Report By:

National TAB
105 Stone Village Drive
Fort Mill, SC 29708

Report: Prelim

Function: Test, Adjust, & Balance

Date: 12/05/2025

Completed By: National TAB

PROJECT

CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

1415 Beatties Ford Road

Charlotte, NC 28216

Client

Balfour Beatty

1930 Camden Rd

Suite 280

Charlotte, NC 28203

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

Table Of Contents

Issue List

- EF-G13 G330B Low Flow
- EF-G9 not operational
- RAF-G1 damaged belts

CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

Project Issue Information

Issue Name :	EF-G13 G330B Low Flow		
Description :	EF-G13 is at 69% of design (831 CFM Actual / 1200 CFM Design). Godfrey stated that there was an RFI that removed one of the 8" ducts for the hood. Speed Controller is at 100%.		
Created By :	National TAB	**Assigned To :**	National TAB - Antonio Flores-De La Cruz
Status :	Open		
Priority :	Urgent	**Asset Tag :**	
Originated Date :	11/26/2025 - Antonio Flores-De La Cruz - National TAB		

CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

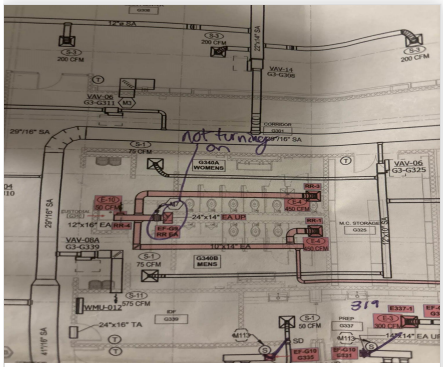
Project Issue Information

Issue Name : EF-G9 not operational

Description : The RR EF has power but is not working. Electrical and Controls believe the motor may has burnt out.

Created By :	National TAB	**Assigned To :**	National TAB - Antonio Flores-De La Cruz
Status :	Open		
Priority :	Urgent	**Asset Tag :**	EF-G9 RR EA 1
Originated Date :	11/12/2025 - Christian Moller - National TAB		

Project Issue File Details



11/12/2025

CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

Project Issue Information

Issue Name : RAF-G1 damaged belts

Description : The belts for RAF is damaged and must be replaced. The Alignment of the pulleys should be checked to ensure belt runs freely.

Created By : National TAB

Assigned To : National TAB - Antonio Flores-De La Cruz

Status : Open

Priority : Urgent

Asset Tag :

Originated Date : 11/26/2025 - Antonio Flores-De La Cruz - National TAB

Project Issue File Details

12/02/2025

Project Issue Response Details

- **12/04/2025 National TAB - Antonio Flores-De La Cruz**
  - Still waiting on belt replacement. Only one belt is installed.

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: AHU/RTU

Asset: AHU-G1 AREA:FLOOR 1

Unit Data		
	Design	**Actual**
MFG	TRANE	TRANE
Serial Num	-	H24H73210
Model Num	CSAA	CSAA021UAM00
Configuration	-	HORIZONTAL
Num PreFilter 1	-	6
PreFilter Size 1	-	16X25X2
Num PreFilter 2	-	1
PreFilter Size 2	-	32X18

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	213T
Horsepower	-	2 @ 7.5
Motor Rpm	-	1770
Phase	-	3
Rated Voltage	-	460
Rated Amperage	-	9.8
Service Factor	-	1.15

Test Data		
	Design	**Actual**
SF CFM	10225	10507
SF RPM	2312	2193
RA CFM	6775	7096
OA CFM	3450	3411
RL Voltage	460	481 VFD
RL Amperage	19	13.1 VFD
VFD Max SetPt	-	78 Hz
SF Motor Freq(HZ)	78.00	74 Hz
OA Flow Station (Kv)	-	1.115
SF System SetPt	-	1.0
RA Damper Position	-	65%
OA Damper Position	-	35%
Min OA Damper Position	-	35%
Brake Horse Power	13.096	10.34

Performance Data		
	Design	**Actual**
Fan Suction SP	-	-1.46"
Fan Discharge SP	-	1.70"
Total ESP	2.00	2.26"
Fan Total SP	4.81	3.16"
Pre-Filter P.D.	0.70	0.36"
Cooling Coil P.D.	0.96	0.50"
Heating Coil P.D.	0.04	0.04"

Completed By: Antonio Flores-De La Cruz on 11/26/2025

AHU/RTU

VAV - Single Duct

AHU-G1/FLOOR 1

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)
G1-G100	TRANE	VCWF06	REHEAT	6	350	354	175	178	175	178	2.38
G1-G109	TRANE	VCWF08	REHEAT	8	550	557	225	232	225	232	1.78
G1-G111	TRANE	VCWF04	REHEAT	4	125	123	50	48	100	98	2.08
G1-G112	TRANE	VCWF04	REHEAT	4	75	77	40	41	75	77	1.43
G1-G113	TRANE	VCWF04	REHEAT	4	200	200	100	102	100	102	1.40
G1-G115	TRANE	VCWF04	REHEAT	4	200	207	100	103	100	103	1.19
G1-G117	TRANE	VCWF04	REHEAT	4	125	128	50	52	100	104	1.15
G1-G118	TRANE	VCWF04	REHEAT	4	75	77	40	41	75	77	0.96
G1-G119	TRANE	VCWF06	REHEAT	6	250	253	125	126	125	126	2.57
G1-G120	TRANE	VCWF04	REHEAT	4	75	76	40	42	75	73	1.08
G1-G121	TRANE	VCWF04	REHEAT	4	125	130	75	76	75	76	0.96
G1-G124	TRANE	VCWF10	REHEAT	10	575	565	275	272	275	272	2.46
G1-G128	TRANE	VCWF10	REHEAT	10	775	760	300	295	300	294	1.62
G1-G129	TRANE	VCWF08	REHEAT	8	525	544	275	287	275	287	1.77
G1-G130	TRANE	VCWF10	REHEAT	10	625	632	325	330	325	328	1.92
G1-G131	TRANE	VCWF10	REHEAT	10	675	691	325	333	325	333	1.88
G1-G132	TRANE	VCWF12	REHEAT	12	1150	1185	575	592	575	592	1.37
G1-G134	TRANE	VCWF10	REHEAT	10	600	619	300	309	300	309	1.95
G1-G136	TRANE	VCWF10	REHEAT	10	725	741	325	332	350	356	1.78
G1-G137	TRANE	VCCF08	REHEAT	8	575	584	300	312	0	0	1.58
G1-G140	TRANE	VCWF10	REHEAT	10	700	706	350	346	350	346	1.65
G1-G141	TRANE	VCWF10	REHEAT	10	625	644	325	332	325	333	1.68
G1-G142	TRANE	NA	REHEAT	6	225	229	125	128	125	128	5.69
G1-G143	TRANE	VCWF04	REHEAT	4	75	74	40	41	75	74	1.06
G1-G144	TRANE	VCWF04	REHEAT	4	75	77	40	40	75	77	1.49
G1-G145	TRANE	VCWF04	REHEAT	4	200	203	100	102	150	155	1.09
G1-G130A 1	TRANE	VCWF08	REHEAT	8	300	307	150	157	150	157	1.89

