

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: P276383

Luminaire Tested: **24CZ2-50-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276383
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50-S-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4972.0 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

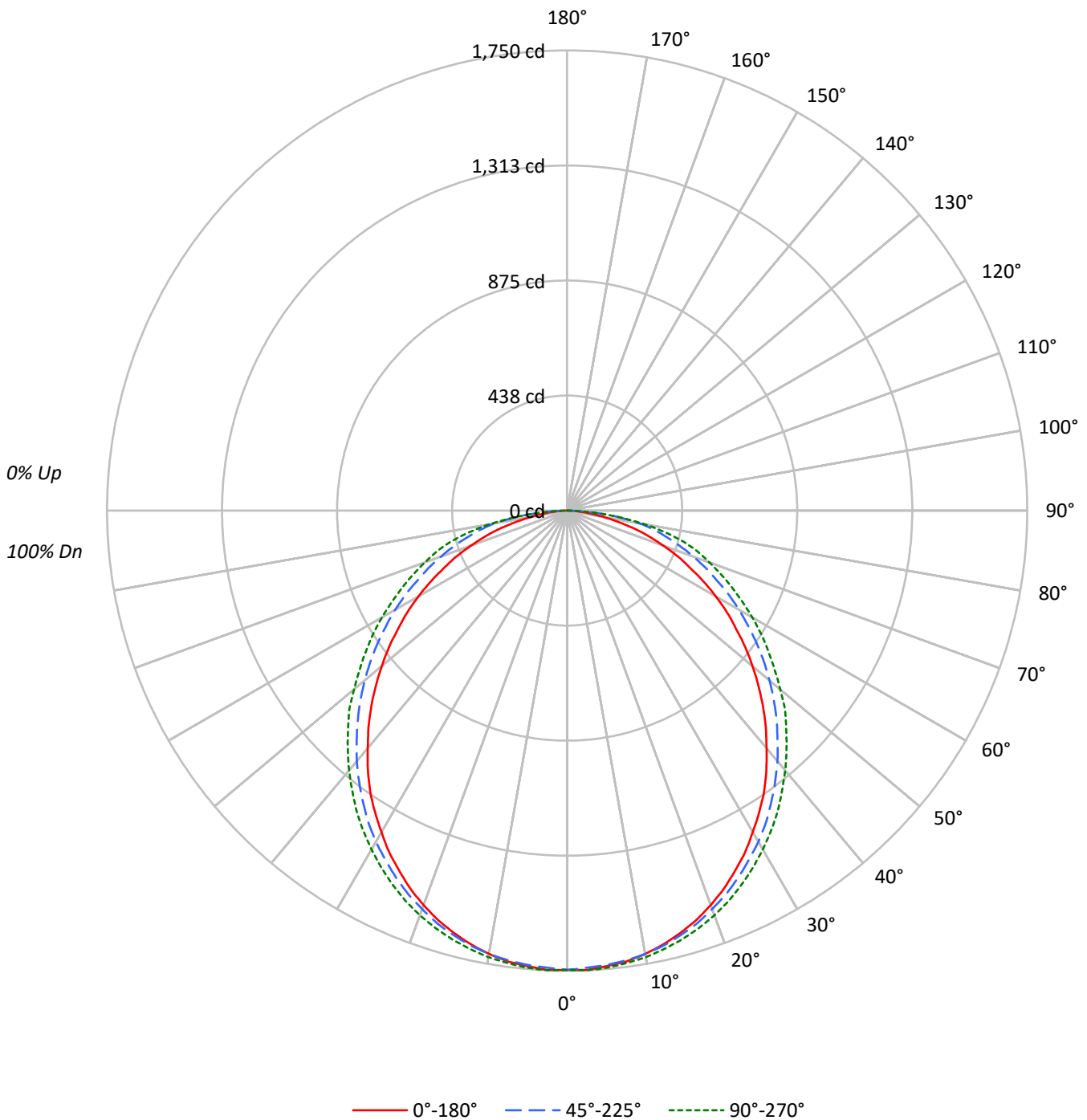
Input Watts (W): 39.711
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2350	2350	2350
5°	2348	2342	2357
10°	2339	2339	2356
15°	2316	2327	2352
20°	2286	2309	2345
25°	2244	2286	2330
30°	2194	2260	2311
35°	2145	2223	2293
40°	2072	2186	2266
45°	2004	2143	2242
50°	1927	2102	2215
55°	1841	2064	2193
60°	1755	2031	2189
65°	1644	1996	2202
70°	1522	2007	2262
75°	1363	2044	2389
80°	1101	2166	2337
85°	829	1902	1853



