

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: P261316

Luminaire Tested: **24CZ-LD5-60-S-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261316  
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-LD5-60-S-UNV-L92765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5688.0 lumens  
Efficiency: N/A  
Efficacy: 125.6 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

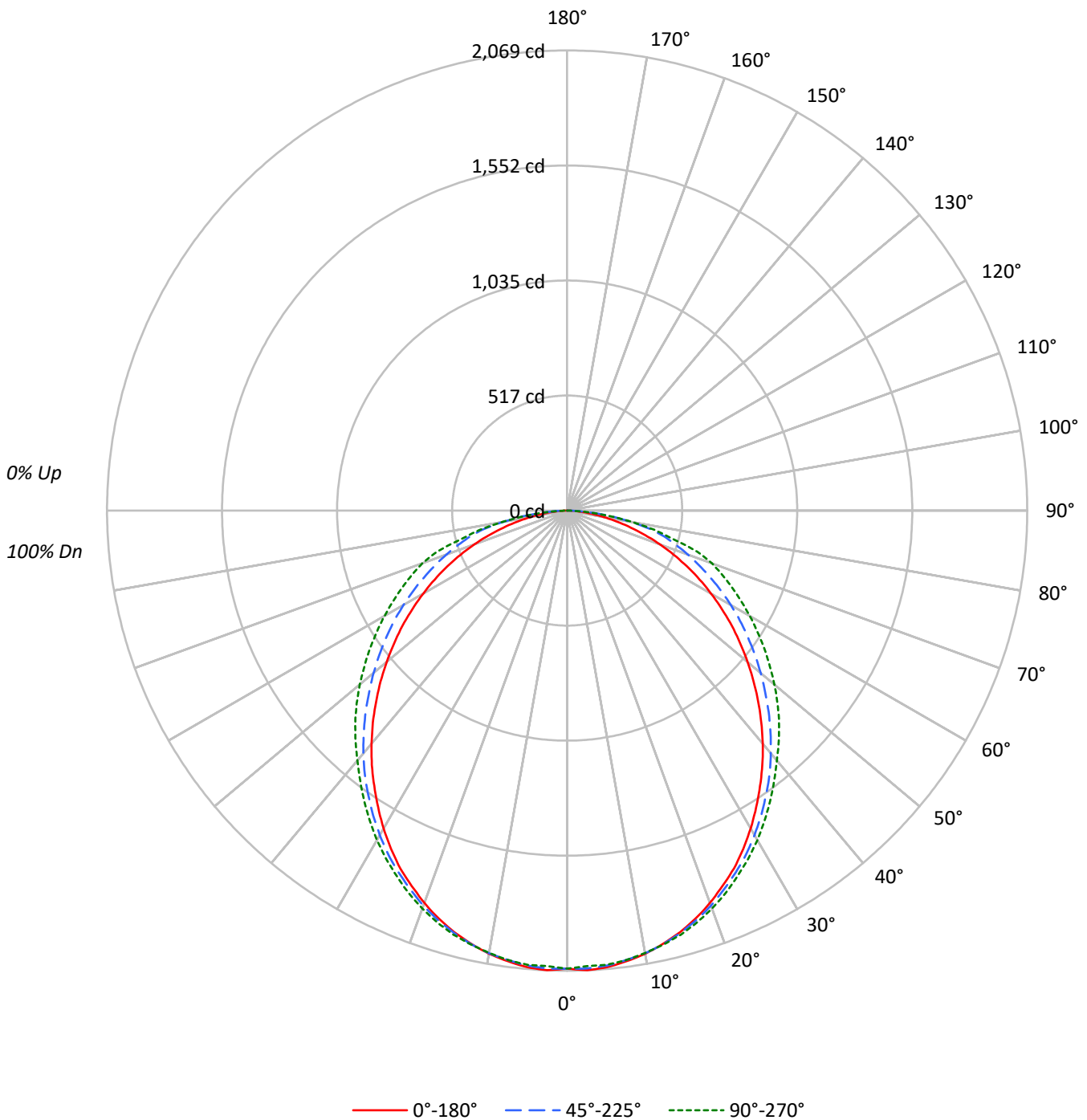
Input Watts (W): 45.291  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2771	2771	2771
5°	2784	2774	2768
10°	2764	2762	2759
15°	2734	2739	2750
20°	2688	2707	2726
25°	2636	2664	2692
30°	2564	2617	2658
35°	2484	2562	2614
40°	2403	2503	2576
45°	2312	2438	2564
50°	2219	2377	2547
55°	2122	2326	2540
60°	2012	2287	2552
65°	1892	2259	2603
70°	1742	2271	2725
75°	1544	2351	2538
80°	1290	2229	2287
85°	965	1782	1636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.7	3.4
10°-20°	553.7	9.7
20°-30°	825.1	14.5
30°-40°	971.3	17.1
40°-50°	987.1	17.4
50°-60°	887.5	15.6
60°-70°	701.1	12.3
70°-80°	444.8	7.8
80°-90°	122.8	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°	1573.5	27.7
0°-40°	2544.8	44.7
0°-60°	4419.4	77.7
0°-90°	5688.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5688.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2059	2059	2059	2059	2059	
5°	2061	2044	2054	2050	2050	195
15°	1963	1953	1966	1972	1974	553
25°	1775	1773	1794	1806	1813	816
35°	1512	1522	1560	1576	1592	946
45°	1215	1232	1281	1319	1348	938
55°	905	927	992	1056	1083	808
65°	594	625	710	787	818	589