Diffuser Supply (GRD)

G1-G100/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
100-1	G101 CORRIDOR	S-1	6	75	101	77	102.7
100-2	G100A STAFF VEST	S-1	6	100	69	98	98.0
100-3	G100 STUDENT VEST	S-2	8	175	159	179	102.3
Total				350	329	354	101.14%

G1-G109/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
109-1	G108 VISITOR VEST	S-2	8	150	159	154	102.7
109-2	G109 RECEPTION	S-1	6	100	115	102	102.0
109-3	G109 RECEPTION	S-1	6	100	120	105	105.0
109-4	G109 RECEPTION	S-1	6	100	118	104	104.0
109-5	G109 RECEPTION	S-1	6	100	81	92	92.0
Total				550	593	557	101.27%

G1-G111/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
111-1	G111 SECRETARY	S-1	6	125	123	123	98.4
Total				125	123	123	98.4%

G1-G112/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
112-1	G112 AP OFFICE	S-1	6	75	90	77	102.7
Total				75	90	77	102.67%

G1-G113/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
113-1	G113	S-1	6	100	140	105	105.0
113-2	G113	S-1	6	100	61	95	95.0
Total				200	201	200	100%

G1-G115/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
1151	G115 CONF RM	S-1	6	100	156	107	107.0
1152	G115 CONF RM	S-1	6	100	130	100	100.0
Total				200	286	207	103.5%

G1-G117/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
117-1	G117 PRINCIPAL	S-2	8	125	175	128	102.4
Total				125	175	128	102.4%

G1-G118/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
118-1	G118 AUDITIONS	S-1	6	75	100	77	102.7
Total				75	100	77	102.67%

G1-G119/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
119-1	G119 ADMIN WORKROOM	S-1	6	125	117	128	102.4
119-2	G119 ADMIN WORKROOM	S-1	6	125	113	125	100.0
Total				250	230	253	101.2%

G1-G120/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
120-1	G120 FINANCE OFFICE	S-1	6	75	96	76	101.3
Total				75	96	76	101.33%

G1-G121/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
121-1	G121 OFFICE	S-1	6	75	130	78	104.0
121-2	G110 CORRIDOR	S-1	6	50	48	52	104.0
Total				125	178	130	104%

G1-G124/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
124-1	G124 SCULPTURE	S-2	8	125	103	127	101.6
124-2	G124 SCULPTURE	S-2	8	125	102	125	100.0

G1-G124/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
124-3	G128A ART STORAGE	S-1	6	50	60	50	100.0
124-4	G124 SCULPTURE	S-2	8	125	134	117	93.6
124-5	G124 SCULPTURE	S-2	8	150	124	146	97.3
Total				575	523	565	98.26%

G1-G128/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
128-1	G128 CERAMICS	S-2	8	150	135	151	100.7
128-2	G128 CERAMICS	S-2	8	150	87	154	102.7
128-3	G128 CERAMICS	S-2	8	150	177	143	95.3
128-4	KILNS	S10		175	250	168	96.0
128-5	G128 CERAMICS	S-2	8	150	181	144	96.0
Total				775	830	760	98.06%

G1-G129/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
129-1	G129 ITINERANT SERVICES	S-1	6	175	80	182	104.0
129-2	G138B MENS RR	S-1	6	75	164	77	102.7
129-3	G123 BOOK STORAGE	S-1	6	50	124	55	110.0
129-4	G122 GALLERY/COLLAB	S-2	8	75	88	77	102.7
129-5	G138A WOMEN RR	S-1	6	75	80	78	104.0
129-6	G102 CORRIDOR	S-1	6	75	53	75	100.0
Total				525	589	544	103.62%

G1-G130/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
130-1	G132A STORAGE	S-10	12X6	50	170	47	94.0
130-2	G130 CONTROL RM	S-3	10	275	200	272	98.9
130-3	G130 CONTROL RM	S-3	10	300	270	313	104.3
Total				625	640	632	101.12%

G1-G131/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
131-1	G131 MS SCIENCE	S-2	8	150	183	155	103.3
131-2	G131 MS SCIENCE	S-2	8	150	139	152	101.3
131-3	G102 CORRIDOR	S-1	6	75	95	77	102.7
131-4	G131 MS SCIENCE	S-2	8	150	161	153	102.0
131-5	G131 MS SCIENCE	S-2	8	150	163	154	102.7
Total				675	741	691	102.37%

G1-G132/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
132-1	G132 GALLERY	S-2	8	200	239	205	102.5
132-2	G132 GALLERY	S-2	8	150	158	150	100.0
132-3	G132 GALLERY	S-2	8	200	245	207	103.5
132-4	G132 GALLERY	S-2	8	200	259	210	105.0
132-5	G132 GALLERY	S-2	8	200	260	204	102.0
132-6	G132 GALLERY	S-2	8	200	279	209	104.5
Total				1150	1440	1185	103.04%

G1-G134/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
134-1	G134 EC/GEN CLASS	S-2	8	150	157	155	103.3

G1-G134/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
134-2	G134 EC/GEN CLASS	S-2	8	150	218	152	101.3
134-3	G134 EC/GEN CLASS	S-2	8	150	132	154	102.7
134-4	G134 EC/GEN CLASS	S-2	8	150	163	158	105.3
Total				600	670	619	103.17%

G1-G136/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
136-1	G136 MS SCIENCE	S-1	6	75	53	71	94.7
136-2	G136 MS SCIENCE	S-2	8	150	130	163	108.7
136-3	G136 MS SCIENCE	S-2	8	150	212	145	96.7
136-4	G136 MS SCIENCE	S-2	8	150	159	159	106.0
136-5	G136 MS SCIENCE	S-2	8	150	148	152	101.3
136-6	G133 PREP	S-1	6	50	78	51	102.0
Total				725	780	741	102.21%

G1-G137/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
137-1	G137 MDF	S-11		575	639	584	101.6
Total				575	639	584	101.57%

G1-G140/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
140-1	G140 GEN CLASS	S-2	8	175	235	183	104.6
140-2	G140 GEN CLASS	S-2	8	175	194	180	102.9
140-3	G140 GEN CLASS	S-2	8	175	166	165	94.3
140-4	G140 GEN CLASS	S-2	8	175	195	178	101.7
Total				700	790	706	100.86%

G1-G141/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
141-1	G141 GEN CLASS	S-2	8	150	159	157	104.7
141-2	G141 GEN CLASS	S-2	8	150	171	155	103.3
141-3	G141 GEN CLASS	S-2	8	150	158	154	102.7
141-4	G141 GEN CLASS	S-2	8	175	143	178	101.7
Total				625	631	644	103.04%

