

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: P387945

Luminaire Tested: **22CZ2-39HE-SQR-UNV-L950-CD1-SDWPD1-U**

Issue Date: 2/28/2020

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: P387945
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-SQR-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3339.0 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

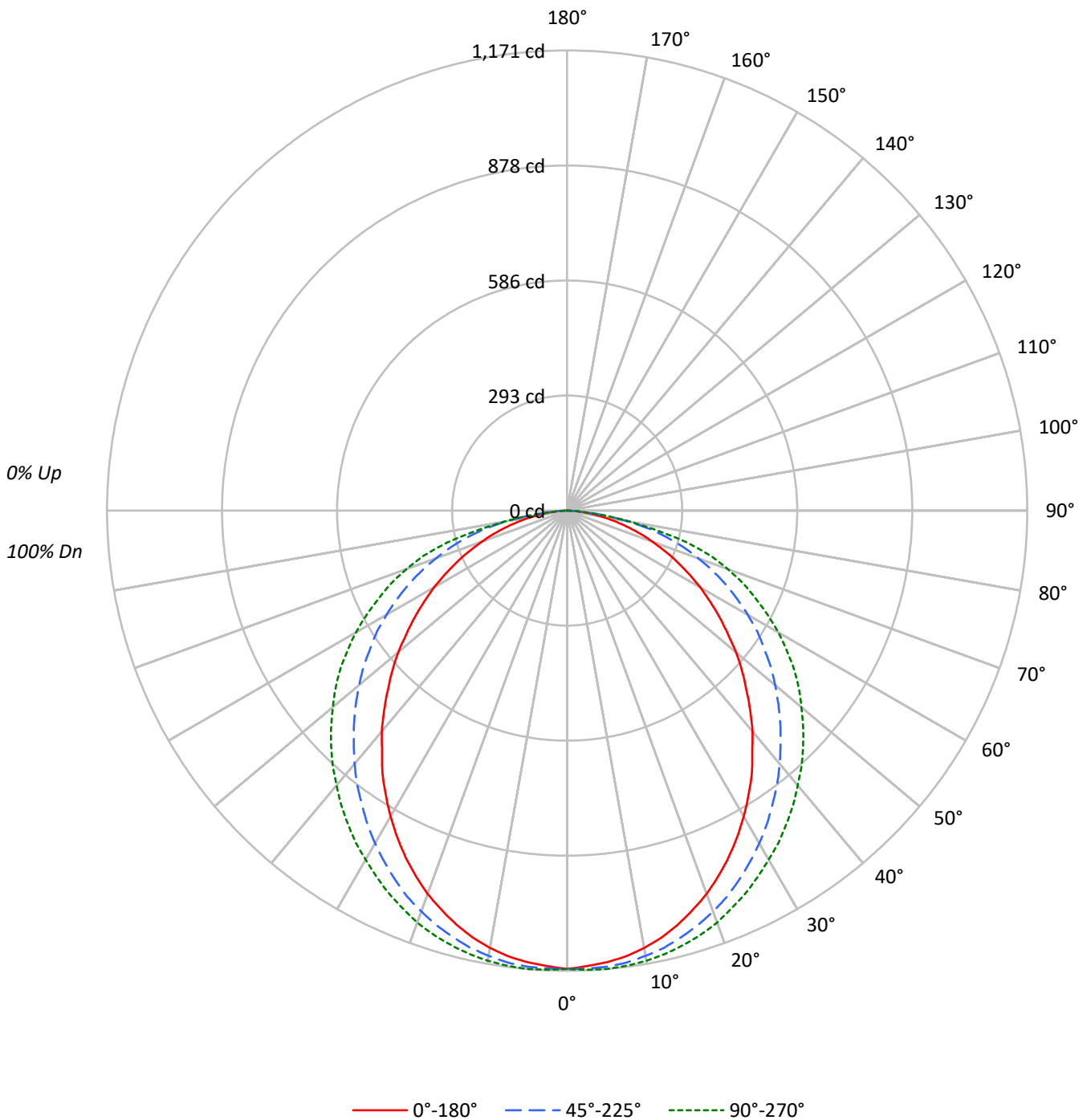
Input Watts (W): 30.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	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	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3139	3139	3139
5°	3116	3146	3163
10°	3087	3144	3178
15°	3037	3130	3188
20°	2972	3109	3195
25°	2889	3077	3190
30°	2792	3038	3186
35°	2691	2993	3197
40°	2578	2956	3207
45°	2455	2919	3232
50°	2349	2893	3257
55°	2223	2870	3309
60°	2106	2857	3343
65°	1968	2835	3370
70°	1808	2793	3416
75°	1631	2719	3296
80°	1399	2407	2481
85°	1124	1420	1124



