

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: P387794

Luminaire Tested: **22CZ2-29HE-SQR-UNV-L930-CD1-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: P387794
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-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: 2331.2 lumens
Efficiency: N/A
Efficacy: 105.0 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

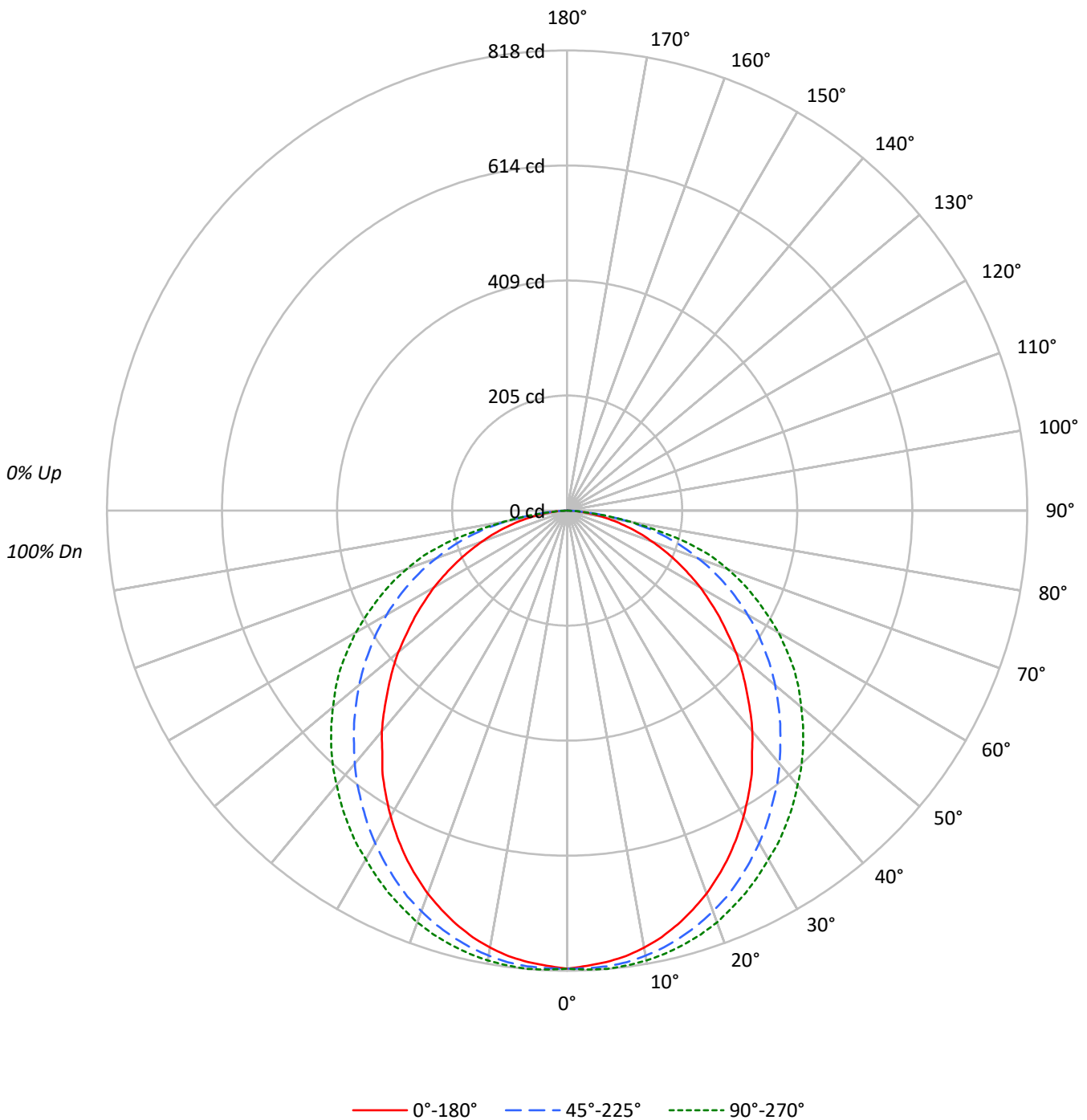
Input Watts (W): 22.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2191	2191	2191
5°	2176	2197	2209
10°	2156	2195	2219
15°	2121	2186	2226
20°	2075	2170	2231
25°	2017	2148	2227
30°	1950	2121	2224
35°	1879	2090	2232
40°	1800	2064	2239
45°	1714	2038	2257
50°	1640	2020	2274
55°	1552	2004	2310
60°	1471	1995	2334
65°	1374	1980	2353
70°	1262	1950	2386
75°	1138	1899	2301
80°	978	1680	1733
85°	784	991	784



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.2	3.3
10°-20°	220.7	9.5
20°-30°	331.5	14.2
30°-40°	395.4	17.0
40°-50°	408.8	17.5
50°-60°	375.8	16.1
60°-70°	299.2	12.8
70°-80°	182.8	7.8
80°-90°	39.7	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°	629.4	27.0
0°-40°	1024.8	44.0
0°-60°	1809.5	77.6
0°-90°	2331.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2331.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	806	808	813	817	818	76
15°	761	770	784	796	799	214
25°	679	696	724	744	750	312
35°	572	596	636	669	679	357
45°	450	482	536	579	593	348
55°	331	367	427	476	492	296
65°	216	252	311	354	370	214
75°	110	142	183	215	221	117
85°	25	31	32	28	25	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	814.3	814.3	814.3	814.3	814.3
2.5°	809.9	811.0	814.3	816.6	816.6
5°	805.5	807.7	813.2	816.6	817.7
7.5°	798.9	802.2	809.9	814.3	815.5
10°	788.9	793.3	803.3	809.9	812.1
12.5°	776.7	783.4	795.5	804.4	806.6
15°	761.2	770.1	784.5	795.5	798.9
17.5°	743.5	754.6	772.3	785.6	790.0
20°	724.7	735.8	757.9	773.4	778.9
22.5°	702.6	717.0	742.4	760.1	764.6
25°	679.4	696.0	723.6	743.5	750.2
27.5°	653.9	673.8	703.7	728.0	733.6
30°	627.4	648.4	682.7	709.2	715.9
32.5°	599.7	624.0	660.5	690.4	699.3
35°	572.0	596.4	636.2	669.4	679.4
37.5°	539.9	568.7	613.0	647.3	659.4
40°	512.3	539.9	587.5	625.1	637.3
42.5°	481.3	511.2	561.0	601.9	616.3
45°	450.3	482.4	535.5	578.7	593.1
47.5°	421.6	453.6	509.0	554.3	568.7
50°	391.7	424.9	482.4	528.9	543.3
52.5°	359.6	396.1	455.9	502.3	518.9
55°	330.8	367.3	427.1	475.8	492.4
57.5°	301.0	338.6	400.5	447.0	462.5
60°	273.3	309.8	370.7	416.0	433.7
62.5°	243.4	281.0	340.8	385.0	401.6
65°	215.8	252.3	310.9	354.1	369.6
67.5°	188.1	224.6	279.9	320.9	338.6
70°	160.4	196.9	247.8	287.7	303.2
72.5°	136.1	168.2	216.9	253.4	267.8
75°	109.5	141.6	182.6	214.7	221.3
77.5°	85.2	114.0	148.3	162.6	164.9
80°	63.1	85.2	108.4	111.8	111.8
82.5°	42.0	58.6	67.5	68.6	67.5
85°	25.4	31.0	32.1	27.7	25.4
87.5°	8.9	8.9	5.5	3.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)