

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: P387798

Luminaire Tested: **22CZ2-29HE-SQR-UNV-L940-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: P387798
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-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2354.9 lumens
Efficiency: N/A
Efficacy: 106.1 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

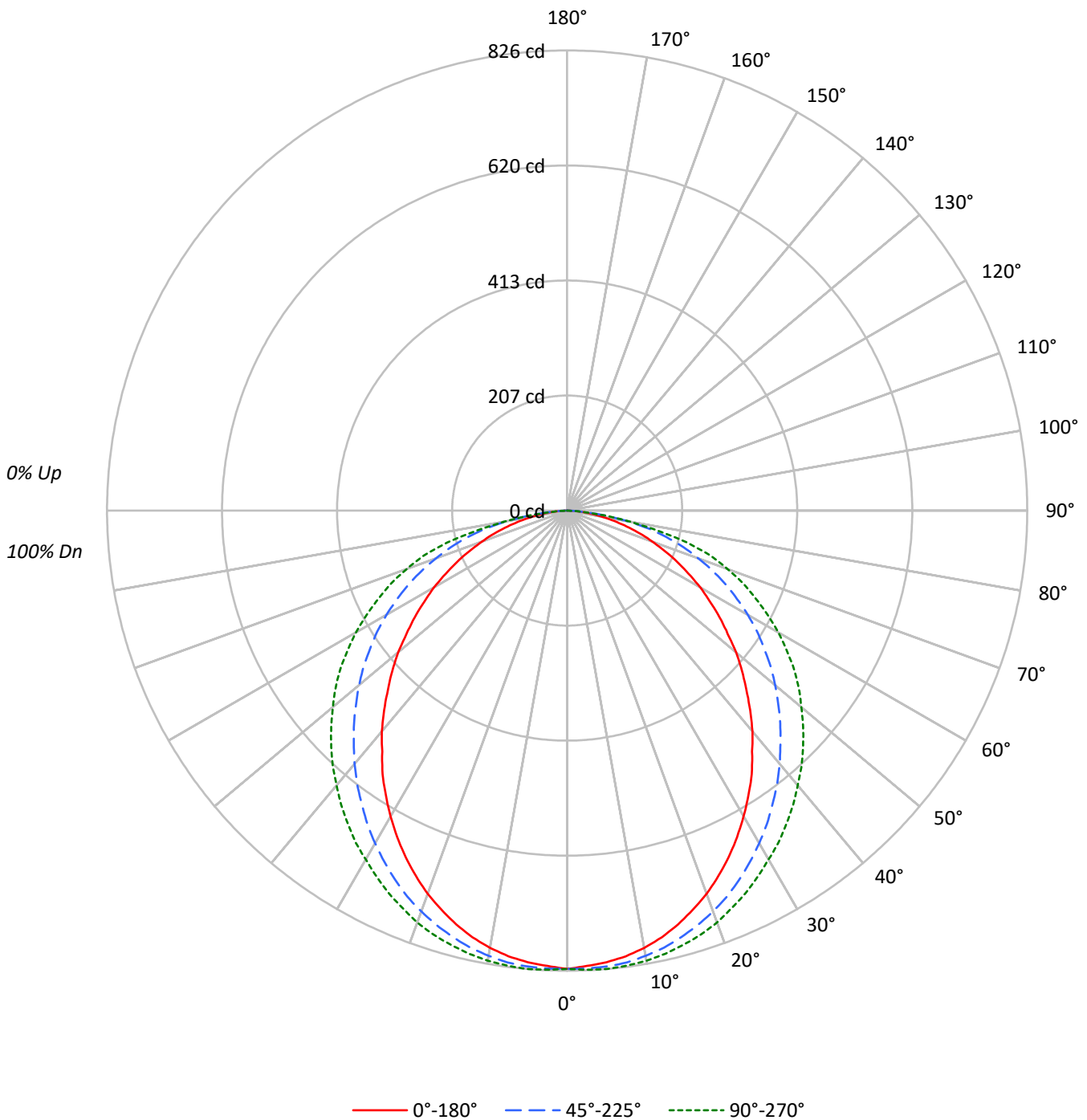
Input Watts (W): 22.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387798

