

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: P389454

Luminaire Tested: **22CZ2-85VHE-S-UNV-L950-CD1-SDWPD1-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: P389454
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: 22CZ2-85VHE-S-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8008.0 lumens
Efficiency: N/A
Efficacy: 125.9 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

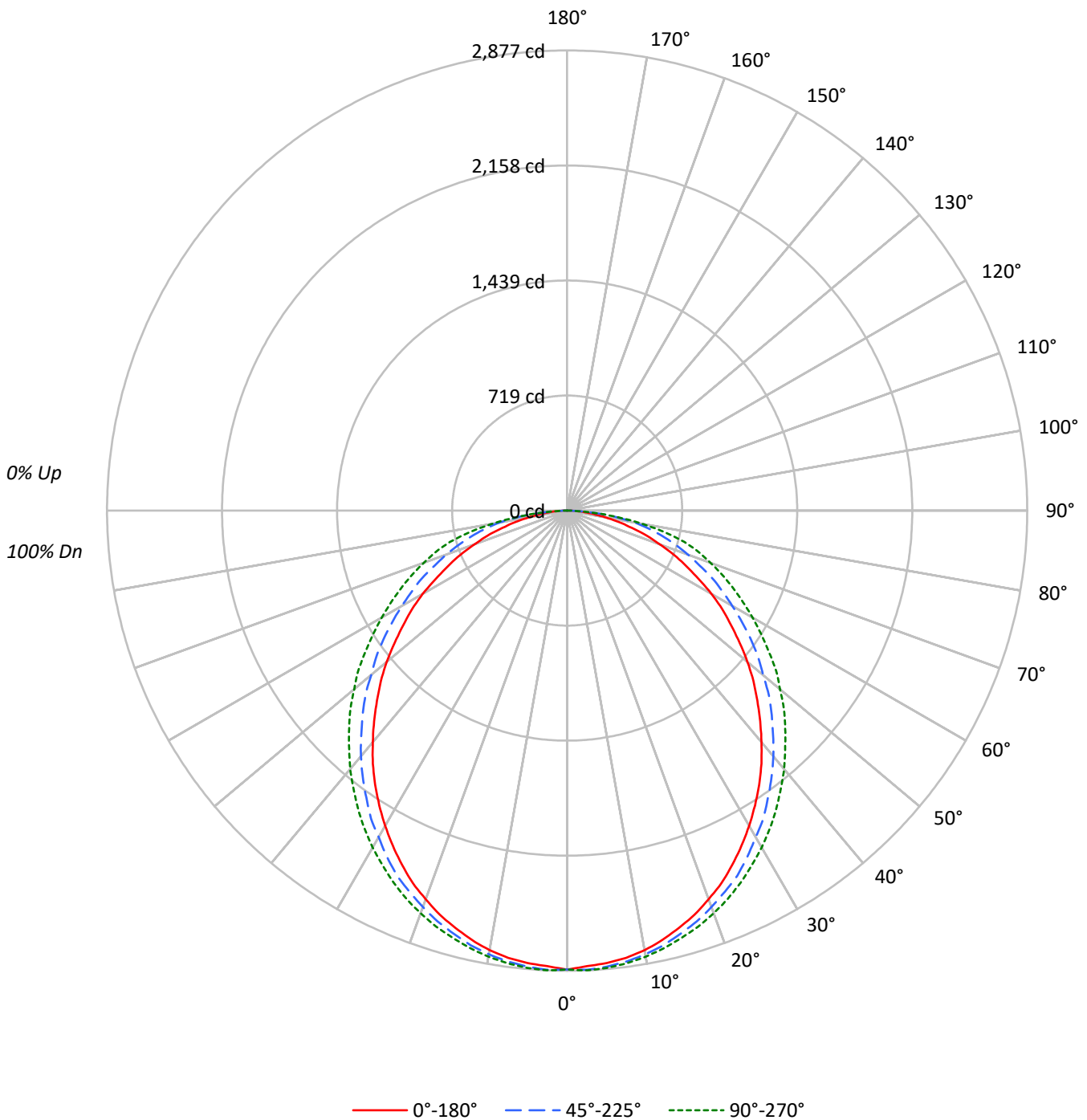
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7722	7722	7722
5°	7670	7731	7751
10°	7627	7698	7739
15°	7526	7630	7703
20°	7404	7554	7672
25°	7255	7477	7622
30°	7070	7326	7558
35°	6874	7193	7487
40°	6641	7048	7416
45°	6399	6882	7337
50°	6163	6695	7273
55°	5872	6573	7222
60°	5610	6415	7199
65°	5234	6376	7280
70°	4821	6320	7497
75°	4351	6410	7886
80°	3764	6600	7412
85°	3115	5536	5536



