

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: P261253

Luminaire Tested: **24CZ-LD5-50SE-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261253  
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-LD5-50SE-S-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5253.0 lumens  
Efficiency: N/A  
Efficacy: 129.3 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

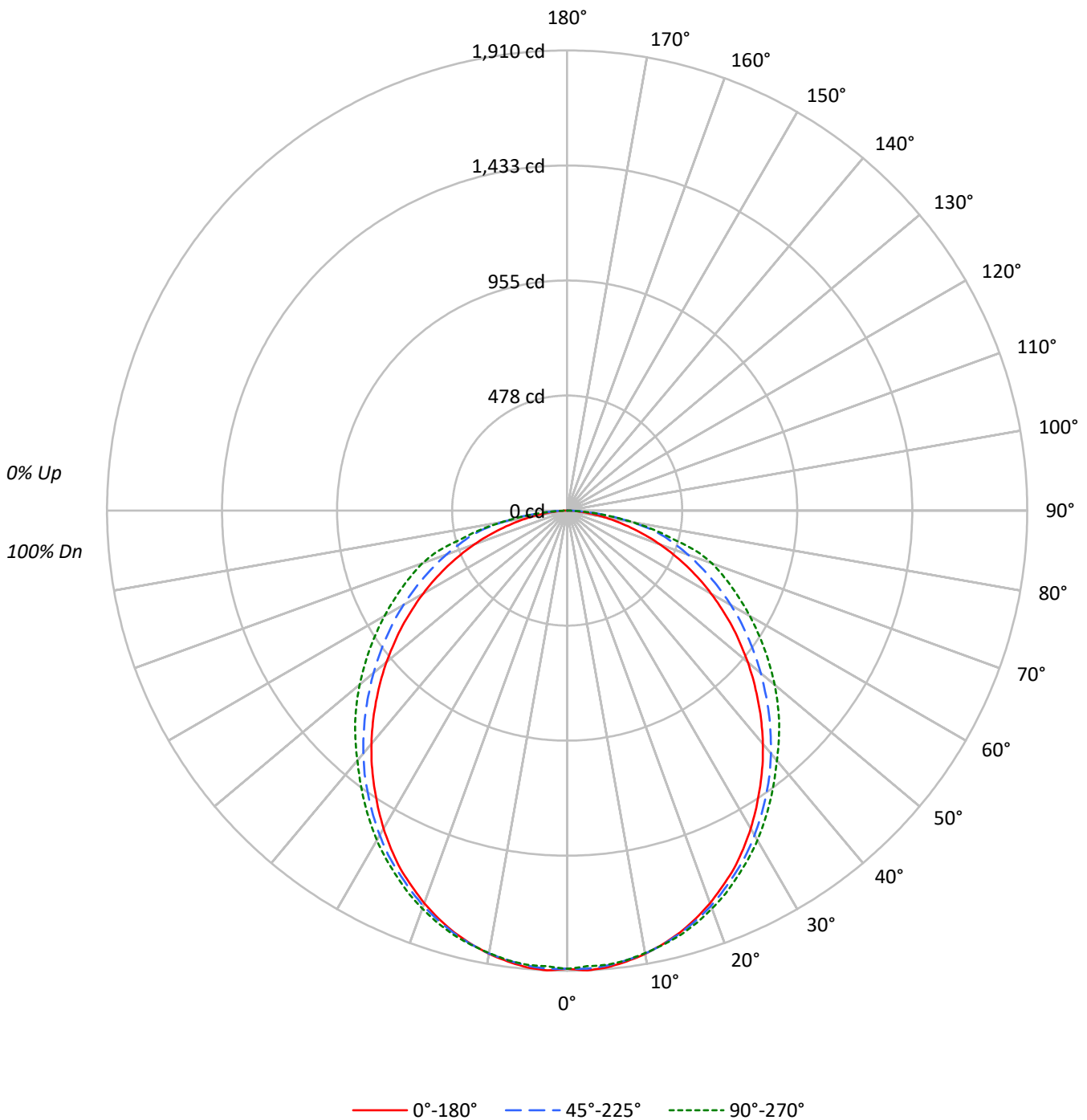
Input Watts (W): 40.641  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2559	2559	2559
5°	2571	2561	2557
10°	2553	2550	2548
15°	2525	2530	2539
20°	2483	2500	2518
25°	2434	2460	2486
30°	2368	2417	2455
35°	2294	2366	2415
40°	2220	2312	2379
45°	2135	2252	2368
50°	2049	2195	2353
55°	1960	2149	2345
60°	1858	2112	2356
65°	1747	2087	2404
70°	1609	2097	2517
75°	1426	2171	2345
80°	1192	2059	2113
85°	891	1646	1511



