

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)



Circuit Setter

CHW CS/

| Asset | | | | | | | |
|------------|------|------|------------|---------|---------|-----------|-------------|
| Asset Name | Size | Type | Design GPM | Setting | Delta P | Final GPM | % to Design |
| (E)AC-1 | | | 500 | | 24.40 | | - |
| (E)AC-2 | | | 276 | | 14.20 | | - |
| (E)AC-3 | | | 276 | | 14.20 | | - |
| (E)AC-4 | | | 190 | | 7.00 | | - |
| Total | | | 1242 | | | 0 | 0% |

HW CS/

| Asset | | | | | | | |
|------------|--------|--------|------------|---------|-----------|-----------|-------------|
| Asset Name | Size | Type | Design GPM | Setting | Delta P | Final GPM | % to Design |
| CUH-1 | | AUTO | 5 | | 2.60 | | - |
| CUH-2 | | AUTO | 2 | | 1.80 | | - |
| CUH-3 | | AUTO | 5 | | 2.60 | | - |
| CUH-4 | | AUTO | 5 | | 2.60 | | - |
| CUH-5 | | AUTO | 6 | | 2.20 | | - |
| CUH-6 | | AUTO | 5 | | 2.60 | | - |
| CUH-7 | | AUTO | 5 | | 2.60 | | - |
| CUH-8 | | AUTO | 5 | | 2.60 | | - |
| CUH-9 | | AUTO | 5 | | 2.60 | | - |
| CUH-10 | | AUTO | 6 | | 2.20 | | - |
| CUH-11 | | AUTO | 6 | | 2.20 | | - |
| UH-1 | | AUTO | 12 | | 0.80 | | - |
| UH-2 | | AUTO | 9 | | 1.20 | | - |
| UH-3 | | AUTO | 10 | | 1.90 | | - |
| V1-100 | | AUTO | 1.5 | | 0.38 | | - |
| V1-117 | | AUTO | 2.4 | | 0.83 | | - |
| V1-118 | | AUTO | 6.4 | | 0.7 | | - |
| V1-205 | | AUTO | 3.2 | | 0.82 | | - |
| V1-207 | | AUTO | 3.8 | | 0.62 | | - |
| V1-210 | | AUTO | 6.1 | | 1.56 | | - |
| V1-212 | 3/4" | MANUAL | 2.3 | 0.4 | 0.115 PSI | 2.08 | 91.3 |
| V1-213 | 1/2" | MANUAL | 1.1 | 0.1 | 0.104 PSI | 1.04 | 90.9 |
| V1-215 | L 1/2" | MANUAL | 1.1 | 0.05 | 0.110 PSI | | - |
| V1-216 | | AUTO | 3.9 | | 0.62 | | - |
| V1-217 | 3/4" | MANUAL | 3.9 | 2.3 | 0.390 PSI | 3.85 | 100.0 |
| V1-100A 1 | | AUTO | 3.8 | | 0.62 | | - |
| V1-100B 1 | | AUTO | 3.8 | | 0.62 | | - |
| V1-100C 1 | | AUTO | 1.3 | | 0.25 | | - |
| V1-100D 1 | | AUTO | 0.9 | | 0.16 | | - |
| V1-100E 1 | | AUTO | 3.9 | | 0.97 | | - |
| V1-100F 1 | | AUTO | 3.9 | | 0.97 | | - |
| V1-100G 1 | | AUTO | 4 | | 2.22 | | - |
| V1-100H 1 | | AUTO | 2.8 | | 0.84 | | - |
| V1-119A 1 | | AUTO | 1.8 | | 0.28 | | - |
| V1-119B 1 | | AUTO | 1.8 | | 0.28 | | - |
| V1-119C 1 | | AUTO | 1.4 | | 0.25 | | - |
| V1-200A 1 | | AUTO | 0.9 | | 0.16 | | - |
| V1-200B 1 | | AUTO | 5.3 | | 0.61 | | - |
| V1-200C 1 | | AUTO | 5.3 | | 0.61 | | - |
| V1-200D 1 | | AUTO | 5.3 | | 0.61 | | - |
| V1-200E 1 | | AUTO | 5.3 | | 0.61 | | - |
| V1-200F 1 | | AUTO | 5.3 | | 0.61 | | - |
| V1-200G 1 | | AUTO | 5.3 | | 0.61 | | - |
| V1-200H 1 | | AUTO | 5.3 | | 0.61 | | - |
| V1-200Q 1 | | AUTO | 0.9 | | 0.22 | | - |
| V3-300 | | AUTO | 0.9 | | 0.16 | | - |
| V3-304 | | AUTO | 1.8 | | 0.28 | | - |
| V3-306 | | AUTO | 1.8 | | 0.25 | | - |
| V3-307 | | AUTO | 1.4 | | 0.22 | | - |
| V3-309 | | AUTO | 1.8 | | 0.25 | | - |
| V3-310 | | AUTO | 6.8 | | 3.27 | | - |
| V3-311 | | AUTO | 3.4 | | 0.53 | | - |
| V3-312 | | AUTO | 3.4 | | 0.53 | | - |
| V3-313 | | AUTO | 3.4 | | 0.53 | | - |
| V3-317 | | AUTO | 3.8 | | 0.62 | | - |
| V3-319 | | AUTO | 0.9 | | 0.16 | | - |
| V3-320 | | AUTO | 2.3 | | 0.38 | | - |
| V3-325 | | AUTO | 0.9 | | 0.16 | | - |
| V3-326 | | AUTO | 1.8 | | 0.25 | | - |
| V3-329 | | AUTO | 0.9 | | 0.22 | | - |
| V3-309A 1 | | AUTO | 0.9 | | 0.26 | | - |
| V3-310A 1 | | AUTO | 4 | | 2.22 | | - |
| V3-314A 1 | | AUTO | 3.2 | | 0.82 | | - |
| V3-314B 1 | | AUTO | 5.5 | | 1.9 | | - |
| V3-314C 1 | | AUTO | 3.9 | | 0.69 | | - |
| V3-314D 1 | | AUTO | 3.9 | | 0.97 | | - |
| V3-322A 1 | | AUTO | 1.8 | | 0.28 | | - |

| | | | | | | | |
|-----------|--|------|-------|--|------|------|-------|
| V3-322B 1 | | AUTO | 1.8 | | 0.28 | | - |
| V3-324A 1 | | AUTO | 4 | | 1.24 | | - |
| V3-324B 1 | | AUTO | 4 | | 1.24 | | - |
| V4-400 | | AUTO | 2.4 | | 0.27 | | - |
| V4-401 | | AUTO | 2.4 | | 0.41 | | - |
| V4-402 | | AUTO | 2.3 | | 0.24 | | - |
| V4-405 | | AUTO | 0.5 | | 0.16 | | - |
| V4-406 | | AUTO | 1.4 | | 0.23 | | - |
| V4-407 | | AUTO | 0.9 | | 0.16 | | - |
| V4-408 | | AUTO | 0.5 | | 0.16 | | - |
| V4-410 | | AUTO | 1.7 | | 0.30 | | - |
| V4-412 | | AUTO | 2.4 | | 0.83 | | - |
| V4-414 | | AUTO | 1.4 | | 0.35 | | - |
| V4-415 | | AUTO | 2.4 | | 2.94 | | - |
| V4-417 | | AUTO | 2.3 | | 0.40 | | - |
| V4-422 | | AUTO | 0.5 | | 0.16 | | - |
| V4-424 | | AUTO | 1.5 | | 0.38 | | - |
| V4-425 | | AUTO | 2.0 | | 0.24 | | - |
| V4-404A 1 | | AUTO | 2.1 | | 0.34 | | - |
| V4-404B 1 | | AUTO | 2.3 | | 0.24 | | - |
| V4-406A 1 | | AUTO | 2.8 | | 0.54 | | - |
| V4-419A 1 | | AUTO | 2.3 | | 0.4 | | - |
| V4-419B 1 | | AUTO | 2.2 | | 0.45 | | - |
| V4-420A 1 | | AUTO | 2.2 | | 0.45 | | - |
| V4-420B 1 | | AUTO | 2.2 | | 0.45 | | - |
| V4-420C 1 | | AUTO | 2.2 | | 0.45 | | - |
| V4-426A 1 | | AUTO | 3.9 | | 0.97 | | - |
| V4-426B 1 | | AUTO | 2.2 | | 0.45 | | - |
| V4-426C 1 | | AUTO | 2.2 | | 0.45 | | - |
| V5-100 | | AUTO | 1.4 | | 0.32 | | - |
| V5-500 | | AUTO | 2.1 | | 0.37 | | - |
| V5-501 | | AUTO | 1.5 | | 0.38 | | - |
| V5-502 | | AUTO | 3.3 | | 0.49 | | - |
| V5-506 | | AUTO | 3.2 | | 0.42 | | - |
| V5-509 | | AUTO | 2.3 | | 0.35 | | - |
| V5-510 | | AUTO | 3.9 | | 0.97 | | - |
| V5-511 | | AUTO | 2.7 | | 0.49 | | - |
| V5-516 | | AUTO | 1.4 | | 0.25 | | - |
| V5-518 | | AUTO | 1.7 | | 0.30 | | - |
| V5-521 | | AUTO | 3.9 | | 0.97 | | - |
| V5-525 | | AUTO | 1.7 | | 0.30 | | - |
| V5-526 | | AUTO | 1.8 | | 0.25 | | - |
| V5-529 | | AUTO | 1.4 | | 0.25 | | - |
| V5-530 | | AUTO | 3.9 | | 0.97 | | - |
| V5-541 | | AUTO | 3.8 | | 0.62 | | - |
| V5-542 | | AUTO | 1.4 | | 0.22 | | - |
| V5-543 | | AUTO | 1.8 | | 0.25 | | - |
| V5-546 | | AUTO | 1.4 | | 0.23 | | - |
| V5-547 | | AUTO | 0.5 | | 0.16 | | - |
| V5-551 | | AUTO | 1.3 | | 0.35 | | - |
| V5-553 | | AUTO | 3.9 | | 0.97 | | - |
| V5-555 | | AUTO | 1.8 | | 0.25 | | - |
| V5-558 | | AUTO | 1.8 | | 0.32 | | - |
| V5-561 | | AUTO | 4.0 | | 2.22 | | - |
| V5-563 | | AUTO | 4.0 | | 2.22 | | - |
| V5-565 | | AUTO | 2.8 | | 0.42 | | - |
| V5-516B 1 | | AUTO | 1.4 | | 0.25 | | - |
| V5-521D 1 | | AUTO | 1.4 | | 0.25 | | - |
| V5-534A 1 | | AUTO | 1.8 | | 0.32 | | - |
| V5-534B 1 | | AUTO | 1.9 | | 0.28 | | - |
| V5-540A 1 | | AUTO | 1.9 | | 0.29 | | - |
| V5-540B 1 | | AUTO | 6.8 | | 3.27 | | - |
| Total | | | 389.4 | | | 6.97 | 1.79% |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: FAN - Exhaust



Asset: EF-1

AREA:JAN CLOSET

| Unit Data | | |
|------------|--------|--------|
| | Design | Actual |
| MFG | NA | NA |
| Model Num | NA | NA |
| Serial Num | - | |
| Type | INLINE | |

| Test Data | | |
|-------------|--------|--------|
| | Design | Actual |
| CFM | 200 | |
| RL Voltage | - | |
| RL Amperage | - | |
| Total ESP | 0.25 | |

| Motor Data | | |
|------------------|--------|--------|
| | Design | Actual |
| Motor MFG | - | |
| Frame | - | |
| Horsepower | - | |
| Motor Rpm | - | |
| Phase | - | |
| Voltage (rated) | - | |
| Amperage (rated) | - | |
| Service Factor | - | |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: FAN - Exhaust



Asset: EF-2

AREA:111W

| Unit Data | | |
|------------|----------------------|--------|
| | Design | Actual |
| MFG | NA | NA |
| Model Num | NA | NA |
| Serial Num | - | |
| Type | TUBE AXIAL INLINE | |

| Test Data | | |
|-------------|--------|--------|
| | Design | Actual |
| CFM | 4800 | |
| RL Voltage | - | |
| RL Amperage | - | |
| Total ESP | 0.53 | |

| Motor Data | | |
|------------------|--------|--------|
| | Design | Actual |
| Motor MFG | - | |
| Frame | - | |
| Horsepower | - | |
| Motor Rpm | - | |
| Phase | - | |
| Voltage (rated) | - | |
| Amperage (rated) | - | |
| Service Factor | - | |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF-2/111W

| Asset | | | | | | | | |
|--------------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| E2-1 | E-1 | 6 | 250 | | | | | - |
| E2-2 | E-1 | 6 | 250 | | | | | - |
| E2-2 | E-1 | 6 | 250 | | | | | - |
| E2-4 | E-1 | 6 | 250 | | | | | - |
| E2-4 | E-1 | 6 | 250 | | | | | - |
| E2-6 | E-1 | 6 | 250 | | | | | - |
| E2-7 | E-1 | 6 | 250 | | | | | - |
| E2-8 | E-1 | 6 | 250 | | | | | - |
| E2-9 | E-1 | 6 | 250 | | | | | - |
| E2-10 | E-1 | 6 | 250 | | | | | - |
| E2-11 | E-1 | 6 | 250 | | | | | - |
| E2-12 | E-1 | 6 | 250 | | | | | - |
| E2-13 | E-1 | 6 | 250 | | | | | - |
| E2-14 | E-1 | 6 | 250 | | | | | - |
| E2-15 | E-1 | 6 | 250 | | | | | - |
| E2-16 | E-1 | 6 | 250 | | | | | - |
| E2-17 | E-1 | 6 | 50 | | | | | - |
| E2-18 | E-1 | 6 | 75 | | | | | - |
| E2-19 | E-1 | 6 | 75 | | | | | - |
| E2-20 | E-2 | 8 | 300 | | | | | - |
| E2-21 | E-2 | 8 | 300 | | | | | - |
| Total | | | 4800 | | 0 | 0 | 0 | 0% |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: FAN - Exhaust



