

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: P387606

Luminaire Tested: **22CZ2-100VHE-SQR-UNV-L940-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: P387606
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-100VHE-SQR-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8090.8 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

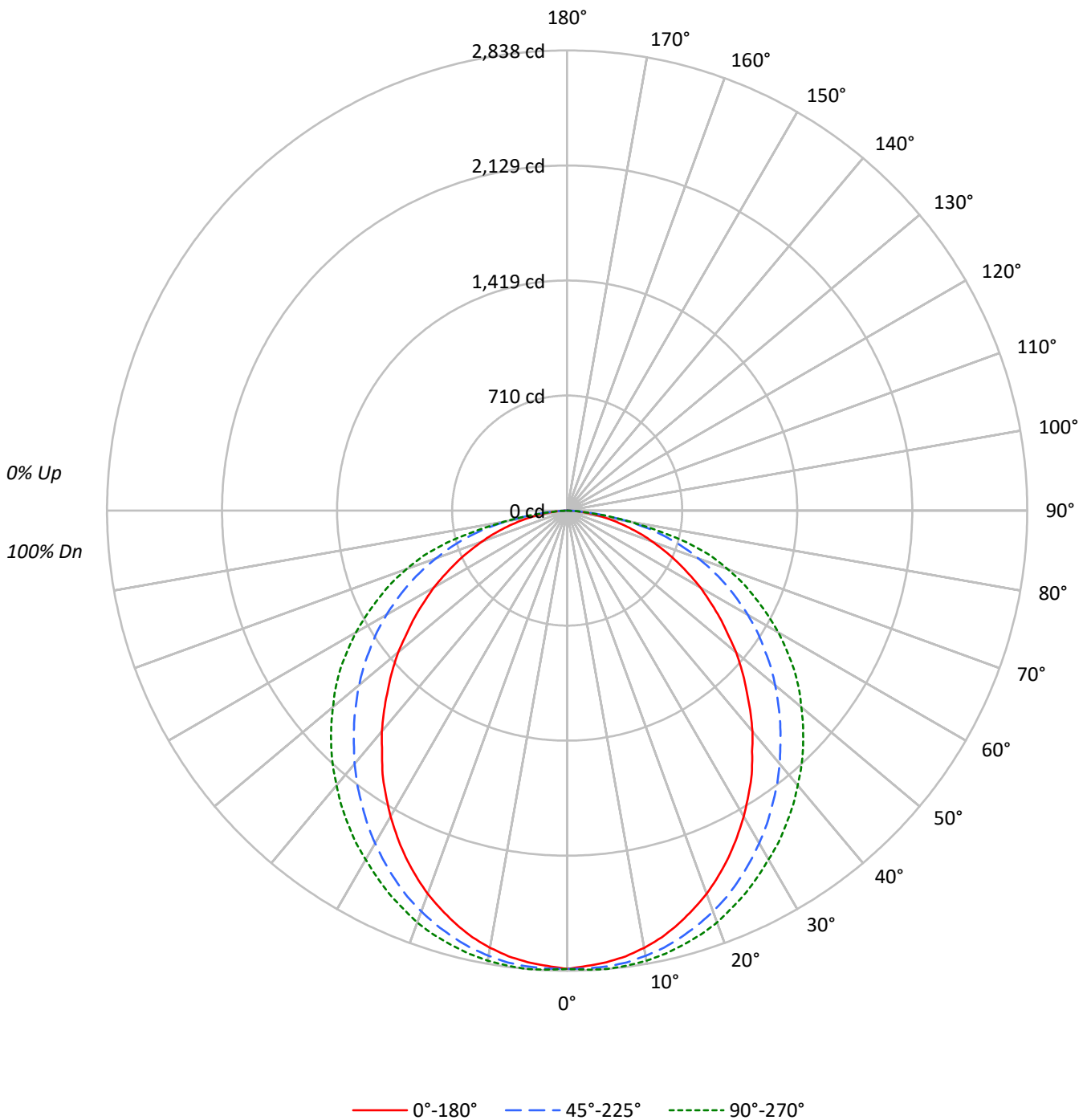
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387606

