

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: P261184

Luminaire Tested: **24CZ-LD5-60-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261184  
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-L82765-W2A1-U-6500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6431.0 lumens  
Efficiency: N/A  
Efficacy: 139.1 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

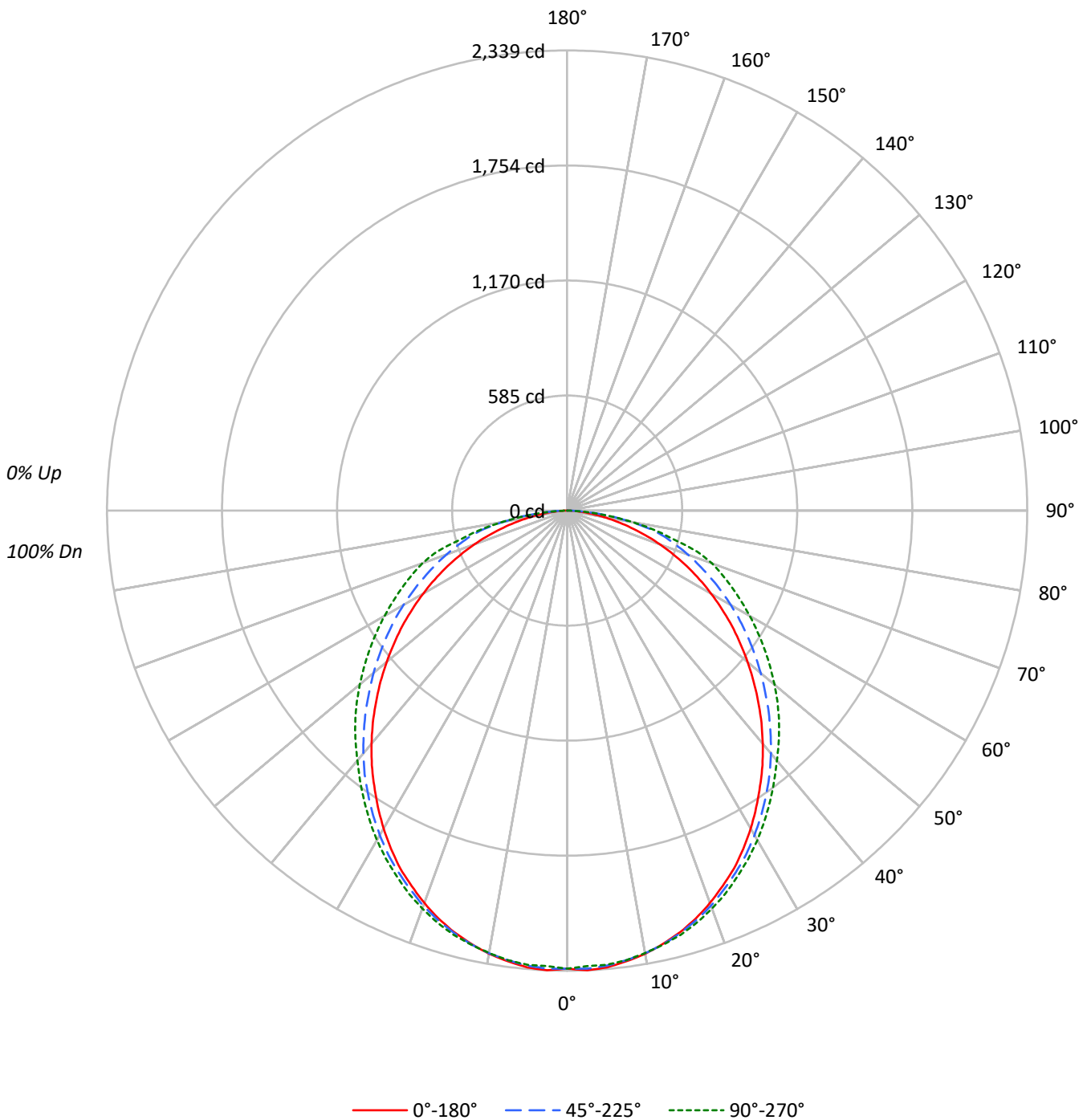
Input Watts (W): 46.221  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P261184

