

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: P387799

Luminaire Tested: **22CZ2-29HE-SQR-UNV-L940-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: P387799
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-SWPD1-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: 2383.6 lumens
Efficiency: N/A
Efficacy: 107.4 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

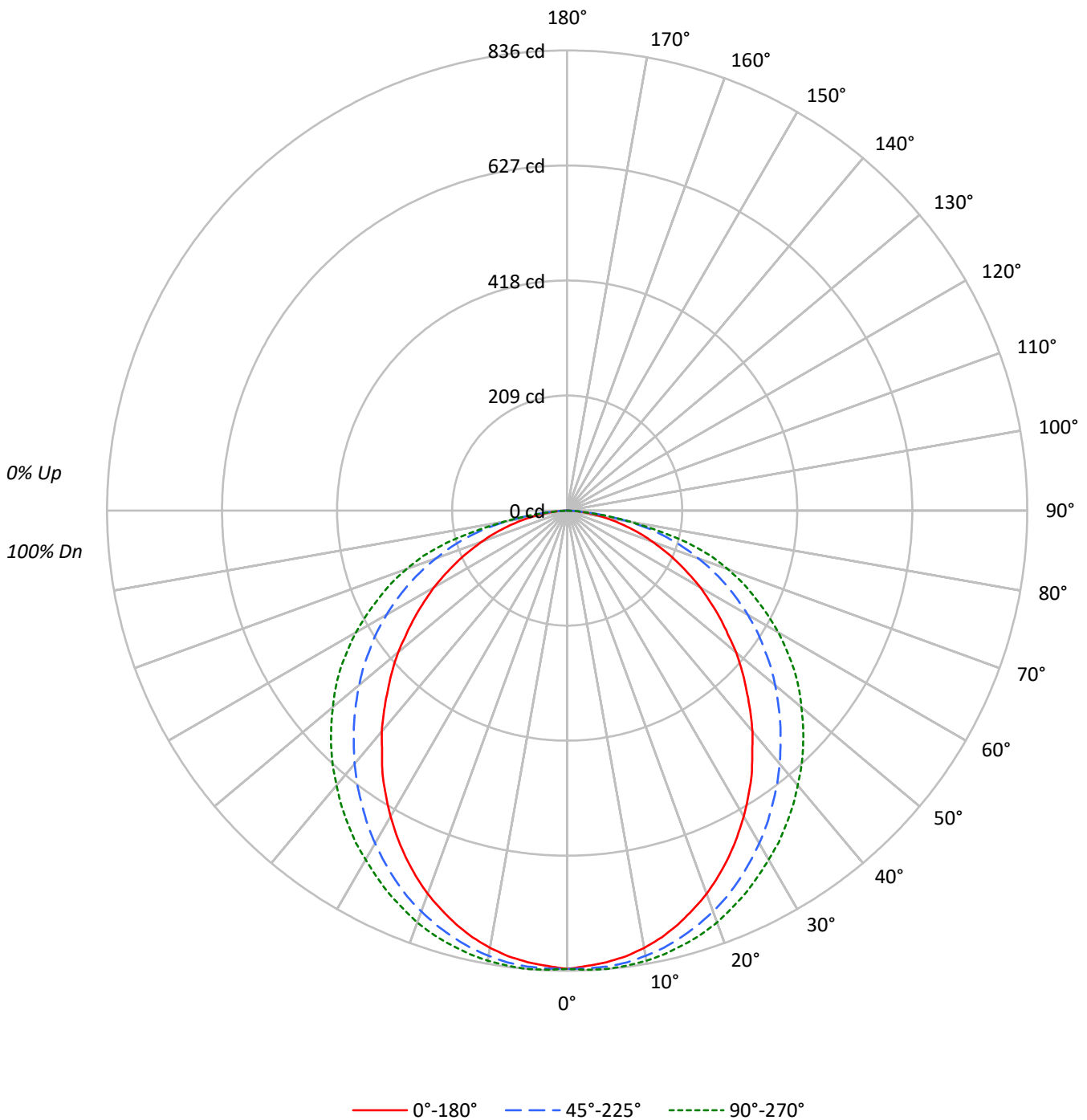
Input Watts (W): 22.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387799