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.8	3.4
10°-20°	511.3	9.7
20°-30°	762.0	14.5
30°-40°	897.0	17.1
40°-50°	911.6	17.4
50°-60°	819.6	15.6
60°-70°	647.5	12.3
70°-80°	410.8	7.8
80°-90°	113.4	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°	1453.2	27.7
0°-40°	2350.2	44.7
0°-60°	4081.4	77.7
0°-90°	5253.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5253.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1902	1902	1902	1902	1902	
5°	1903	1888	1896	1893	1893	180
15°	1812	1804	1816	1821	1823	511
25°	1640	1638	1657	1668	1674	754
35°	1396	1405	1440	1456	1470	874
45°	1122	1138	1183	1218	1244	866
55°	836	856	916	975	1000	746
65°	549	577	656	727	755	544
75°	274	322	418	454	451	292
85°	58	100	107	98	98	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1901.7	1901.7	1901.7	1901.7	1901.7
2.5°	1910.4	1896.4	1903.4	1899.9	1892.9
5°	1903.4	1887.7	1896.4	1892.9	1892.9
7.5°	1887.7	1875.5	1882.5	1880.7	1882.5
10°	1868.5	1856.2	1866.7	1866.7	1865.0
12.5°	1842.3	1831.8	1844.0	1844.0	1845.8
15°	1812.5	1803.8	1816.0	1821.3	1823.0
17.5°	1775.8	1767.1	1782.8	1788.1	1793.3
20°	1733.9	1730.4	1746.1	1751.4	1758.4
22.5°	1686.7	1686.7	1702.4	1709.4	1719.9
25°	1639.5	1637.8	1657.0	1667.5	1674.5
27.5°	1583.6	1585.3	1609.8	1620.3	1629.0
30°	1524.1	1527.6	1555.6	1567.8	1580.1
32.5°	1461.2	1468.2	1499.7	1513.7	1525.9
35°	1396.5	1405.3	1440.2	1456.0	1470.0
37.5°	1331.9	1344.1	1380.8	1396.5	1412.3
40°	1263.7	1274.2	1316.1	1335.4	1354.6
42.5°	1193.8	1207.8	1249.7	1277.7	1300.4
45°	1122.1	1137.9	1183.3	1218.3	1244.5
47.5°	1050.5	1071.4	1115.1	1162.3	1185.1
50°	978.8	999.8	1048.7	1101.2	1123.9
52.5°	905.4	926.4	982.3	1036.5	1061.0
55°	835.5	856.5	915.9	975.3	999.8
57.5°	762.1	784.8	851.2	912.4	936.9
60°	690.4	713.1	784.8	849.5	875.7
62.5°	620.5	645.0	720.1	788.3	814.5
65°	548.8	576.8	655.5	727.1	755.1
67.5°	478.9	510.4	592.5	667.7	697.4
70°	409.0	445.7	533.1	610.0	639.7
72.5°	340.8	381.0	473.7	550.6	566.3
75°	274.4	321.6	417.7	454.4	451.0
77.5°	211.5	263.9	354.8	361.8	372.3
80°	153.8	211.5	265.7	279.7	272.7
82.5°	101.4	159.1	190.5	183.5	181.8
85°	57.7	99.6	106.6	97.9	97.9
87.5°	24.5	40.2	35.0	26.2	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)