

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: P387441

Luminaire Tested: **14CZ2-29-SQR-UNV-L950-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: P387441
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-580-2)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-29-SQR-UNV-L950-CD1-SDWPD1-U
Description: 1x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2446.0 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

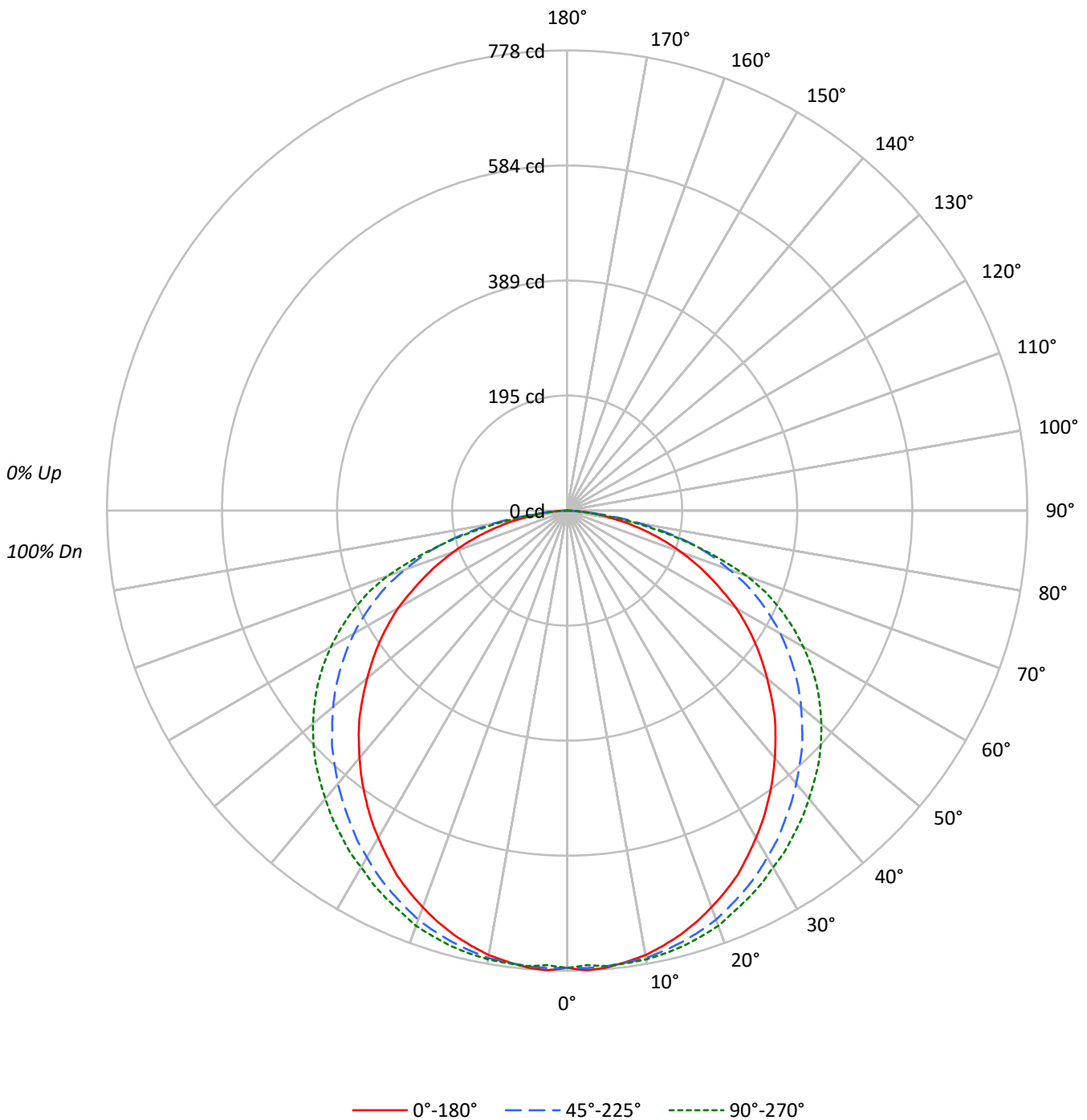
Input Watts (W): 24.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387441

