

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: P274764

Luminaire Tested: **22CZ2-39-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: P274764
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: 22CZ2-39-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

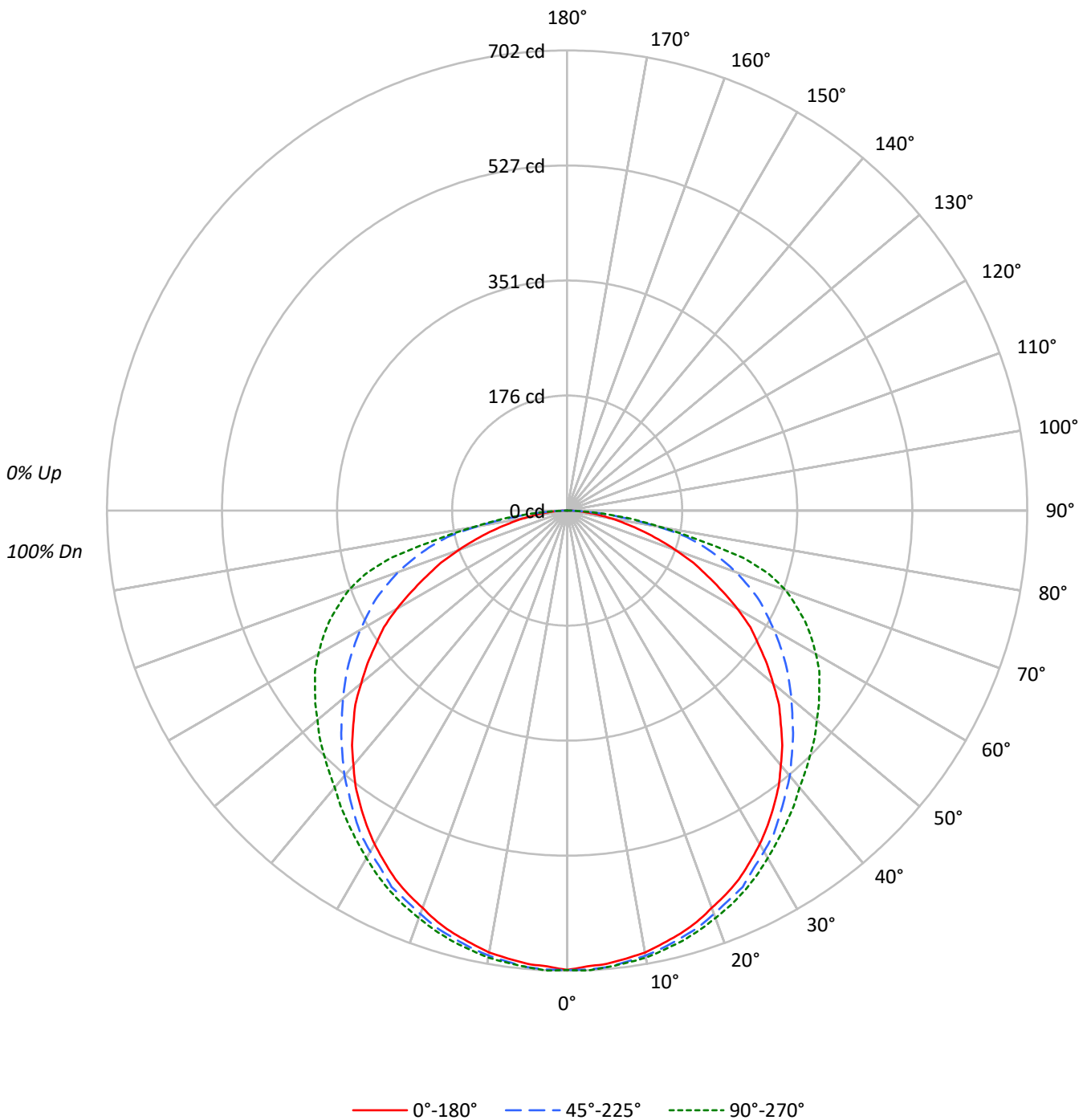
Lumens per Lamp: N/A
Luminaire Lumens: 2231.0 lumens
Efficiency: N/A
Efficacy: 64.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 34.5
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°	1886	1886	1886
5°	1875	1889	1889
10°	1870	1884	1893
15°	1861	1879	1893
20°	1847	1875	1894
25°	1842	1881	1901
30°	1826	1867	1902
35°	1806	1860	1914
40°	1781	1857	1937
45°	1755	1855	1999
50°	1718	1869	2082
55°	1671	1909	2202
60°	1616	1961	2358
65°	1505	2059	2550
70°	1382	2157	2789
75°	1211	2270	2884
80°	1043	2162	2264
85°	911	1572	1723



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.3	3.0
10°-20°	190.3	8.5
20°-30°	290.4	13.0
30°-40°	354.6	15.9
40°-50°	379.1	17.0
50°-60°	365.9	16.4
60°-70°	315.0	14.1
70°-80°	213.1	9.6
80°-90°	56.2	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°	547.0	24.5
0°-40°	901.6	40.4
0°-60°	1646.6	73.8
0°-90°	2231.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2231.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	694	696	699	699	699	66
15°	668	670	674	678	680	188
25°	620	624	634	637	640	286
35°	550	555	566	578	583	344
45°	461	469	487	512	525	356
55°	356	368	407	448	469	319
65°	236	259	323	374	400	235
75°	116	154	218	263	277	125
85°	30	41	51	52	56	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	700.8	700.8	700.8	700.8	700.8
2.5°	695.9	697.5	700.8	700.8	702.4
5°	694.2	695.9	699.2	699.2	699.2
7.5°	689.3	690.9	694.2	695.9	695.9
10°	684.4	686.0	689.3	690.9	692.6
12.5°	676.2	677.8	682.7	686.0	686.0
15°	668.0	669.6	674.5	677.8	679.5
17.5°	658.1	661.4	666.3	669.6	671.3
20°	645.0	648.3	654.8	659.8	661.4
22.5°	633.5	636.8	643.4	648.3	651.6
25°	620.4	623.7	633.5	636.8	640.1
27.5°	604.0	607.2	615.5	622.0	626.9
30°	587.6	590.8	600.7	608.9	612.2
32.5°	569.5	574.4	585.9	592.5	597.4
35°	549.8	554.7	566.2	577.7	582.6
37.5°	530.1	535.0	546.5	561.3	567.9
40°	507.1	513.7	528.5	548.2	551.4
42.5°	485.8	494.0	507.1	530.1	538.3
45°	461.2	469.4	487.4	512.1	525.2
47.5°	438.2	446.4	466.1	495.6	512.1
50°	410.3	421.8	446.4	480.9	497.3
52.5°	384.0	393.9	426.7	464.5	484.2
55°	356.1	367.6	407.0	448.0	469.4
57.5°	331.5	341.4	385.7	431.6	456.3
60°	300.3	313.5	364.3	413.6	438.2
62.5°	267.5	287.2	343.0	393.9	420.1
65°	236.3	259.3	323.3	374.2	400.5
67.5°	208.4	233.1	298.7	352.9	377.5
70°	175.6	206.8	274.1	326.6	354.5
72.5°	146.1	180.5	246.2	298.7	323.3
75°	116.5	154.3	218.3	262.6	277.4
77.5°	90.3	126.4	187.1	200.2	201.9
80°	67.3	100.1	139.5	141.1	146.1
82.5°	46.0	70.6	90.3	98.5	100.1
85°	29.5	41.0	50.9	52.5	55.8
87.5°	13.1	14.8	18.1	16.4	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)