

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: P261015

Luminaire Tested: **24CZ-LD5-70-S-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261015  
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-L83050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7624.0 lumens  
Efficiency: N/A  
Efficacy: 135.4 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

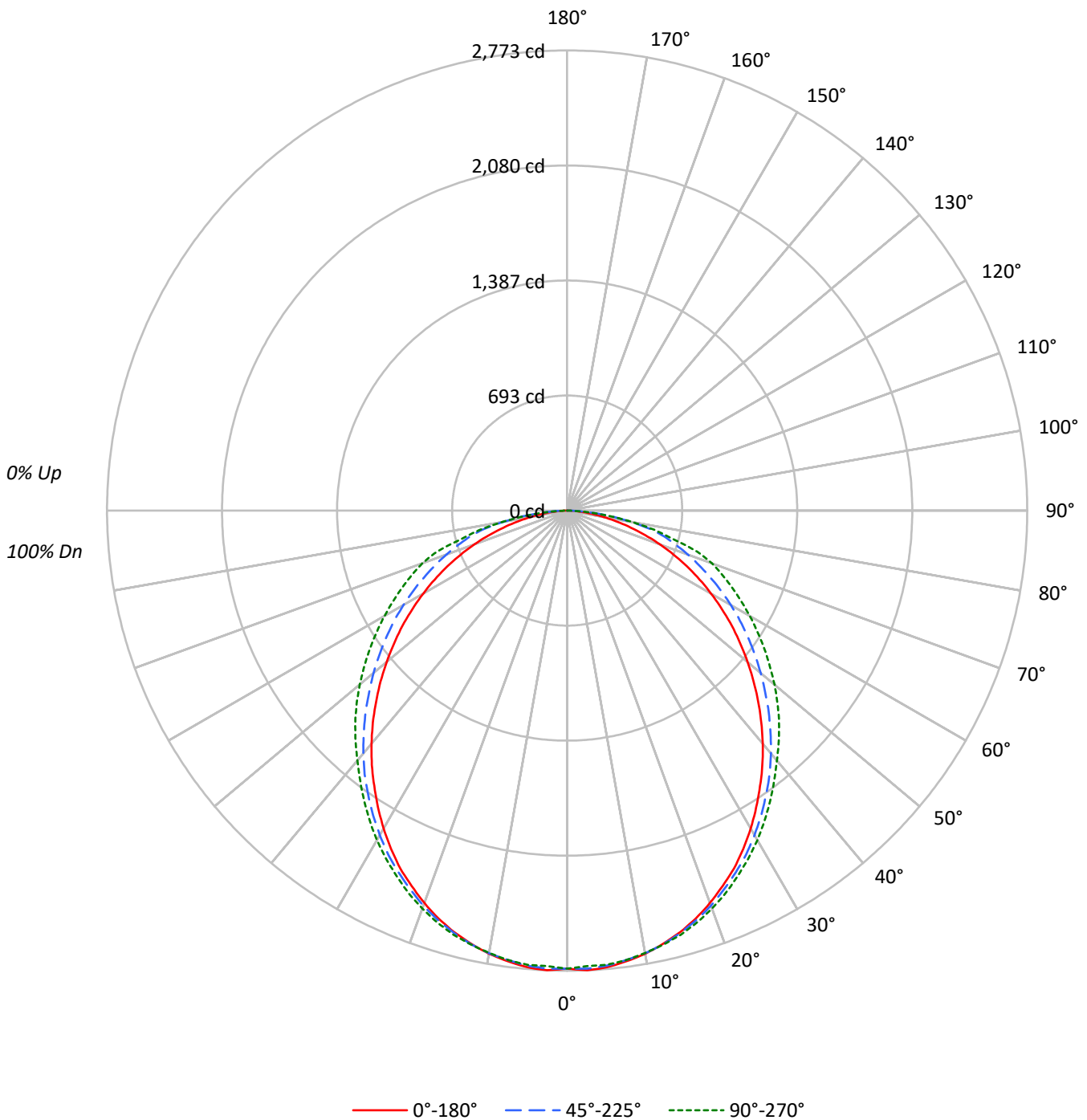
Input Watts (W): 56.290389  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3714	3714	3714
5°	3731	3717	3711
10°	3705	3702	3698
15°	3664	3671	3686
20°	3603	3629	3654
25°	3533	3570	3608
30°	3437	3508	3563
35°	3329	3433	3504
40°	3221	3355	3453
45°	3099	3268	3437
50°	2974	3186	3414
55°	2845	3118	3404
60°	2696	3065	3420
65°	2536	3029	3489
70°	2335	3044	3653
75°	2071	3152	3402
80°	1729	2988	3066
85°	1292	2388	2194



