

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: P272045

Luminaire Tested: **22CZ2-44HE-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: P272045
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: 22CZ2-44HE-S-UNV-L930-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (196) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3884.3 lumens
Efficiency: N/A
Efficacy: 111.0 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

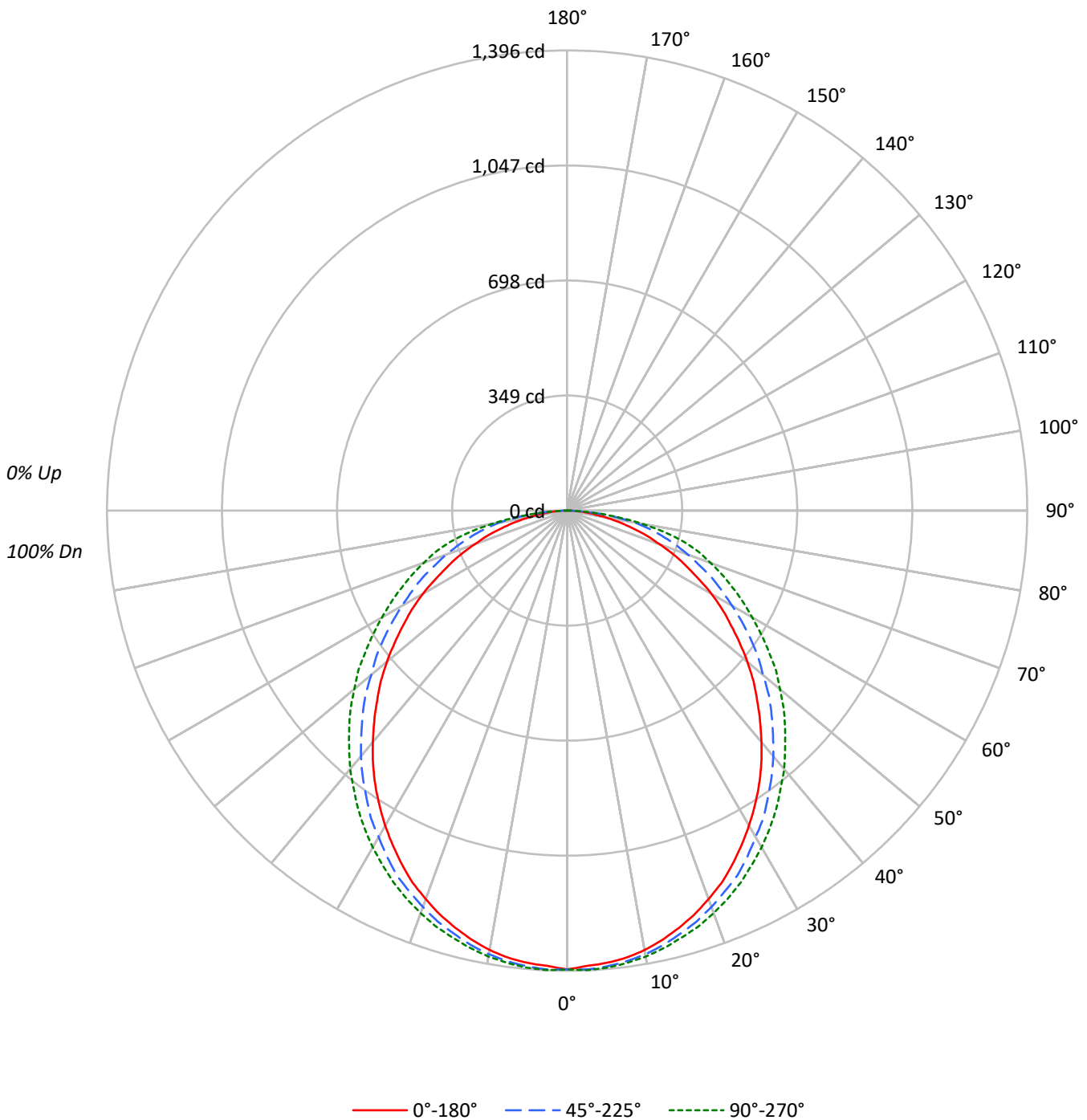
Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3746	3746	3746
5°	3721	3750	3760
10°	3699	3734	3754
15°	3650	3701	3736
20°	3591	3664	3721
25°	3519	3627	3697
30°	3429	3553	3666
35°	3334	3489	3632
40°	3221	3419	3597
45°	3103	3338	3559
50°	2990	3247	3528
55°	2848	3188	3503
60°	2721	3111	3492
65°	2539	3093	3531
70°	2338	3065	3636
75°	2111	3109	3825
80°	1826	3202	3595
85°	1510	2686	2686



