

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)

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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

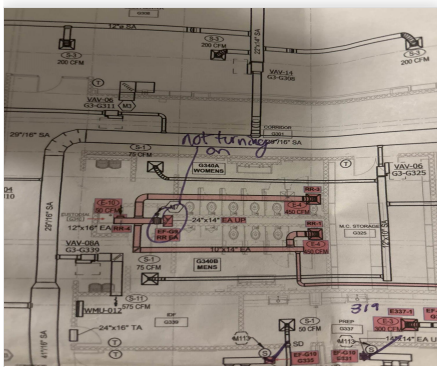


CMS NWSA P2 New Bldg & Reno (Charlotte, NC)

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



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

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	48	50	48	100	48	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	52	40	40	75	52	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	48	48	38.4
Total				125	48	48	38.4%

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	52	52	69.3
Total				75	52	52	69.33%

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%

Asset	Notes	Date	Written By
G1-G111	MC trying to verify why the flow is low	12/05/2025	Scott Springer
G1-G144	MC trying to verify why the flow is low	12/05/2025	Scott Springer



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



National TAB

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

AHU/RTU

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



National TAB

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

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/PHOTOGRAP HY	S-2	8	175	60	180	102.9
238-2	G238 2D ART/PHOTOGRAP HY	S-2	8	200	249	206	103.0
238-3	G238 2D ART/PHOTOGRAP HY	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/PHOTOGRAP HY	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



National TAB

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

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



National TAB

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

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



National TAB

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

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

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

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"

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



National TAB

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

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	1050
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



National TAB

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

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	554	105.5
E131-2	G131 MS SCIENCE	E-4	12	525	1	558	496	94.5
Total				1050		1135	1050	100%



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



National TAB

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

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



National TAB

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

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



National TAB

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

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



National TAB

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

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



National TAB

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

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	-	