Asset: EF-2

AREA:540B

| Unit Data | | |
|------------|-------------|--------|
| | Design | Actual |
| MFG | NA | NA |
| Model Num | NA | NA |
| Serial Num | - | |
| Type | CRE DNBLAST | |

| Test Data | | |
|-------------|--------|--------|
| | Design | Actual |
| CFM | 500 | |
| RL Voltage | - | |
| RL Amperage | - | |
| Total ESP | 0.68 | |

| Motor Data | | |
|------------------|--------|--------|
| | Design | Actual |
| Motor MFG | - | |
| Frame | - | |
| Horsepower | - | |
| Motor Rpm | - | |
| Phase | - | |
| Voltage (rated) | - | |
| Amperage (rated) | - | |
| Service Factor | - | |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF-2/540B

| Asset | | | | | | | | |
|------------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| E3-1 | EX | | 250 | | | | | - |
| E3-2 | EX | | 250 | | | | | - |
| Total | | | 500 | | 0 | 0 | 0 | 0% |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: FAN - Exhaust



Asset: EF-4

AREA:IT 117

| Unit Data | | |
|------------|--------|--------|
| | Design | Actual |
| MFG | NA | NA |
| Model Num | NA | NA |
| Serial Num | - | |
| Type | INLINE | |

| Test Data | | |
|-------------|--------|--------|
| | Design | Actual |
| CFM | 200 | |
| RL Voltage | - | |
| RL Amperage | - | |
| Total ESP | 0.25 | |

| Motor Data | | |
|------------------|--------|--------|
| | Design | Actual |
| Motor MFG | - | |
| Frame | - | |
| Horsepower | - | |
| Motor Rpm | - | |
| Phase | - | |
| Voltage (rated) | - | |
| Amperage (rated) | - | |
| Service Factor | - | |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: FAN - Exhaust



Asset: EF-4

AREA:IT 208

| Unit Data | | |
|------------|--------|--------|
| | Design | Actual |
| MFG | NA | NA |
| Model Num | NA | NA |
| Serial Num | - | |
| Type | INLINE | |

| Test Data | | |
|-------------|--------|--------|
| | Design | Actual |
| CFM | 200 | |
| RL Voltage | - | |
| RL Amperage | - | |
| Total ESP | 0.25 | |

| Motor Data | | |
|------------------|--------|--------|
| | Design | Actual |
| Motor MFG | - | |
| Frame | - | |
| Horsepower | - | |
| Motor Rpm | - | |
| Phase | - | |
| Voltage (rated) | - | |
| Amperage (rated) | - | |
| Service Factor | - | |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: FAN - Exhaust



Asset: EF-6

AREA:IT 104D FLOOR 5

| Unit Data | | |
|------------|--------|--------|
| | Design | Actual |
| MFG | NA | NA |
| Model Num | NA | NA |
| Serial Num | - | |
| Type | INLINE | |

| Test Data | | |
|-------------|--------|--------|
| | Design | Actual |
| CFM | 200 | |
| RL Voltage | - | |
| RL Amperage | - | |
| Total ESP | 0.25 | |

| Motor Data | | |
|------------------|--------|--------|
| | Design | Actual |
| Motor MFG | - | |
| Frame | - | |
| Horsepower | - | |
| Motor Rpm | - | |
| Phase | - | |
| Voltage (rated) | - | |
| Amperage (rated) | - | |
| Service Factor | - | |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: Pump



Asset: CHWP-1

AREA: CHILLED WATER

| Unit Data | | |
|-------------------|-----------|---------------|
| | Design | Actual |
| MFG | NA | BELL&GOSSETT |
| Model Num | NA | E-1510 SSF |
| Serial Num | - | C352767-02A42 |
| Service | - | CHILLED WATER |
| Type | - | |
| Configuration | - | |
| Pump RPM | - | 1200 |
| GPM/HD | 1250 - 60 | 1250-60 |
| Impeller Diameter | - | 12.625" |

| Motor Data | | |
|----------------|--------|--------|
| | Design | Actual |
| Motor MFG | - | WEG |
| Frame | - | 324/6T |
| Horsepower | 30 | 30 |
| Motor Rpm | - | 1182 |
| Phase | - | 3 |
| Voltage | - | 460 |
| Amperage | - | 36.0 |
| Service Factor | - | 1.25 |
| Efficiency | - | 93.6% |
| Power Factor | - | 0.82 |

| Test Data | | |
|---------------------------|--------|--------|
| | Design | Actual |
| Pump Off Pres | - | |
| Pump Dead Head Pres | - | |
| Act Impeller Dia (IN) | - | |
| Valve Open GPM | - | |
| Valve Open Diff (FT) | - | |
| Final Suction Pres (FT) | - | |
| Final Discharge Pres (FT) | - | |
| Total Head Pres (FT) | 60 | |
| Final GPM | 1250 | |
| Pump Rotation | - | |
| Motor RPM | - | |
| Pump RPM | - | |
| Motor Frequency | - | |
| System SetPt | - | |
| RL Voltage | - | 460 |
| RL Amperage | - | |
| Brake Horse Power | - | |

Notes:
NUMBERED CHWP-2 ON DRAWING

Written By: Gabe Merk on 01/22/2025

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: Pump



Asset: CHWP-2

AREA:CHILLED WATER

| Unit Data | | |
|-------------------|-----------|---------------|
| | Design | Actual |
| MFG | NA | BELL&GOSSETT |
| Model Num | NA | E-1510 SSF |
| Serial Num | - | C352767-01A42 |
| Service | - | CHILLED WATER |
| Type | - | |
| Configuration | - | |
| Pump RPM | - | 1200 |
| GPM/HD | 1250 - 60 | 1250-60 |
| Impeller Diameter | - | 12.625" |

| Motor Data | | |
|----------------|--------|--------|
| | Design | Actual |
| Motor MFG | - | WEG |
| Frame | - | 324/6T |
| Horsepower | 30 | 30 |
| Motor Rpm | - | 1182 |
| Phase | - | 3 |
| Voltage | - | 460 |
| Amperage | - | 36.0 |
| Service Factor | - | 1.25 |
| Efficiency | - | 93.6% |
| Power Factor | - | 0.82 |

| Test Data | | |
|---------------------------|--------|--------|
| | Design | Actual |
| Pump Off Pres | - | |
| Pump Dead Head Pres | - | |
| Act Impeller Dia (IN) | - | |
| Valve Open GPM | - | |
| Valve Open Diff (FT) | - | |
| Final Suction Pres (FT) | - | |
| Final Discharge Pres (FT) | - | |
| Total Head Pres (FT) | 60 | |
| Final GPM | 1250 | |
| Pump Rotation | - | |
| Motor RPM | - | |
| Pump RPM | - | |
| Motor Frequency | - | |
| System SetPt | - | |
| RL Voltage | - | 460 |
| RL Amperage | - | |
| Brake Horse Power | - | |

Notes:
LABELED CHWP-1 ON DRAWING

Written By: Gabe Merk on 01/22/2025

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: Pump



Asset: HWP-1

AREA:HOT WATER

| Unit Data | | |
|-------------------|----------|---------------|
| | Design | Actual |
| MFG | NA | BELL&GOSSETT |
| Model Num | NA | E-1510 SSF |
| Serial Num | - | C352768-02L32 |
| Service | - | HOT WATER |
| Type | - | CENTRIFUGAL |
| Configuration | - | VERTICAL |
| Pump RPM | - | 1750 |
| GPM/HD | 450 - 50 | 450-50 |
| Impeller Diameter | - | 11.5" |

| Motor Data | | |
|----------------|--------|--------|
| | Design | Actual |
| Motor MFG | - | WEG |
| Frame | - | 254/6T |
| Horsepower | 10 | 10 |
| Motor Rpm | - | 1180 |
| Phase | - | 3 |
| Voltage | - | 460 |
| Amperage | - | 13.9 |
| Service Factor | - | 1.15 |
| Efficiency | - | 91.7% |
| Power Factor | - | 0.74 |

| Test Data | | |
|---------------------------|--------|---------|
| | Design | Actual |
| Pump Off Pres | - | 146 FT |
| Valve Open GPM | - | 424 |
| Valve Open Diff (FT) | - | 56.3 FT |
| Final Suction Pres (FT) | - | |
| Final Discharge Pres (FT) | - | |
| Total Head Pres (FT) | 50 | |
| Final GPM | 450 | |
| Pump Rotation | - | |
| Motor RPM | - | |
| Pump RPM | - | |
| Motor Frequency | - | |
| System SetPt | - | |
| RL Voltage | - | 460 |
| RL Amperage | - | |
| Brake Horse Power | - | |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: Pump



Asset: HWP-2

AREA:HOT WATER

| Unit Data | | |
|-------------------|----------|----------------|
| | Design | Actual |
| MFG | NA | BELL&GOSSETT |
| Model Num | NA | E-1510 SSF |
| Serial Num | - | C352768-01 L32 |
| Service | - | HOT WATER |
| Type | - | |
| Configuration | - | |
| Pump RPM | - | 1200 |
| GPM/HD | 450 - 50 | 450-50 |
| Impeller Diameter | - | 11.5" |

| Motor Data | | |
|----------------|--------|--------|
| | Design | Actual |
| Motor MFG | - | WEG |
| Frame | - | 254/6T |
| Horsepower | 10 | 10 |
| Motor Rpm | - | 1180 |
| Phase | - | 3 |
| Voltage | - | 460 |
| Amperage | - | 13.9 |
| Service Factor | - | 1.15 |
| Efficiency | - | 91.7% |
| Power Factor | - | 0.74 |

| Test Data | | |
|---------------------------|--------|---------|
| | Design | Actual |
| Pump Off Pres | - | 146 FT |
| Valve Open GPM | - | |
| Valve Open Diff (FT) | - | 57.5 FT |
| Final Suction Pres (FT) | - | |
| Final Discharge Pres (FT) | - | |
| Total Head Pres (FT) | 50 | |
| Final GPM | 450 | |
| Pump Rotation | - | |
| Motor RPM | - | |
| Pump RPM | - | |
| Motor Frequency | - | |
| System SetPt | - | |
| RL Voltage | - | 460 |
| RL Amperage | - | |
| Brake Horse Power | - | |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: AHU-DUAL FAN



Asset: (E)AC-1

AREA:120

| UNIT DATA - SUPPLY | | |
|------------------------------|--------|--------|
| | Design | Actual |
| Manufacturer | NA | NA |
| Model Number | NA | NA |
| Serial Number | - | |
| No. Pre-Filters / Size (1) | - | |
| No. Final Filters / Size (1) | - | |

| MOTOR DATA - SUPPLY | |
|---------------------|--------|
| | Actual |
| Motor MFG / Frame | |
| Horsepower / RPM | |
| Rated Volts / Phase | |
| Rated Amperage / SF | |

| TEST DATA - SUPPLY | | |
|--------------------|--------|--------|
| | Design | Actual |
| Total CFM | 50000 | |
| OA CFM | - | |
| Fan RPM | - | |
| VFD Speed | - | |
| RL Voltage | - | |
| RL Amperage | - | |
| Motor B.H.P. | - | |

| PERFORMANCE DATA - SUPPLY | | |
|---------------------------|--------|--------|
| | Design | Actual |
| Static Pressure Stpt | - | |
| Suction S.P. | - | |
| Discharge S.P. | - | |
| Total S.P. | 4.75 | |
| Reheat Coil P.D. | - | |
| DX Coil P.D. | - | |
| Condenser Coil P.D. | - | |
| Chilled Water Coil P.D. | - | |
| Pre Heat Coil P.D. | - | |
| Final Filters P.D. | - | |
| Heat Wheel P.D. | - | |
| Pre-Filters P.D. | - | |
| Air Blender P.D. | - | |
| Total ESP | - | |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

