

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: P260834

Luminaire Tested: **24CZ-LD5-50SE-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260834  
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-5500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5201.0 lumens  
Efficiency: N/A  
Efficacy: 127.4 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

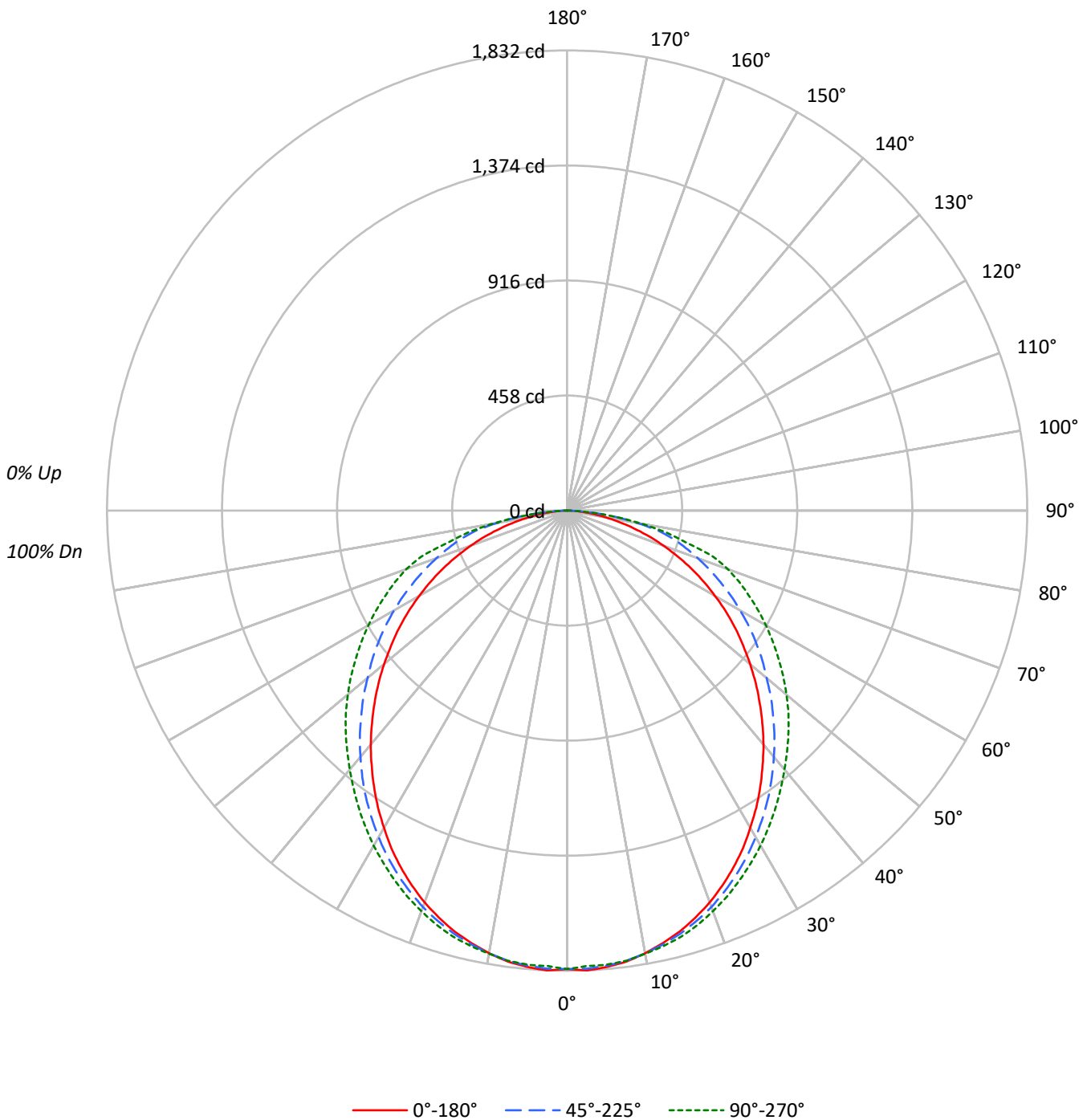
Input Watts (W): 40.827  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2456	2456	2456
5°	2463	2456	2451
10°	2445	2445	2447
15°	2416	2428	2446
20°	2376	2404	2430
25°	2326	2371	2411
30°	2266	2332	2393
35°	2202	2293	2375
40°	2136	2249	2365
45°	2064	2206	2372
50°	1990	2169	2386
55°	1917	2156	2410
60°	1831	2142	2458
65°	1735	2143	2540
70°	1604	2179	2676
75°	1435	2277	2546
80°	1200	2180	2331
85°	908	1677	1595



