

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: P474171

Luminaire Tested: **24CZ2-40HE-RDP-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474171
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40HE-RDP-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2679.3 lumens
Efficiency: N/A
Efficacy: 87.3 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

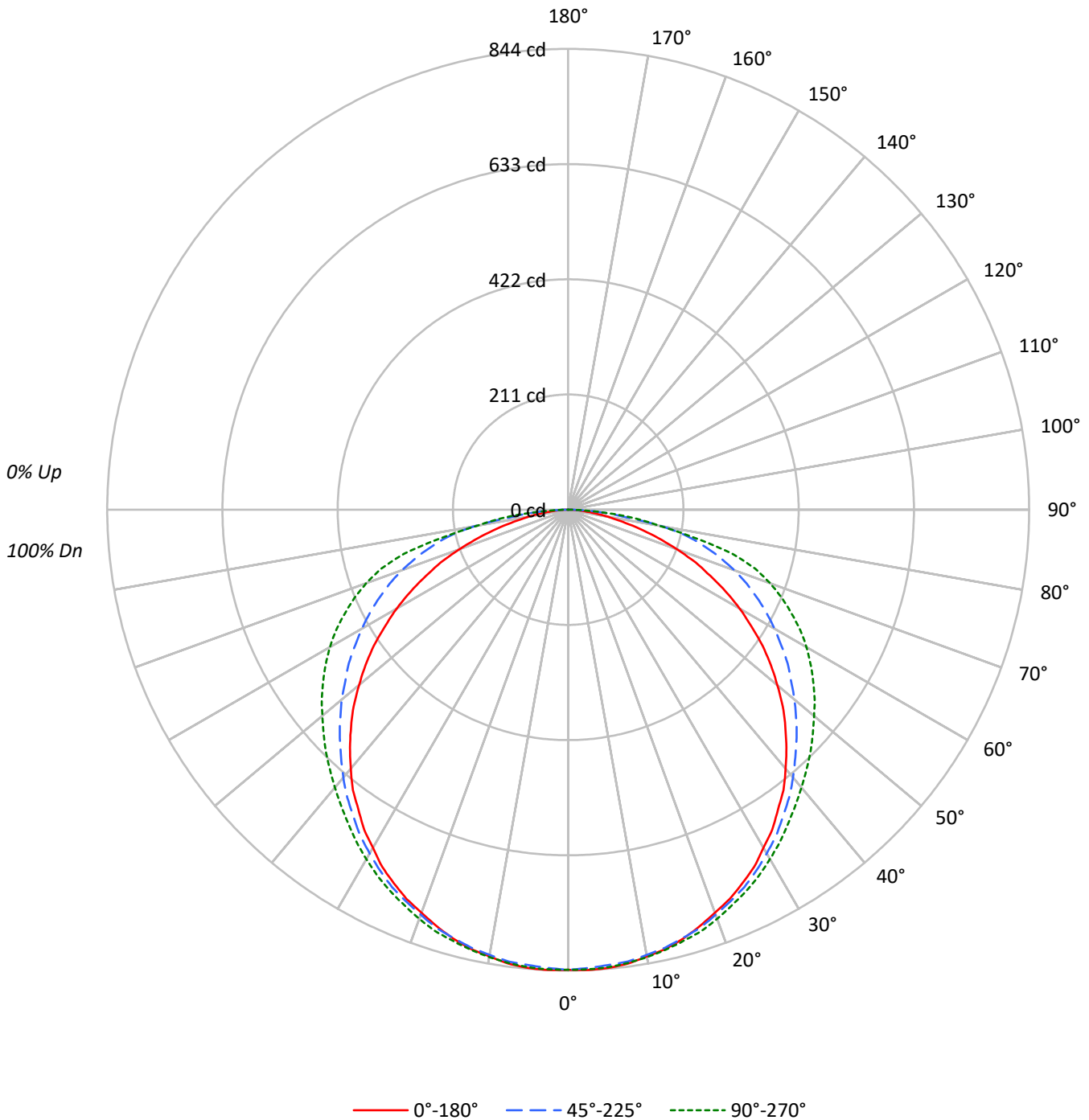
Input Watts (W): 30.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1134	1134	1134
5°	1138	1131	1136
10°	1135	1131	1137
15°	1133	1131	1139
20°	1125	1130	1142
25°	1121	1132	1144
30°	1111	1129	1148
35°	1100	1126	1153
40°	1088	1125	1167
45°	1070	1125	1193
50°	1046	1132	1230
55°	1019	1150	1285
60°	977	1173	1355
65°	914	1214	1438
70°	831	1271	1547
75°	704	1340	1617
80°	556	1349	1307
85°	411	1027	1150



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.9	3.0
10°-20°	230.0	8.6
20°-30°	351.8	13.1
30°-40°	430.0	16.0
40°-50°	458.3	17.1
50°-60°	438.2	16.4
60°-70°	371.2	13.9
70°-80°	249.5	9.3
80°-90°	70.4	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°	661.7	24.7
0°-40°	1091.7	40.7
0°-60°	1988.2	74.2
0°-90°	2679.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2679.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	843	843	843	843	843	
5°	843	841	837	841	841	80
15°	813	813	812	819	817	229
25°	755	758	763	770	771	348
35°	670	675	686	699	702	420
45°	562	572	591	617	627	434
55°	434	450	490	529	548	387
65°	287	316	381	432	452	285
75°	136	185	258	302	311	145
85°	27	54	66	72	74	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	842.6	842.6	842.6	842.6	842.6
2.5°	843.9	843.9	840.0	842.6	842.6
5°	842.6	841.3	837.3	841.3	841.3
7.5°	838.6	837.3	834.6	838.6	837.3
10°	830.7	830.7	828.0	832.0	832.0
12.5°	824.0	822.7	821.3	826.7	825.3
15°	813.4	813.4	812.0	818.7	817.4
17.5°	800.1	801.4	802.7	808.0	809.4
20°	785.4	788.1	789.4	797.4	797.4
22.5°	772.1	773.5	776.1	784.1	784.1
25°	754.9	757.5	762.8	769.5	770.8
27.5°	737.6	738.9	745.6	754.9	756.2
30°	715.0	719.0	726.9	737.6	738.9
32.5°	695.0	699.0	708.3	719.0	721.6
35°	669.8	675.1	685.7	699.0	701.7
37.5°	647.2	651.1	664.4	679.1	683.1
40°	619.4	627.2	640.5	657.8	664.4
42.5°	591.4	599.4	615.4	637.8	645.8
45°	562.2	571.5	591.4	616.7	627.2
47.5°	532.9	543.6	566.2	595.4	607.4
50°	499.7	513.0	540.9	574.2	587.5
52.5°	467.8	483.7	514.3	551.6	568.8
55°	434.5	450.5	490.4	528.9	547.6
57.5°	397.3	418.6	462.5	506.3	526.3
60°	362.9	382.7	435.9	483.7	503.7
62.5°	325.6	352.2	409.3	459.8	479.7
65°	287.1	316.3	381.4	431.9	451.8
67.5°	252.5	284.4	353.6	404.0	423.9
70°	211.3	251.2	323.0	373.4	393.3
72.5°	172.7	216.6	291.1	340.3	358.9
75°	135.5	184.7	257.8	301.7	311.0
77.5°	101.1	152.8	223.3	241.9	235.2
80°	71.8	122.3	174.1	164.7	168.7
82.5°	46.5	93.1	107.7	122.3	126.2
85°	26.6	54.5	66.5	71.8	74.5
87.5°	12.0	19.9	26.6	26.6	25.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)