

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: P391854

Luminaire Tested: **24CZ2-95VHE-HRP-UNV-L950-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: P391854
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-95VHE-HRP-UNV-L950-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7149.5 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

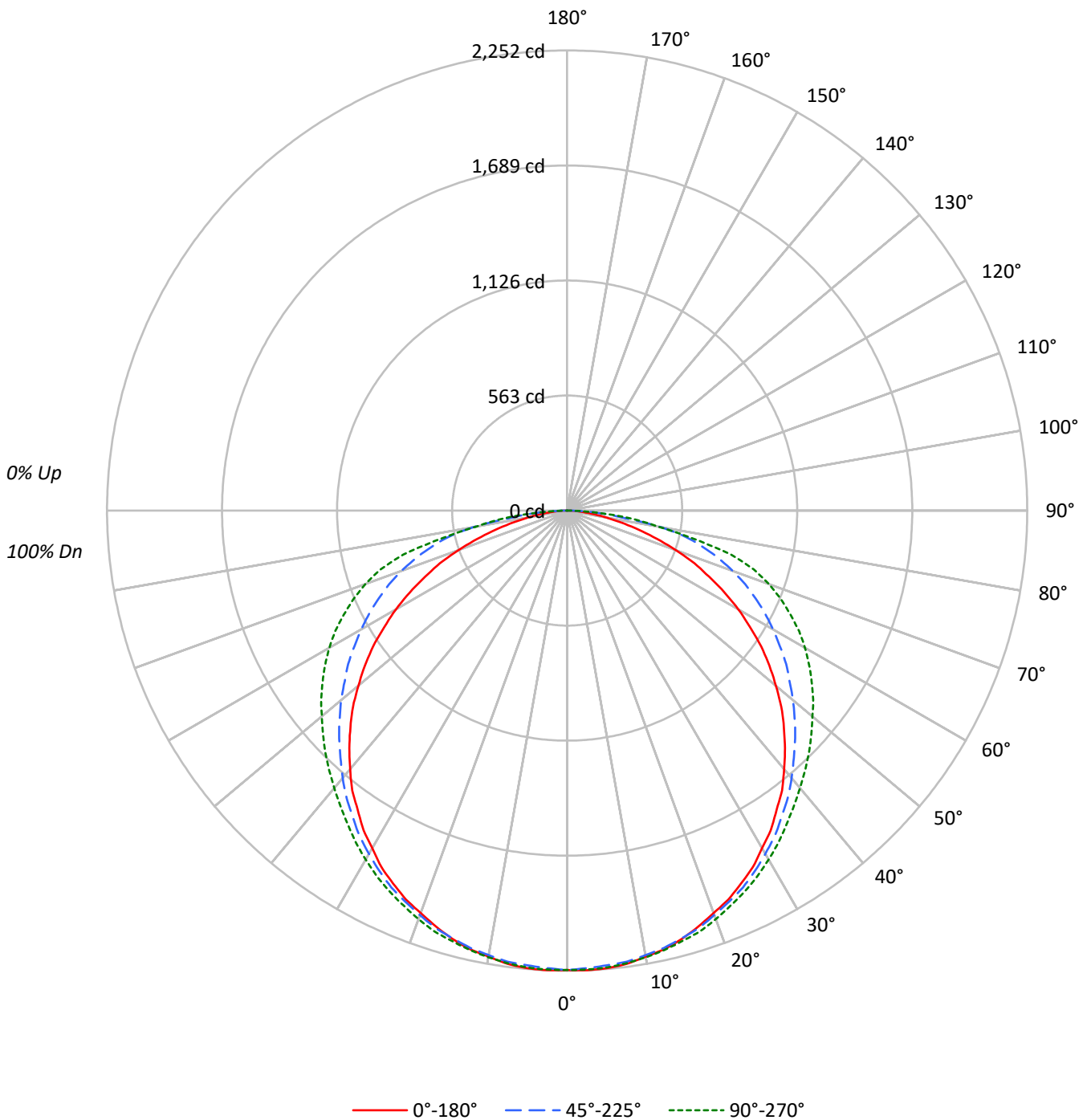
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3025	3025	3025
5°	3037	3017	3032
10°	3028	3018	3033
15°	3023	3018	3038
20°	3001	3016	3047
25°	2990	3022	3053
30°	2964	3014	3063
35°	2936	3006	3075
40°	2902	3002	3114
45°	2854	3003	3185
50°	2791	3021	3281
55°	2720	3070	3427
60°	2605	3130	3617
65°	2439	3240	3839
70°	2218	3390	4129
75°	1880	3577	4314
80°	1484	3600	3490
85°	1095	2737	3066



