

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: P272122

Luminaire Tested: **24CZ2-75HE-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: P272122  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-75HE-UNV-L935-CD1-U  
Description: 2'x4' TROFFER LED MODULE,RIBBED 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: 6402.0 lumens  
Efficiency: N/A  
Efficacy: 115.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

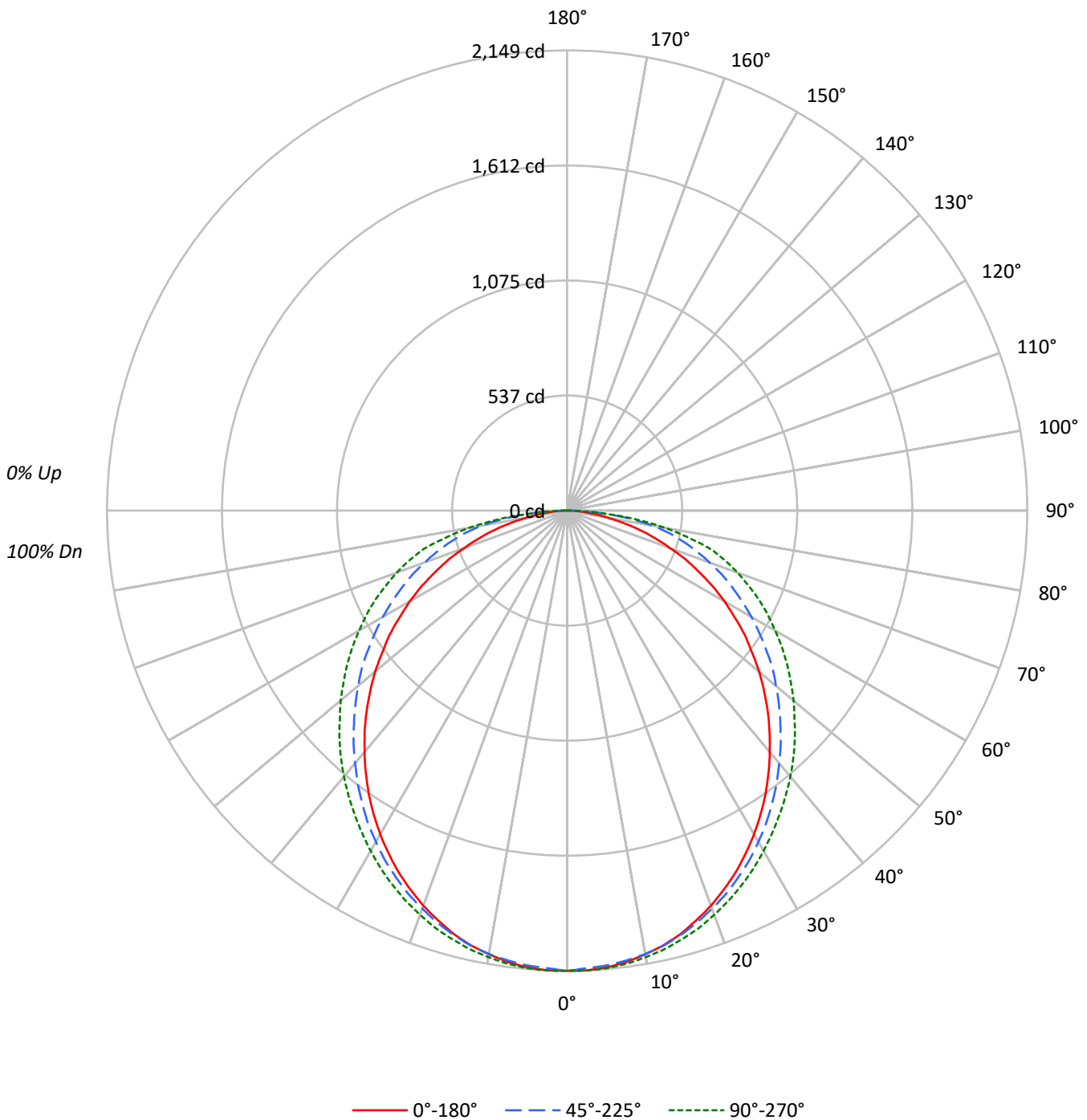
Input Watts (W): 55.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25

