

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: P274830

Luminaire Tested: **24CZ2-60-RDP-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: P274830
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-60-RDP-UNV-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (112) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

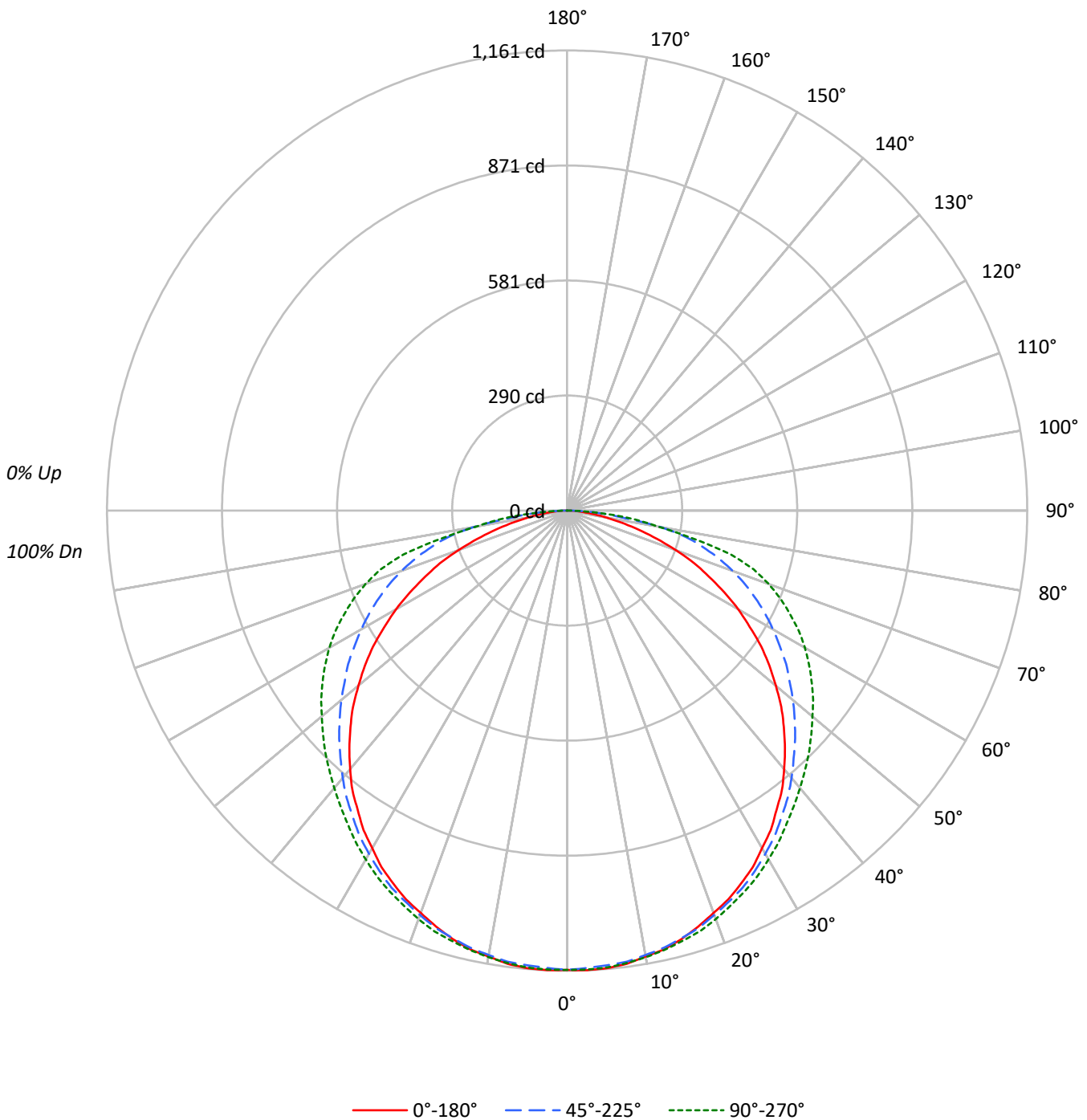
Lumens per Lamp: N/A
Luminaire Lumens: 3685.0 lumens
Efficiency: N/A
Efficacy: 66.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 55.6
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	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1559	1559	1559
5°	1565	1555	1563
10°	1561	1556	1563
15°	1558	1556	1566
20°	1547	1555	1570
25°	1541	1558	1574
30°	1528	1553	1579
35°	1513	1549	1585
40°	1496	1547	1605
45°	1471	1548	1642
50°	1439	1557	1691
55°	1402	1582	1767
60°	1343	1613	1864
65°	1257	1670	1979
70°	1143	1747	2128
75°	969	1843	2223
80°	765	1855	1798
85°	565	1411	1581