G1-G142/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
142-1	G142 NURSE	S-1	6	100	81	102	102.0
142-2	G142 NURSE	S-1	6	125	50	127	101.6
Total				225	131	229	101.78%

G1-G143/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
143-1	G143 REGISTRAR	S-1	6	75	102	74	98.7
Total				75	102	74	98.67%

G1-G144/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
144-1	G144 SRO	S-1	6	75	77	77	102.7
Total				75	77	77	102.67%

G1-G145/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
145-1	G145 PARENTS RM	S-1	6	100	98	98	98.0
145-2	G145 PARENTS RM	S-1	6	100	105	105	105.0
Total				200	203	203	101.5%

G1-G130A 1/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
130A-1	G130B ISOLATION BOOTH	S-1	6	75	28	76	101.3
130A-2	G130A RECORDING STUDIO	S-1	6	100	105	102	102.0
130A-3	G130A RECORDING STUDIO	S-1	6	100	109	103	103.0
130A-4	G130C STORAGE	S-1	6	25	93	26	104.0
Total				300	335	307	102.33%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: AHU/RTU

Asset: AHU-G2 AREA:FLOOR 2

Unit Data		
	Design	**Actual**
MFG	TRANE	TRANE
Serial Num	-	H24H73175
Model Num	CSAA	CSAA021UAM00
Configuration	-	HORIZONTAL
Num PreFilter 1	-	6
PreFilter Size 1	-	16X25X2
Num PreFilter 2	-	1
PreFilter Size 2	-	32X18

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	213T
Horsepower	-	7.5
Motor Rpm	-	1770
Phase	-	3
Rated Voltage	-	460
Rated Amperage	-	9.5
Service Factor	-	1.15

Test Data		
	Design	**Actual**
SF CFM	10775	10057
SF RPM	2181	1909
RA CFM	6025	5374
OA CFM	4750	4683
RL Voltage	460	481 VFD
RL Amperage	19	12.6 VFD
VFD Max SetPt	-	74 Hz
SF Motor Freq(HZ)	74.00	65 Hz
OA Flow Station (Kv)	-	1.10
SF System SetPt	-	0.9
RA Damper Position	-	51%
OA Damper Position	-	49%
Min OA Damper Position	-	49%
Brake Horse Power	13.699	9.28

Performance Data		
	Design	**Actual**
Fan Suction SP	-	-1.41"
Fan Discharge SP	-	1.66"
Total ESP	2.28	1.99"
Fan Total SP	5.01	3.07"
Pre-Filter P.D.	0.71	0.36"
Cooling Coil P.D.	1.05	0.57"
Heating Coil P.D.	0.05	0.15"

Completed By: Antonio Flores-De La Cruz on 11/26/2025

VAV - Single Duct

AHU-G2/FLOOR 2

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)
G2-G208	TRANE	VCWF04	REHEAT	4	175	170	100	92	150	143	0.42
G2-G209	TRANE	VCWF04	REHEAT	4	125	130	75	72	100	89	0.40
G2-G210	TRANE	VCWF04	REHEAT	4	125	129	75	78	100	91	0.44
G2-G211	TRANE	VCWF04	REHEAT	4	125	126	75	77	100	103	0.42
G2-G213	TRANE	VCWF04	REHEAT	4	200	205	100	98	150	139	0.36
G2-G214	TRANE	VCWF04	REHEAT	4	225	223	125	120	150	152	0.36
G2-G215	TRANE	VCWF04	REHEAT	4	150	145	75	72	150	142	0.44
G2-G216	TRANE	VCWF04	REHEAT	4	125	124	75	70	100	99	0.50
G2-G217	TRANE	VCWF04	REHEAT	4	125	123	75	72	100	101	0.40
G2-G220	TRANE	VCWF06	REHEAT	6	300	301	150	149	150	143	1.68
G2-G223	TRANE	VCWF06	REHEAT	6	275	271	150	141	150	153	2.32
G2-G224	TRANE	VCWF10	REHEAT	10	725	726	375	378	375	376	1.78
G2-G227	TRANE	VCWF10	REHEAT	10	625	644	325	328	325	332	1.94
G2-G228	TRANE	VCWF10	REHEAT	10	725	725	375	375	375	375	1.55
G2-G230	TRANE	VCWF10	REHEAT	10	675	666	350	352	350	359	1.57
G2-G231	TRANE	VCWF08	REHEAT	10	625	618	325	321	325	321	1.52
G2-G232	TRANE	VCWF10	REHEAT	10	775	789	375	381	375	388	1.53
G2-G233	TRANE	VCCF08	REHEAT	8	575	580	300	303	0	0	2.13
G2-G234	TRANE	VCWF10	REHEAT	10	700	693	350	349	350	349	1.59
G2-G236	TRANE	VCWF10	REHEAT	10	700	720	350	336	350	348	1.90
G2-G239	TRANE	VCWF10	REHEAT	10	700	736	350	344	350	356	2.31
G2-G240	TRANE	VCWF10	REHEAT	10	625	637	325	338	325	336	1.77
G2-G241	TRANE	VCWF10	REHEAT	10	625	621	325	332	325	321	1.88
G2-G242	TRANE	VCWF10	REHEAT	10	625	608	325	321	325	317	1.46
G2-G210A 1	TRANE	VCWF06	REHEAT	6	325	321	175	168	175	177	1.65

Diffuser Supply (GRD)

G2-G208/FLOOR 2

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
208-1	G208 GUIDANCE	S-1	6	100	345	93	93.0
208-2	G208 GUIDANCE	S-1	6	75	45	77	102.7
Total				175	390	170	97.14%

G2-G209/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
209-1	G209 COUNSELOR	S-2	8	125	282	130	104.0
Total				125	282	130	104%

G2-G210/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
210-1	G210 COUNSELOR	S-2	8	125	206	129	103.2
Total				125	206	129	103.2%

G2-G211/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
211-1	G211 COUNCELOR	S-2	8	125	273	126	100.8
Total				125	273	126	100.8%

G2-G213/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
213-1	G213 COUNSELOR	S-1	6	125	281	133	106.4
213-2	G212 FILE RM	S-1	6	75	37	72	96.0
Total				200	318	205	102.5%

G2-G214/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
214-1	G214 CONFERENCE RM	S-1	6	100	157	109	109.0
214-2	G214 CONFERENCE RM	S-2	8	125	153	114	91.2
Total				225	310	223	99.11%

G2-G215/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
215-1	G125 CAREER CENTER	S-1	6	75	162	71	94.7
215-2	G125 CAREER CENTER	S-1	6	75	160	74	98.7
Total				150	322	145	96.67%

G2-G216/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
216-1	G216 SOCIAL WORKER	S-2	8	125	157	124	99.2
Total				125	157	124	99.2%

G2-G217/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
217-1	G217 TESTING	S-2	8	125	279	123	98.4
Total				125	279	123	98.4%