AHU-DUAL FAN



VAV - Single Duct

(E)AC-1/120

| Asset | | | | | | | | | | | |
|------------|-------|-----------|--------|------------|----------------|---------|----------------|---------|-----------------|----------|----------|
| Asset Name | MFG | Model Num | Type | Inlet Size | Design Max CFM | Max CFM | Design Min CFM | Min CFM | Design Heat CFM | Heat CFM | Ak (max) |
| V1-100 | TITUS | DESV | REHEAT | 8 | 400 | 407 | 100 | 103 | 175 | 180 | 1.03 |
| V1-117 | TITUS | DESV | REHEAT | 8 | 400 | 397 | 125 | 121 | 200 | 207 | 1.07 |
| V1-118 | TITUS | DESV | REHEAT | 24X16 | 2700 | 2763 | 1025 | 1064 | 1950 | 2009 | 1.08 |
| V1-207 | TITUS | DESV | REHEAT | 10 | 600 | 593 | 200 | 205 | 625 | 613 | 1.02 |
| V1-210 | TITUS | DESV | REHEAT | 14 | 1960 | 1803 | 600 | 613 | 600 | 613 | 0.84 |
| V1-212 | TITUS | DESV | REHEAT | 14 | 2250 | 2059 | 675 | 619 | 675 | 619 | 0.98 |
| V1-213 | TITUS | DESV | REHEAT | 8 | 500 | 506 | 150 | 161 | 150 | 161 | 0.94 |
| V1-215 | TITUS | DESV | REHEAT | 6 | 250 | 252 | 75 | 81 | 250 | 264 | 1.17 |
| V1-216 | TITUS | DESV | REHEAT | 8 | 650 | 664 | 200 | 207 | 625 | 634 | 1.07 |
| V1-217 | TITUS | DESV | REHEAT | 6 | 300 | 315 | 100 | 106 | 300 | 315 | 1.00 |
| V1-100A 1 | TITUS | DESV | REHEAT | 8 | 750 | 760 | 225 | 218 | 625 | 632 | 1.1 |
| V1-100B 1 | TITUS | DESV | REHEAT | 8 | 650 | 664 | 200 | 205 | 625 | 631 | 1.07 |
| V1-100C 1 | TITUS | DESV | REHEAT | 6 | 125 | 132 | 50 | 54 | 125 | 131 | 1.03 |
| V1-100D 1 | TITUS | DESV | REHEAT | 6 | 250 | 259 | 75 | 81 | 110 | 99 | 1.13 |
| V1-100E 1 | TITUS | DESV | REHEAT | 10 | 600 | 599 | 200 | 203 | 300 | 389 | 1.01 |
| V1-100F 1 | TITUS | DESV | REHEAT | 10 | 600 | 595 | 200 | 206 | 300 | 311 | 1.04 |
| V1-100G 1 | TITUS | DESV | REHEAT | 8 | 450 | 458 | 150 | 159 | 225 | 241 | 1.02 |
| V1-100H 1 | TITUS | DESV | REHEAT | 8 | 450 | 459 | 100 | 98 | 160 | 171 | 1.03 |
| V1-122 1 | TITUS | DESV | REHEAT | 12 | 1200 | 1235 | 350 | 362 | 400 | 421 | 0.83 |
| V1-126A 1 | TITUS | DESV | REHEAT | 12 | 1205 | 1231 | 350 | 361 | 500 | 511 | 1.03 |
| V1-126B 1 | TITUS | DESV | REHEAT | 12 | 1205 | 1226 | 350 | 371 | 500 | 505 | 1.13 |
| V1-127 1 | TITUS | DESV | | | 200 | 211 | 60 | 61 | 120 | 130 | 1.05 |
| V1-130 1 | TITUS | DESV | | | 360 | 359 | 100 | 108 | 200 | 214 | 1.09 |
| V1-200A 1 | TITUS | DESV | REHEAT | 6 | 300 | 301 | 75 | 77 | 125 | 129 | 1.10 |
| V1-200B 1 | TITUS | DESV | REHEAT | 14 | 1650 | 1668 | 525 | 531 | 1500 | 1520 | 1.06 |
| V1-200C 1 | TITUS | DESV | REHEAT | 14 | 1650 | 1675 | 525 | 531 | 1500 | 1538 | 1.09 |
| V1-200D 1 | TITUS | DESV | REHEAT | 14 | 1650 | 1656 | 525 | 524 | 1500 | 1513 | 0.84 |
| V1-200E 1 | TITUS | DESV | REHEAT | 14 | 1650 | 1649 | 525 | 510 | 1500 | 1542 | 0.94 |
| V1-200F 1 | TITUS | DESV | REHEAT | 14 | 1375 | 1374 | 525 | 541 | 1500 | 1563 | 1.04 |
| V1-200G 1 | TITUS | DESV | REHEAT | 14 | 1650 | 1657 | 525 | 541 | 1500 | 1543 | 1.12 |
| V1-200H 1 | TITUS | DESV | REHEAT | 14 | 1650 | 1674 | 525 | 541 | 1500 | 1520 | 1.10 |
| V1-200Q 1 | TITUS | DESV | REHEAT | 8 | 400 | 401 | 125 | 121 | 200 | 211 | 1.16 |

Diffuser Supply (GRD)

V1-100/121

| Asset | | | | | | | |
|------------|----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1100-1 | 121H | LD | 8 | 100 | 95 | 103 | 103.0 |
| 1100-2 | 100 | S-2 | 8 | 150 | 143 | 139 | 92.7 |
| 1100-2 | 100 | S-2 | 8 | 150 | 172 | 165 | 110.0 |
| Total | | | | 400 | 410 | 407 | 101.75% |

V1-117/138

| Asset | | | | | | | |
|------------|----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1117-1 | 121 | S-2 | 8 | 200 | 198 | 190 | 95.0 |
| 1117-2 | 121 | S-2 | 8 | 200 | 228 | 207 | 103.5 |
| Total | | | | 400 | 426 | 397 | 99.25% |

V1-207/207

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1207-1 | 200A | EX-SA | | 200 | 226 | 219 | 109.5 |
| 1207-2 | 207 | EX-SA | | 200 | 201 | 194 | 97.0 |
| 1207-2 | 207 | EX-SA | | 200 | 163 | 180 | 90.0 |
| Total | | | | 600 | 590 | 593 | 98.83% |

V1-213/213

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1213-1 | 212 | EX-SA | | 200 | 157 | 180 | 90.0 |
| 1213-2 | 213 | EX-SA | | 300 | 308 | 326 | 108.7 |
| Total | | | | 500 | 465 | 506 | 101.2% |

V1-215/215

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1215-1 | 215 | S-2 | 8 | 125 | 135 | 124 | 99.2 |
| 1215-2 | 215 | S-2 | 8 | 125 | 144 | 128 | 102.4 |
| Total | | | | 250 | 279 | 252 | 100.8% |

V1-216/216

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1216-1 | 216 | S-2 | 8 | 200 | 164 | 217 | 108.5 |
| 1216-2 | 216 | S-2 | 8 | 200 | 194 | 181 | 90.5 |
| 1216-2 | 216A | S-2 | 8 | 125 | 199 | 131 | 104.8 |
| 1216-4 | 216A | S-2 | 8 | 125 | 178 | 135 | 108.0 |
| Total | | | | 650 | 735 | 664 | 102.15% |

V1-217/217

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1217-1 | 217 | S-2 | 8 | 150 | 164 | 154 | 102.7 |
| 1217-2 | 217 | S-2 | 8 | 150 | 175 | 161 | 107.3 |
| Total | | | | 300 | 339 | 315 | 105% |

V1-100A 1/125

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1100A-1 | 121H | LD | 8 | 100 | 105 | 95 | 95.0 |
| 1100A-2 | 125 | S-3 | 10 | 325 | 364 | 336 | 103.4 |
| 1100A-2 | 125 | S-3 | 10 | 325 | 350 | 329 | 101.2 |
| Total | | | | 750 | 819 | 760 | 101.33% |

V1-100B 1/102

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1100B-1 | 125 | S-3 | 10 | 325 | 346 | 328 | 100.9 |
| 1100B-2 | 125 | S-3 | 10 | 325 | 351 | 336 | 103.4 |
| Total | | | | 650 | 697 | 664 | 102.15% |

V1-100C 1/103

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1100C-1 | 102 | S-2 | 8 | 125 | 132 | 132 | 105.6 |
| Total | | | | 125 | 132 | 132 | 105.6% |

V1-100D 1/120

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1100D-1 | 104 | S-2 | 8 | 100 | 102 | 95 | 95.0 |
| 1100D-2 | 103 | S-2 | 8 | 150 | 184 | 164 | 109.3 |
| Total | | | | 250 | 286 | 259 | 103.6% |

V1-100E 1/120

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1100E-1 | 120 | S-3 | 10 | 300 | 298 | 294 | 98.0 |
| 1100E-2 | 120 | S-3 | 10 | 300 | 310 | 305 | 101.7 |
| Total | | | | 600 | 608 | 599 | 99.83% |

V1-100F 1/120A

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1100F-1 | 120 | S-3 | 10 | 300 | 309 | 293 | 97.7 |
| 1100F-2 | 120 | S-3 | 10 | 300 | 322 | 302 | 100.7 |
| Total | | | | 600 | 631 | 595 | 99.17% |

V1-100G 1/120F

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1100G-1 | 120B | S-2 | 8 | 150 | 149 | 156 | 104.0 |
| 1100G-2 | 120C | S-2 | 8 | 150 | 150 | 153 | 102.0 |
| 1100G-2 | 120A | S-2 | 8 | 150 | 157 | 149 | 99.3 |
| Total | | | | 450 | 456 | 458 | 101.78% |

V1-100H 1/140

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1100H-1 | 120E | S-2 | 8 | 150 | 155 | 149 | 99.3 |
| 1100H-2 | 120F | S-2 | 8 | 150 | 168 | 160 | 106.7 |
| 1100H-2 | 120D | S-2 | 8 | 150 | 157 | 150 | 100.0 |
| Total | | | | 450 | 480 | 459 | 102% |

V1-122 1/130

| Asset | | | | | | | |
|-------------------|-----------------|--------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1119C-1 | 130 | EX-SA | | 275 | | 277 | 100.7 |
| 1119C-2 | 130 | EX-SA | | 275 | | 277 | 100.7 |
| 1119C-2 | 130 | EX-SA | | 275 | | 283 | 102.9 |
| 1119C-4 | 130 | EX-SA | | 275 | | 289 | 105.1 |
| SGRD5 | HALL | CEILING DIFF | | 100 | | 109 | 109.0 |
| Total | | | | 1200 | 0 | 1235 | 102.92% |

V1-127 1/

| Asset | | | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|-----------|---------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1 | 127 | | | 200 | | | | 211 | 105.5 |
| Total | | | | 200 | | 0 | 0 | 211 | 105.5% |

V1-130 1/120

| Asset | | | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|-----------|---------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1 | 130 | | | 180 | | | | 172 | 95.6 |
| SGRD2 | 130 | | | 180 | | | | 187 | 103.9 |
| Total | | | | 360 | | 0 | 0 | 359 | 99.72% |

V1-200A 1/202

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1200A-1 | 202 | S-1 | 6 | 200 | 140 | 194 | 97.0 |
| 1200A-2 | 209 | S-1 | 6 | 100 | 188 | 107 | 107.0 |
| Total | | | | 300 | 328 | 301 | 100.33% |

V1-200B 1/200

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1200B-1 | 200 | S-3 | 10 | 275 | 288 | 269 | 97.8 |
| 1200B-2 | 200 | S-3 | 10 | 275 | 311 | 302 | 109.8 |
| 1200B-2 | 200 | S-3 | 10 | 275 | 310 | 299 | 108.7 |
| 1200B-4 | 200 | S-3 | 10 | 275 | 264 | 250 | 90.9 |
| 1200B-4 | 200 | S-3 | 10 | 275 | 273 | 259 | 94.2 |
| 1200B-6 | 200 | S-3 | 10 | 275 | 304 | 289 | 105.1 |
| Total | | | | 1650 | 1750 | 1668 | 101.09% |

V1-200C 1/200

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1200C-1 | 200 | S-3 | 10 | 275 | 264 | 283 | 102.9 |
| 1200C-2 | 200 | S-3 | 10 | 275 | 275 | 302 | 109.8 |
| 1200C-2 | 200 | S-3 | 10 | 275 | 240 | 250 | 90.9 |
| 1200C-4 | 200 | S-3 | 10 | 275 | 229 | 248 | 90.2 |
| 1200C-4 | 200 | S-3 | 10 | 275 | 279 | 302 | 109.8 |
| 1200C-6 | 200 | S-3 | 10 | 275 | 284 | 290 | 105.5 |
| Total | | | | 1650 | 1571 | 1675 | 101.52% |

