

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: P276683

Luminaire Tested: **24CZ2-75HE-S-UNV-L92765-W2A1-U-5000K**

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: P276683  
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-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6926.1 lumens  
Efficiency: N/A  
Efficacy: 115.8 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

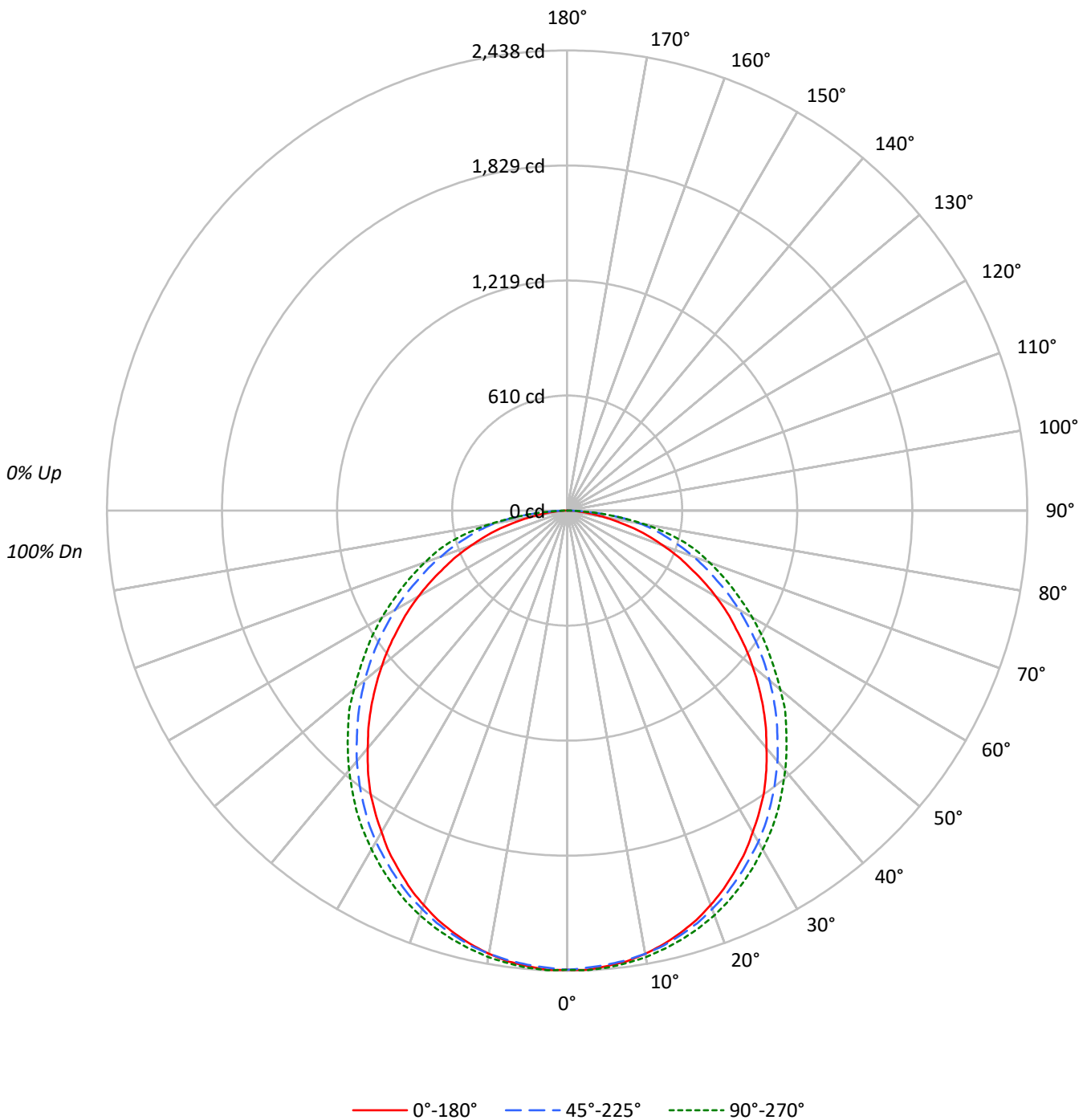
Input Watts (W): 59.799  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	3274	3274	3274
5°	3271	3263	3283
10°	3258	3258	3282
15°	3227	3242	3276
20°	3185	3216	3267
25°	3126	3184	3246
30°	3056	3148	3220
35°	2988	3097	3194
40°	2886	3045	3157
45°	2792	2985	3123
50°	2685	2929	3085
55°	2565	2875	3055
60°	2445	2830	3049
65°	2290	2781	3068
70°	2120	2795	3150
75°	1899	2848	3328
80°	1534	3017	3256
85°	1155	2649	2581



