

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: P261336

Luminaire Tested: **24CZ-LD5-70-S-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261336  
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-LD5-70-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: 6780.0 lumens  
Efficiency: N/A  
Efficacy: 122.5 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

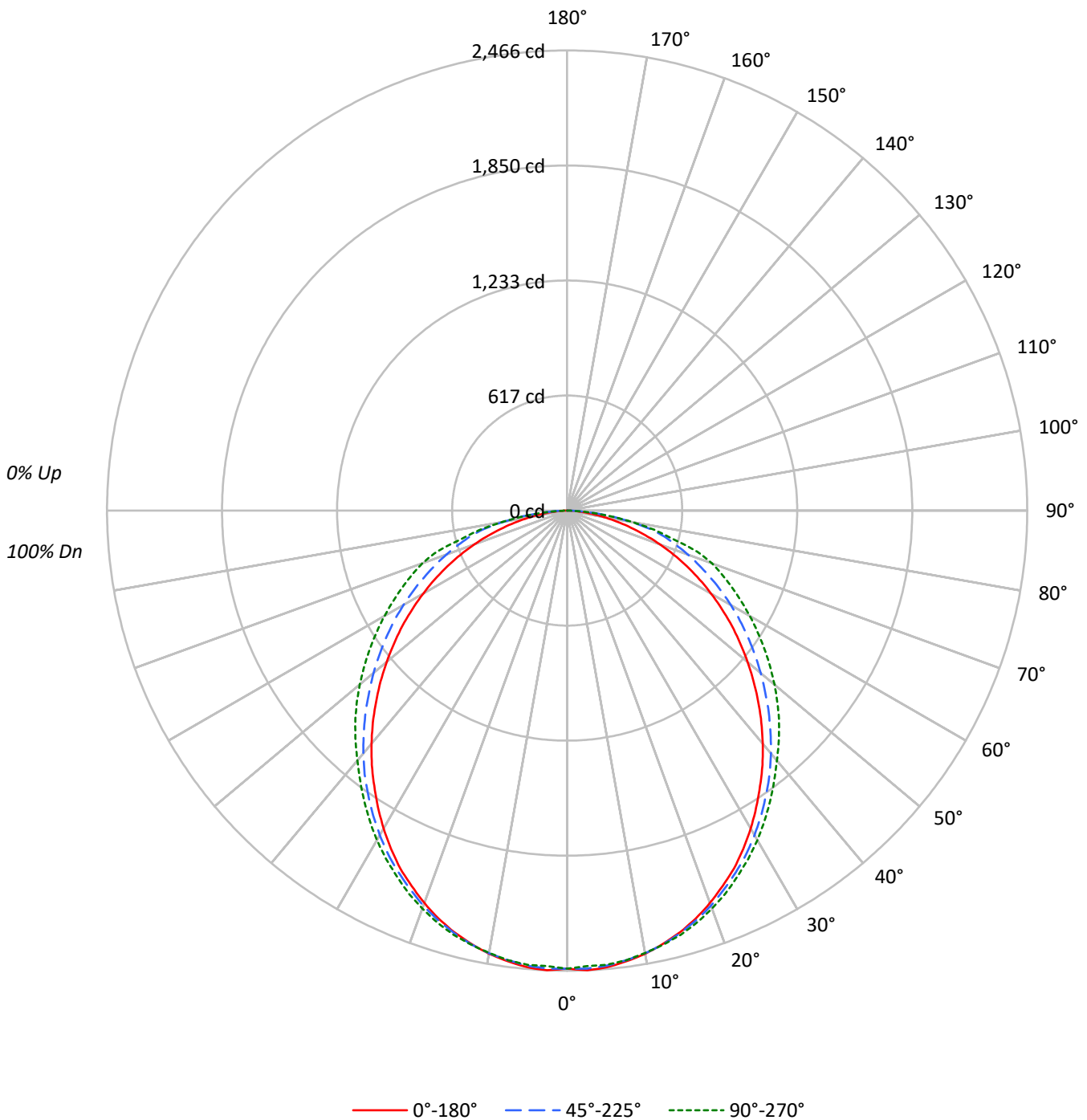
Input Watts (W): 55.335  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3303	3303	3303
5°	3318	3306	3300
10°	3295	3292	3289
15°	3259	3265	3278
20°	3204	3227	3250
25°	3142	3175	3208
30°	3056	3119	3168
35°	2961	3053	3116
40°	2865	2984	3071
45°	2756	2906	3056
50°	2644	2833	3036
55°	2529	2773	3027
60°	2398	2726	3041
65°	2255	2693	3103
70°	2077	2707	3248
75°	1841	2803	3026
80°	1538	2657	2727
85°	1149	2124	1950



