

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: P261320

Luminaire Tested: **24CZ-LD5-65-S-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261320  
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-L92765-W2A1-U-2700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5224.0 lumens  
Efficiency: N/A  
Efficacy: 107.0 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

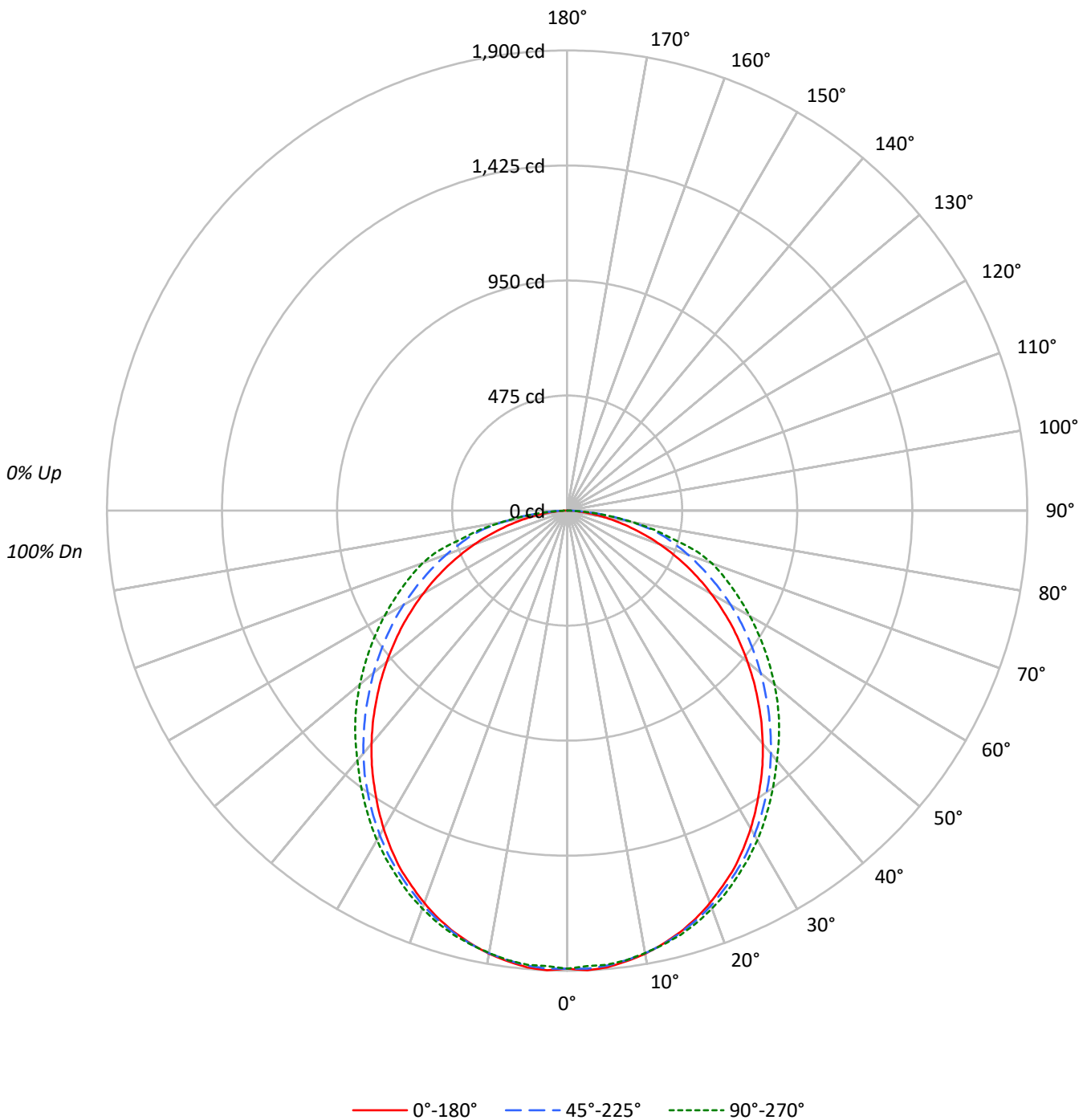
Input Watts (W): 48.825  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	2545	2545	2545
5°	2557	2547	2543
10°	2539	2536	2534
15°	2511	2516	2525
20°	2469	2486	2504
25°	2421	2446	2472
30°	2355	2403	2441
35°	2281	2353	2401
40°	2207	2299	2366
45°	2123	2239	2355
50°	2038	2183	2340
55°	1949	2137	2332
60°	1848	2100	2343
65°	1738	2075	2391
70°	1600	2086	2503
75°	1419	2159	2332
80°	1185	2047	2101
85°	886	1636	1502



