

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: P276531

Luminaire Tested: **24CZ2-65HE-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276531  
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: 24CZ2-65HE-S-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6755.2 lumens  
Efficiency: N/A  
Efficacy: 134.3 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

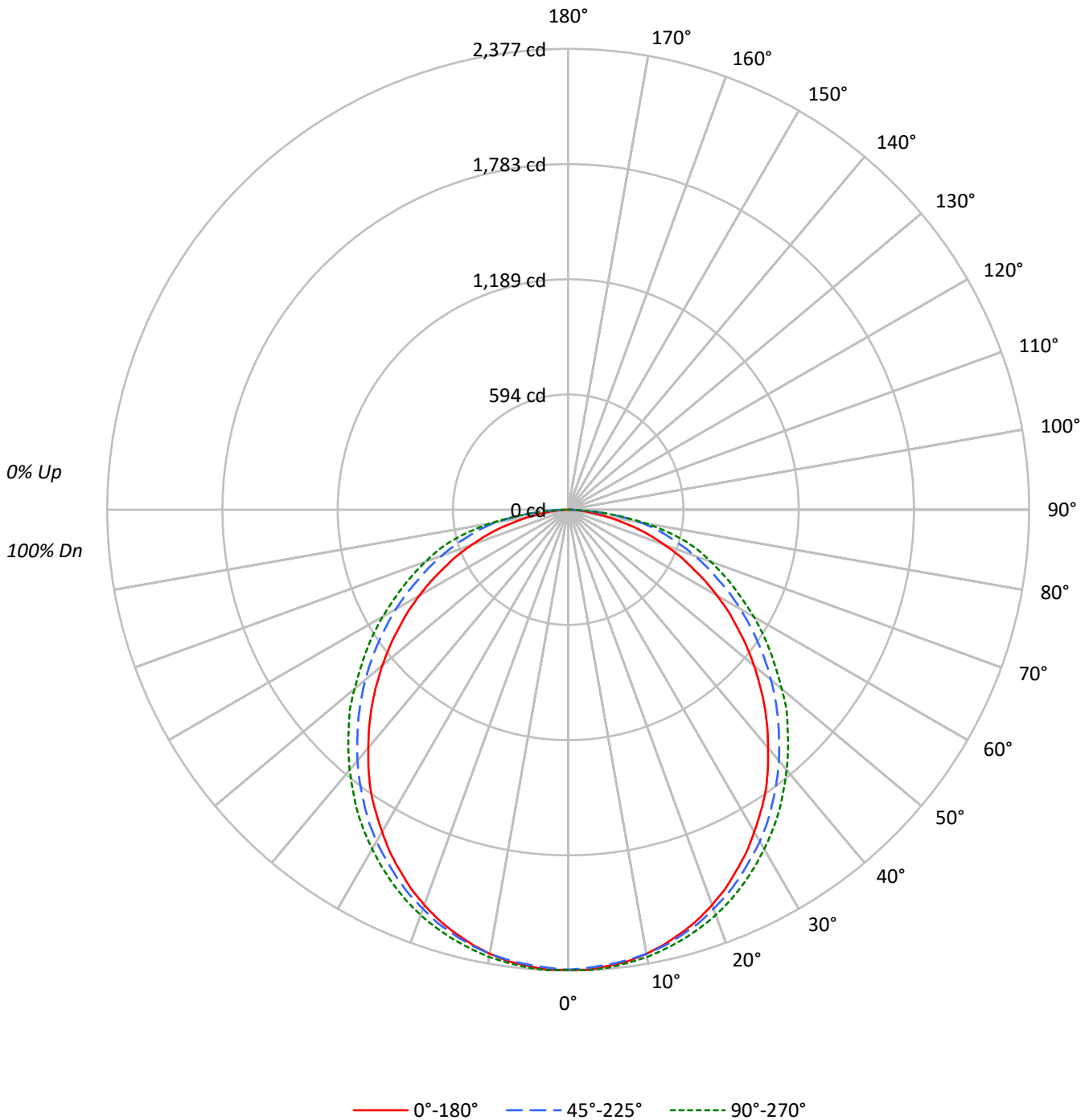
Input Watts (W): 50.313  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3193	3193	3193
5°	3191	3182	3202
10°	3178	3178	3201
15°	3147	3162	3195
20°	3106	3137	3186
25°	3048	3106	3166
30°	2980	3070	3140
35°	2915	3020	3116
40°	2815	2970	3079
45°	2723	2911	3046
50°	2618	2857	3009
55°	2502	2804	2980
60°	2385	2760	2974
65°	2234	2712	2992
70°	2068	2727	3072
75°	1852	2778	3246
80°	1496	2943	3175
85°	1127	2584	2518



