

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: P260586

Luminaire Tested: **24CZ-LD5-60-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260586  
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-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6394.0 lumens  
Efficiency: N/A  
Efficacy: 137.7 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

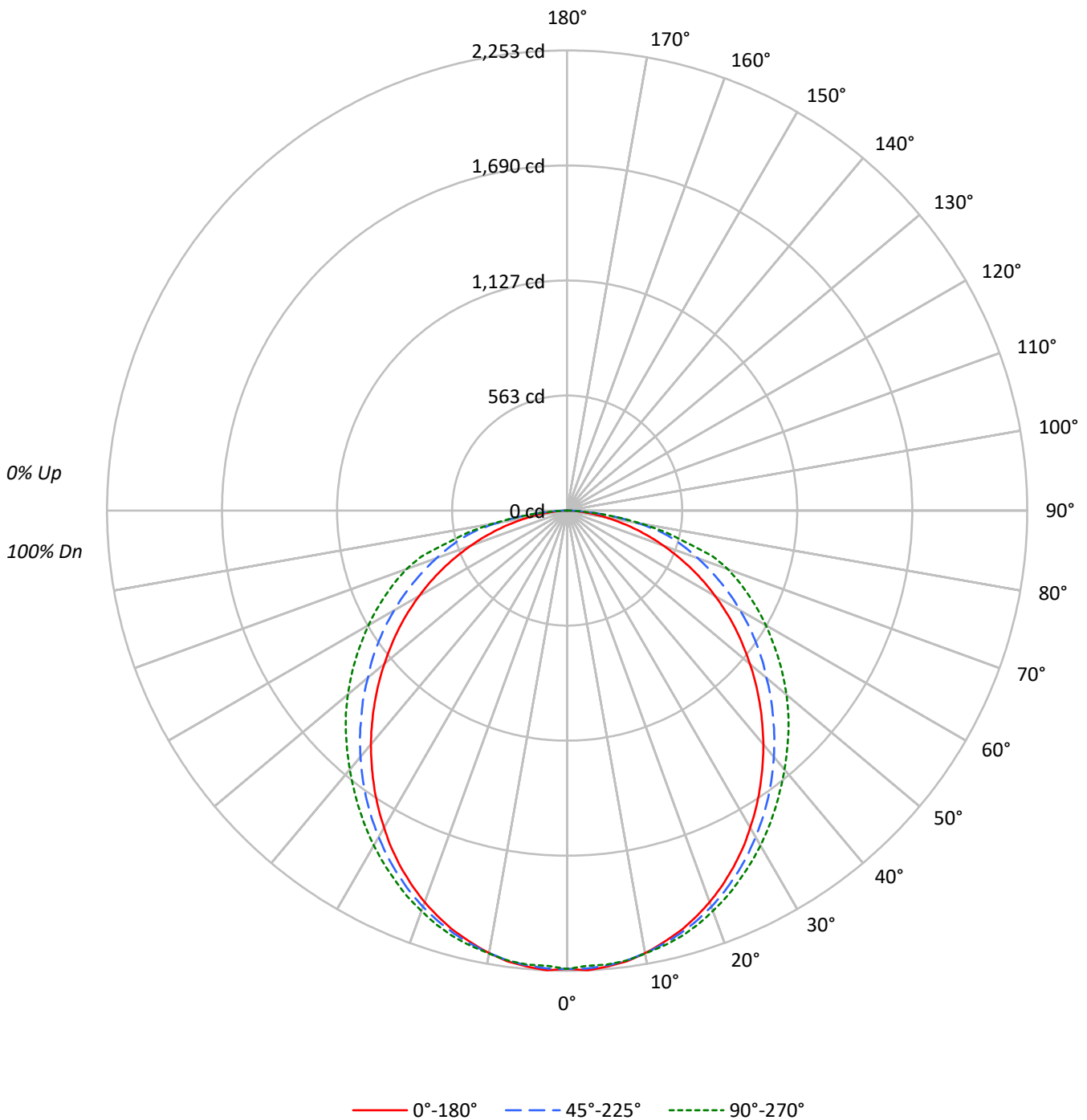
Input Watts (W): 46.437132  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3019	3019	3019
5°	3028	3019	3013
10°	3006	3006	3009
15°	2970	2986	3007
20°	2922	2956	2987
25°	2860	2915	2964
30°	2786	2867	2942
35°	2708	2819	2920
40°	2626	2765	2907
45°	2537	2712	2916
50°	2447	2667	2933
55°	2357	2650	2963
60°	2250	2633	3022
65°	2133	2635	3123
70°	1972	2679	3290
75°	1764	2800	3130
80°	1476	2680	2867
85°	1115	2061	1961



