

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: P387846

Luminaire Tested: **22CZ2-32-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: P387846
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: 22CZ2-32-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: 2625.4 lumens
Efficiency: N/A
Efficacy: 98.3 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

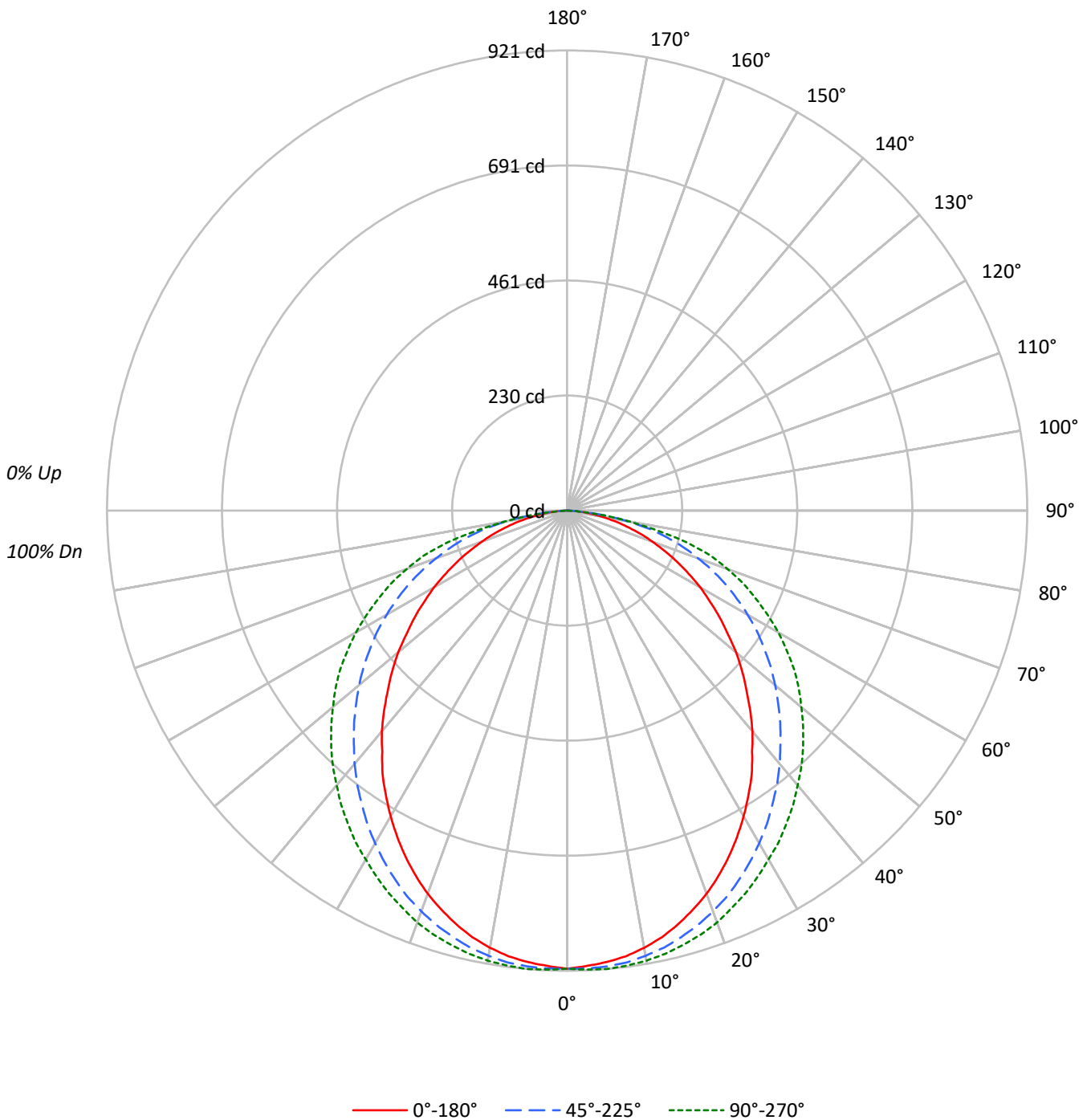
Input Watts (W): 26.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387846

