

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: P272094

Luminaire Tested: **24CZ2-55HE-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: P272094  
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-L935-CD1-U  
Description: 2'x4' TROFFER LED MODULE,RIBBED 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: 4705.0 lumens  
Efficiency: N/A  
Efficacy: 108.2 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

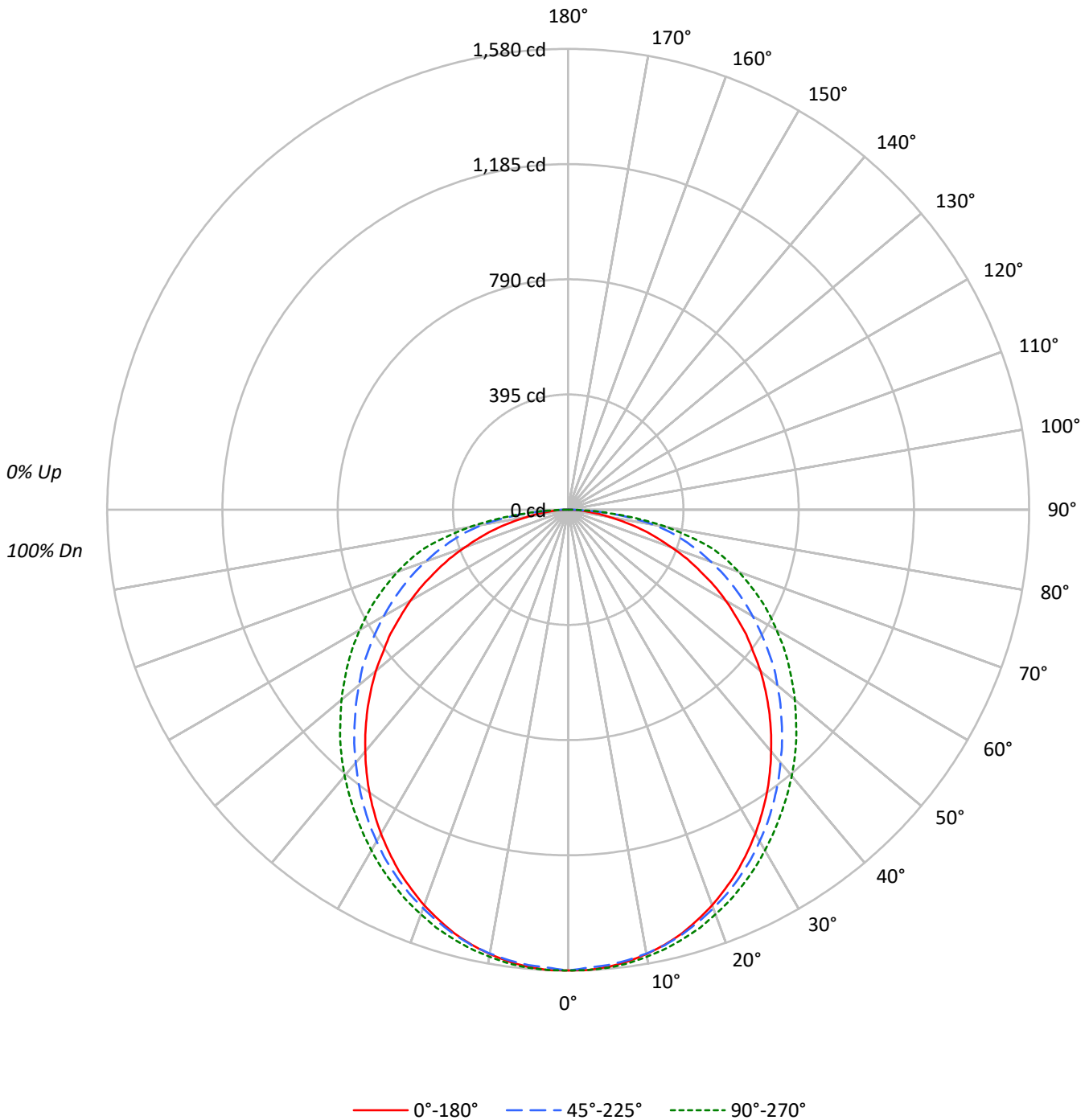
Input Watts (W): 43.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2125	2125	2125
5°	2125	2117	2129
10°	2113	2111	2126
15°	2095	2100	2122
20°	2066	2082	2113
25°	2033	2063	2105
30°	1993	2039	2096
35°	1950	2014	2089
40°	1900	1989	2093
45°	1853	1969	2104
50°	1801	1959	2123
55°	1746	1956	2162
60°	1678	1965	2218
65°	1590	1995	2315
70°	1476	2045	2446
75°	1347	2147	2653
80°	1107	2312	2652
85°	849	2133	2279