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.3	3.0
10°-20°	613.8	8.6
20°-30°	938.6	13.1
30°-40°	1147.5	16.0
40°-50°	1223.0	17.1
50°-60°	1169.3	16.4
60°-70°	990.6	13.9
70°-80°	665.7	9.3
80°-90°	187.8	2.6
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°	1765.7	24.7
0°-40°	2913.2	40.7
0°-60°	5305.4	74.2
0°-90°	7149.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7149.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2248	2248	2248	2248	2248	
5°	2248	2245	2234	2245	2245	214
15°	2170	2170	2167	2184	2181	612
25°	2014	2021	2036	2053	2057	928
35°	1787	1802	1830	1865	1872	1120
45°	1500	1525	1578	1646	1674	1157
55°	1160	1202	1309	1411	1461	1033
65°	766	844	1018	1152	1206	760
75°	362	493	688	805	830	387
85°	71	145	177	192	199	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2248.3	2248.3	2248.3	2248.3	2248.3
2.5°	2251.9	2251.9	2241.2	2248.3	2248.3
5°	2248.3	2244.8	2234.1	2244.8	2244.8
7.5°	2237.7	2234.1	2227.0	2237.7	2234.1
10°	2216.4	2216.4	2209.3	2219.9	2219.9
12.5°	2198.7	2195.1	2191.6	2205.8	2202.2
15°	2170.3	2170.3	2166.8	2184.5	2180.9
17.5°	2134.8	2138.4	2141.9	2156.1	2159.7
20°	2095.8	2102.9	2106.5	2127.7	2127.7
22.5°	2060.4	2063.9	2071.0	2092.3	2092.3
25°	2014.3	2021.4	2035.5	2053.3	2056.8
27.5°	1968.2	1971.7	1989.4	2014.3	2017.8
30°	1907.9	1918.5	1939.8	1968.2	1971.7
32.5°	1854.7	1865.3	1890.1	1918.5	1925.6
35°	1787.3	1801.5	1829.9	1865.3	1872.4
37.5°	1727.0	1737.7	1773.1	1812.1	1822.8
40°	1652.5	1673.8	1709.3	1755.4	1773.1
42.5°	1578.1	1599.4	1641.9	1702.2	1723.5
45°	1500.1	1524.9	1578.1	1645.5	1673.8
47.5°	1422.0	1450.4	1510.7	1588.7	1620.6
50°	1333.4	1368.8	1443.3	1532.0	1567.4
52.5°	1248.3	1290.8	1372.4	1471.7	1517.8
55°	1159.6	1202.2	1308.6	1411.4	1461.0
57.5°	1060.3	1117.1	1234.1	1351.1	1404.3
60°	968.1	1021.3	1163.2	1290.8	1344.0
62.5°	868.8	939.8	1092.2	1227.0	1280.2
65°	766.0	844.0	1017.8	1152.5	1205.7
67.5°	673.8	758.9	943.3	1078.1	1131.2
70°	563.9	670.2	861.7	996.5	1049.7
72.5°	461.0	578.0	776.6	907.8	957.5
75°	361.7	492.9	688.0	805.0	829.8
77.5°	269.5	407.8	595.8	645.4	627.7
80°	191.5	326.3	464.6	439.7	450.4
82.5°	124.1	248.2	287.2	326.3	336.9
85°	70.9	145.4	177.3	191.5	198.6
87.5°	31.9	53.2	70.9	70.9	67.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)