V1-200D 1/200

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1200D-1 | 200 | S-3 | 10 | 275 | 241 | 266 | 96.7 |
| 1200D-2 | 200 | S-3 | 10 | 275 | 263 | 281 | 102.2 |
| 1200D-2 | 200 | S-3 | 10 | 275 | 251 | 271 | 98.5 |
| 1200D-4 | 200 | S-3 | 10 | 275 | 249 | 269 | 97.8 |
| 1200D-4 | 200 | S-3 | 10 | 275 | 259 | 278 | 101.1 |
| 1200D-6 | 200 | S-3 | 10 | 275 | 248 | 291 | 105.8 |
| Total | | | | 1650 | 1511 | 1656 | 100.36% |

V1-200E 1/200

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1200D-1 | 200 | S-3 | 10 | 275 | 255 | 261 | 94.9 |
| 1200D-2 | 200 | S-3 | 10 | 275 | 264 | 277 | 100.7 |
| 1200D-2 | 200 | S-3 | 10 | 275 | 271 | 284 | 103.3 |
| 1200D-4 | 200 | S-3 | 10 | 275 | 260 | 269 | 97.8 |
| 1200D-4 | 200 | S-3 | 10 | 275 | 274 | 281 | 102.2 |
| 1200D-6 | 200 | S-3 | 10 | 275 | 251 | 277 | 100.7 |
| Total | | | | 1650 | 1575 | 1649 | 99.94% |

V1-200F 1/200

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1200F-1 | 200 | S-3 | 10 | 275 | 239 | 251 | 91.3 |
| 1200F-2 | 200 | S-3 | 10 | 275 | 279 | 272 | 98.9 |
| 1200F-2 | 200 | S-3 | 10 | 275 | 333 | 300 | 109.1 |
| 1200F-4 | 200 | S-3 | 10 | 275 | 281 | 272 | 98.9 |
| 1200F-4 | 200 | S-3 | 10 | 275 | 289 | 279 | 101.5 |
| Total | | | | 1375 | 1421 | 1374 | 99.93% |

V1-200G 1/200

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1200G-1 | 200 | S-3 | 10 | 275 | 295 | 279 | 101.5 |
| 1200G-2 | 200 | S-3 | 10 | 275 | 345 | 267 | 97.1 |
| 1200G-2 | 200 | S-3 | 10 | 275 | 288 | 274 | 99.6 |
| 1200G-4 | 200 | S-3 | 10 | 275 | 348 | 302 | 109.8 |
| 1200G-4 | 200 | S-3 | 10 | 275 | 274 | 284 | 103.3 |
| 1200G-6 | 200 | S-3 | 10 | 275 | 267 | 251 | 91.3 |
| Total | | | | 1650 | 1817 | 1657 | 100.42% |

V1-200H 1/200

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1200H-1 | 200 | S-3 | 10 | 275 | 294 | 264 | 96.0 |
| 1200H-2 | 200 | S-3 | 10 | 275 | 371 | 288 | 104.7 |
| 1200H-2 | 200 | S-3 | 10 | 275 | 289 | 276 | 100.4 |
| 1200H-4 | 200 | S-3 | 10 | 275 | 309 | 294 | 106.9 |
| 1200H-4 | 200 | S-3 | 10 | 275 | 381 | 302 | 109.8 |
| 1200H-6 | 200 | S-3 | 10 | 275 | 179 | 250 | 90.9 |
| Total | | | | 1650 | 1823 | 1674 | 101.45% |

V1-200Q 1/211

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 1200Q-1 | 211 | S-2 | 8 | 200 | 194 | 184 | 92.0 |
| 1200Q-2 | HALL | S-1 | 6 | 100 | 126 | 109 | 109.0 |
| 1200Q-2 | 210 | S-1 | 6 | 100 | 131 | 108 | 108.0 |
| Total | | | | 400 | 451 | 401 | 100.25% |

Completed By: Corey Dick on 10/27/2025

| Asset | Notes | Date | Written By |
|--------------|-------------------|-------------|-------------------|
| V1-210 | Existing ductwork | 10/29/2025 | Corey Dick |
| V1-212 | Existing ductwork | 10/28/2025 | Corey Dick |
| V1-122 1 | Existing ductwork | 10/29/2025 | Corey Dick |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: AHU-DUAL FAN



Asset: (E)AC-2

AREA:MECH 351

| UNIT DATA - SUPPLY | | |
|------------------------------|--------|--------|
| | Design | Actual |
| Manufacturer | NA | NA |
| Model Number | NA | NA |
| Serial Number | - | |
| No. Pre-Filters / Size (1) | - | |
| No. Final Filters / Size (1) | - | |

| MOTOR DATA - SUPPLY | |
|---------------------|--------|
| | Actual |
| Motor MFG / Frame | |
| Horsepower / RPM | |
| Rated Volts / Phase | |
| Rated Amperage / SF | |

| TEST DATA - SUPPLY | | |
|--------------------|--------|--------|
| | Design | Actual |
| Total CFM | 22415 | |
| OA CFM | - | |
| Fan RPM | - | |
| VFD Speed | - | |
| RL Voltage | - | |
| RL Amperage | - | |
| Motor B.H.P. | - | |

| PERFORMANCE DATA - SUPPLY | | |
|---------------------------|--------|--------|
| | Design | Actual |
| Static Pressure Stpt | - | |
| Suction S.P. | - | |
| Discharge S.P. | - | |
| Total S.P. | 5.75 | |
| Reheat Coil P.D. | - | |
| DX Coil P.D. | - | |
| Condenser Coil P.D. | - | |
| Chilled Water Coil P.D. | - | |
| Pre Heat Coil P.D. | - | |
| Final Filters P.D. | - | |
| Heat Wheel P.D. | - | |
| Pre-Filters P.D. | - | |
| Air Blender P.D. | - | |
| Total ESP | - | |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

AHU-DUAL FAN



VAV - Single Duct

(E)AC-2/MECH 351

| Asset | | | | | | | | | | | |
|------------|-------|-----------|--------|------------|----------------|---------|----------------|---------|-----------------|----------|-----------|
| Asset Name | MFG | Model Num | Type | Inlet Size | Design Max CFM | Max CFM | Design Min CFM | Min CFM | Design Heat CFM | Heat CFM | Ak (max) |
| V3-300 | TITUS | DESV | REHEAT | 6 | 275 | 280 | 75 | 77 | 150 | 147 | 1.07-481 |
| V3-304 | TITUS | DESV | REHEAT | 10 | 800 | 796 | 300 | 298 | 480 | 478 | 1581-1.10 |
| V3-306 | TITUS | DESV | REHEAT | 10 | 400 | 415 | 250 | 260 | 400 | 415 | 1376-0.96 |
| V3-307 | TITUS | DESV | REHEAT | 8 | 400 | 406 | 175 | 178 | 300 | 304 | 920-1.02 |
| V3-309 | TITUS | DESV | REHEAT | 10 | 400 | 391 | 250 | 245 | 400 | 391 | 1498-1.04 |
| V3-310 | TITUS | DESV | REHEAT | 12 | 1480 | 1429 | 450 | 435 | 450 | 435 | 2247-1.19 |
| V3-311 | TITUS | DESV | REHEAT | 12 | 1580 | 1591 | 500 | 505 | 500 | 505 | 2218-1.17 |
| V3-312 | TITUS | DESV | REHEAT | 12 | 1480 | 1459 | 450 | 440 | 500 | 490 | 2277-1.20 |
| V3-313 | TITUS | DESV | REHEAT | 12 | 1480 | 1506 | 500 | 505 | 500 | 505 | 2122-1.12 |
| V3-317 | TITUS | DESV | REHEAT | 10 | 625 | 603 | 200 | 190 | 625 | 603 | 1526-1.06 |
| V3-319 | TITUS | DESV | REHEAT | 6 | 200 | 201 | 75 | 75 | 100 | 100 | 430-0.96 |
| V3-320 | TITUS | DESV | REHEAT | 12 | 1300 | 1289 | 375 | 365 | 630 | 638 | 1.24-2349 |
| V3-325 | TITUS | DESV | REHEAT | 6 | 150 | 145 | 50 | 49 | 75 | 73 | 555-1.24 |
| V3-326 | TITUS | DESV | REHEAT | 8 | 400 | 403 | 125 | 126 | 350 | 352 | 929-1.03 |
| V3-329 | TITUS | DESV | REHEAT | 8 | 300 | 296 | 75 | 74 | 150 | 148 | 966-1.07 |
| V3-309A 1 | TITUS | DESV | REHEAT | 6 | 275 | 273 | 100 | 99 | 225 | 224 | 500-1.12 |
| V3-310A 1 | TITUS | DESV | REHEAT | 8 | 750 | 757 | 225 | 227 | 225 | 227 | 933-1.03 |
| V3-314A 1 | TITUS | DESV | REHEAT | 12 | 1260 | 1265 | 375 | 388 | 375 | 388 | 1.21 |
| V3-314B 1 | TITUS | DESV | REHEAT | 10 | 880 | 853 | 325 | 330 | 325 | 330 | 1.03-1482 |
| V3-314C 1 | TITUS | DESV | REHEAT | 14 | 1540 | 1557 | 525 | 531 | 525 | 531 | 1.34-4034 |
| V3-314D 1 | TITUS | DESV | REHEAT | 10 | 1040 | 1011 | 300 | 293 | 300 | 293 | 0.75-1070 |
| V3-322A 1 | TITUS | DESV | REHEAT | 12 | 1225 | 1203 | 350 | 355 | 500 | 506 | 1.26-2385 |
| V3-322B 1 | TITUS | DESV | REHEAT | 12 | 1225 | 1256 | 350 | 347 | 500 | 495 | 1.21-2287 |
| V3-324A 1 | TITUS | DESV | REHEAT | 12 | 1710 | 1716 | 400 | 401 | 400 | 401 | 1.18-2226 |
| V3-324B 1 | TITUS | DESV | REHEAT | 12 | 1440 | 1461 | 400 | 405 | 400 | 405 | 1.16-2201 |

Diffuser Supply (GRD)

V3-300/300

| Asset | | | | | | | |
|------------|----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3300-1 | 302 | S-1 | 6 | 75 | 56 | 76 | 101.3 |
| 3300-2 | 303 | S-1 | 6 | 75 | 79 | 74 | 98.7 |
| 3300-2 | 300 | S-2 | 8 | 125 | 157 | 130 | 104.0 |
| Total | | | | 275 | 292 | 280 | 101.82% |

V3-304/306

| Asset | | | | | | | |
|------------|----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3304-1 | 100CCC | S-2 | 8 | 200 | 164 | 194 | 97.0 |
| 3304-2 | 304 | S-2 | 8 | 150 | 178 | 155 | 103.3 |
| 3304-2 | 304 | S-2 | 8 | 150 | 171 | 149 | 99.3 |
| 3304-4 | 305 | S-2 | 8 | 150 | 184 | 138 | 92.0 |
| 3304-4 | 305 | S-2 | 8 | 150 | 177 | 160 | 106.7 |
| Total | | | | 800 | 874 | 796 | 99.5% |

V3-306/307

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3306-1 | 306 | S-2 | 8 | 200 | 183 | 205 | 102.5 |
| 3306-2 | 306 | S-2 | 8 | 200 | 210 | 210 | 105.0 |
| Total | | | | 400 | 393 | 415 | 103.75% |

V3-307/309

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3307-1 | 307 | S-2 | 8 | 200 | 224 | 216 | 108.0 |
| 3307-2 | 307 | S-2 | 8 | 200 | 190 | 190 | 95.0 |
| Total | | | | 400 | 414 | 406 | 101.5% |

V3-309/309

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3309-1 | 309 | S-2 | 8 | 200 | 184 | 196 | 98.0 |
| 3309-2 | 309 | S-2 | 8 | 200 | 225 | 195 | 97.5 |
| Total | | | | 400 | 409 | 391 | 97.75% |

V3-310/310

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3310-1 | 310 | EX-SA | | 370 | 288 | 234 | 63.2 |
| 3310-2 | 310 | EX-SA | | 370 | 528 | 433 | 117.0 |
| 3310-2 | 310 | EX-SA | | 370 | 439 | 362 | 97.8 |
| 3310-4 | 310 | EX-SA | | 370 | 488 | 400 | 108.1 |
| Total | | | | 1480 | 1743 | 1429 | 96.55% |

V3-311/311

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3311-1 | 311 | EX-SA | | 370 | 563 | 449 | 121.4 |
| 3311-2 | 311 | EX-SA | | 370 | 533 | 424 | 114.6 |
| 3311-2 | 311 | EX-SA | | 370 | 380 | 297 | 80.3 |
| 3311-4 | 311 | EX-SA | | 370 | 367 | 300 | 81.1 |
| 3311-5 | | EX-SA | | 100 | 137 | 121 | 121.0 |
| Total | | | | 1580 | 1980 | 1591 | 100.7% |

