

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: P295053

Luminaire Tested: **24CZ2-55HE-HRP-UNV-L940-CD1-U**

Issue Date: 12/2/2019

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: P295053
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-20)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55HE-HRP-UNV-L940-CD1-U
Description: 2'x4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
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: 3692.4 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

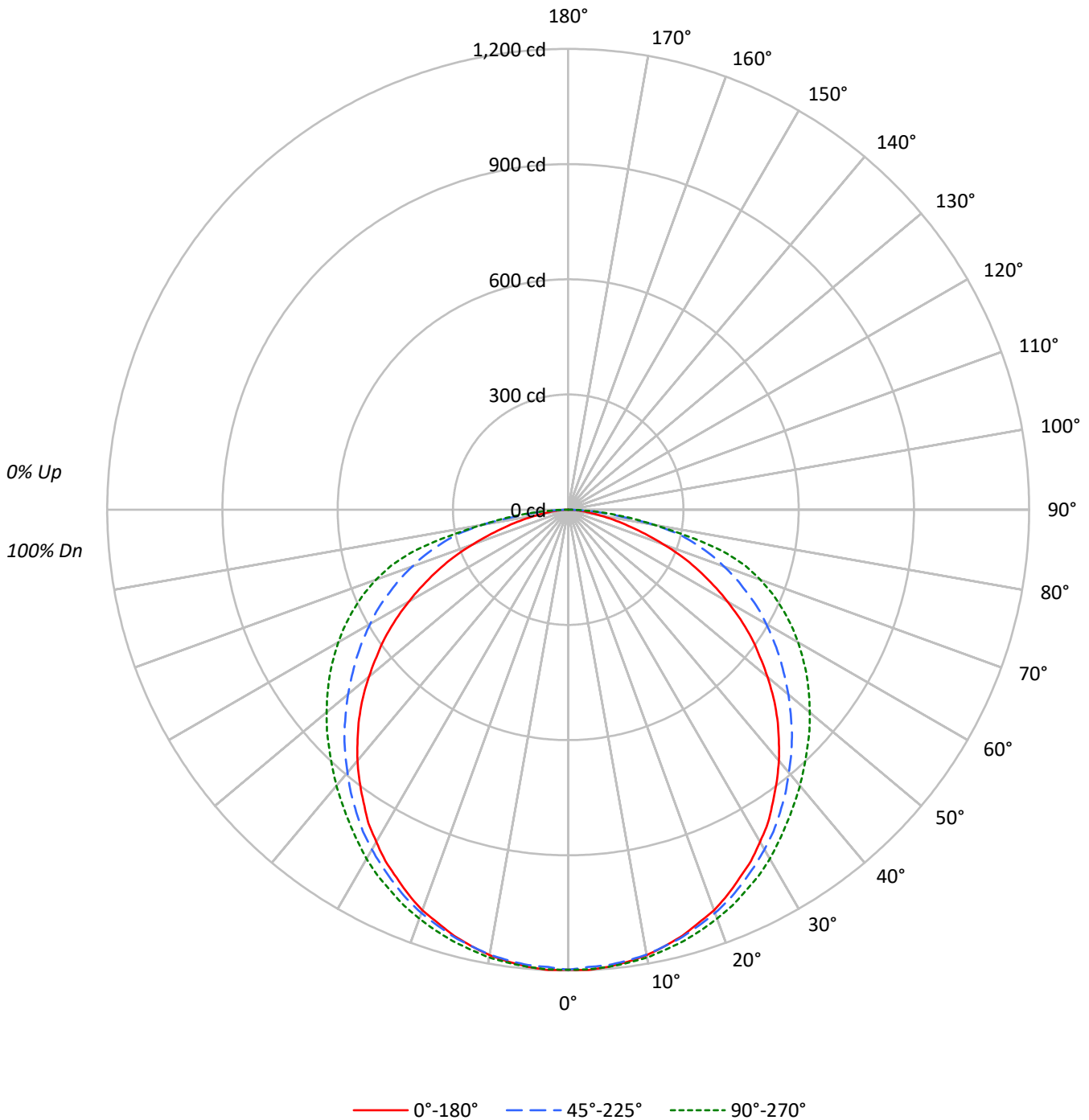
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90		92	90	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	59		68	63	58	56
4	81	68	59	52	79	67	59	52	65	57	51		62	56	50		60	54	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	38		50	43	38		49	42	38	36
7	63	50	41	34	62	49	40	34	47	39	34		46	39	34		44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30		42	35	30		41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	24		35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1612	1612	1612
5°	1614	1608	1614
10°	1609	1607	1618
15°	1600	1604	1619
20°	1589	1600	1622
25°	1570	1593	1625
30°	1551	1588	1631
35°	1526	1579	1633
40°	1499	1569	1648
45°	1465	1568	1674
50°	1417	1566	1718
55°	1367	1577	1780
60°	1290	1601	1859
65°	1191	1639	1964
70°	1040	1697	2092
75°	844	1784	2162
80°	623	1749	1749
85°	477	1289	1456



