

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: P389431

Luminaire Tested: **22CZ2-80VHE-S-UNV-L950-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: P389431
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-L950-CD1-SWPD1-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: 7613.7 lumens
Efficiency: N/A
Efficacy: 128.8 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

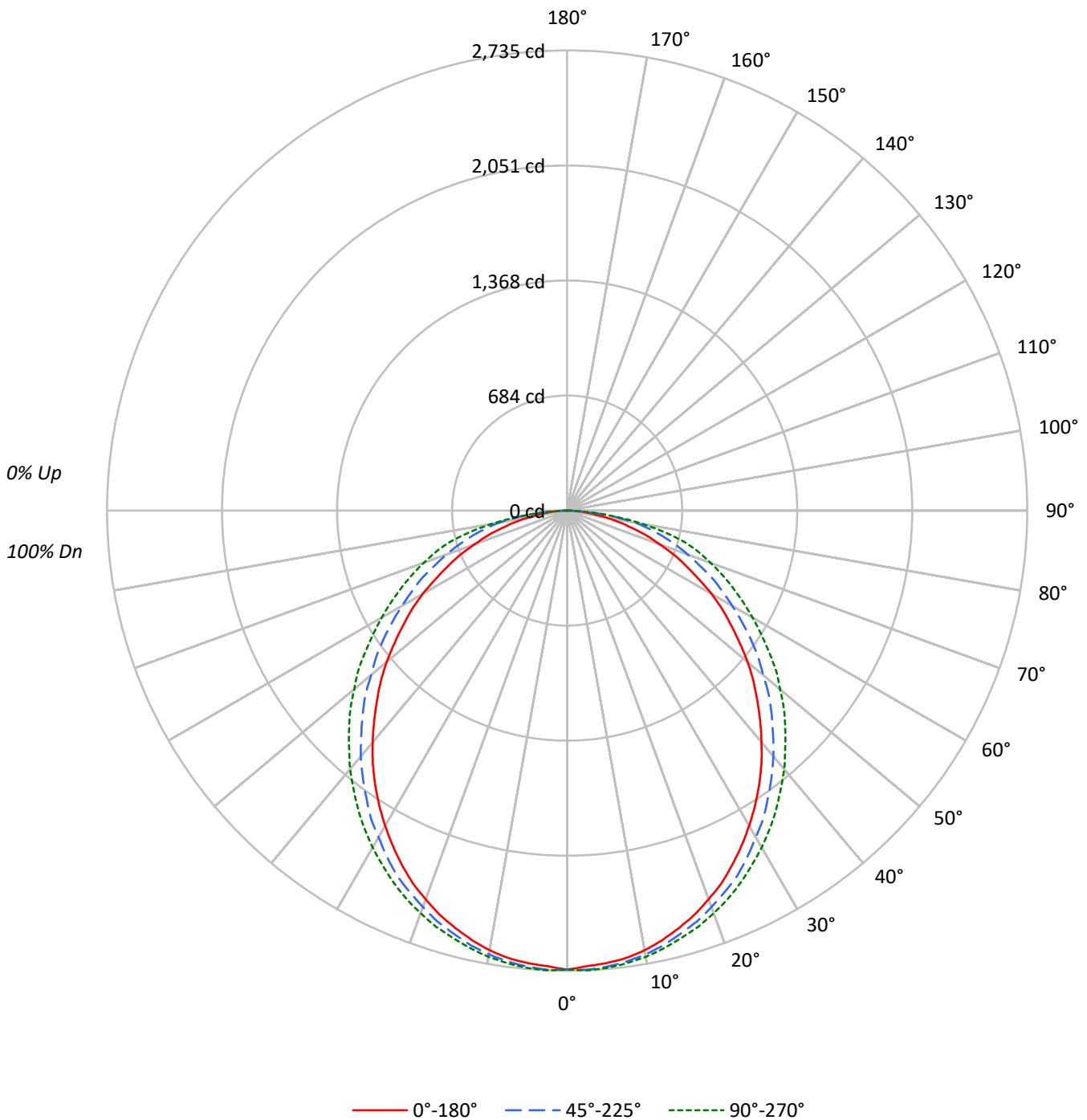
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7342	7342	7342
5°	7293	7350	7370
10°	7251	7319	7358
15°	7155	7254	7324
20°	7039	7182	7294
25°	6898	7109	7246
30°	6722	6965	7186
35°	6535	6839	7119
40°	6314	6701	7051
45°	6084	6543	6976
50°	5859	6365	6916
55°	5583	6250	6867
60°	5334	6099	6845
65°	4976	6062	6921
70°	4584	6009	7128
75°	4137	6094	7497
80°	3578	6276	7046
85°	2961	5264	5264



