

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: P389426

Luminaire Tested: **22CZ2-80VHE-S-UNV-L935-CD1-U**

Issue Date: 2/28/2020

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: P389426
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-80VHE-S-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7188.7 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

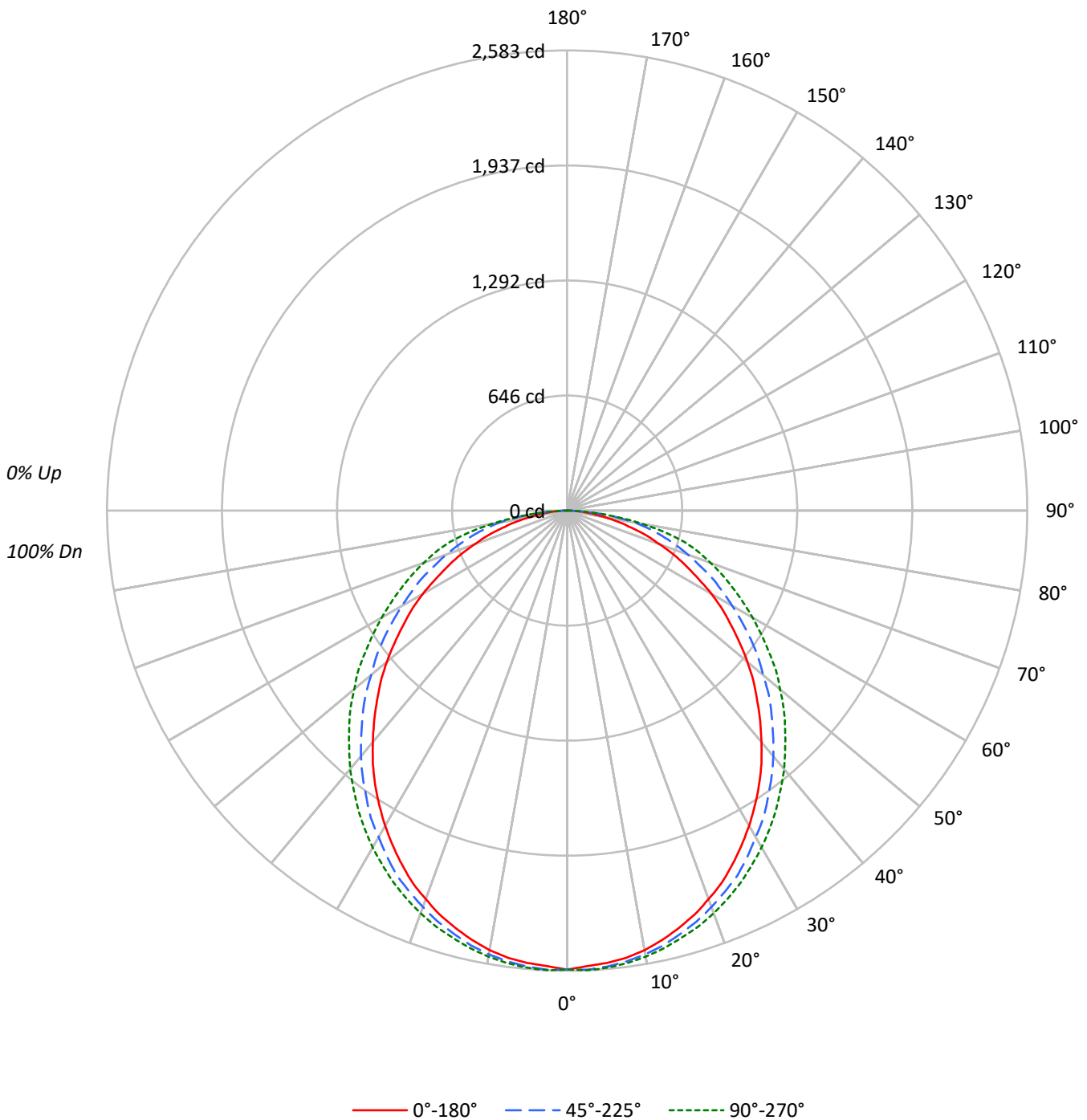
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91		93	90	88		89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62		72	66	61		69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53		64	57	52		61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40		52	45	40		50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36		47	40	35		46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26		37	31	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6932	6932	6932
5°	6886	6940	6958
10°	6846	6910	6947
15°	6756	6849	6915
20°	6647	6781	6887
25°	6513	6712	6842
30°	6347	6576	6785
35°	6170	6457	6721
40°	5962	6327	6657
45°	5744	6178	6586
50°	5532	6010	6529
55°	5271	5901	6483
60°	5036	5759	6463
65°	4699	5724	6535
70°	4328	5674	6729
75°	3906	5754	7079
80°	3378	5926	6653
85°	2797	4971	4971



