

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: P272100

Luminaire Tested: **24CZ2-55-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: P272100  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-15)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-55-UNV-L950-CD1-U  
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI  
Light Source: (112) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

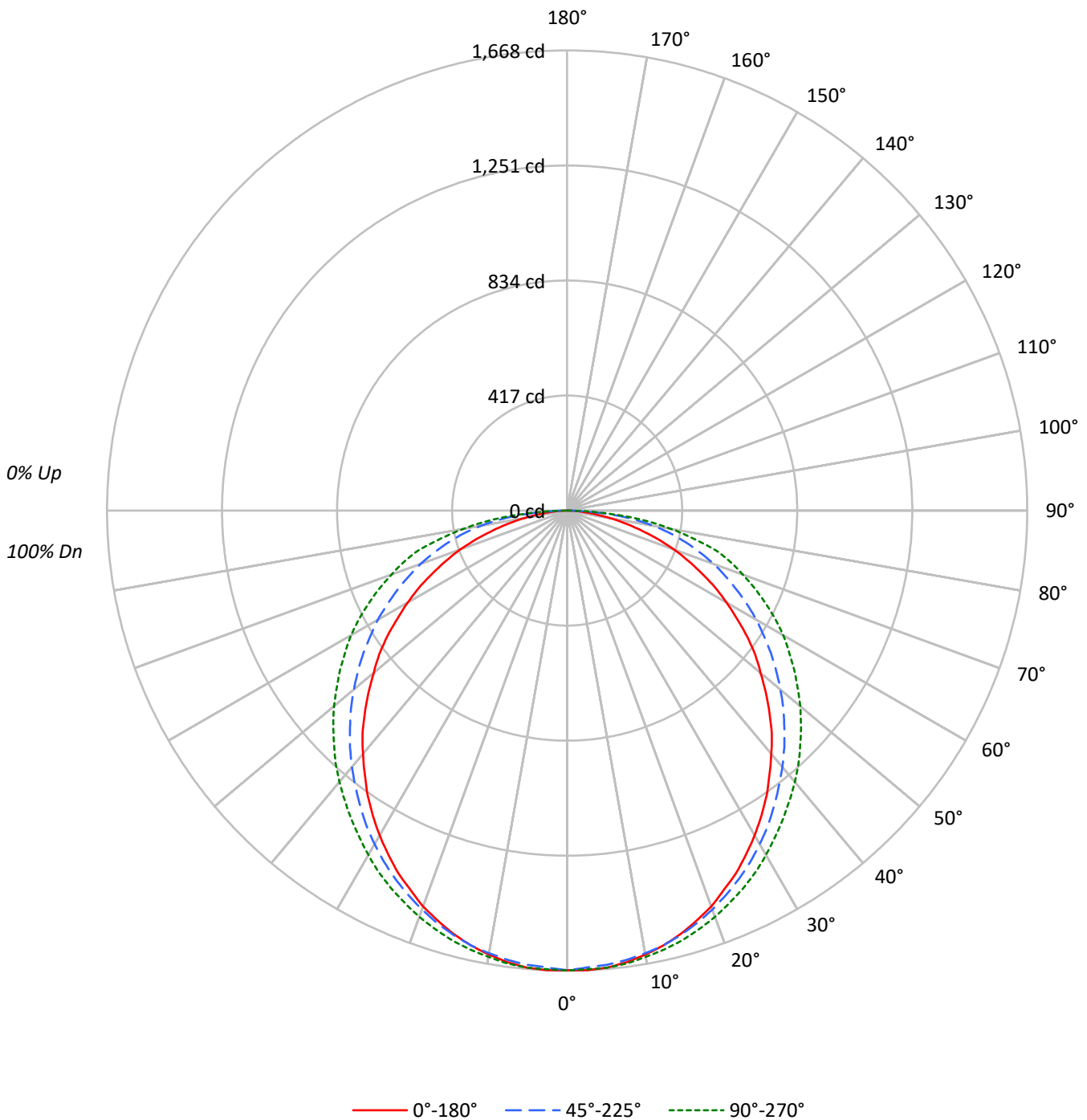
Lumens per Lamp: N/A  
Luminaire Lumens: 5052.0 lumens  
Efficiency: N/A  
Efficacy: 100.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 50.5  
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	92	89	92	89	87	88	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	36
7	64	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	37	31	57	45	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	25	35	29	24	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2242	2242	2242
5°	2246	2232	2246
10°	2233	2226	2244
15°	2213	2218	2246
20°	2186	2203	2244
25°	2152	2187	2242
30°	2112	2169	2240
35°	2070	2147	2241
40°	2023	2131	2255
45°	1974	2118	2274
50°	1916	2112	2309
55°	1868	2115	2355
60°	1795	2133	2436
65°	1713	2156	2524
70°	1622	2222	2664
75°	1446	2318	2910
80°	1234	2455	2974
85°	880	2433	2847



