

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: P260992

Luminaire Tested: **24CZ-LD5-50-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260992  
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-LD5-50-S-UNV-L83050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4845.0 lumens  
Efficiency: N/A  
Efficacy: 135.9 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

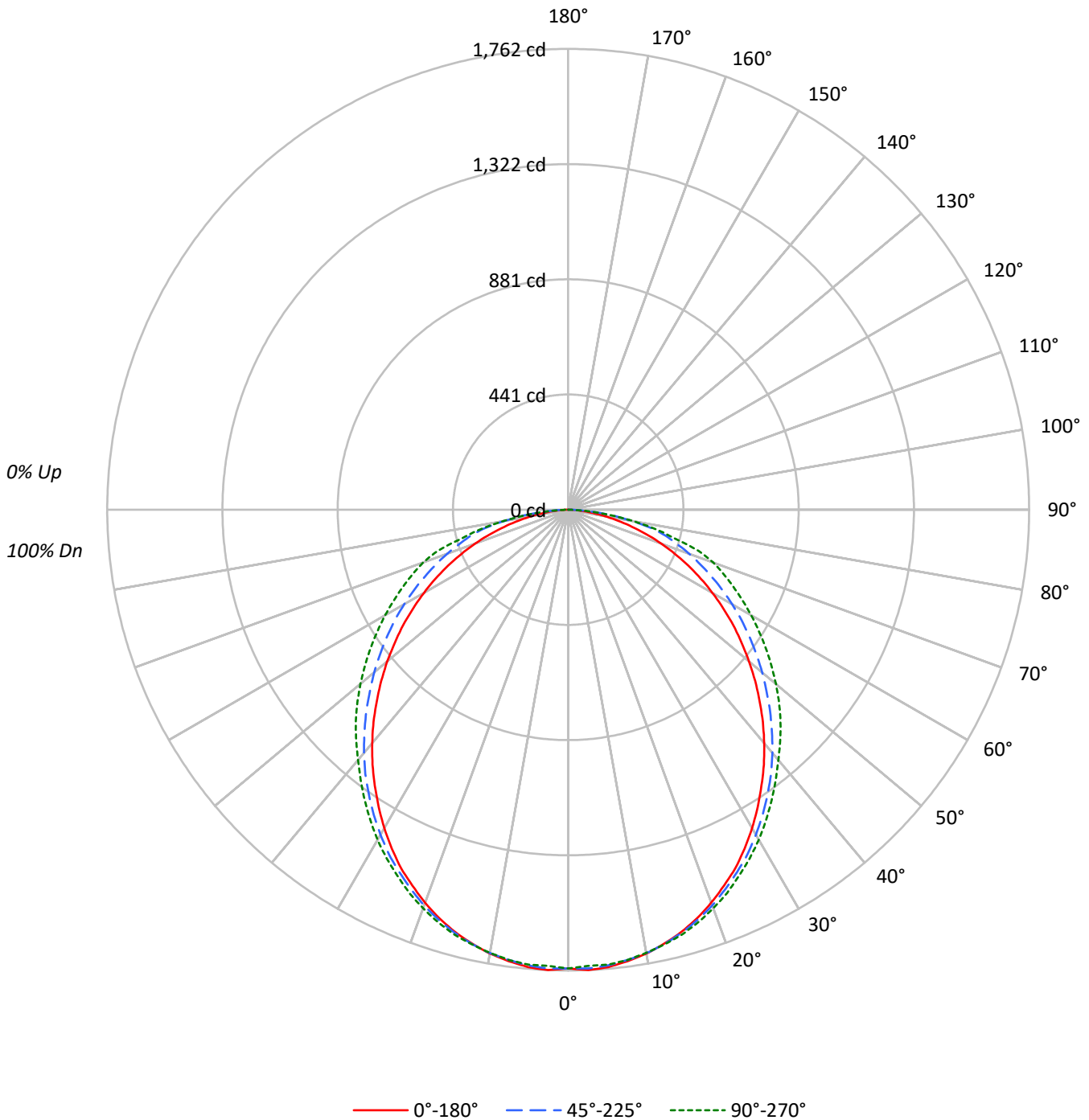
Input Watts (W): 35.640576  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2360	2360	2360
5°	2371	2362	2358
10°	2354	2352	2350
15°	2329	2333	2342
20°	2290	2306	2322
25°	2245	2269	2293
30°	2184	2229	2264
35°	2116	2182	2227
40°	2047	2132	2194
45°	1969	2077	2184
50°	1890	2025	2170
55°	1808	1981	2163
60°	1714	1948	2174
65°	1612	1925	2217
70°	1484	1934	2321
75°	1316	2003	2162
80°	1099	1898	1949
85°	821	1518	1394



