

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: P276682

Luminaire Tested: **24CZ2-75HE-S-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P276682  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-75HE-S-UNV-L92765-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

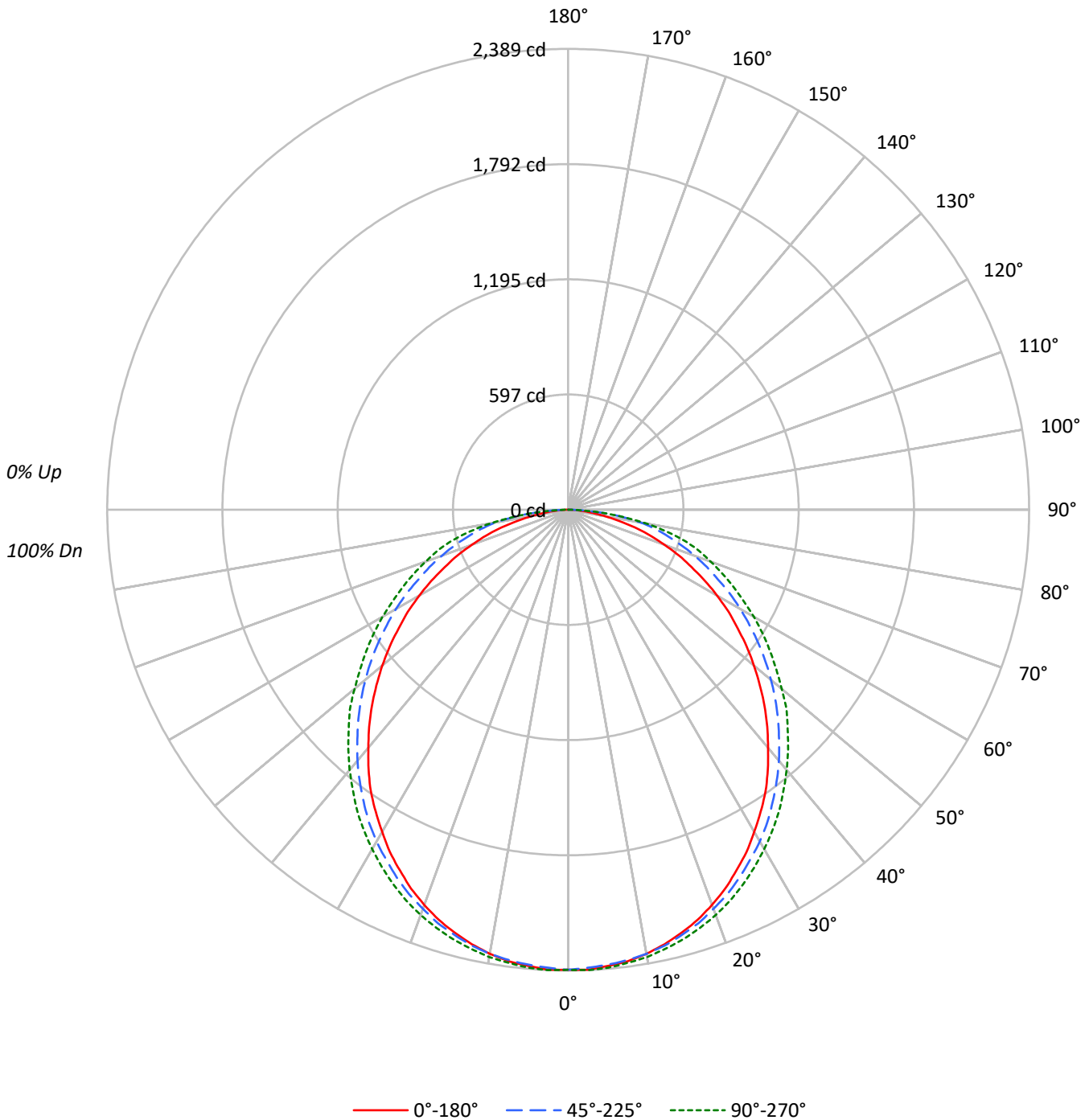
Lumens per Lamp: N/A  
Luminaire Lumens: 6789.0 lumens  
Efficiency: N/A  
Efficacy: 114.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 59.52  
Input Voltage (V): 120  
Input Current (Ain): 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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	3209	3209	3209
5°	3207	3198	3218
10°	3194	3194	3217
15°	3163	3178	3211
20°	3122	3152	3202
25°	3064	3121	3182
30°	2995	3086	3156
35°	2929	3036	3131
40°	2829	2985	3094
45°	2737	2926	3061
50°	2632	2871	3024
55°	2514	2818	2995
60°	2397	2774	2989
65°	2245	2726	3007
70°	2078	2740	3088
75°	1861	2792	3262
80°	1504	2958	3192
85°	1132	2597	2530



