

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: P272095

Luminaire Tested: **24CZ2-55HE-UNV-L940-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: P272095
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-L940-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (224) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4753.0 lumens
Efficiency: N/A
Efficacy: 109.3 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

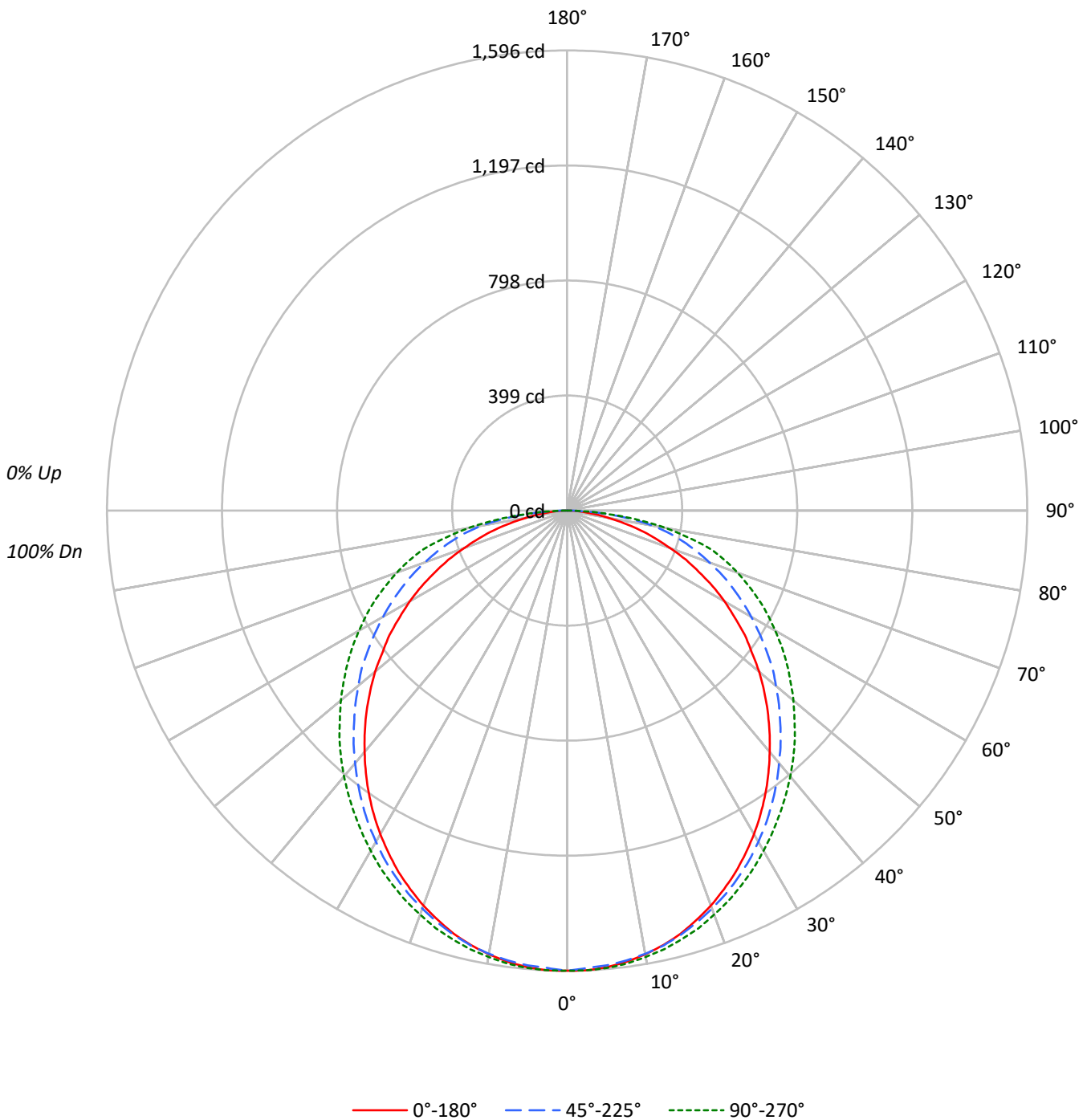
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2147	2147	2147
5°	2147	2138	2151
10°	2135	2133	2148
15°	2117	2121	2143
20°	2087	2103	2135
25°	2053	2084	2127
30°	2014	2060	2117
35°	1970	2035	2110
40°	1920	2009	2115
45°	1871	1989	2125
50°	1820	1979	2145
55°	1764	1976	2184
60°	1695	1985	2241
65°	1606	2015	2338
70°	1491	2066	2471
75°	1360	2169	2680
80°	1119	2335	2679
85°	857	2155	2302



