

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: P272169

Luminaire Tested: **24CZ2-55-S-UNV-L930-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: P272169
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: 24CZ2-55-S-UNV-L930-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (112) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4830.0 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

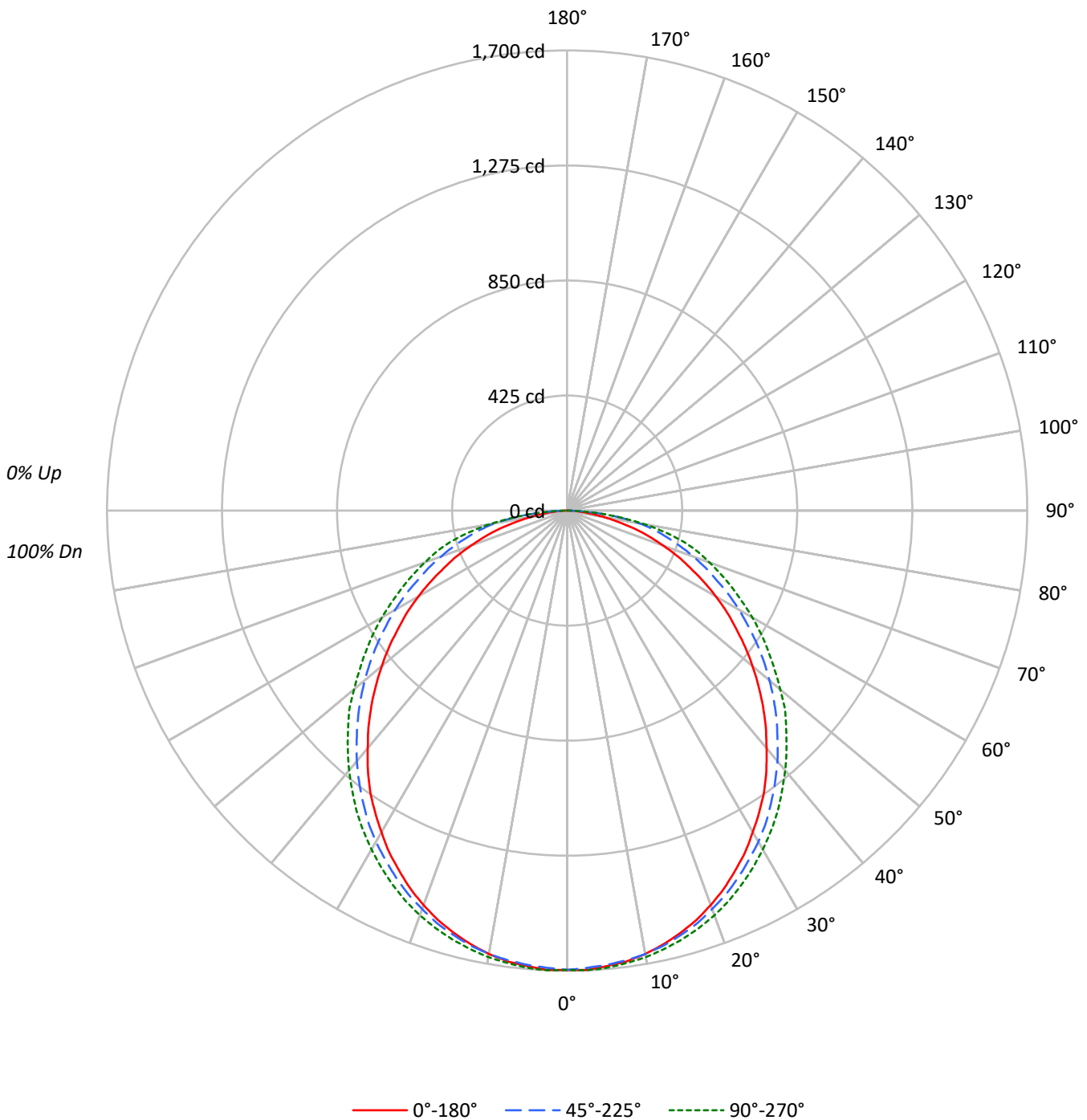
Input Watts (W): 50.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P272169

