

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: P387819

Luminaire Tested: **22CZ2-29VHE-SQR-UNV-L935-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: P387819
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: 22CZ2-29VHE-SQR-UNV-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2467.0 lumens
Efficiency: N/A
Efficacy: 113.7 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

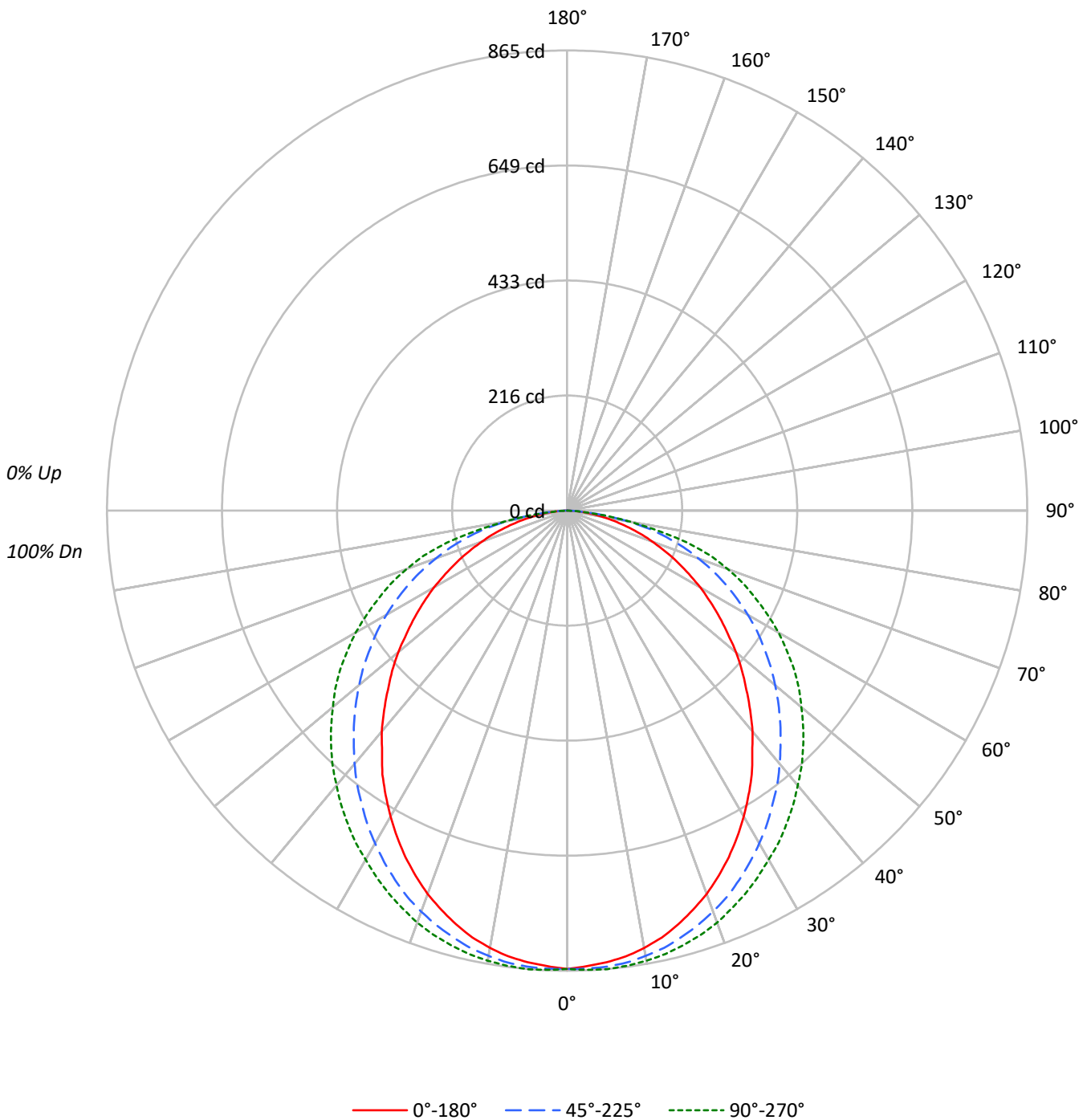
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387819

