

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: P388561

Luminaire Tested: **22CZ2-95VHE-UNV-L935-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: P388561
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-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8024.3 lumens
Efficiency: N/A
Efficacy: 110.4 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

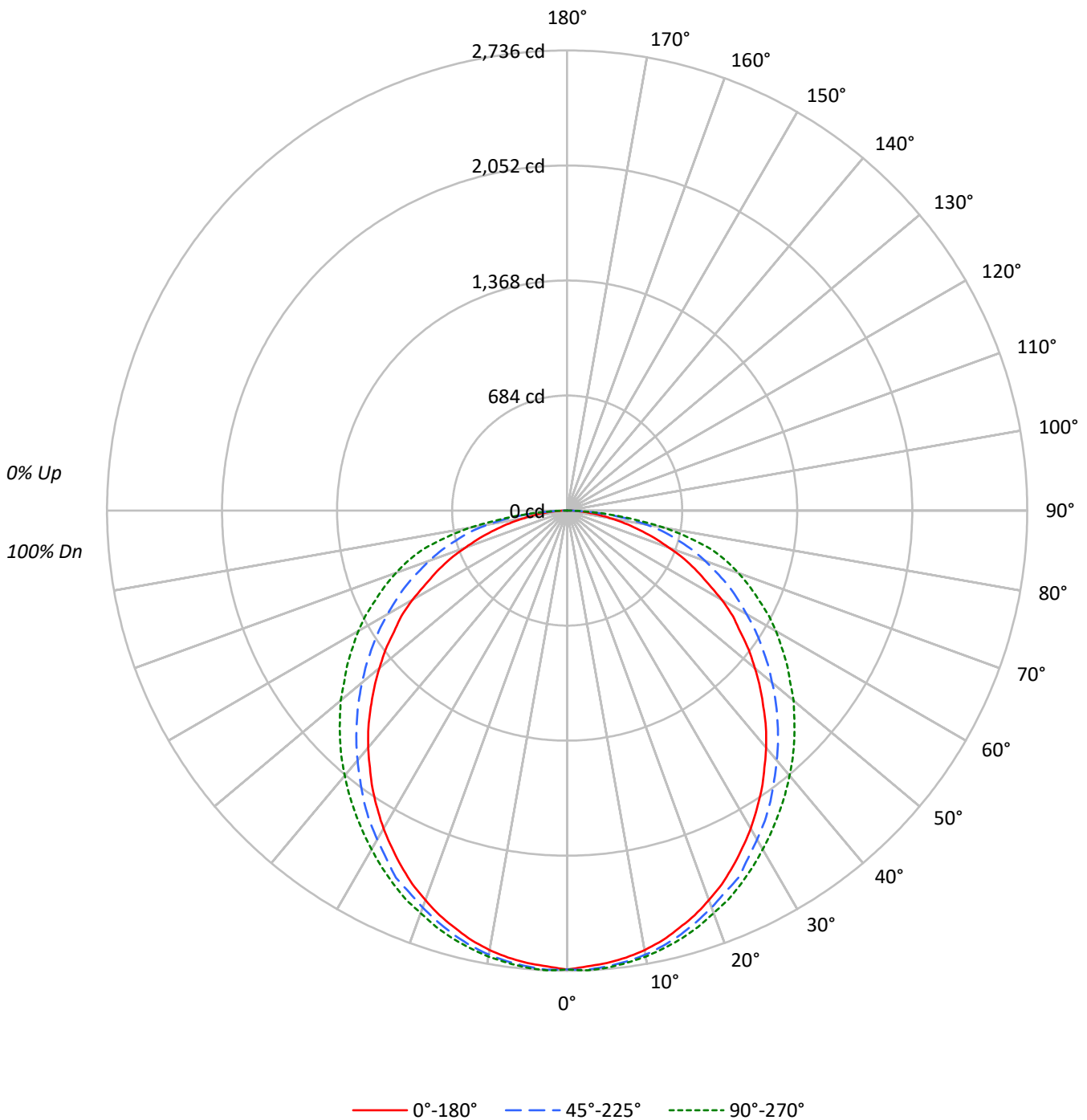
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7342	7342	7342
5°	7296	7349	7370
10°	7250	7326	7358
15°	7161	7271	7337
20°	7056	7191	7293
25°	6929	7152	7269
30°	6785	7018	7227
35°	6628	6927	7212
40°	6464	6810	7227
45°	6281	6732	7273
50°	6100	6661	7356
55°	5891	6632	7484
60°	5716	6630	7714
65°	5431	6738	7995
70°	5064	6866	8512
75°	4639	7102	9196
80°	4038	7404	9056
85°	3535	6583	7194



