

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: P260596

Luminaire Tested: **24CZ-LD5-70-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260596  
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-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: 7474.0 lumens  
Efficiency: N/A  
Efficacy: 132.8 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

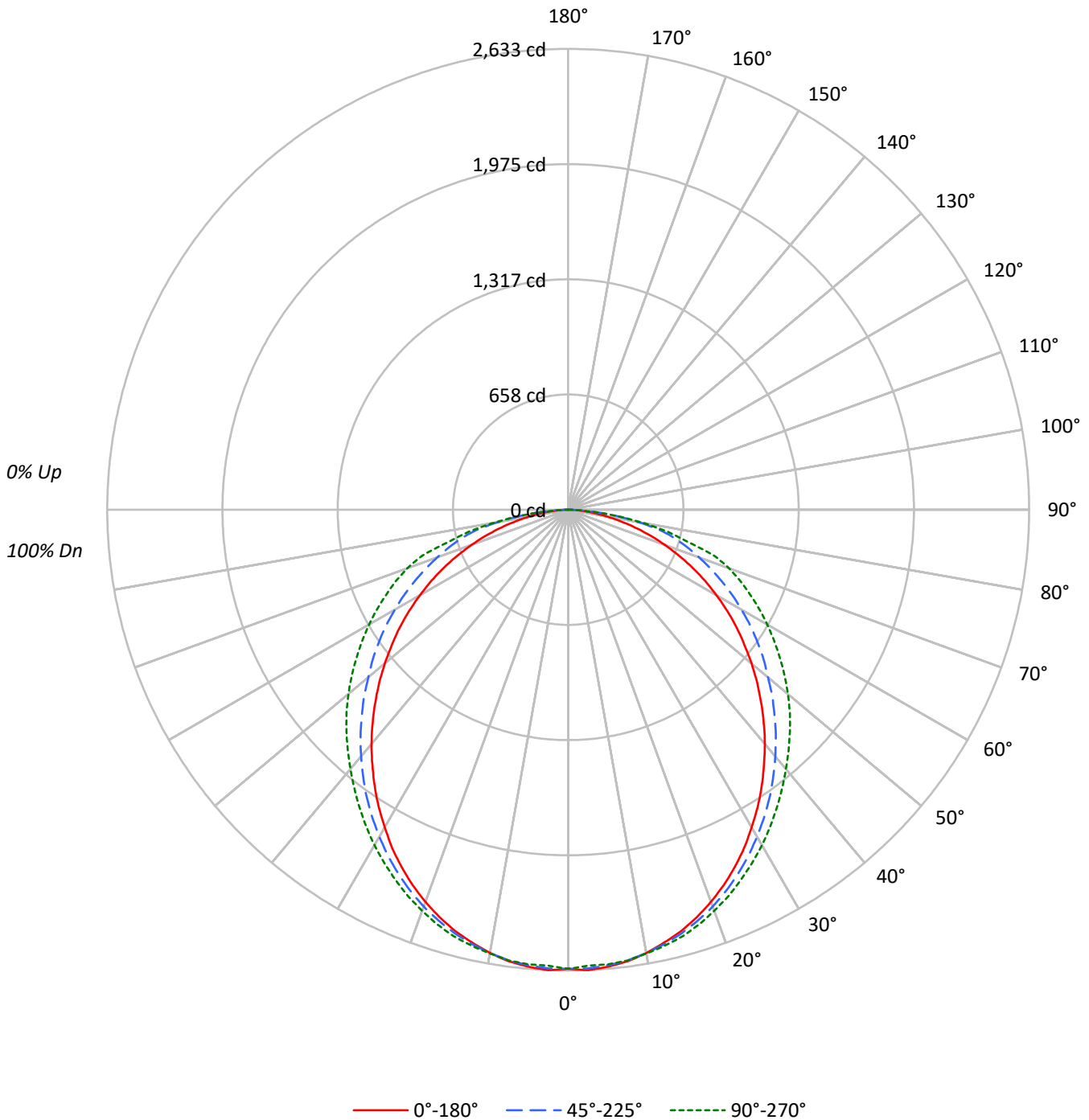
Input Watts (W): 56.290389  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3529	3529	3529
5°	3539	3529	3522
10°	3514	3514	3517
15°	3472	3490	3515
20°	3415	3455	3492
25°	3343	3408	3465
30°	3256	3352	3439
35°	3165	3295	3413
40°	3070	3232	3398
45°	2965	3170	3409
50°	2860	3117	3428
55°	2755	3097	3464
60°	2630	3078	3533
65°	2493	3080	3650
70°	2305	3131	3845
75°	2062	3273	3658
80°	1725	3133	3351
85°	1303	2410	2291



