

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: P261191

Luminaire Tested: **24CZ-LD5-65-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261191  
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-L82765-W2A1-U-5500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6932.0 lumens  
Efficiency: N/A  
Efficacy: 137.8 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

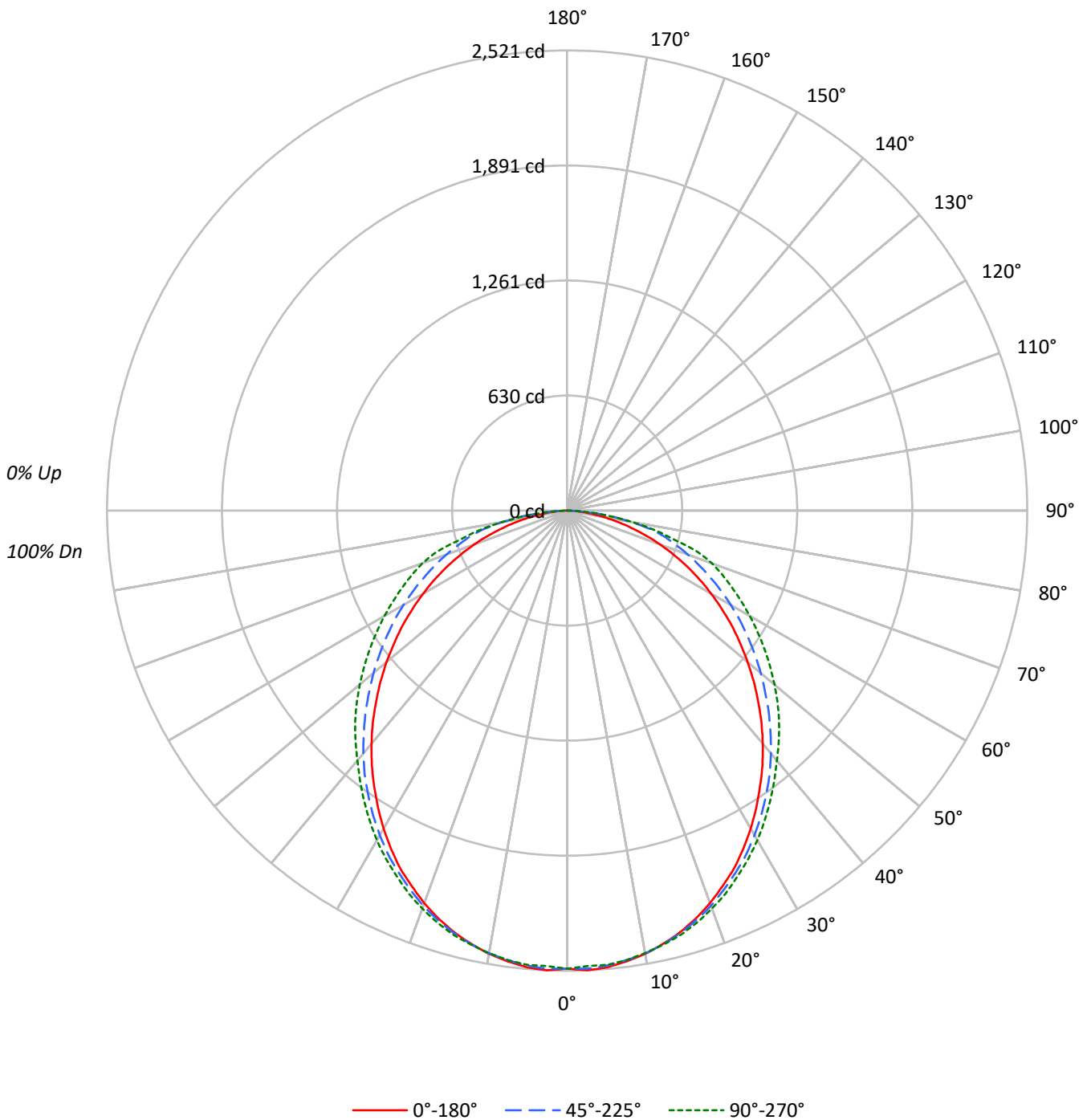
Input Watts (W): 50.313  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3377	3377	3377
5°	3393	3380	3374
10°	3369	3366	3362
15°	3332	3338	3351
20°	3276	3299	3322
25°	3212	3246	3280
30°	3125	3189	3239
35°	3027	3122	3186
40°	2929	3051	3140
45°	2818	2971	3125
50°	2704	2897	3104
55°	2586	2835	3095
60°	2452	2787	3110
65°	2306	2754	3172
70°	2123	2768	3321
75°	1882	2866	3094
80°	1573	2717	2788
85°	1175	2172	1995