G2-G220/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
220-1	G220B WELLNESS B	S-1	6	75	58	74	98.7
220-2	CORRIDOR	S-1	6	75	0	74	98.7
220-3	G220 WELLNESS RM	S-1	6	75	77	77	102.7
220-4	G220A WELLNESS A	S-1	6	75	76	76	101.3
Total				300	211	301	100.33%

G2-G223/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
223-1	G223 COLLABORATION	S-2	8	125	177	123	98.4
223-2	G237A WOMEN RR	S-1	6	75	0	72	96.0
223-3	G237B MENS RR	S-1	6	75	78	76	101.3
Total				275	255	271	98.55%

G2-G224/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
224-1	G224 DRAW/PAINT	S-2	8	175	166	180	102.9
224-2	G224 DRAW/PAINT	S-2	8	150	181	149	99.3
224-3	G224 DRAW/PAINT	S-2	8	175	187	175	100.0
224-4	G224A STORAGE	S-1	6	50	73	50	100.0
224-5	G224 DRAW/PAINT	S-2	8	175	182	172	98.3
Total				725	789	726	100.14%

G2-G227/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
227-1	G229 PREP	S-1	6	50	67	50	100.0
227-2	G227 HS CHEMISTRY	S-1	6	100	9	103	103.0
227-3	G227 HS CHEMISTRY	S-1	6	75	0	80	106.7
227-4	G227 HS CHEMISTRY	S-1	6	100	149	104	104.0
227-5	G227 HS CHEMISTRY	S-1	6	100	162	98	98.0
227-6	G227 HS CHEMISTRY	S-1	6	100	144	103	103.0
227-7	G227 HS CHEMISTRY	S-1	6	100	111	106	106.0
Total				625	642	644	103.04%

G2-G228/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
228-1	G228 PRINTMAKING	S-2	8	150	32	146	97.3
228-2	G228 PRINTMAKING	S-2	8	175	235	180	102.9
228-3	G228A ART STORAGE	S-1	6	50	96	51	102.0
228-4	G228 PRINTMAKING	S-2	8	175	211	176	100.6
228-5	G228 PRINTMAKING	S-2	8	175	246	172	98.3
Total				725	820	725	100%

G2-G230/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
230-1	G230A STORAGE	S-1	6	25	17	24	96.0
230-2	G230 GEN CLASS	S-2	8	150	241	150	100.0
230-3	G230 GEN CLASS	S-2	8	150	200	145	96.7
230-4	G230 GEN CLASS	S-2	8	175	141	170	97.1
230-5	G230 GEN CLASS	S-2	8	175	161	177	101.1
Total				675	760	666	98.67%

G2-G231/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
231-1	G231 HS SCIENCE	S-1	6	125	109	128	102.4
231-2	G231 HS SCIENCE	S-1	6	125	153	125	100.0
231-3	G204 CORRIDOR	S-1	6	100	115	103	103.0
231-4	G231 HS SCIENCE	S-1	6	100	127	102	102.0
231-5	G231 HS SCIENCE	S-1	6	125	105	114	91.2
231-6	G227A PREP	S-1	6	50	121	46	92.0
Total				625	730	618	98.88%

G2-G232/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
232-1	G232 GEN CLASS	S-2	8	175	66	175	100.0
232-2	G232 GEN CLASS	S-2	8	200	188	200	100.0
232-3	G232 GEN CLASS	S-2	8	200	77	207	103.5

G2-G232/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
232-4	G232 GEN CLASS	S-2	8	200	472	207	103.5
Total				775	803	789	101.81%

G2-G233/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
233-1	G233 IDF	S-11		575	551	580	100.9
Total				575	551	580	100.87%

G2-G234/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
234-1	G234 GEN CLASS	S-2	8	175	238	174	99.4
234-2	G234 GEN CLASS	S-2	8	175	230	187	106.9
234-3	G234 GEN CLASS	S-2	8	175	263	162	92.6
234-4	G234 GEN CLASS	S-2	8	175	56	170	97.1
Total				700	787	693	99%

G2-G236/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
236-1	G236 GEN CLASS	S-2	8	175	154	189	108.0
236-2	G236 GEN CLASS	S-2	8	175	166	191	109.1
236-3	G236 GEN CLASS	S-2	8	175	190	166	94.9
236-4	G236 GEN CLASS	S-2	8	175	216	174	99.4
Total				700	726	720	102.86%

G2-G239/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
239-1	G239 GEN CLASS	S-2	8	175	0	192	109.7
239-2	G239 GEN CLASS	S-2	8	175	234	185	105.7
239-3	G239 GEN CLASS	S-2	8	175	204	176	100.6
239-4	G239 GEN CLASS	S-2	8	175	218	183	104.6
Total				700	656	736	105.14%

G2-G240/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
240-1	G240 GEN CLASS	S-2	8	150	303	154	102.7
240-2	G240 GEN CLASS	S-2	8	150	362	163	108.7
240-3	G240 GEN CLASS	S-2	8	175	0	178	101.7
240-4	G240 GEN CLASS	S-2	8	150	0	142	94.7
Total				625	665	637	101.92%

G2-G241/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
241-1	G241 GEN CLASS	S-2	8	150	77	136	90.7
241-2	G241 GEN CLASS	S-2	8	150	229	153	102.0
241-3	G241 GEN CLASS	S-2	8	150	173	156	104.0
241-4	G241 GEN CLASS	S-2	8	175	169	176	100.6
Total				625	648	621	99.36%

G2-G242/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
242-1	G242 GEN CLASS	S-2	8	150	191	147	98.0
242-2	G242 GEN CLASS	S-2	8	150	180	153	102.0
242-3	G242 GEN CLASS	S-2	8	150	226	136	90.7
242-4	G242 GEN CLASS	S-2	8	175	145	168	96.0
Total				625	742	604	96.64%

G2-G210A 1/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
210A-1	G218 TECHER BREAKROOM	S-1	6	75	61	69	92.0
210A-2	G218 TECHER BREAKROOM	S-1	6	75	34	74	98.7
210A-3	G218 TECHER BREAKROOM	S-1	6	75	45	75	100.0
210A-4	G218 TECHER BREAKROOM	S-1	6	100	269	103	103.0
Total				325	409	321	98.77%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: AHU/RTU

Asset: AHU-G3 AREA:FLOOR 3

Unit Data		
	Design	**Actual**
MFG	TRANE	TRANE
Serial Num	-	H24H73187
Model Num	CSAA	CSAA021UAM00
Configuration	-	HORIZONTAL
Num PreFilter 1	-	7
PreFilter Size 1	-	20X25X2
Num PreFilter 2	-	1
PreFilter Size 2	-	32X18

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	213T
Horsepower	-	2@ 7.5
Motor Rpm	-	1800
Phase	-	3
Rated Voltage	-	460
Rated Amperage	-	9.5
Service Factor	-	1.15