75°	297	348	452	492	488	316
85°	62	108	115	106	106	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2059.2	2059.2	2059.2	2059.2	2059.2
2.5°	2068.6	2053.5	2061.1	2057.3	2049.7
5°	2061.1	2044.0	2053.5	2049.7	2049.7
7.5°	2044.0	2030.8	2038.3	2036.4	2038.3
10°	2023.2	2010.0	2021.3	2021.3	2019.4
12.5°	1994.8	1983.5	1996.7	1996.7	1998.6
15°	1962.6	1953.2	1966.4	1972.1	1974.0
17.5°	1922.9	1913.4	1930.5	1936.1	1941.8
20°	1877.5	1873.7	1890.7	1896.4	1904.0
22.5°	1826.4	1826.4	1843.4	1851.0	1862.3
25°	1775.3	1773.4	1794.2	1805.6	1813.1
27.5°	1714.7	1716.6	1743.1	1754.5	1763.9
30°	1650.4	1654.1	1684.4	1697.7	1710.9
32.5°	1582.2	1589.8	1623.9	1639.0	1652.2
35°	1512.2	1521.7	1559.5	1576.5	1591.7
37.5°	1442.2	1455.4	1495.2	1512.2	1529.2
40°	1368.4	1379.7	1425.1	1446.0	1466.8
42.5°	1292.7	1307.8	1353.2	1383.5	1408.1
45°	1215.1	1232.1	1281.3	1319.1	1347.5
47.5°	1137.5	1160.2	1207.5	1258.6	1283.2
50°	1059.9	1082.6	1135.6	1192.3	1216.9
52.5°	980.4	1003.1	1063.6	1122.3	1148.8
55°	904.7	927.4	991.7	1056.1	1082.6
57.5°	825.2	849.8	921.7	987.9	1014.4
60°	747.6	772.2	849.8	919.8	948.2
62.5°	671.9	698.4	779.8	853.6	882.0
65°	594.3	624.6	709.7	787.3	817.6
67.5°	518.6	552.6	641.6	723.0	755.2
70°	442.9	482.6	577.2	660.5	692.7
72.5°	369.1	412.6	512.9	596.2	613.2
75°	297.1	348.2	452.3	492.1	488.3
77.5°	229.0	285.8	384.2	391.8	403.1
80°	166.5	229.0	287.7	302.8	295.2
82.5°	109.8	172.2	206.3	198.7	196.8
85°	62.5	107.9	115.4	106.0	106.0
87.5°	26.5	43.5	37.9	28.4	26.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)