

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: P272166

Luminaire Tested: **24CZ2-55HE-S-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: P272166
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-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (224) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4943.0 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

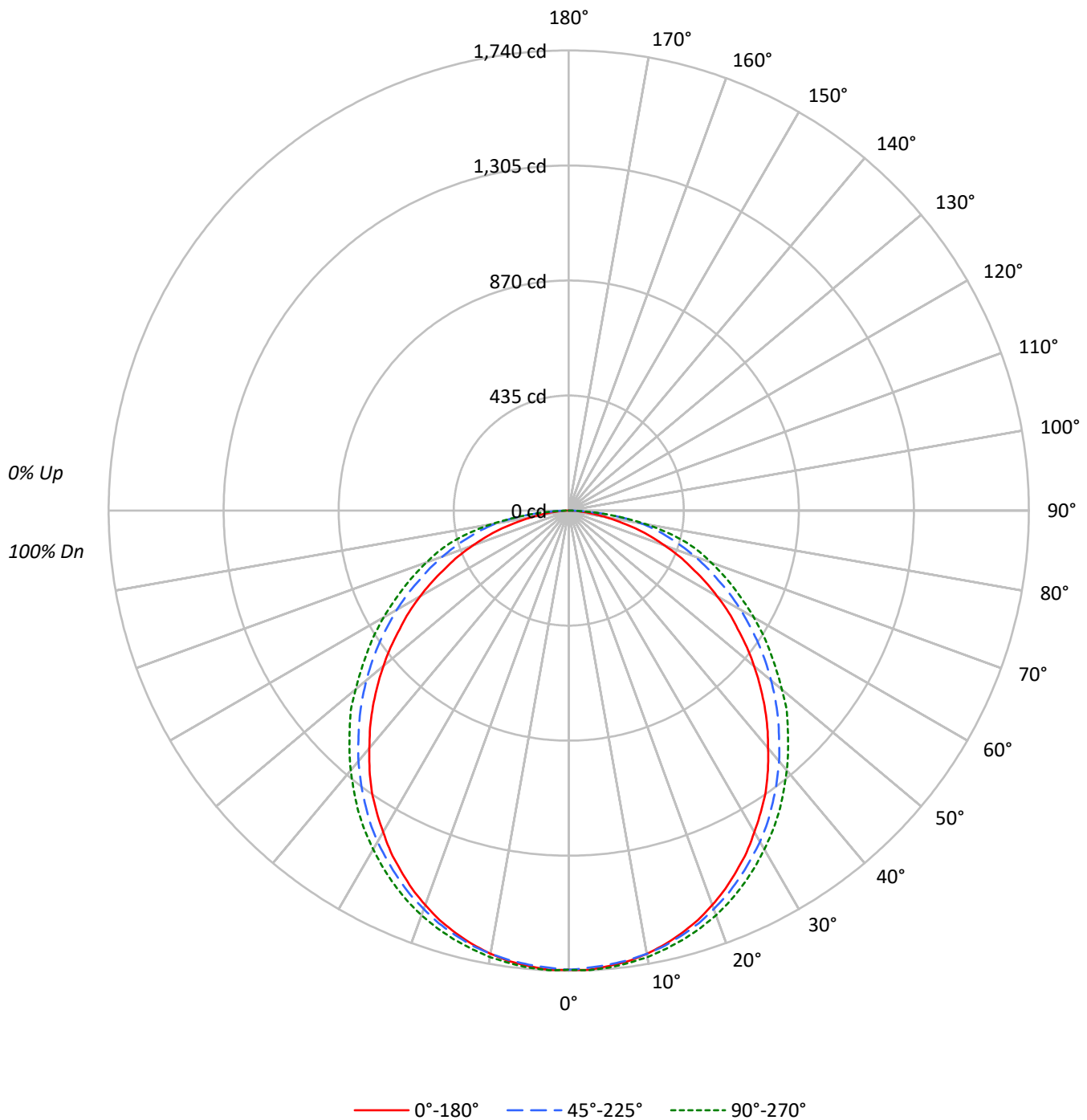
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	108	103	99	95	106	101	97	93		97	93	90			93	90	88			89
2	98	90	83	77	96	88	81	76		84	79	74			81	76	72			78
3	89	79	70	64	87	77	69	63		74	67	62			71	66	61			69
4	82	70	61	54	80	68	60	54		66	59	53			63	57	52			61
5	75	62	53	46	73	61	53	46		59	51	46			57	50	45			55
6	70	56	47	40	68	55	47	40		53	46	40			52	45	40			50
7	64	51	42	36	63	50	42	36		48	41	35			47	40	35			46
8	60	46	38	32	58	46	37	32		44	37	32			43	36	31			42
9	56	43	34	29	55	42	34	29		41	34	28			40	33	28			39
10	53	39	31	26	51	39	31	26		38	31	26			37	30	26			36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2336	2336	2336
5°	2335	2328	2343
10°	2325	2325	2342
15°	2303	2314	2338
20°	2273	2295	2331
25°	2231	2273	2317
30°	2181	2247	2298
35°	2133	2210	2280
40°	2060	2173	2253
45°	1993	2130	2229
50°	1916	2090	2202
55°	1830	2051	2180
60°	1745	2020	2176
65°	1635	1984	2189
70°	1513	1995	2248
75°	1355	2032	2375
80°	1095	2153	2324
85°	824	1891	1842



