

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: P276339

Luminaire Tested: **24CZ2-55HE-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276339  
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: 24CZ2-55HE-S-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5793.0 lumens  
Efficiency: N/A  
Efficacy: 141.3 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

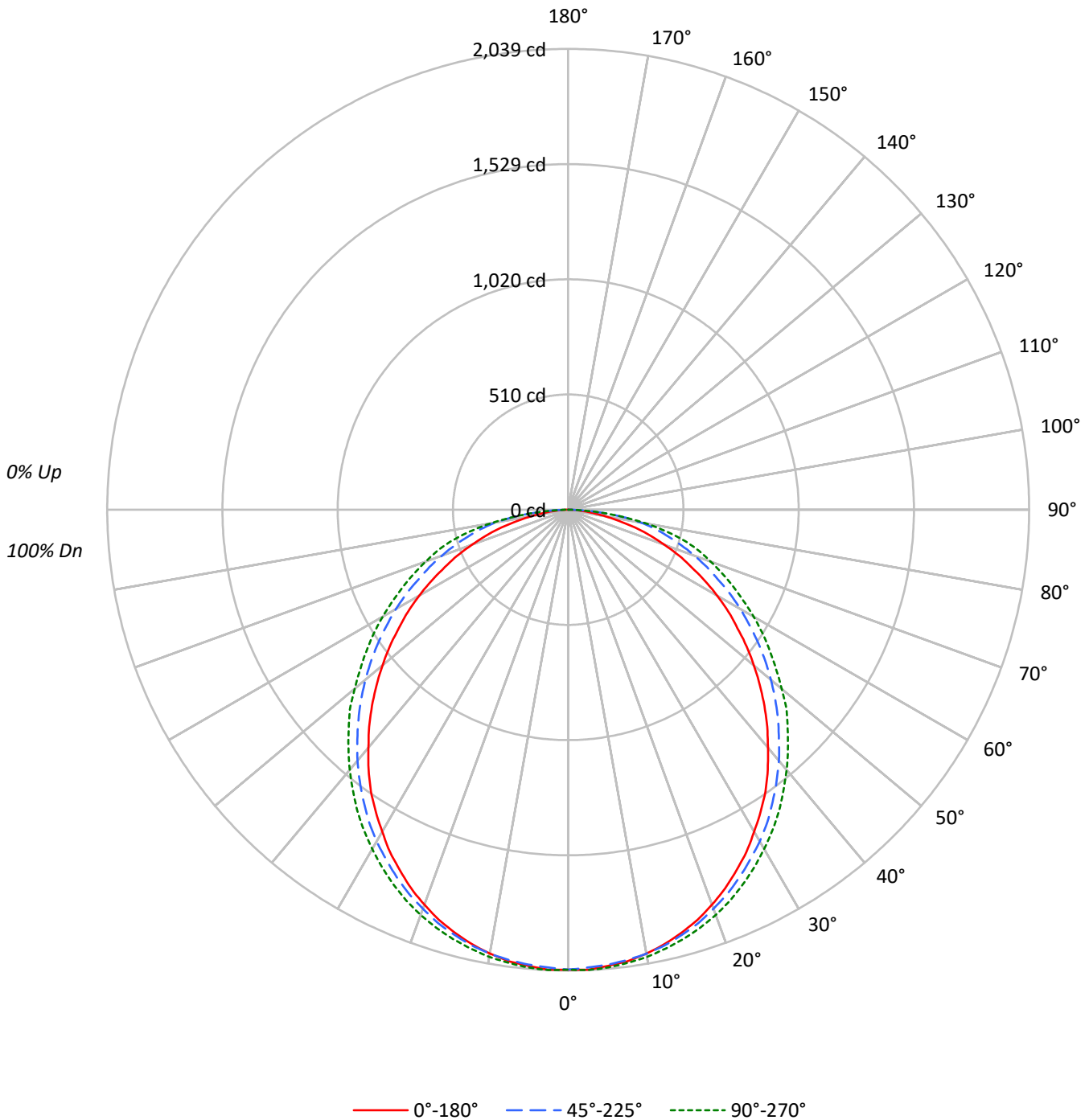
Input Watts (W): 41.004909  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2738	2738	2738
5°	2736	2729	2746
10°	2725	2725	2745
15°	2699	2712	2740
20°	2664	2690	2732
25°	2614	2663	2715
30°	2556	2633	2693
35°	2499	2590	2672
40°	2414	2547	2640
45°	2335	2496	2612
50°	2246	2450	2581
55°	2145	2404	2555
60°	2045	2367	2550
65°	1916	2326	2566
70°	1773	2338	2635
75°	1588	2382	2784
80°	1283	2524	2724
85°	966	2215	2158