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.5	3.3
10°-20°	490.9	9.4
20°-30°	733.9	14.1
30°-40°	870.6	16.7
40°-50°	896.1	17.2
50°-60°	822.0	15.8
60°-70°	664.7	12.8
70°-80°	431.4	8.3
80°-90°	118.9	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°	1397.3	26.9
0°-40°	2267.9	43.6
0°-60°	3986.1	76.6
0°-90°	5201.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5201.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1825	1825	1825	1825	1825	
5°	1824	1811	1818	1816	1815	173
15°	1734	1727	1743	1750	1756	489
25°	1567	1569	1597	1612	1624	721
35°	1341	1352	1396	1426	1446	839
45°	1084	1102	1159	1214	1246	837
55°	817	842	919	994	1028	730
65°	545	577	673	762	798	539
75°	276	328	438	490	490	293
85°	59	100	109	105	103	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1825.3	1825.3	1825.3	1825.3	1825.3
2.5°	1832.4	1818.2	1825.3	1823.5	1814.6
5°	1823.5	1811.0	1818.2	1816.4	1814.6
7.5°	1811.0	1798.6	1807.5	1805.7	1807.5
10°	1789.7	1779.0	1789.7	1791.4	1791.4
12.5°	1763.0	1754.1	1768.3	1771.9	1775.4
15°	1734.5	1727.3	1743.4	1750.5	1755.8
17.5°	1698.8	1693.5	1713.1	1722.0	1729.1
20°	1659.7	1657.9	1679.3	1688.2	1697.1
22.5°	1615.2	1615.2	1640.1	1650.8	1663.2
25°	1567.1	1568.9	1597.3	1611.6	1624.1
27.5°	1515.4	1517.2	1551.0	1568.9	1583.1
30°	1458.4	1465.6	1501.2	1524.3	1540.4
32.5°	1401.5	1410.4	1449.5	1476.3	1494.1
35°	1340.9	1351.6	1396.1	1426.4	1446.0
37.5°	1278.6	1291.1	1339.1	1373.0	1396.1
40°	1216.3	1230.5	1280.4	1319.5	1346.3
42.5°	1150.4	1166.4	1221.6	1267.9	1296.4
45°	1084.5	1102.3	1159.3	1214.5	1246.5
47.5°	1018.6	1040.0	1100.5	1161.1	1194.9
50°	950.9	972.3	1036.4	1105.9	1139.7
52.5°	883.3	908.2	979.4	1050.6	1084.5
55°	817.4	842.3	918.9	993.7	1027.5
57.5°	749.7	774.6	858.3	936.7	970.5
60°	680.3	708.7	796.0	876.1	913.5
62.5°	612.6	642.9	735.5	820.9	856.5
65°	544.9	577.0	673.1	762.2	797.8
67.5°	475.5	512.9	612.6	703.4	740.8
70°	407.8	448.8	553.8	644.6	680.3
72.5°	341.9	386.4	495.1	587.7	609.0
75°	276.0	327.7	438.1	489.7	489.7
77.5°	213.7	270.7	374.0	393.5	404.2
80°	154.9	217.3	281.4	304.5	300.9
82.5°	103.3	165.6	201.2	201.2	195.9
85°	58.8	99.7	108.6	105.1	103.3
87.5°	24.9	37.4	33.8	26.7	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)