

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: P272096

Luminaire Tested: **24CZ2-55HE-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: P272096
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: 24CZ2-55HE-UNV-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED 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: 5045.0 lumens
Efficiency: N/A
Efficacy: 116.0 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

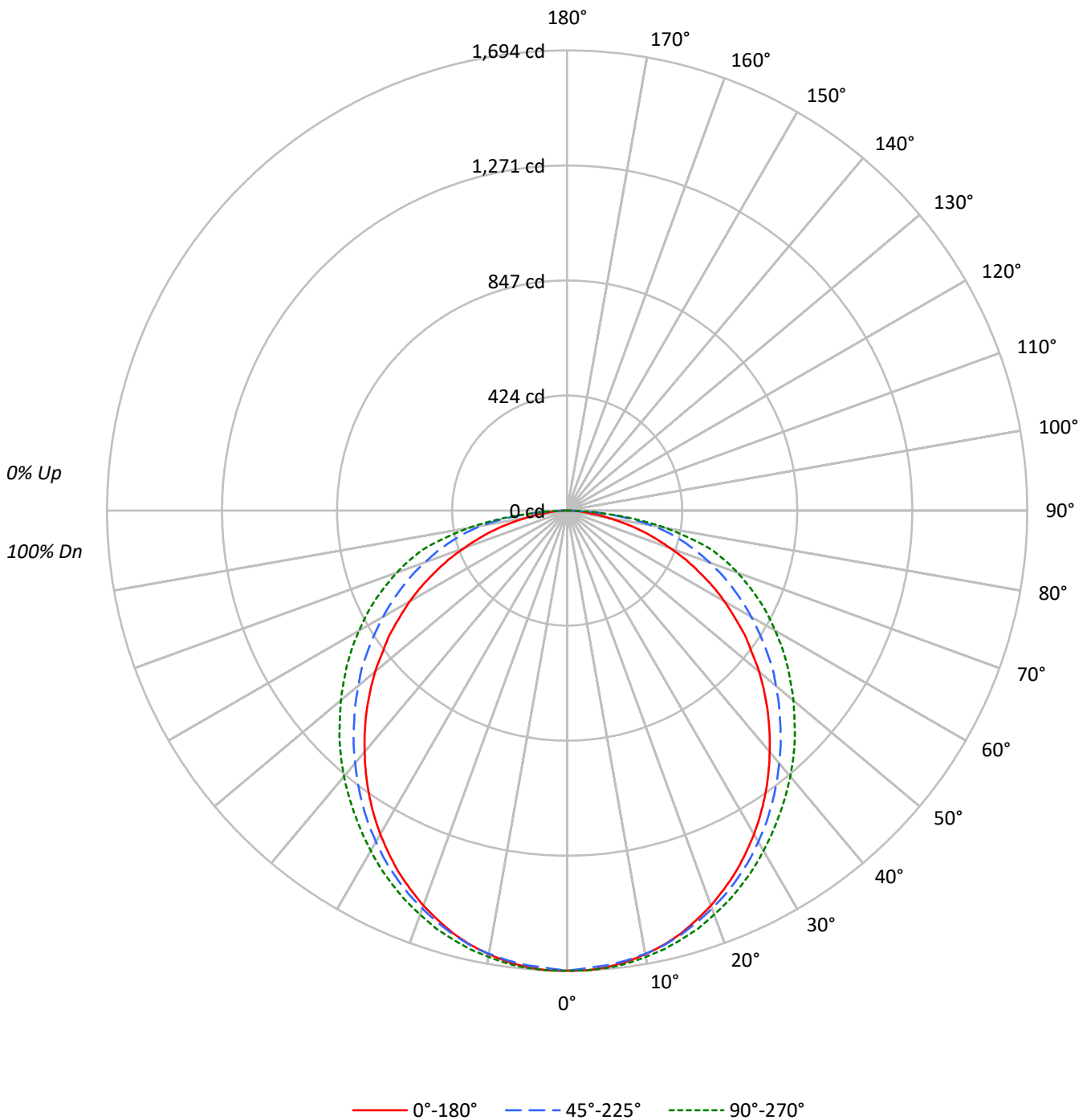
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2279	2279	2279
5°	2279	2270	2283
10°	2266	2264	2280
15°	2247	2252	2275
20°	2216	2232	2266
25°	2180	2212	2257
30°	2137	2187	2247
35°	2091	2160	2240
40°	2038	2132	2245
45°	1986	2111	2256
50°	1931	2101	2277
55°	1872	2097	2319
60°	1799	2107	2379
65°	1705	2139	2482
70°	1583	2192	2623
75°	1444	2302	2845
80°	1187	2479	2844
85°	909	2288	2444



