

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: P388158

Luminaire Tested: **22CZ2-100VHE-UNV-L950-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: P388158
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-100VHE-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8942.1 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

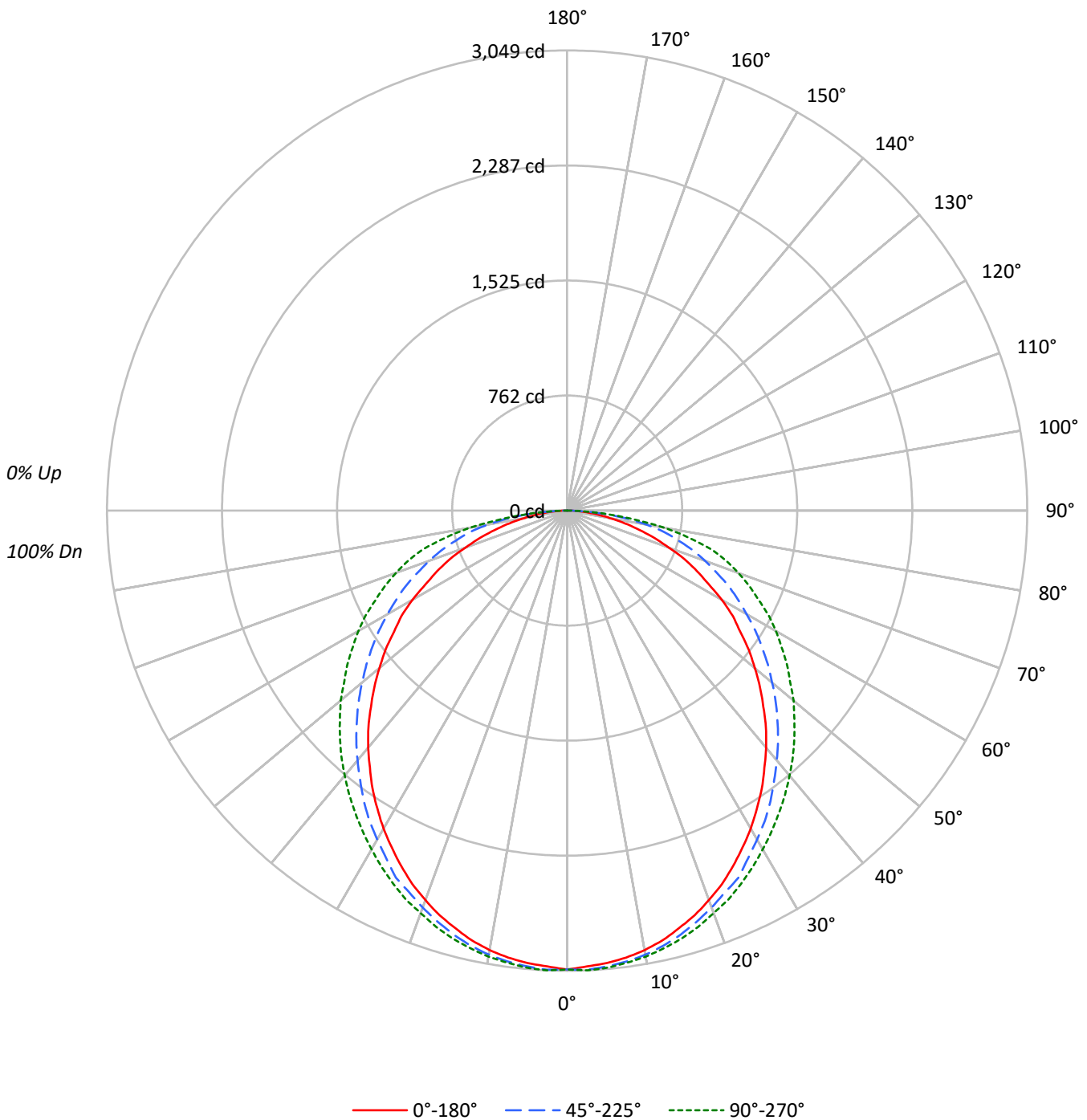
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8182	8182	8182
5°	8130	8189	8213
10°	8080	8164	8200
15°	7980	8103	8176
20°	7863	8014	8127
25°	7721	7970	8100
30°	7561	7821	8053
35°	7386	7719	8037
40°	7203	7589	8053
45°	6999	7502	8105
50°	6797	7423	8197
55°	6564	7390	8340
60°	6370	7388	8596
65°	6052	7508	8909
70°	5643	7651	9486
75°	5169	7914	10247
80°	4500	8250	10091
85°	3940	7336	8015