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.5	3.1
10°-20°	325.9	8.8
20°-30°	496.1	13.4
30°-40°	602.4	16.3
40°-50°	636.5	17.2
50°-60°	600.6	16.3
60°-70°	499.4	13.5
70°-80°	328.5	8.9
80°-90°	89.5	2.4
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°	935.5	25.3
0°-40°	1538.0	41.7
0°-60°	2775.0	75.2
0°-90°	3692.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3692.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1198	1198	1198	1198	1198	
5°	1195	1195	1190	1195	1195	113
15°	1148	1150	1152	1162	1162	324
25°	1057	1064	1073	1091	1094	488
35°	929	940	962	986	994	582
45°	770	785	824	864	880	593
55°	583	608	672	736	759	519
65°	374	417	515	590	617	370
75°	162	236	343	406	416	175
85°	31	68	84	93	94	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1198.0	1198.0	1198.0	1198.0	1198.0
2.5°	1199.6	1198.0	1191.8	1198.0	1198.0
5°	1194.9	1194.9	1190.3	1194.9	1194.9
7.5°	1187.2	1187.2	1184.1	1190.3	1190.3
10°	1177.9	1177.9	1176.4	1184.1	1184.1
12.5°	1164.0	1165.5	1164.0	1173.3	1173.3
15°	1148.5	1150.1	1151.6	1162.5	1162.5
17.5°	1128.4	1131.5	1134.6	1147.0	1148.5
20°	1109.9	1111.4	1117.6	1131.5	1133.1
22.5°	1085.2	1089.8	1097.5	1111.4	1116.1
25°	1057.3	1063.5	1072.8	1091.3	1094.4
27.5°	1031.1	1035.7	1048.1	1068.2	1074.3
30°	998.6	1006.3	1021.8	1041.9	1049.6
32.5°	967.7	975.4	994.0	1015.6	1021.8
35°	929.0	939.9	961.5	986.2	994.0
37.5°	891.9	902.8	929.0	956.9	966.1
40°	853.3	865.7	893.5	925.9	938.3
42.5°	811.6	828.6	859.5	895.0	908.9
45°	769.8	785.3	823.9	864.1	879.6
47.5°	725.0	743.5	785.3	833.2	851.7
50°	677.1	700.3	748.2	800.7	820.8
52.5°	629.1	655.4	709.5	768.3	789.9
55°	582.8	607.5	672.4	735.8	759.0
57.5°	531.8	562.7	633.8	701.8	725.0
60°	479.2	513.2	595.1	666.2	691.0
62.5°	426.6	465.3	558.0	629.1	655.4
65°	374.1	417.4	514.8	590.5	616.8
67.5°	323.1	371.0	474.6	550.3	576.6
70°	264.3	324.6	431.3	505.5	531.8
72.5°	210.2	279.8	389.5	459.1	482.3
75°	162.3	236.5	343.2	406.5	415.8
77.5°	119.0	193.2	295.3	316.9	318.4
80°	80.4	154.6	225.7	222.6	225.7
82.5°	52.6	115.9	142.2	159.2	160.8
85°	30.9	68.0	83.5	92.7	94.3
87.5°	15.5	23.2	29.4	30.9	34.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)