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.0	3.4
10°-20°	734.2	9.6
20°-30°	1098.6	14.4
30°-40°	1301.0	17.1
40°-50°	1325.9	17.4
50°-60°	1188.4	15.6
60°-70°	930.4	12.2
70°-80°	600.0	7.9
80°-90°	177.2	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°	2090.8	27.5
0°-40°	3391.9	44.5
0°-60°	5906.1	77.6
0°-90°	7613.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7613.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2728	2728	2728	2728	2728	
5°	2700	2707	2721	2725	2728	256
15°	2568	2583	2604	2625	2629	724
25°	2323	2345	2394	2426	2440	1069
35°	1989	2014	2082	2146	2167	1243
45°	1599	1634	1719	1808	1833	1235
55°	1190	1229	1332	1424	1464	1067
65°	782	828	952	1044	1087	776
75°	398	458	586	686	721	427
85°	96	131	170	170	170	113
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2728.2	2728.2	2728.2	2728.2	2728.2
2.5°	2710.5	2717.6	2731.8	2735.3	2735.3
5°	2699.8	2706.9	2721.1	2724.7	2728.2
7.5°	2682.0	2685.6	2703.4	2710.5	2714.0
10°	2653.6	2660.7	2678.5	2689.1	2692.7
12.5°	2614.5	2625.2	2646.5	2660.7	2664.3
15°	2568.4	2582.6	2603.9	2625.2	2628.8
17.5°	2518.6	2532.8	2561.3	2586.1	2593.2
20°	2458.2	2476.0	2508.0	2536.4	2547.1
22.5°	2397.9	2412.1	2451.1	2486.7	2497.3
25°	2323.3	2344.6	2394.3	2426.3	2440.5
27.5°	2245.1	2270.0	2319.7	2362.3	2376.5
30°	2163.4	2188.3	2241.6	2294.8	2312.6
32.5°	2078.1	2106.6	2170.5	2223.8	2241.6
35°	1989.3	2014.2	2081.7	2145.6	2167.0
37.5°	1897.0	1918.3	1996.4	2063.9	2085.2
40°	1797.5	1825.9	1907.6	1985.8	2007.1
42.5°	1698.0	1730.0	1811.7	1897.0	1918.3
45°	1598.6	1634.1	1719.4	1808.2	1833.0
47.5°	1502.7	1531.1	1627.0	1712.2	1747.8
50°	1399.6	1428.1	1520.4	1616.3	1651.9
52.5°	1293.1	1332.1	1431.6	1524.0	1566.6
55°	1190.0	1229.1	1332.1	1424.5	1463.6
57.5°	1094.1	1126.1	1232.7	1328.6	1367.7
60°	991.1	1019.5	1133.2	1236.2	1271.8
62.5°	881.0	923.6	1040.8	1136.8	1179.4
65°	781.5	827.7	952.0	1044.4	1087.0
67.5°	689.2	731.8	852.6	952.0	998.2
70°	582.6	639.4	763.8	863.2	905.9
72.5°	497.3	547.1	675.0	774.4	820.6
75°	397.9	458.3	586.1	685.6	721.1
77.5°	316.2	376.6	497.3	575.5	593.2
80°	230.9	291.3	405.0	444.0	454.7
82.5°	156.3	213.1	291.3	302.0	305.5
85°	95.9	131.4	170.5	170.5	170.5
87.5°	46.2	53.3	60.4	56.8	56.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)