Test Data		
	Design	**Actual**
SF CFM	11000	10215
SF RPM	2209	1885
RA CFM	7075	6088
OA CFM	3925	4127
RL Voltage	460	481 VFD
RL Amperage	19	12.6 VFD
VFD Max SetPt	-	75 Hz
SF Motor Freq(HZ)	75.00	64 Hz
OA Flow Station (Kv)	-	0.99
SF System SetPt	-	0.9"
RA Damper Position	-	53%
OA Damper Position	-	47%
Min OA Damper Position	-	47%
Brake Horse Power	14.262	9.95

Performance Data		
	Design	**Actual**
Fan Suction SP	-	-1.10"
Fan Discharge SP	-	1.76"
Total ESP	2.28	1.62"
Fan Total SP	5.10	2.86"
Pre-Filter P.D.	0.72	0.66"
Cooling Coil P.D.	1.08	0.54"
Heating Coil P.D.	0.05	0.04"

Completed By: Antonio Flores-De La Cruz on 11/26/2025

AHU/RTU

VAV - Single Duct

AHU-G3/FLOOR 3

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)
G3-G238	TRANE	VCWF10	REHEAT	10	900	919	450	462	450	461	2.15
G3-G308	TRANE	VCWF14	REHEAT	14	1700	1701	850	852	850	851	2.02
G3-G309	TRANE	VCWF04	REHEAT	4	125	121	75	74	100	97	0.46
G3-G310	TRANE	VCWF06	REHEAT	6	250	245	125	123	175	172	2.55
G3-G311	TRANE	VCWF06	REHEAT	6	325	318	175	171	175	171	2.14
G3-G324	TRANE	VCWF10	REHEAT	10	750	787	375	384	375	388	2.61
G3-G325	TRANE	VCWF06	REHEAT	6	400	399	200	199	200	200	2.07
G3-G331	TRANE	VCWF10	REHEAT	10	625	645	325	340	325	340	1.56
G3-G332	TRANE	VCWF10	REHEAT	10	800	789	400	394	400	394	1.54
G3-G333	TRANE	VCWF04	REHEAT	4	75	80	40	45	75	80	0.40
G3-G334	TRANE	VCWF10	REHEAT	10	700	642	350	346	350	346	1.48
G3-G335	TRANE	VCWF10	REHEAT	10	675	672	350	347	350	346	1.96
G3-G336	TRANE	VCWF10	REHEAT	10	700	718	350	365	350	365	1.89
G3-G339	TRANE	VCCF08	REHEAT	8	575	575	300	300	0	0	1.76
G3-G341	TRANE	VCWF10	REHEAT	10	725	719	375	372	375	372	1.94
G3-G342	TRANE	VCWF10	REHEAT	10	650	655	325	330	325	330	1.94
G3-G343	TRANE	VCWF10	REHEAT	10	650	662	325	331	325	331	2.16
G3-G330B 1	TRANE	VCWF06	REHEAT	6	450	449	225	224	225	223	2.93

Diffuser Supply (GRD)

G3-G238/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
238-1	G238 2D ART/PHOTOGRAPHY	S-2	8	175	60	180	102.9
238-2	G238 2D ART/PHOTOGRAPHY	S-2	8	200	249	206	103.0
238-3	G238 2D ART/PHOTOGRAPHY	S-2	8	200	267	206	103.0
238-4	G330 PHOTO LAB	S-2	8	125	0	122	97.6
238-5	G238 2D ART/PHOTOGRAPHY	S-2	8	200	276	205	102.5
Total				900	852	919	102.11%

G3-G308/FLOOR 3

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
308-1	G308 MEDIA CENTER	S-3	10	200	227	206	103.0
308-2	G308 MEDIA CENTER	S-3	10	200	293	208	104.0
308-3	G308 MEDIA CENTER	S-3	10	200	178	192	96.0
308-4	G308 MEDIA CENTER	S-3	10	200	109	196	98.0
308-5	G308 MEDIA CENTER	S-3	10	225	40	229	101.8

G3-G308/FLOOR 3

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
308-6	G308 MEDIA CENTER	S-3	10	225	352	227	100.9
308-7	G308 MEDIA CENTER	S-3	10	225	238	211	93.8
308-8	G308 MEDIA CENTER	S-3	10	225	264	232	103.1
Total				1700	1701	1701	100.06%

G3-G309/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
309-1	G309 OFFICE	S-2	8	125	260	121	96.8
Total				125	260	121	96.8%

G3-G310/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
310-1	G310 TV VIDEO PROD	S-1	6	75	102	75	100.0
310-2	G310A TV VIDEO PROD	S-1	6	175	122	170	97.1
Total				250	224	245	98%

G3-G311/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
311-1	G311 WORKROOM	S-1	6	225	212	219	97.3
311-2	G311 WORKROOM	S-1	6	100	96	99	99.0
Total				325	308	318	97.85%

G3-G324/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
324-1	G324 MEDIA ARTS	S-2	8	175	178	182	104.0
324-2	G324 MEDIA ARTS	S-2	8	175	130	183	104.6
324-3	G324A ART STORAGE	S-1	6	50	45	51	102.0
324-4	G324 MEDIA ARTS	S-2	8	175	165	182	104.0
324-5	G324 MEDIA ARTS	S-2	8	175	175	189	108.0
Total				750	693	787	104.93%

G3-G325/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
325-1	G340A WOMEN RR	S-1	6	75	110	75	100.0
325-2	G323 COLLAB	S-2	8	250	180	245	98.0
325-3	G340B MENS RR	S-1	6	75	101	79	105.3
Total				400	391	399	99.75%

G3-G331/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
331-1	G331 BIOLOGY	S-1	6	100	167	108	108.0
331-2	G331 BIOLOGY	S-1	6	75	224	76	101.3
331-3	G302 CORRIDOR	S-1	6	100	0	104	104.0
331-4	G331 BIOLOGY	S-1	6	100	0	107	107.0
331-5	G331 BIOLOGY	S-1	6	75	187	80	106.7
331-6	G331 BIOLOGY	S-1	6	100	0	98	98.0
331-7	G331 BIOLOGY	S-1	6	75	53	81	108.0
Total				625	631	654	104.64%

G3-G332/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
332-1	G332 GEN CLASS	S-2	8	200	193	200	100.0

G3-G332/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
332-2	G332 GEN CLASS	S-2	8	200	223	185	92.5
332-3	G332 GEN CLASS	S-2	8	200	229	194	97.0
332-4	G332 GEN CLASS	S-2	8	200	263	210	105.0
Total				800	908	789	98.62%

G3-G333/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
333-1	G333 ART DIRECTOR	S-1	6	75	165	80	106.7
Total				75	165	80	106.67%

G3-G334/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
334-1	G334 GEN CLASS	S-2	8	175	180	174	99.4
334-2	G334 GEN CLASS	S-2	8	175	240	170	97.1
334-3	G334 GEN CLASS	S-2	8	175	220	182	104.0
334-4	G334 GEN CLASS	S-2	8	175	180	166	94.9
Total				700	820	692	98.86%

