

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: P387792

Luminaire Tested: **22CZ2-29HE-SQR-UNV-L930-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: P387792
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-SDWPD1-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: 2274.5 lumens
Efficiency: N/A
Efficacy: 102.5 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

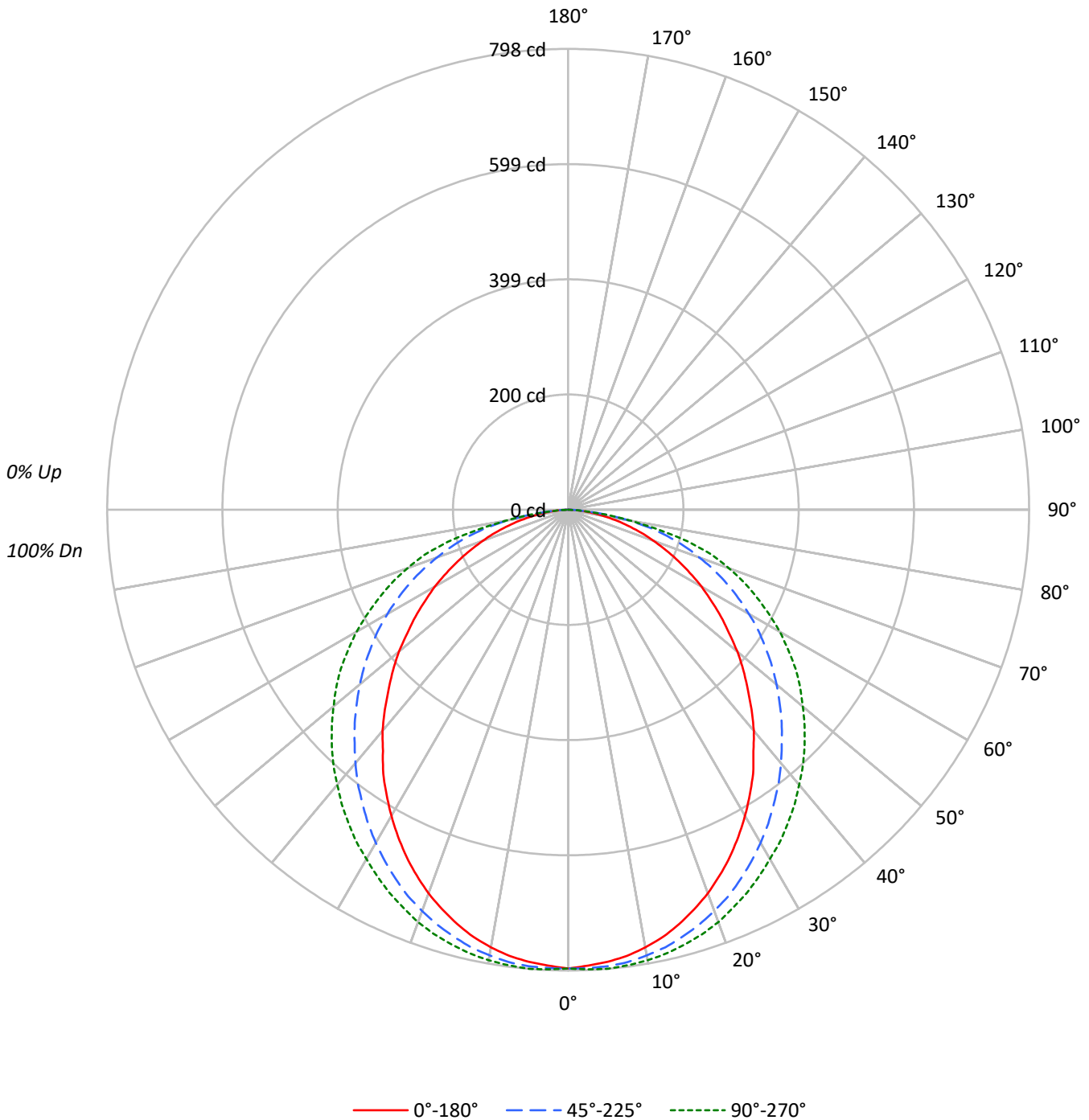
Input Watts (W): 22.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2138	2138	2138
5°	2123	2143	2155
10°	2103	2141	2165
15°	2069	2132	2171
20°	2025	2118	2176
25°	1968	2096	2173
30°	1902	2070	2170
35°	1833	2039	2177
40°	1756	2014	2184
45°	1672	1988	2202
50°	1600	1971	2219
55°	1514	1955	2254
60°	1435	1946	2278
65°	1340	1931	2296
70°	1231	1902	2327
75°	1111	1852	2245
80°	953	1640	1689
85°	766	966	766



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.3	3.3
10°-20°	215.4	9.5
20°-30°	323.5	14.2
30°-40°	385.8	17.0
40°-50°	398.8	17.5
50°-60°	366.7	16.1
60°-70°	291.9	12.8
70°-80°	178.4	7.8
80°-90°	38.8	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°	614.1	27.0
0°-40°	999.9	44.0
0°-60°	1765.4	77.6
0°-90°	2274.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2274.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	794	794	794	794	794	
5°	786	788	794	797	798	75
15°	743	751	765	776	779	209
25°	663	679	706	725	732	305
35°	558	582	621	653	663	348
45°	439	471	522	565	579	340
55°	323	358	417	464	480	289
65°	210	246	303	346	361	209
75°	107	138	178	209	216	114
85°	25	30	31	27	25	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	794.5	794.5	794.5	794.5	794.5
2.5°	790.2	791.3	794.5	796.7	796.7
5°	785.9	788.1	793.5	796.7	797.8
7.5°	779.4	782.7	790.2	794.5	795.6
10°	769.7	774.0	783.7	790.2	792.4
12.5°	757.8	764.3	776.2	784.8	787.0
15°	742.7	751.4	765.4	776.2	779.4
17.5°	725.4	736.2	753.5	766.5	770.8
20°	707.1	717.9	739.5	754.6	760.0
22.5°	685.5	699.5	724.4	741.6	746.0
25°	662.8	679.0	706.0	725.4	731.9
27.5°	638.0	657.4	686.6	710.3	715.7
30°	612.1	632.6	666.1	692.0	698.5
32.5°	585.1	608.9	644.5	673.6	682.3
35°	558.1	581.9	620.7	653.1	662.8
37.5°	526.8	554.9	598.1	631.5	643.4
40°	499.8	526.8	573.2	609.9	621.8
42.5°	469.6	498.7	547.3	587.3	601.3
45°	439.4	470.7	522.5	564.6	578.6
47.5°	411.3	442.6	496.6	540.8	554.9
50°	382.2	414.5	470.7	516.0	530.1
52.5°	350.8	386.5	444.8	490.1	506.3
55°	322.8	358.4	416.7	464.2	480.4
57.5°	293.6	330.3	390.8	436.1	451.2
60°	266.6	302.3	361.6	405.9	423.2
62.5°	237.5	274.2	332.5	375.7	391.9
65°	210.5	246.1	303.3	345.5	360.6
67.5°	183.5	219.1	273.1	313.1	330.3
70°	156.5	192.2	241.8	280.7	295.8
72.5°	132.8	164.1	211.6	247.2	261.2
75°	106.9	138.2	178.1	209.4	215.9
77.5°	83.1	111.2	144.7	158.7	160.9
80°	61.5	83.1	105.8	109.0	109.0
82.5°	41.0	57.2	65.9	66.9	65.9
85°	24.8	30.2	31.3	27.0	24.8
87.5°	8.6	8.6	5.4	3.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)