

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: P272034

Luminaire Tested: **22CZ2-34HE-S-UNV-L935-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: P272034
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: 22CZ2-34HE-S-UNV-L935-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (196) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3019.0 lumens
Efficiency: N/A
Efficacy: 117.0 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

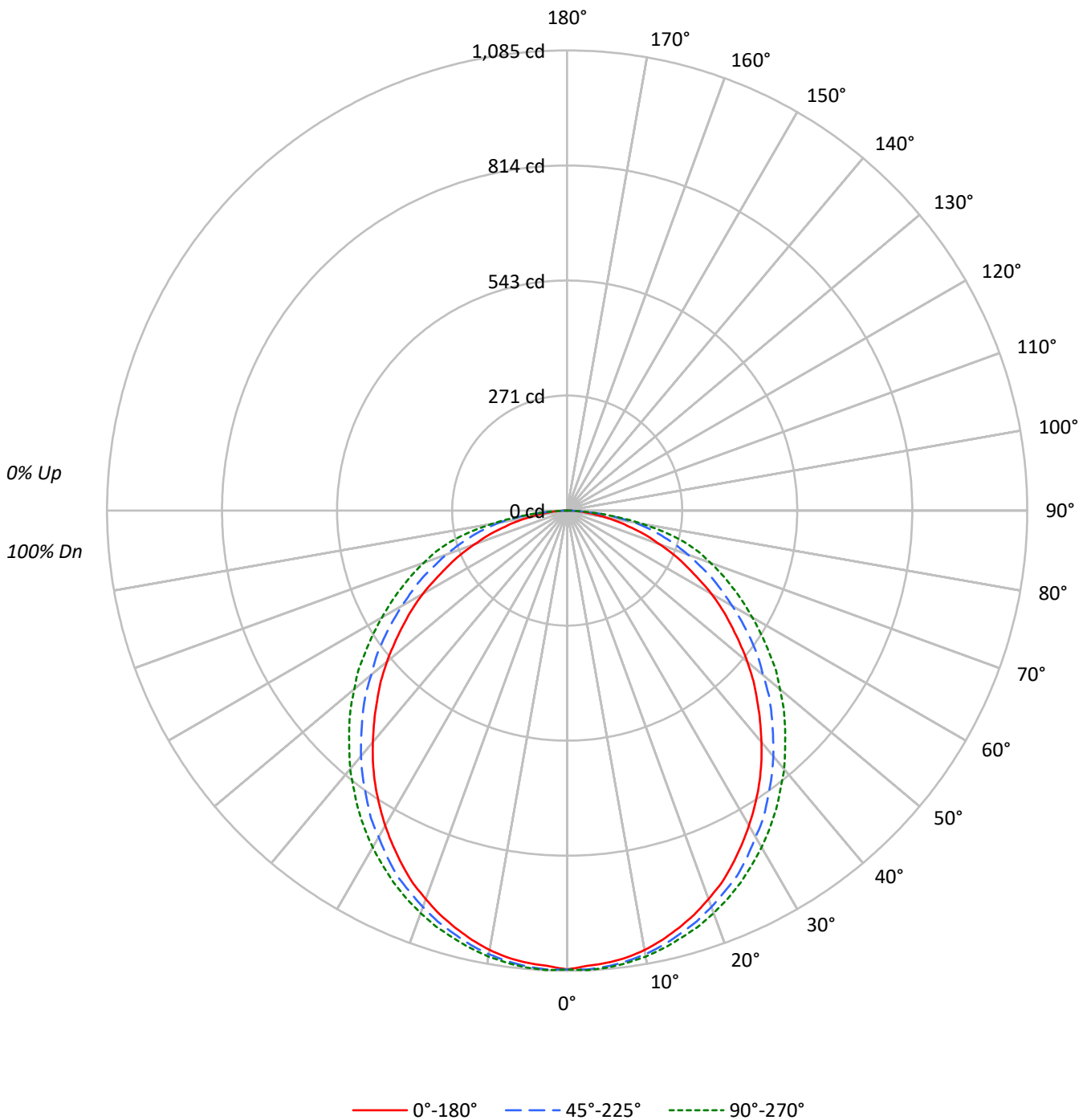
Input Watts (W): 25.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2911	2911	2911
5°	2892	2915	2922
10°	2875	2902	2917
15°	2837	2876	2904
20°	2791	2848	2892
25°	2735	2819	2873
30°	2665	2762	2849
35°	2591	2712	2823
40°	2504	2657	2796
45°	2412	2595	2766
50°	2323	2524	2742
55°	2214	2478	2723
60°	2115	2418	2714
65°	1973	2404	2744
70°	1817	2382	2826
75°	1641	2416	2973
80°	1420	2489	2794
85°	1173	2087	2087



