

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: P387442

Luminaire Tested: **14CZ2-29-SQR-UNV-L950-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: P387442  
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-SWPD1-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: 2475.9 lumens  
Efficiency: N/A  
Efficacy: 101.9 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

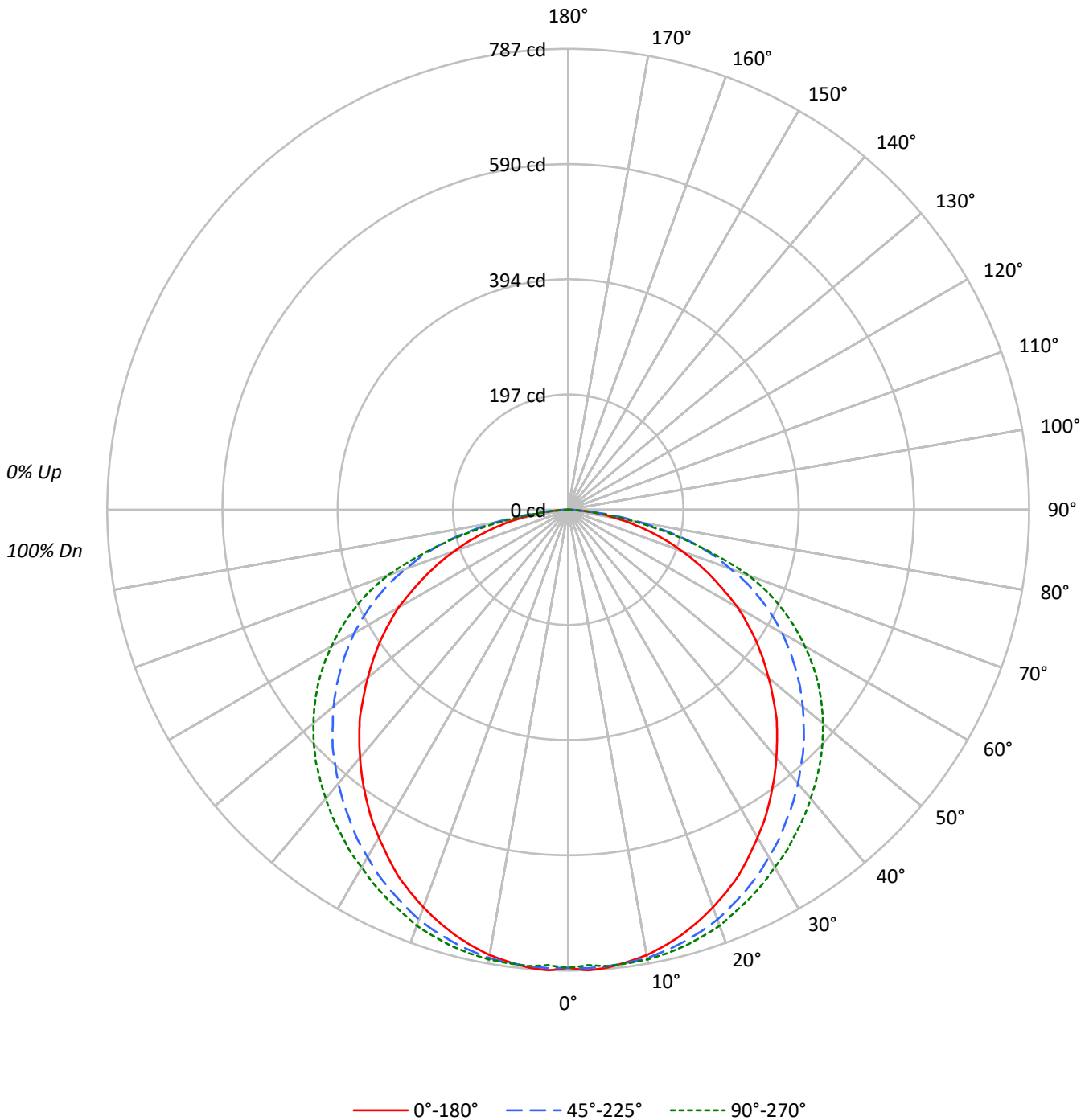
Input Watts (W): 24.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2105	2105	2105
5°	2120	2113	2113
10°	2111	2124	2131
15°	2093	2128	2148
20°	2069	2133	2166
25°	2045	2130	2175
30°	2009	2129	2191
35°	1976	2132	2222
40°	1942	2144	2262
45°	1914	2165	2318
50°	1870	2189	2377
55°	1838	2225	2447
60°	1800	2270	2512
65°	1716	2312	2574
70°	1629	2317	2572
75°	1492	2309	2271
80°	1277	1973	1760
85°	1000	1118	655



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.4	3.0
10°-20°	214.8	8.7
20°-30°	328.5	13.3
30°-40°	402.6	16.3
40°-50°	433.0	17.5
50°-60°	416.1	16.8
60°-70°	346.5	14.0
70°-80°	212.7	8.6
80°-90°	47.4	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°	617.6	24.9
0°-40°	1020.3	41.2
0°-60°	1869.4	75.5
0°-90°	2475.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2475.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	782	782	782	782	782	
5°	785	777	782	782	782	74
15°	751	749	764	769	771	212
25°	689	695	718	726	732	317
35°	602	616	649	666	676	376
45°	503	525	569	595	609	387
55°	392	426	474	507	522	350
65°	270	311	363	393	404	267
75°	144	187	222	221	218	152
85°	32	49	36	25	21	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	782.4	782.4	782.4	782.4	782.4
2.5°	787.4	779.9	783.7	782.4	778.7
5°	784.9	777.4	782.4	782.4	782.4
7.5°	778.7	772.4	779.9	781.2	781.2
10°	772.4	767.4	777.4	778.7	779.9
12.5°	762.4	758.7	771.2	773.7	776.2
15°	751.2	748.7	763.7	768.7	771.2
17.5°	737.5	738.7	755.0	761.2	763.7
20°	722.5	726.3	745.0	751.2	756.2
22.5°	706.3	711.3	731.2	738.7	743.7
25°	688.8	695.1	717.5	726.3	732.5
27.5°	667.6	677.6	702.5	713.8	720.0
30°	646.4	657.6	685.1	698.8	705.0
32.5°	625.2	637.7	668.9	682.6	692.6
35°	601.5	616.4	648.9	666.4	676.3
37.5°	577.8	595.2	630.2	650.1	661.4
40°	552.8	571.5	610.2	632.7	643.9
42.5°	527.8	549.1	589.0	613.9	626.4
45°	502.9	525.3	569.0	595.2	609.0
47.5°	474.2	501.6	545.3	575.3	589.0
50°	446.7	476.7	522.9	554.0	567.8
52.5°	419.3	450.5	499.1	531.6	545.3
55°	391.8	425.5	474.2	506.6	521.6
57.5°	363.1	398.1	448.0	481.7	495.4
60°	334.4	370.6	421.8	453.0	466.7
62.5°	300.7	343.2	393.1	424.3	436.7
65°	269.5	310.7	363.1	393.1	404.3
67.5°	238.3	280.8	331.9	359.4	369.4
70°	207.1	249.6	294.5	320.7	326.9
72.5°	175.9	218.4	260.8	275.8	273.3
75°	143.5	187.2	222.1	220.9	218.4
77.5°	112.3	154.7	175.9	167.2	163.5
80°	82.4	123.5	127.3	118.5	113.6
82.5°	56.2	88.6	79.9	69.9	64.9
85°	32.4	48.7	36.2	25.0	21.2
87.5°	13.7	12.5	3.7	3.7	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)