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	149.4	3.2
10°-20°	426.5	9.1
20°-30°	641.9	13.6
30°-40°	769.2	16.3
40°-50°	801.6	17.0
50°-60°	745.8	15.9
60°-70°	614.2	13.1
70°-80°	418.3	8.9
80°-90°	138.1	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°	1217.8	25.9
0°-40°	1987.0	42.2
0°-60°	3534.3	75.1
0°-90°	4705.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4705.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1580	1580	1580	1580	1580	
5°	1573	1573	1567	1575	1576	149
15°	1504	1506	1508	1522	1523	424
25°	1369	1376	1390	1413	1418	630
35°	1187	1201	1226	1259	1272	742
45°	974	994	1035	1087	1106	751
55°	744	769	834	900	922	663
65°	499	542	626	700	727	496
75°	259	317	413	487	510	273
85°	55	107	138	148	148	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1579.7	1579.7	1579.7	1579.7	1579.7
2.5°	1579.7	1579.7	1571.8	1579.7	1579.7
5°	1573.4	1573.4	1567.1	1575.0	1576.5
7.5°	1562.4	1564.0	1557.7	1567.1	1568.7
10°	1546.7	1548.3	1545.1	1554.6	1556.1
12.5°	1527.9	1529.4	1529.4	1540.4	1542.0
15°	1504.3	1505.9	1507.5	1521.6	1523.2
17.5°	1474.5	1479.2	1482.3	1499.6	1502.7
20°	1443.1	1447.8	1454.1	1472.9	1476.0
22.5°	1407.0	1413.2	1424.2	1444.6	1449.4
25°	1369.3	1375.6	1389.7	1413.2	1417.9
27.5°	1326.9	1336.3	1353.6	1378.7	1385.0
30°	1282.9	1292.3	1312.7	1339.4	1348.9
32.5°	1235.8	1248.4	1271.9	1301.8	1311.2
35°	1187.1	1201.3	1226.4	1259.4	1271.9
37.5°	1135.3	1151.0	1180.8	1217.0	1232.7
40°	1081.9	1100.8	1132.2	1174.6	1191.8
42.5°	1028.5	1045.8	1085.1	1130.6	1149.4
45°	973.6	994.0	1034.8	1086.6	1105.5
47.5°	917.0	937.4	986.1	1041.1	1058.4
50°	860.5	880.9	935.9	994.0	1014.4
52.5°	799.3	826.0	888.8	946.9	967.3
55°	744.3	769.4	833.8	899.8	921.7
57.5°	681.5	711.3	782.0	851.1	874.6
60°	623.4	654.8	730.2	800.8	824.4
62.5°	563.7	598.3	678.4	750.6	777.3
65°	499.3	541.7	626.5	700.3	727.0
67.5°	441.2	485.2	574.7	650.1	673.6
70°	375.3	428.7	519.8	595.1	621.8
72.5°	318.8	372.2	467.9	541.7	568.4
75°	259.1	317.2	413.0	486.8	510.3
77.5°	199.4	263.8	359.6	416.1	424.0
80°	142.9	210.4	298.4	331.3	342.3
82.5°	100.5	161.7	219.8	241.8	248.1
85°	55.0	106.8	138.2	147.6	147.6
87.5°	23.6	45.5	55.0	56.5	58.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)