

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: P260894

Luminaire Tested: **24CZ-LD5-60-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260894  
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-LD5-60-UNV-L92765-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5327.0 lumens  
Efficiency: N/A  
Efficacy: 118.8 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

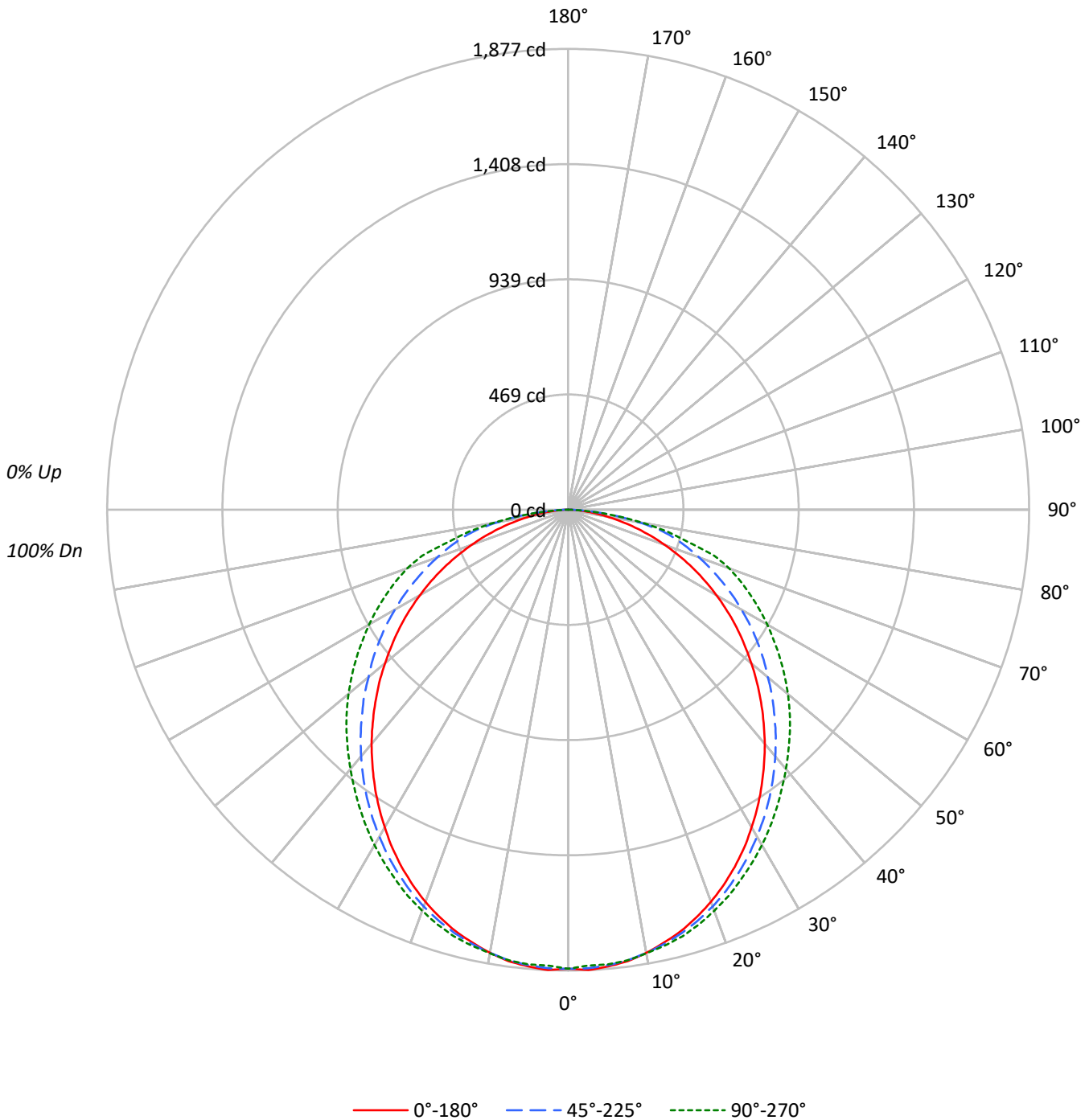
Input Watts (W): 44.826  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