G3-G335/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
335-1	G335 HS PHYSICS	S-1	6	75	78	74	98.7
335-2	G335 HS PHYSICS	S-1	6	100	103	99	99.0
335-3	G304 CORRIDOR	S-1	6	100	33	98	98.0
335-4	G335 HS PHYSICS	S-1	6	100	131	95	95.0
335-5	G335 HS PHYSICS	S-1	6	75	123	75	100.0
335-6	G335 HS PHYSICS	S-1	6	100	102	104	104.0
335-7	G335 HS PHYSICS	S-1	6	75	108	74	98.7
335-8	G337 PREP	S-1	6	50	0	53	106.0
Total				675	678	672	99.56%

G3-G336/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
336-1	G336 GEN CLASS	S-2	8	175	189	189	108.0
336-2	G336 GEN CLASS	S-2	8	175	168	168	96.0
336-3	G336 GEN CLASS	S-2	8	175	186	186	106.3
336-4	G336 GEN CLASS	S-2	8	175	175	175	100.0
Total				700	718	718	102.57%

G3-G339/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
339-1	G339 IDF	S-11		575	612	575	100.0
Total				575	612	575	100%

G3-G341/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
341-1	G341 GEN CLASS	S-2	8	175	174	182	104.0
341-2	G341 GEN CLASS	S-2	8	175	205	182	104.0
341-3	G341 GEN CLASS	S-2	8	200	159	195	97.5
341-4	G341 GEN CLASS	S-2	8	175	200	160	91.4
Total				725	738	719	99.17%

G3-G342/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
342-1	G342 GEN CLASS	S-2	8	150	200	157	104.7
342-2	G342 GEN CLASS	S-2	8	150	166	157	104.7
342-3	G342 GEN CLASS	S-2	8	175	0	174	99.4

G3-G342/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
342-4	G342 GEN CLASS	S-2	8	175	243	167	95.4
Total				650	609	655	100.77%

G3-G343/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
343-1	G343 MAKER SPACE	S-2	8	150	140	143	95.3
343-2	G343 MAKER SPACE	S-2	8	150	229	163	108.7
343-3	G343 MAKER SPACE	S-2	8	175	193	172	98.3
343-4	G343 MAKER SPACE	S-2	8	175	71	184	105.1
Total				650	633	662	101.85%

G3-G330B 1/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
330B-1	G328A ARTS STORAGE	S-1	6	50	106	51	102.0
330B-2	G330B DARK RM/PROC	S-1	6	100	80	98	98.0
330B-3	G330B DARK RM/PROC	S-1	6	100	0	96	96.0
330B-4	G330B DARK RM/PROC	S-1	6	100	86	96	96.0
330B-5	G330A LIGHT TRAP	S-1	6	100	82	108	108.0
Total				450	354	449	99.78%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G1 G128 AREA:G128 CERAMICS RM

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	120SQN-D VF
Serial Num	-	202PL48663010000702
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.25
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.2
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1000	994
System SetPt	-	61%
RL Voltage	115	115
RL Amperage	3.2	2.1
Suction ESP	-	-0.19"
Discharge ESP	-	0.04"
Total ESP	0.30	0.23"

Completed By: Christian Moller on 11/23/2025

National TAB

Project:CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G1 G128/G128 CERAMICS RM

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E128-1	G128 CERAMICS	E-4	12	850	1.06	1235	844	99.3
E128-2	G128A ARTS STORAGE	E-2	8	150	1	191	150	100.0
Total				1000		1426	994	99.4%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G1 G224 AREA:G224 PAINT RM

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	120SQN-D VF
Serial Num	-	202PL48663010000701
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.25
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.2
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1000	1080
System SetPt	-	75%
RL Voltage	115	114
RL Amperage	3.2	1.8
Suction ESP	-	-0.24"
Discharge ESP	-	0.08"
Total ESP	0.30	0.32"

Completed By: Christian Moller on 11/23/2025

National TAB

Project:CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G1 G224/G224 PAINT RM

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E224-1	G224A ART STORAGE	E-2	8	150	1	132	146	97.3
E224-2	G224 DRAW/PAINT	E-5	14	850	1	1047	934	109.9
Total				1000		1179	1080	108%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G10 G331 AREA:G331 SCIENCE LAB

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	120R17DVF120ACRU
Serial Num	-	202SL48663-00/0001801
Type	CRE	CRE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.25
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	4.2
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1225	1223
System SetPt	-	100%
RL Voltage	115	114
RL Amperage	4.2	1.8
Suction ESP	-	-0.38
Total ESP	0.30	0.38"

Completed By: Christian Moller on 11/25/2025

National TAB

Project:CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G10 G331/G331 SCIENCE LAB

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E331-1	G331 HS BIOLOGY	E-4	12	625	1	630	630	100.8
E331-2	G331 HS BIOLOGY	E-4	12	625	1	593	593	94.9
Total				1250		1223	1223	97.84%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G10 G335 AREA:G335 SCIENCE LAB

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	120R17DVF120ACRU
Serial Num	-	202SL4866300/0000701
Type	CRE	CRE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.25
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	4.2
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1225	1242
System SetPt	-	100%
RL Voltage	115	115
RL Amperage	4.2	1.7
Suction ESP	-	-0.44"
Total ESP	0.30	0.44"

Completed By: Christian Moller on 11/25/2025

National TAB

Project:CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G10 G335/G335 SCIENCE LAB

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E335-1	G335 HS PHYSICS	E-4	12	625	1	637	637	101.9
E335-2	G335 HS PHYSICS	E-4	12	625	1	605	605	96.8
Total				1250		1242	1242	99.36%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G11 G324 AREA:G324 ART ROOM

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	120R17DVF120ACRU
Serial Num	-	202SL48663000000702
Type	CRE	CRE

Motor Data		
	Design	**Actual**
Motor MFG	-	COOK
Frame	-	48Y
Horsepower	-	0.25
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.2
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1000	927
System SetPt	-	67%
RL Voltage	115	114
RL Amperage	3.2	1.7
Suction ESP	-	-0.22"
Total ESP	0.30	0.22"

Completed By: Christian Moller on 11/23/2025

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G11 G324/G324 ART ROOM

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E324-1	G324 MEDIA ARTS	E-5	14	850	1	1102	780	91.8
E324-2	G324A ARTS STORAGE	E-2	8	150	1	223	147	98.0
Total				1000		1325	927	92.7%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G11 G328 AREA:G328 ART ROOM

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	120R17DVF120ACRU
Serial Num	-	202SL48663000001802
Type	CRE	CRE

Motor Data		
	Design	**Actual**
Motor MFG	-	COOK
Frame	-	48Y
Horsepower	-	0.25
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.2
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1000	942
System SetPt	-	64%
RL Voltage	115	114
RL Amperage	3.2	1.7
Suction ESP	-	-0.38"
Total ESP	0.30	0.38"