V3-312/312

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3312-1 | 312 | EX-SA | | 370 | 178 | 145 | 39.2 |
| 3312-2 | 312 | EX-SA | | 370 | 484 | 395 | 106.8 |
| 3312-2 | 312 | EX-SA | | 370 | 645 | 522 | 141.1 |
| 3312-4 | 312 | EX-SA | | 370 | 475 | 397 | 107.3 |
| Total | | | | 1480 | 1782 | 1459 | 98.58% |

V3-313/313

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3313-1 | 313 | EX-SA | | 370 | 420 | 332 | 89.7 |
| 3313-2 | 313 | EX-SA | | 370 | 431 | 361 | 97.6 |
| 3313-2 | 313 | EX-SA | | 370 | 483 | 388 | 104.9 |
| 3313-4 | 313 | EX-SA | | 370 | 551 | 425 | 114.9 |
| Total | | | | 1480 | 1885 | 1506 | 101.76% |

V3-317/318

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3317-1 | 317 | S-2 | 8 | 225 | 195 | 219 | 97.3 |
| 3317-2 | 327 | S-2 | 8 | 150 | 193 | 140 | 93.3 |
| 3317-2 | 316 | S-3 | 10 | 250 | 270 | 244 | 97.6 |
| Total | | | | 625 | 658 | 603 | 96.48% |

V3-319/320

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3319-1 | 319 | S-1 | 6 | 100 | 110 | 96 | 96.0 |
| 3319-2 | 318 | S-1 | 6 | 100 | 80 | 105 | 105.0 |
| Total | | | | 200 | 190 | 201 | 100.5% |

V3-320/322

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3320-1 | 320 | S-3 | 10 | 300 | 375 | 308 | 102.7 |
| 3320-2 | 320 | S-3 | 10 | 300 | 398 | 309 | 103.0 |
| 3320-2 | 320 | S-3 | 10 | 300 | 365 | 299 | 99.7 |
| 3320-4 | 320 | S-3 | 10 | 300 | 339 | 277 | 92.3 |
| 3320-5 | HALL | S-3 | 6 | 100 | 113 | 96 | 96.0 |
| Total | | | | 1300 | 1590 | 1289 | 99.15% |

V3-325/326

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3325-1 | 323 | S-1 | 6 | 75 | 90 | 73 | 97.3 |
| 3325-2 | 325 | S-1 | 6 | 75 | 91 | 72 | 96.0 |
| Total | | | | 150 | 181 | 145 | 96.67% |

V3-326/329

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3326-1 | 326 | S-2 | 8 | 200 | 210 | 206 | 103.0 |
| 3326-2 | 326 | S-2 | 8 | 200 | 201 | 197 | 98.5 |
| Total | | | | 400 | 411 | 403 | 100.75% |

V3-329/329

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3329-1 | 314 | S-1 | 6 | 100 | 108 | 108 | 108.0 |
| 3329-2 | 329 | S-1 | 6 | 100 | 118 | 97 | 97.0 |
| 3329-2 | 314 | S-1 | 6 | 100 | 99 | 91 | 91.0 |
| Total | | | | 300 | 325 | 296 | 98.67% |

V3-309A 1/310

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3309A-1 | 309A | S-1 | 6 | 100 | 101 | 96 | 96.0 |
| 3309A-2 | 309B | S-2 | 8 | 175 | 196 | 177 | 101.1 |
| Total | | | | 275 | 297 | 273 | 99.27% |

V3-310A 1/311

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3310A-1 | 100CCC | | | 375 | 396 | 384 | 102.4 |
| 3310A-2 | 100CCC | | | 375 | 382 | 373 | 99.5 |
| Total | | | | 750 | 778 | 757 | 100.93% |

V3-314B 1/LOUNGE

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3314B-1 | LOUNGE | EX-SA | | 220 | 228 | 220 | 100.0 |
| 3314B-2 | LOUNGE | EX-SA | | 220 | 162 | 153 | 69.5 |
| 3314B-3 | LOUNGE | EX-SA | | 220 | 294 | 279 | 126.8 |
| 3314B-4 | LOUNGE | EX-SA | | 220 | 210 | 201 | 91.4 |
| Total | | | | 880 | 894 | 853 | 96.93% |

V3-314C 1/LOUNGE

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3314C-1 | LOUNGE | EX-SA | | 385 | 650 | 421 | 109.4 |
| 3314C-2 | LOUNGE | EX-SA | | 385 | 521 | 370 | 96.1 |
| 3314C-2 | LOUNGE | EX-SA | | 385 | 592 | 375 | 97.4 |
| 3314C-4 | LOUNGE | EX-SA | | 385 | 593 | 391 | 101.6 |
| Total | | | | 1540 | 2356 | 1557 | 101.1% |

V3-314D 1/327

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3314D-1 | LOUNGE | EX-SA | | 260 | 372 | 265 | 101.9 |
| 3314D-2 | LOUNGE | EX-SA | | 260 | 295 | 223 | 85.8 |
| 3314D-3 | LOUNGE | EX-SA | | 260 | 157 | 277 | 106.5 |
| 3314D-4 | LOUNGE | EX-SA | | 260 | 71 | 246 | 94.6 |
| Total | | | | 1040 | 895 | 1011 | 97.21% |

V3-322A 1/322

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3322A-1 | HALL | EX-SA | | 100 | 133 | 107 | 107.0 |
| 3322A-2 | 322 | S-3 | 10 | 375 | 515 | 396 | 105.6 |
| 3322A-3 | 322 | S-3 | 10 | 375 | 442 | 351 | 93.6 |
| 3322A-4 | 322 | S-3 | 10 | 375 | 457 | 349 | 93.1 |
| Total | | | | 1225 | 1547 | 1203 | 98.2% |

V3-322B 1/324

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3322B-1 | HALL | EX-SA | | 100 | 163 | 130 | 130.0 |
| 3322B-2 | 322 | S-3 | 10 | 375 | 461 | 392 | 104.5 |
| 3322B-3 | 322 | S-3 | 10 | 375 | 413 | 363 | 96.8 |
| 3322B-4 | 322 | S-3 | 10 | 375 | 448 | 371 | 98.9 |
| Total | | | | 1225 | 1485 | 1256 | 102.53% |

V3-324A 1/324

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3324A-1 | 324 | EX-SA | | 285 | 336 | 277 | 97.2 |
| 3324A-2 | 324 | EX-SA | | 285 | 297 | 245 | 86.0 |
| 3324A-2 | 324 | EX-SA | | 285 | 348 | 294 | 103.2 |
| 3324A-4 | 324 | EX-SA | | 285 | 354 | 309 | 108.4 |
| 3324A-4 | 324 | EX-SA | | 285 | 351 | 298 | 104.6 |
| 3324A-6 | 324 | EX-SA | | 285 | 348 | 293 | 102.8 |
| Total | | | | 1710 | 2034 | 1716 | 100.35% |

V3-324B 1/325

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 3324B-1 | 324 | EX-SA | | 360 | 381 | 331 | 91.9 |
| 3324B-2 | 324 | EX-SA | | 360 | 308 | 256 | 71.1 |
| 3324B-2 | 324 | EX-SA | | 360 | 495 | 432 | 120.0 |
| 3324B-4 | 324 | EX-SA | | 360 | 501 | 442 | 122.8 |
| Total | | | | 1440 | 1685 | 1461 | 101.46% |

Completed By: Gabe Merk on 12/26/2024

| Asset | Notes | Date | Written By |
|-----------|--|------------|-------------|
| V3-311 | NO DAMPERS LOCATED, UNABLE TO BALANCE DEVICES INTO DESIGN | 10/17/2024 | Riley Frady |
| V3-312 | DIFFUSER 1 NO OBSTRUCTIONS TO NOTE | 12/26/2024 | Gabe Merk |
| V3-314B 1 | DIFFUSER 5 CONNECTED TO 314A. REMOVED FROM 314B TOTAL. DIFFUSERS 1 AND 3 ARE LINEAR. | 12/27/2024 | Gabe Merk |
| V3-322B 1 | NO DAMPER ON EXISTING DIFFUSER 1 | 12/27/2024 | Gabe Merk |
| V3-324A 1 | EXISTING DUCTWORK. NO DAMPERS TO DISTRIBUTE AIRFLOW. | 12/27/2024 | Gabe Merk |
| V3-324B 1 | NO DAMPERS TO DISTRIBUTE AIRFLOW. | 12/27/2024 | Gabe Merk |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: AHU-DUAL FAN



Asset: (E)AC-3

AREA:MECH 427

| UNIT DATA - SUPPLY | | |
|------------------------------|--------|--------|
| | Design | Actual |
| Manufacturer | NA | NA |
| Model Number | NA | NA |
| Serial Number | - | - |
| No. Pre-Filters / Size (1) | - | - |
| No. Pre-Filters / Size (2) | - | - |
| No. Pre-Filters / Size (3) | - | - |
| No. Final Filters / Size (1) | - | - |
| No. Final Filters / Size (2) | - | - |
| No. Final Filters / Size (3) | - | - |

| MOTOR DATA - SUPPLY | |
|---------------------|--------|
| | Actual |
| Motor MFG / Frame | |
| Horsepower / RPM | |
| Rated Volts / Phase | |
| Rated Amperage / SF | |

| DRIVE DATA - SUPPLY | | |
|--------------------------|--------|--------|
| | Design | Actual |
| Motor Sheave Size / Bore | - | - |
| Fan Sheave Size / Bore | - | - |
| Belt CL Distance | - | - |
| No. Belts / Size | - | - |

| TEST DATA - SUPPLY | | |
|--------------------|--------|--------|
| | Design | Actual |
| Total CFM | 27490 | |
| OA CFM | - | |
| Fan RPM | - | |
| VFD Speed | - | |
| RL Voltage | - | |
| RL Amperage | - | |
| Motor B.H.P. | - | |

| PERFORMANCE DATA - SUPPLY | | |
|---------------------------|--------|--------|
| | Design | Actual |
| Static Pressure Stpt | - | |
| Suction S.P. | - | |
| Discharge S.P. | - | |
| Total S.P. | 5.75 | |
| Reheat Coil P.D. | - | |
| DX Coil P.D. | - | |
| Condenser Coil P.D. | - | |
| Chilled Water Coil P.D. | - | |
| Pre Heat Coil P.D. | - | |
| Final Filters P.D. | - | |
| Heat Wheel P.D. | - | |
| Pre-Filters P.D. | - | |
| Air Blender P.D. | - | |
| Total ESP | - | |

| UNIT DATA - EXHAUST/RETURN | | |
|----------------------------|--------|--------|
| | Design | Actual |
| Manufacturer | - | |
| Model Number | - | |
| Serial Number | - | |
| No. Pre-Filters / Size (1) | - | |
| No. Pre-Filters / Size (2) | - | |
| No. Pre-Filters / Size (3) | - | |
| No. Pre-Filters / Size (4) | - | |
| No. Pre-Filters / Size (5) | - | |
| No. Pre-Filters / Size (6) | - | |

| MOTOR DATA - EXHAUST/RETURN | |
|-----------------------------|--------|
| | Actual |
| Motor MFG / FRAME | |
| Horsepower / RPM | |
| Rated Volts / Phase | |
| Rated Amperage / SF | |

| DRIVE DATA - EXHAUST/RETURN | | |
|-----------------------------|--------|--------|
| | Design | Actual |
| Motor Sheave Size / Bore | - | |
| Fan Sheave Size / Bore | - | |
| Belt CL Distance | - | |
| No. Belts / Size | - | |

| TEST DATA - EXHAUST/RETURN | | |
|----------------------------|--------|--------|
| | Design | Actual |
| Total CFM | 27500 | |
| Fan RPM | - | |
| VFD Speed | - | |
| RL Voltage | - | |
| RL Amperage | - | |
| Motor B.H.P. | - | |

| PERFORMANCE DATA - EXHAUST/RETURN | | |
|-----------------------------------|--------|--------|
| | Design | Actual |
| Static Pressure Stpt | - | |
| Suction S.P. | - | |
| Discharge S.P. | - | |
| Total S.P. | 1.75 | |
| Heat Wheel P.D. | - | |
| Pre-Filters P.D. | - | |
| Total ESP | - | |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

