

Report By:

National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246



Report: PRELIM
Function: Test, Adjust, & Balance
Date: 09/14/2023

PROJECT
Ulta Beauty (Baraboo, WI)

210 N. GASSER RD.

BARABOO, WI 53913

Client

Air Temperature Services
5301 Voges Road
Madison , WI 53718

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Project: Ulta Beauty (Baraboo, WI)

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Project: Ulta Beauty (Baraboo, WI)

System/Unit: AHU/RTU



Asset: RTU-1

AREA: SALES

Unit Data		
	Design	Actual
MFG	NA	LENNOX
Serial Num	-	5623G03743
Model Num	NA	LGM102U4
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	14.25X23
Num PreFilter 1	-	4
PreFilter Size 1	-	20X25X2

Motor Data		
	Design	Actual
Motor MFG	-	EBMPAPST
Frame	-	NL
Horsepower	-	3.8
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	8.7
Service Factor	-	NL

Test Data		
	Design	Actual
SF CFM	3400	3465
RA CFM	2800	2883
OA CFM	600	582
RL Voltage	208	211/211/211
RL Amperage	-	2.0/2.0/1.9
OA Damper Position	-	HIGH SPEED: 29% LOW SPEED: 43%
Brake Horse Power	3.75	0.86

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.30"
Fan Suction SP	-	-0.44"
Fan Discharge SP	-	0.35"
Total ESP	1.00	0.65"
Fan Total SP	-	0.79"

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Project:Ultra Beauty (Baraboo, WI)

AHU/RTU



Diffuser Supply (GRD)

RTU-1/SALES

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
1-1	SALES	CD	14	650	706	634	97.5
1-2	SALES	CD	14	650	731	654	100.6
1-3	SALES	CD	14	700	818	737	105.3
1-4	SALES	CD	14	700	809	727	103.9
1-5	SALES	CD	14	700	820	713	101.9
Total				3400	3884	3465	101.91%

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Project: Ulta Beauty (Baraboo, WI)

System/Unit: AHU/RTU



Asset: RTU-2

AREA:SALES

Unit Data		
	Design	Actual
MFG	NA	LENNOX
Serial Num	-	5623G03746
Model Num	NA	LGM102U4
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	14.25X23
Num PreFilter 1	-	4
PreFilter Size 1	-	20X25X2

Motor Data		
	Design	Actual
Motor MFG	-	EBMPAPST
Frame	-	NL
Horsepower	-	3.8
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	8.7
Service Factor	-	NL

Test Data		
	Design	Actual
SF CFM	3400	3394
RA CFM	2800	2780
OA CFM	600	614
RL Voltage	208	212/212/212
RL Amperage	-	2.1/2.0/2.0
OA Damper Position	-	HIGH SPEED: 29% LOW SPEED: 43%
Brake Horse Power	3.75	0.89

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.33"
Fan Suction SP	-	-0.49"
Fan Discharge SP	-	0.35"
Total ESP	1.00	0.68"
Fan Total SP	-	0.84"

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Project:Ultra Beauty (Baraboo, WI)

AHU/RTU



Diffuser Supply (GRD)

RTU-2/SALES

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
2-1	SALES	CD	14	565	579	579	102.5
2-2	SALES	CD	14	565	560	560	99.1
2-3	SALES	CD	14	565	575	575	101.8
2-4	SALES	CD	14	565	553	553	97.9
2-5	SALES	CD	14	565	560	560	99.1
2-6	SALES	CD	14	575	567	567	98.6
Total				3400	3394	3394	99.82%

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Project: Ulta Beauty (Baraboo, WI)

System/Unit: AHU/RTU



Asset: RTU-3

AREA:SALES

Unit Data		
	Design	Actual
MFG	NA	LENNOX
Serial Num	-	5623G03744
Model Num	NA	LGM102U4
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	14.25X23
Num PreFilter 1	-	4
PreFilter Size 1	-	20X25X2

