

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: P260583

Luminaire Tested: **24CZ-LD5-60-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260583  
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-L83050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6032.0 lumens  
Efficiency: N/A  
Efficacy: 136.3 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

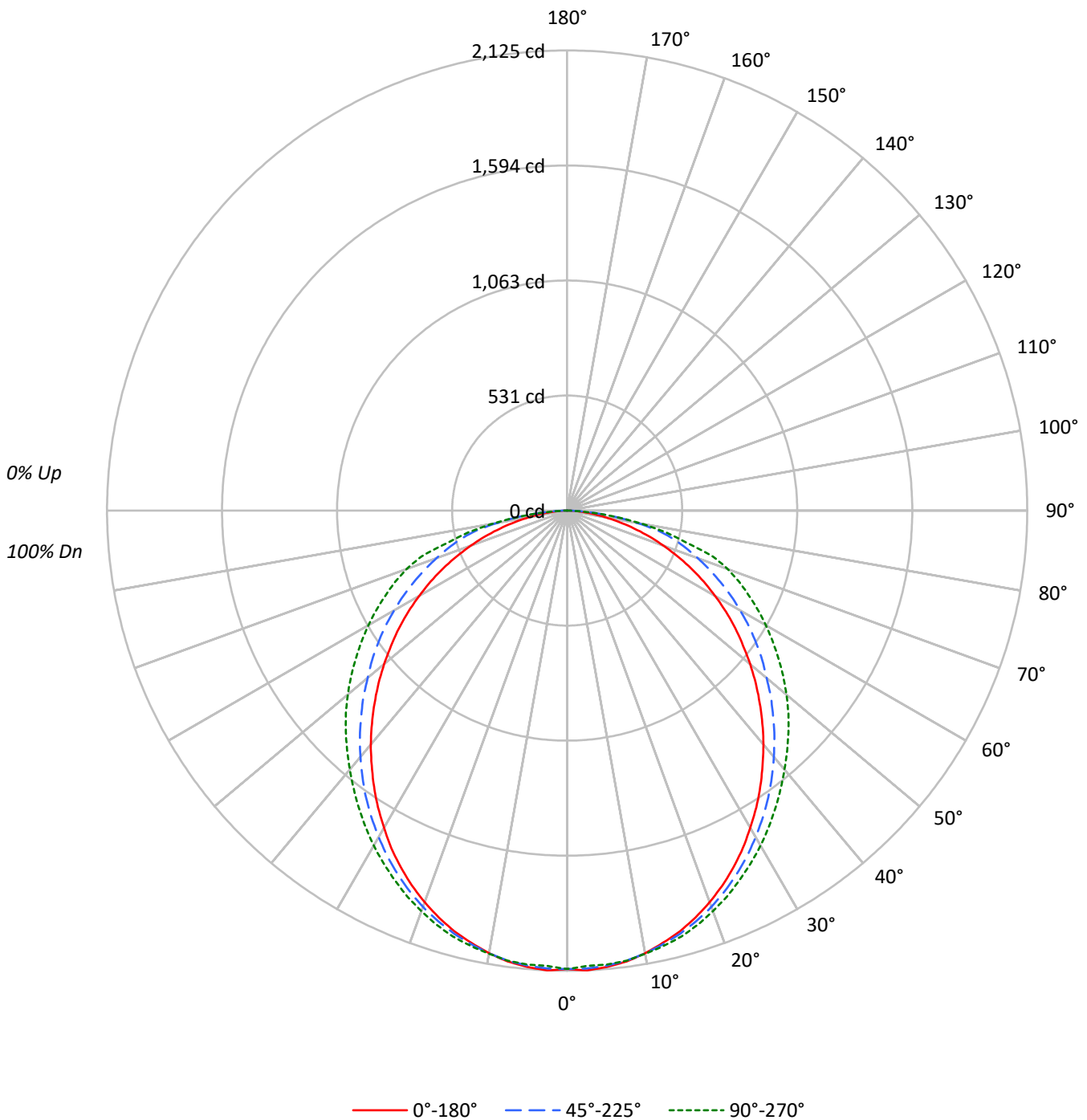
Input Watts (W): 44.268  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	2848	2848	2848
5°	2856	2848	2842
10°	2836	2836	2839
15°	2802	2816	2837
20°	2756	2789	2818
25°	2698	2750	2796
30°	2628	2705	2776
35°	2554	2660	2755
40°	2478	2608	2742
45°	2393	2558	2751
50°	2309	2516	2767
55°	2224	2500	2795
60°	2123	2484	2851
65°	2012	2486	2946
70°	1861	2527	3103
75°	1664	2641	2953
80°	1392	2528	2704
85°	1053	1945	1849



