

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: P387793

Luminaire Tested: **22CZ2-29HE-SQR-UNV-L930-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: P387793
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-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2302.3 lumens
Efficiency: N/A
Efficacy: 103.7 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

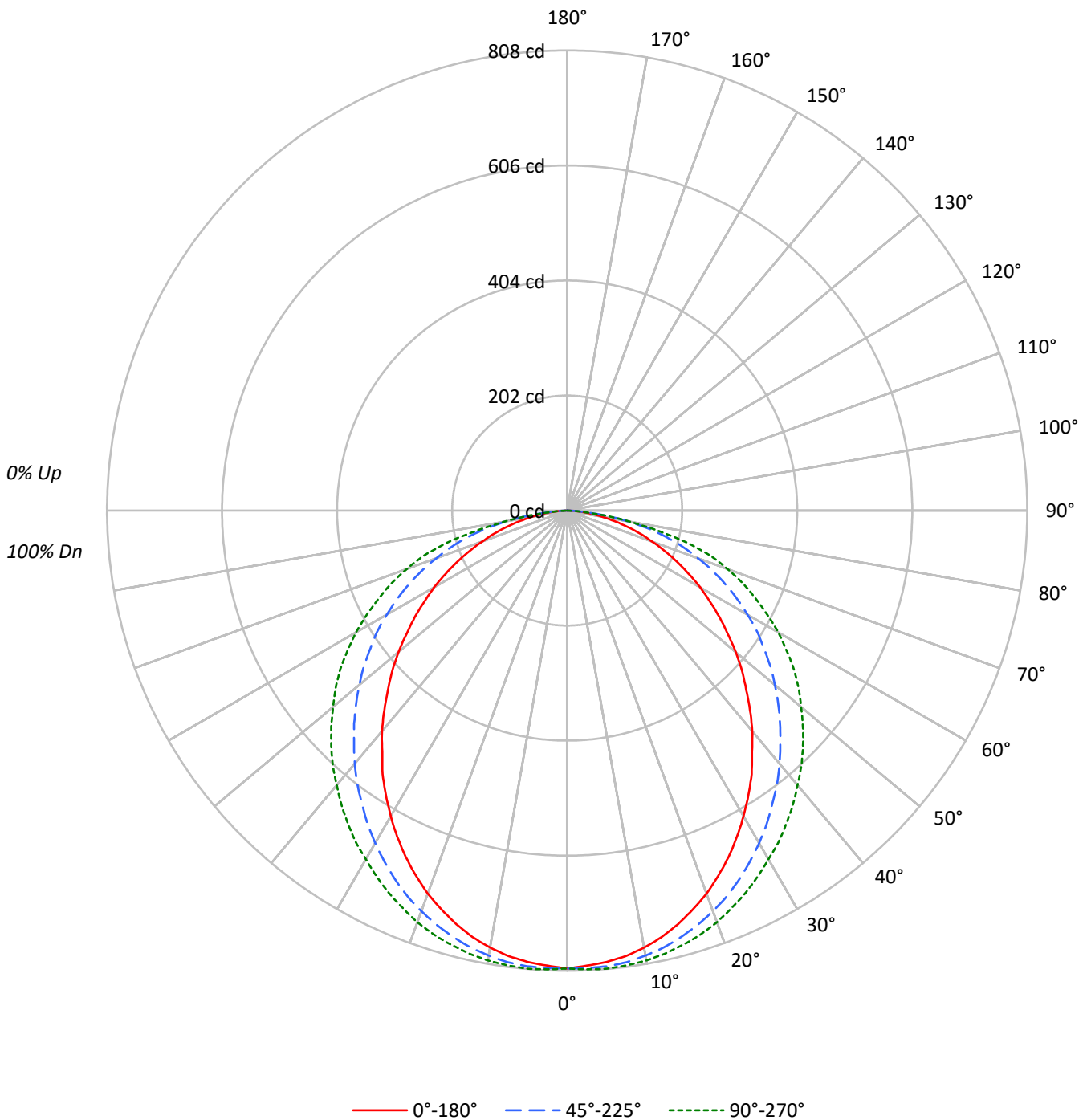
Input Watts (W): 22.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2164	2164	2164
5°	2149	2170	2181
10°	2129	2168	2192
15°	2094	2158	2198
20°	2050	2143	2203
25°	1992	2122	2200
30°	1925	2095	2197
35°	1856	2064	2204
40°	1777	2038	2211
45°	1692	2013	2229
50°	1619	1994	2246
55°	1533	1979	2282
60°	1453	1970	2305
65°	1357	1955	2324
70°	1246	1926	2356
75°	1125	1875	2272
80°	965	1660	1711
85°	775	979	775



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.2	3.3
10°-20°	218.0	9.5
20°-30°	327.4	14.2
30°-40°	390.5	17.0
40°-50°	403.7	17.5
50°-60°	371.2	16.1
60°-70°	295.5	12.8
70°-80°	180.5	7.8
80°-90°	39.2	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°	621.6	27.0
0°-40°	1012.1	44.0
0°-60°	1787.0	77.6
0°-90°	2302.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2302.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	804	804	804	804	804	
5°	796	798	803	806	808	75
15°	752	760	775	786	789	212
25°	671	687	715	734	741	309
35°	565	589	628	661	671	352
45°	445	476	529	572	586	344
55°	327	363	422	470	486	292
65°	213	249	307	350	365	211
75°	108	140	180	212	218	115
85°	25	31	32	27	25	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	804.2	804.2	804.2	804.2	804.2
2.5°	799.9	801.0	804.2	806.4	806.4
5°	795.5	797.7	803.2	806.4	807.5
7.5°	789.0	792.2	799.9	804.2	805.3
10°	779.1	783.5	793.3	799.9	802.1
12.5°	767.1	773.7	785.7	794.4	796.6
15°	751.8	760.5	774.7	785.7	789.0
17.5°	734.3	745.2	762.7	775.8	780.2
20°	715.7	726.7	748.5	763.8	769.3
22.5°	693.9	708.1	733.2	750.7	755.1
25°	670.9	687.3	714.6	734.3	740.9
27.5°	645.8	665.5	695.0	719.0	724.5
30°	619.6	640.3	674.2	700.4	707.0
32.5°	592.3	616.3	652.4	681.9	690.6
35°	564.9	589.0	628.3	661.1	670.9
37.5°	533.3	561.7	605.4	639.2	651.3
40°	505.9	533.3	580.2	617.4	629.4
42.5°	475.3	504.8	554.0	594.4	608.7
45°	444.7	476.4	528.9	571.5	585.7
47.5°	416.3	448.0	502.7	547.5	561.7
50°	386.8	419.6	476.4	522.3	536.5
52.5°	355.1	391.2	450.2	496.1	512.5
55°	326.7	362.8	421.8	469.9	486.3
57.5°	297.2	334.4	395.6	441.5	456.8
60°	269.9	306.0	366.1	410.9	428.3
62.5°	240.4	277.6	336.6	380.3	396.7
65°	213.1	249.1	307.1	349.7	365.0
67.5°	185.8	221.8	276.5	316.9	334.4
70°	158.4	194.5	244.8	284.1	299.4
72.5°	134.4	166.1	214.2	250.2	264.4
75°	108.2	139.9	180.3	212.0	218.5
77.5°	84.1	112.6	146.4	160.6	162.8
80°	62.3	84.1	107.1	110.4	110.4
82.5°	41.5	57.9	66.7	67.7	66.7
85°	25.1	30.6	31.7	27.3	25.1
87.5°	8.7	8.7	5.5	3.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)