

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: P272168

Luminaire Tested: **24CZ2-55HE-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: P272168
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: 24CZ2-55HE-S-UNV-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (224) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

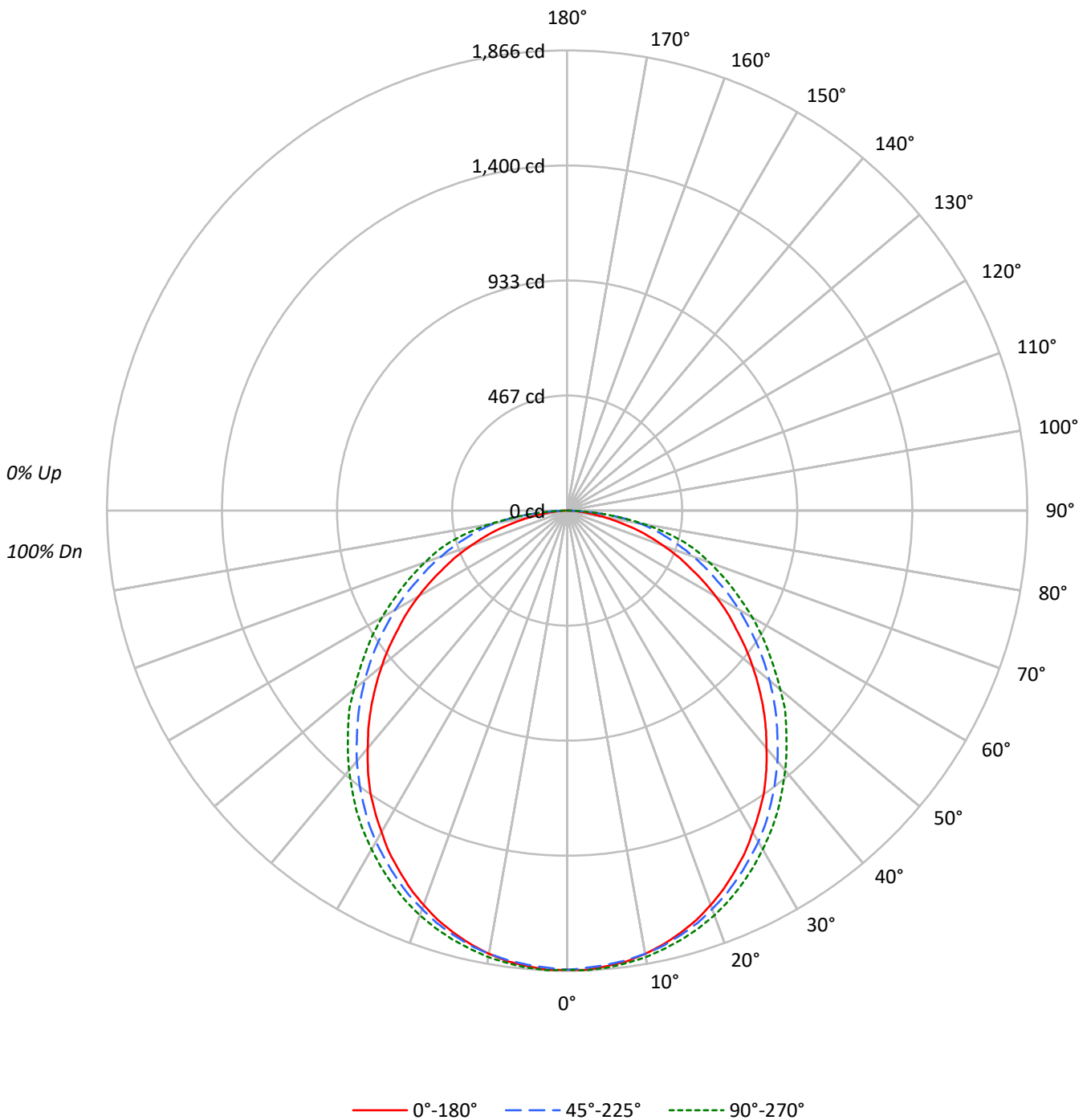
Lumens per Lamp: N/A
Luminaire Lumens: 5301.0 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.5
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°	2506	2506	2506
5°	2504	2497	2513
10°	2494	2494	2512
15°	2470	2482	2507
20°	2437	2462	2500
25°	2392	2437	2485
30°	2339	2409	2464
35°	2287	2370	2445
40°	2209	2330	2416
45°	2137	2284	2390
50°	2055	2242	2361
55°	1963	2200	2338
60°	1871	2166	2334
65°	1753	2128	2348
70°	1623	2140	2411
75°	1453	2180	2547
80°	1174	2309	2492
85°	883	2027	1976