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.7	3.3
10°-20°	550.5	9.5
20°-30°	827.6	14.3
30°-40°	985.7	17.0
40°-50°	1008.9	17.4
50°-60°	908.3	15.7
60°-70°	713.3	12.3
70°-80°	462.9	8.0
80°-90°	143.2	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°	1570.7	27.1
0°-40°	2556.5	44.1
0°-60°	4473.6	77.2
0°-90°	5793.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5793.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2035	2035	2035	2035	2035	
5°	2026	2030	2020	2031	2033	192
15°	1938	1943	1947	1963	1967	546
25°	1761	1776	1794	1824	1829	811
35°	1522	1540	1577	1616	1627	949
45°	1227	1257	1312	1362	1373	946
55°	914	955	1025	1078	1089	820
65°	602	648	730	791	806	599
75°	306	364	458	521	536	323
85°	63	116	144	140	140	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2035.1	2035.1	2035.1	2035.1	2035.1
2.5°	2037.0	2037.0	2027.8	2037.0	2038.8
5°	2025.9	2029.6	2020.4	2031.4	2033.3
7.5°	2014.9	2014.9	2009.4	2020.4	2022.2
10°	1994.6	1996.5	1994.6	2007.5	2009.4
12.5°	1968.9	1972.6	1974.4	1987.3	1989.1
15°	1937.6	1943.1	1946.8	1963.4	1967.0
17.5°	1902.6	1908.2	1917.4	1935.8	1939.4
20°	1860.3	1867.7	1878.7	1902.6	1908.2
22.5°	1814.3	1821.7	1840.1	1862.2	1871.4
25°	1760.9	1775.7	1794.1	1823.5	1829.0
27.5°	1707.6	1720.5	1744.4	1775.7	1783.0
30°	1645.0	1665.3	1694.7	1726.0	1733.3
32.5°	1584.3	1604.5	1639.5	1672.6	1681.8
35°	1521.7	1540.1	1576.9	1615.6	1626.6
37.5°	1450.0	1473.9	1514.4	1553.0	1564.1
40°	1374.5	1404.0	1450.0	1490.5	1503.3
42.5°	1302.8	1334.1	1380.1	1424.2	1438.9
45°	1227.3	1256.8	1312.0	1361.7	1372.7
47.5°	1150.0	1183.2	1242.0	1291.7	1310.1
50°	1072.8	1107.7	1170.3	1221.8	1232.8
52.5°	995.5	1032.3	1098.5	1153.7	1159.2
55°	914.5	955.0	1024.9	1078.3	1089.3
57.5°	840.9	875.9	951.3	1006.5	1019.4
60°	759.9	798.6	879.6	931.1	947.6
62.5°	682.7	723.1	807.8	859.3	874.0
65°	601.7	647.7	730.5	791.2	806.0
67.5°	531.8	575.9	664.3	723.1	737.9
70°	450.8	500.5	594.3	655.1	669.8
72.5°	380.9	432.4	526.3	585.1	607.2
75°	305.5	364.3	458.2	520.7	535.5
77.5°	231.8	299.9	395.6	443.5	443.5
80°	165.6	237.4	325.7	347.8	351.5
82.5°	108.6	178.5	241.0	239.2	239.2
85°	62.6	115.9	143.5	139.8	139.8
87.5°	23.9	47.8	51.5	51.5	49.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)