

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: P260669

Luminaire Tested: **24CZ-LD5-70-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260669  
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-L93050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6472.8 lumens  
Efficiency: N/A  
Efficacy: 117.6 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

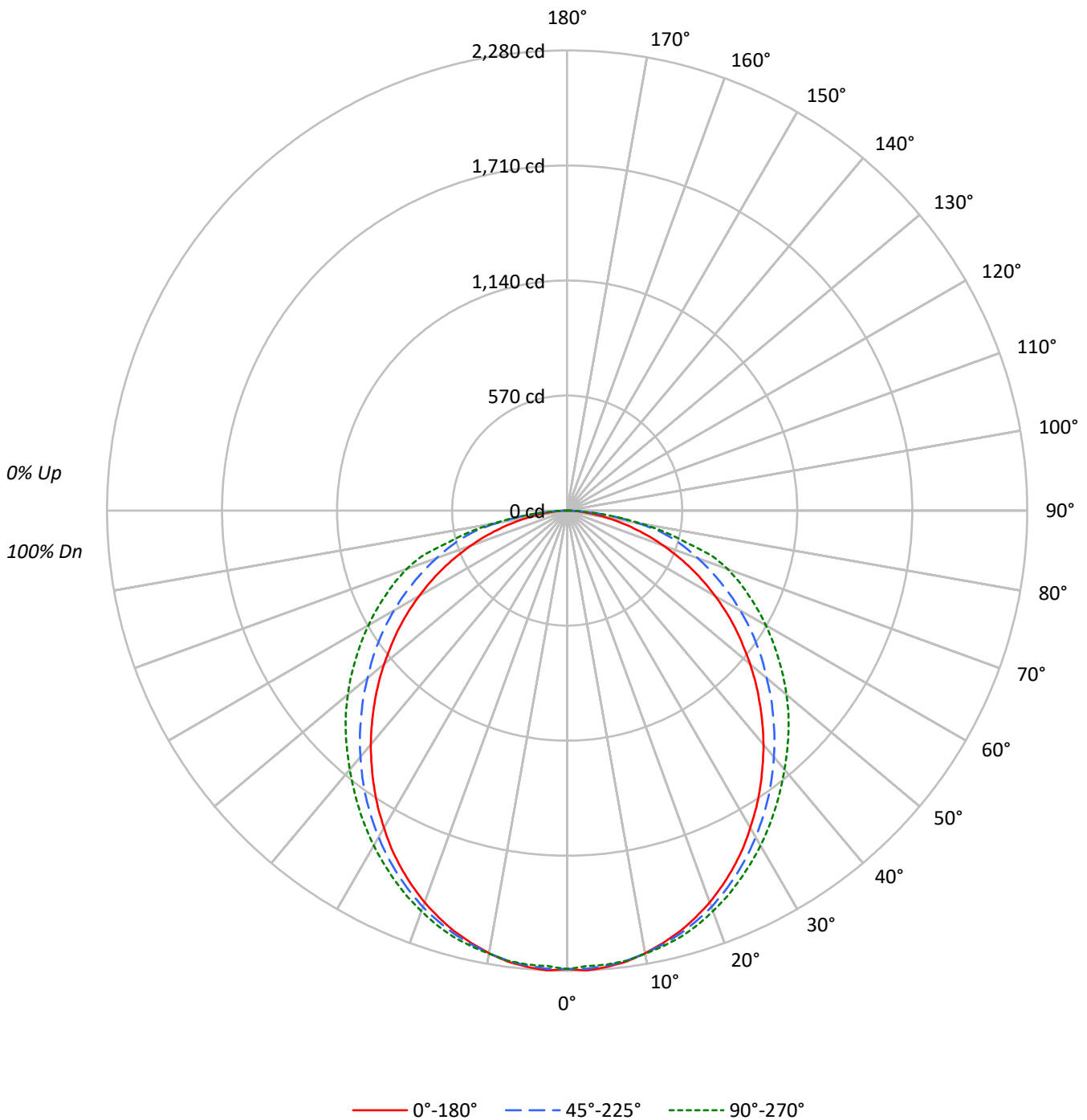
Input Watts (W): 55.056186  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3056	3056	3056
5°	3065	3056	3050
10°	3043	3043	3046
15°	3007	3022	3044
20°	2957	2992	3024
25°	2895	2951	3001
30°	2820	2903	2978
35°	2741	2854	2956
40°	2659	2799	2943
45°	2568	2745	2952
50°	2477	2700	2969
55°	2386	2683	3000
60°	2278	2666	3059
65°	2159	2667	3161
70°	1996	2711	3330
75°	1786	2834	3169
80°	1494	2713	2902
85°	1129	2087	1984