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.7	3.1
10°-20°	450.9	8.9
20°-30°	681.0	13.5
30°-40°	820.7	16.2
40°-50°	861.6	17.1
50°-60°	806.1	16.0
60°-70°	665.7	13.2
70°-80°	453.6	9.0
80°-90°	154.7	3.1
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°	1289.5	25.5
0°-40°	2110.2	41.8
0°-60°	3778.0	74.8
0°-90°	5052.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5052.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1666	1666	1666	1666	1666	
5°	1663	1661	1653	1663	1663	158
15°	1589	1591	1592	1609	1612	448
25°	1450	1457	1473	1502	1510	667
35°	1260	1274	1307	1351	1364	788
45°	1038	1059	1113	1173	1195	800
55°	796	828	902	976	1004	711
65°	538	583	677	763	793	534
75°	278	342	446	530	560	297
85°	57	112	158	178	184	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1666.1	1666.1	1666.1	1666.1	1666.1
2.5°	1667.8	1666.1	1657.7	1666.1	1664.4
5°	1662.8	1661.1	1652.7	1662.8	1662.8
7.5°	1651.0	1651.0	1642.6	1654.4	1656.0
10°	1634.3	1634.3	1629.2	1642.6	1642.6
12.5°	1614.1	1614.1	1614.1	1627.6	1629.2
15°	1589.0	1590.7	1592.4	1609.1	1612.5
17.5°	1558.8	1562.2	1567.2	1587.3	1590.7
20°	1527.0	1530.3	1538.7	1562.2	1567.2
22.5°	1486.8	1495.1	1506.9	1533.7	1538.7
25°	1449.9	1456.6	1473.3	1501.8	1510.2
27.5°	1404.6	1414.7	1436.5	1466.6	1478.4
30°	1359.4	1369.4	1396.2	1431.4	1441.5
32.5°	1310.8	1325.8	1354.3	1391.2	1402.9
35°	1260.5	1273.9	1307.4	1351.0	1364.4
37.5°	1205.2	1223.6	1260.5	1307.4	1324.2
40°	1151.5	1171.6	1213.5	1263.8	1283.9
42.5°	1097.9	1118.0	1164.9	1221.9	1242.0
45°	1037.5	1059.3	1113.0	1173.3	1195.1
47.5°	977.2	1004.0	1062.7	1126.4	1149.8
50°	915.2	945.4	1009.0	1076.1	1102.9
52.5°	859.9	888.4	955.4	1027.5	1052.6
55°	796.2	828.0	901.8	975.5	1004.0
57.5°	730.8	766.0	844.8	925.2	953.7
60°	667.1	705.7	792.8	873.3	905.1
62.5°	605.1	643.6	734.2	818.0	849.8
65°	538.0	583.3	677.2	762.7	792.8
67.5°	474.4	523.0	621.9	705.7	735.8
70°	412.3	459.3	564.9	647.0	677.2
72.5°	345.3	398.9	504.5	590.0	621.9
75°	278.2	341.9	445.9	529.7	559.8
77.5°	216.2	281.6	385.5	454.2	469.3
80°	159.2	226.3	316.8	365.4	383.8
82.5°	102.2	169.3	241.4	276.6	291.7
85°	57.0	112.3	157.6	177.7	184.4
87.5°	23.5	48.6	63.7	72.1	72.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)