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.4	3.3
10°-20°	472.5	9.5
20°-30°	710.3	14.3
30°-40°	846.0	17.0
40°-50°	865.9	17.4
50°-60°	779.5	15.7
60°-70°	612.2	12.3
70°-80°	397.3	8.0
80°-90°	122.9	2.5
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°	1348.1	27.1
0°-40°	2194.2	44.1
0°-60°	3839.6	77.2
0°-90°	4972.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4972.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1747	1747	1747	1747	1747	
5°	1739	1742	1734	1744	1745	165
15°	1663	1668	1671	1685	1688	469
25°	1511	1524	1540	1565	1570	696
35°	1306	1322	1354	1387	1396	815
45°	1053	1079	1126	1169	1178	812
55°	785	820	880	926	935	704
65°	516	556	627	679	692	514
75°	262	313	393	447	460	277
85°	54	100	123	120	120	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1746.7	1746.7	1746.7	1746.7	1746.7
2.5°	1748.3	1748.3	1740.4	1748.3	1749.9
5°	1738.8	1742.0	1734.1	1743.5	1745.1
7.5°	1729.3	1729.3	1724.6	1734.1	1735.6
10°	1712.0	1713.5	1712.0	1723.0	1724.6
12.5°	1689.8	1693.0	1694.6	1705.6	1707.2
15°	1663.0	1667.7	1670.9	1685.1	1688.3
17.5°	1633.0	1637.7	1645.6	1661.4	1664.6
20°	1596.7	1603.0	1612.5	1633.0	1637.7
22.5°	1557.2	1563.5	1579.3	1598.2	1606.1
25°	1511.4	1524.0	1539.8	1565.1	1569.8
27.5°	1465.6	1476.6	1497.2	1524.0	1530.3
30°	1411.9	1429.3	1454.5	1481.4	1487.7
32.5°	1359.8	1377.1	1407.1	1435.6	1443.5
35°	1306.1	1321.9	1353.5	1386.6	1396.1
37.5°	1244.5	1265.0	1299.8	1332.9	1342.4
40°	1179.7	1205.0	1244.5	1279.2	1290.3
42.5°	1118.1	1145.0	1184.5	1222.4	1235.0
45°	1053.4	1078.7	1126.0	1168.7	1178.2
47.5°	987.1	1015.5	1066.0	1108.7	1124.5
50°	920.7	950.7	1004.4	1048.6	1058.1
52.5°	854.4	886.0	942.8	990.2	995.0
55°	784.9	819.7	879.7	925.5	934.9
57.5°	721.7	751.7	816.5	863.9	874.9
60°	652.2	685.4	754.9	799.1	813.3
62.5°	585.9	620.7	693.3	737.5	750.2
65°	516.4	555.9	627.0	679.1	691.7
67.5°	456.4	494.3	570.1	620.7	633.3
70°	386.9	429.6	510.1	562.2	574.9
72.5°	326.9	371.1	451.7	502.2	521.2
75°	262.2	312.7	393.2	446.9	459.6
77.5°	199.0	257.4	339.5	380.6	380.6
80°	142.1	203.7	279.5	298.5	301.6
82.5°	93.2	153.2	206.9	205.3	205.3
85°	53.7	99.5	123.2	120.0	120.0
87.5°	20.5	41.1	44.2	44.2	42.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)