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.4	3.4
10°-20°	772.3	9.6
20°-30°	1155.5	14.4
30°-40°	1368.4	17.1
40°-50°	1394.6	17.4
50°-60°	1249.9	15.6
60°-70°	978.6	12.2
70°-80°	631.0	7.9
80°-90°	186.4	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°	2199.1	27.5
0°-40°	3567.5	44.5
0°-60°	6212.0	77.6
0°-90°	8008.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8008.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2870	2870	2870	2870	2870	
5°	2840	2847	2862	2866	2870	270
15°	2701	2716	2739	2761	2765	762
25°	2444	2466	2518	2552	2567	1125
35°	2092	2118	2190	2257	2279	1308
45°	1681	1719	1808	1902	1928	1298
55°	1252	1293	1401	1498	1539	1122
65°	822	871	1001	1098	1143	817
75°	418	482	616	721	758	449
85°	101	138	179	179	179	118
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2869.5	2869.5	2869.5	2869.5	2869.5
2.5°	2850.8	2858.3	2873.3	2877.0	2877.0
5°	2839.6	2847.1	2862.0	2865.8	2869.5
7.5°	2820.9	2824.7	2843.4	2850.8	2854.6
10°	2791.1	2798.5	2817.2	2828.4	2832.2
12.5°	2750.0	2761.2	2783.6	2798.5	2802.3
15°	2701.4	2716.3	2738.7	2761.2	2764.9
17.5°	2649.1	2664.0	2693.9	2720.1	2727.5
20°	2585.6	2604.2	2637.9	2667.8	2679.0
22.5°	2522.0	2537.0	2578.1	2615.4	2626.7
25°	2443.6	2466.0	2518.3	2551.9	2566.9
27.5°	2361.4	2387.5	2439.8	2484.7	2499.6
30°	2275.4	2301.6	2357.6	2413.7	2432.4
32.5°	2185.8	2215.7	2282.9	2339.0	2357.6
35°	2092.4	2118.5	2189.5	2256.8	2279.2
37.5°	1995.2	2017.6	2099.8	2170.8	2193.2
40°	1890.6	1920.5	2006.4	2088.6	2111.0
42.5°	1786.0	1819.6	1905.5	1995.2	2017.6
45°	1681.4	1718.7	1808.4	1901.8	1928.0
47.5°	1580.5	1610.4	1711.2	1800.9	1838.3
50°	1472.1	1502.0	1599.2	1700.0	1737.4
52.5°	1360.0	1401.1	1505.7	1602.9	1647.7
55°	1251.7	1292.8	1401.1	1498.3	1539.4
57.5°	1150.8	1184.4	1296.5	1397.4	1438.5
60°	1042.4	1072.3	1191.9	1300.2	1337.6
62.5°	926.6	971.5	1094.8	1195.6	1240.5
65°	822.0	870.6	1001.3	1098.5	1143.3
67.5°	724.9	769.7	896.7	1001.3	1049.9
70°	612.8	672.5	803.3	907.9	952.8
72.5°	523.1	575.4	709.9	814.5	863.1
75°	418.5	482.0	616.5	721.1	758.5
77.5°	332.5	396.1	523.1	605.3	624.0
80°	242.9	306.4	425.9	467.0	478.3
82.5°	164.4	224.2	306.4	317.6	321.3
85°	100.9	138.2	179.3	179.3	179.3
87.5°	48.6	56.0	63.5	59.8	59.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)