

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: P274772

Luminaire Tested: **22CZ2-44-RDP-UNV-L935-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: P274772  
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: 22CZ2-44-RDP-UNV-L935-CD1-U  
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI  
Light Source: (98) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2503.0 lumens  
Efficiency: N/A  
Efficacy: 58.6 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

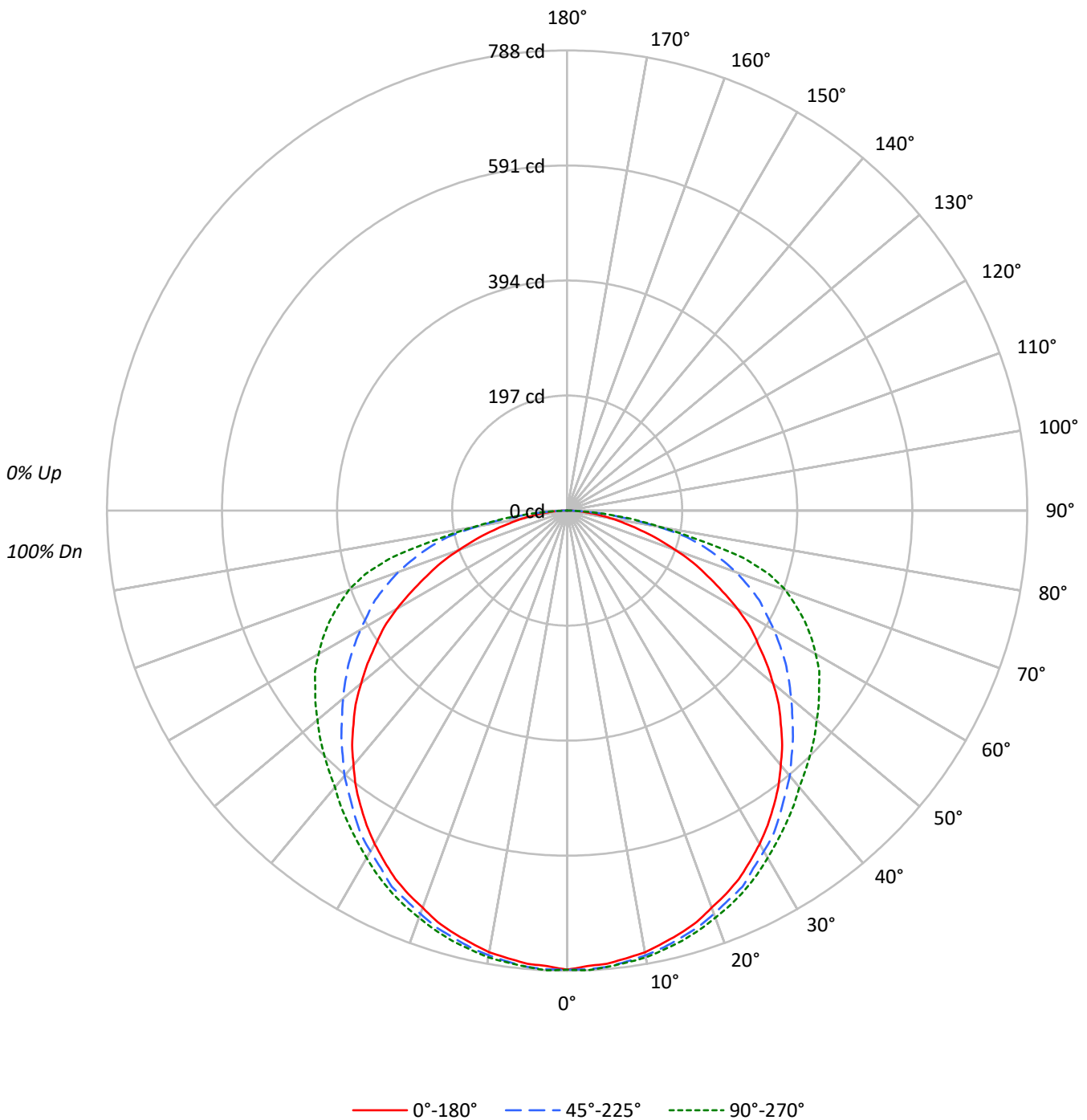
Input Watts (W): 42.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2116	2116	2116
5°	2104	2119	2119
10°	2098	2113	2123
15°	2088	2108	2124
20°	2072	2104	2125
25°	2067	2110	2132
30°	2048	2094	2134
35°	2026	2087	2147
40°	1999	2083	2173
45°	1969	2081	2242
50°	1927	2097	2336
55°	1875	2142	2471
60°	1814	2200	2646
65°	1688	2309	2861
70°	1550	2419	3129
75°	1359	2546	3236
80°	1170	2425	2540
85°	1022	1763	1933



