

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: P261008

Luminaire Tested: **24CZ-LD5-65-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261008  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-65-S-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6667.0 lumens  
Efficiency: N/A  
Efficacy: 136.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

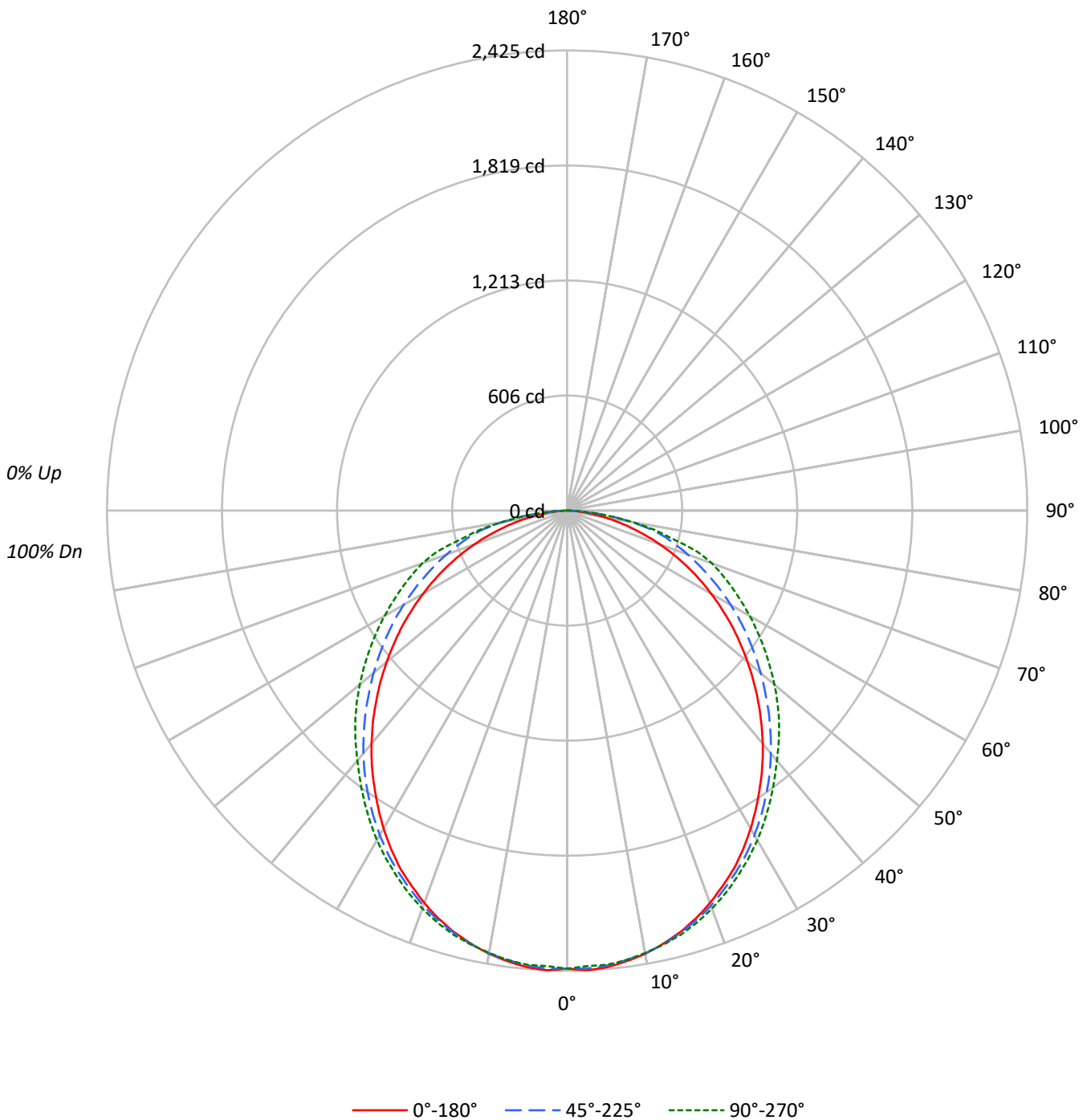
Input Watts (W): 48.918  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50					50			
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	3247	3247	3247
5°	3263	3251	3245
10°	3240	3237	3234
15°	3204	3211	3223
20°	3151	3173	3195
25°	3089	3122	3155
30°	3005	3067	3116
35°	2911	3002	3064
40°	2817	2934	3020
45°	2710	2858	3005
50°	2600	2786	2986
55°	2487	2727	2977
60°	2358	2680	2991
65°	2218	2649	3051
70°	2042	2662	3194
75°	1811	2756	2975
80°	1512	2613	2682
85°	1130	2089	1917



