

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: P387433

Luminaire Tested: **14CZ2-29-SQR-UNV-L930-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: P387433
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-L930-CD1-SWPD1-U
Description: 1x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2253.0 lumens
Efficiency: N/A
Efficacy: 92.7 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

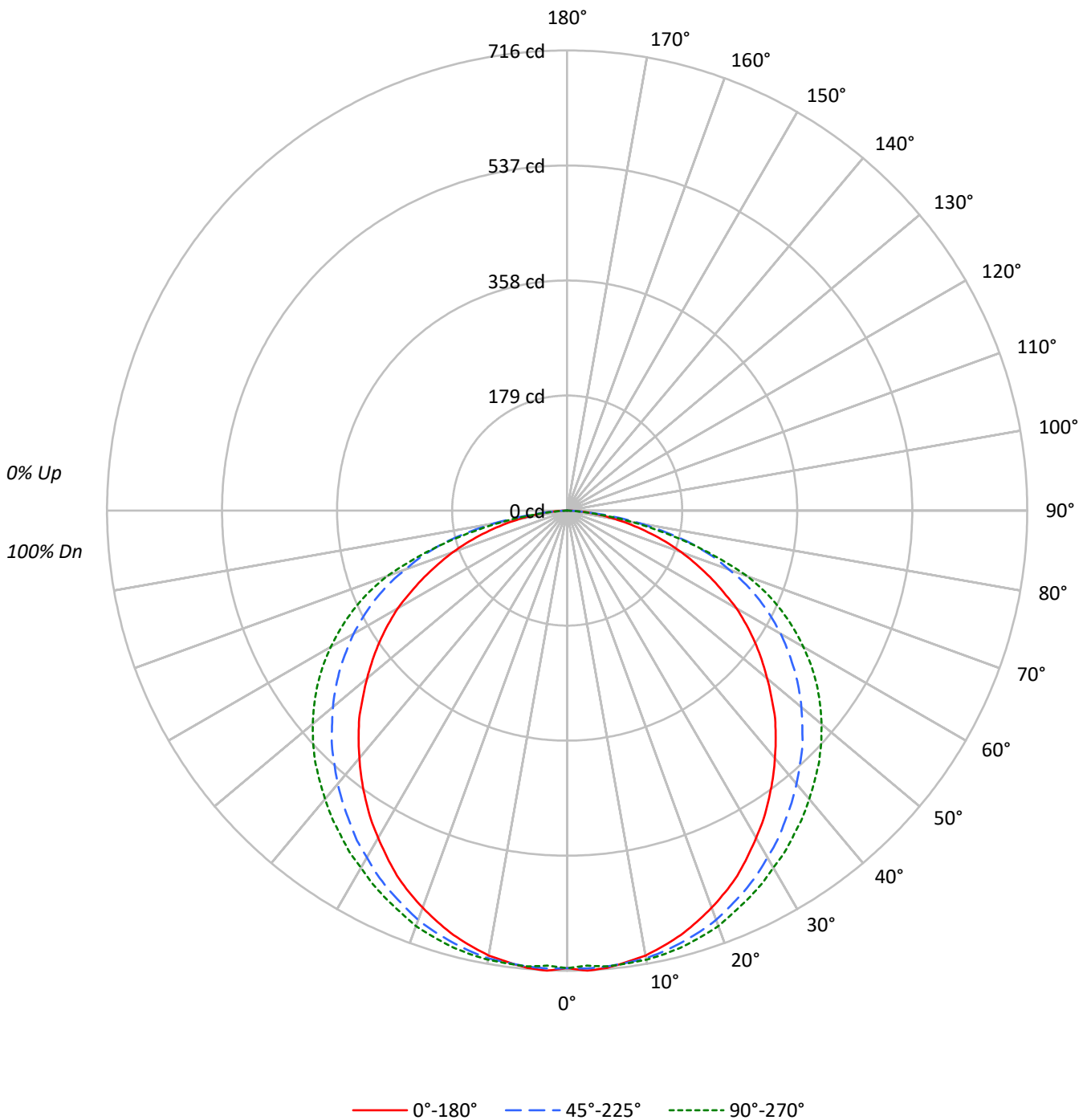
Input Watts (W): 24.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	1916	1916	1916
5°	1929	1923	1923
10°	1921	1933	1939
15°	1904	1936	1955
20°	1883	1941	1970
25°	1861	1939	1979
30°	1828	1937	1994
35°	1798	1940	2022
40°	1767	1951	2058
45°	1741	1971	2109
50°	1702	1992	2163
55°	1673	2024	2227
60°	1638	2066	2286
65°	1562	2104	2343
70°	1483	2109	2341
75°	1358	2101	2066
80°	1161	1795	1601
85°	911	1016	596



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.7	3.0
10°-20°	195.5	8.7
20°-30°	298.9	13.3
30°-40°	366.4	16.3
40°-50°	394.0	17.5
50°-60°	378.6	16.8
60°-70°	315.3	14.0
70°-80°	193.5	8.6
80°-90°	43.1	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°	562.0	24.9
0°-40°	928.4	41.2
0°-60°	1701.1	75.5
0°-90°	2253.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2253.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	712	712	712	712	712	
5°	714	707	712	712	712	68
15°	684	681	695	700	702	193
25°	627	632	653	661	666	288
35°	547	561	590	606	615	342
45°	458	478	518	542	554	352
55°	357	387	432	461	475	318
65°	245	283	330	358	368	243
75°	131	170	202	201	199	138
85°	30	44	33	23	19	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	712.0	712.0	712.0	712.0	712.0
2.5°	716.5	709.7	713.1	712.0	708.6
5°	714.2	707.4	712.0	712.0	712.0
7.5°	708.6	702.9	709.7	710.8	710.8
10°	702.9	698.3	707.4	708.6	709.7
12.5°	693.8	690.4	701.7	704.0	706.3
15°	683.6	681.3	694.9	699.5	701.7
17.5°	671.1	672.2	687.0	692.7	694.9
20°	657.5	660.9	677.9	683.6	688.1
22.5°	642.7	647.2	665.4	672.2	676.8
25°	626.8	632.5	652.9	660.9	666.5
27.5°	607.5	616.6	639.3	649.5	655.2
30°	588.2	598.4	623.4	635.9	641.6
32.5°	568.9	580.2	608.6	621.1	630.2
35°	547.3	560.9	590.5	606.4	615.4
37.5°	525.7	541.6	573.4	591.6	601.8
40°	503.0	520.1	555.3	575.7	585.9
42.5°	480.3	499.6	536.0	558.7	570.0
45°	457.6	478.1	517.8	541.6	554.1
47.5°	431.5	456.5	496.2	523.5	536.0
50°	406.5	433.8	475.8	504.2	516.7
52.5°	381.5	409.9	454.2	483.7	496.2
55°	356.6	387.2	431.5	461.0	474.6
57.5°	330.4	362.2	407.6	438.3	450.8
60°	304.3	337.2	383.8	412.2	424.7
62.5°	273.7	312.3	357.7	386.1	397.4
65°	245.3	282.7	330.4	357.7	367.9
67.5°	216.9	255.5	302.0	327.0	336.1
70°	188.5	227.1	268.0	291.8	297.5
72.5°	160.1	198.7	237.3	250.9	248.7
75°	130.6	170.3	202.1	201.0	198.7
77.5°	102.2	140.8	160.1	152.2	148.8
80°	74.9	112.4	115.8	107.9	103.3
82.5°	51.1	80.6	72.7	63.6	59.0
85°	29.5	44.3	32.9	22.7	19.3
87.5°	12.5	11.4	3.4	3.4	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)