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.3	3.4
10°-20°	291.1	9.6
20°-30°	435.6	14.4
30°-40°	515.9	17.1
40°-50°	525.7	17.4
50°-60°	471.2	15.6
60°-70°	368.9	12.2
70°-80°	237.9	7.9
80°-90°	70.3	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°	829.1	27.5
0°-40°	1344.9	44.5
0°-60°	2341.9	77.6
0°-90°	3019.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3019.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1070	1073	1079	1080	1082	102
15°	1018	1024	1032	1041	1042	287
25°	921	930	949	962	968	424
35°	789	799	825	851	859	493
45°	634	648	682	717	727	490
55°	472	487	528	565	580	423
65°	310	328	378	414	431	308
75°	158	182	232	272	286	169
85°	38	52	68	68	68	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1081.8	1081.8	1081.8	1081.8	1081.8
2.5°	1074.8	1077.6	1083.2	1084.6	1084.6
5°	1070.5	1073.4	1079.0	1080.4	1081.8
7.5°	1063.5	1064.9	1071.9	1074.8	1076.2
10°	1052.2	1055.0	1062.1	1066.3	1067.7
12.5°	1036.7	1041.0	1049.4	1055.0	1056.4
15°	1018.4	1024.0	1032.5	1041.0	1042.4
17.5°	998.7	1004.3	1015.6	1025.5	1028.3
20°	974.7	981.8	994.5	1005.7	1010.0
22.5°	950.8	956.4	971.9	986.0	990.2
25°	921.2	929.7	949.4	962.1	967.7
27.5°	890.2	900.1	919.8	936.7	942.4
30°	857.8	867.7	888.8	910.0	917.0
32.5°	824.0	835.3	860.7	881.8	888.8
35°	788.8	798.7	825.4	850.8	859.2
37.5°	752.2	760.6	791.6	818.4	826.8
40°	712.7	724.0	756.4	787.4	795.9
42.5°	673.3	686.0	718.4	752.2	760.6
45°	633.9	648.0	681.8	717.0	726.8
47.5°	595.8	607.1	645.1	678.9	693.0
50°	555.0	566.3	602.9	640.9	655.0
52.5°	512.7	528.2	567.7	604.3	621.2
55°	471.9	487.4	528.2	564.8	580.3
57.5°	433.8	446.5	488.8	526.8	542.3
60°	393.0	404.3	449.3	490.2	504.3
62.5°	349.3	366.2	412.7	450.8	467.7
65°	309.9	328.2	377.5	414.1	431.0
67.5°	273.3	290.2	338.1	377.5	395.8
70°	231.0	253.5	302.8	342.3	359.2
72.5°	197.2	216.9	267.6	307.1	325.4
75°	157.8	181.7	232.4	271.9	285.9
77.5°	125.4	149.3	197.2	228.2	235.2
80°	91.6	115.5	160.6	176.1	180.3
82.5°	62.0	84.5	115.5	119.7	121.1
85°	38.0	52.1	67.6	67.6	67.6
87.5°	18.3	21.1	23.9	22.5	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)