

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: P260592

Luminaire Tested: **24CZ-LD5-70-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260592  
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-LD5-70-UNV-L83050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6663.0 lumens  
Efficiency: N/A  
Efficacy: 124.4 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

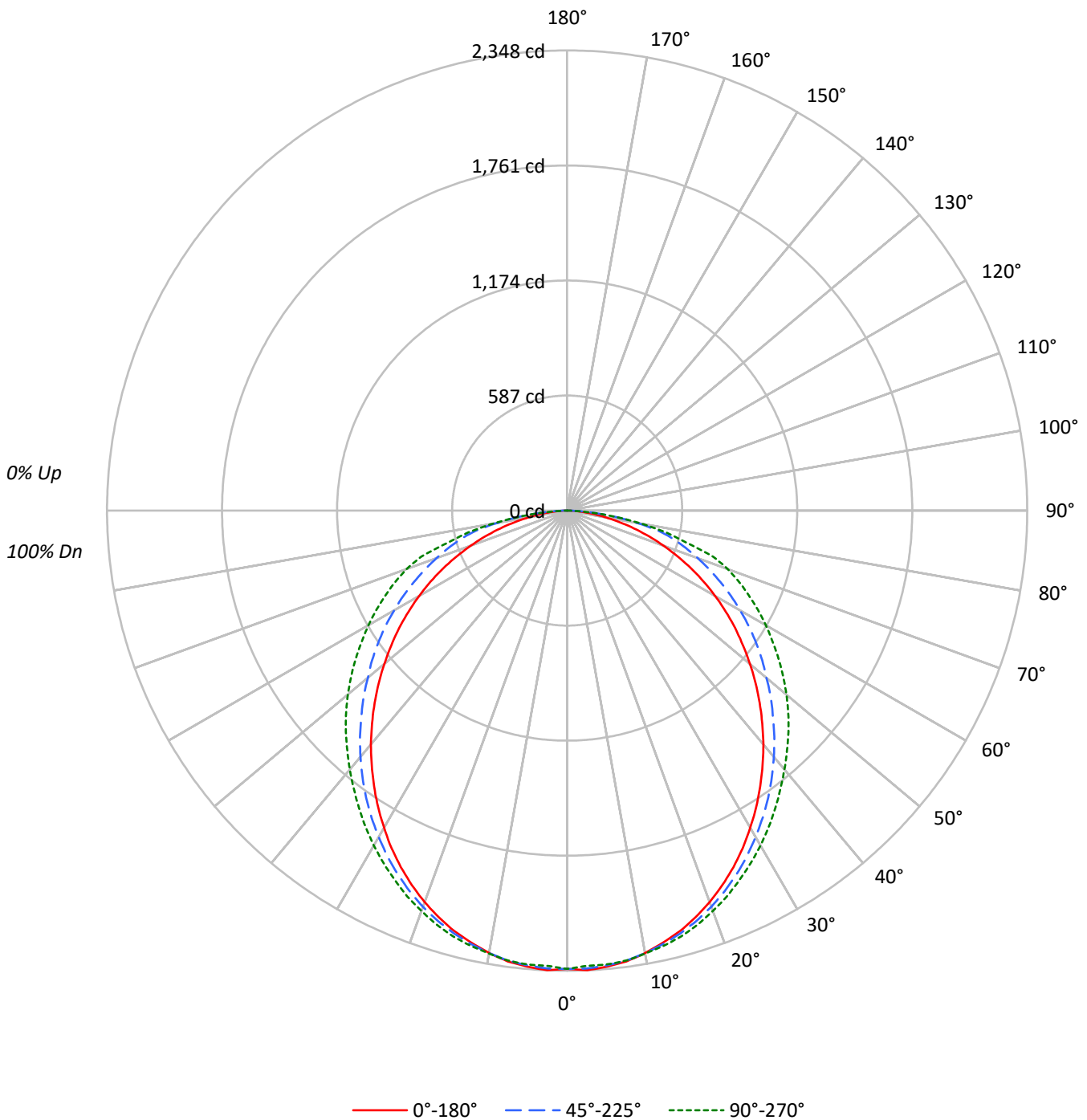
Input Watts (W): 53.553678  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3146	3146	3146
5°	3155	3146	3140
10°	3132	3132	3136
15°	3095	3111	3133
20°	3044	3080	3113
25°	2980	3038	3089
30°	2903	2988	3066
35°	2822	2938	3043
40°	2737	2881	3029
45°	2644	2826	3039
50°	2550	2779	3056
55°	2456	2761	3088
60°	2345	2744	3149
65°	2223	2745	3254
70°	2055	2791	3428
75°	1838	2917	3262
80°	1538	2793	2987
85°	1162	2149	2042



