

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: P389452

Luminaire Tested: **22CZ2-85VHE-S-UNV-L940-CD1-SWPD1-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: P389452
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-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7636.6 lumens
Efficiency: N/A
Efficacy: 120.1 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

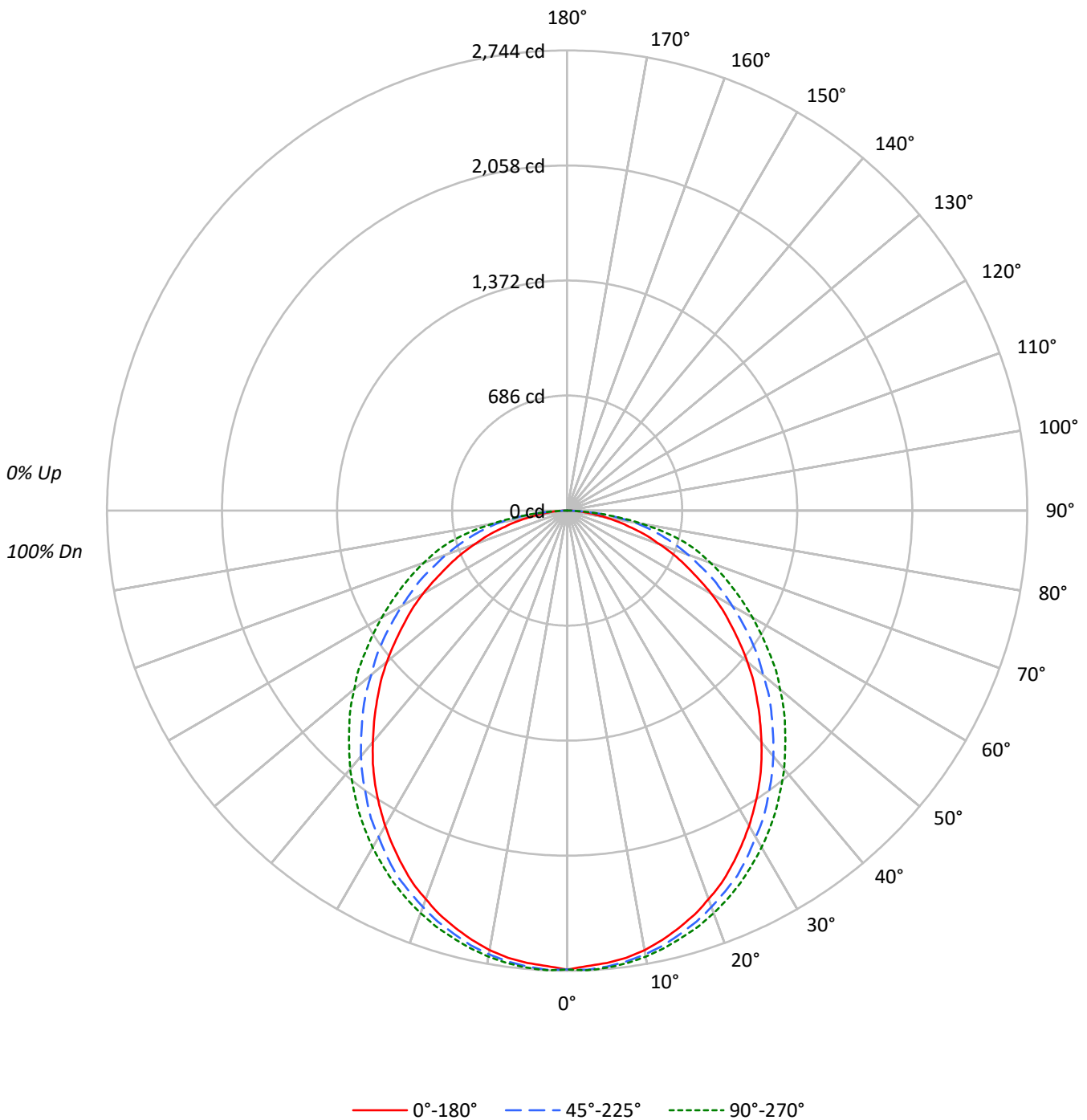
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7364	7364	7364
5°	7315	7373	7392
10°	7273	7341	7380
15°	7177	7276	7346
20°	7061	7204	7316
25°	6919	7130	7268
30°	6742	6986	7208
35°	6555	6859	7140
40°	6333	6721	7072
45°	6102	6563	6997
50°	5877	6384	6936
55°	5600	6268	6887
60°	5350	6117	6865
65°	4991	6080	6942
70°	4597	6028	7149
75°	4149	6112	7520
80°	3589	6295	7068
85°	2970	5280	5280



