

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: P389090

Luminaire Tested: **22CZ2-100VHE-S-UNV-L935-CD1-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: P389090
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-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

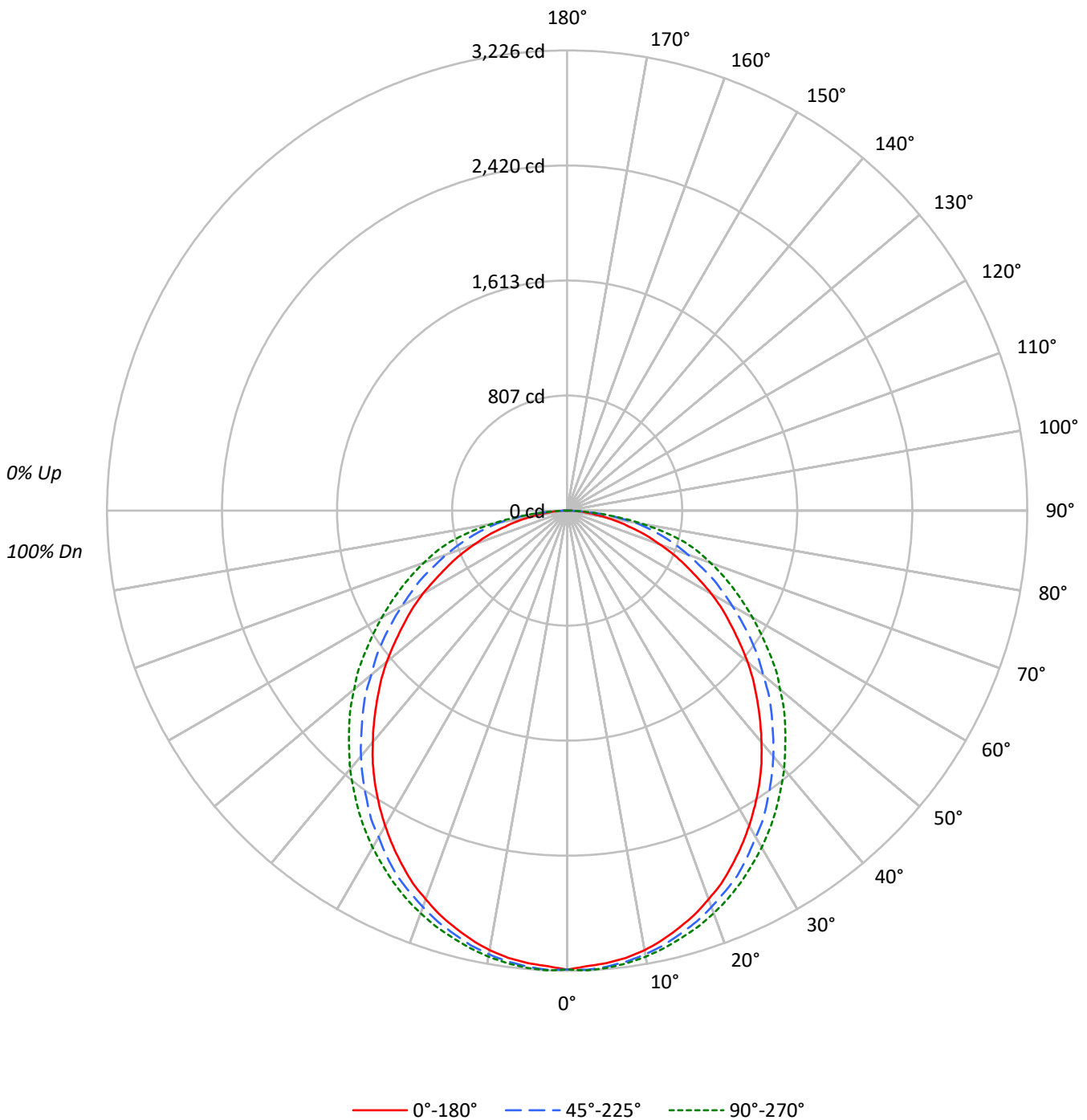
Lumens per Lamp: N/A
Luminaire Lumens: 8979.7 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	8659	8659	8659
5°	8601	8669	8692
10°	8552	8632	8678
15°	8439	8556	8637
20°	8303	8470	8602
25°	8136	8385	8546
30°	7928	8215	8475
35°	7707	8066	8396
40°	7447	7904	8316
45°	7175	7717	8227
50°	6911	7507	8156
55°	6585	7371	8099
60°	6291	7193	8072
65°	5869	7149	8164
70°	5406	7087	8406
75°	4878	7188	8843
80°	4220	7401	8311
85°	3492	6209	6209



