

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: P387459

Luminaire Tested: **14CZ2-35-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: P387459
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: 14CZ2-35-SQR-UNV-L935-CD1-SDWPD1-U
Description: 1x4 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: 2808.5 lumens
Efficiency: N/A
Efficacy: 90.0 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

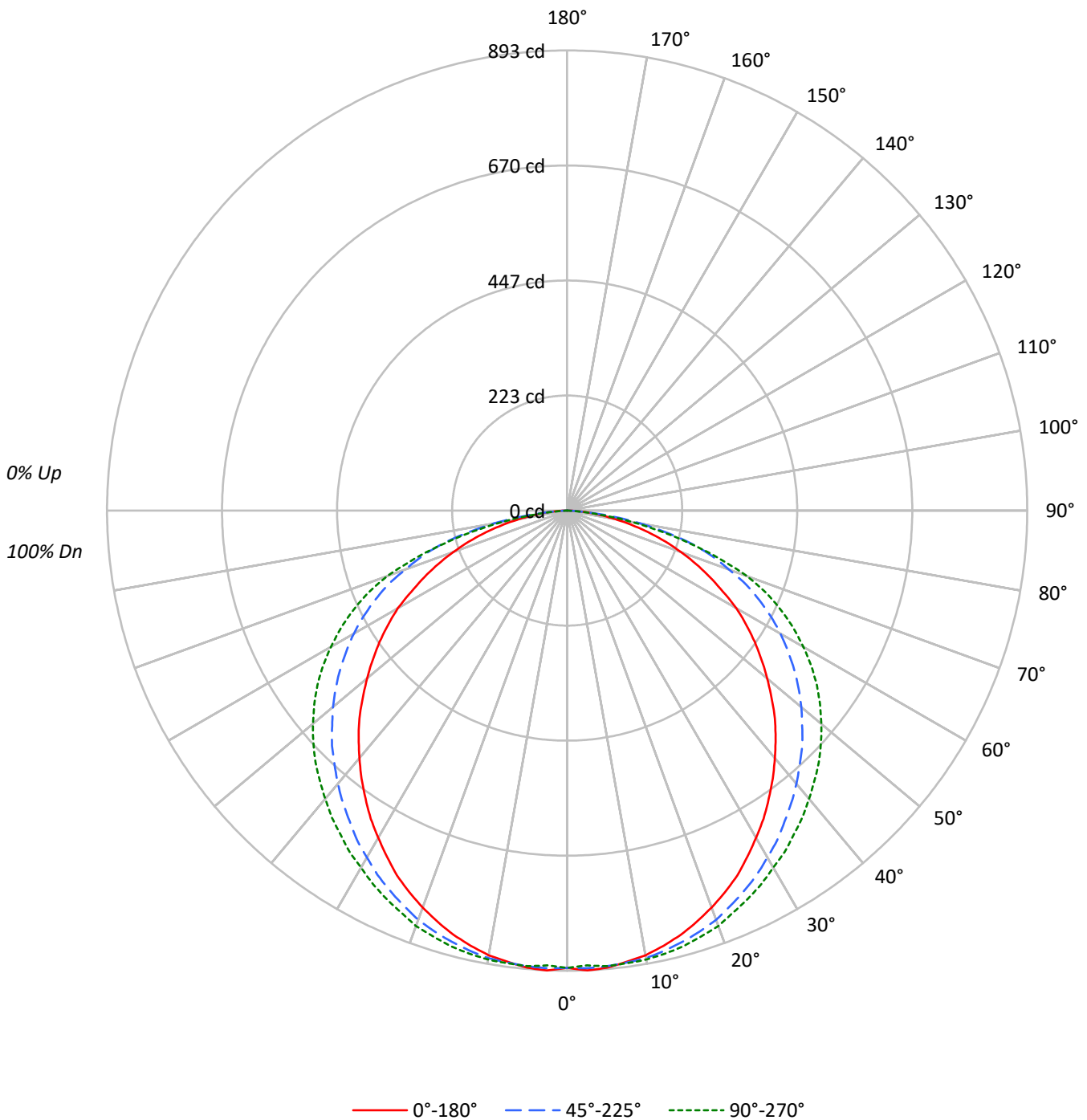
Input Watts (W): 31.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2388	2388	2388
5°	2405	2397	2397
10°	2394	2410	2417
15°	2374	2413	2437
20°	2347	2420	2456
25°	2320	2417	2467
30°	2278	2415	2485
35°	2241	2418	2520
40°	2203	2432	2566
45°	2171	2457	2629
50°	2121	2483	2696
55°	2085	2524	2776
60°	2042	2575	2849
65°	1947	2623	2920
70°	1849	2629	2918
75°	1693	2620	2575
80°	1447	2238	1996
85°	1136	1266	744