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.0	3.3
10°-20°	603.5	9.4
20°-30°	902.2	14.1
30°-40°	1070.3	16.7
40°-50°	1101.6	17.2
50°-60°	1010.6	15.8
60°-70°	817.1	12.8
70°-80°	530.3	8.3
80°-90°	146.2	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°	1717.8	26.9
0°-40°	2788.1	43.6
0°-60°	4900.3	76.6
0°-90°	6394.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6394.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2244	2244	2244	2244	2244	
5°	2242	2226	2235	2233	2231	213
15°	2132	2124	2143	2152	2159	601
25°	1926	1929	1964	1981	1997	887
35°	1648	1662	1716	1754	1778	1031
45°	1333	1355	1425	1493	1532	1029
55°	1005	1036	1130	1222	1263	898
65°	670	709	828	937	981	662
75°	339	403	539	602	602	361
85°	72	123	134	129	127	88
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2244.0	2244.0	2244.0	2244.0	2244.0
2.5°	2252.7	2235.2	2244.0	2241.8	2230.8
5°	2241.8	2226.4	2235.2	2233.0	2230.8
7.5°	2226.4	2211.1	2222.1	2219.9	2222.1
10°	2200.2	2187.0	2200.2	2202.4	2202.4
12.5°	2167.3	2156.4	2173.9	2178.3	2182.7
15°	2132.3	2123.6	2143.3	2152.0	2158.6
17.5°	2088.5	2082.0	2106.0	2117.0	2125.7
20°	2040.4	2038.2	2064.4	2075.4	2086.3
22.5°	1985.6	1985.6	2016.3	2029.4	2044.7
25°	1926.5	1928.7	1963.7	1981.3	1996.6
27.5°	1863.0	1865.2	1906.8	1928.7	1946.2
30°	1793.0	1801.7	1845.5	1874.0	1893.7
32.5°	1722.9	1733.9	1782.0	1814.9	1836.8
35°	1648.5	1661.6	1716.4	1753.6	1777.7
37.5°	1571.9	1587.2	1646.3	1687.9	1716.4
40°	1495.2	1512.8	1574.1	1622.2	1655.1
42.5°	1414.2	1433.9	1501.8	1558.7	1593.8
45°	1333.2	1355.1	1425.2	1493.1	1532.5
47.5°	1252.2	1278.5	1352.9	1427.4	1469.0
50°	1169.0	1195.3	1274.1	1359.5	1401.1
52.5°	1085.9	1116.5	1204.1	1291.6	1333.2
55°	1004.9	1035.5	1129.6	1221.6	1263.2
57.5°	921.7	952.3	1055.2	1151.5	1193.1
60°	836.3	871.3	978.6	1077.1	1123.1
62.5°	753.1	790.3	904.2	1009.2	1053.0
65°	669.9	709.3	827.5	937.0	980.8
67.5°	584.5	630.5	753.1	864.7	910.7
70°	501.3	551.7	680.9	792.5	836.3
72.5°	420.3	475.1	608.6	722.4	748.7
75°	339.3	402.8	538.6	602.0	602.0
77.5°	262.7	332.8	459.7	483.8	497.0
80°	190.5	267.1	345.9	374.4	370.0
82.5°	127.0	203.6	247.4	247.4	240.8
85°	72.2	122.6	133.5	129.2	127.0
87.5°	30.6	46.0	41.6	32.8	28.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)