

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: P260588

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260588  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-65-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6536.0 lumens  
Efficiency: N/A  
Efficacy: 133.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

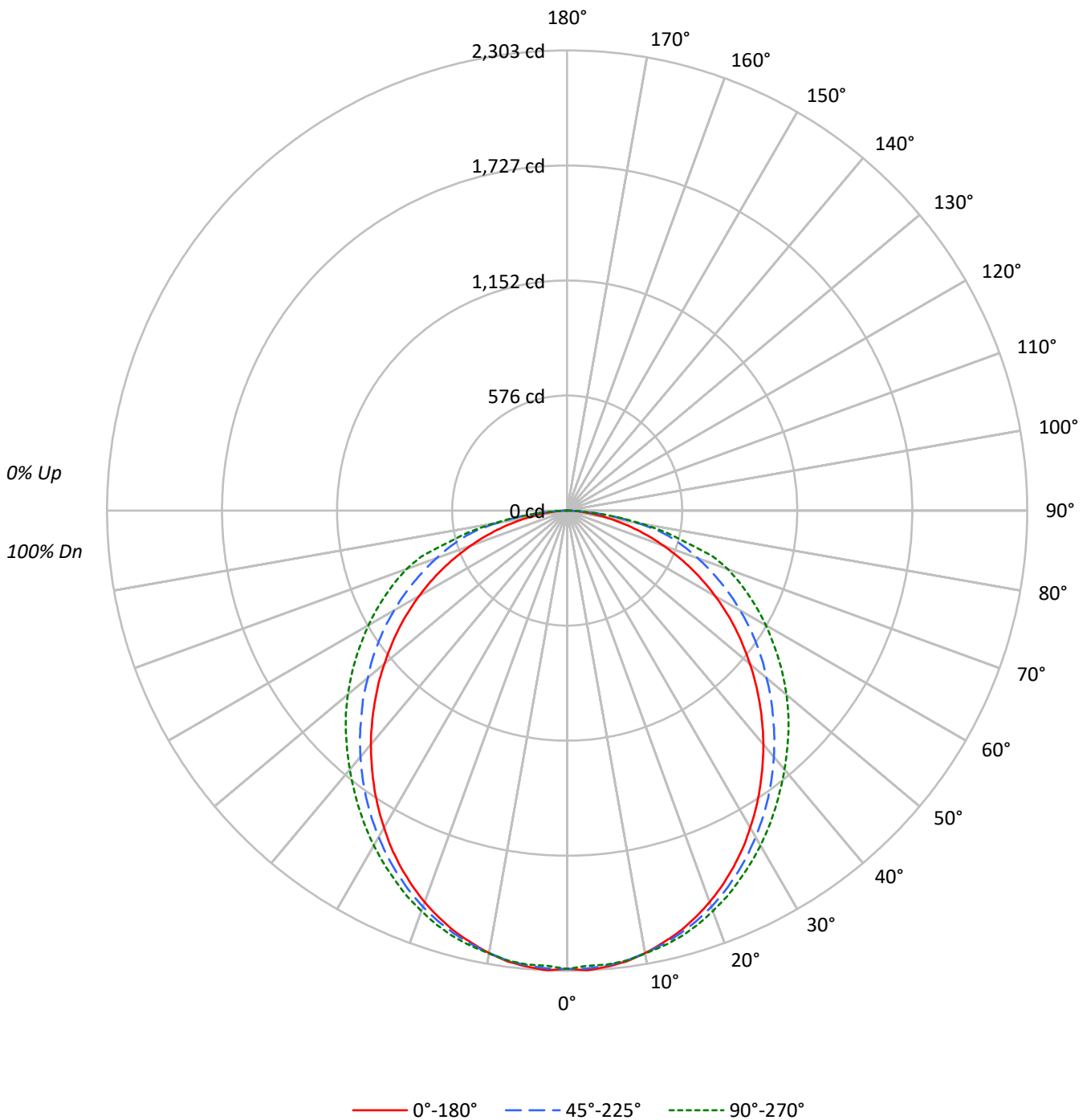
Input Watts (W): 48.918  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	3086	3086	3086
5°	3095	3086	3080
10°	3073	3073	3076
15°	3036	3052	3074
20°	2986	3022	3054
25°	2924	2980	3030
30°	2848	2931	3007
35°	2768	2882	2985
40°	2685	2826	2971
45°	2593	2772	2981
50°	2501	2726	2998
55°	2410	2709	3029
60°	2301	2692	3089
65°	2180	2693	3192
70°	2016	2738	3363
75°	1803	2862	3199
80°	1509	2740	2930
85°	1139	2107	2004