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	230.4	3.3
10°-20°	658.2	9.5
20°-30°	989.4	14.3
30°-40°	1178.6	17.0
40°-50°	1206.2	17.4
50°-60°	1085.9	15.7
60°-70°	852.8	12.3
70°-80°	553.5	8.0
80°-90°	171.2	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°	1878.0	27.1
0°-40°	3056.5	44.1
0°-60°	5348.7	77.2
0°-90°	6926.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6926.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2433	2433	2433	2433	2433	
5°	2422	2427	2416	2429	2431	230
15°	2317	2323	2328	2347	2352	653
25°	2105	2123	2145	2180	2187	970
35°	1819	1841	1885	1932	1945	1135
45°	1467	1503	1569	1628	1641	1131
55°	1093	1142	1225	1289	1302	980
65°	719	774	873	946	964	716
75°	365	436	548	623	640	386
85°	75	139	172	167	167	90
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2433.2	2433.2	2433.2	2433.2	2433.2
2.5°	2435.4	2435.4	2424.4	2435.4	2437.6
5°	2422.2	2426.6	2415.6	2428.8	2431.0
7.5°	2409.0	2409.0	2402.4	2415.6	2417.8
10°	2384.8	2387.0	2384.8	2400.2	2402.4
12.5°	2354.0	2358.4	2360.6	2376.0	2378.2
15°	2316.6	2323.2	2327.6	2347.4	2351.8
17.5°	2274.8	2281.4	2292.4	2314.4	2318.8
20°	2224.2	2233.0	2246.2	2274.8	2281.4
22.5°	2169.2	2178.0	2200.0	2226.4	2237.4
25°	2105.4	2123.0	2145.0	2180.2	2186.8
27.5°	2041.6	2057.0	2085.6	2123.0	2131.8
30°	1966.8	1991.0	2026.2	2063.6	2072.4
32.5°	1894.2	1918.4	1960.2	1999.8	2010.8
35°	1819.4	1841.4	1885.4	1931.6	1944.8
37.5°	1733.6	1762.2	1810.6	1856.8	1870.0
40°	1643.4	1678.6	1733.6	1782.0	1797.4
42.5°	1557.6	1595.0	1650.0	1702.8	1720.4
45°	1467.4	1502.6	1568.6	1628.0	1641.2
47.5°	1375.0	1414.6	1485.0	1544.4	1566.4
50°	1282.6	1324.4	1399.2	1460.8	1474.0
52.5°	1190.2	1234.2	1313.4	1379.4	1386.0
55°	1093.4	1141.8	1225.4	1289.2	1302.4
57.5°	1005.4	1047.2	1137.4	1203.4	1218.8
60°	908.6	954.8	1051.6	1113.2	1133.0
62.5°	816.2	864.6	965.8	1027.4	1045.0
65°	719.4	774.4	873.4	946.0	963.6
67.5°	635.8	688.6	794.2	864.6	882.2
70°	539.0	598.4	710.6	783.2	800.8
72.5°	455.4	517.0	629.2	699.6	726.0
75°	365.2	435.6	547.8	622.6	640.2
77.5°	277.2	358.6	473.0	530.2	530.2
80°	198.0	283.8	389.4	415.8	420.2
82.5°	129.8	213.4	288.2	286.0	286.0
85°	74.8	138.6	171.6	167.2	167.2
87.5°	28.6	57.2	61.6	61.6	59.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)