

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: P272049

Luminaire Tested: **22CZ2-44-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: P272049
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-L930-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (98) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

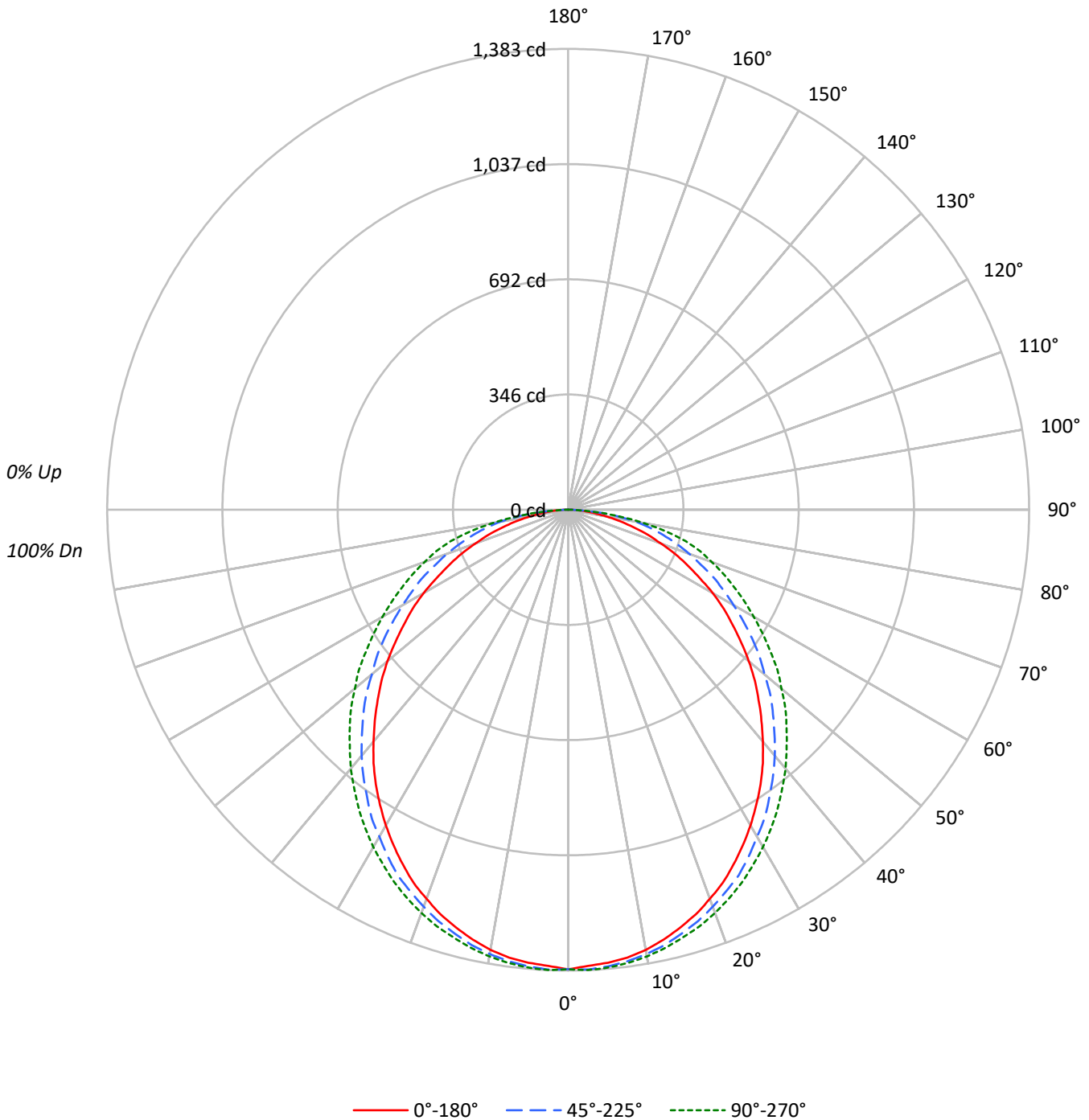
Lumens per Lamp: N/A
Luminaire Lumens: 3849.0 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	3711	3711	3711
5°	3687	3716	3726
10°	3666	3700	3720
15°	3617	3667	3702
20°	3559	3631	3687
25°	3487	3594	3663
30°	3398	3521	3633
35°	3304	3457	3599
40°	3192	3388	3564
45°	3075	3308	3527
50°	2962	3218	3496
55°	2822	3159	3471
60°	2696	3083	3460
65°	2516	3065	3499
70°	2317	3038	3603
75°	2091	3081	3791
80°	1808	3172	3563
85°	1497	2661	2661