Motor Data		
	Design	Actual
Motor MFG	-	EBMPAPST
Frame	-	NL
Horsepower	-	3.8
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	8.7
Service Factor	-	NL

Test Data		
	Design	Actual
SF CFM	3400	3505
RA CFM	2800	2877
OA CFM	600	628
RL Voltage	208	211/211/212
RL Amperage	-	2.4/2.5/2.4
OA Damper Position	-	HIGH SPEED: 28% LOW SPEED: 45%
Brake Horse Power	3.75	1.06

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.37"
Fan Suction SP	-	-0.53"
Fan Discharge SP	-	0.41"
Total ESP	1.00	0.78"
Fan Total SP	-	0.94"

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AHU/RTU



Diffuser Supply (GRD)

RTU-3/SALES

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
3-1	SALES	CD	14	550	445	566	102.9
3-2	SALES	CD	14	540	529	562	104.1
3-3	SALES	CD	14	540	539	536	99.3
3-4	SALES	CD	14	540	575	548	101.5
3-5	SALES	CD	14	540	497	574	106.3
3-6	SALES	CD	14	540	674	567	105.0
3-7	WOMENS RR	CD	6	75	93	77	102.7
3-8	MENS RR	CD	6	75	94	75	100.0
Total				3400	3446	3505	103.09%

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Project: Ulta Beauty (Baraboo, WI)

System/Unit: AHU/RTU



Asset: RTU-4

AREA:STAGING

Unit Data		
	Design	Actual
MFG	NA	LENNOX
Serial Num	-	5623F04022
Model Num	NA	LGM060U4
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29X14
Num PreFilter 1	-	4
PreFilter Size 1	-	20X20X2

Motor Data		
	Design	Actual
Motor MFG	-	EBMPAPST
Frame	-	NL
Horsepower	-	1.5
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	4.4
Service Factor	-	NL

Test Data		
	Design	Actual
SF CFM	2000	2026
RA CFM	1850	1883
OA CFM	150	143
RL Voltage	208	212/212/212
RL Amperage	-	1.9/1.9/1.7
OA Damper Position	-	HIGH SPEED: 21% LOW SPEED: 30%
Brake Horse Power	1.50	

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.35"
Fan Suction SP	-	-0.45"
Fan Discharge SP	-	0.30"
Total ESP	1.00	0.65"
Fan Total SP	-	0.75"

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AHU/RTU



Diffuser Supply (GRD)

RTU-4/STAGING

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
4-1	STAGING	CD	14	610	605	621	101.8
4-2	STAGING	CD	14	610	717	623	102.1
4-3	OFFICE	CD	8	170	156	166	97.6
4-4	STAGING	CD	14	610	686	616	101.0
Total				2000	2164	2026	101.3%

Diffuser Ret/Exh (GRD)

RTU-4/STAGING

Asset								
Asset Name	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
R4-1	CD	20X16	915	1.0	1009	861	852	93.1
R4-2	CD	20X16	915	1.0	992	880	864	94.4
R4-3	CD	8	170	1.0	104	178	167	98.2
Total			2000		2105	1919	1883	94.15%

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Project: Ulta Beauty (Baraboo, WI)

System/Unit: FAN - Exhaust



Asset: EF-1

AREA:MENS RR

Unit Data		
	Design	Actual
MFG	NA	COOK
Model Num	NA	GN-188
Serial Num	-	NA
Type	INLINE	INLINE

Test Data		
	Design	Actual
CFM	200	201
RL Voltage	-	118

Motor Data		
	Design	Actual
Motor MFG	-	NL
Motor Rpm	1357	DD
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	1.0

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FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF-1/MENS RR

Asset								
Asset Name	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
E1-1	CD	8	100	1.0	114	99	99	99.0
E1-2	CD	8	100	1.0	118	102	102	102.0
Total			200		232	201	201	100.5%

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