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.4	3.3
10°-20°	469.7	9.5
20°-30°	706.1	14.3
30°-40°	841.1	17.0
40°-50°	860.8	17.4
50°-60°	775.0	15.7
60°-70°	608.6	12.3
70°-80°	395.0	8.0
80°-90°	122.2	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°	1340.3	27.1
0°-40°	2181.4	44.1
0°-60°	3817.2	77.2
0°-90°	4943.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4943.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1736	1736	1736	1736	1736	
5°	1729	1732	1724	1733	1735	164
15°	1653	1658	1661	1675	1678	466
25°	1503	1515	1531	1556	1561	692
35°	1298	1314	1346	1378	1388	810
45°	1047	1072	1120	1162	1171	807
55°	780	815	874	920	930	700
65°	513	553	623	675	688	511
75°	261	311	391	444	457	276
85°	53	99	122	119	119	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1736.5	1736.5	1736.5	1736.5	1736.5
2.5°	1738.1	1738.1	1730.2	1738.1	1739.6
5°	1728.7	1731.8	1723.9	1733.4	1734.9
7.5°	1719.2	1719.2	1714.5	1723.9	1725.5
10°	1702.0	1703.5	1702.0	1713.0	1714.5
12.5°	1680.0	1683.1	1684.7	1695.7	1697.3
15°	1653.3	1658.0	1661.1	1675.3	1678.4
17.5°	1623.5	1628.2	1636.0	1651.7	1654.9
20°	1587.4	1593.6	1603.1	1623.5	1628.2
22.5°	1548.1	1554.4	1570.1	1588.9	1596.8
25°	1502.6	1515.1	1530.8	1555.9	1560.7
27.5°	1457.0	1468.0	1488.4	1515.1	1521.4
30°	1403.7	1420.9	1446.0	1472.7	1479.0
32.5°	1351.8	1369.1	1398.9	1427.2	1435.1
35°	1298.5	1314.2	1345.6	1378.5	1388.0
37.5°	1237.2	1257.6	1292.2	1325.1	1334.6
40°	1172.8	1198.0	1237.2	1271.8	1282.8
42.5°	1111.6	1138.3	1177.6	1215.2	1227.8
45°	1047.2	1072.4	1119.5	1161.9	1171.3
47.5°	981.3	1009.6	1059.8	1102.2	1117.9
50°	915.4	945.2	998.6	1042.5	1052.0
52.5°	849.4	880.8	937.3	984.4	989.2
55°	780.3	814.9	874.5	920.1	929.5
57.5°	717.5	747.4	811.7	858.8	869.8
60°	648.4	681.4	750.5	794.5	808.6
62.5°	582.5	617.0	689.3	733.2	745.8
65°	513.4	552.7	623.3	675.1	687.7
67.5°	453.8	491.4	566.8	617.0	629.6
70°	384.7	427.1	507.1	558.9	571.5
72.5°	325.0	369.0	449.0	499.3	518.1
75°	260.6	310.9	390.9	444.3	456.9
77.5°	197.8	255.9	337.6	378.4	378.4
80°	141.3	202.5	277.9	296.7	299.9
82.5°	92.6	152.3	205.7	204.1	204.1
85°	53.4	98.9	122.5	119.3	119.3
87.5°	20.4	40.8	44.0	44.0	42.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)