

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: P261091

Luminaire Tested: **24CZ-LD5-70-S-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261091  
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-L93050-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6717.4 lumens  
Efficiency: N/A  
Efficacy: 120.1 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

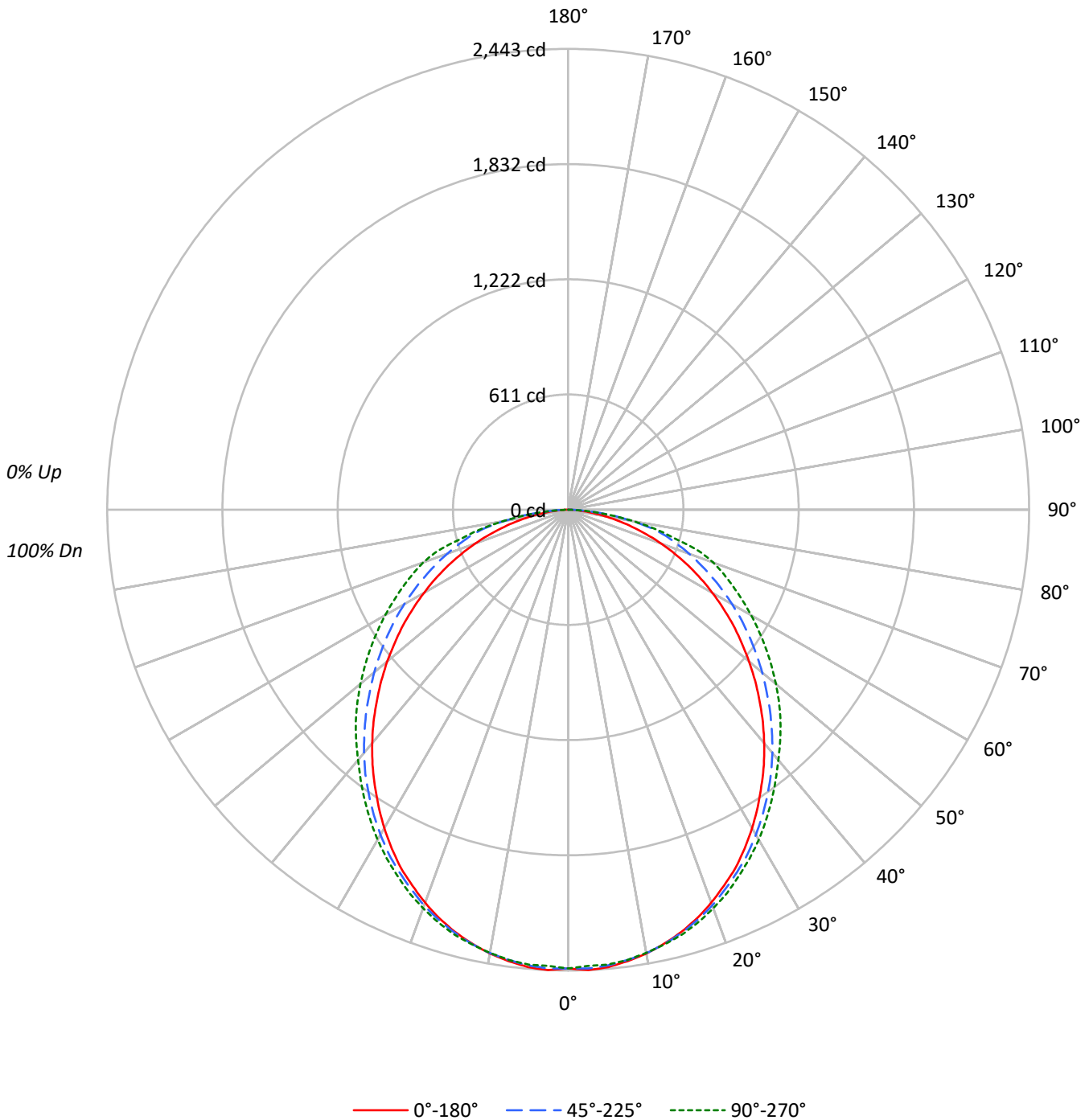
Input Watts (W): 55.914762  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3272	3272	3272
5°	3287	3275	3269
10°	3264	3261	3258
15°	3229	3235	3247
20°	3175	3197	3219
25°	3112	3146	3179
30°	3028	3091	3139
35°	2933	3025	3087
40°	2838	2956	3042
45°	2730	2879	3028
50°	2620	2807	3008
55°	2506	2747	2999
60°	2376	2701	3013
65°	2234	2669	3074
70°	2057	2682	3218
75°	1824	2777	2998
80°	1524	2632	2702
85°	1139	2104	1933