CATALOG NUMBER: 14CZ2-29-SQR-UNV-L950-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387441

CATALOG NUMBER: 14CZ2-29-SQR-UNV-L950-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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2080	2080	2080
5°	2095	2088	2088
10°	2085	2099	2105
15°	2067	2102	2123
20°	2044	2108	2139
25°	2021	2105	2148
30°	1984	2103	2164
35°	1952	2106	2195
40°	1918	2118	2235
45°	1891	2140	2289
50°	1847	2162	2348
55°	1816	2198	2418
60°	1778	2243	2482
65°	1696	2284	2543
70°	1610	2289	2541
75°	1474	2281	2243
80°	1261	1948	1739
85°	991	1105	648



TEST NUMBER: P387441

CATALOG NUMBER: 14CZ2-29-SQR-UNV-L950-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.5	3.0
10°-20°	212.2	8.7
20°-30°	324.5	13.3
30°-40°	397.8	16.3
40°-50°	427.8	17.5
50°-60°	411.1	16.8
60°-70°	342.3	14.0
70°-80°	210.1	8.6
80°-90°	46.8	1.9
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°	610.2	24.9
0°-40°	1007.9	41.2
0°-60°	1846.8	75.5
0°-90°	2446.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2446.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	773	773	773	773	773	
5°	775	768	773	773	773	74
15°	742	740	754	759	762	209
25°	680	687	709	718	724	313
35°	594	609	641	658	668	372
45°	497	519	562	588	602	382
55°	387	420	468	500	515	346
65°	266	307	359	388	399	264
75°	142	185	219	218	216	150
85°	32	48	36	25	21	39
90°	0	0	0	0	0	



TEST NUMBER: P387441

CATALOG NUMBER: 14CZ2-29-SQR-UNV-L950-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	773.0	773.0	773.0	773.0	773.0
2.5°	777.9	770.5	774.2	773.0	769.3
5°	775.4	768.0	773.0	773.0	773.0
7.5°	769.3	763.1	770.5	771.7	771.7
10°	763.1	758.2	768.0	769.3	770.5
12.5°	753.2	749.5	761.9	764.3	766.8
15°	742.1	739.7	754.5	759.4	761.9
17.5°	728.6	729.8	745.8	752.0	754.5
20°	713.8	717.5	736.0	742.1	747.1
22.5°	697.8	702.7	722.4	729.8	734.7
25°	680.5	686.7	708.9	717.5	723.6
27.5°	659.5	669.4	694.1	705.2	711.3
30°	638.6	649.7	676.8	690.4	696.5
32.5°	617.6	630.0	660.8	674.3	684.2
35°	594.2	609.0	641.0	658.3	668.2
37.5°	570.8	588.0	622.6	642.3	653.4
40°	546.1	564.6	602.8	625.0	636.1
42.5°	521.5	542.4	581.9	606.5	618.9
45°	496.8	519.0	562.2	588.0	601.6
47.5°	468.5	495.6	538.7	568.3	581.9
50°	441.3	470.9	516.5	547.4	560.9
52.5°	414.2	445.0	493.1	525.2	538.7
55°	387.1	420.4	468.5	500.5	515.3
57.5°	358.7	393.3	442.6	475.9	489.4
60°	330.4	366.1	416.7	447.5	461.1
62.5°	297.1	339.0	388.3	419.1	431.5
65°	266.3	307.0	358.7	388.3	399.4
67.5°	235.5	277.4	327.9	355.0	364.9
70°	204.6	246.6	290.9	316.8	323.0
72.5°	173.8	215.7	257.7	272.4	270.0
75°	141.8	184.9	219.4	218.2	215.7
77.5°	111.0	152.9	173.8	165.2	161.5
80°	81.4	122.0	125.7	117.1	112.2
82.5°	55.5	87.5	78.9	69.0	64.1
85°	32.1	48.1	35.8	24.7	21.0
87.5°	13.6	12.3	3.7	3.7	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)