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.3	3.0
10°-20°	243.6	8.7
20°-30°	372.6	13.3
30°-40°	456.7	16.3
40°-50°	491.2	17.5
50°-60°	472.0	16.8
60°-70°	393.0	14.0
70°-80°	241.2	8.6
80°-90°	53.7	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°	700.6	24.9
0°-40°	1157.3	41.2
0°-60°	2120.5	75.5
0°-90°	2808.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2808.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	888	888	888	888	888	
5°	890	882	888	888	888	84
15°	852	849	866	872	875	240
25°	781	788	814	824	831	359
35°	682	699	736	756	767	427
45°	570	596	646	675	691	439
55°	444	483	538	575	592	397
65°	306	352	412	446	459	303
75°	163	212	252	250	248	172
85°	37	55	41	28	24	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	887.5	887.5	887.5	887.5	887.5
2.5°	893.2	884.7	888.9	887.5	883.3
5°	890.3	881.8	887.5	887.5	887.5
7.5°	883.3	876.2	884.7	886.1	886.1
10°	876.2	870.5	881.8	883.3	884.7
12.5°	864.9	860.6	874.8	877.6	880.4
15°	852.1	849.3	866.3	871.9	874.8
17.5°	836.6	838.0	856.4	863.4	866.3
20°	819.6	823.8	845.0	852.1	857.8
22.5°	801.2	806.8	829.5	838.0	843.6
25°	781.3	788.4	813.9	823.8	830.9
27.5°	757.3	768.6	796.9	809.7	816.7
30°	733.2	746.0	777.1	792.7	799.8
32.5°	709.2	723.3	758.7	774.3	785.6
35°	682.3	699.3	736.1	755.9	767.2
37.5°	655.4	675.2	714.8	737.5	750.2
40°	627.1	648.3	692.2	717.7	730.4
42.5°	598.8	622.8	668.1	696.4	710.6
45°	570.4	595.9	645.5	675.2	690.8
47.5°	537.9	569.0	618.6	652.5	668.1
50°	506.7	540.7	593.1	628.5	644.0
52.5°	475.6	511.0	566.2	603.0	618.6
55°	444.5	482.7	537.9	574.7	591.7
57.5°	411.9	451.5	508.2	546.4	561.9
60°	379.4	420.4	478.4	513.8	529.4
62.5°	341.1	389.3	445.9	481.3	495.4
65°	305.7	352.5	411.9	445.9	458.6
67.5°	270.4	318.5	376.5	407.7	419.0
70°	235.0	283.1	334.1	363.8	370.9
72.5°	199.6	247.7	295.8	312.8	310.0
75°	162.8	212.3	252.0	250.5	247.7
77.5°	127.4	175.5	199.6	189.7	185.4
80°	93.4	140.1	144.4	134.5	128.8
82.5°	63.7	100.5	90.6	79.3	73.6
85°	36.8	55.2	41.0	28.3	24.1
87.5°	15.6	14.2	4.2	4.2	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)