

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: P388563

Luminaire Tested: **22CZ2-95VHE-UNV-L940-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: P388563
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-95VHE-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8009.5 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

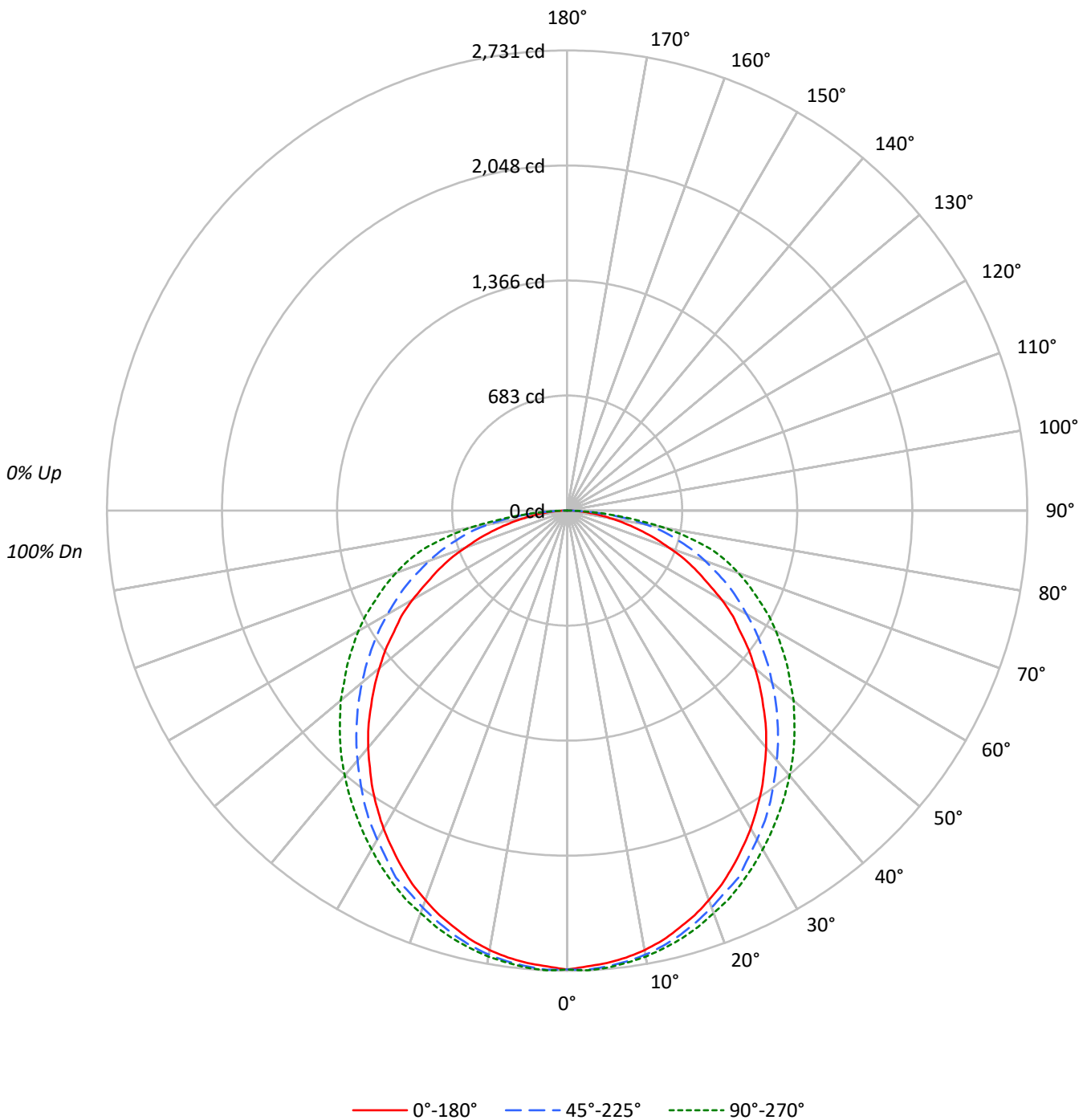
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7329	7329	7329
5°	7282	7335	7357
10°	7237	7312	7345
15°	7148	7258	7324
20°	7043	7178	7280
25°	6916	7138	7255
30°	6772	7005	7213
35°	6616	6914	7199
40°	6452	6798	7213
45°	6269	6720	7259
50°	6088	6649	7342
55°	5880	6620	7470
60°	5706	6618	7700
65°	5421	6725	7980
70°	5054	6853	8497
75°	4631	7089	9179
80°	4031	7390	9039
85°	3529	6570	7179



