

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: P260830

Luminaire Tested: **24CZ-LD5-50SE-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260830  
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-LD5-50SE-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4885.0 lumens  
Efficiency: N/A  
Efficacy: 122.4 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

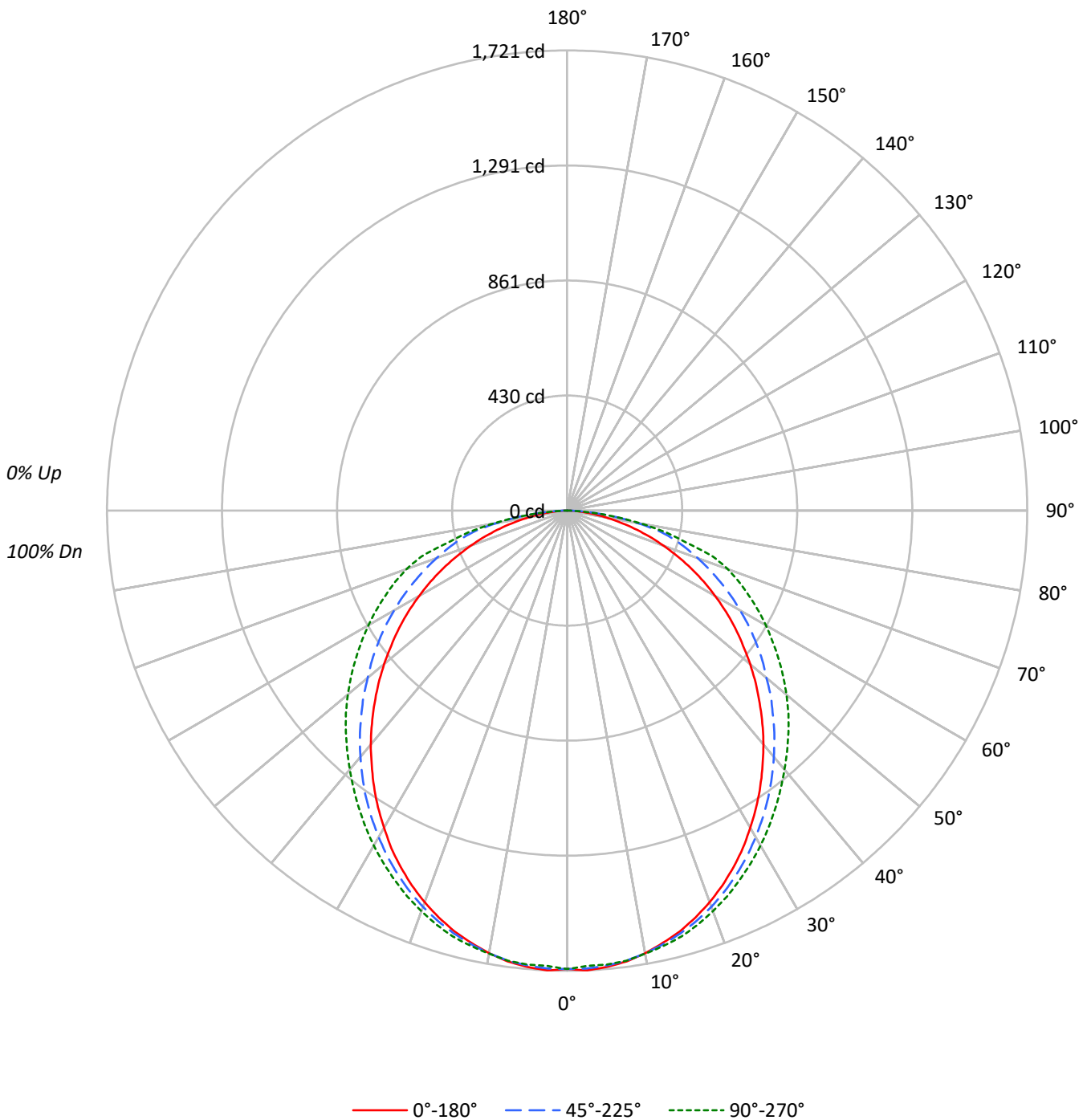
Input Watts (W): 39.897  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2307	2307	2307
5°	2313	2306	2302
10°	2297	2297	2299
15°	2269	2281	2297
20°	2232	2258	2282
25°	2185	2227	2265
30°	2128	2191	2248
35°	2069	2154	2231
40°	2007	2112	2221
45°	1938	2072	2228
50°	1870	2038	2241
55°	1801	2024	2264
60°	1719	2012	2309
65°	1629	2013	2386
70°	1507	2046	2513
75°	1347	2139	2391
80°	1127	2048	2190
85°	852	1575	1497