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.2	3.2
10°-20°	457.3	9.1
20°-30°	688.2	13.6
30°-40°	824.8	16.3
40°-50°	859.5	17.0
50°-60°	799.7	15.9
60°-70°	658.6	13.1
70°-80°	448.6	8.9
80°-90°	148.1	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°	1305.8	25.9
0°-40°	2130.6	42.2
0°-60°	3789.7	75.1
0°-90°	5045.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5045.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1694	1694	1694	1694	1694	
5°	1687	1687	1680	1689	1690	160
15°	1613	1615	1616	1632	1633	454
25°	1468	1475	1490	1515	1520	676
35°	1273	1288	1315	1350	1364	796
45°	1044	1066	1110	1165	1185	805
55°	798	825	894	965	988	711
65°	535	581	672	751	780	531
75°	278	340	443	522	547	293
85°	59	114	148	158	158	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1693.8	1693.8	1693.8	1693.8	1693.8
2.5°	1693.8	1693.8	1685.4	1693.8	1693.8
5°	1687.1	1687.1	1680.4	1688.8	1690.5
7.5°	1675.3	1677.0	1670.3	1680.4	1682.1
10°	1658.5	1660.2	1656.8	1666.9	1668.6
12.5°	1638.3	1640.0	1640.0	1651.7	1653.4
15°	1613.0	1614.7	1616.4	1631.5	1633.2
17.5°	1581.0	1586.1	1589.4	1608.0	1611.3
20°	1547.4	1552.4	1559.1	1579.3	1582.7
22.5°	1508.6	1515.4	1527.2	1549.0	1554.1
25°	1468.2	1475.0	1490.1	1515.4	1520.4
27.5°	1422.8	1432.9	1451.4	1478.3	1485.1
30°	1375.6	1385.7	1407.6	1436.2	1446.3
32.5°	1325.1	1338.6	1363.8	1395.8	1405.9
35°	1272.9	1288.1	1315.0	1350.4	1363.8
37.5°	1217.3	1234.2	1266.2	1304.9	1321.7
40°	1160.1	1180.3	1214.0	1259.4	1278.0
42.5°	1102.8	1121.4	1163.5	1212.3	1232.5
45°	1043.9	1065.8	1109.6	1165.1	1185.4
47.5°	983.3	1005.2	1057.4	1116.3	1134.8
50°	922.7	944.6	1003.5	1065.8	1087.7
52.5°	857.0	885.6	953.0	1015.3	1037.2
55°	798.1	825.0	894.1	964.8	988.4
57.5°	730.7	762.7	838.5	912.6	937.8
60°	668.4	702.1	782.9	858.7	884.0
62.5°	604.5	641.5	727.4	804.8	833.5
65°	535.4	580.9	671.8	750.9	779.6
67.5°	473.1	520.3	616.2	697.1	722.3
70°	402.4	459.7	557.3	638.1	666.8
72.5°	341.8	399.0	501.8	580.9	609.5
75°	277.8	340.1	442.8	522.0	547.2
77.5°	213.8	282.9	385.6	446.2	454.6
80°	153.2	225.6	319.9	355.3	367.1
82.5°	107.8	173.4	235.7	259.3	266.0
85°	58.9	114.5	148.2	158.3	158.3
87.5°	25.3	48.8	58.9	60.6	62.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)