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.8	3.4
10°-20°	471.6	9.7
20°-30°	702.9	14.5
30°-40°	827.4	17.1
40°-50°	840.8	17.4
50°-60°	755.9	15.6
60°-70°	597.2	12.3
70°-80°	378.9	7.8
80°-90°	104.6	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°	1340.3	27.7
0°-40°	2167.7	44.7
0°-60°	3764.4	77.7
0°-90°	4845.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4845.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1754	1754	1754	1754	1754	
5°	1756	1741	1749	1746	1746	166
15°	1672	1664	1675	1680	1681	471
25°	1512	1511	1528	1538	1544	695
35°	1288	1296	1328	1343	1356	806
45°	1035	1050	1091	1124	1148	799
55°	771	790	845	900	922	688
65°	506	532	604	671	696	501
75°	253	297	385	419	416	269
85°	53	92	98	90	90	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1754.0	1754.0	1754.0	1754.0	1754.0
2.5°	1762.0	1749.1	1755.6	1752.4	1745.9
5°	1755.6	1741.1	1749.1	1745.9	1745.9
7.5°	1741.1	1729.8	1736.2	1734.6	1736.2
10°	1723.3	1712.1	1721.7	1721.7	1720.1
12.5°	1699.2	1689.5	1700.8	1700.8	1702.4
15°	1671.8	1663.7	1675.0	1679.8	1681.4
17.5°	1637.9	1629.8	1644.4	1649.2	1654.0
20°	1599.2	1596.0	1610.5	1615.3	1621.8
22.5°	1555.7	1555.7	1570.2	1576.6	1586.3
25°	1512.2	1510.6	1528.3	1538.0	1544.4
27.5°	1460.6	1462.2	1484.8	1494.4	1502.5
30°	1405.8	1409.0	1434.8	1446.1	1457.4
32.5°	1347.7	1354.2	1383.2	1396.1	1407.4
35°	1288.1	1296.1	1328.4	1342.9	1355.8
37.5°	1228.4	1239.7	1273.6	1288.1	1302.6
40°	1165.6	1175.2	1213.9	1231.7	1249.4
42.5°	1101.1	1114.0	1152.7	1178.5	1199.4
45°	1035.0	1049.5	1091.4	1123.6	1147.8
47.5°	968.9	988.2	1028.5	1072.1	1093.0
50°	902.8	922.1	967.3	1015.6	1036.6
52.5°	835.1	854.4	906.0	956.0	978.6
55°	770.6	789.9	844.7	899.6	922.1
57.5°	702.9	723.8	785.1	841.5	864.1
60°	636.8	657.7	723.8	783.5	807.7
62.5°	572.3	594.9	664.2	727.1	751.2
65°	506.2	532.0	604.5	670.6	696.4
67.5°	441.7	470.7	546.5	615.8	643.2
70°	377.2	411.1	491.7	562.6	590.0
72.5°	314.4	351.4	436.9	507.8	522.3
75°	253.1	296.6	385.3	419.1	415.9
77.5°	195.1	243.4	327.3	333.7	343.4
80°	141.9	195.1	245.0	257.9	251.5
82.5°	93.5	146.7	175.7	169.3	167.7
85°	53.2	91.9	98.3	90.3	90.3
87.5°	22.6	37.1	32.2	24.2	22.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)