

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: P388564

Luminaire Tested: **22CZ2-95VHE-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: P388564
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-SWPD1-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: 8107.3 lumens
Efficiency: N/A
Efficacy: 111.5 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

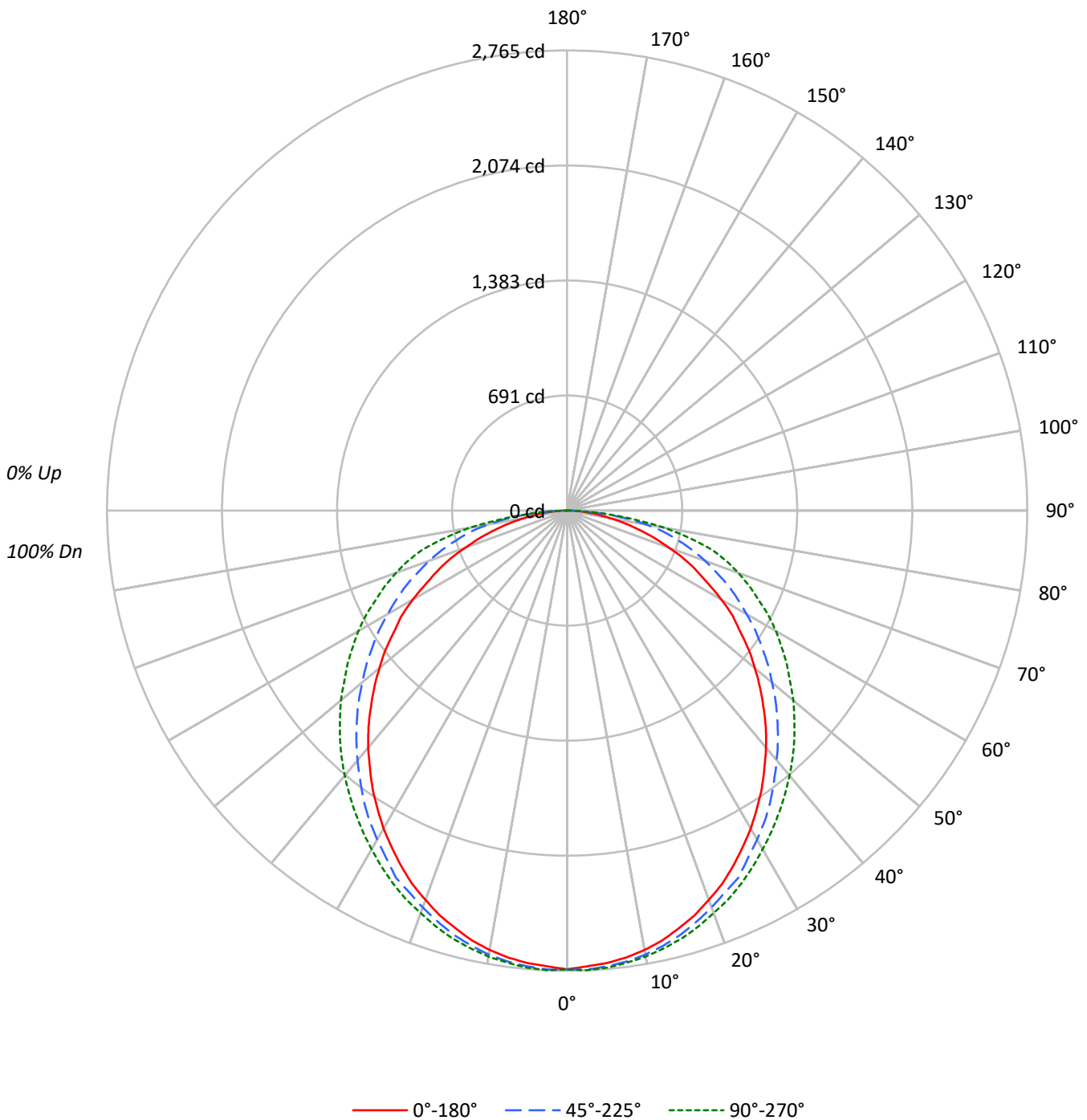
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7418	7418	7418
5°	7371	7425	7446
10°	7325	7402	7434
15°	7235	7346	7413
20°	7129	7266	7369
25°	7000	7225	7344
30°	6855	7090	7301
35°	6697	6998	7287
40°	6530	6881	7301
45°	6346	6801	7348
50°	6163	6731	7432
55°	5952	6701	7561
60°	5775	6699	7794
65°	5487	6807	8078
70°	5116	6936	8600
75°	4687	7176	9291
80°	4080	7480	9149
85°	3572	6651	7268