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.9	3.2
10°-20°	430.9	9.1
20°-30°	648.4	13.6
30°-40°	777.0	16.3
40°-50°	809.8	17.0
50°-60°	753.4	15.9
60°-70°	620.5	13.1
70°-80°	422.6	8.9
80°-90°	139.5	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°	1230.2	25.9
0°-40°	2007.2	42.2
0°-60°	3570.4	75.1
0°-90°	4753.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4753.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1596	1596	1596	1596	1596	
5°	1590	1590	1583	1591	1593	151
15°	1520	1521	1523	1537	1539	428
25°	1383	1390	1404	1428	1432	637
35°	1199	1214	1239	1272	1285	750
45°	984	1004	1045	1098	1117	759
55°	752	777	842	909	931	670
65°	504	547	633	708	734	501
75°	262	320	417	492	516	276
85°	56	108	140	149	149	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1595.8	1595.8	1595.8	1595.8	1595.8
2.5°	1595.8	1595.8	1587.9	1595.8	1595.8
5°	1589.5	1589.5	1583.1	1591.0	1592.6
7.5°	1578.4	1579.9	1573.6	1583.1	1584.7
10°	1562.5	1564.1	1560.9	1570.4	1572.0
12.5°	1543.5	1545.0	1545.0	1556.1	1557.7
15°	1519.7	1521.2	1522.8	1537.1	1538.7
17.5°	1489.5	1494.3	1497.5	1514.9	1518.1
20°	1457.8	1462.6	1468.9	1487.9	1491.1
22.5°	1421.3	1427.7	1438.8	1459.4	1464.1
25°	1383.2	1389.6	1403.9	1427.7	1432.4
27.5°	1340.4	1349.9	1367.4	1392.8	1399.1
30°	1296.0	1305.5	1326.1	1353.1	1362.6
32.5°	1248.4	1261.1	1284.9	1315.0	1324.5
35°	1199.2	1213.5	1238.9	1272.2	1284.9
37.5°	1146.9	1162.7	1192.9	1229.4	1245.2
40°	1093.0	1112.0	1143.7	1186.5	1204.0
42.5°	1039.0	1056.5	1096.1	1142.1	1161.2
45°	983.5	1004.1	1045.4	1097.7	1116.7
47.5°	926.4	947.0	996.2	1051.7	1069.2
50°	869.3	889.9	945.4	1004.1	1024.7
52.5°	807.4	834.4	897.8	956.5	977.2
55°	751.9	777.3	842.3	908.9	931.1
57.5°	688.4	718.6	790.0	859.8	883.6
60°	629.8	661.5	737.6	809.0	832.8
62.5°	569.5	604.4	685.3	758.2	785.2
65°	504.4	547.3	632.9	707.5	734.5
67.5°	445.7	490.2	580.6	656.7	680.5
70°	379.1	433.1	525.1	601.2	628.2
72.5°	322.0	375.9	472.7	547.3	574.2
75°	261.7	320.4	417.2	491.7	515.5
77.5°	201.5	266.5	363.3	420.4	428.3
80°	144.4	212.6	301.4	334.7	345.8
82.5°	101.5	163.4	222.1	244.3	250.6
85°	55.5	107.9	139.6	149.1	149.1
87.5°	23.8	46.0	55.5	57.1	58.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)