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.5	3.2
10°-20°	819.0	9.2
20°-30°	1229.5	13.7
30°-40°	1469.2	16.4
40°-50°	1527.7	17.1
50°-60°	1415.9	15.8
60°-70°	1161.4	13.0
70°-80°	785.1	8.8
80°-90°	246.7	2.8
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°	2336.1	26.1
0°-40°	3805.3	42.6
0°-60°	6748.9	75.5
0°-90°	8942.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8942.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3040	3040	3040	3040	3040	
5°	3010	3014	3032	3036	3040	286
15°	2864	2878	2908	2926	2935	808
25°	2600	2622	2684	2715	2728	1198
35°	2248	2279	2350	2420	2446	1405
45°	1839	1874	1971	2086	2130	1420
55°	1399	1443	1575	1716	1778	1257
65°	950	1003	1179	1333	1399	939
75°	497	581	761	915	986	527
85°	128	176	238	264	260	145
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3040.5	3040.5	3040.5	3040.5	3040.5
2.5°	3022.9	3031.7	3044.9	3049.3	3049.3
5°	3009.7	3014.1	3031.7	3036.1	3040.5
7.5°	2987.7	2996.5	3014.1	3018.5	3022.9
10°	2956.9	2965.7	2987.7	2996.5	3000.9
12.5°	2917.3	2926.1	2952.5	2965.7	2970.1
15°	2864.5	2877.7	2908.5	2926.1	2934.9
17.5°	2811.7	2824.9	2855.7	2882.1	2890.9
20°	2745.7	2776.5	2798.5	2833.7	2838.1
22.5°	2679.7	2697.3	2736.9	2772.1	2789.7
25°	2600.5	2622.5	2684.1	2714.9	2728.1
27.5°	2516.9	2547.7	2596.1	2644.5	2662.1
30°	2433.3	2455.3	2516.9	2574.1	2591.7
32.5°	2340.9	2371.7	2437.7	2494.9	2521.3
35°	2248.5	2279.3	2349.7	2420.1	2446.5
37.5°	2147.3	2182.5	2252.9	2336.5	2371.7
40°	2050.5	2076.9	2160.5	2261.7	2292.5
42.5°	1949.3	1980.1	2068.1	2178.1	2213.3
45°	1839.2	1874.4	1971.3	2085.7	2129.7
47.5°	1733.6	1768.8	1874.4	1988.9	2041.7
50°	1623.6	1667.6	1773.2	1905.2	1958.1
52.5°	1518.0	1557.6	1676.4	1812.8	1861.2
55°	1399.2	1443.2	1575.2	1716.0	1777.6
57.5°	1302.4	1333.2	1478.4	1623.6	1685.2
60°	1183.6	1223.2	1372.8	1526.8	1597.2
62.5°	1056.0	1122.0	1276.0	1434.4	1504.8
65°	950.4	1003.2	1179.2	1333.2	1399.2
67.5°	840.4	897.6	1069.2	1232.0	1306.8
70°	717.2	792.0	972.4	1135.2	1205.6
72.5°	607.2	686.4	871.2	1029.6	1104.4
75°	497.2	580.8	761.2	915.2	985.6
77.5°	391.6	484.0	660.0	778.8	822.8
80°	290.4	378.4	532.4	616.0	651.2
82.5°	202.4	277.2	391.6	435.6	444.4
85°	127.6	176.0	237.6	264.0	259.6
87.5°	57.2	70.4	88.0	96.8	92.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)