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	229.9	3.4
10°-20°	653.9	9.7
20°-30°	974.5	14.5
30°-40°	1147.1	17.1
40°-50°	1165.7	17.4
50°-60°	1048.1	15.6
60°-70°	828.0	12.3
70°-80°	525.3	7.8
80°-90°	145.0	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°	1858.3	27.7
0°-40°	3005.4	44.7
0°-60°	5219.1	77.7
0°-90°	6717.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6717.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2432	2432	2432	2432	2432	
5°	2434	2414	2425	2421	2421	231
15°	2318	2307	2322	2329	2331	653
25°	2096	2094	2119	2132	2141	964
35°	1786	1797	1842	1862	1880	1117
45°	1435	1455	1513	1558	1591	1107
55°	1068	1095	1171	1247	1278	954
65°	702	738	838	930	966	695
75°	351	411	534	581	577	373
85°	74	127	136	125	125	91
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2431.8	2431.8	2431.8	2431.8	2431.8
2.5°	2443.0	2425.1	2434.0	2429.6	2420.6
5°	2434.0	2413.9	2425.1	2420.6	2420.6
7.5°	2413.9	2398.3	2407.2	2405.0	2407.2
10°	2389.3	2373.7	2387.1	2387.1	2384.9
12.5°	2355.8	2342.4	2358.0	2358.0	2360.3
15°	2317.8	2306.6	2322.3	2329.0	2331.2
17.5°	2270.9	2259.7	2279.8	2286.5	2293.2
20°	2217.2	2212.8	2232.9	2239.6	2248.5
22.5°	2156.9	2156.9	2177.0	2185.9	2199.4
25°	2096.5	2094.3	2118.9	2132.3	2141.2
27.5°	2025.0	2027.2	2058.5	2071.9	2083.1
30°	1949.0	1953.5	1989.3	2004.9	2020.5
32.5°	1868.6	1877.5	1917.7	1935.6	1951.3
35°	1785.9	1797.0	1841.7	1861.8	1879.7
37.5°	1703.2	1718.8	1765.7	1785.9	1806.0
40°	1616.0	1629.4	1683.0	1707.6	1732.2
42.5°	1526.6	1544.5	1598.1	1633.9	1662.9
45°	1434.9	1455.1	1513.2	1557.9	1591.4
47.5°	1343.3	1370.1	1426.0	1486.4	1515.4
50°	1251.7	1278.5	1341.1	1408.1	1437.2
52.5°	1157.8	1184.6	1256.1	1325.4	1356.7
55°	1068.4	1095.2	1171.2	1247.2	1278.5
57.5°	974.5	1003.6	1088.5	1166.7	1198.0
60°	882.9	911.9	1003.6	1086.3	1119.8
62.5°	793.5	824.8	920.9	1008.0	1041.6
65°	701.8	737.6	838.2	929.8	965.6
67.5°	612.4	652.7	757.7	853.8	891.8
70°	523.0	570.0	681.7	780.1	818.1
72.5°	435.8	487.3	605.7	704.1	724.2
75°	350.9	411.3	534.2	581.1	576.7
77.5°	270.4	337.5	453.7	462.7	476.1
80°	196.7	270.4	339.7	357.6	348.7
82.5°	129.6	203.4	243.6	234.7	232.5
85°	73.8	127.4	136.3	125.2	125.2
87.5°	31.3	51.4	44.7	33.5	31.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)