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	247.9	3.3
10°-20°	705.5	9.4
20°-30°	1054.6	14.1
30°-40°	1251.1	16.7
40°-50°	1287.7	17.2
50°-60°	1181.3	15.8
60°-70°	955.1	12.8
70°-80°	619.9	8.3
80°-90°	170.9	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°	2007.9	26.9
0°-40°	3259.0	43.6
0°-60°	5728.0	76.6
0°-90°	7474.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7474.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2623	2623	2623	2623	2623	
5°	2620	2602	2613	2610	2608	249
15°	2492	2482	2505	2516	2523	702
25°	2252	2254	2295	2316	2334	1037
35°	1927	1942	2006	2050	2078	1205
45°	1558	1584	1666	1745	1791	1203
55°	1175	1210	1320	1428	1476	1049
65°	783	829	967	1095	1146	774
75°	397	471	630	704	704	422
85°	84	143	156	151	148	103
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2623.0	2623.0	2623.0	2623.0	2623.0
2.5°	2633.2	2612.7	2623.0	2620.4	2607.6
5°	2620.4	2602.5	2612.7	2610.2	2607.6
7.5°	2602.5	2584.6	2597.4	2594.8	2597.4
10°	2571.8	2556.5	2571.8	2574.4	2574.4
12.5°	2533.4	2520.6	2541.1	2546.2	2551.3
15°	2492.5	2482.2	2505.3	2515.5	2523.2
17.5°	2441.3	2433.6	2461.8	2474.6	2484.8
20°	2385.0	2382.4	2413.1	2425.9	2438.7
22.5°	2321.0	2321.0	2356.8	2372.2	2390.1
25°	2251.9	2254.5	2295.4	2315.9	2333.8
27.5°	2177.7	2180.3	2228.9	2254.5	2275.0
30°	2095.8	2106.1	2157.2	2190.5	2213.5
32.5°	2013.9	2026.7	2083.0	2121.4	2147.0
35°	1926.9	1942.3	2006.3	2049.8	2077.9
37.5°	1837.4	1855.3	1924.4	1973.0	2006.3
40°	1747.8	1768.3	1839.9	1896.2	1934.6
42.5°	1653.1	1676.2	1755.5	1822.0	1863.0
45°	1558.4	1584.0	1665.9	1745.2	1791.3
47.5°	1463.8	1494.5	1581.5	1668.5	1717.1
50°	1366.5	1397.2	1489.3	1589.1	1637.8
52.5°	1269.3	1305.1	1407.5	1509.8	1558.4
55°	1174.6	1210.4	1320.4	1427.9	1476.5
57.5°	1077.3	1113.2	1233.4	1346.0	1394.7
60°	977.5	1018.5	1143.9	1259.0	1312.8
62.5°	880.3	923.8	1056.9	1179.7	1230.9
65°	783.1	829.1	967.3	1095.3	1146.4
67.5°	683.3	737.0	880.3	1010.8	1064.5
70°	586.0	644.9	795.9	926.4	977.5
72.5°	491.3	555.3	711.4	844.5	875.2
75°	396.6	470.9	629.5	703.7	703.7
77.5°	307.1	389.0	537.4	565.5	580.9
80°	222.6	312.2	404.3	437.6	432.5
82.5°	148.4	238.0	289.2	289.2	281.5
85°	84.4	143.3	156.1	151.0	148.4
87.5°	35.8	53.7	48.6	38.4	33.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)