

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: P272196

Luminaire Tested: **24CZ2-75HE-S-UNV-L950-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: P272196
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-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (392) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7214.0 lumens
Efficiency: N/A
Efficacy: 130.2 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

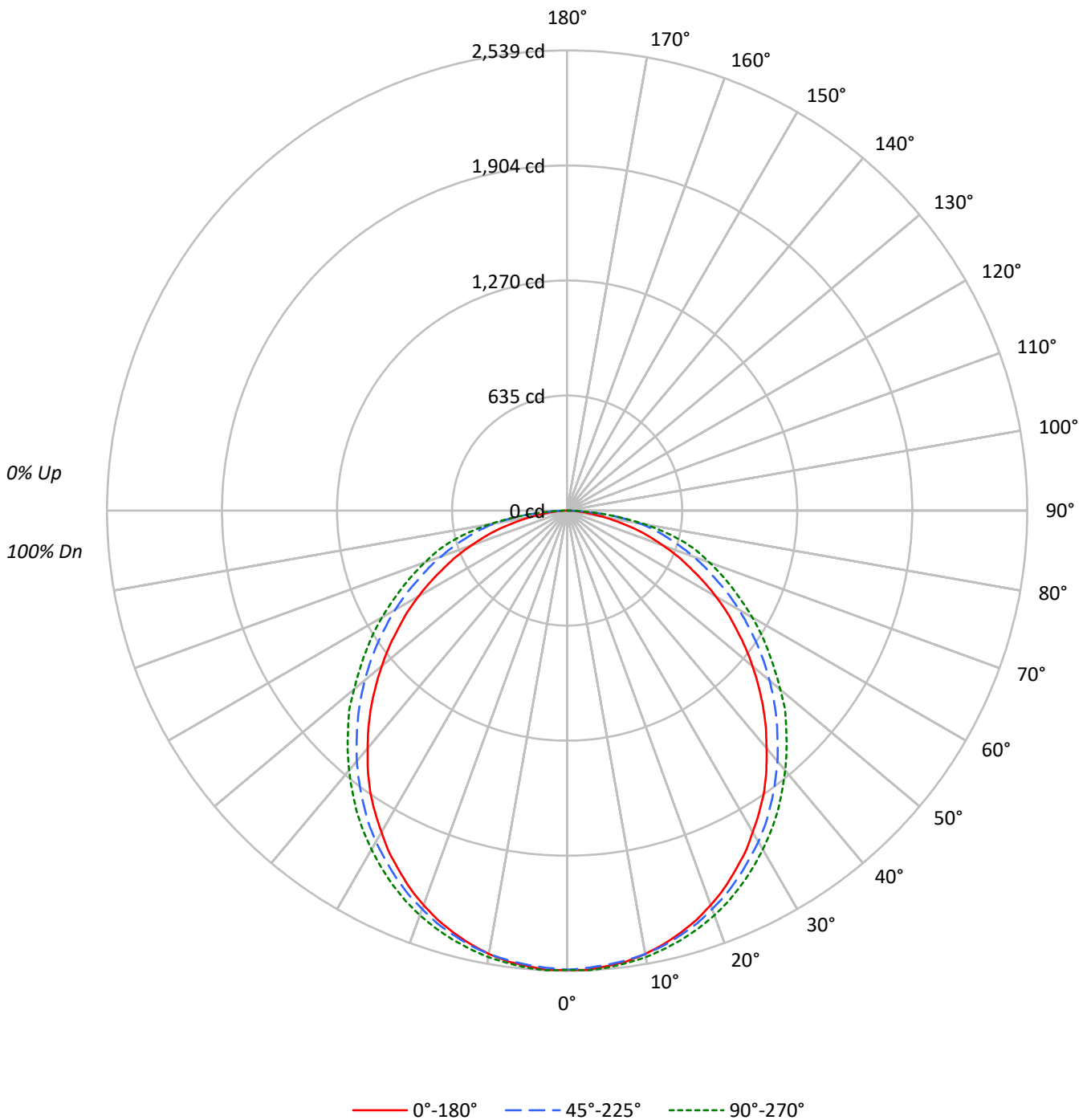
Input Watts (W): 55.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3410	3410	3410
5°	3408	3398	3420
10°	3394	3394	3419
15°	3361	3377	3412
20°	3317	3350	3402
25°	3256	3317	3381
30°	3183	3279	3354
35°	3113	3226	3327
40°	3006	3171	3288
45°	2908	3109	3253
50°	2796	3051	3214
55°	2671	2994	3182
60°	2547	2947	3176
65°	2386	2896	3195
70°	2209	2912	3281
75°	1978	2966	3466
80°	1598	3143	3391
85°	1203	2759	2688



