

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: P387457

Luminaire Tested: **14CZ2-35-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: P387457
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-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: 2774.2 lumens
Efficiency: N/A
Efficacy: 88.9 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

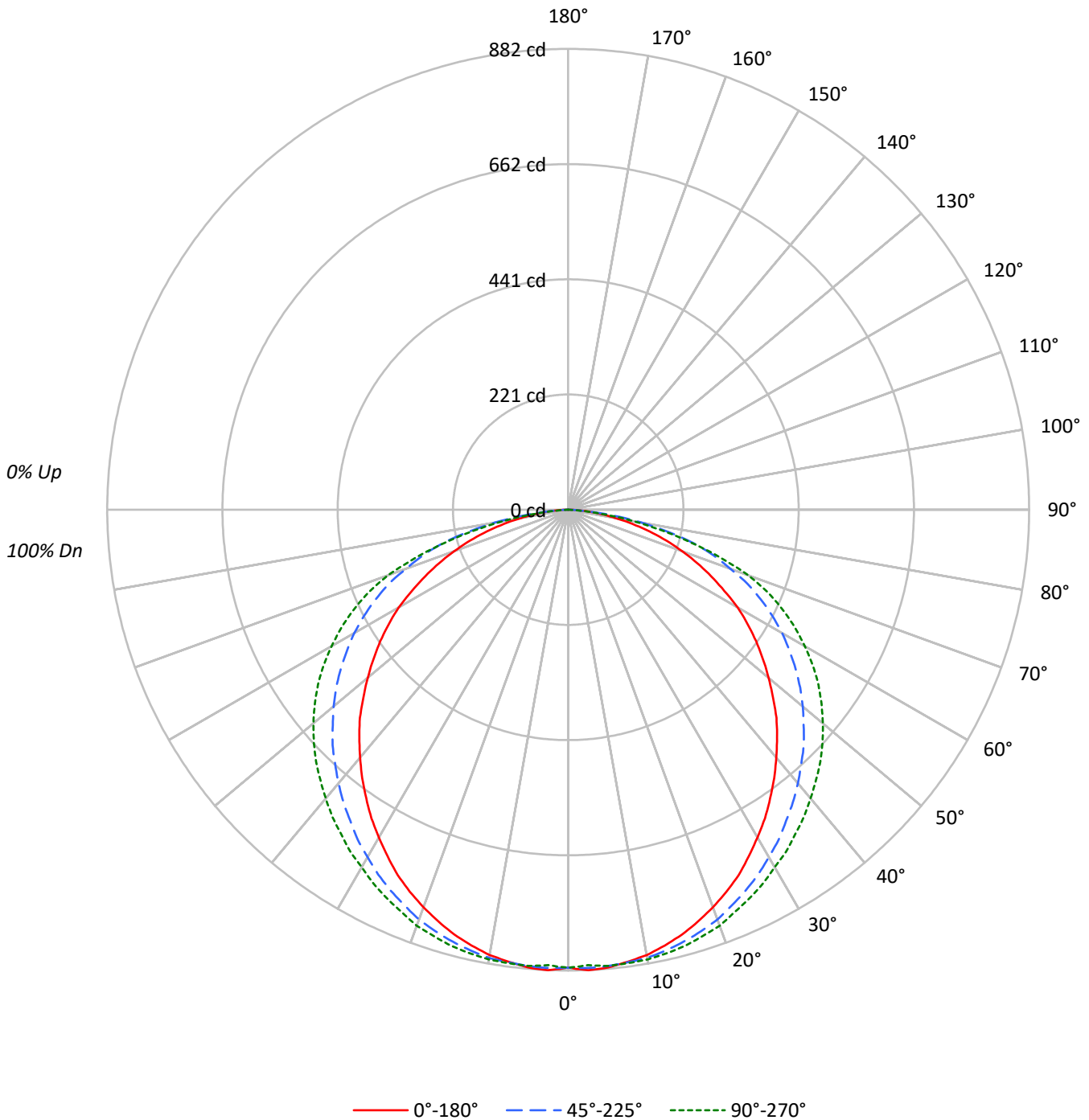
Input Watts (W): 31.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2359	2359	2359
5°	2376	2368	2368
10°	2365	2380	2388
15°	2345	2384	2407
20°	2318	2390	2426
25°	2292	2387	2437
30°	2251	2385	2455
35°	2214	2389	2489
40°	2176	2402	2535
45°	2144	2426	2597
50°	2096	2452	2663
55°	2060	2493	2742
60°	2017	2544	2814
65°	1923	2591	2884
70°	1826	2596	2882
75°	1672	2588	2544
80°	1430	2210	1971
85°	1124	1250	735



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.3	3.0
10°-20°	240.7	8.7
20°-30°	368.1	13.3
30°-40°	451.1	16.3
40°-50°	485.2	17.5
50°-60°	466.3	16.8
60°-70°	388.2	14.0
70°-80°	238.3	8.6
80°-90°	53.1	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°	692.0	24.9
0°-40°	1143.2	41.2
0°-60°	2094.6	75.5
0°-90°	2774.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2774.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	877	877	877	877	877	
5°	880	871	877	877	877	83
15°	842	839	856	861	864	237
25°	772	779	804	814	821	355
35°	674	691	727	747	758	422
45°	564	589	638	667	682	434
55°	439	477	531	568	584	392
65°	302	348	407	440	453	299
75°	161	210	249	248	245	170
85°	36	54	40	28	24	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	876.7	876.7	876.7	876.7	876.7
2.5°	882.3	873.9	878.1	876.7	872.5
5°	879.5	871.1	876.7	876.7	876.7
7.5°	872.5	865.5	873.9	875.3	875.3
10°	865.5	859.9	871.1	872.5	873.9
12.5°	854.3	850.1	864.1	866.9	869.7
15°	841.7	838.9	855.7	861.3	864.1
17.5°	826.3	827.7	845.9	852.9	855.7
20°	809.6	813.8	834.7	841.7	847.3
22.5°	791.4	797.0	819.3	827.7	833.3
25°	771.8	778.8	804.0	813.8	820.7
27.5°	748.0	759.2	787.2	799.8	806.8
30°	724.3	736.9	767.6	783.0	790.0
32.5°	700.5	714.5	749.4	764.8	776.0
35°	673.9	690.7	727.1	746.6	757.8
37.5°	647.4	666.9	706.1	728.5	741.0
40°	619.4	640.4	683.7	708.9	721.5
42.5°	591.4	615.2	660.0	687.9	701.9
45°	563.5	588.6	637.6	666.9	682.3
47.5°	531.3	562.1	611.0	644.6	660.0
50°	500.6	534.1	585.8	620.8	636.2
52.5°	469.8	504.8	559.3	595.6	611.0
55°	439.0	476.8	531.3	567.7	584.4
57.5°	406.9	446.0	502.0	539.7	555.1
60°	374.7	415.3	472.6	507.5	522.9
62.5°	337.0	384.5	440.4	475.4	489.4
65°	302.0	348.2	406.9	440.4	453.0
67.5°	267.1	314.6	371.9	402.7	413.9
70°	232.1	279.6	330.0	359.3	366.3
72.5°	197.1	244.7	292.2	309.0	306.2
75°	160.8	209.7	248.9	247.5	244.7
77.5°	125.8	173.4	197.1	187.4	183.2
80°	92.3	138.4	142.6	132.8	127.2
82.5°	62.9	99.3	89.5	78.3	72.7
85°	36.4	54.5	40.5	28.0	23.8
87.5°	15.4	14.0	4.2	4.2	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)