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	225.8	3.3
10°-20°	645.2	9.5
20°-30°	969.8	14.3
30°-40°	1155.2	17.0
40°-50°	1182.3	17.4
50°-60°	1064.4	15.7
60°-70°	835.9	12.3
70°-80°	542.5	8.0
80°-90°	167.8	2.5
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°	1840.8	27.1
0°-40°	2996.0	44.1
0°-60°	5242.8	77.2
0°-90°	6789.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6789.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2385	2385	2385	2385	2385	
5°	2374	2378	2368	2381	2383	226
15°	2271	2277	2282	2301	2305	640
25°	2064	2081	2102	2137	2144	951
35°	1783	1805	1848	1893	1906	1113
45°	1438	1473	1538	1596	1609	1109
55°	1072	1119	1201	1264	1277	961
65°	705	759	856	927	944	702
75°	358	427	537	610	628	379
85°	73	136	168	164	164	89
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2385.0	2385.0	2385.0	2385.0	2385.0
2.5°	2387.2	2387.2	2376.4	2387.2	2389.3
5°	2374.2	2378.5	2367.8	2380.7	2382.9
7.5°	2361.3	2361.3	2354.8	2367.8	2369.9
10°	2337.6	2339.7	2337.6	2352.7	2354.8
12.5°	2307.4	2311.7	2313.9	2328.9	2331.1
15°	2270.7	2277.2	2281.5	2300.9	2305.2
17.5°	2229.8	2236.2	2247.0	2268.6	2272.9
20°	2180.2	2188.8	2201.7	2229.8	2236.2
22.5°	2126.2	2134.9	2156.4	2182.3	2193.1
25°	2063.7	2081.0	2102.5	2137.0	2143.5
27.5°	2001.2	2016.3	2044.3	2081.0	2089.6
30°	1927.9	1951.6	1986.1	2022.7	2031.4
32.5°	1856.7	1880.4	1921.4	1960.2	1971.0
35°	1783.4	1804.9	1848.1	1893.3	1906.3
37.5°	1699.3	1727.3	1774.7	1820.0	1833.0
40°	1610.9	1645.4	1699.3	1746.7	1761.8
42.5°	1526.8	1563.4	1617.3	1669.1	1686.3
45°	1438.3	1472.8	1537.5	1595.8	1608.7
47.5°	1347.8	1386.6	1455.6	1513.8	1535.4
50°	1257.2	1298.2	1371.5	1431.9	1444.8
52.5°	1166.6	1209.8	1287.4	1352.1	1358.6
55°	1071.7	1119.2	1201.1	1263.7	1276.6
57.5°	985.5	1026.5	1114.9	1179.6	1194.7
60°	890.6	935.9	1030.8	1091.2	1110.6
62.5°	800.0	847.5	946.7	1007.1	1024.3
65°	705.2	759.1	856.1	927.3	944.5
67.5°	623.2	675.0	778.5	847.5	864.7
70°	528.3	586.5	696.5	767.7	784.9
72.5°	446.4	506.8	616.7	685.7	711.6
75°	358.0	427.0	537.0	610.3	627.5
77.5°	271.7	351.5	463.6	519.7	519.7
80°	194.1	278.2	381.7	407.6	411.9
82.5°	127.2	209.2	282.5	280.3	280.3
85°	73.3	135.9	168.2	163.9	163.9
87.5°	28.0	56.1	60.4	60.4	58.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)