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.4	3.0
10°-20°	213.5	8.5
20°-30°	325.8	13.0
30°-40°	397.8	15.9
40°-50°	425.3	17.0
50°-60°	410.5	16.4
60°-70°	353.4	14.1
70°-80°	239.1	9.6
80°-90°	63.1	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°	613.7	24.5
0°-40°	1011.5	40.4
0°-60°	1847.4	73.8
0°-90°	2503.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2503.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	786	786	786	786	786	
5°	779	781	784	784	784	74
15°	749	751	757	760	762	211
25°	696	700	711	714	718	320
35°	617	622	635	648	654	386
45°	517	527	547	574	589	399
55°	400	412	457	503	527	358
65°	265	291	363	420	449	264
75°	131	173	245	295	311	140
85°	33	46	57	59	63	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	786.2	786.2	786.2	786.2	786.2
2.5°	780.7	782.6	786.2	786.2	788.1
5°	778.9	780.7	784.4	784.4	784.4
7.5°	773.3	775.2	778.9	780.7	780.7
10°	767.8	769.7	773.3	775.2	777.0
12.5°	758.6	760.5	766.0	769.7	769.7
15°	749.4	751.3	756.8	760.5	762.3
17.5°	738.4	742.0	747.6	751.3	753.1
20°	723.6	727.3	734.7	740.2	742.0
22.5°	710.7	714.4	721.8	727.3	731.0
25°	696.0	699.7	710.7	714.4	718.1
27.5°	677.6	681.3	690.5	697.9	703.4
30°	659.2	662.9	673.9	683.1	686.8
32.5°	638.9	644.5	657.3	664.7	670.2
35°	616.8	622.4	635.2	648.1	653.7
37.5°	594.7	600.3	613.2	629.7	637.1
40°	569.0	576.3	592.9	615.0	618.7
42.5°	545.0	554.2	569.0	594.7	603.9
45°	517.4	526.6	546.9	574.5	589.2
47.5°	491.6	500.8	522.9	556.1	574.5
50°	460.3	473.2	500.8	539.5	557.9
52.5°	430.9	441.9	478.7	521.1	543.2
55°	399.6	412.5	456.6	502.7	526.6
57.5°	371.9	383.0	432.7	484.3	511.9
60°	337.0	351.7	408.8	464.0	491.6
62.5°	300.1	322.2	384.8	441.9	471.4
65°	265.1	290.9	362.7	419.8	449.3
67.5°	233.8	261.5	335.1	395.9	423.5
70°	197.0	232.0	307.5	366.4	397.7
72.5°	163.9	202.5	276.2	335.1	362.7
75°	130.7	173.1	244.9	294.6	311.2
77.5°	101.3	141.8	209.9	224.6	226.5
80°	75.5	112.3	156.5	158.4	163.9
82.5°	51.6	79.2	101.3	110.5	112.3
85°	33.1	46.0	57.1	58.9	62.6
87.5°	14.7	16.6	20.3	18.4	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)