CATALOG NUMBER: 22CZ2-29HE-SQR-UNV-L940-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387799

CATALOG NUMBER: 22CZ2-29HE-SQR-UNV-L940-CD1-SWPD1-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°	2241	2241	2241
5°	2225	2246	2258
10°	2204	2244	2269
15°	2168	2235	2276
20°	2122	2219	2281
25°	2062	2197	2277
30°	1993	2169	2275
35°	1921	2137	2282
40°	1840	2110	2289
45°	1752	2084	2308
50°	1677	2065	2326
55°	1587	2049	2362
60°	1504	2040	2387
65°	1405	2024	2406
70°	1290	1994	2439
75°	1164	1941	2353
80°	1000	1719	1771
85°	803	1013	803



TEST NUMBER: P387799

CATALOG NUMBER: 22CZ2-29HE-SQR-UNV-L940-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	3.3
10°-20°	225.7	9.5
20°-30°	339.0	14.2
30°-40°	404.3	17.0
40°-50°	418.0	17.5
50°-60°	384.3	16.1
60°-70°	305.9	12.8
70°-80°	186.9	7.8
80°-90°	40.6	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°	643.6	27.0
0°-40°	1047.9	44.0
0°-60°	1850.1	77.6
0°-90°	2383.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2383.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	833	833	833	833	833	
5°	824	826	832	835	836	78
15°	778	787	802	813	817	219
25°	695	712	740	760	767	320
35°	585	610	650	684	695	365
45°	460	493	548	592	606	356
55°	338	376	437	486	503	303
65°	221	258	318	362	378	219
75°	112	145	187	220	226	119
85°	26	32	33	28	26	30
90°	0	0	0	0	0	



TEST NUMBER: P387799

CATALOG NUMBER: 22CZ2-29HE-SQR-UNV-L940-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	832.6	832.6	832.6	832.6	832.6
2.5°	828.1	829.3	832.6	834.9	834.9
5°	823.6	825.9	831.5	834.9	836.0
7.5°	816.8	820.2	828.1	832.6	833.8
10°	806.6	811.2	821.3	828.1	830.4
12.5°	794.2	801.0	813.4	822.5	824.7
15°	778.3	787.4	802.1	813.4	816.8
17.5°	760.2	771.6	789.7	803.2	807.8
20°	741.0	752.3	775.0	790.8	796.4
22.5°	718.4	733.1	759.1	777.2	781.7
25°	694.6	711.6	739.9	760.2	767.0
27.5°	668.6	689.0	719.5	744.4	750.1
30°	641.5	663.0	698.0	725.2	732.0
32.5°	613.2	638.1	675.4	705.9	715.0
35°	584.9	609.8	650.5	684.4	694.6
37.5°	552.1	581.5	626.7	661.8	674.3
40°	523.8	552.1	600.7	639.2	651.6
42.5°	492.1	522.7	573.6	615.4	630.1
45°	460.4	493.3	547.6	591.7	606.4
47.5°	431.0	463.8	520.4	566.8	581.5
50°	400.5	434.4	493.3	540.8	555.5
52.5°	367.7	405.0	466.1	513.6	530.6
55°	338.3	375.6	436.7	486.5	503.4
57.5°	307.7	346.2	409.5	457.1	472.9
60°	279.4	316.8	379.0	425.4	443.5
62.5°	248.9	287.4	348.4	393.7	410.7
65°	220.6	257.9	317.9	362.0	377.9
67.5°	192.3	229.7	286.2	328.1	346.2
70°	164.0	201.4	253.4	294.1	310.0
72.5°	139.2	172.0	221.7	259.1	273.8
75°	112.0	144.8	186.7	219.5	226.3
77.5°	87.1	116.5	151.6	166.3	168.6
80°	64.5	87.1	110.9	114.3	114.3
82.5°	43.0	60.0	69.0	70.1	69.0
85°	26.0	31.7	32.8	28.3	26.0
87.5°	9.1	9.1	5.7	3.4	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)