

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: P387460

Luminaire Tested: **14CZ2-35-SQR-UNV-L935-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: P387460
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-SWPD1-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: 2842.8 lumens
Efficiency: N/A
Efficacy: 91.1 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

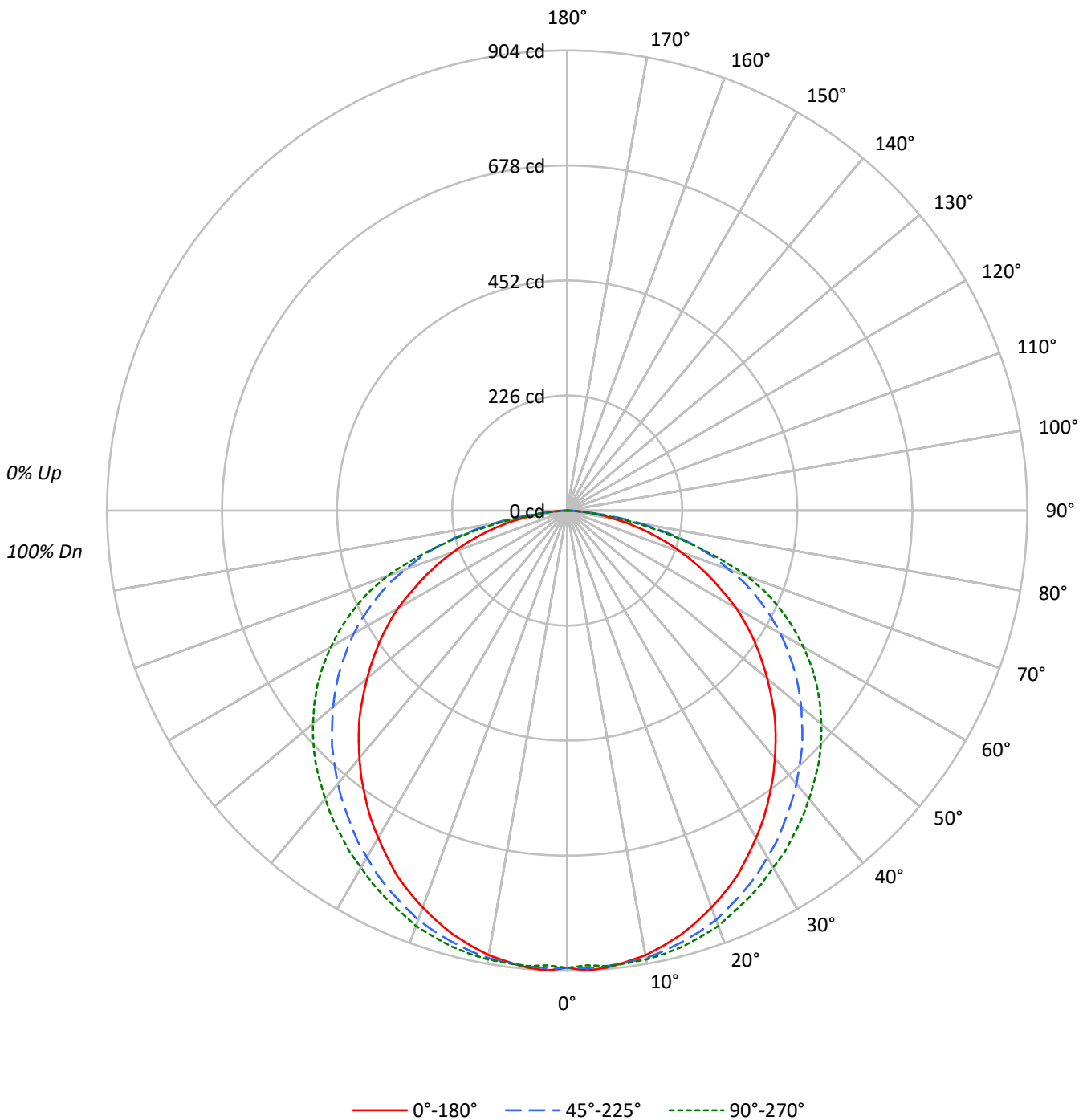
Input Watts (W): 31.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2417	2417	2417
5°	2434	2427	2427
10°	2423	2439	2447
15°	2403	2443	2467
20°	2376	2450	2487
25°	2348	2446	2497
30°	2306	2444	2515
35°	2269	2447	2551
40°	2230	2461	2597
45°	2197	2486	2661
50°	2147	2513	2729
55°	2111	2555	2810
60°	2067	2606	2884
65°	1971	2655	2956
70°	1871	2660	2954
75°	1713	2651	2607
80°	1466	2264	2021
85°	1152	1284	753



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.4	3.0
10°-20°	246.6	8.7
20°-30°	377.2	13.3
30°-40°	462.3	16.3
40°-50°	497.2	17.5
50°-60°	477.8	16.8
60°-70°	397.8	14.0
70°-80°	244.1	8.6
80°-90°	54.4	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°	709.2	24.9
0°-40°	1171.5	41.2
0°-60°	2146.4	75.5
0°-90°	2842.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2842.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	898	898	898	898	898	
5°	901	893	898	898	898	85
15°	862	860	877	883	886	243
25°	791	798	824	834	841	364
35°	691	708	745	765	777	432
45°	577	603	653	683	699	444
55°	450	489	544	582	599	402
65°	310	357	417	451	464	307
75°	165	215	255	254	251	174
85°	37	56	42	29	24	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	898.3	898.3	898.3	898.3	898.3
2.5°	904.1	895.5	899.8	898.3	894.1
5°	901.2	892.6	898.3	898.3	898.3
7.5°	894.1	886.9	895.5	896.9	896.9
10°	886.9	881.2	892.6	894.1	895.5
12.5°	875.4	871.1	885.5	888.3	891.2
15°	862.5	859.7	876.9	882.6	885.5
17.5°	846.8	848.2	866.8	874.0	876.9
20°	829.6	833.9	855.4	862.5	868.3
22.5°	811.0	816.7	839.6	848.2	853.9
25°	790.9	798.1	823.8	833.9	841.0
27.5°	766.5	778.0	806.7	819.5	826.7
30°	742.2	755.1	786.6	802.4	809.5
32.5°	717.8	732.1	768.0	783.7	795.2
35°	690.6	707.8	745.0	765.1	776.6
37.5°	663.4	683.4	723.6	746.5	759.4
40°	634.7	656.2	700.6	726.4	739.3
42.5°	606.1	630.4	676.3	704.9	719.3
45°	577.4	603.2	653.3	683.4	699.2
47.5°	544.5	576.0	626.1	660.5	676.3
50°	512.9	547.3	600.3	636.2	651.9
52.5°	481.4	517.2	573.1	610.4	626.1
55°	449.9	488.6	544.5	581.7	598.9
57.5°	416.9	457.1	514.4	553.1	568.8
60°	384.0	425.5	484.3	520.1	535.9
62.5°	345.3	394.0	451.3	487.1	501.5
65°	309.5	356.8	416.9	451.3	464.2
67.5°	273.7	322.4	381.1	412.6	424.1
70°	237.8	286.6	338.1	368.2	375.4
72.5°	202.0	250.7	299.4	316.6	313.8
75°	164.8	214.9	255.0	253.6	250.7
77.5°	128.9	177.7	202.0	192.0	187.7
80°	94.6	141.8	146.1	136.1	130.4
82.5°	64.5	101.7	91.7	80.2	74.5
85°	37.3	55.9	41.6	28.7	24.4
87.5°	15.8	14.3	4.3	4.3	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)