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	224.7	3.3
10°-20°	642.0	9.5
20°-30°	965.0	14.3
30°-40°	1149.5	17.0
40°-50°	1176.4	17.4
50°-60°	1059.1	15.7
60°-70°	831.8	12.3
70°-80°	539.8	8.0
80°-90°	167.0	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°	1831.6	27.1
0°-40°	2981.1	44.1
0°-60°	5216.7	77.2
0°-90°	6755.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6755.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2373	2373	2373	2373	2373	
5°	2362	2367	2356	2369	2371	224
15°	2259	2266	2270	2290	2294	637
25°	2053	2071	2092	2126	2133	946
35°	1774	1796	1839	1884	1897	1107
45°	1431	1466	1530	1588	1601	1103
55°	1066	1114	1195	1257	1270	956
65°	702	755	852	923	940	698
75°	356	425	534	607	624	377
85°	73	135	167	163	163	88
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2373.1	2373.1	2373.1	2373.1	2373.1
2.5°	2375.3	2375.3	2364.6	2375.3	2377.4
5°	2362.4	2366.7	2356.0	2368.8	2371.0
7.5°	2349.5	2349.5	2343.1	2356.0	2358.1
10°	2325.9	2328.1	2325.9	2341.0	2343.1
12.5°	2295.9	2300.2	2302.3	2317.4	2319.5
15°	2259.4	2265.9	2270.1	2289.5	2293.8
17.5°	2218.7	2225.1	2235.8	2257.3	2261.6
20°	2169.3	2177.9	2190.8	2218.7	2225.1
22.5°	2115.7	2124.2	2145.7	2171.4	2182.2
25°	2053.4	2070.6	2092.1	2126.4	2132.8
27.5°	1991.2	2006.2	2034.1	2070.6	2079.2
30°	1918.3	1941.9	1976.2	2012.7	2021.2
32.5°	1847.4	1871.0	1911.8	1950.4	1961.2
35°	1774.5	1795.9	1838.9	1883.9	1896.8
37.5°	1690.8	1718.7	1765.9	1811.0	1823.8
40°	1602.8	1637.2	1690.8	1738.0	1753.0
42.5°	1519.2	1555.6	1609.3	1660.8	1677.9
45°	1431.2	1465.5	1529.9	1587.8	1600.7
47.5°	1341.1	1379.7	1448.3	1506.3	1527.7
50°	1250.9	1291.7	1364.7	1424.7	1437.6
52.5°	1160.8	1203.7	1281.0	1345.4	1351.8
55°	1066.4	1113.6	1195.2	1257.4	1270.3
57.5°	980.6	1021.4	1109.3	1173.7	1188.7
60°	886.2	931.2	1025.6	1085.7	1105.0
62.5°	796.1	843.3	942.0	1002.0	1019.2
65°	701.6	755.3	851.8	922.6	939.8
67.5°	620.1	671.6	774.6	843.3	860.4
70°	525.7	583.6	693.1	763.9	781.0
72.5°	444.2	504.2	613.7	682.3	708.1
75°	356.2	424.8	534.3	607.2	624.4
77.5°	270.4	349.7	461.3	517.1	517.1
80°	193.1	276.8	379.8	405.5	409.8
82.5°	126.6	208.1	281.1	278.9	278.9
85°	73.0	135.2	167.4	163.1	163.1
87.5°	27.9	55.8	60.1	60.1	57.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)