CATALOG NUMBER: 24CZ2-55-S-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P272169

CATALOG NUMBER: 24CZ2-55-S-UNV-L930-CD1-U

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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2283	2283	2283
5°	2281	2275	2290
10°	2272	2272	2289
15°	2250	2261	2284
20°	2221	2243	2278
25°	2180	2221	2264
30°	2131	2195	2245
35°	2084	2160	2228
40°	2013	2123	2201
45°	1947	2081	2178
50°	1872	2042	2152
55°	1789	2004	2130
60°	1705	1973	2126
65°	1597	1939	2139
70°	1479	1949	2197
75°	1324	1986	2321
80°	1070	2104	2270
85°	806	1848	1800



TEST NUMBER: P272169

CATALOG NUMBER: 24CZ2-55-S-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.6	3.3
10°-20°	459.0	9.5
20°-30°	690.0	14.3
30°-40°	821.9	17.0
40°-50°	841.2	17.4
50°-60°	757.3	15.7
60°-70°	594.7	12.3
70°-80°	386.0	8.0
80°-90°	119.4	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°	1309.6	27.1
0°-40°	2131.5	44.1
0°-60°	3729.9	77.2
0°-90°	4830.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4830.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1697	1697	1697	1697	1697	
5°	1689	1692	1684	1694	1695	160
15°	1616	1620	1623	1637	1640	456
25°	1468	1480	1496	1520	1525	676
35°	1269	1284	1315	1347	1356	792
45°	1023	1048	1094	1135	1144	789
55°	762	796	854	899	908	684
65°	502	540	609	660	672	499
75°	255	304	382	434	446	270
85°	52	97	120	117	117	63
90°	0	0	0	0	0	



TEST NUMBER: P272169

CATALOG NUMBER: 24CZ2-55-S-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1696.8	1696.8	1696.8	1696.8	1696.8
2.5°	1698.3	1698.3	1690.7	1698.3	1699.9
5°	1689.1	1692.2	1684.5	1693.7	1695.3
7.5°	1679.9	1679.9	1675.3	1684.5	1686.1
10°	1663.1	1664.6	1663.1	1673.8	1675.3
12.5°	1641.6	1644.6	1646.2	1656.9	1658.5
15°	1615.5	1620.1	1623.2	1637.0	1640.0
17.5°	1586.3	1591.0	1598.6	1614.0	1617.0
20°	1551.1	1557.2	1566.4	1586.3	1591.0
22.5°	1512.7	1518.8	1534.2	1552.6	1560.3
25°	1468.2	1480.5	1495.8	1520.4	1525.0
27.5°	1423.7	1434.5	1454.4	1480.5	1486.6
30°	1371.6	1388.4	1413.0	1439.1	1445.2
32.5°	1320.9	1337.8	1367.0	1394.6	1402.2
35°	1268.8	1284.1	1314.8	1347.0	1356.2
37.5°	1208.9	1228.9	1262.6	1294.9	1304.1
40°	1146.0	1170.6	1208.9	1242.7	1253.4
42.5°	1086.2	1112.3	1150.6	1187.5	1199.7
45°	1023.3	1047.8	1093.9	1135.3	1144.5
47.5°	958.9	986.5	1035.6	1077.0	1092.3
50°	894.4	923.6	975.7	1018.7	1027.9
52.5°	830.0	860.7	915.9	961.9	966.5
55°	762.5	796.2	854.5	899.0	908.2
57.5°	701.1	730.3	793.2	839.2	849.9
60°	633.6	665.8	733.3	776.3	790.1
62.5°	569.2	602.9	673.5	716.5	728.7
65°	501.7	540.0	609.1	659.7	672.0
67.5°	443.4	480.2	553.8	602.9	615.2
70°	375.9	417.3	495.5	546.2	558.4
72.5°	317.6	360.5	438.8	487.9	506.3
75°	254.7	303.8	382.0	434.2	446.4
77.5°	193.3	250.1	329.9	369.7	369.7
80°	138.1	197.9	271.6	290.0	293.0
82.5°	90.5	148.8	201.0	199.4	199.4
85°	52.2	96.7	119.7	116.6	116.6
87.5°	19.9	39.9	43.0	43.0	41.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)