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.6	3.3
10°-20°	316.2	9.5
20°-30°	474.8	14.2
30°-40°	566.3	17.0
40°-50°	585.5	17.5
50°-60°	538.3	16.1
60°-70°	428.5	12.8
70°-80°	261.8	7.8
80°-90°	56.9	1.7
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°	901.6	27.0
0°-40°	1467.9	44.0
0°-60°	2591.7	77.6
0°-90°	3339.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3339.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1166	1166	1166	1166	1166	
5°	1154	1157	1165	1170	1171	109
15°	1090	1103	1124	1140	1144	307
25°	973	997	1036	1065	1074	448
35°	819	854	911	959	973	511
45°	645	691	767	829	849	499
55°	474	526	612	682	705	424
65°	309	361	445	507	529	306
75°	157	203	262	307	317	167
85°	36	44	46	40	36	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1166.4	1166.4	1166.4	1166.4	1166.4
2.5°	1160.1	1161.6	1166.4	1169.6	1169.6
5°	1153.7	1156.9	1164.8	1169.6	1171.1
7.5°	1144.2	1149.0	1160.1	1166.4	1168.0
10°	1129.9	1136.3	1150.5	1160.1	1163.2
12.5°	1112.5	1122.0	1139.5	1152.1	1155.3
15°	1090.3	1103.0	1123.6	1139.5	1144.2
17.5°	1065.0	1080.8	1106.2	1125.2	1131.5
20°	1038.0	1053.9	1085.6	1107.8	1115.7
22.5°	1006.3	1026.9	1063.4	1088.7	1095.1
25°	973.1	996.8	1036.4	1065.0	1074.5
27.5°	936.6	965.1	1007.9	1042.8	1050.7
30°	898.6	928.7	977.8	1015.8	1025.3
32.5°	858.9	893.8	946.1	988.9	1001.6
35°	819.3	854.2	911.2	958.8	973.1
37.5°	773.4	814.6	878.0	927.1	944.5
40°	733.8	773.4	841.5	895.4	912.8
42.5°	689.4	732.2	803.5	862.1	882.7
45°	645.0	691.0	767.0	828.8	849.4
47.5°	603.8	649.8	729.0	794.0	814.6
50°	561.0	608.6	691.0	757.5	778.1
52.5°	515.1	567.3	652.9	719.5	743.3
55°	473.8	526.1	611.7	681.5	705.2
57.5°	431.1	484.9	573.7	640.2	662.4
60°	391.4	443.7	530.9	595.9	621.2
62.5°	348.7	402.5	488.1	551.5	575.3
65°	309.0	361.3	445.3	507.1	529.3
67.5°	269.4	321.7	400.9	459.6	484.9
70°	229.8	282.1	355.0	412.0	434.2
72.5°	194.9	240.9	310.6	362.9	383.5
75°	156.9	202.9	261.5	307.4	317.0
77.5°	122.0	163.2	212.4	233.0	236.1
80°	90.3	122.0	155.3	160.1	160.1
82.5°	60.2	84.0	96.7	98.3	96.7
85°	36.4	44.4	46.0	39.6	36.4
87.5°	12.7	12.7	7.9	4.8	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)