

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: P272194

Luminaire Tested: **24CZ2-75HE-S-UNV-L935-CD1-U**

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: P272194
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-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (392) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6727.0 lumens
Efficiency: N/A
Efficacy: 121.4 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

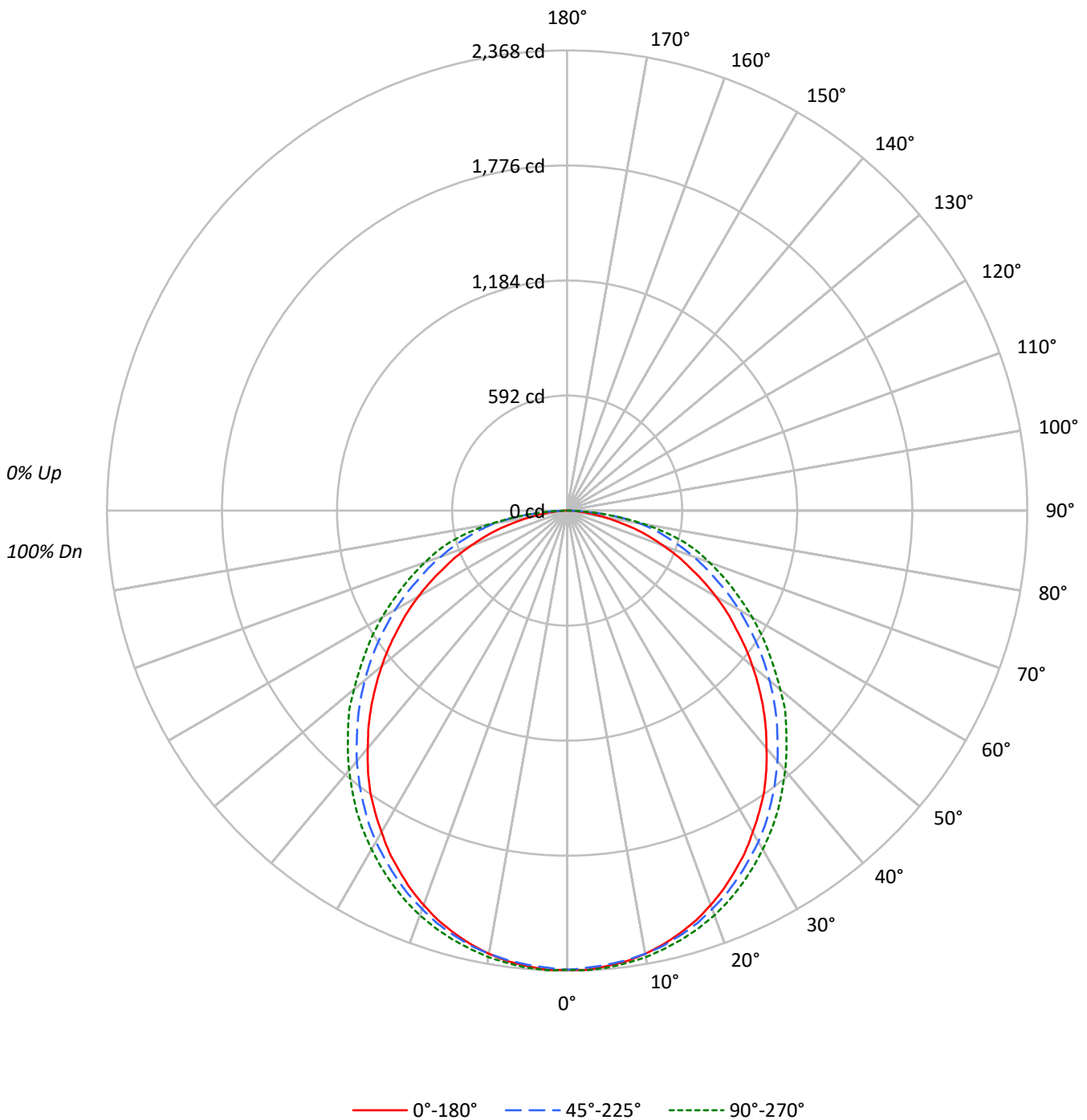
Input Watts (W): 55.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3180	3180	3180
5°	3177	3169	3189
10°	3164	3164	3188
15°	3134	3149	3182
20°	3093	3124	3173
25°	3036	3093	3153
30°	2968	3057	3127
35°	2903	3008	3103
40°	2803	2957	3066
45°	2712	2899	3033
50°	2608	2845	2997
55°	2491	2792	2967
60°	2375	2749	2961
65°	2224	2701	2980
70°	2059	2715	3060
75°	1844	2766	3232
80°	1490	2930	3162
85°	1121	2573	2507