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.8	3.3
10°-20°	616.9	9.4
20°-30°	922.3	14.1
30°-40°	1094.1	16.7
40°-50°	1126.1	17.2
50°-60°	1033.0	15.8
60°-70°	835.3	12.8
70°-80°	542.1	8.3
80°-90°	149.5	2.3
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°	1755.9	26.9
0°-40°	2850.0	43.6
0°-60°	5009.2	76.6
0°-90°	6536.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6536.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2294	2294	2294	2294	2294	
5°	2292	2276	2285	2283	2280	217
15°	2180	2171	2191	2200	2206	614
25°	1969	1972	2007	2025	2041	906
35°	1685	1698	1754	1792	1817	1054
45°	1363	1385	1457	1526	1566	1052
55°	1027	1058	1155	1249	1291	918
65°	685	725	846	958	1003	677
75°	347	412	550	615	615	369
85°	74	125	136	132	130	90
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2293.8	2293.8	2293.8	2293.8	2293.8
2.5°	2302.7	2284.8	2293.8	2291.6	2280.4
5°	2291.6	2275.9	2284.8	2282.6	2280.4
7.5°	2275.9	2260.2	2271.4	2269.2	2271.4
10°	2249.0	2235.6	2249.0	2251.3	2251.3
12.5°	2215.5	2204.3	2222.2	2226.7	2231.1
15°	2179.7	2170.7	2190.9	2199.8	2206.5
17.5°	2134.9	2128.2	2152.8	2164.0	2173.0
20°	2085.7	2083.4	2110.3	2121.5	2132.7
22.5°	2029.7	2029.7	2061.1	2074.5	2090.2
25°	1969.3	1971.5	2007.4	2025.3	2040.9
27.5°	1904.4	1906.6	1949.2	1971.5	1989.4
30°	1832.8	1841.8	1886.5	1915.6	1935.7
32.5°	1761.2	1772.4	1821.6	1855.2	1877.6
35°	1685.1	1698.5	1754.5	1792.5	1817.1
37.5°	1606.8	1622.4	1682.9	1725.4	1754.5
40°	1528.5	1546.4	1609.0	1658.2	1691.8
42.5°	1445.7	1465.8	1535.2	1593.3	1629.2
45°	1362.9	1385.2	1456.8	1526.2	1566.5
47.5°	1280.1	1306.9	1383.0	1459.1	1501.6
50°	1195.0	1221.9	1302.4	1389.7	1432.2
52.5°	1110.0	1141.3	1230.8	1320.3	1362.9
55°	1027.2	1058.5	1154.7	1248.7	1291.2
57.5°	942.1	973.5	1078.6	1177.1	1219.6
60°	854.9	890.7	1000.3	1101.0	1148.0
62.5°	769.8	807.9	924.2	1031.6	1076.4
65°	684.8	725.1	845.9	957.8	1002.6
67.5°	597.5	644.5	769.8	884.0	930.9
70°	512.5	563.9	696.0	810.1	854.9
72.5°	429.7	485.6	622.1	738.5	765.3
75°	346.9	411.8	550.5	615.4	615.4
77.5°	268.5	340.2	469.9	494.6	508.0
80°	194.7	273.0	353.6	382.7	378.2
82.5°	129.8	208.1	252.9	252.9	246.2
85°	73.8	125.3	136.5	132.0	129.8
87.5°	31.3	47.0	42.5	33.6	29.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)