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.0	3.2
10°-20°	735.0	9.2
20°-30°	1103.3	13.7
30°-40°	1318.4	16.4
40°-50°	1370.9	17.1
50°-60°	1270.6	15.8
60°-70°	1042.2	13.0
70°-80°	704.5	8.8
80°-90°	221.4	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°	2096.3	26.1
0°-40°	3414.7	42.6
0°-60°	6056.2	75.5
0°-90°	8024.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8024.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2728	2728	2728	2728	2728	
5°	2701	2705	2720	2724	2728	256
15°	2570	2582	2610	2626	2634	725
25°	2334	2353	2409	2436	2448	1075
35°	2018	2045	2108	2172	2195	1261
45°	1650	1682	1769	1872	1911	1275
55°	1256	1295	1414	1540	1595	1128
65°	853	900	1058	1196	1256	843
75°	446	521	683	821	884	473
85°	114	158	213	237	233	130
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2728.4	2728.4	2728.4	2728.4	2728.4
2.5°	2712.6	2720.5	2732.4	2736.3	2736.3
5°	2700.8	2704.7	2720.5	2724.5	2728.4
7.5°	2681.0	2688.9	2704.7	2708.7	2712.6
10°	2653.4	2661.3	2681.0	2688.9	2692.9
12.5°	2617.9	2625.7	2649.4	2661.3	2665.2
15°	2570.5	2582.3	2610.0	2625.7	2633.6
17.5°	2523.1	2534.9	2562.6	2586.3	2594.2
20°	2463.9	2491.5	2511.2	2542.8	2546.8
22.5°	2404.6	2420.4	2456.0	2487.6	2503.3
25°	2333.6	2353.3	2408.6	2436.2	2448.1
27.5°	2258.5	2286.2	2329.6	2373.0	2388.8
30°	2183.5	2203.3	2258.5	2309.9	2325.7
32.5°	2100.6	2128.2	2187.5	2238.8	2262.5
35°	2017.7	2045.3	2108.5	2171.7	2195.4
37.5°	1926.9	1958.5	2021.6	2096.7	2128.2
40°	1840.0	1863.7	1938.7	2029.5	2057.2
42.5°	1749.2	1776.8	1855.8	1954.5	1986.1
45°	1650.5	1682.1	1768.9	1871.6	1911.1
47.5°	1555.7	1587.3	1682.1	1784.7	1832.1
50°	1457.0	1496.5	1591.2	1709.7	1757.1
52.5°	1362.2	1397.8	1504.4	1626.8	1670.2
55°	1255.6	1295.1	1413.6	1539.9	1595.2
57.5°	1168.8	1196.4	1326.7	1457.0	1512.3
60°	1062.1	1097.7	1231.9	1370.1	1433.3
62.5°	947.6	1006.9	1145.1	1287.2	1350.4
65°	852.9	900.3	1058.2	1196.4	1255.6
67.5°	754.2	805.5	959.5	1105.6	1172.7
70°	643.6	710.7	872.6	1018.7	1081.9
72.5°	544.9	616.0	781.8	923.9	991.1
75°	446.2	521.2	683.1	821.3	884.5
77.5°	351.4	434.3	592.3	698.9	738.4
80°	260.6	339.6	477.8	552.8	584.4
82.5°	181.6	248.8	351.4	390.9	398.8
85°	114.5	157.9	213.2	236.9	233.0
87.5°	51.3	63.2	79.0	86.9	82.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)