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.1	3.4
10°-20°	660.0	9.7
20°-30°	983.6	14.5
30°-40°	1157.8	17.1
40°-50°	1176.6	17.4
50°-60°	1057.8	15.6
60°-70°	835.7	12.3
70°-80°	530.2	7.8
80°-90°	146.3	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°	1875.6	27.7
0°-40°	3033.4	44.7
0°-60°	5267.8	77.7
0°-90°	6780.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6780.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2454	2454	2454	2454	2454	
5°	2457	2436	2448	2443	2443	233
15°	2339	2328	2344	2351	2353	659
25°	2116	2114	2139	2152	2161	973
35°	1802	1814	1859	1879	1897	1128
45°	1448	1469	1527	1572	1606	1118
55°	1078	1105	1182	1259	1290	963
65°	708	744	846	938	975	702
75°	354	415	539	586	582	377
85°	74	129	138	126	126	91
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2454.5	2454.5	2454.5	2454.5	2454.5
2.5°	2465.8	2447.7	2456.7	2452.2	2443.2
5°	2456.7	2436.4	2447.7	2443.2	2443.2
7.5°	2436.4	2420.6	2429.7	2427.4	2429.7
10°	2411.6	2395.8	2409.4	2409.4	2407.1
12.5°	2377.8	2364.2	2380.0	2380.0	2382.3
15°	2339.4	2328.2	2343.9	2350.7	2353.0
17.5°	2292.1	2280.8	2301.1	2307.8	2314.6
20°	2237.9	2233.4	2253.7	2260.5	2269.5
22.5°	2177.0	2177.0	2197.3	2206.3	2219.9
25°	2116.1	2113.8	2138.7	2152.2	2161.2
27.5°	2043.9	2046.2	2077.7	2091.3	2102.6
30°	1967.2	1971.7	2007.8	2023.6	2039.4
32.5°	1886.0	1895.0	1935.6	1953.7	1969.5
35°	1802.5	1813.8	1858.9	1879.2	1897.3
37.5°	1719.0	1734.8	1782.2	1802.5	1822.8
40°	1631.1	1644.6	1698.7	1723.6	1748.4
42.5°	1540.8	1558.9	1613.0	1649.1	1678.4
45°	1448.3	1468.6	1527.3	1572.4	1606.2
47.5°	1355.8	1382.9	1439.3	1500.2	1529.5
50°	1263.3	1290.4	1353.6	1421.3	1450.6
52.5°	1168.6	1195.7	1267.8	1337.8	1369.4
55°	1078.3	1105.4	1182.1	1258.8	1290.4
57.5°	983.6	1012.9	1098.7	1177.6	1209.2
60°	891.1	920.4	1012.9	1096.4	1130.2
62.5°	800.9	832.4	929.5	1017.4	1051.3
65°	708.4	744.5	846.0	938.5	974.6
67.5°	618.1	658.7	764.8	861.8	900.1
70°	527.9	575.3	688.1	787.3	825.7
72.5°	439.9	491.8	611.4	710.6	730.9
75°	354.2	415.1	539.2	586.5	582.0
77.5°	273.0	340.6	458.0	467.0	480.5
80°	198.5	273.0	342.9	361.0	351.9
82.5°	130.8	205.3	245.9	236.9	234.6
85°	74.4	128.6	137.6	126.3	126.3
87.5°	31.6	51.9	45.1	33.8	31.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)