AHU-DUAL FAN



VAV - Single Duct

(E)AC-3/MECH 427

| Asset | | | | | | | | | | | |
|------------|-------|-----------|--------|------------|----------------|---------|----------------|---------|-----------------|----------|-----------|
| Asset Name | MFG | Model Num | Type | Inlet Size | Design Max CFM | Max CFM | Design Min CFM | Min CFM | Design Heat CFM | Heat CFM | Ak (max) |
| V4-400 | TITUS | DESV | REHEAT | 12 | 1660 | 1669 | 500 | 502 | 800 | 804 | 2241-1.18 |
| V4-401 | TITUS | DESV | REHEAT | 12 | 1200 | 1185 | 425 | 420 | 650 | 640 | 2125-1.12 |
| V4-402 | TITUS | DESV | REHEAT | 14 | 1800 | 1771 | 500 | 490 | 750 | 735 | 3035-1.01 |
| V4-405 | TITUS | DESV | REHEAT | 6 | 100 | 101 | 50 | 50 | 50 | 50 | 444-0.99 |
| V4-406 | TITUS | DESV | REHEAT | 6 | 300 | 299 | 100 | 99 | 200 | 199 | 482-1.08 |
| V4-407 | TITUS | DESV | REHEAT | 6 | 100 | 103 | 50 | 52 | 100 | 103 | 507-1.13 |
| V4-408 | TITUS | DESV | REHEAT | 6 | 100 | 102 | 25 | 26 | 25 | 26 | 502-1.12 |
| V4-410 | TITUS | DESV | REHEAT | 8 | 750 | 742 | 225 | 223 | 340 | 337 | 928-1.03 |
| V4-412 | TITUS | DESV | REHEAT | 8 | 400 | 402 | 125 | 126 | 200 | 201 | 915-1.01 |
| V4-414 | TITUS | DESV | REHEAT | 10 | 1080 | 1076 | 325 | 321 | 500 | 506 | 0.93-1336 |
| V4-415 | TITUS | DESV | REHEAT | 8 | 350 | 344 | 124 | 124 | 125 | 124 | 1002-1.11 |
| V4-417 | TITUS | DESV | REHEAT | 12 | 1980 | 1376 | 425 | 435 | 640 | 651 | 2186-1.16 |
| V4-422 | TITUS | DESV | REHEAT | 6 | 100 | 106 | 25 | 27 | 25 | 27 | 1.17-524 |
| V4-424 | TITUS | DESV | REHEAT | 8 | 450 | 455 | 125 | 128 | 175 | 173 | 1.02-926 |
| V4-425 | TITUS | DESV | REHEAT | 14 | 1740 | 1747 | 200 | 208 | 375 | 376 | 1.05-3167 |
| V4-404A 1 | TITUS | DESV | REHEAT | 12 | 1480 | 1438 | 400 | 390 | 600 | 580 | 2041-1.08 |
| V4-404B 1 | TITUS | DESV | REHEAT | 12 | 1480 | 1490 | 500 | 502 | 725 | 730 | 2224-1.18 |
| V4-406A 1 | TITUS | DESV | REHEAT | 10 | 600 | 594 | 175 | 173 | 275 | 272 | 1503-1.05 |
| V4-419A 1 | TITUS | DESV | REHEAT | 12 | 1480 | 1513 | 425 | 435 | 640 | 655 | 2101-1.11 |
| V4-419B 1 | TITUS | DESV | REHEAT | 12 | 1260 | 1223 | 200 | 190 | 330 | 317 | 2273-1.20 |
| V4-420A 1 | TITUS | DESV | REHEAT | 12 | 1740 | 1715 | 200 | 199 | 330 | 328 | 2175-1.15 |
| V4-420B 1 | TITUS | DESV | REHEAT | 12 | 1740 | 1768 | 200 | 209 | 330 | 341 | 1.10-2084 |
| V4-420C 1 | TITUS | DESV | REHEAT | 12 | 1440 | 1456 | 200 | 202 | 330 | 333 | 2173-1.13 |
| V4-426A 1 | TITUS | DESV | REHEAT | 10 | 1040 | 1044 | 200 | 201 | 300 | 301 | 1455-1.01 |
| V4-426B 1 | TITUS | DESV | REHEAT | 12 | 1680 | 1670 | 200 | 198 | 330 | 227 | 2198-1.16 |
| V4-426C 1 | TITUS | DESV | REHEAT | 12 | 1440 | 1434 | 200 | 199 | 330 | 328 | 2140-1.13 |

Diffuser Supply (GRD)

V4-400/400

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4400-1 | 400 | EX-SA | | 415 | 478 | 445 | 107.2 |
| 4400-2 | 400 | EX-SA | | 415 | 473 | 432 | 104.1 |
| 4400-2 | 400 | EX-SA | | 415 | 444 | 426 | 102.7 |
| 4400-4 | 400 | EX-SA | | 415 | 387 | 366 | 88.2 |
| Total | | | | 1660 | 1782 | 1669 | 100.54% |

V4-401/401

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4401-1 | 401 | EX-SA | | 300 | 316 | 269 | 89.7 |
| 4401-2 | 401 | EX-SA | | 300 | 274 | 253 | 84.3 |
| 4401-2 | 401 | EX-SA | | 300 | 408 | 360 | 120.0 |
| 4401-4 | 401 | EX-SA | | 300 | 344 | 303 | 101.0 |
| Total | | | | 1200 | 1342 | 1185 | 98.75% |

V4-402/402

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4402-1 | 402 | EX-SA | | 300 | 67 | 75 | 25.0 |
| 4402-2 | 402 | EX-SA | | 300 | 397 | 391 | 130.3 |
| 4402-2 | 402 | EX-SA | | 300 | 119 | 110 | 36.7 |
| 4402-4 | 402 | EX-SA | | 300 | 410 | 383 | 127.7 |
| 4402-4 | 402 | EX-SA | | 300 | 422 | 412 | 137.3 |
| 4402-6 | 402 | EX-SA | | 300 | 408 | 400 | 133.3 |
| Total | | | | 1800 | 1823 | 1771 | 98.39% |

V4-405/405

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4405-1 | 405 | S-1 | 6 | 100 | 105 | 101 | 101.0 |
| Total | | | | 100 | 105 | 101 | 101% |

V4-406/406

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4406-1 | 406 | S-2 | 8 | 150 | 53 | 151 | 100.7 |
| 4406-2 | 406 | S-2 | 8 | 150 | 49 | 148 | 98.7 |
| Total | | | | 300 | 102 | 299 | 99.67% |

V4-407/407

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4407-1 | 407 | S-1 | 6 | 100 | 112 | 103 | 103.0 |
| Total | | | | 100 | 112 | 103 | 103% |

V4-408/408

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4408-1 | 408 | S-1 | 6 | 100 | 323 | 102 | 102.0 |
| Total | | | | 100 | 323 | 102 | 102% |

V4-410/LOBBY

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4410-1 | LOBBY | | | 375 | 469 | 358 | 95.5 |
| 4410-2 | LOBBY | | | 375 | 297 | 384 | 102.4 |
| Total | | | | 750 | 766 | 742 | 98.93% |

V4-412/LOBBY

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4412-1 | 412 | S-2 | 8 | 200 | 196 | 194 | 97.0 |
| 4412-2 | 412 | S-2 | 8 | 200 | 213 | 208 | 104.0 |
| Total | | | | 400 | 409 | 402 | 100.5% |

V4-414/414

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4414-1 | LOBBY | EX-SA | | 540 | 431 | 493 | 91.3 |
| 4414-2 | LOBBY | EX-SA | | 540 | 514 | 583 | 108.0 |
| Total | | | | 1080 | 945 | 1076 | 99.63% |

V4-415/415

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4415-1 | 415 | S-2 | 8 | 175 | 171 | 165 | 94.3 |
| 4415-2 | 415 | S-2 | 8 | 175 | 219 | 179 | 102.3 |
| Total | | | | 350 | 390 | 344 | 98.29% |

V4-417/417

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4417-1 | 417 | EX-SA | | 495 | 451 | 451 | 91.1 |
| 4417-2 | 417 | EX-SA | | 495 | 287 | 287 | 58.0 |
| 4417-2 | 417 | EX-SA | | 495 | 325 | 325 | 65.7 |
| 4417-4 | 417 | EX-SA | | 495 | 313 | 313 | 63.2 |
| Total | | | | 1980 | 1376 | 1376 | 69.49% |

V4-422/

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4422-11 | 422 | S-1 | 6 | 100 | 117 | 106 | 106.0 |
| Total | | | | 100 | 117 | 106 | 106% |

V4-424/424

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4424-1 | 424 | S-3 | 10 | 225 | 229 | 225 | 100.0 |
| 4424-2 | 424 | S-3 | 10 | 225 | 234 | 230 | 102.2 |
| Total | | | | 450 | 463 | 455 | 101.11% |

V4-425/426

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4425-1 | 425 | EX-SA | | 870 | 885 | 841 | 96.7 |
| 4425-2 | 425 | EX-SA | | 870 | 948 | 906 | 104.1 |
| Total | | | | 1740 | 1833 | 1747 | 100.4% |

V4-404A 1/404

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4404A-1 | 404 | EX-SA | | 370 | 376 | 335 | 90.5 |
| 4404A-2 | 404 | EX-SA | | 370 | 376 | 388 | 104.9 |
| 4404A-2 | 404 | EX-SA | | 370 | 246 | 334 | 90.3 |
| 4404A-4 | 404 | EX-SA | | 370 | 475 | 382 | 103.2 |
| Total | | | | 1480 | 1473 | 1439 | 97.23% |

V4-404B 1/404

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4404B-1 | 404 | EX-SA | | 370 | 386 | 370 | 100.0 |
| 4404B-2 | 404 | EX-SA | | 370 | 454 | 395 | 106.8 |
| 4404B-2 | 404 | EX-SA | | 370 | 506 | 337 | 91.1 |
| 4404B-4 | 404 | EX-SA | | 370 | 525 | 388 | 104.9 |
| Total | | | | 1480 | 1871 | 1490 | 100.68% |

V4-406A 1/406

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4406A-1 | 406A | S-2 | 8 | 150 | 174 | 142 | 94.7 |
| 4406A-2 | 406A | S-2 | 8 | 150 | 153 | 157 | 104.7 |
| 4406A-2 | 406A | S-2 | 8 | 150 | 139 | 144 | 96.0 |
| 4406A-4 | 406A | S-2 | 8 | 150 | 164 | 151 | 100.7 |
| Total | | | | 600 | 630 | 594 | 99% |

V4-419A 1/419

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4419A-1 | 419 | EX-SA | | 370 | 397 | 389 | 105.1 |
| EX-SA2 | 419 | EX-SA | | 370 | 382 | 382 | 103.2 |
| EX-SA2 | 419 | EX-SA | | 370 | 410 | 381 | 103.0 |
| EX-SA4 | 419 | EX-SA | | 370 | 425 | 361 | 97.6 |
| Total | | | | 1480 | 1614 | 1513 | 102.23% |

V4-419B 1/

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4419B-1 | 419 | EX-SA | | 315 | 340 | 302 | 95.9 |
| 4419B-2 | 419 | EX-SA | | 315 | 324 | 291 | 92.4 |
| 4419B-2 | 419 | EX-SA | | 315 | 431 | 299 | 94.9 |
| 4419B-4 | 419 | EX-SA | | 315 | 406 | 331 | 105.1 |
| Total | | | | 1260 | 1501 | 1223 | 97.06% |

V4-420A 1/420

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4420A-1 | HALL | EX-SA | | 100 | 64 | 55 | 55.0 |
| 4420A-2 | 420 | EX-SA | | 410 | 397 | 406 | 99.0 |
| 4420A-2 | 420 | EX-SA | | 410 | 518 | 443 | 108.0 |
| 4420A-4 | 420 | EX-SA | | 410 | 455 | 412 | 100.5 |
| 4420A-4 | 420 | EX-SA | | 410 | 437 | 399 | 97.3 |
| Total | | | | 1740 | 1871 | 1715 | 98.56% |

V4-420B 1/420

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4420B-1 | HALL | EX-SA | | 100 | 64 | 62 | 62.0 |
| 4420B-2 | 420 | EX-SA | | 410 | 457 | 429 | 104.6 |
| 4420B-2 | 420 | EX-SA | | 410 | 402 | 375 | 91.5 |
| 4420B-4 | 420 | EX-SA | | 410 | 456 | 417 | 101.7 |
| 4420B-4 | 420 | EX-SA | | 410 | 531 | 485 | 118.3 |
| Total | | | | 1740 | 1910 | 1768 | 101.61% |

V4-420C 1/422

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4420C-1 | 420 | EX-SA | | 360 | 455 | 429 | 119.2 |
| 4420C-2 | 420 | EX-SA | | 360 | 372 | 346 | 96.1 |
| 4420C-2 | 420 | EX-SA | | 360 | 355 | 308 | 85.6 |
| 4420C-4 | 420 | EX-SA | | 360 | 435 | 373 | 103.6 |
| Total | | | | 1440 | 1617 | 1456 | 101.11% |

V4-426A 1/426

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4426A-1 | 426 | EX-SA | | 260 | 236 | 242 | 93.1 |
| 4426A-2 | 426 | EX-SA | | 260 | 308 | 284 | 109.2 |
| 4426A-2 | 426 | EX-SA | | 260 | 246 | 259 | 99.6 |
| 4426A-4 | 426 | EX-SA | | 260 | 259 | 259 | 99.6 |
| Total | | | | 1040 | 1049 | 1044 | 100.38% |