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	237.3	3.4
10°-20°	674.8	9.7
20°-30°	1005.6	14.5
30°-40°	1183.8	17.1
40°-50°	1203.0	17.4
50°-60°	1081.5	15.6
60°-70°	854.4	12.3
70°-80°	542.1	7.8
80°-90°	149.6	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°	1917.6	27.7
0°-40°	3101.4	44.7
0°-60°	5385.9	77.7
0°-90°	6932.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6932.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2510	2510	2510	2510	2510	
5°	2512	2491	2503	2498	2498	238
15°	2392	2380	2396	2403	2406	674
25°	2164	2161	2187	2200	2210	995
35°	1843	1854	1901	1921	1940	1153
45°	1481	1502	1562	1608	1642	1143
55°	1102	1130	1209	1287	1319	985
65°	724	761	865	960	996	717
75°	362	424	551	600	595	385
85°	76	132	141	129	129	93
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2509.5	2509.5	2509.5	2509.5	2509.5
2.5°	2521.0	2502.6	2511.8	2507.2	2498.0
5°	2511.8	2491.1	2502.6	2498.0	2498.0
7.5°	2491.1	2474.9	2484.1	2481.8	2484.1
10°	2465.7	2449.5	2463.4	2463.4	2461.1
12.5°	2431.1	2417.3	2433.4	2433.4	2435.7
15°	2391.9	2380.3	2396.5	2403.4	2405.7
17.5°	2343.4	2331.9	2352.7	2359.6	2366.5
20°	2288.1	2283.5	2304.2	2311.1	2320.4
22.5°	2225.8	2225.8	2246.6	2255.8	2269.6
25°	2163.5	2161.2	2186.6	2200.4	2209.7
27.5°	2089.7	2092.0	2124.3	2138.2	2149.7
30°	2011.3	2015.9	2052.8	2069.0	2085.1
32.5°	1928.3	1937.5	1979.0	1997.5	2013.6
35°	1842.9	1854.5	1900.6	1921.3	1939.8
37.5°	1757.6	1773.7	1822.2	1842.9	1863.7
40°	1667.6	1681.5	1736.8	1762.2	1787.6
42.5°	1575.4	1593.8	1649.2	1686.1	1716.1
45°	1480.8	1501.6	1561.5	1607.7	1642.3
47.5°	1386.2	1413.9	1471.6	1533.8	1563.8
50°	1291.7	1319.3	1383.9	1453.1	1483.1
52.5°	1194.8	1222.5	1296.3	1367.8	1400.1
55°	1102.5	1130.2	1208.6	1287.0	1319.3
57.5°	1005.6	1035.6	1123.3	1204.0	1236.3
60°	911.1	941.1	1035.6	1121.0	1155.6
62.5°	818.8	851.1	950.3	1040.2	1074.8
65°	724.3	761.2	865.0	959.5	996.4
67.5°	632.0	673.5	781.9	881.1	920.3
70°	539.7	588.2	703.5	805.0	844.2
72.5°	449.8	502.8	625.1	726.6	747.3
75°	362.1	424.4	551.3	599.7	595.1
77.5°	279.1	348.3	468.2	477.5	491.3
80°	203.0	279.1	350.6	369.0	359.8
82.5°	133.8	209.9	251.4	242.2	239.9
85°	76.1	131.5	140.7	129.2	129.2
87.5°	32.3	53.1	46.1	34.6	32.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)