CATALOG NUMBER: 22CZ2-29HE-SQR-UNV-L940-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387798

CATALOG NUMBER: 22CZ2-29HE-SQR-UNV-L940-CD1-SDWPD1-U

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°	2214	2214	2214
5°	2198	2219	2231
10°	2178	2217	2242
15°	2142	2208	2248
20°	2096	2192	2253
25°	2038	2170	2250
30°	1969	2143	2247
35°	1898	2111	2255
40°	1818	2085	2262
45°	1731	2059	2280
50°	1657	2040	2298
55°	1568	2024	2334
60°	1486	2015	2358
65°	1388	2000	2377
70°	1275	1970	2409
75°	1151	1917	2324
80°	987	1697	1750
85°	794	1000	794



TEST NUMBER: P387798

CATALOG NUMBER: 22CZ2-29HE-SQR-UNV-L940-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	3.3
10°-20°	223.0	9.5
20°-30°	334.9	14.2
30°-40°	399.4	17.0
40°-50°	413.0	17.5
50°-60°	379.7	16.1
60°-70°	302.2	12.8
70°-80°	184.7	7.8
80°-90°	40.1	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°	635.9	27.0
0°-40°	1035.3	44.0
0°-60°	1827.9	77.6
0°-90°	2354.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2354.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	823	823	823	823	823	
5°	814	816	822	825	826	77
15°	769	778	792	804	807	217
25°	686	703	731	751	758	316
35°	578	602	643	676	686	360
45°	455	487	541	585	599	352
55°	334	371	431	481	497	299
65°	218	255	314	358	373	216
75°	111	143	184	217	224	118
85°	26	31	32	28	26	30
90°	0	0	0	0	0	



TEST NUMBER: P387798

CATALOG NUMBER: 22CZ2-29HE-SQR-UNV-L940-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	822.6	822.6	822.6	822.6	822.6
2.5°	818.2	819.3	822.6	824.9	824.9
5°	813.7	815.9	821.5	824.9	826.0
7.5°	807.0	810.3	818.2	822.6	823.7
10°	796.9	801.4	811.4	818.2	820.4
12.5°	784.6	791.3	803.6	812.6	814.8
15°	769.0	777.9	792.4	803.6	807.0
17.5°	751.1	762.3	780.2	793.6	798.0
20°	732.1	743.3	765.6	781.3	786.9
22.5°	709.7	724.3	750.0	767.9	772.3
25°	686.3	703.0	731.0	751.1	757.8
27.5°	660.6	680.7	710.9	735.4	741.0
30°	633.7	655.0	689.6	716.4	723.1
32.5°	605.8	630.4	667.3	697.4	706.4
35°	577.8	602.4	642.7	676.2	686.3
37.5°	545.4	574.5	619.2	653.9	666.1
40°	517.5	545.4	593.5	631.5	643.8
42.5°	486.2	516.4	566.7	608.0	622.6
45°	454.9	487.3	541.0	584.6	599.1
47.5°	425.8	458.3	514.1	560.0	574.5
50°	395.7	429.2	487.3	534.3	548.8
52.5°	363.3	400.1	460.5	507.4	524.2
55°	334.2	371.1	431.4	480.6	497.4
57.5°	304.0	342.0	404.6	451.5	467.2
60°	276.1	313.0	374.4	420.3	438.1
62.5°	245.9	283.9	344.2	389.0	405.7
65°	218.0	254.8	314.1	357.7	373.3
67.5°	190.0	226.9	282.8	324.1	342.0
70°	162.1	198.9	250.4	290.6	306.2
72.5°	137.5	169.9	219.1	256.0	270.5
75°	110.7	143.1	184.4	216.8	223.5
77.5°	86.1	115.1	149.8	164.3	166.5
80°	63.7	86.1	109.5	112.9	112.9
82.5°	42.5	59.2	68.2	69.3	68.2
85°	25.7	31.3	32.4	27.9	25.7
87.5°	8.9	8.9	5.6	3.4	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)