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.0	3.3
10°-20°	569.3	9.4
20°-30°	851.1	14.1
30°-40°	1009.7	16.7
40°-50°	1039.3	17.2
50°-60°	953.4	15.8
60°-70°	770.9	12.8
70°-80°	500.3	8.3
80°-90°	138.0	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°	1620.5	26.9
0°-40°	2630.2	43.6
0°-60°	4622.9	76.6
0°-90°	6032.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6032.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2117	2117	2117	2117	2117	
5°	2115	2100	2109	2107	2104	201
15°	2012	2003	2022	2030	2036	567
25°	1818	1820	1853	1869	1884	837
35°	1555	1568	1619	1654	1677	973
45°	1258	1278	1344	1408	1446	971
55°	948	977	1066	1152	1192	847
65°	632	669	781	884	925	625
75°	320	380	508	568	568	340
85°	68	116	126	122	120	83
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2116.9	2116.9	2116.9	2116.9	2116.9
2.5°	2125.2	2108.7	2116.9	2114.9	2104.5
5°	2114.9	2100.4	2108.7	2106.6	2104.5
7.5°	2100.4	2085.9	2096.3	2094.2	2096.3
10°	2075.6	2063.2	2075.6	2077.7	2077.7
12.5°	2044.6	2034.3	2050.8	2055.0	2059.1
15°	2011.6	2003.3	2021.9	2030.2	2036.4
17.5°	1970.3	1964.1	1986.8	1997.1	2005.4
20°	1924.8	1922.8	1947.6	1957.9	1968.2
22.5°	1873.2	1873.2	1902.1	1914.5	1929.0
25°	1817.5	1819.5	1852.6	1869.1	1883.5
27.5°	1757.6	1759.6	1798.9	1819.5	1836.0
30°	1691.5	1699.7	1741.0	1767.9	1786.5
32.5°	1625.4	1635.7	1681.1	1712.1	1732.8
35°	1555.2	1567.6	1619.2	1654.3	1677.0
37.5°	1482.9	1497.3	1553.1	1592.3	1619.2
40°	1410.6	1427.1	1484.9	1530.4	1561.4
42.5°	1334.2	1352.8	1416.8	1470.5	1503.5
45°	1257.8	1278.4	1344.5	1408.5	1445.7
47.5°	1181.3	1206.1	1276.3	1346.6	1385.8
50°	1102.9	1127.6	1202.0	1282.5	1321.8
52.5°	1024.4	1053.3	1135.9	1218.5	1257.8
55°	948.0	976.9	1065.7	1152.4	1191.7
57.5°	869.5	898.4	995.5	1086.3	1125.6
60°	788.9	822.0	923.2	1016.1	1059.5
62.5°	710.5	745.6	853.0	952.1	993.4
65°	632.0	669.2	780.7	883.9	925.2
67.5°	551.4	594.8	710.5	815.8	859.2
70°	473.0	520.5	642.3	747.6	788.9
72.5°	396.5	448.2	574.1	681.5	706.3
75°	320.1	380.0	508.1	568.0	568.0
77.5°	247.8	313.9	433.7	456.4	468.8
80°	179.7	252.0	326.3	353.2	349.0
82.5°	119.8	192.1	233.4	233.4	227.2
85°	68.2	115.7	126.0	121.9	119.8
87.5°	28.9	43.4	39.2	31.0	26.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)