

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: P389089

Luminaire Tested: **22CZ2-100VHE-S-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: P389089
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-100VHE-S-UNV-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8868.3 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

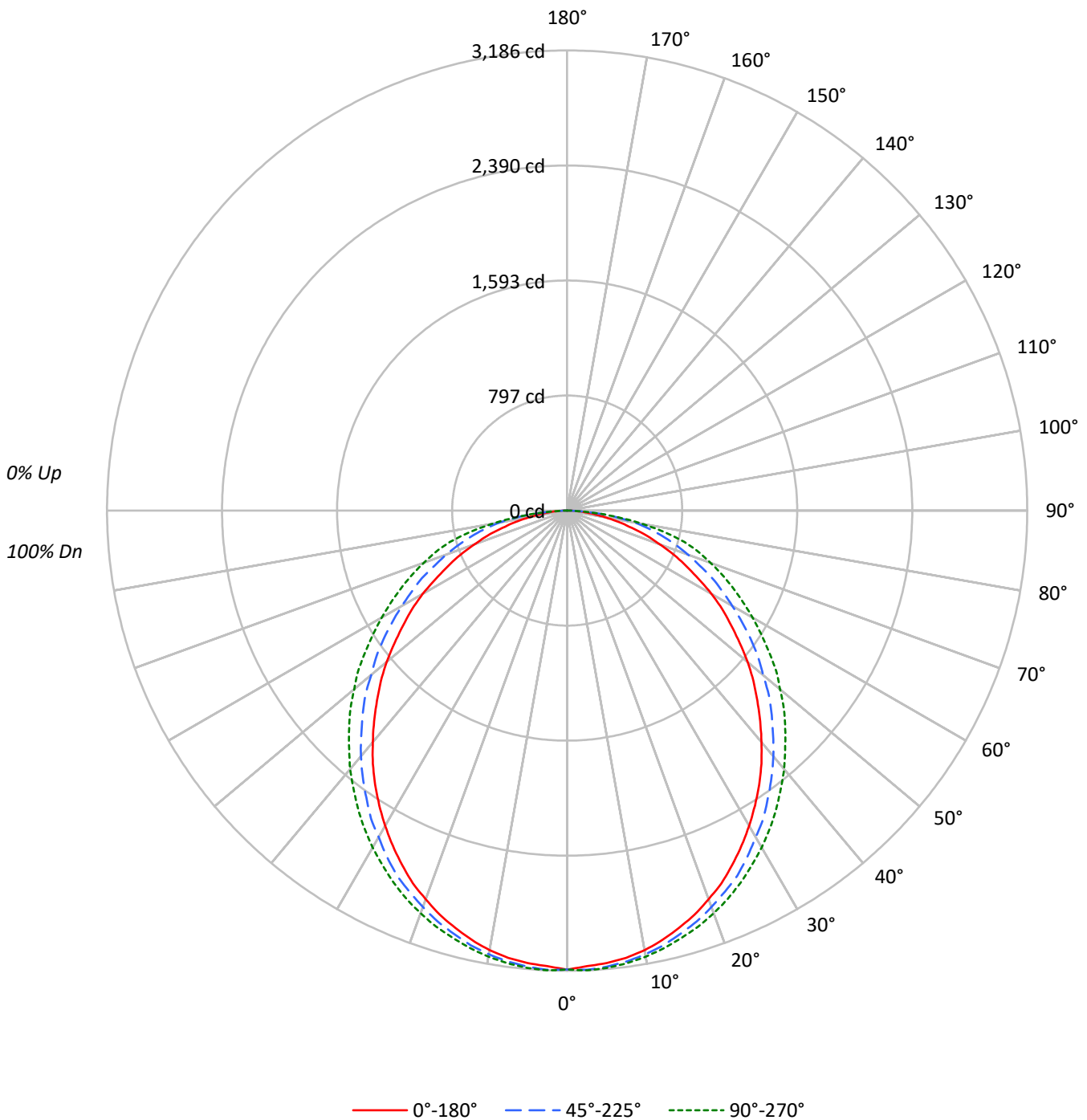
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8551	8551	8551
5°	8495	8562	8584
10°	8446	8525	8570
15°	8334	8450	8530
20°	8200	8365	8496
25°	8035	8280	8440
30°	7830	8113	8370
35°	7612	7965	8292
40°	7355	7805	8212
45°	7086	7622	8125
50°	6825	7414	8055
55°	6503	7280	7998
60°	6213	7104	7972
65°	5796	7061	8062
70°	5339	6999	8301
75°	4818	7098	8734
80°	4169	7310	8207
85°	3449	6132	6132



