

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: P272052

Luminaire Tested: **22CZ2-44-S-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: P272052
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44-S-UNV-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (98) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

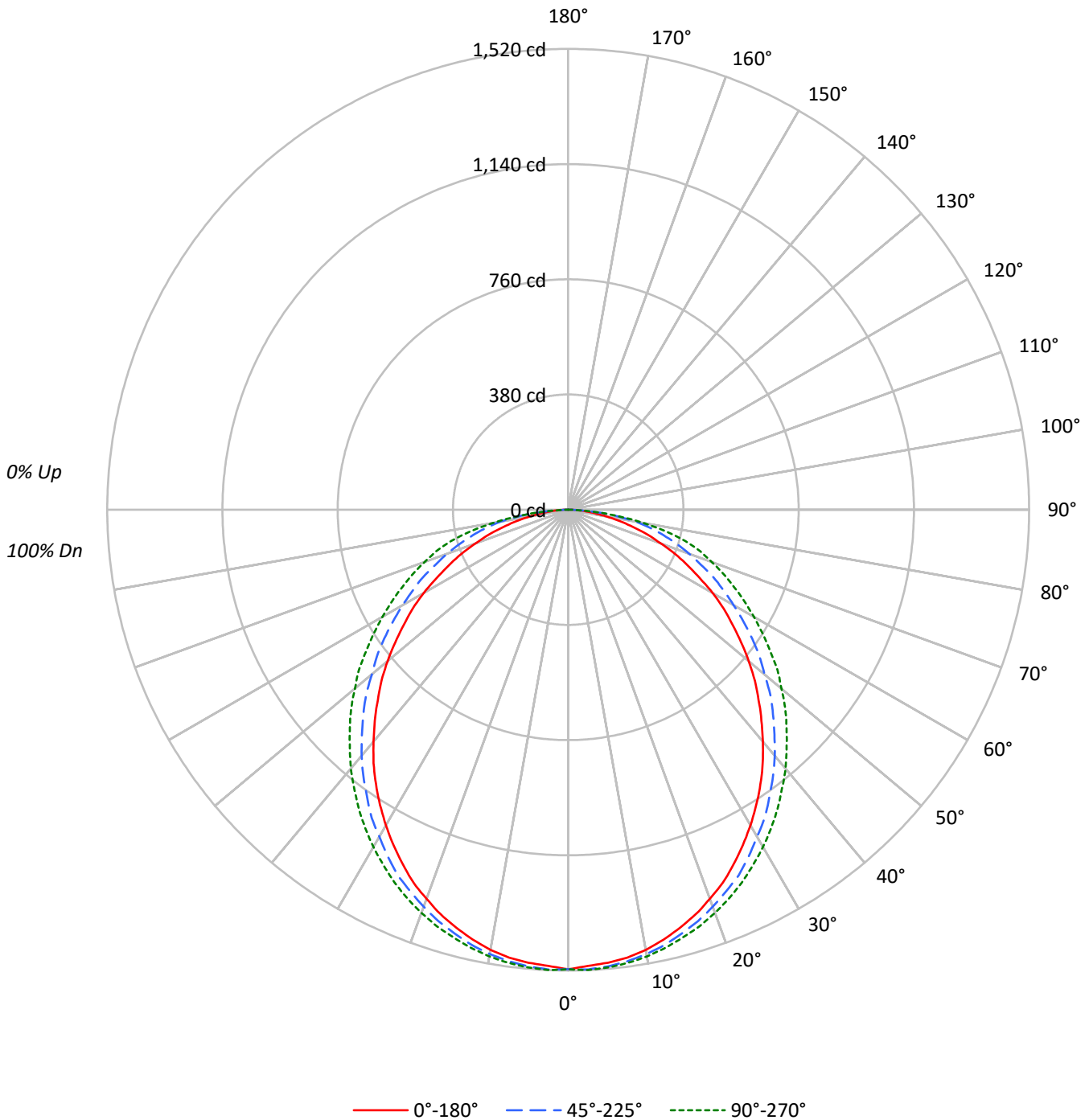
Lumens per Lamp: N/A
Luminaire Lumens: 4230.0 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 42.7
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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4079	4079	4079
5°	4052	4084	4094
10°	4029	4066	4088
15°	3975	4030	4069
20°	3911	3990	4052
25°	3832	3950	4026
30°	3735	3870	3992
35°	3631	3799	3955
40°	3508	3723	3917
45°	3380	3635	3876
50°	3255	3536	3842
55°	3102	3472	3815
60°	2963	3388	3803
65°	2765	3368	3845
70°	2547	3338	3960
75°	2298	3385	4165
80°	1988	3487	3914
85°	1646	2924	2924