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

	0°	45°	90°
0°	2892	2892	2892
5°	2892	2880	2897
10°	2875	2872	2893
15°	2851	2857	2887
20°	2812	2833	2876
25°	2766	2807	2864
30°	2712	2775	2852
35°	2653	2741	2843
40°	2586	2706	2848
45°	2521	2679	2862
50°	2451	2665	2889
55°	2376	2662	2942
60°	2282	2673	3018
65°	2163	2714	3150
70°	2009	2782	3329
75°	1832	2921	3610
80°	1506	3146	3609
85°	1155	2902	3100



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.3	3.2
10°-20°	580.4	9.1
20°-30°	873.4	13.6
30°-40°	1046.6	16.3
40°-50°	1090.7	17.0
50°-60°	1014.8	15.9
60°-70°	835.8	13.1
70°-80°	569.2	8.9
80°-90°	187.9	2.9
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°	1657.0	25.9
0°-40°	2703.6	42.2
0°-60°	4809.1	75.1
0°-90°	6402.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6402.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2149	2149	2149	2149	2149	
5°	2141	2141	2132	2143	2145	203
15°	2047	2049	2051	2070	2072	577
25°	1863	1872	1891	1923	1929	858
35°	1615	1634	1669	1714	1731	1010
45°	1325	1352	1408	1478	1504	1022
55°	1013	1047	1135	1224	1254	903
65°	679	737	852	953	989	674
75°	352	432	562	662	694	372
85°	75	145	188	201	201	93
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2149.4	2149.4	2149.4	2149.4	2149.4
2.5°	2149.4	2149.4	2138.8	2149.4	2149.4
5°	2140.9	2140.9	2132.4	2143.0	2145.2
7.5°	2125.9	2128.1	2119.5	2132.4	2134.5
10°	2104.6	2106.7	2102.4	2115.3	2117.4
12.5°	2078.9	2081.1	2081.1	2096.0	2098.2
15°	2046.9	2049.0	2051.2	2070.4	2072.5
17.5°	2006.3	2012.7	2017.0	2040.5	2044.8
20°	1963.6	1970.0	1978.5	2004.2	2008.4
22.5°	1914.4	1923.0	1937.9	1965.7	1972.1
25°	1863.1	1871.7	1890.9	1923.0	1929.4
27.5°	1805.5	1818.3	1841.8	1876.0	1884.5
30°	1745.6	1758.4	1786.2	1822.5	1835.4
32.5°	1681.5	1698.6	1730.7	1771.3	1784.1
35°	1615.3	1634.5	1668.7	1713.6	1730.7
37.5°	1544.8	1566.1	1606.7	1655.9	1677.3
40°	1472.1	1497.8	1540.5	1598.2	1621.7
42.5°	1399.5	1423.0	1476.4	1538.4	1564.0
45°	1324.7	1352.5	1408.0	1478.5	1504.2
47.5°	1247.8	1275.6	1341.8	1416.6	1440.1
50°	1170.9	1198.6	1273.4	1352.5	1380.3
52.5°	1087.5	1123.9	1209.3	1288.4	1316.2
55°	1012.8	1046.9	1134.6	1224.3	1254.2
57.5°	927.3	967.9	1064.0	1158.1	1190.1
60°	848.2	891.0	993.5	1089.7	1121.7
62.5°	767.0	814.1	923.0	1021.3	1057.6
65°	679.4	737.1	852.5	952.9	989.3
67.5°	600.4	660.2	782.0	884.6	916.6
70°	510.7	583.3	707.2	809.8	846.1
72.5°	433.7	506.4	636.7	737.1	773.5
75°	352.5	431.6	561.9	662.4	694.4
77.5°	271.4	359.0	489.3	566.2	576.9
80°	194.4	286.3	406.0	450.8	465.8
82.5°	136.7	220.1	299.1	329.0	337.6
85°	74.8	145.3	188.0	200.8	200.8
87.5°	32.0	62.0	74.8	76.9	79.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)