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.0	3.3
10°-20°	461.1	9.4
20°-30°	689.3	14.1
30°-40°	817.7	16.7
40°-50°	841.6	17.2
50°-60°	772.1	15.8
60°-70°	624.3	12.8
70°-80°	405.2	8.3
80°-90°	111.7	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°	1312.4	26.9
0°-40°	2130.1	43.6
0°-60°	3743.8	76.6
0°-90°	4885.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4885.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1714	1714	1714	1714	1714	
5°	1713	1701	1708	1706	1704	163
15°	1629	1622	1637	1644	1649	459
25°	1472	1474	1500	1514	1525	677
35°	1259	1270	1311	1340	1358	788
45°	1019	1035	1089	1141	1171	786
55°	768	791	863	933	965	686
65°	512	542	632	716	749	506
75°	259	308	412	460	460	276
85°	55	94	102	99	97	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1714.4	1714.4	1714.4	1714.4	1714.4
2.5°	1721.1	1707.7	1714.4	1712.7	1704.3
5°	1712.7	1701.0	1707.7	1706.0	1704.3
7.5°	1701.0	1689.3	1697.7	1696.0	1697.7
10°	1680.9	1670.9	1680.9	1682.6	1682.6
12.5°	1655.8	1647.5	1660.9	1664.2	1667.5
15°	1629.1	1622.4	1637.4	1644.1	1649.2
17.5°	1595.6	1590.6	1609.0	1617.4	1624.1
20°	1558.8	1557.2	1577.2	1585.6	1594.0
22.5°	1517.0	1517.0	1540.4	1550.5	1562.2
25°	1471.9	1473.5	1500.3	1513.7	1525.4
27.5°	1423.4	1425.0	1456.8	1473.5	1486.9
30°	1369.8	1376.5	1410.0	1431.7	1446.8
32.5°	1316.3	1324.7	1361.5	1386.6	1403.3
35°	1259.4	1269.5	1311.3	1339.7	1358.1
37.5°	1200.9	1212.6	1257.8	1289.5	1311.3
40°	1142.4	1155.7	1202.6	1239.4	1264.5
42.5°	1080.5	1095.5	1147.4	1190.9	1217.6
45°	1018.6	1035.3	1088.8	1140.7	1170.8
47.5°	956.7	976.8	1033.6	1090.5	1122.3
50°	893.2	913.2	973.4	1038.7	1070.4
52.5°	829.6	853.0	919.9	986.8	1018.6
55°	767.7	791.1	863.0	933.3	965.1
57.5°	704.2	727.6	806.2	879.8	911.5
60°	638.9	665.7	747.6	822.9	858.0
62.5°	575.4	603.8	690.8	771.1	804.5
65°	511.8	541.9	632.2	715.9	749.3
67.5°	446.6	481.7	575.4	660.7	695.8
70°	383.0	421.5	520.2	605.5	638.9
72.5°	321.1	362.9	465.0	551.9	572.0
75°	259.2	307.8	411.5	460.0	460.0
77.5°	200.7	254.2	351.2	369.6	379.7
80°	145.5	204.1	264.3	286.0	282.7
82.5°	97.0	155.5	189.0	189.0	184.0
85°	55.2	93.7	102.0	98.7	97.0
87.5°	23.4	35.1	31.8	25.1	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)