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.9	3.0
10°-20°	316.4	8.6
20°-30°	483.8	13.1
30°-40°	591.4	16.0
40°-50°	630.3	17.1
50°-60°	602.7	16.4
60°-70°	510.6	13.9
70°-80°	343.1	9.3
80°-90°	96.8	2.6
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°	910.1	24.7
0°-40°	1501.5	40.7
0°-60°	2734.5	74.2
0°-90°	3685.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3685.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1159	1159	1159	1159	1159	
5°	1159	1157	1152	1157	1157	110
15°	1119	1119	1117	1126	1124	315
25°	1038	1042	1049	1058	1060	479
35°	921	928	943	961	965	577
45°	773	786	813	848	863	596
55°	598	620	674	728	753	532
65°	395	435	525	594	622	392
75°	186	254	355	415	428	200
85°	37	75	91	99	102	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1158.8	1158.8	1158.8	1158.8	1158.8
2.5°	1160.7	1160.7	1155.2	1158.8	1158.8
5°	1158.8	1157.0	1151.5	1157.0	1157.0
7.5°	1153.3	1151.5	1147.9	1153.3	1151.5
10°	1142.4	1142.4	1138.7	1144.2	1144.2
12.5°	1133.2	1131.4	1129.6	1136.9	1135.1
15°	1118.6	1118.6	1116.8	1125.9	1124.1
17.5°	1100.3	1102.2	1104.0	1111.3	1113.1
20°	1080.2	1083.9	1085.7	1096.7	1096.7
22.5°	1062.0	1063.8	1067.4	1078.4	1078.4
25°	1038.2	1041.8	1049.2	1058.3	1060.1
27.5°	1014.4	1016.3	1025.4	1038.2	1040.0
30°	983.4	988.8	999.8	1014.4	1016.3
32.5°	955.9	961.4	974.2	988.8	992.5
35°	921.2	928.5	943.1	961.4	965.1
37.5°	890.1	895.6	913.9	934.0	939.5
40°	851.8	862.7	881.0	904.8	913.9
42.5°	813.4	824.3	846.3	877.3	888.3
45°	773.2	786.0	813.4	848.1	862.7
47.5°	732.9	747.6	778.6	818.9	835.3
50°	687.3	705.5	743.9	789.6	807.9
52.5°	643.4	665.3	707.4	758.5	782.3
55°	597.7	619.6	674.5	727.5	753.1
57.5°	546.5	575.8	636.1	696.4	723.8
60°	499.0	526.4	599.5	665.3	692.7
62.5°	447.8	484.4	563.0	632.4	659.8
65°	394.8	435.0	524.6	594.0	621.5
67.5°	347.3	391.1	486.2	555.7	583.1
70°	290.6	345.5	444.2	513.6	541.0
72.5°	237.6	297.9	400.3	467.9	493.5
75°	186.4	254.1	354.6	414.9	427.7
77.5°	138.9	210.2	307.1	332.7	323.5
80°	98.7	168.2	239.4	226.6	232.1
82.5°	64.0	127.9	148.1	168.2	173.6
85°	36.6	74.9	91.4	98.7	102.4
87.5°	16.5	27.4	36.6	36.6	34.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)