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.6	3.4
10°-20°	374.6	9.6
20°-30°	560.5	14.4
30°-40°	663.7	17.1
40°-50°	676.4	17.4
50°-60°	606.3	15.6
60°-70°	474.7	12.2
70°-80°	306.1	7.9
80°-90°	90.4	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°	1066.7	27.5
0°-40°	1730.4	44.5
0°-60°	3013.1	77.6
0°-90°	3884.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3884.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1392	1392	1392	1392	1392	
5°	1377	1381	1388	1390	1392	131
15°	1310	1318	1328	1339	1341	369
25°	1185	1196	1222	1238	1245	546
35°	1015	1028	1062	1095	1106	634
45°	816	834	877	922	935	630
55°	607	627	680	727	747	544
65°	399	422	486	533	555	396
75°	203	234	299	350	368	218
85°	49	67	87	87	87	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1391.9	1391.9	1391.9	1391.9	1391.9
2.5°	1382.8	1386.4	1393.7	1395.5	1395.5
5°	1377.4	1381.0	1388.2	1390.1	1391.9
7.5°	1368.3	1370.1	1379.2	1382.8	1384.6
10°	1353.8	1357.4	1366.5	1371.9	1373.7
12.5°	1333.9	1339.3	1350.2	1357.4	1359.2
15°	1310.3	1317.6	1328.4	1339.3	1341.1
17.5°	1284.9	1292.2	1306.7	1319.4	1323.0
20°	1254.1	1263.2	1279.5	1294.0	1299.4
22.5°	1223.3	1230.6	1250.5	1268.6	1274.1
25°	1185.3	1196.1	1221.5	1237.8	1245.1
27.5°	1145.4	1158.1	1183.4	1205.2	1212.4
30°	1103.7	1116.4	1143.6	1170.8	1179.8
32.5°	1060.2	1074.7	1107.3	1134.5	1143.6
35°	1014.9	1027.6	1062.0	1094.6	1105.5
37.5°	967.8	978.7	1018.5	1053.0	1063.8
40°	917.0	931.5	973.2	1013.1	1024.0
42.5°	866.3	882.6	924.3	967.8	978.7
45°	815.5	833.7	877.2	922.5	935.2
47.5°	766.6	781.1	830.0	873.5	891.7
50°	714.1	728.6	775.7	824.6	842.7
52.5°	659.7	679.6	730.4	777.5	799.2
55°	607.1	627.1	679.6	726.7	746.7
57.5°	558.2	574.5	628.9	677.8	697.7
60°	505.6	520.1	578.1	630.7	648.8
62.5°	449.5	471.2	531.0	579.9	601.7
65°	398.7	422.3	485.7	532.8	554.6
67.5°	351.6	373.3	435.0	485.7	509.3
70°	297.2	326.2	389.6	440.4	462.1
72.5°	253.7	279.1	344.3	395.1	418.6
75°	203.0	233.8	299.0	349.8	367.9
77.5°	161.3	192.1	253.7	293.6	302.7
80°	117.8	148.6	206.6	226.5	232.0
82.5°	79.7	108.7	148.6	154.0	155.9
85°	48.9	67.1	87.0	87.0	87.0
87.5°	23.6	27.2	30.8	29.0	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)