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.3	3.3
10°-20°	503.8	9.5
20°-30°	757.3	14.3
30°-40°	902.0	17.0
40°-50°	923.2	17.4
50°-60°	831.1	15.7
60°-70°	652.7	12.3
70°-80°	423.6	8.0
80°-90°	131.0	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°	1437.3	27.1
0°-40°	2339.4	44.1
0°-60°	4093.7	77.2
0°-90°	5301.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5301.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1862	1862	1862	1862	1862	
5°	1854	1857	1849	1859	1861	176
15°	1773	1778	1782	1797	1800	500
25°	1611	1625	1642	1669	1674	742
35°	1392	1409	1443	1478	1488	869
45°	1123	1150	1200	1246	1256	866
55°	837	874	938	987	997	750
65°	551	593	668	724	738	548
75°	280	333	419	476	490	296
85°	57	106	131	128	128	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1862.3	1862.3	1862.3	1862.3	1862.3
2.5°	1864.0	1864.0	1855.5	1864.0	1865.6
5°	1853.9	1857.2	1848.8	1858.9	1860.6
7.5°	1843.8	1843.8	1838.7	1848.8	1850.5
10°	1825.2	1826.9	1825.2	1837.0	1838.7
12.5°	1801.7	1805.0	1806.7	1818.5	1820.2
15°	1773.0	1778.1	1781.5	1796.6	1800.0
17.5°	1741.0	1746.1	1754.5	1771.4	1774.7
20°	1702.3	1709.1	1719.2	1741.0	1746.1
22.5°	1660.2	1667.0	1683.8	1704.0	1712.4
25°	1611.4	1624.9	1641.7	1668.6	1673.7
27.5°	1562.6	1574.3	1596.2	1624.9	1631.6
30°	1505.3	1523.8	1550.8	1579.4	1586.1
32.5°	1449.7	1468.3	1500.3	1530.6	1539.0
35°	1392.5	1409.3	1443.0	1478.4	1488.5
37.5°	1326.8	1348.7	1385.8	1421.1	1431.2
40°	1257.8	1284.7	1326.8	1363.9	1375.7
42.5°	1192.1	1220.8	1262.8	1303.3	1316.7
45°	1123.1	1150.0	1200.5	1246.0	1256.1
47.5°	1052.4	1082.7	1136.6	1182.0	1198.9
50°	981.7	1013.6	1070.9	1118.0	1128.1
52.5°	910.9	944.6	1005.2	1055.7	1060.8
55°	836.8	873.9	937.9	986.7	996.8
57.5°	769.5	801.5	870.5	921.0	932.8
60°	695.4	730.8	804.9	852.0	867.2
62.5°	624.7	661.7	739.2	786.3	799.8
65°	550.6	592.7	668.5	724.0	737.5
67.5°	486.6	527.0	607.8	661.7	675.2
70°	412.5	458.0	543.9	599.4	612.9
72.5°	348.5	395.7	481.6	535.4	555.7
75°	279.5	333.4	419.3	476.5	490.0
77.5°	212.2	274.5	362.0	405.8	405.8
80°	151.5	217.2	298.0	318.2	321.6
82.5°	99.3	163.3	220.6	218.9	218.9
85°	57.2	106.1	131.3	128.0	128.0
87.5°	21.9	43.8	47.1	47.1	45.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)