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.6	3.2
10°-20°	733.6	9.2
20°-30°	1101.3	13.7
30°-40°	1315.9	16.4
40°-50°	1368.4	17.1
50°-60°	1268.3	15.8
60°-70°	1040.3	13.0
70°-80°	703.2	8.8
80°-90°	221.0	2.8
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°	2092.4	26.1
0°-40°	3408.4	42.6
0°-60°	6045.0	75.5
0°-90°	8009.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8009.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2723	2723	2723	2723	2723	
5°	2696	2700	2716	2719	2723	256
15°	2566	2578	2605	2621	2629	724
25°	2329	2349	2404	2432	2444	1073
35°	2014	2042	2105	2168	2191	1259
45°	1647	1679	1766	1868	1908	1272
55°	1253	1293	1411	1537	1592	1126
65°	851	899	1056	1194	1253	841
75°	445	520	682	820	883	472
85°	114	158	213	236	232	130
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2723.4	2723.4	2723.4	2723.4	2723.4
2.5°	2707.6	2715.5	2727.3	2731.3	2731.3
5°	2695.8	2699.7	2715.5	2719.4	2723.4
7.5°	2676.1	2684.0	2699.7	2703.7	2707.6
10°	2648.5	2656.4	2676.1	2684.0	2687.9
12.5°	2613.0	2620.9	2644.6	2656.4	2660.3
15°	2565.7	2577.6	2605.1	2620.9	2628.8
17.5°	2518.4	2530.3	2557.8	2581.5	2589.4
20°	2459.3	2486.9	2506.6	2538.1	2542.1
22.5°	2400.2	2416.0	2451.4	2483.0	2498.7
25°	2329.3	2349.0	2404.1	2431.7	2443.6
27.5°	2254.4	2282.0	2325.3	2368.7	2384.4
30°	2179.5	2199.2	2254.4	2305.6	2321.4
32.5°	2096.7	2124.3	2183.4	2234.7	2258.3
35°	2014.0	2041.5	2104.6	2167.7	2191.3
37.5°	1923.3	1954.8	2017.9	2092.8	2124.3
40°	1836.6	1860.3	1935.1	2025.8	2053.4
42.5°	1746.0	1773.5	1852.4	1950.9	1982.4
45°	1647.4	1679.0	1765.7	1868.1	1907.5
47.5°	1552.8	1584.4	1679.0	1781.4	1828.7
50°	1454.3	1493.7	1588.3	1706.5	1753.8
52.5°	1359.7	1395.2	1501.6	1623.8	1667.1
55°	1253.3	1292.7	1411.0	1537.1	1592.2
57.5°	1166.6	1194.2	1324.2	1454.3	1509.5
60°	1060.2	1095.7	1229.7	1367.6	1430.7
62.5°	945.9	1005.0	1143.0	1284.8	1347.9
65°	851.3	898.6	1056.2	1194.2	1253.3
67.5°	752.8	804.0	957.7	1103.5	1170.5
70°	642.4	709.4	871.0	1016.8	1079.9
72.5°	543.9	614.8	780.4	922.2	989.2
75°	445.4	520.2	681.8	819.8	882.8
77.5°	350.8	433.5	591.2	697.6	737.0
80°	260.1	338.9	476.9	551.8	583.3
82.5°	181.3	248.3	350.8	390.2	398.1
85°	114.3	157.6	212.8	236.5	232.5
87.5°	51.2	63.1	78.8	86.7	82.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)