CATALOG NUMBER: 22CZ2-29VHE-SQR-UNV-L935-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387819

CATALOG NUMBER: 22CZ2-29VHE-SQR-UNV-L935-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°	2319	2319	2319
5°	2303	2325	2337
10°	2281	2323	2348
15°	2244	2313	2355
20°	2196	2297	2361
25°	2135	2274	2357
30°	2063	2245	2354
35°	1989	2212	2362
40°	1904	2184	2369
45°	1814	2157	2388
50°	1735	2137	2407
55°	1643	2121	2445
60°	1556	2111	2470
65°	1454	2095	2490
70°	1336	2064	2524
75°	1205	2009	2435
80°	1034	1777	1833
85°	831	1050	831



TEST NUMBER: P387819

CATALOG NUMBER: 22CZ2-29VHE-SQR-UNV-L935-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	3.3
10°-20°	233.6	9.5
20°-30°	350.8	14.2
30°-40°	418.4	17.0
40°-50°	432.6	17.5
50°-60°	397.7	16.1
60°-70°	316.6	12.8
70°-80°	193.5	7.8
80°-90°	42.1	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°	666.1	27.0
0°-40°	1084.5	44.0
0°-60°	1914.9	77.6
0°-90°	2467.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2467.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	862	862	862	862	862	
5°	852	855	861	864	865	81
15°	806	815	830	842	845	227
25°	719	736	766	787	794	331
35°	605	631	673	708	719	378
45°	477	510	567	612	628	369
55°	350	389	452	504	521	313
65°	228	267	329	375	391	226
75°	116	150	193	227	234	123
85°	27	33	34	29	27	31
90°	0	0	0	0	0	



TEST NUMBER: P387819

CATALOG NUMBER: 22CZ2-29VHE-SQR-UNV-L935-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	861.8	861.8	861.8	861.8	861.8
2.5°	857.1	858.3	861.8	864.1	864.1
5°	852.4	854.8	860.6	864.1	865.3
7.5°	845.4	848.9	857.1	861.8	863.0
10°	834.9	839.5	850.1	857.1	859.4
12.5°	822.0	829.0	841.9	851.2	853.6
15°	805.6	814.9	830.2	841.9	845.4
17.5°	786.8	798.6	817.3	831.3	836.0
20°	766.9	778.6	802.1	818.5	824.3
22.5°	743.5	758.7	785.7	804.4	809.1
25°	718.9	736.5	765.8	786.8	793.9
27.5°	692.0	713.1	744.7	770.5	776.3
30°	663.9	686.1	722.4	750.5	757.6
32.5°	634.6	660.4	699.0	730.6	740.0
35°	605.4	631.1	673.3	708.4	718.9
37.5°	571.4	601.8	648.7	685.0	697.9
40°	542.1	571.4	621.7	661.6	674.4
42.5°	509.3	541.0	593.6	637.0	652.2
45°	476.6	510.5	566.7	612.4	627.6
47.5°	446.1	480.1	538.6	586.6	601.8
50°	414.5	449.6	510.5	559.7	574.9
52.5°	380.5	419.2	482.4	531.6	549.2
55°	350.1	388.7	452.0	503.5	521.1
57.5°	318.5	358.3	423.9	473.0	489.4
60°	289.2	327.9	392.3	440.3	459.0
62.5°	257.6	297.4	360.6	407.5	425.0
65°	228.3	267.0	329.0	374.7	391.1
67.5°	199.1	237.7	296.2	339.6	358.3
70°	169.8	208.4	262.3	304.4	320.8
72.5°	144.0	178.0	229.5	268.1	283.4
75°	115.9	149.9	193.2	227.2	234.2
77.5°	90.2	120.6	156.9	172.1	174.5
80°	66.7	90.2	114.7	118.3	118.3
82.5°	44.5	62.1	71.4	72.6	71.4
85°	26.9	32.8	34.0	29.3	26.9
87.5°	9.4	9.4	5.9	3.5	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)