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.6	3.4
10°-20°	693.2	9.6
20°-30°	1037.3	14.4
30°-40°	1228.4	17.1
40°-50°	1251.9	17.4
50°-60°	1122.0	15.6
60°-70°	878.5	12.2
70°-80°	566.5	7.9
80°-90°	167.3	2.3
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°	1974.1	27.5
0°-40°	3202.5	44.5
0°-60°	5576.4	77.6
0°-90°	7188.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7188.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2576	2576	2576	2576	2576	
5°	2549	2556	2569	2573	2576	242
15°	2425	2438	2458	2479	2482	684
25°	2194	2214	2261	2291	2304	1010
35°	1878	1902	1966	2026	2046	1174
45°	1509	1543	1623	1707	1731	1166
55°	1124	1160	1258	1345	1382	1007
65°	738	782	899	986	1026	733
75°	376	433	553	647	681	403
85°	91	124	161	161	161	106
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2575.9	2575.9	2575.9	2575.9	2575.9
2.5°	2559.2	2565.9	2579.3	2582.6	2582.6
5°	2549.1	2555.8	2569.2	2572.6	2575.9
7.5°	2532.3	2535.7	2552.5	2559.2	2562.5
10°	2505.5	2512.2	2529.0	2539.0	2542.4
12.5°	2468.6	2478.7	2498.8	2512.2	2515.6
15°	2425.0	2438.4	2458.5	2478.7	2482.0
17.5°	2378.0	2391.5	2418.3	2441.8	2448.5
20°	2321.0	2337.8	2368.0	2394.8	2404.9
22.5°	2264.0	2277.4	2314.3	2347.9	2357.9
25°	2193.6	2213.7	2260.7	2290.8	2304.3
27.5°	2119.8	2143.3	2190.2	2230.5	2243.9
30°	2042.6	2066.1	2116.4	2166.7	2183.5
32.5°	1962.1	1989.0	2049.3	2099.7	2116.4
35°	1878.3	1901.8	1965.5	2025.9	2046.0
37.5°	1791.1	1811.2	1885.0	1948.7	1968.8
40°	1697.2	1724.0	1801.1	1874.9	1895.1
42.5°	1603.3	1633.4	1710.6	1791.1	1811.2
45°	1509.3	1542.9	1623.4	1707.2	1730.7
47.5°	1418.8	1445.6	1536.2	1616.7	1650.2
50°	1321.5	1348.3	1435.5	1526.1	1559.6
52.5°	1220.9	1257.8	1351.7	1438.9	1479.2
55°	1123.6	1160.5	1257.8	1345.0	1381.9
57.5°	1033.1	1063.2	1163.9	1254.4	1291.3
60°	935.8	962.6	1070.0	1167.2	1200.8
62.5°	831.8	872.1	982.7	1073.3	1113.6
65°	737.9	781.5	898.9	986.1	1026.3
67.5°	650.7	690.9	805.0	898.9	942.5
70°	550.1	603.7	721.1	815.0	855.3
72.5°	469.6	516.5	637.3	731.2	774.8
75°	375.7	432.7	553.4	647.3	680.9
77.5°	298.5	355.5	469.6	543.4	560.1
80°	218.0	275.0	382.4	419.3	429.3
82.5°	147.6	201.2	275.0	285.1	288.5
85°	90.6	124.1	161.0	161.0	161.0
87.5°	43.6	50.3	57.0	53.7	53.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)