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	260.9	3.4
10°-20°	742.1	9.7
20°-30°	1106.0	14.5
30°-40°	1301.9	17.1
40°-50°	1323.0	17.4
50°-60°	1189.5	15.6
60°-70°	939.7	12.3
70°-80°	596.2	7.8
80°-90°	164.5	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°	2109.1	27.7
0°-40°	3411.0	44.7
0°-60°	5923.6	77.7
0°-90°	7624.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7624.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2760	2760	2760	2760	2760	
5°	2763	2740	2752	2747	2747	262
15°	2631	2618	2636	2643	2646	741
25°	2380	2377	2405	2420	2430	1094
35°	2027	2040	2090	2113	2133	1268
45°	1629	1652	1717	1768	1806	1257
55°	1213	1243	1329	1416	1451	1083
65°	797	837	951	1055	1096	789
75°	398	467	606	660	654	424
85°	84	145	155	142	142	103
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2760.0	2760.0	2760.0	2760.0	2760.0
2.5°	2772.7	2752.4	2762.6	2757.5	2747.3
5°	2762.6	2739.7	2752.4	2747.3	2747.3
7.5°	2739.7	2722.0	2732.1	2729.6	2732.1
10°	2711.8	2694.1	2709.3	2709.3	2706.8
12.5°	2673.8	2658.6	2676.3	2676.3	2678.9
15°	2630.7	2618.0	2635.7	2643.3	2645.9
17.5°	2577.4	2564.7	2587.5	2595.1	2602.7
20°	2516.5	2511.4	2534.3	2541.9	2552.0
22.5°	2448.0	2448.0	2470.8	2481.0	2496.2
25°	2379.5	2377.0	2404.9	2420.1	2430.2
27.5°	2298.3	2300.9	2336.4	2351.6	2364.3
30°	2212.1	2217.2	2257.7	2275.5	2293.3
32.5°	2120.8	2130.9	2176.6	2196.9	2214.6
35°	2026.9	2039.6	2090.3	2113.1	2133.4
37.5°	1933.0	1950.8	2004.1	2026.9	2049.7
40°	1834.1	1849.3	1910.2	1938.1	1966.0
42.5°	1732.6	1752.9	1813.8	1854.4	1887.4
45°	1628.6	1651.5	1717.4	1768.1	1806.2
47.5°	1524.6	1555.1	1618.5	1687.0	1719.9
50°	1420.6	1451.0	1522.1	1598.2	1631.2
52.5°	1314.1	1344.5	1425.7	1504.3	1539.8
55°	1212.6	1243.0	1329.3	1415.5	1451.0
57.5°	1106.0	1139.0	1235.4	1324.2	1359.7
60°	1002.0	1035.0	1139.0	1232.9	1270.9
62.5°	900.6	936.1	1045.2	1144.1	1182.1
65°	796.6	837.1	951.3	1055.3	1095.9
67.5°	695.1	740.7	860.0	969.1	1012.2
70°	593.6	646.9	773.7	885.3	928.5
72.5°	494.7	553.0	687.5	799.1	821.9
75°	398.3	466.8	606.3	659.6	654.5
77.5°	307.0	383.1	515.0	525.1	540.3
80°	223.2	307.0	385.6	405.9	395.7
82.5°	147.1	230.8	276.5	266.4	263.8
85°	83.7	144.6	154.7	142.1	142.1
87.5°	35.5	58.3	50.7	38.1	35.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)