Completed By: Christian Moller on 11/23/2025

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G11 G328/G328 ART ROOM

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E328-1	G328A ART STORAGE	E-2	8	150	1	107	144	96.0
E328-2	G328 PHOTOGRAPHY	E-5	14	850	1	948	798	93.9
Total				1000		1055	942	94.2%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G12 G337 AREA:G337 PREP ROOM

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	100R17DHVF100ACRUH
Serial Num	-	202SL48663-00/0002901
Type	CRE	CRE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.125
Motor Rpm	-	1NA725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	1.9
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	300	319
System SetPt	-	61%
RL Voltage	115	114
RL Amperage	1.9	1.2
Suction ESP	-	-0.26"
Total ESP	0.30	0.26"

Completed By: Christian Moller on 11/25/2025

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G12 G337/G337 PREP ROOM

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E337-1	G337 PREP	E-3	10	300	1	500	319	106.3
Total				300		500	319	106.33%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G13 G330B 1 AREA:G330B PROCESSING LAB

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	165R17DVF165ACRU
Serial Num	-	202SL48663000004101
Type	CRE	CRE

Test Data		
	Design	**Actual**
CFM	1200	831
System SetPt	-	100 %
RL Voltage	115	115
RL Amperage	11.6	2.2
Suction ESP	-	-0.83"
Total ESP	-	0.83"

Motor Data		
	Design	**Actual**
Motor MFG	-	COOK
Frame	-	48Y
Horsepower	-	1.00
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	11.6
Service Factor	-	1.0

Completed By: Christian Moller on 11/25/2025

Notes:
There was an RFI that removed one of the 8" ducts / design cfm reduced to 1200

Written By: Scott Springer on 12/05/2025

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G13 G330B 1/G330B PROCESSING LAB

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E330B-1	G330B PROCESSING LAB	DUCT	8	1200	0.35	831	831	69.3
Total				1200		831	831	69.25%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G14 G126 AREA:G126 ELECTRIC ROOM

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	100SQN-D VF
Serial Num	-	202PL48663010001901
Type	INLINE	INLINE

Test Data		
	Design	**Actual**
CFM	400	402
System SetPt	-	63%
RL Voltage	115	112
RL Amperage	2.4	1.7

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.167
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	2.4
Service Factor	-	1.0

Completed By: Christian Moller on 11/23/2025

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G14 G226 AREA:G226 ELECTRIC ROOM

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	100SQN-D VF
Serial Num	-	NA
Type	INLINE	INLINE

Test Data		
	Design	**Actual**
CFM	400	379
System SetPt	-	51%
RL Voltage	115	115
RL Amperage	2.4	1.3

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.167
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	2.4
Service Factor	-	1.0

Completed By: Christian Moller on 11/23/2025

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G14 G326 AREA:G326 ELECTRIC ROOM

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	100SQN-D VF
Serial Num	-	202PL48663010001902
Type	INLINE	INLINE

Test Data		
	Design	**Actual**
CFM	400	396
System SetPt	-	51%
RL Voltage	115	120
RL Amperage	2.4	1.1

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.167
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	2.4
Service Factor	-	1.0

Completed By: Christian Moller on 11/23/2025

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G2 G131 AREA:G131 SCIENCE LAB

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	120SQN-D VF
Serial Num	-	202PL48663010003301
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.25
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.2
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1050	1073
System SetPt	-	100%
RL Voltage	115	112
RL Amperage	3.2	2.7
Suction ESP	-	-0.26"
Discharge ESP	-	0.34"
Total ESP	0.30	0.60"

Completed By: Christian Moller on 11/23/2025

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G2 G131/G131 SCIENCE LAB

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E131-1	G131 MS SCIENCE	E-4	12	525	1	577	607	115.6
E131-2	G131 MS SCIENCE	E-4	12	525	1	496	496	94.5
Total				1050		1073	1103	105.05%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G2 G136 AREA:G136 SCIENCE LAB

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	120SQN-D VF
Serial Num	-	202PL48663010003302
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.25
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.2
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1050	1100
System SetPt	-	100%
RL Voltage	115	116
RL Amperage	3.2	2.8
Suction ESP	-	-0.22"
Discharge ESP	-	0.36"
Total ESP	0.30	0.58"

Completed By: Christian Moller on 11/23/2025

National TAB

Project:CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G2 G136/G136 SCIENCE LAB

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E136-1	G136 MS SCIENCE	E-4	12	525	1	486	567	108.0
E136-2	G136 MS SCIENCE	E-4	12	525	1	506	533	101.5
Total				1050		992	1100	104.76%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G3 G228 AREA:G228 FUME HOOD

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	120SQN-D VF
Serial Num	-	202PL48663010004502
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.25
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.2
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1000	1038
System SetPt	-	84%
RL Voltage	115	116
RL Amperage	3.2	2.6
Suction ESP	-	-0.42"
Discharge ESP	-	0.11"
Total ESP	0.75	0.53"

Completed By: Christian Moller on 11/23/2025

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G3 G228/G228 FUME HOOD

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E228-1	G228 PRINTMAKING	DUCT	14	850	1	1012	884	104.0
E228-2	G228A ART STORAGE	E-2	8	150	1	123	154	102.7
Total				1000		1135	1038	103.8%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G3 G124A 1 AREA:G124A FUME HOOD

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	120SQN-D VF
Serial Num	-	202PL48663010004503
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.25
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.2
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	850	876
System SetPt	-	92%
RL Voltage	115	114
RL Amperage	3.2	2.8
Suction ESP	-	-0.57"
Discharge ESP	-	0.04"
Total ESP	0.75	0.61"

Completed By: Christian Moller on 11/23/2025

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G3 G124A 1/G124A FUME HOOD

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E124-1	G124 SCULPTURE	DUCT	14	850	1.06	668	876	103.1
Total				850		668	876	103.06%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G3 G124B 1 AREA:G124B FUME HOOD

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	120SQN-D VF
Serial Num	-	202PL48663010004501
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.25
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.2
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	850	792
System SetPt	-	85%
RL Voltage	115	116
RL Amperage	3.2	2.6
Suction ESP	-	-0.46"
Discharge ESP	-	0.05"
Total ESP	0.75	0.51"

Completed By: Christian Moller on 11/23/2025

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G3 G124B 1/G124B FUME HOOD

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E124B-1	G124 SCULPTURE	DUCT	14	850	1.06	792	792	93.2
Total				850		792	792	93.18%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G4 G124C 1 AREA:G124C KILN

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	100SQN-D VF
Serial Num	-	202PL48663010005901
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.50
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	6.4
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	600	612
System SetPt	-	95 %
RL Voltage	115	114
RL Amperage	6.4	1.3
Suction ESP	-	0.42"
Total ESP	0.50	0.42"

Completed By: Christian Moller on 11/25/2025

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G4 G128B 1 AREA:G128B KILN

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	100SQN-D VF
Serial Num	-	202PL48663010005908
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.50
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	6.4
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	600	637
System SetPt	-	88%
RL Voltage	115	117
RL Amperage	6.4	1.3
Suction ESP	-	-0.01"
Discharge ESP	-	0.64"
Total ESP	0.50	0.65"

