

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: P261318

Luminaire Tested: **24CZ-LD5-60-S-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261318  
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-5700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5801.0 lumens  
Efficiency: N/A  
Efficacy: 127.3 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

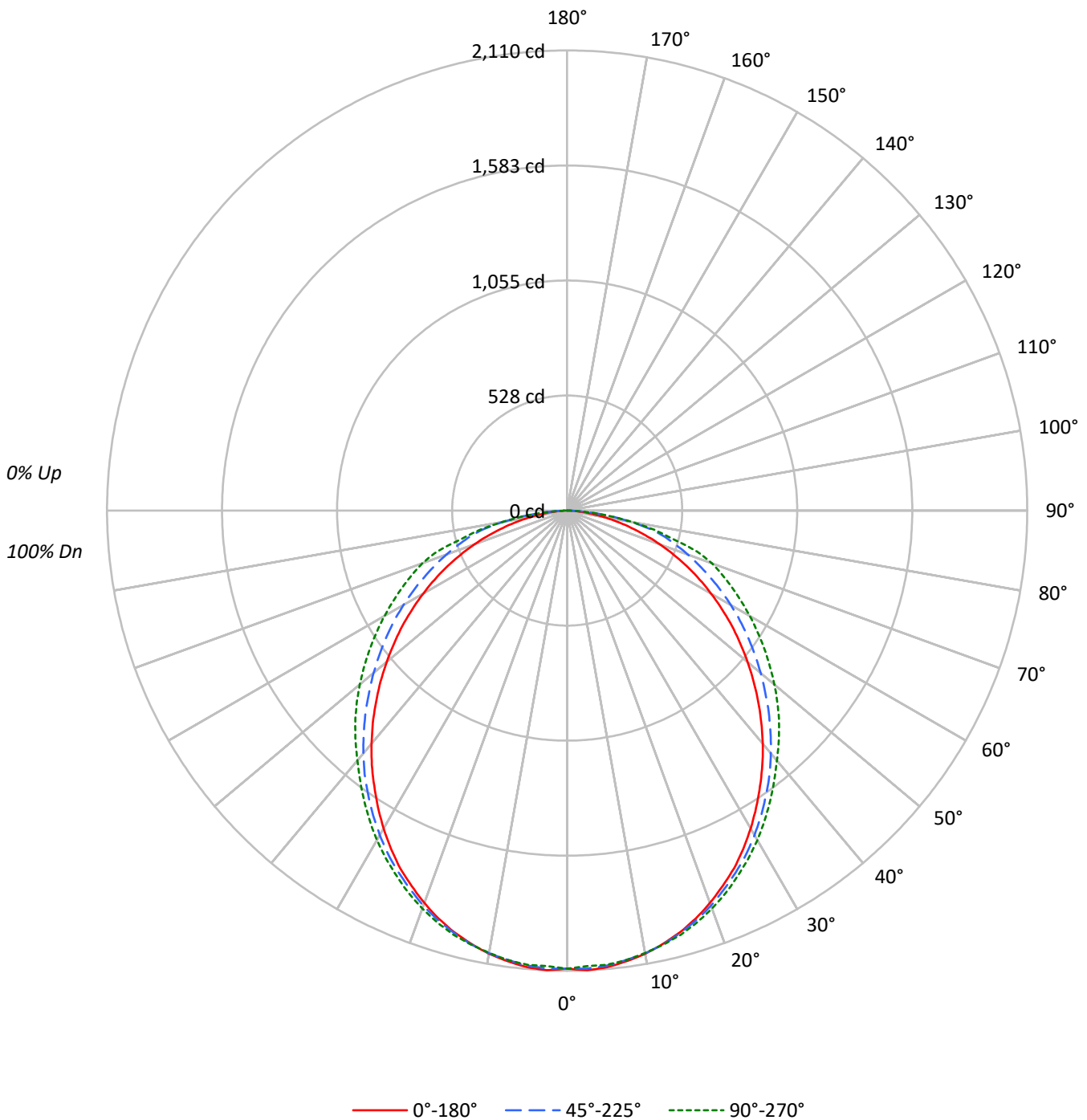
Input Watts (W): 45.57  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2826	2826	2826
5°	2839	2829	2823
10°	2819	2817	2814
15°	2788	2794	2804
20°	2742	2761	2780
25°	2688	2716	2745
30°	2615	2669	2711
35°	2533	2612	2666
40°	2451	2553	2627
45°	2358	2487	2615
50°	2263	2424	2598
55°	2164	2373	2590
60°	2052	2332	2602
65°	1930	2304	2655
70°	1777	2316	2779
75°	1575	2398	2589
80°	1316	2273	2333
85°	983	1817	1669