CATALOG NUMBER: 22CZ2-32-SQR-UNV-L940-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387846

CATALOG NUMBER: 22CZ2-32-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°	2468	2468	2468
5°	2450	2474	2488
10°	2428	2472	2499
15°	2388	2461	2506
20°	2337	2444	2512
25°	2272	2420	2508
30°	2195	2389	2505
35°	2116	2354	2513
40°	2027	2324	2521
45°	1930	2295	2542
50°	1847	2274	2561
55°	1748	2257	2601
60°	1657	2246	2629
65°	1547	2229	2650
70°	1422	2196	2686
75°	1283	2138	2591
80°	1100	1892	1951
85°	886	1115	886



TEST NUMBER: P387846

CATALOG NUMBER: 22CZ2-32-SQR-UNV-L940-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.9	3.3
10°-20°	248.6	9.5
20°-30°	373.4	14.2
30°-40°	445.3	17.0
40°-50°	460.4	17.5
50°-60°	423.3	16.1
60°-70°	337.0	12.8
70°-80°	205.9	7.8
80°-90°	44.8	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°	708.9	27.0
0°-40°	1154.2	44.0
0°-60°	2037.8	77.6
0°-90°	2625.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2625.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	917	917	917	917	917	
5°	907	910	916	920	921	86
15°	857	867	884	896	900	241
25°	765	784	815	837	845	352
35°	644	672	716	754	765	402
45°	507	543	603	652	668	392
55°	373	414	481	536	554	333
65°	243	284	350	399	416	241
75°	123	160	206	242	249	131
85°	29	35	36	31	29	33
90°	0	0	0	0	0	



TEST NUMBER: P387846

CATALOG NUMBER: 22CZ2-32-SQR-UNV-L940-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	917.1	917.1	917.1	917.1	917.1
2.5°	912.1	913.4	917.1	919.6	919.6
5°	907.1	909.6	915.9	919.6	920.9
7.5°	899.7	903.4	912.1	917.1	918.4
10°	888.5	893.4	904.7	912.1	914.6
12.5°	874.7	882.2	895.9	905.9	908.4
15°	857.3	867.3	883.5	895.9	899.7
17.5°	837.4	849.8	869.8	884.7	889.7
20°	816.2	828.6	853.6	871.0	877.2
22.5°	791.3	807.5	836.1	856.1	861.0
25°	765.1	783.8	814.9	837.4	844.8
27.5°	736.4	758.9	792.5	819.9	826.2
30°	706.5	730.2	768.8	798.7	806.2
32.5°	675.4	702.8	743.9	777.6	787.5
35°	644.2	671.6	716.5	753.9	765.1
37.5°	608.1	640.5	690.3	729.0	742.7
40°	576.9	608.1	661.7	704.0	717.7
42.5°	542.0	575.7	631.8	677.9	694.1
45°	507.2	543.3	603.1	651.7	667.9
47.5°	474.8	510.9	573.2	624.3	640.5
50°	441.1	478.5	543.3	595.6	611.8
52.5°	405.0	446.1	513.4	565.7	584.4
55°	372.6	413.7	481.0	535.8	554.5
57.5°	338.9	381.3	451.1	503.4	520.9
60°	307.8	348.9	417.4	468.5	488.5
62.5°	274.1	316.5	383.8	433.6	452.3
65°	243.0	284.1	350.1	398.7	416.2
67.5°	211.8	253.0	315.3	361.4	381.3
70°	180.7	221.8	279.1	324.0	341.4
72.5°	153.3	189.4	244.2	285.4	301.6
75°	123.4	159.5	205.6	241.7	249.2
77.5°	95.9	128.3	167.0	183.2	185.7
80°	71.0	95.9	122.1	125.9	125.9
82.5°	47.4	66.0	76.0	77.3	76.0
85°	28.7	34.9	36.1	31.2	28.7
87.5°	10.0	10.0	6.2	3.7	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)