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.3	3.4
10°-20°	407.9	9.6
20°-30°	610.4	14.4
30°-40°	722.8	17.1
40°-50°	736.6	17.4
50°-60°	660.2	15.6
60°-70°	516.9	12.2
70°-80°	333.3	7.9
80°-90°	98.5	2.3
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°	1161.6	27.5
0°-40°	1884.4	44.5
0°-60°	3281.3	77.6
0°-90°	4230.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4230.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1516	1516	1516	1516	1516	
5°	1500	1504	1512	1514	1516	142
15°	1427	1435	1447	1458	1460	402
25°	1291	1303	1330	1348	1356	594
35°	1105	1119	1156	1192	1204	691
45°	888	908	955	1005	1018	686
55°	661	683	740	791	813	593
65°	434	460	529	580	604	431
75°	221	255	326	381	401	237
85°	53	73	95	95	95	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1515.7	1515.7	1515.7	1515.7	1515.7
2.5°	1505.9	1509.8	1517.7	1519.7	1519.7
5°	1500.0	1503.9	1511.8	1513.8	1515.7
7.5°	1490.1	1492.1	1501.9	1505.9	1507.8
10°	1474.3	1478.2	1488.1	1494.0	1496.0
12.5°	1452.6	1458.5	1470.3	1478.2	1480.2
15°	1426.9	1434.8	1446.7	1458.5	1460.5
17.5°	1399.3	1407.2	1423.0	1436.8	1440.7
20°	1365.7	1375.6	1393.4	1409.2	1415.1
22.5°	1332.2	1340.1	1361.8	1381.5	1387.5
25°	1290.7	1302.6	1330.2	1348.0	1355.9
27.5°	1247.3	1261.1	1288.8	1312.5	1320.4
30°	1201.9	1215.8	1245.4	1275.0	1284.8
32.5°	1154.6	1170.4	1205.9	1235.5	1245.4
35°	1105.2	1119.0	1156.5	1192.1	1203.9
37.5°	1053.9	1065.8	1109.2	1146.7	1158.5
40°	998.7	1014.4	1059.8	1103.3	1115.1
42.5°	943.4	961.2	1006.5	1053.9	1065.8
45°	888.1	907.9	955.2	1004.6	1018.4
47.5°	834.8	850.6	903.9	951.3	971.0
50°	777.6	793.4	844.7	898.0	917.7
52.5°	718.4	740.1	795.4	846.7	870.4
55°	661.2	682.9	740.1	791.4	813.1
57.5°	607.9	625.6	684.8	738.1	759.8
60°	550.6	566.4	629.6	686.8	706.6
62.5°	489.5	513.1	578.3	631.6	655.2
65°	434.2	459.9	528.9	580.2	603.9
67.5°	382.9	406.6	473.7	528.9	554.6
70°	323.7	355.3	424.3	479.6	503.3
72.5°	276.3	303.9	375.0	430.2	455.9
75°	221.0	254.6	325.6	380.9	400.6
77.5°	175.7	209.2	276.3	319.7	329.6
80°	128.3	161.8	225.0	246.7	252.6
82.5°	86.8	118.4	161.8	167.8	169.7
85°	53.3	73.0	94.7	94.7	94.7
87.5°	25.7	29.6	33.6	31.6	31.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)