CATALOG NUMBER: 24CZ-LD5-60-S-UNV-L82765-W2A1-U-6500K

### Luminous Intensity Polar Plot





TEST NUMBER: P261184

CATALOG NUMBER: 24CZ-LD5-60-S-UNV-L82765-W2A1-U-6500K

**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°	3132	3132	3132
5°	3147	3136	3130
10°	3125	3122	3119
15°	3091	3097	3109
20°	3039	3061	3082
25°	2980	3012	3043
30°	2899	2959	3005
35°	2808	2896	2956
40°	2717	2830	2913
45°	2614	2757	2899
50°	2508	2687	2880
55°	2399	2630	2871
60°	2274	2585	2885
65°	2139	2555	2943
70°	1970	2567	3081
75°	1747	2659	2870
80°	1459	2521	2586
85°	1090	2015	1849



TEST NUMBER: P261184

CATALOG NUMBER: 24CZ-LD5-60-S-UNV-L82765-W2A1-U-6500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	220.1	3.4
10°-20°	626.0	9.7
20°-30°	932.9	14.5
30°-40°	1098.2	17.1
40°-50°	1116.0	17.4
50°-60°	1003.4	15.6
60°-70°	792.7	12.3
70°-80°	502.9	7.8
80°-90°	138.8	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°	1779.1	27.7
0°-40°	2877.2	44.7
0°-60°	4996.6	77.7
0°-90°	6431.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6431.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2328	2328	2328	2328	2328	
5°	2330	2311	2322	2317	2317	221
15°	2219	2208	2223	2230	2232	625
25°	2007	2005	2029	2041	2050	923
35°	1710	1720	1763	1782	1800	1070
45°	1374	1393	1449	1492	1524	1060
55°	1023	1048	1121	1194	1224	913
65°	672	706	802	890	924	666
75°	336	394	511	556	552	358
85°	71	122	130	120	120	87
90°	0	0	0	0	0	



TEST NUMBER: P261184

CATALOG NUMBER: 24CZ-LD5-60-S-UNV-L82765-W2A1-U-6500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2328.1	2328.1	2328.1	2328.1	2328.1
2.5°	2338.8	2321.7	2330.3	2326.0	2317.4
5°	2330.3	2311.0	2321.7	2317.4	2317.4
7.5°	2311.0	2296.0	2304.6	2302.5	2304.6
10°	2287.5	2272.5	2285.3	2285.3	2283.2
12.5°	2255.4	2242.5	2257.5	2257.5	2259.7
15°	2219.0	2208.3	2223.3	2229.7	2231.8
17.5°	2174.1	2163.4	2182.6	2189.1	2195.5
20°	2122.7	2118.4	2137.7	2144.1	2152.7
22.5°	2064.9	2064.9	2084.2	2092.8	2105.6
25°	2007.2	2005.0	2028.6	2041.4	2050.0
27.5°	1938.7	1940.8	1970.8	1983.6	1994.3
30°	1865.9	1870.2	1904.5	1919.4	1934.4
32.5°	1788.9	1797.5	1836.0	1853.1	1868.1
35°	1709.7	1720.4	1763.2	1782.5	1799.6
37.5°	1630.6	1645.5	1690.5	1709.7	1729.0
40°	1547.1	1559.9	1611.3	1634.8	1658.4
42.5°	1461.5	1478.6	1530.0	1564.2	1592.0
45°	1373.8	1393.0	1448.7	1491.5	1523.6
47.5°	1286.0	1311.7	1365.2	1423.0	1450.8
50°	1198.3	1224.0	1283.9	1348.1	1375.9
52.5°	1108.4	1134.1	1202.6	1268.9	1298.9
55°	1022.8	1048.5	1121.3	1194.0	1224.0
57.5°	933.0	960.8	1042.1	1117.0	1147.0
60°	845.2	873.1	960.8	1040.0	1072.1
62.5°	759.6	789.6	881.6	965.1	997.2
65°	671.9	706.1	802.4	890.2	924.4
67.5°	586.3	624.8	725.4	817.4	853.8
70°	500.7	545.7	652.6	746.8	783.2
72.5°	417.3	466.5	579.9	674.0	693.3
75°	336.0	393.7	511.4	556.4	552.1
77.5°	258.9	323.1	434.4	442.9	455.8
80°	188.3	258.9	325.3	342.4	333.8
82.5°	124.1	194.7	233.2	224.7	222.5
85°	70.6	122.0	130.5	119.8	119.8
87.5°	30.0	49.2	42.8	32.1	30.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)