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.7	3.3
10°-20°	611.0	9.4
20°-30°	913.3	14.1
30°-40°	1083.5	16.7
40°-50°	1115.2	17.2
50°-60°	1023.1	15.8
60°-70°	827.2	12.8
70°-80°	536.9	8.3
80°-90°	148.0	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°	1739.0	26.9
0°-40°	2822.5	43.6
0°-60°	4960.7	76.6
0°-90°	6472.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6472.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2272	2272	2272	2272	2272	
5°	2269	2254	2263	2260	2258	215
15°	2159	2150	2170	2178	2185	608
25°	1950	1952	1988	2006	2021	898
35°	1669	1682	1738	1775	1800	1044
45°	1350	1372	1443	1512	1551	1042
55°	1017	1048	1144	1237	1279	909
65°	678	718	838	948	993	670
75°	344	408	545	610	610	365
85°	73	124	135	131	128	89
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2271.6	2271.6	2271.6	2271.6	2271.6
2.5°	2280.5	2262.8	2271.6	2269.4	2258.3
5°	2269.4	2253.9	2262.8	2260.5	2258.3
7.5°	2253.9	2238.4	2249.5	2247.2	2249.5
10°	2227.3	2214.0	2227.3	2229.5	2229.5
12.5°	2194.1	2183.0	2200.7	2205.1	2209.6
15°	2158.6	2149.7	2169.7	2178.5	2185.2
17.5°	2114.3	2107.6	2132.0	2143.1	2151.9
20°	2065.5	2063.3	2089.9	2101.0	2112.1
22.5°	2010.1	2010.1	2041.1	2054.4	2069.9
25°	1950.3	1952.5	1987.9	2005.7	2021.2
27.5°	1886.0	1888.2	1930.3	1952.5	1970.2
30°	1815.1	1823.9	1868.3	1897.1	1917.0
32.5°	1744.2	1755.2	1804.0	1837.2	1859.4
35°	1668.8	1682.1	1737.5	1775.2	1799.6
37.5°	1591.2	1606.8	1666.6	1708.7	1737.5
40°	1513.7	1531.4	1593.5	1642.2	1675.5
42.5°	1431.7	1451.6	1520.3	1577.9	1613.4
45°	1349.7	1371.8	1442.8	1511.5	1551.4
47.5°	1267.7	1294.3	1369.6	1445.0	1487.1
50°	1183.5	1210.1	1289.8	1376.3	1418.4
52.5°	1099.2	1130.3	1218.9	1307.6	1349.7
55°	1017.2	1048.3	1143.6	1236.6	1278.8
57.5°	933.0	964.1	1068.2	1165.7	1207.8
60°	846.6	882.1	990.6	1090.4	1136.9
62.5°	762.4	800.1	915.3	1021.7	1066.0
65°	678.2	718.1	837.7	948.5	992.9
67.5°	591.7	638.3	762.4	875.4	921.9
70°	507.5	558.5	689.2	802.3	846.6
72.5°	425.5	480.9	616.1	731.4	757.9
75°	343.5	407.8	545.2	609.5	609.5
77.5°	265.9	336.9	465.4	489.8	503.1
80°	192.8	270.4	350.2	379.0	374.5
82.5°	128.5	206.1	250.4	250.4	243.8
85°	73.1	124.1	135.2	130.8	128.5
87.5°	31.0	46.5	42.1	33.2	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)