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.7	3.2
10°-20°	742.6	9.2
20°-30°	1114.7	13.7
30°-40°	1332.0	16.4
40°-50°	1385.1	17.1
50°-60°	1283.8	15.8
60°-70°	1053.0	13.0
70°-80°	711.8	8.8
80°-90°	223.7	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°	2118.0	26.1
0°-40°	3450.0	42.6
0°-60°	6118.8	75.5
0°-90°	8107.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8107.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2757	2757	2757	2757	2757	
5°	2729	2733	2749	2753	2757	259
15°	2597	2609	2637	2653	2661	733
25°	2358	2378	2434	2461	2473	1086
35°	2039	2066	2130	2194	2218	1274
45°	1668	1700	1787	1891	1931	1288
55°	1269	1308	1428	1556	1612	1140
65°	862	910	1069	1209	1269	852
75°	451	527	690	830	894	478
85°	116	160	215	239	235	131
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2756.6	2756.6	2756.6	2756.6	2756.6
2.5°	2740.7	2748.7	2760.6	2764.6	2764.6
5°	2728.7	2732.7	2748.7	2752.6	2756.6
7.5°	2708.8	2716.7	2732.7	2736.7	2740.7
10°	2680.8	2688.8	2708.8	2716.7	2720.7
12.5°	2644.9	2652.9	2676.8	2688.8	2692.8
15°	2597.1	2609.0	2637.0	2652.9	2660.9
17.5°	2549.2	2561.2	2589.1	2613.0	2621.0
20°	2489.3	2517.3	2537.2	2569.1	2573.1
22.5°	2429.5	2445.5	2481.4	2513.3	2529.2
25°	2357.7	2377.6	2433.5	2461.4	2473.4
27.5°	2281.9	2309.8	2353.7	2397.6	2413.5
30°	2206.1	2226.0	2281.9	2333.8	2349.7
32.5°	2122.3	2150.3	2210.1	2262.0	2285.9
35°	2038.6	2066.5	2130.3	2194.1	2218.1
37.5°	1946.8	1978.7	2042.5	2118.3	2150.3
40°	1859.0	1883.0	1958.8	2050.5	2078.4
42.5°	1767.3	1795.2	1875.0	1974.7	2006.6
45°	1667.5	1699.5	1787.2	1890.9	1930.8
47.5°	1571.8	1603.7	1699.5	1803.2	1851.1
50°	1472.1	1512.0	1607.7	1727.4	1775.3
52.5°	1376.3	1412.2	1519.9	1643.6	1687.5
55°	1268.6	1308.5	1428.2	1555.8	1611.7
57.5°	1180.8	1208.8	1340.4	1472.1	1527.9
60°	1073.1	1109.0	1244.7	1384.3	1448.1
62.5°	957.4	1017.3	1156.9	1300.5	1364.4
65°	861.7	909.6	1069.1	1208.8	1268.6
67.5°	762.0	813.8	969.4	1117.0	1184.8
70°	650.3	718.1	881.6	1029.2	1093.1
72.5°	550.5	622.3	789.9	933.5	1001.3
75°	450.8	526.6	690.2	829.8	893.6
77.5°	355.1	438.8	598.4	706.1	746.0
80°	263.3	343.1	482.7	558.5	590.4
82.5°	183.5	251.3	355.1	394.9	402.9
85°	115.7	159.6	215.4	239.4	235.4
87.5°	51.9	63.8	79.8	87.8	83.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)