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.7	3.3
10°-20°	639.3	9.5
20°-30°	961.0	14.3
30°-40°	1144.7	17.0
40°-50°	1171.5	17.4
50°-60°	1054.7	15.7
60°-70°	828.3	12.3
70°-80°	537.6	8.0
80°-90°	166.3	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°	1824.0	27.1
0°-40°	2968.6	44.1
0°-60°	5194.9	77.2
0°-90°	6727.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6727.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2363	2363	2363	2363	2363	
5°	2353	2357	2346	2359	2361	224
15°	2250	2256	2261	2280	2284	634
25°	2045	2062	2083	2118	2124	942
35°	1767	1788	1831	1876	1889	1102
45°	1425	1459	1524	1581	1594	1099
55°	1062	1109	1190	1252	1265	952
65°	699	752	848	919	936	696
75°	355	423	532	605	622	375
85°	73	135	167	162	162	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2363.2	2363.2	2363.2	2363.2	2363.2
2.5°	2365.4	2365.4	2354.7	2365.4	2367.5
5°	2352.6	2356.8	2346.1	2359.0	2361.1
7.5°	2339.7	2339.7	2333.3	2346.1	2348.3
10°	2316.2	2318.4	2316.2	2331.2	2333.3
12.5°	2286.3	2290.6	2292.7	2307.7	2309.8
15°	2250.0	2256.4	2260.7	2279.9	2284.2
17.5°	2209.4	2215.8	2226.5	2247.9	2252.1
20°	2160.2	2168.8	2181.6	2209.4	2215.8
22.5°	2106.8	2115.4	2136.7	2162.4	2173.1
25°	2044.9	2062.0	2083.3	2117.5	2123.9
27.5°	1982.9	1997.9	2025.6	2062.0	2070.5
30°	1910.2	1933.8	1967.9	2004.3	2012.8
32.5°	1839.7	1863.2	1903.8	1942.3	1953.0
35°	1767.1	1788.5	1831.2	1876.1	1888.9
37.5°	1683.8	1711.5	1758.5	1803.4	1816.2
40°	1596.1	1630.3	1683.8	1730.8	1745.7
42.5°	1512.8	1549.1	1602.6	1653.8	1670.9
45°	1425.2	1459.4	1523.5	1581.2	1594.0
47.5°	1335.5	1373.9	1442.3	1500.0	1521.4
50°	1245.7	1286.3	1359.0	1418.8	1431.6
52.5°	1156.0	1198.7	1275.6	1339.7	1346.1
55°	1062.0	1109.0	1190.2	1252.1	1265.0
57.5°	976.5	1017.1	1104.7	1168.8	1183.8
60°	882.5	927.3	1021.4	1081.2	1100.4
62.5°	792.7	839.7	938.0	997.9	1015.0
65°	698.7	752.1	848.3	918.8	935.9
67.5°	617.5	668.8	771.4	839.7	856.8
70°	523.5	581.2	690.2	760.7	777.8
72.5°	442.3	502.1	611.1	679.5	705.1
75°	354.7	423.1	532.0	604.7	621.8
77.5°	269.2	348.3	459.4	515.0	515.0
80°	192.3	275.6	378.2	403.8	408.1
82.5°	126.1	207.3	279.9	277.8	277.8
85°	72.6	134.6	166.7	162.4	162.4
87.5°	27.8	55.6	59.8	59.8	57.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)