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.3	3.4
10°-20°	866.0	9.6
20°-30°	1295.7	14.4
30°-40°	1534.4	17.1
40°-50°	1563.8	17.4
50°-60°	1401.6	15.6
60°-70°	1097.3	12.2
70°-80°	707.6	7.9
80°-90°	209.0	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°	2466.0	27.5
0°-40°	4000.4	44.5
0°-60°	6965.8	77.6
0°-90°	8979.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8979.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3218	3218	3218	3218	3218	
5°	3184	3193	3209	3214	3218	302
15°	3029	3046	3071	3096	3100	854
25°	2740	2765	2824	2862	2878	1261
35°	2346	2376	2455	2531	2556	1466
45°	1885	1927	2028	2133	2162	1456
55°	1404	1450	1571	1680	1726	1258
65°	922	976	1123	1232	1282	916
75°	469	540	691	809	850	503
85°	113	155	201	201	201	133
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3217.7	3217.7	3217.7	3217.7	3217.7
2.5°	3196.8	3205.1	3221.9	3226.1	3226.1
5°	3184.2	3192.6	3209.3	3213.5	3217.7
7.5°	3163.2	3167.4	3188.4	3196.8	3200.9
10°	3129.7	3138.1	3159.1	3171.6	3175.8
12.5°	3083.6	3096.2	3121.3	3138.1	3142.3
15°	3029.2	3045.9	3071.1	3096.2	3100.4
17.5°	2970.5	2987.3	3020.8	3050.1	3058.5
20°	2899.3	2920.2	2957.9	2991.5	3004.0
22.5°	2828.1	2844.8	2890.9	2932.8	2945.4
25°	2740.1	2765.2	2823.9	2861.6	2878.3
27.5°	2647.9	2677.2	2735.9	2786.2	2802.9
30°	2551.5	2580.9	2643.7	2706.6	2727.5
32.5°	2451.0	2484.5	2559.9	2622.8	2643.7
35°	2346.2	2375.6	2455.2	2530.6	2555.7
37.5°	2237.3	2262.4	2354.6	2434.2	2459.4
40°	2120.0	2153.5	2249.9	2342.1	2367.2
42.5°	2002.7	2040.4	2136.8	2237.3	2262.4
45°	1885.4	1927.3	2027.8	2132.6	2161.9
47.5°	1772.3	1805.8	1918.9	2019.4	2061.3
50°	1650.8	1684.3	1793.2	1906.3	1948.2
52.5°	1525.1	1571.1	1688.5	1797.4	1847.7
55°	1403.6	1449.6	1571.1	1680.1	1726.2
57.5°	1290.4	1328.1	1453.8	1567.0	1613.0
60°	1168.9	1202.5	1336.5	1458.0	1499.9
62.5°	1039.1	1089.3	1227.6	1340.7	1391.0
65°	921.7	976.2	1122.8	1231.8	1282.1
67.5°	812.8	863.1	1005.5	1122.8	1177.3
70°	687.1	754.1	900.8	1018.1	1068.4
72.5°	586.6	645.2	796.0	913.4	967.8
75°	469.2	540.5	691.3	808.6	850.5
77.5°	372.9	444.1	586.6	678.7	699.7
80°	272.3	343.6	477.6	523.7	536.3
82.5°	184.3	251.4	343.6	356.1	360.3
85°	113.1	155.0	201.1	201.1	201.1
87.5°	54.5	62.8	71.2	67.0	67.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)