V4-426B 1/426

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4426B-1 | 426 | EX-SA | | 420 | 353 | 333 | 79.3 |
| 4426B-2 | 426 | EX-SA | | 420 | 462 | 428 | 101.9 |
| 4426B-2 | 426 | EX-SA | | 420 | 490 | 454 | 108.1 |
| 4426B-4 | 426 | EX-SA | | 420 | 497 | 455 | 108.3 |
| Total | | | | 1680 | 1802 | 1670 | 99.4% |

V4-426C 1/

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 4426C-1 | 426 | EX-SA | | 360 | 409 | 361 | 100.3 |
| 4426C-2 | 426 | EX-SA | | 360 | 434 | 395 | 109.7 |
| 4426C-2 | 426 | EX-SA | | 360 | 386 | 332 | 92.2 |
| 4426C-4 | 426 | EX-SA | | 360 | 406 | 346 | 96.1 |
| Total | | | | 1440 | 1635 | 1434 | 99.58% |

| Asset | Notes | Date | Written By |
|--------------|---|-------------|-------------------|
| V4-414 | CAPPED DEAD LEG RAN TO CLASSROOM 419 | 12/19/2024 | Gabe Merk |
| V4-417 | UNABLE TO BALANCE DIFFUSERS. FACE DAMPERS ARE JAMMED OPEN. BOX TOTAL TO INCREASE WITH UNIT FINALS. | 12/19/2024 | Gabe Merk |
| V4-420A 1 | Swapped for 420B in software, program 420B to control these diffusers. No damper for hallway diffuser. | 10/14/2024 | Riley Frady |
| V4-420B 1 | VAV 420B controls 420A's devices, suspect they got swapped in software. no dampers to distribute airflow. | 12/26/2024 | Gabe Merk |
| V4-426B 1 | No dampers present. Diffuser 1 low due to long bending run below ceiling beams. | 10/15/2024 | Riley Frady |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

System/Unit: AHU-DUAL FAN



Asset: (E)AC-4

AREA:S PENTHOUSE

| UNIT DATA - SUPPLY | | |
|------------------------------|--------|--------|
| | Design | Actual |
| Manufacturer | NA | NA |
| Model Number | NA | NA |
| Serial Number | - | |
| No. Pre-Filters / Size (1) | - | |
| No. Final Filters / Size (1) | - | |

| MOTOR DATA - SUPPLY | |
|---------------------|--------|
| | Actual |
| Motor MFG / Frame | |
| Horsepower / RPM | |
| Rated Volts / Phase | |
| Rated Amperage / SF | |

| TEST DATA - SUPPLY | | |
|--------------------|--------|--------|
| | Design | Actual |
| Total CFM | 28320 | |
| OA CFM | - | |
| Fan RPM | - | |
| VFD Speed | - | |
| RL Voltage | - | |
| RL Amperage | - | |
| Motor B.H.P. | - | |

| PERFORMANCE DATA - SUPPLY | | |
|---------------------------|--------|--------|
| | Design | Actual |
| Static Pressure Stpt | - | |
| Suction S.P. | - | |
| Discharge S.P. | - | |
| Total S.P. | 5.75 | |
| Reheat Coil P.D. | - | |
| DX Coil P.D. | - | |
| Condenser Coil P.D. | - | |
| Chilled Water Coil P.D. | - | |
| Pre Heat Coil P.D. | - | |
| Final Filters P.D. | - | |
| Heat Wheel P.D. | - | |
| Pre-Filters P.D. | - | |
| Air Blender P.D. | - | |
| Total ESP | - | |

National TAB

Project: NKU Nunn Hall (Highland Heights, KY)

AHU-DUAL FAN



VAV - Single Duct

(E)AC-4/S PENTHOUSE

| Asset | | | | | | | | | | | |
|------------|-----|-----------|--------|------------|----------------|---------|----------------|---------|-----------------|----------|-----------|
| Asset Name | MFG | Model Num | Type | Inlet Size | Design Max CFM | Max CFM | Design Min CFM | Min CFM | Design Heat CFM | Heat CFM | Ak (max) |
| V5-100 | NA | NA | REHEAT | 12 | 1200 | 1231 | 100 | 105 | 200 | 216 | 1.13-4145 |
| V5-500 | NA | NA | REHEAT | 10 | 1040 | 1057 | 150 | 152 | 250 | 256 | 1463-1.02 |
| V5-501 | NA | NA | REHEAT | 8 | 580 | 572 | 200 | 198 | 330 | 327 | 920-1.02 |
| V5-502 | NA | NA | REHEAT | 10 | 900 | 896 | 270 | 269 | 600 | 598 | 1578-1.10 |
| V5-506 | NA | NA | REHEAT | 12 | 1700 | 1706 | 510 | 512 | 950 | 954 | 2354-1.24 |
| V5-509 | NA | NA | REHEAT | 10 | 600 | 598 | 180 | 180 | 500 | 498 | 1576-1.10 |
| V5-510 | NA | NA | REHEAT | 10 | 830 | 805 | 200 | 195 | 300 | 290 | 1356-0.94 |
| V5-511 | NA | NA | REHEAT | 12 | 1300 | 1262 | 275 | 268 | 700 | 687 | 2089-1.10 |
| V5-516 | NA | NA | REHEAT | 12 | 1605 | 1653 | 200 | 199 | 300 | 298 | 1.04-1967 |
| V5-518 | NA | NA | REHEAT | 8 | 750 | 748 | 225 | 224 | 340 | 344 | 1.00-904 |
| V5-521 | NA | NA | REHEAT | 10 | 1200 | 1221 | 200 | 204 | 300 | 306 | 1446-1.01 |
| V5-525 | NA | NA | REHEAT | 8 | 750 | 740 | 225 | 223 | 340 | 337 | 897-0.99 |
| V5-526 | NA | NA | REHEAT | 8 | 750 | 748 | 200 | 200 | 380 | 379 | 900-1.00 |
| V5-529 | NA | NA | REHEAT | 12 | 1450 | 1458 | 200 | 202 | 300 | 303 | 1839-0.97 |
| V5-530 | NA | NA | REHEAT | 10 | 950 | 954 | 200 | 501 | 300 | 301 | 1505-1.05 |
| V5-541 | NA | NA | REHEAT | 8 | 450 | 451 | 100 | 100 | 312 | 313 | 888-0.98 |
| V5-542 | NA | NA | REHEAT | 8 | 450 | 452 | 150 | 151 | 275 | 276 | 492-0.54 |
| V5-543 | NA | NA | REHEAT | 8 | 450 | 452 | 150 | 151 | 350 | 352 | 922-1.02 |
| V5-547 | NA | NA | REHEAT | 6 | 100 | 104 | 25 | 26 | 50 | 52 | 473-1.06 |
| V5-551 | NA | NA | REHEAT | 8 | 400 | 406 | 200 | 203 | 165 | 167 | 802-0.89 |
| V5-553 | NA | NA | REHEAT | 10 | 950 | 945 | 200 | 201 | 300 | 309 | 1.02-1471 |
| V5-555 | NA | NA | REHEAT | 10 | 630 | 623 | 200 | 198 | 350 | 347 | 1466-1.02 |
| V5-558 | NA | NA | REHEAT | 8 | 750 | 752 | 225 | 223 | 350 | 351 | 1.01 |
| V5-561 | NA | NA | REHEAT | 8 | 540 | 543 | 150 | 154 | 225 | 229 | 0.95-862 |
| V5-563 | NA | NA | REHEAT | 8 | 540 | 534 | 170 | 168 | 225 | 222 | 926-1.02 |
| V5-565 | NA | NA | REHEAT | 14 | 2160 | 2138 | 500 | 494 | 860 | 854 | 1.03-3118 |
| V5-516B 1 | NA | NA | REHEAT | 12 | 1050 | 1013 | 200 | 193 | 300 | 302 | 1.18-2224 |
| V5-521D 1 | NA | NA | REHEAT | 12 | 400 | 397 | 200 | 204 | 200 | 204 | 1.04-1972 |
| V5-534A 1 | NA | NA | REHEAT | 8 | 450 | 449 | 133 | 133 | 225 | 224 | 824-0.91 |
| V5-534B 1 | NA | NA | REHEAT | 10 | 900 | 885 | 267 | 262 | 450 | 445 | 914-1.01 |
| V5-540A 1 | NA | NA | REHEAT | 12 | 690 | 686 | 328 | 326 | 328 | 326 | 1891-1.00 |
| V5-540B 1 | NA | NA | REHEAT | 12 | 1450 | 1394 | 300 | 297 | 450 | 445 | 1591-0.84 |

Diffuser Supply (GRD)

V5-100/MEETING 500

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5100-1 | CORR 100 | EX-SA | | 300 | 396 | 365 | 121.7 |
| 5100-2 | CORR 100 | EX-SA | | 300 | 123 | 109 | 36.3 |
| 5100-2 | CORR 100 | EX-SA | | 300 | 402 | 360 | 120.0 |
| 5100-4 | CORR 100 | EX-SA | | 300 | 439 | 397 | 132.3 |
| Total | | | | 1200 | 1360 | 1231 | 102.58% |

V5-500/OFC 501

| Asset | | | | | | | |
|------------|-------------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5500-1 | COOR 100 | EX-SA | | 570 | 717 | 583 | 102.3 |
| 5500-2 | MEETING 500 | EX-SA | | 470 | 348 | 474 | 100.9 |
| Total | | | | 1040 | 1065 | 1057 | 101.63% |

V5-501/OFC 502

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5501-1 | OFC 501 | EX-SA | | 290 | 347 | 297 | 102.4 |
| 5501-2 | OFC 501 | EX-SA | | 290 | 243 | 275 | 94.8 |
| Total | | | | 580 | 590 | 572 | 98.62% |

V5-502/STUDY 508

| Asset | | | | | | | |
|------------|----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5502-1 | OFC 502 | S-4 | 12 | 450 | 497 | 442 | 98.2 |
| 5502-2 | OFC 502 | S-4 | 12 | 450 | 505 | 454 | 100.9 |
| Total | | | | 900 | 1002 | 896 | 99.56% |

V5-506/OFC 509

| Asset | | | | | | | |
|------------|-----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5506-1 | STUDY 507 | S-2 | 8 | 125 | 74 | 128 | 102.4 |
| 5506-2 | OFC 506 | S-3 | 10 | 225 | 283 | 226 | 100.4 |
| 5506-2 | STUDY 507 | S-2 | 8 | 125 | 236 | 117 | 93.6 |
| 5506-4 | OFC 503 | S-3 | 10 | 275 | 281 | 294 | 106.9 |
| 5506-4 | OFC 506 | S-3 | 10 | 225 | 330 | 224 | 99.6 |
| 5506-6 | OFC 503 | S-3 | 10 | 275 | 355 | 289 | 105.1 |
| 5506-7 | STUDY 508 | S-2 | 8 | 225 | 214 | 224 | 99.6 |
| 5506-8 | STUDY 508 | S-2 | 8 | 225 | 185 | 204 | 90.7 |
| Total | | | | 1700 | 1958 | 1706 | 100.35% |

V5-509/CORR 100

| Asset | | | | | | | |
|------------|----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5509-1 | OFC 509 | S-3 | 10 | 300 | 341 | 306 | 102.0 |
| 5509-2 | OFC 509 | S-3 | 10 | 300 | 323 | 292 | 97.3 |
| Total | | | | 600 | 664 | 598 | 99.67% |

V5-510/CORR 100

| Asset | | | | | | | |
|------------|----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5510-1 | CORR 100 | | | 415 | 436 | 400 | 96.4 |
| 5510-2 | | | | 415 | 339 | 405 | 97.6 |
| Total | | | | 830 | 775 | 805 | 96.99% |

V5-511/PRINT 505

| Asset | | | | | | | |
|------------|----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5511-1 | 514 | S-4 | 12 | 450 | 514 | 441 | 98.0 |
| 5511-2 | 511 | S-4 | 12 | 450 | 496 | 431 | 95.8 |
| 5511-2 | 510 | S-3 | 10 | 400 | 445 | 390 | 97.5 |
| Total | | | | 1300 | 1455 | 1262 | 97.08% |

V5-516/OFC 522

| Asset | | | | | | | |
|------------|------------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5516-1 | LOUNGE 516 | EX-SA | | 640 | 940 | 700 | 109.4 |
| 5516-2 | LOUNGE 516 | EX-SA | | 640 | 74 | 640 | 100.0 |
| 5516-2 | PRINT 505 | EX-SA | | 325 | 387 | 313 | 96.3 |
| Total | | | | 1605 | 1401 | 1653 | 102.99% |

V5-518/OFC 521

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5518-1 | OFC 515 | EX-SA | | 125 | 174 | 174 | 139.2 |
| 5518-2 | OFC 517 | EX-SA | | 125 | 158 | 158 | 126.4 |
| 5518-2 | OFC 515 | EX-SA | | 125 | 66 | 66 | 52.8 |
| 5518-4 | OFC 518 | EX-SA | | 125 | 126 | 126 | 100.8 |
| 5518-4 | OFC 517 | EX-SA | | 125 | 60 | 60 | 48.0 |
| 5518-6 | OFC 518 | EX-SA | | 125 | 164 | 164 | 131.2 |
| Total | | | | 750 | 748 | 748 | 99.73% |

