

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: P261194

Luminaire Tested: **24CZ-LD5-70-S-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261194  
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-L82765-W2A1-U-2700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6599.0 lumens  
Efficiency: N/A  
Efficacy: 123.0 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

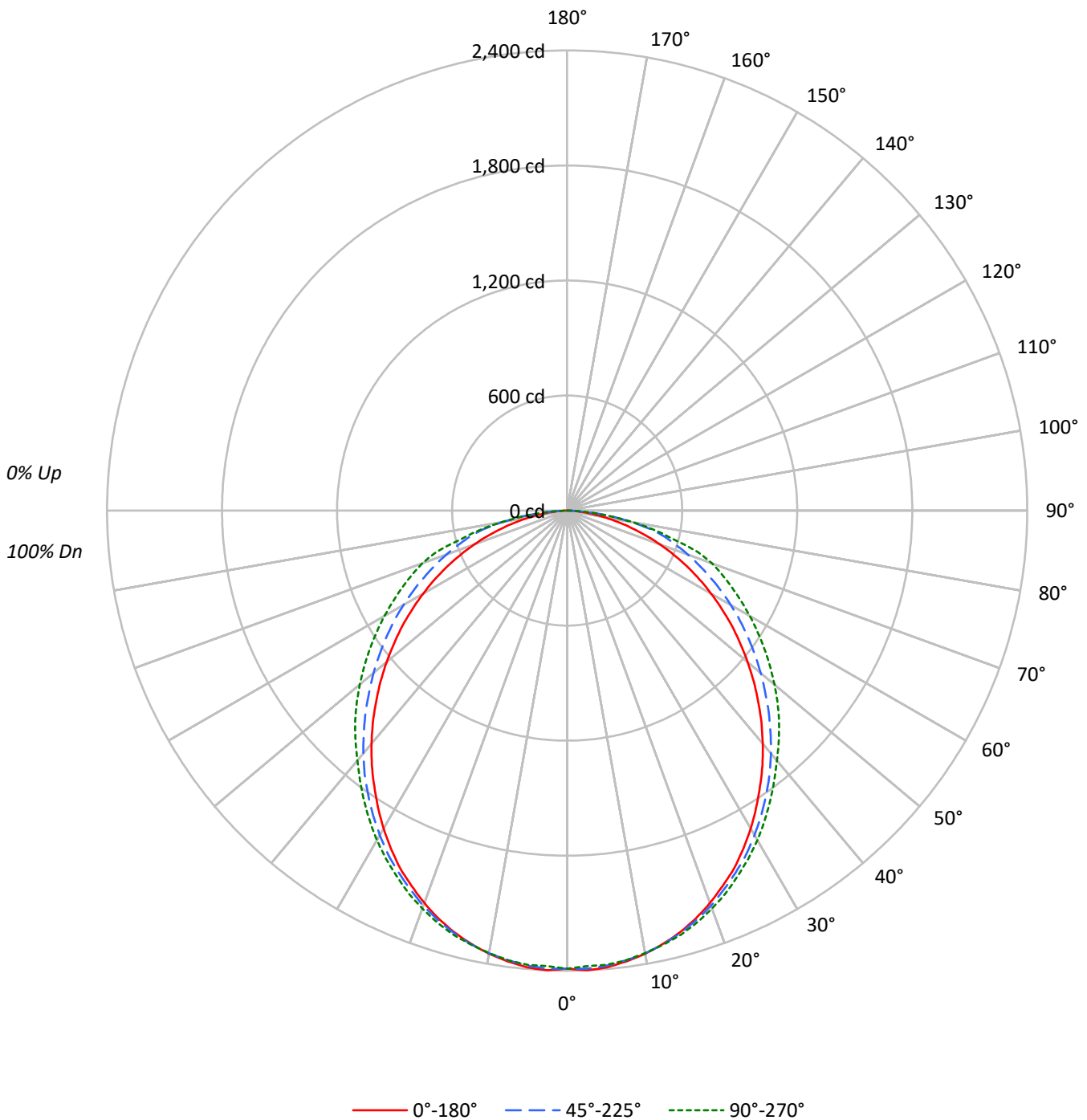
Input Watts (W): 53.661  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50					50			
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	3214	3214	3214
5°	3230	3218	3212
10°	3207	3204	3201
15°	3172	3178	3190
20°	3119	3141	3163
25°	3058	3090	3123
30°	2975	3036	3084
35°	2882	2972	3033
40°	2788	2904	2989
45°	2682	2829	2975
50°	2574	2758	2955
55°	2462	2699	2946
60°	2334	2653	2960
65°	2195	2621	3020
70°	2021	2635	3161
75°	1792	2728	2945
80°	1497	2586	2654
85°	1119	2067	1899