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.8	3.4
10°-20°	508.5	9.7
20°-30°	757.8	14.5
30°-40°	892.1	17.1
40°-50°	906.5	17.4
50°-60°	815.1	15.6
60°-70°	643.9	12.3
70°-80°	408.5	7.8
80°-90°	112.7	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°	1445.2	27.7
0°-40°	2337.2	44.7
0°-60°	4058.8	77.7
0°-90°	5224.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5224.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1891	1891	1891	1891	1891	
5°	1893	1877	1886	1882	1882	179
15°	1802	1794	1806	1811	1813	508
25°	1630	1629	1648	1658	1665	750
35°	1389	1398	1432	1448	1462	869
45°	1116	1132	1177	1212	1238	861
55°	831	852	911	970	994	742
65°	546	574	652	723	751	541
75°	273	320	415	452	448	290
85°	57	99	106	97	97	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1891.2	1891.2	1891.2	1891.2	1891.2
2.5°	1899.9	1886.0	1892.9	1889.4	1882.5
5°	1892.9	1877.3	1886.0	1882.5	1882.5
7.5°	1877.3	1865.1	1872.1	1870.3	1872.1
10°	1858.2	1846.0	1856.4	1856.4	1854.7
12.5°	1832.1	1821.7	1833.8	1833.8	1835.6
15°	1802.5	1793.8	1806.0	1811.2	1813.0
17.5°	1766.0	1757.3	1773.0	1778.2	1783.4
20°	1724.3	1720.8	1736.5	1741.7	1748.7
22.5°	1677.4	1677.4	1693.0	1700.0	1710.4
25°	1630.5	1628.7	1647.8	1658.3	1665.2
27.5°	1574.8	1576.6	1600.9	1611.3	1620.0
30°	1515.7	1519.2	1547.0	1559.2	1571.4
32.5°	1453.2	1460.1	1491.4	1505.3	1517.5
35°	1388.8	1397.5	1432.3	1447.9	1461.8
37.5°	1324.5	1336.7	1373.2	1388.8	1404.5
40°	1256.7	1267.2	1308.9	1328.0	1347.1
42.5°	1187.2	1201.1	1242.8	1270.6	1293.2
45°	1115.9	1131.6	1176.8	1211.5	1237.6
47.5°	1044.7	1065.5	1109.0	1155.9	1178.5
50°	973.4	994.3	1042.9	1095.1	1117.7
52.5°	900.4	921.3	976.9	1030.8	1055.1
55°	830.9	851.7	910.8	969.9	994.3
57.5°	757.9	780.5	846.5	907.4	931.7
60°	686.6	709.2	780.5	844.8	870.8
62.5°	617.1	641.4	716.1	783.9	810.0
65°	545.8	573.6	651.8	723.1	750.9
67.5°	476.3	507.6	589.3	664.0	693.6
70°	406.7	443.2	530.2	606.6	636.2
72.5°	339.0	378.9	471.1	547.5	563.2
75°	272.9	319.8	415.4	451.9	448.5
77.5°	210.3	262.5	352.9	359.8	370.2
80°	153.0	210.3	264.2	278.1	271.2
82.5°	100.8	158.2	189.5	182.5	180.8
85°	57.4	99.1	106.0	97.3	97.3
87.5°	24.3	40.0	34.8	26.1	24.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)