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.6	3.4
10°-20°	564.7	9.7
20°-30°	841.5	14.5
30°-40°	990.6	17.1
40°-50°	1006.7	17.4
50°-60°	905.1	15.6
60°-70°	715.0	12.3
70°-80°	453.6	7.8
80°-90°	125.2	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°	1604.8	27.7
0°-40°	2595.4	44.7
0°-60°	4507.2	77.7
0°-90°	5801.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5801.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2100	2100	2100	2100	2100	
5°	2102	2085	2094	2090	2090	199
15°	2002	1992	2006	2011	2013	564
25°	1810	1809	1830	1841	1849	832
35°	1542	1552	1590	1608	1623	965
45°	1239	1257	1307	1345	1374	956
55°	923	946	1011	1077	1104	824
65°	606	637	724	803	834	600
75°	303	355	461	502	498	323
85°	64	110	118	108	108	78
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2100.1	2100.1	2100.1	2100.1	2100.1
2.5°	2109.7	2094.3	2102.0	2098.1	2090.4
5°	2102.0	2084.6	2094.3	2090.4	2090.4
7.5°	2084.6	2071.1	2078.8	2076.9	2078.8
10°	2063.4	2049.9	2061.5	2061.5	2059.5
12.5°	2034.4	2022.9	2036.4	2036.4	2038.3
15°	2001.6	1992.0	2005.5	2011.3	2013.2
17.5°	1961.1	1951.4	1968.8	1974.6	1980.4
20°	1914.8	1910.9	1928.3	1934.1	1941.8
22.5°	1862.7	1862.7	1880.0	1887.7	1899.3
25°	1810.5	1808.6	1829.8	1841.4	1849.1
27.5°	1748.8	1750.7	1777.7	1789.3	1799.0
30°	1683.1	1687.0	1717.9	1731.4	1744.9
32.5°	1613.7	1621.4	1656.1	1671.6	1685.1
35°	1542.2	1551.9	1590.5	1607.9	1623.3
37.5°	1470.8	1484.3	1524.9	1542.2	1559.6
40°	1395.5	1407.1	1453.4	1474.7	1495.9
42.5°	1318.3	1333.8	1380.1	1411.0	1436.1
45°	1239.2	1256.6	1306.8	1345.4	1374.3
47.5°	1160.1	1183.2	1231.5	1283.6	1308.7
50°	1080.9	1104.1	1158.1	1216.0	1241.1
52.5°	999.8	1023.0	1084.8	1144.6	1171.6
55°	922.6	945.8	1011.4	1077.1	1104.1
57.5°	841.6	866.7	940.0	1007.6	1034.6
60°	762.4	787.5	866.7	938.1	967.0
62.5°	685.2	712.2	795.2	870.5	899.5
65°	606.1	637.0	723.8	803.0	833.9
67.5°	528.9	563.6	654.3	737.3	770.2
70°	451.7	492.2	588.7	673.6	706.5
72.5°	376.4	420.8	523.1	608.0	625.4
75°	303.0	355.2	461.3	501.9	498.0
77.5°	233.6	291.5	391.8	399.6	411.1
80°	169.9	233.6	293.4	308.8	301.1
82.5°	112.0	175.6	210.4	202.7	200.7
85°	63.7	110.0	117.7	108.1	108.1
87.5°	27.0	44.4	38.6	29.0	27.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)