

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P474234

Luminaire Tested: **24CZ2-40VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474234
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40VHE-RDP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2713.5 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

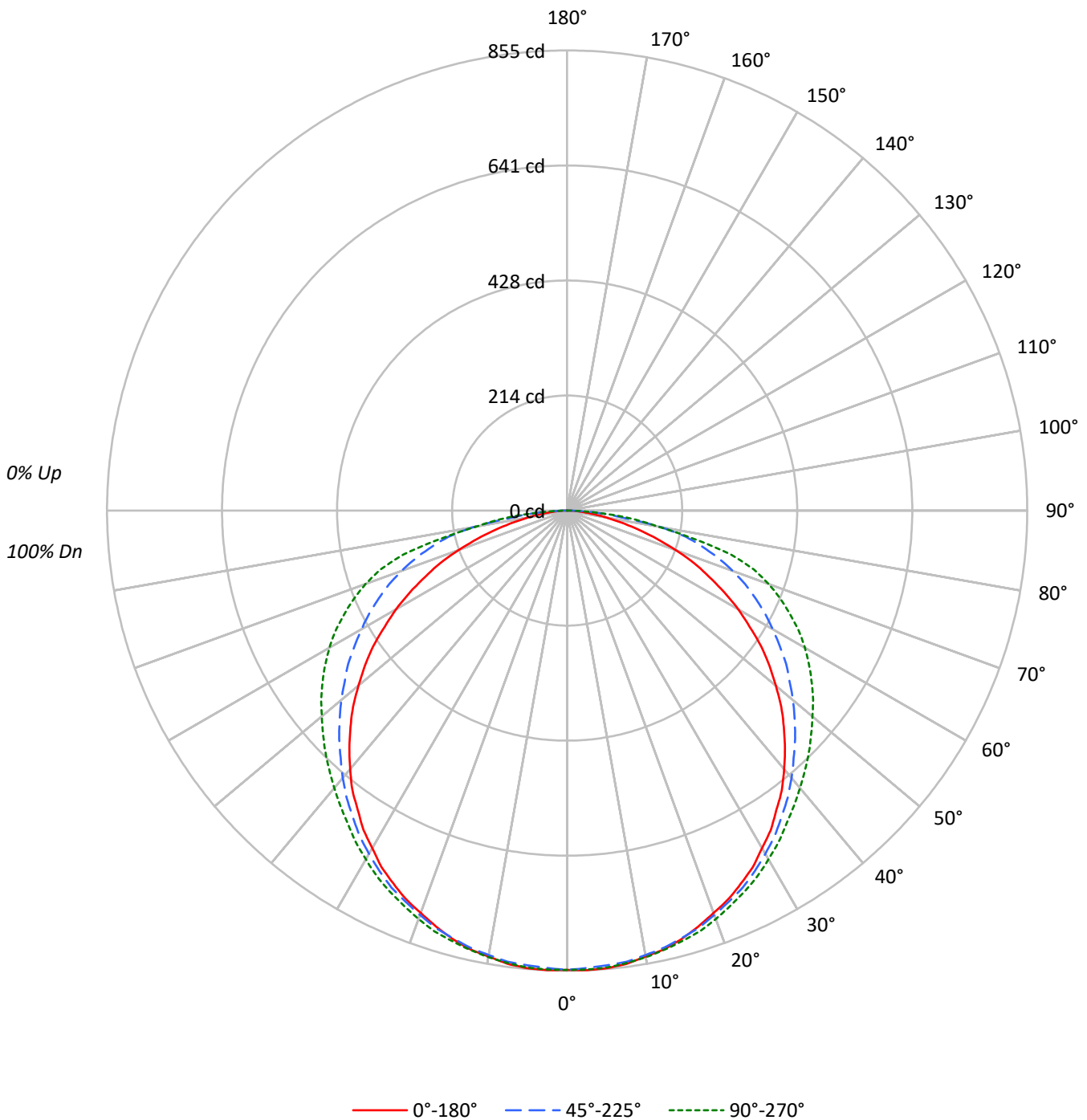
Input Watts (W): 27.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1148	1148	1148
5°	1153	1145	1151
10°	1149	1146	1151
15°	1147	1146	1153
20°	1139	1145	1156
25°	1135	1147	1159
30°	1125	1144	1163
35°	1114	1141	1167
40°	1102	1139	1182
45°	1083	1140	1209
50°	1059	1147	1245
55°	1032	1165	1301
60°	989	1188	1373
65°	926	1230	1457
70°	842	1287	1567
75°	713	1357	1638
80°	563	1366	1324
85°	415	1039	1164



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.0	3.0
10°-20°	233.0	8.6
20°-30°	356.2	13.1
30°-40°	435.5	16.0
40°-50°	464.2	17.1
50°-60°	443.8	16.4
60°-70°	375.9	13.9
70°-80°	252.7	9.3
80°-90°	71.3	2.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	670.2	24.7
0°-40°	1105.7	40.7
0°-60°	2013.6	74.2
0°-90°	2713.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2713.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	853	853	853	853	853	
5°	853	852	848	852	852	81
15°	824	824	822	829	828	232
25°	764	767	773	779	781	352
35°	678	684	694	708	711	425
45°	569	579	599	625	635	439
55°	440	456	497	536	555	392
65°	291	320	386	437	458	289
75°	137	187	261	306	315	147
85°	27	55	67	73	75	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	853.4	853.4	853.4	853.4	853.4
2.5°	854.7	854.7	850.7	853.4	853.4
5°	853.4	852.0	848.0	852.0	852.0
7.5°	849.3	848.0	845.3	849.3	848.0
10°	841.3	841.3	838.6	842.6	842.6
12.5°	834.5	833.2	831.8	837.2	835.9
15°	823.7	823.7	822.4	829.1	827.8
17.5°	810.3	811.6	813.0	818.4	819.7
20°	795.5	798.2	799.5	807.6	807.6
22.5°	782.0	783.3	786.0	794.1	794.1
25°	764.5	767.2	772.6	779.3	780.7
27.5°	747.0	748.3	755.1	764.5	765.8
30°	724.1	728.1	736.2	747.0	748.3
32.5°	703.9	707.9	717.4	728.1	730.8
35°	678.3	683.7	694.5	707.9	710.6
37.5°	655.4	659.5	672.9	687.7	691.8
40°	627.3	635.2	648.7	666.2	672.9
42.5°	599.0	607.1	623.2	646.0	654.1
45°	569.4	578.8	599.0	624.6	635.2
47.5°	539.7	550.5	573.4	603.0	615.1
50°	506.1	519.5	547.8	581.5	595.0
52.5°	473.8	489.9	520.9	558.6	576.1
55°	440.1	456.2	496.6	535.7	554.6
57.5°	402.4	423.9	468.4	512.8	533.0
60°	367.5	387.6	441.4	489.9	510.1
62.5°	329.8	356.7	414.5	465.7	485.9
65°	290.7	320.4	386.2	437.4	457.6
67.5°	255.7	288.0	358.1	409.1	429.3
70°	214.0	254.4	327.1	378.1	398.3
72.5°	174.9	219.4	294.8	344.6	363.5
75°	137.2	187.0	261.1	305.6	315.0
77.5°	102.3	154.7	226.1	245.0	238.2
80°	72.7	123.9	176.3	166.8	170.9
82.5°	47.1	94.3	109.1	123.9	127.8
85°	26.9	55.2	67.3	72.7	75.4
87.5°	12.1	20.2	26.9	26.9	25.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)