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	228.2	3.4
10°-20°	649.0	9.7
20°-30°	967.2	14.5
30°-40°	1138.5	17.1
40°-50°	1157.0	17.4
50°-60°	1040.2	15.6
60°-70°	821.8	12.3
70°-80°	521.3	7.8
80°-90°	143.9	2.2
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°	1844.3	27.7
0°-40°	2982.8	44.7
0°-60°	5180.0	77.7
0°-90°	6667.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6667.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2414	2414	2414	2414	2414	
5°	2416	2396	2407	2402	2402	229
15°	2300	2289	2305	2312	2314	648
25°	2081	2079	2103	2116	2125	957
35°	1772	1784	1828	1848	1866	1109
45°	1424	1444	1502	1546	1580	1099
55°	1060	1087	1162	1238	1269	947
65°	697	732	832	923	958	690
75°	348	408	530	577	572	371
85°	73	126	135	124	124	90
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2413.6	2413.6	2413.6	2413.6	2413.6
2.5°	2424.7	2406.9	2415.8	2411.4	2402.5
5°	2415.8	2395.8	2406.9	2402.5	2402.5
7.5°	2395.8	2380.3	2389.2	2387.0	2389.2
10°	2371.4	2355.9	2369.2	2369.2	2367.0
12.5°	2338.2	2324.8	2340.4	2340.4	2342.6
15°	2300.4	2289.3	2304.9	2311.5	2313.8
17.5°	2253.9	2242.8	2262.7	2269.4	2276.0
20°	2200.6	2196.2	2216.1	2222.8	2231.7
22.5°	2140.7	2140.7	2160.7	2169.6	2182.9
25°	2080.8	2078.6	2103.0	2116.3	2125.2
27.5°	2009.8	2012.1	2043.1	2056.4	2067.5
30°	1934.4	1938.8	1974.3	1989.9	2005.4
32.5°	1854.5	1863.4	1903.4	1921.1	1936.6
35°	1772.5	1783.6	1827.9	1847.9	1865.6
37.5°	1690.4	1705.9	1752.5	1772.5	1792.4
40°	1603.9	1617.2	1670.4	1694.8	1719.2
42.5°	1515.1	1532.9	1586.1	1621.6	1650.5
45°	1424.2	1444.2	1501.8	1546.2	1579.5
47.5°	1333.2	1359.9	1415.3	1475.2	1504.0
50°	1242.3	1268.9	1331.0	1397.6	1426.4
52.5°	1149.1	1175.7	1246.7	1315.5	1346.5
55°	1060.4	1087.0	1162.4	1237.8	1268.9
57.5°	967.2	996.0	1080.3	1158.0	1189.0
60°	876.3	905.1	996.0	1078.1	1111.4
62.5°	787.5	818.6	914.0	1000.5	1033.8
65°	696.6	732.1	831.9	922.8	958.3
67.5°	607.8	647.8	752.0	847.4	885.1
70°	519.1	565.7	676.6	774.2	811.9
72.5°	432.6	483.6	601.2	698.8	718.7
75°	348.3	408.2	530.2	576.8	572.3
77.5°	268.4	335.0	450.3	459.2	472.5
80°	195.2	268.4	337.2	354.9	346.1
82.5°	128.7	201.9	241.8	232.9	230.7
85°	73.2	126.4	135.3	124.2	124.2
87.5°	31.1	51.0	44.4	33.3	31.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)