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.8	3.4
10°-20°	736.4	9.6
20°-30°	1101.9	14.4
30°-40°	1304.9	17.1
40°-50°	1329.9	17.4
50°-60°	1191.9	15.6
60°-70°	933.2	12.2
70°-80°	601.8	7.9
80°-90°	177.8	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°	2097.1	27.5
0°-40°	3402.1	44.5
0°-60°	5923.9	77.6
0°-90°	7636.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7636.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2736	2736	2736	2736	2736	
5°	2708	2715	2729	2733	2736	257
15°	2576	2590	2612	2633	2637	726
25°	2330	2352	2402	2434	2448	1073
35°	1995	2020	2088	2152	2174	1247
45°	1603	1639	1724	1814	1838	1238
55°	1194	1233	1336	1429	1468	1070
65°	784	830	955	1048	1090	779
75°	399	460	588	688	723	428
85°	96	132	171	171	171	113
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2736.4	2736.4	2736.4	2736.4	2736.4
2.5°	2718.6	2725.7	2740.0	2743.6	2743.6
5°	2707.9	2715.1	2729.3	2732.9	2736.4
7.5°	2690.1	2693.7	2711.5	2718.6	2722.2
10°	2661.6	2668.7	2686.5	2697.2	2700.8
12.5°	2622.4	2633.1	2654.5	2668.7	2672.3
15°	2576.1	2590.3	2611.7	2633.1	2636.7
17.5°	2526.2	2540.5	2569.0	2593.9	2601.0
20°	2465.6	2483.5	2515.5	2544.0	2554.7
22.5°	2405.1	2419.3	2458.5	2494.1	2504.8
25°	2330.2	2351.6	2401.5	2433.6	2447.8
27.5°	2251.9	2276.8	2326.7	2369.4	2383.7
30°	2169.9	2194.8	2248.3	2301.7	2319.6
32.5°	2084.4	2112.9	2177.0	2230.5	2248.3
35°	1995.3	2020.3	2088.0	2152.1	2173.5
37.5°	1902.7	1924.1	2002.4	2070.1	2091.5
40°	1802.9	1831.4	1913.4	1991.8	2013.1
42.5°	1703.1	1735.2	1817.2	1902.7	1924.1
45°	1603.4	1639.0	1724.5	1813.6	1838.5
47.5°	1507.2	1535.7	1631.9	1717.4	1753.0
50°	1403.8	1432.4	1525.0	1621.2	1656.8
52.5°	1297.0	1336.1	1435.9	1528.6	1571.3
55°	1193.6	1232.8	1336.1	1428.8	1468.0
57.5°	1097.4	1129.5	1236.4	1332.6	1371.8
60°	994.1	1022.6	1136.6	1239.9	1275.6
62.5°	883.6	926.4	1044.0	1140.2	1182.9
65°	783.9	830.2	954.9	1047.5	1090.3
67.5°	691.2	734.0	855.1	954.9	1001.2
70°	584.3	641.4	766.1	865.8	908.6
72.5°	498.8	548.7	677.0	776.7	823.1
75°	399.1	459.6	587.9	687.7	723.3
77.5°	317.1	377.7	498.8	577.2	595.0
80°	231.6	292.2	406.2	445.4	456.1
82.5°	156.8	213.8	292.2	302.9	306.4
85°	96.2	131.8	171.0	171.0	171.0
87.5°	46.3	53.4	60.6	57.0	57.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)