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.4	3.4
10°-20°	371.2	9.6
20°-30°	555.4	14.4
30°-40°	657.7	17.1
40°-50°	670.3	17.4
50°-60°	600.8	15.6
60°-70°	470.3	12.2
70°-80°	303.3	7.9
80°-90°	89.6	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°	1057.0	27.5
0°-40°	1714.7	44.5
0°-60°	2985.8	77.6
0°-90°	3849.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3849.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1379	1379	1379	1379	1379	
5°	1365	1368	1376	1377	1379	130
15°	1298	1306	1316	1327	1329	366
25°	1174	1185	1210	1227	1234	541
35°	1006	1018	1052	1085	1096	629
45°	808	826	869	914	927	624
55°	602	621	673	720	740	539
65°	395	418	481	528	550	392
75°	201	232	296	347	365	216
85°	48	66	86	86	86	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1379.2	1379.2	1379.2	1379.2	1379.2
2.5°	1370.2	1373.8	1381.0	1382.8	1382.8
5°	1364.8	1368.4	1375.6	1377.4	1379.2
7.5°	1355.9	1357.7	1366.6	1370.2	1372.0
10°	1341.5	1345.1	1354.1	1359.5	1361.3
12.5°	1321.7	1327.1	1337.9	1345.1	1346.9
15°	1298.4	1305.6	1316.4	1327.1	1328.9
17.5°	1273.3	1280.4	1294.8	1307.4	1311.0
20°	1242.7	1251.7	1267.9	1282.2	1287.6
22.5°	1212.2	1219.4	1239.1	1257.1	1262.5
25°	1174.5	1185.3	1210.4	1226.6	1233.8
27.5°	1135.0	1147.6	1172.7	1194.2	1201.4
30°	1093.7	1106.2	1133.2	1160.1	1169.1
32.5°	1050.6	1064.9	1097.3	1124.2	1133.2
35°	1005.7	1018.2	1052.4	1084.7	1095.5
37.5°	959.0	969.8	1009.3	1043.4	1054.2
40°	908.7	923.1	964.4	1003.9	1014.7
42.5°	858.4	874.6	915.9	959.0	969.8
45°	808.1	826.1	869.2	914.1	926.7
47.5°	759.6	774.0	822.5	865.6	883.6
50°	707.6	721.9	768.6	817.1	835.1
52.5°	653.7	673.4	723.7	770.4	792.0
55°	601.6	621.4	673.4	720.1	739.9
57.5°	553.1	569.3	623.2	671.6	691.4
60°	501.0	515.4	572.9	625.0	642.9
62.5°	445.4	466.9	526.2	574.7	596.2
65°	395.1	418.4	481.3	528.0	549.5
67.5°	348.4	369.9	431.0	481.3	504.6
70°	294.5	323.3	386.1	436.4	457.9
72.5°	251.4	276.6	341.2	391.5	414.8
75°	201.1	231.7	296.3	346.6	364.6
77.5°	159.8	190.4	251.4	290.9	299.9
80°	116.7	147.3	204.7	224.5	229.9
82.5°	79.0	107.8	147.3	152.6	154.4
85°	48.5	66.4	86.2	86.2	86.2
87.5°	23.3	26.9	30.5	28.7	28.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)