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	221.0	3.3
10°-20°	628.9	9.4
20°-30°	940.2	14.1
30°-40°	1115.3	16.7
40°-50°	1148.0	17.2
50°-60°	1053.1	15.8
60°-70°	851.5	12.8
70°-80°	552.6	8.3
80°-90°	152.4	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°	1790.0	26.9
0°-40°	2905.4	43.6
0°-60°	5106.5	76.6
0°-90°	6663.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6663.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2338	2338	2338	2338	2338	
5°	2336	2320	2329	2327	2325	222
15°	2222	2213	2233	2243	2249	626
25°	2008	2010	2046	2065	2081	924
35°	1718	1732	1789	1827	1852	1074
45°	1389	1412	1485	1556	1597	1072
55°	1047	1079	1177	1273	1316	935
65°	698	739	862	976	1022	690
75°	354	420	561	627	627	376
85°	75	128	139	135	132	92
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2338.4	2338.4	2338.4	2338.4	2338.4
2.5°	2347.5	2329.2	2338.4	2336.1	2324.7
5°	2336.1	2320.1	2329.2	2327.0	2324.7
7.5°	2320.1	2304.1	2315.6	2313.3	2315.6
10°	2292.7	2279.1	2292.7	2295.0	2295.0
12.5°	2258.5	2247.1	2265.4	2269.9	2274.5
15°	2222.0	2212.9	2233.4	2242.6	2249.4
17.5°	2176.4	2169.5	2194.6	2206.0	2215.2
20°	2126.2	2123.9	2151.3	2162.7	2174.1
22.5°	2069.2	2069.2	2101.1	2114.8	2130.8
25°	2007.6	2009.9	2046.4	2064.6	2080.6
27.5°	1941.4	1943.7	1987.0	2009.9	2028.1
30°	1868.4	1877.5	1923.2	1952.8	1973.4
32.5°	1795.4	1806.8	1857.0	1891.2	1914.0
35°	1717.8	1731.5	1788.6	1827.3	1852.4
37.5°	1638.0	1654.0	1715.6	1758.9	1788.6
40°	1558.2	1576.4	1640.3	1690.5	1724.7
42.5°	1473.7	1494.3	1565.0	1624.3	1660.8
45°	1389.3	1412.1	1485.1	1555.9	1596.9
47.5°	1304.9	1332.3	1409.9	1487.4	1530.8
50°	1218.2	1245.6	1327.7	1416.7	1460.1
52.5°	1131.5	1163.5	1254.7	1346.0	1389.3
55°	1047.1	1079.1	1177.2	1273.0	1316.3
57.5°	960.4	992.4	1099.6	1200.0	1243.3
60°	871.5	908.0	1019.8	1122.4	1170.3
62.5°	784.8	823.6	942.2	1051.7	1097.3
65°	698.1	739.2	862.3	976.4	1022.0
67.5°	609.1	657.0	784.8	901.1	949.0
70°	522.4	574.9	709.5	825.8	871.5
72.5°	438.0	495.0	634.2	752.8	780.2
75°	353.6	419.8	561.2	627.4	627.4
77.5°	273.8	346.8	479.1	504.2	517.9
80°	198.5	278.3	360.5	390.1	385.5
82.5°	132.3	212.2	257.8	257.8	250.9
85°	75.3	127.8	139.2	134.6	132.3
87.5°	31.9	47.9	43.3	34.2	29.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)