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	225.9	3.4
10°-20°	642.4	9.7
20°-30°	957.3	14.5
30°-40°	1126.9	17.1
40°-50°	1145.2	17.4
50°-60°	1029.6	15.6
60°-70°	813.4	12.3
70°-80°	516.0	7.8
80°-90°	142.4	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°	1825.5	27.7
0°-40°	2952.4	44.7
0°-60°	5127.2	77.7
0°-90°	6599.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6599.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2389	2389	2389	2389	2389	
5°	2391	2371	2382	2378	2378	227
15°	2277	2266	2281	2288	2290	641
25°	2060	2057	2082	2095	2104	947
35°	1754	1765	1809	1829	1847	1098
45°	1410	1429	1486	1530	1563	1088
55°	1050	1076	1151	1225	1256	937
65°	690	725	823	913	949	683
75°	345	404	525	571	566	367
85°	72	125	134	123	123	89
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2389.0	2389.0	2389.0	2389.0	2389.0
2.5°	2399.9	2382.4	2391.2	2386.8	2378.0
5°	2391.2	2371.4	2382.4	2378.0	2378.0
7.5°	2371.4	2356.0	2364.8	2362.6	2364.8
10°	2347.2	2331.9	2345.0	2345.0	2342.8
12.5°	2314.3	2301.1	2316.5	2316.5	2318.7
15°	2277.0	2266.0	2281.4	2288.0	2290.2
17.5°	2230.9	2219.9	2239.6	2246.2	2252.8
20°	2178.2	2173.8	2193.5	2200.1	2208.9
22.5°	2118.9	2118.9	2138.6	2147.4	2160.6
25°	2059.6	2057.4	2081.6	2094.7	2103.5
27.5°	1989.3	1991.5	2022.3	2035.4	2046.4
30°	1914.7	1919.1	1954.2	1969.6	1984.9
32.5°	1835.6	1844.4	1883.9	1901.5	1916.9
35°	1754.4	1765.4	1809.3	1829.0	1846.6
37.5°	1673.1	1688.5	1734.6	1754.4	1774.2
40°	1587.5	1600.7	1653.4	1677.5	1701.7
42.5°	1499.7	1517.3	1570.0	1605.1	1633.6
45°	1409.7	1429.4	1486.5	1530.4	1563.4
47.5°	1319.6	1346.0	1400.9	1460.2	1488.7
50°	1229.6	1256.0	1317.4	1383.3	1411.9
52.5°	1137.4	1163.7	1234.0	1302.1	1332.8
55°	1049.6	1075.9	1150.6	1225.2	1256.0
57.5°	957.3	985.9	1069.3	1146.2	1176.9
60°	867.3	895.9	985.9	1067.1	1100.1
62.5°	779.5	810.2	904.6	990.3	1023.2
65°	689.5	724.6	823.4	913.4	948.6
67.5°	601.6	641.2	744.4	838.8	876.1
70°	513.8	559.9	669.7	766.3	803.6
72.5°	428.2	478.7	595.0	691.7	711.4
75°	344.7	404.0	524.8	570.9	566.5
77.5°	265.7	331.6	445.7	454.5	467.7
80°	193.2	265.7	333.8	351.3	342.5
82.5°	127.4	199.8	239.3	230.6	228.4
85°	72.5	125.2	133.9	123.0	123.0
87.5°	30.7	50.5	43.9	32.9	30.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)