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.9	3.3
10°-20°	685.6	9.5
20°-30°	1030.5	14.3
30°-40°	1227.5	17.0
40°-50°	1256.3	17.4
50°-60°	1131.1	15.7
60°-70°	888.2	12.3
70°-80°	576.5	8.0
80°-90°	178.3	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°	1956.0	27.1
0°-40°	3183.6	44.1
0°-60°	5571.0	77.2
0°-90°	7214.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7214.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2534	2534	2534	2534	2534	
5°	2523	2528	2516	2530	2532	240
15°	2413	2420	2424	2445	2450	680
25°	2193	2211	2234	2271	2278	1010
35°	1895	1918	1964	2012	2026	1182
45°	1528	1565	1634	1696	1709	1178
55°	1139	1189	1276	1343	1356	1021
65°	749	807	910	985	1004	746
75°	380	454	571	648	667	403
85°	78	144	179	174	174	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2534.3	2534.3	2534.3	2534.3	2534.3
2.5°	2536.6	2536.6	2525.2	2536.6	2538.9
5°	2522.9	2527.5	2516.0	2529.7	2532.0
7.5°	2509.1	2509.1	2502.2	2516.0	2518.3
10°	2483.9	2486.2	2483.9	2500.0	2502.2
12.5°	2451.8	2456.4	2458.7	2474.7	2477.0
15°	2412.9	2419.8	2424.3	2445.0	2449.5
17.5°	2369.3	2376.2	2387.7	2410.6	2415.2
20°	2316.6	2325.8	2339.6	2369.3	2376.2
22.5°	2259.4	2268.5	2291.4	2318.9	2330.4
25°	2192.9	2211.2	2234.1	2270.8	2277.7
27.5°	2126.5	2142.5	2172.3	2211.2	2220.4
30°	2048.5	2073.7	2110.4	2149.4	2158.5
32.5°	1972.9	1998.1	2041.7	2082.9	2094.4
35°	1895.0	1917.9	1963.8	2011.9	2025.6
37.5°	1805.6	1835.4	1885.8	1934.0	1947.7
40°	1711.7	1748.4	1805.6	1856.1	1872.1
42.5°	1622.3	1661.3	1718.6	1773.6	1791.9
45°	1528.4	1565.0	1633.8	1695.7	1709.4
47.5°	1432.1	1473.4	1546.7	1608.6	1631.5
50°	1335.9	1379.4	1457.4	1521.5	1535.3
52.5°	1239.7	1285.5	1368.0	1436.7	1443.6
55°	1138.8	1189.3	1276.3	1342.8	1356.5
57.5°	1047.2	1090.7	1184.7	1253.4	1269.5
60°	946.4	994.5	1095.3	1159.5	1180.1
62.5°	850.1	900.5	1005.9	1070.1	1088.4
65°	749.3	806.6	909.7	985.3	1003.6
67.5°	662.2	717.2	827.2	900.5	918.9
70°	561.4	623.3	740.1	815.8	834.1
72.5°	474.3	538.5	655.3	728.7	756.2
75°	380.4	453.7	570.6	648.5	666.8
77.5°	288.7	373.5	492.7	552.2	552.2
80°	206.2	295.6	405.6	433.1	437.7
82.5°	135.2	222.3	300.2	297.9	297.9
85°	77.9	144.4	178.7	174.1	174.1
87.5°	29.8	59.6	64.2	64.2	61.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)