

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: P387796

Luminaire Tested: **22CZ2-29HE-SQR-UNV-L935-CD1-SWPD1-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: P387796
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: 22CZ2-29HE-SQR-UNV-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2359.2 lumens
Efficiency: N/A
Efficacy: 106.3 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

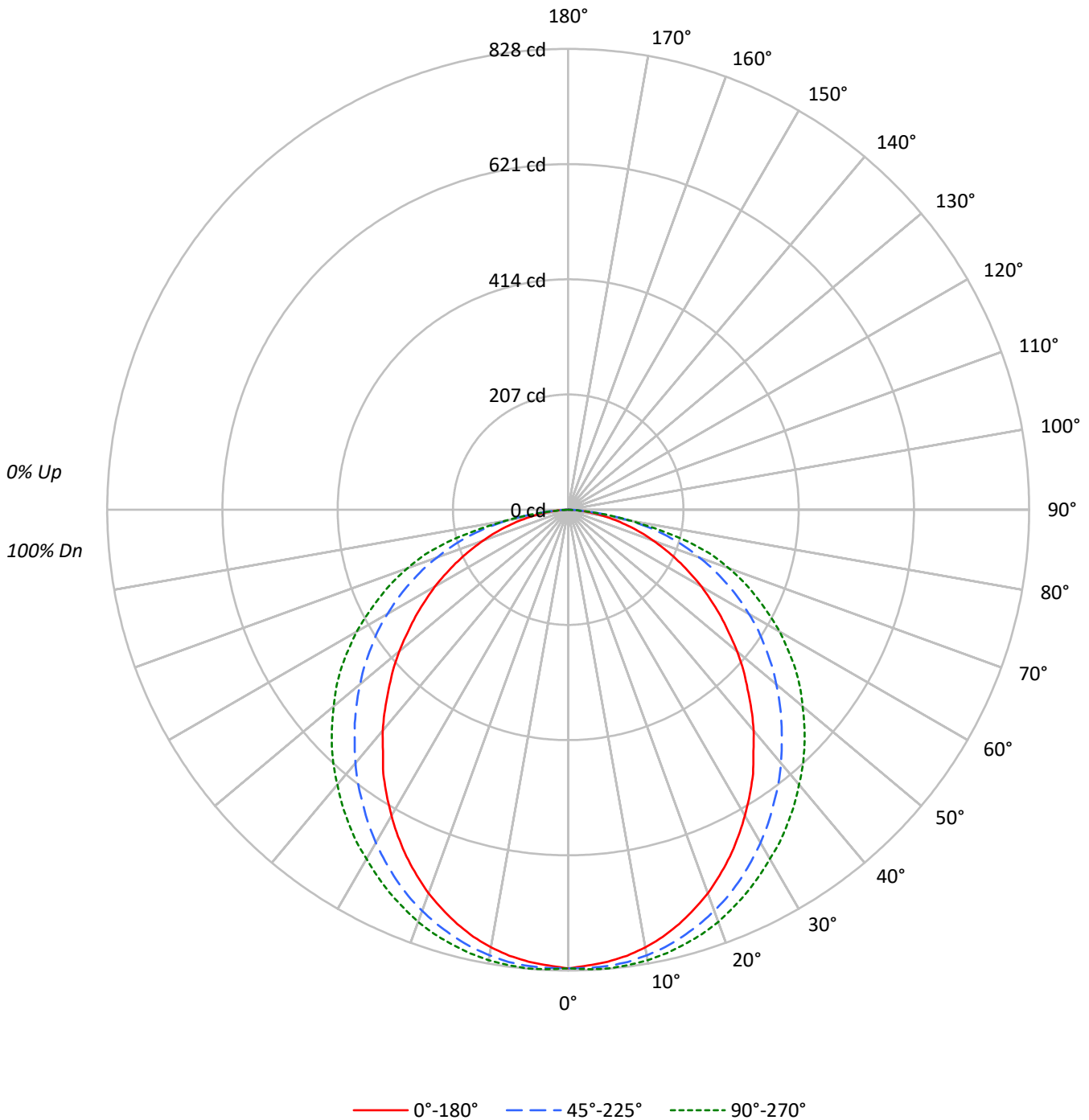
Input Watts (W): 22.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2218	2218	2218
5°	2202	2223	2235
10°	2182	2221	2246
15°	2146	2212	2252
20°	2100	2196	2257
25°	2041	2174	2254
30°	1973	2147	2251
35°	1902	2115	2258
40°	1821	2089	2266
45°	1734	2063	2284
50°	1659	2044	2302
55°	1571	2028	2338
60°	1489	2019	2362
65°	1390	2003	2381
70°	1278	1973	2414
75°	1153	1921	2328
80°	989	1700	1753
85°	797	1003	797



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.1	3.3
10°-20°	223.4	9.5
20°-30°	335.5	14.2
30°-40°	400.1	17.0
40°-50°	413.7	17.5
50°-60°	380.4	16.1
60°-70°	302.8	12.8
70°-80°	185.0	7.8
80°-90°	40.2	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°	637.0	27.0
0°-40°	1037.1	44.0
0°-60°	1831.2	77.6
0°-90°	2359.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2359.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	824	824	824	824	824	
5°	815	817	823	826	828	77
15°	770	779	794	805	808	217
25°	688	704	732	752	759	316
35°	579	604	644	677	688	361
45°	456	488	542	586	600	352
55°	335	372	432	482	498	299
65°	218	255	315	358	374	216
75°	111	143	185	217	224	118
85°	26	31	32	28	26	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	824.1	824.1	824.1	824.1	824.1
2.5°	819.6	820.8	824.1	826.4	826.4
5°	815.2	817.4	823.0	826.4	827.5
7.5°	808.4	811.8	819.6	824.1	825.2
10°	798.4	802.9	812.9	819.6	821.9
12.5°	786.1	792.8	805.1	814.0	816.3
15°	770.4	779.3	793.9	805.1	808.4
17.5°	752.5	763.7	781.6	795.0	799.5
20°	733.4	744.6	767.0	782.7	788.3
22.5°	711.0	725.6	751.3	769.3	773.7
25°	687.5	704.3	732.3	752.5	759.2
27.5°	661.8	681.9	712.2	736.8	742.4
30°	634.9	656.2	690.9	717.8	724.5
32.5°	606.9	631.5	668.5	698.7	707.7
35°	578.9	603.5	643.8	677.4	687.5
37.5°	546.4	575.5	620.3	655.0	667.4
40°	518.4	546.4	594.6	632.7	645.0
42.5°	487.1	517.3	567.7	609.1	623.7
45°	455.7	488.2	542.0	585.6	600.2
47.5°	426.6	459.1	515.1	561.0	575.5
50°	396.4	430.0	488.2	535.2	549.8
52.5°	363.9	400.9	461.3	508.4	525.2
55°	334.8	371.8	432.2	481.5	498.3
57.5°	304.6	342.6	405.3	452.4	468.0
60°	276.6	313.5	375.1	421.0	438.9
62.5°	246.3	284.4	344.9	389.7	406.5
65°	218.3	255.3	314.6	358.3	374.0
67.5°	190.4	227.3	283.3	324.7	342.6
70°	162.4	199.3	250.8	291.1	306.8
72.5°	137.7	170.2	219.5	256.4	271.0
75°	110.9	143.3	184.8	217.2	223.9
77.5°	86.2	115.3	150.0	164.6	166.8
80°	63.8	86.2	109.7	113.1	113.1
82.5°	42.5	59.3	68.3	69.4	68.3
85°	25.8	31.4	32.5	28.0	25.8
87.5°	9.0	9.0	5.6	3.4	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)