Completed By: Christian Moller on 11/23/2025

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G4 G128B 1/G128B KILN

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
EGRD1	G128B	Duct	8	150	.35	203	162	108.0
EGRD2	G128B	Duct	8	150	.35	184	163	108.7
EGRD3	G128B	Duct	8	150	.35	134	162	108.0
EGRD4	G128B	Duct	8	150	.35	129	150	100.0
Total				600		650	637	106.17%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G5 G227 AREA:G227 CHEM RM/FUME HOOD

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	135SQN-D VF
Serial Num	-	202SL48663000005201
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.50
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	6.4
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1525	1504
System SetPt	-	92%
RL Voltage	115	116
RL Amperage	6.4	2.9
Suction ESP	-	-0.58"
Discharge ESP	-	0.24"
Total ESP	0.75	0.82"

Completed By: Christian Moller on 11/23/2025

National TAB

Project:CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G5 G227/G227 CHEM RM/FUME HOOD

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E227-1	G227 HS CHEMISTRY	DUCT	14	850	1.06	241	846	99.5
E227-2	G227 HS CHEMISTRY	E-4	12	675	1	0	658	97.5
Total				1525		241	1504	98.62%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G6 G227A 1 AREA:G227A PREP RM

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	90SQN-D VF
Serial Num	-	202PL48663010007101
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.125
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	1.9
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	200	217
System SetPt	-	67%
RL Voltage	115	114
RL Amperage	1.9	0.85
Suction ESP	-	-0.24"
Discharge ESP	-	0.06"
Total ESP	0.30	0.30"

Completed By: Christian Moller on 11/23/2025

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G6 G227A 1/G227A PREP RM

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E227A-1	G227A PREP	E-3	10	200	1	333	219	109.5
Total				200		333	219	109.5%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G7 G231 AREA:G231 SCIENCE LAB

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	120SQN-D VF
Serial Num	-	202PL48663010008401
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.50
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	6.4
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1225	1120
System SetPt	-	100%
RL Voltage	115	116
RL Amperage	6.4	2.9
Suction ESP	-	-0.42"
Discharge ESP	-	0.29"
Total ESP	0.30	0.71"

Completed By: Christian Moller on 11/23/2025

National TAB

Project:CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G7 G231/G231 SCIENCE LAB

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E231-1	G231 HS SCIENCE	E-4	12	600	1	446	549	91.5
E231-2	G231 HS SCIENCE	E-4	12	625	1	531	571	91.4
Total				1225		977	1120	91.43%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G8 G133 AREA:G133 PREP RM

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	90SQN-D VF
Serial Num	-	202PL48663010009601
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.125
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	1.9
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	325	329
System SetPt	-	88%
RL Voltage	115	114
RL Amperage	1.9	1.8
Suction ESP	-	-0.15"
Discharge ESP	-	0.10"
Total ESP	0.30	0.25"

Completed By: Christian Moller on 11/23/2025

National TAB

Project:CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G8 G133/G133 PREP RM

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E133-1	G133 PREP	E-3	10	325		370	329	101.2
Total				325		370	329	101.23%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G8 G229 AREA:G229 PREP RM

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	90SQN-D VF
Serial Num	-	202PL48663010009602
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	0.125
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	1.9
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	325	326
System SetPt	-	95%
RL Voltage	115	114
RL Amperage	1.9	1.3
Suction ESP	-	-0.16"
Discharge ESP	-	0.02"
Total ESP	0.30	0.18"

Completed By: Christian Moller on 11/23/2025

National TAB

Project:CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G8 G229/G229 PREP RM

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
E229-1	G229 PREP	E-2	8	200	1	252	200	100.0
E229-2	G227C CHEM STORAGE	E-2	8	125	1	98	126	100.8
Total				325		350	326	100.31%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Asset: EF-G9 RR EA 1 AREA:RESTROOMS

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	180R17D ACRU-D VF
Serial Num	-	202SL48663000006401
Type	CRE	CRE

Motor Data		
	Design	**Actual**
Motor MFG	-	MCMILLIAN
Frame	-	182
Horsepower	-	1.25
Motor Rpm	-	1280
Phase	-	1
Voltage (rated)	-	208
Amperage (rated)	-	7.7
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	3600	
Motor Frequency	-	
System SetPt	-	
RL Voltage	208	
RL Amperage	7.7	
Suction ESP	-	
Discharge ESP	-	
Total ESP	0.50	
Brake Horse Power	-	

Notes:
Not operational. missing speed control also

Written By: Scott Springer on 12/05/2025

National TAB

Project:CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF-G9 RR EA 1/RESTROOMS

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
RR-1	G340B MENS RR	E-4	12	450				-
RR-2	G329 STAFF RR	E-1	6	75				-
RR-3	G340A WOMEN RR	E-4	12	450				-
RR-4	G340 CUSTODIAL	E-10		50				-
RR-5	G237A WOMEN RR	E-4	12	450				-
RR-6	G237B MENS RR	E-4	12	450				-
RR-7	G235 CUSTODIAL	E-10		50				-
RR-8	G219 STAFF RR	E-1	6	75				-
RR-9	G220B WELLNESS B	E-1	6	75				-
RR-10	G220 WELLNESS	E-1	6	75				-
RR-11	G220A WELLNESS A	E-1	6	75				-
RR-12	G138B MENS RR	E-4	12	450				-
RR-13	G138A WOMEN RR	E-4	12	450				-
RR-14	G134A EC RR	E-3	10	150				-
RR-15	G138 CUSTODIAL	E-10		0				-
RR-16	G114 UNISEX RR	E-1	6	75				-
RR-17	G116 UNISEX RR	E-1	6	75				-
RR-18	G142A TLT	E-1	6	75				-
Total				3550		0	0	0%

National TAB

Project: CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

System/Unit: FAN - Relief

Asset: RAF-G1 AREA:AHU-G1,G2,G3 RELIEF

Unit Data	
	Actual
MFG	COOK
Model Num	402C11B ACE-B
Serial Num	202SL48663000007801

Motor Data		
	Design	**Actual**
Motor MFG	-	NEMA
Frame	-	184T
Horsepower	-	5.0
Motor Rpm	-	1725
Phase	-	3
Voltage (rated)	-	460
Amperage (rated)	-	6.8
Service Factor	-	1.15

Drive Data	
	Actual
Motor Sheave Size	2VP50
Motor Bore Size	1.125"
Fan Sheave Size	2MA133
Fan Sheave Bore	1"
Belt CL Distance	10.5"
Num of Belts	2
Belt Size	AX48

Test Data		
	Design	**Actual**
CFM	15750	
Relief Fan RPM	1725	
Motor Frequency	-	
RL Voltage	460	
RL Amperage	7.6	
Suction ESP	-	
Discharge ESP	-	
Total ESP	0.50	
Brake Horse Power	-	