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

	0°	45°	90°
0°	2515	2515	2515
5°	2523	2515	2510
10°	2504	2504	2507
15°	2475	2487	2505
20°	2434	2463	2489
25°	2383	2429	2469
30°	2321	2389	2451
35°	2256	2349	2433
40°	2188	2303	2422
45°	2114	2259	2429
50°	2039	2222	2443
55°	1964	2208	2469
60°	1875	2194	2518
65°	1777	2195	2601
70°	1643	2231	2741
75°	1470	2333	2608
80°	1230	2233	2388
85°	929	1718	1633



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.7	3.3
10°-20°	502.8	9.4
20°-30°	751.7	14.1
30°-40°	891.7	16.7
40°-50°	917.8	17.2
50°-60°	842.0	15.8
60°-70°	680.8	12.8
70°-80°	441.8	8.3
80°-90°	121.8	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°	1431.1	26.9
0°-40°	2322.8	43.6
0°-60°	4082.6	76.6
0°-90°	5327.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5327.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1870	1870	1870	1870	1870	
5°	1868	1855	1862	1860	1859	177
15°	1776	1769	1786	1793	1798	500
25°	1605	1607	1636	1651	1663	739
35°	1373	1384	1430	1461	1481	859
45°	1111	1129	1187	1244	1277	857
55°	837	863	941	1018	1052	748
65°	558	591	689	781	817	552
75°	283	336	449	502	502	300
85°	60	102	111	108	106	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1869.5	1869.5	1869.5	1869.5	1869.5
2.5°	1876.8	1862.2	1869.5	1867.7	1858.6
5°	1867.7	1854.9	1862.2	1860.4	1858.6
7.5°	1854.9	1842.1	1851.3	1849.4	1851.3
10°	1833.0	1822.1	1833.0	1834.8	1834.8
12.5°	1805.7	1796.5	1811.1	1814.8	1818.4
15°	1776.5	1769.2	1785.6	1792.9	1798.4
17.5°	1740.0	1734.5	1754.6	1763.7	1771.0
20°	1699.9	1698.1	1719.9	1729.1	1738.2
22.5°	1654.3	1654.3	1679.8	1690.8	1703.5
25°	1605.0	1606.9	1636.0	1650.6	1663.4
27.5°	1552.1	1554.0	1588.6	1606.9	1621.4
30°	1493.8	1501.1	1537.5	1561.3	1577.7
32.5°	1435.4	1444.5	1484.7	1512.0	1530.3
35°	1373.4	1384.3	1429.9	1460.9	1481.0
37.5°	1309.6	1322.3	1371.6	1406.2	1429.9
40°	1245.7	1260.3	1311.4	1351.5	1378.9
42.5°	1178.2	1194.7	1251.2	1298.6	1327.8
45°	1110.8	1129.0	1187.4	1243.9	1276.7
47.5°	1043.3	1065.2	1127.2	1189.2	1223.8
50°	974.0	995.9	1061.5	1132.6	1167.3
52.5°	904.7	930.2	1003.1	1076.1	1110.8
55°	837.2	862.7	941.1	1017.7	1052.4
57.5°	767.9	793.4	879.1	959.4	994.0
60°	696.7	725.9	815.3	897.4	935.7
62.5°	627.4	658.4	753.3	840.8	877.3
65°	558.1	590.9	689.4	780.6	817.1
67.5°	487.0	525.3	627.4	720.4	758.7
70°	417.7	459.6	567.2	660.3	696.7
72.5°	350.2	395.8	507.0	601.9	623.8
75°	282.7	335.6	448.7	501.6	501.6
77.5°	218.9	277.2	383.0	403.1	414.0
80°	158.7	222.5	288.2	311.9	308.2
82.5°	105.8	169.6	206.1	206.1	200.6
85°	60.2	102.1	111.3	107.6	105.8
87.5°	25.5	38.3	34.7	27.4	23.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)