

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: P274769

Luminaire Tested: **22CZ2-44HE-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P274769  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44HE-RDP-UNV-L940-CD1-U  
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI  
Light Source: (196) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2552.0 lumens  
Efficiency: N/A  
Efficacy: 72.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

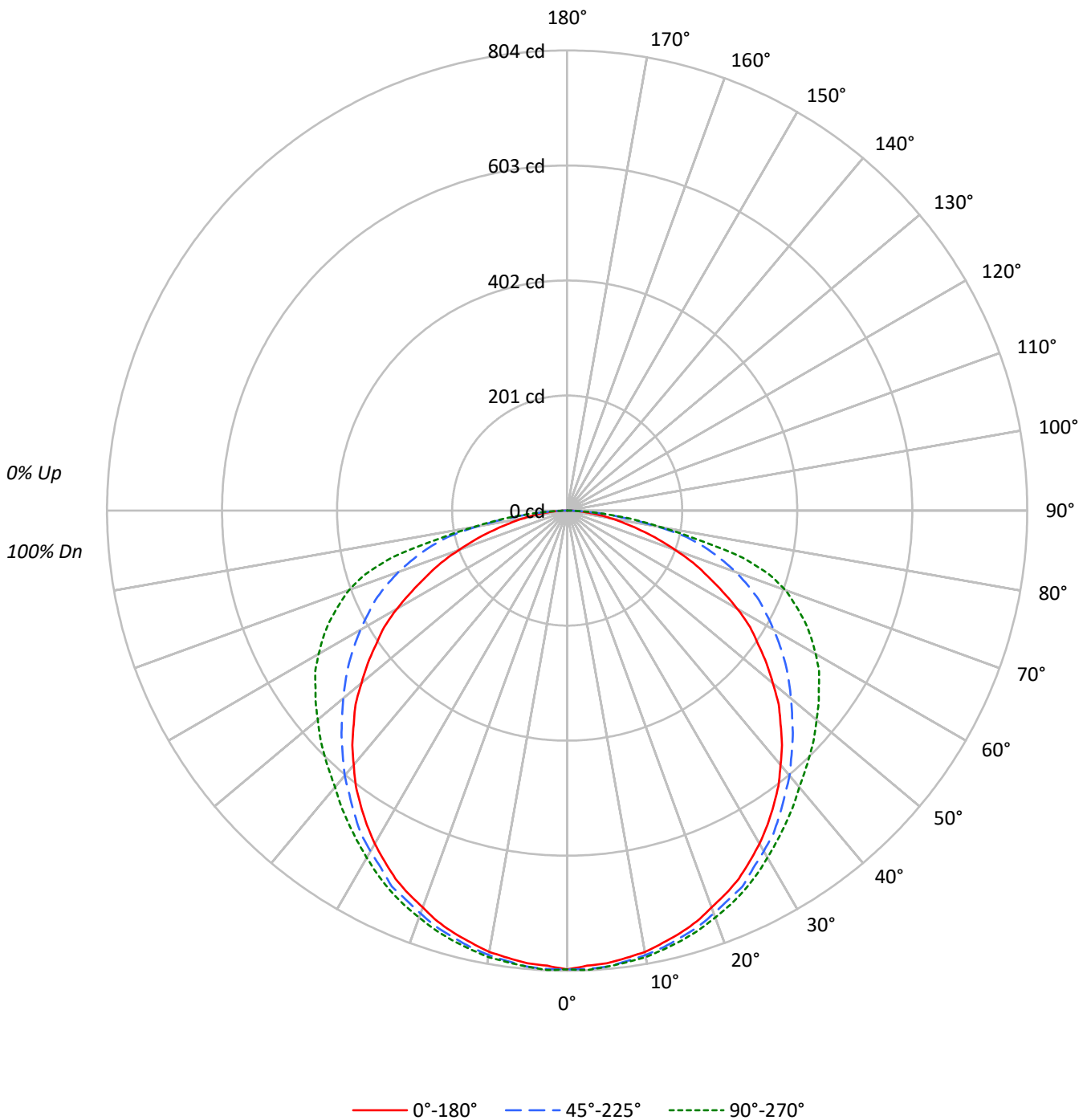
Input Watts (W): 35  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	2157	2157	2157
5°	2145	2160	2160
10°	2139	2155	2165
15°	2129	2150	2165
20°	2113	2145	2167
25°	2107	2152	2174
30°	2088	2135	2176
35°	2066	2128	2190
40°	2038	2124	2216
45°	2007	2122	2286
50°	1965	2138	2381
55°	1911	2184	2519
60°	1849	2243	2698
65°	1721	2355	2917
70°	1581	2467	3190
75°	1386	2596	3299
80°	1193	2473	2590
85°	1044	1797	1970



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.8	3.0
10°-20°	217.7	8.5
20°-30°	332.2	13.0
30°-40°	405.6	15.9
40°-50°	433.7	17.0
50°-60°	418.6	16.4
60°-70°	360.3	14.1
70°-80°	243.8	9.6
80°-90°	64.3	2.5
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°	625.7	24.5
0°-40°	1031.3	40.4
0°-60°	1883.6	73.8
0°-90°	2552.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2552.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	802	802	802	802	802	
5°	794	796	800	800	800	75
15°	764	766	772	775	777	216
25°	710	713	725	728	732	327
35°	629	634	648	661	666	394
45°	528	537	558	586	601	407
55°	407	420	466	512	537	365
65°	270	297	370	428	458	269
75°	133	176	250	300	317	143
85°	34	47	58	60	64	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	801.6	801.6	801.6	801.6	801.6
2.5°	796.0	797.9	801.6	801.6	803.5
5°	794.1	796.0	799.8	799.8	799.8
7.5°	788.5	790.4	794.1	796.0	796.0
10°	782.9	784.7	788.5	790.4	792.2
12.5°	773.5	775.3	781.0	784.7	784.7
15°	764.1	766.0	771.6	775.3	777.2
17.5°	752.8	756.6	762.2	766.0	767.8
20°	737.8	741.6	749.1	754.7	756.6
22.5°	724.7	728.4	735.9	741.6	745.3
25°	709.6	713.4	724.7	728.4	732.2
27.5°	690.9	694.6	704.0	711.5	717.1
30°	672.1	675.8	687.1	696.5	700.3
32.5°	651.4	657.1	670.2	677.7	683.4
35°	628.9	634.5	647.7	660.8	666.5
37.5°	606.4	612.0	625.2	642.1	649.6
40°	580.1	587.6	604.5	627.0	630.8
42.5°	555.7	565.1	580.1	606.4	615.8
45°	527.5	536.9	557.6	585.7	600.8
47.5°	501.3	510.6	533.2	567.0	585.7
50°	469.3	482.5	510.6	550.1	568.8
52.5°	439.3	450.6	488.1	531.3	553.8
55°	407.4	420.5	465.6	512.5	536.9
57.5°	379.2	390.5	441.2	493.7	521.9
60°	343.6	358.6	416.8	473.1	501.3
62.5°	306.0	328.5	392.4	450.6	480.6
65°	270.3	296.6	369.8	428.0	458.1
67.5°	238.4	266.6	341.7	403.6	431.8
70°	200.9	236.5	313.5	373.6	405.5
72.5°	167.1	206.5	281.6	341.7	369.8
75°	133.3	176.5	249.7	300.4	317.3
77.5°	103.3	144.6	214.0	229.0	230.9
80°	77.0	114.5	159.6	161.5	167.1
82.5°	52.6	80.7	103.3	112.6	114.5
85°	33.8	46.9	58.2	60.1	63.8
87.5°	15.0	16.9	20.7	18.8	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)