V5-521/OFC 521

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5521-1 | OFC 521B | EX-SA | | 150 | 178 | 209 | 139.3 |
| 5521-2 | STO 521C | EX-SA | | 50 | 67 | 110 | 220.0 |
| 5521-3 | OFC 521 | EX-SA | | 400 | 283 | 319 | 79.8 |
| 5521-4 | OFC 521 | EX-SA | | 400 | 217 | 237 | 59.3 |
| 5521-5 | OFC 521D | EX-SA | | 200 | 315 | 346 | 173.0 |
| Total | | | | 1200 | 1060 | 1221 | 101.75% |

V5-525/OFC 525

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5525-1 | OFC-519 | EX-SA | | 125 | 115 | 116 | 92.8 |
| 5525-2 | OFC-519 | EX-SA | | 125 | 129 | 130 | 104.0 |
| 5525-2 | OFC-520 | EX-SA | | 125 | 114 | 114 | 91.2 |
| 5525-4 | OFC-525 | EX-SA | | 125 | 131 | 132 | 105.6 |
| 5525-4 | OFC-520 | EX-SA | | 125 | 136 | 137 | 109.6 |
| 5525-6 | OFC-525 | EX-SA | | 125 | 115 | 115 | 92.0 |
| Total | | | | 750 | 740 | 744 | 99.2% |

V5-526/OFC 528

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5526-1 | OFC 526 | EX-SA | | 125 | 129 | 131 | 104.8 |
| 5526-2 | OFC 527 | EX-SA | | 125 | 132 | 129 | 103.2 |
| 5526-2 | OFC 526 | EX-SA | | 125 | 115 | 114 | 91.2 |
| 5526-4 | OFC 527 | EX-SA | | 125 | 130 | 131 | 104.8 |
| 5526-4 | OFC 528 | EX-SA | | 125 | 112 | 113 | 90.4 |
| 5526-6 | OFC 528 | EX-SA | | 125 | 128 | 130 | 104.0 |
| Total | | | | 750 | 746 | 748 | 99.73% |

V5-529/OFC 531

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5529-1 | OFC 529 | EX-SA | | 440 | 512 | 531 | 120.7 |
| 5529-2 | CORR 100 | EX-SA | | 330 | 342 | 351 | 106.4 |
| 5529-2 | OFC 531 | EX-SA | | 440 | 240 | 249 | 56.6 |
| 5529-4 | COOR 100 | EX-SA | | 240 | 321 | 327 | 136.3 |
| Total | | | | 1450 | 1415 | 1458 | 100.55% |

V5-530/OFC 530

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5530-1 | LOUNGE 533 | EX-SA | | 750 | 542 | 529 | 70.5 |
| 5530-2 | OFC 530 | EX-SA | | 200 | 443 | 423 | 211.5 |
| Total | | | | 950 | 985 | 952 | 100.21% |

V5-541/OFC 542

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5541-1 | OFC 541 | EX-SA | | 225 | 203 | 204 | 90.7 |
| 5541-2 | OFC 541 | EX-SA | | 225 | 245 | 247 | 109.8 |
| Total | | | | 450 | 448 | 451 | 100.22% |

V5-542/OFC 542

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5542-1 | OFC 542 | EX-SA | | 220 | 137 | 241 | 109.5 |
| 5542-2 | OFC 542 | EX-SA | | 220 | 109 | 211 | 95.9 |
| Total | | | | 440 | 246 | 452 | 102.73% |

V5-543/OFC 543

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5543-1 | OFC 543 | EX-SA | | 225 | 212 | 207 | 92.0 |
| 5543-2 | OFC 543 | EX-SA | | 225 | 251 | 245 | 108.9 |
| Total | | | | 450 | 463 | 452 | 100.44% |

V5-547/OFC 547

| Asset | | | | | | | |
|------------|----------|------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5547-1 | OFC 547 | S-1 | 6 | 100 | 112 | 104 | 104.0 |
| Total | | | | 100 | 112 | 104 | 104% |

V5-551/OFC 551

| Asset | | | | | | | |
|------------|----------|---------------|--------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5551-1 | OFC 551 | PLENUM SUPPLY | 7"x15" | | 400 | 353 | 406 |
| Total | | | | | 400 | 353 | 406 |
| | | | | | | | 101.5% |

V5-553/OFC 555

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5553-1 | STOR 551 | EX-SA | | 150 | 156 | 152 | 101.3 |
| 5553-2 | ROOM 553 | EX-SA | | 400 | 382 | 371 | 92.8 |
| 5553-2 | CORR 100 | EX-SA | | 400 | 434 | 422 | 105.5 |
| Total | | | | 950 | 972 | 945 | 99.47% |

V5-555/LOUNGE 558

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5555-1 | OFC 557 | EX-SA | | 105 | 108 | 103 | 98.1 |
| 5555-2 | OFC 557 | EX-SA | | 105 | 93 | 95 | 90.5 |
| 5555-2 | OFC 556 | EX-SA | | 105 | 107 | 103 | 98.1 |
| 5555-4 | OFC 556 | EX-SA | | 105 | 103 | 107 | 101.9 |
| 5555-4 | OFC 555 | EX-SA | | 105 | 118 | 112 | 106.7 |
| 5555-6 | OFC 555 | EX-SA | | 105 | 113 | 103 | 98.1 |
| Total | | | | 630 | 642 | 623 | 98.89% |

V5-558/OFC 561

| Asset | | | | | | | |
|------------|------------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5558-1 | LOUNGE 558 | EX-SA | | 105 | 117 | 115 | 109.5 |
| 5558-2 | LOUNGE 558 | EX-SA | | 105 | 109 | 107 | 101.9 |
| 5558-2 | CORR | EX-SA | | 330 | 300 | 305 | 92.4 |
| 5558-4 | LOUNGE 558 | EX-SA | | 105 | 118 | 114 | 108.6 |
| 5558-4 | LOUNGE 558 | EX-SA | | 105 | 112 | 111 | 105.7 |
| Total | | | | 750 | 756 | 752 | 100.27% |

V5-561/MEETING 563

| Asset | | | | | | | |
|------------|----------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5561-1 | OFC 561 | EX-SA | | 135 | 117 | 123 | 91.1 |
| 5561-2 | OFC 562 | EX-SA | | 135 | 145 | 152 | 112.6 |
| 5561-2 | OFC 562 | EX-SA | | 135 | 150 | 158 | 117.0 |
| 5561-4 | OFC 561 | EX-SA | | 135 | 104 | 109 | 80.7 |
| Total | | | | 540 | 516 | 542 | 100.37% |

V5-563/MEETING 563

| Asset | | | | | | | |
|------------|-------------|-------|------|------------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5563-1 | MEETING 563 | EX-SA | | 135 | 121 | 114 | 84.4 |
| 5563-2 | OFC 564 | EX-SA | | 135 | 155 | 146 | 108.1 |
| 5563-2 | OFC 564 | EX-SA | | 135 | 137 | 137 | 101.5 |
| 5563-4 | MEETING 563 | EX-SA | | 135 | 140 | 137 | 101.5 |
| Total | | | | 540 | 553 | 534 | 98.89% |

V5-565/PRINT 566

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5565-1 | MEETING 565 | EX-SA | | 305 | 262 | 255 | 83.6 |
| 5565-2 | MEETING 565 | EX-SA | | 305 | 387 | 375 | 123.0 |
| 5565-2 | MEETING 565 | EX-SA | | 305 | 396 | 384 | 125.9 |
| 5565-4 | MEETING 565 | EX-SA | | 305 | 387 | 373 | 122.3 |
| 5565-4 | PRINT 566 | EX-SA | | 305 | 299 | 291 | 95.4 |
| 5565-6 | PRINT 566 | EX-SA | | 305 | 276 | 265 | 86.9 |
| 5565-7 | HALLWAY | EX-SA | | 330 | 200 | 195 | 59.1 |
| Total | | | | 2160 | 2207 | 2138 | 98.98% |

V5-516B 1/OFC 518

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 516B-1 | LOUNGE 516 | EX-SA | | 375 | 336 | 281 | 74.9 |
| 516B-2 | LOUNGE 516 | EX-SA | | 375 | 287 | 241 | 64.3 |
| 516B-3 | STORAGE 521A | EX-SA | | 150 | 276 | 230 | 153.3 |
| 516B-4 | OFC 522 | EX-SA | | 150 | 336 | 261 | 174.0 |
| Total | | | | 1050 | 1235 | 1013 | 96.48% |

V5-521D 1/CLASS 534

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5521D-5 | LOUNGE 516 | EX-SA | | 200 | 243 | 204 | 102.0 |
| 5521D-6 | LOUNGE 516 | EX-SA | | 200 | 206 | 193 | 96.5 |
| Total | | | | 400 | 449 | 397 | 99.25% |

V5-534A 1/CLASS 534

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5534A-1 | CLASS 534 | EX-SA | EX-SA | 225 | 216 | 234 | 104.0 |
| 5534A-2 | CLASS 534 | EX-SA | EX-SA | 225 | 195 | 215 | 95.6 |
| Total | | | | 450 | 411 | 449 | 99.78% |

V5-534B 1/CLASS 534

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5534B-1 | CLASS 534 | EX-SA | | 225 | 194 | 226 | 100.4 |
| 5534B-2 | CLASS 534 | EX-SA | | 225 | 218 | 209 | 92.9 |
| 5534B-2 | CLASS 534 | EX-SA | | 225 | 258 | 223 | 99.1 |
| 5534B-4 | CLASS 534 | EX-SA | | 225 | 241 | 227 | 100.9 |
| Total | | | | 900 | 911 | 885 | 98.33% |

V5-540A 1/CORR

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5540A-1 | 544 | EX-SA | | 220 | 226 | 226 | 102.7 |
| 5540A-2 | 546 | EX-SA | | 250 | 190 | 190 | 76.0 |
| 5540A-2 | 542 | EX-SA | | 220 | 270 | 270 | 122.7 |
| Total | | | | 690 | 686 | 686 | 99.42% |

V5-540B 1/RECPT 540

| Asset | | | | | | | |
|-------------------|-----------------|-------------|-------------|-------------------|---------------|------------------|--------------------|
| Asset Name | Location | Type | Size | DESIGN CFM | CFM(1) | FINAL CFM | % to design |
| 5540B-1 | 540 RECEPTION | | | 430 | 450 | 558 | 129.8 |
| 5540B-2 | 540 RECEPTION | | | 430 | 271 | 344 | 80.0 |
| 5540B-2 | 540A UNISEX RR | | | 80 | 59 | 78 | 97.5 |
| 5540B-4 | 540 RECEPTION | | | 430 | 259 | 332 | 77.2 |
| 5540B-4 | 540B MENS RR | | | 80 | 187 | 82 | 102.5 |
| Total | | | | 1450 | 1226 | 1394 | 96.14% |

Completed By: Gabe Merk on 12/26/2024

| Asset | Notes | Date | Written By |
|-----------|--|------------|-------------|
| V5-521 | DEVICES IN FIELD DO NOT MATCH DRAWING, UPDATED IN GRID VIEW TO MATCH OBSERVED DEVICES | 10/17/2024 | Riley Frady |
| V5-529 | NO DAMPERS LOCATED, UNABLE TO BRING DEVICES INTO DESIGN. | 10/16/2024 | Riley Frady |
| V5-530 | NO DAMPERS LOCATED, UNABLE TO BRING DEVICES INTO DESIGN | 10/16/2024 | Riley Frady |
| V5-542 | DEVICES DO NOT MATCH DRAWING AS INSTALLED. DEVICE LIST UPDATED TO MATCH FIELD INSTALLATION. | 10/17/2024 | Riley Frady |
| V5-563 | No dampers observed, unable to bring diffuser 1 into design. | 10/16/2024 | Riley Frady |
| V5-521D 1 | HAS ONLY TWO DIFFUSERS SERVING LOUNGE 516. THE LISTED LOCATION OF THE DIFFUSER IS CORRECT. ADDED FLOW TO DIFFUSERS TO KEEP ROOM TOTAL HOWEVER DIFFUSER NOISE WAS CONSIDERABLE. KEPT INITIAL DIFFUSER DESIGN. | 12/19/2024 | Gabe Merk |
| V5-540A 1 | DEVICES DO NOT MATCH DRAWING AS INSTALLED. DEVICE LIST UPDATED TO MATCH FIELD INSTALLATION. NO DAMPERS | 10/17/2024 | Riley Frady |
| V5-540B 1 | DEVICES DO NOT MATCH DRAWING AS INSTALLED. DEVICE LIST UPDATED TO MATCH FIELD INSTALLATION. NO DAMPERS FOR RECEPTION DIFFUSERS | 10/17/2024 | Riley Frady |