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.5	3.4
10°-20°	855.2	9.6
20°-30°	1279.6	14.4
30°-40°	1515.4	17.1
40°-50°	1544.4	17.4
50°-60°	1384.2	15.6
60°-70°	1083.7	12.2
70°-80°	698.8	7.9
80°-90°	206.4	2.3
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°	2435.4	27.5
0°-40°	3950.8	44.5
0°-60°	6879.4	77.6
0°-90°	8868.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8868.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3178	3178	3178	3178	3178	
5°	3145	3153	3170	3174	3178	299
15°	2992	3008	3033	3058	3062	843
25°	2706	2731	2789	2826	2843	1246
35°	2317	2346	2425	2499	2524	1448
45°	1862	1903	2003	2106	2135	1438
55°	1386	1432	1552	1659	1705	1243
65°	910	964	1109	1216	1266	904
75°	463	534	683	799	840	497
85°	112	153	199	199	199	131
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3177.8	3177.8	3177.8	3177.8	3177.8
2.5°	3157.1	3165.4	3181.9	3186.1	3186.1
5°	3144.7	3153.0	3169.5	3173.7	3177.8
7.5°	3124.0	3128.1	3148.8	3157.1	3161.2
10°	3090.9	3099.2	3119.9	3132.3	3136.4
12.5°	3045.4	3057.8	3082.6	3099.2	3103.3
15°	2991.6	3008.1	3033.0	3057.8	3061.9
17.5°	2933.7	2950.2	2983.3	3012.3	3020.6
20°	2863.3	2884.0	2921.2	2954.4	2966.8
22.5°	2793.0	2809.5	2855.0	2896.4	2908.8
25°	2706.1	2730.9	2788.8	2826.1	2842.6
27.5°	2615.1	2644.0	2701.9	2751.6	2768.2
30°	2519.9	2548.9	2610.9	2673.0	2693.7
32.5°	2420.6	2453.7	2528.2	2590.2	2610.9
35°	2317.1	2346.1	2424.7	2499.2	2524.0
37.5°	2209.6	2234.4	2325.4	2404.0	2428.9
40°	2093.7	2126.8	2222.0	2313.0	2337.8
42.5°	1977.8	2015.1	2110.3	2209.6	2234.4
45°	1862.0	1903.4	2002.7	2106.1	2135.1
47.5°	1750.3	1783.4	1895.1	1994.4	2035.8
50°	1630.3	1663.4	1771.0	1882.7	1924.1
52.5°	1506.1	1551.7	1667.5	1775.1	1824.7
55°	1386.1	1431.7	1551.7	1659.2	1704.8
57.5°	1274.4	1311.7	1435.8	1547.5	1593.0
60°	1154.4	1187.5	1319.9	1439.9	1481.3
62.5°	1026.2	1075.8	1212.4	1324.1	1373.7
65°	910.3	964.1	1108.9	1216.5	1266.2
67.5°	802.7	852.4	993.1	1108.9	1162.7
70°	678.6	744.8	889.6	1005.5	1055.1
72.5°	579.3	637.2	786.2	902.0	955.8
75°	463.4	533.8	682.7	798.6	840.0
77.5°	368.3	438.6	579.3	670.3	691.0
80°	269.0	339.3	471.7	517.2	529.6
82.5°	182.1	248.3	339.3	351.7	355.8
85°	111.7	153.1	198.6	198.6	198.6
87.5°	53.8	62.1	70.3	66.2	66.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)