CATALOG NUMBER: 22CZ2-100VHE-SQR-UNV-L940-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387606

CATALOG NUMBER: 22CZ2-100VHE-SQR-UNV-L940-CD1-SDWPD1-U

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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	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	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7606	7606	7606
5°	7552	7624	7666
10°	7482	7618	7702
15°	7360	7585	7724
20°	7203	7533	7742
25°	7001	7457	7731
30°	6765	7362	7720
35°	6522	7254	7746
40°	6246	7163	7770
45°	5948	7073	7833
50°	5691	7009	7893
55°	5387	6954	8017
60°	5105	6923	8101
65°	4768	6871	8167
70°	4381	6768	8279
75°	3953	6588	7985
80°	3392	5831	6010
85°	2726	3440	2726



TEST NUMBER: P387606

CATALOG NUMBER: 22CZ2-100VHE-SQR-UNV-L940-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.9	3.3
10°-20°	766.1	9.5
20°-30°	1150.6	14.2
30°-40°	1372.2	17.0
40°-50°	1418.8	17.5
50°-60°	1304.4	16.1
60°-70°	1038.4	12.8
70°-80°	634.4	7.8
80°-90°	137.9	1.7
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°	2184.6	27.0
0°-40°	3556.8	44.0
0°-60°	6280.0	77.6
0°-90°	8090.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8090.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2826	2826	2826	2826	2826	
5°	2796	2803	2822	2834	2838	265
15°	2642	2673	2723	2761	2772	744
25°	2358	2415	2511	2580	2604	1085
35°	1985	2070	2208	2323	2358	1239
45°	1563	1674	1859	2008	2058	1209
55°	1148	1275	1482	1651	1709	1027
65°	749	876	1079	1229	1283	742
75°	380	492	634	745	768	405
85°	88	108	111	96	88	102
90°	0	0	0	0	0	



TEST NUMBER: P387606

CATALOG NUMBER: 22CZ2-100VHE-SQR-UNV-L940-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2826.3	2826.3	2826.3	2826.3	2826.3
2.5°	2811.0	2814.8	2826.3	2834.0	2834.0
5°	2795.6	2803.3	2822.5	2834.0	2837.8
7.5°	2772.5	2784.1	2811.0	2826.3	2830.2
10°	2738.0	2753.3	2787.9	2811.0	2818.6
12.5°	2695.7	2718.8	2761.0	2791.8	2799.4
15°	2642.0	2672.7	2722.6	2761.0	2772.5
17.5°	2580.5	2618.9	2680.4	2726.5	2741.8
20°	2515.3	2553.7	2630.5	2684.2	2703.4
22.5°	2438.5	2488.4	2576.7	2638.1	2653.5
25°	2357.8	2415.4	2511.4	2580.5	2603.6
27.5°	2269.5	2338.6	2442.3	2526.8	2546.0
30°	2177.3	2250.3	2369.3	2461.5	2484.5
32.5°	2081.3	2165.8	2292.5	2396.2	2426.9
35°	1985.3	2069.8	2208.1	2323.3	2357.8
37.5°	1874.0	1973.8	2127.4	2246.5	2288.7
40°	1778.0	1874.0	2039.1	2169.7	2211.9
42.5°	1670.4	1774.1	1946.9	2089.0	2138.9
45°	1562.9	1674.3	1858.6	2008.4	2058.3
47.5°	1463.1	1574.4	1766.4	1923.9	1973.8
50°	1359.4	1474.6	1674.3	1835.6	1885.5
52.5°	1248.0	1374.8	1582.1	1743.4	1801.0
55°	1148.2	1274.9	1482.3	1651.2	1708.8
57.5°	1044.5	1175.1	1390.1	1551.4	1605.2
60°	948.5	1075.2	1286.4	1443.9	1505.3
62.5°	844.8	975.4	1182.7	1336.4	1394.0
65°	748.8	875.5	1079.1	1228.8	1282.6
67.5°	652.8	779.5	971.5	1113.6	1175.1
70°	556.8	683.5	860.2	998.4	1052.2
72.5°	472.3	583.7	752.7	879.4	929.3
75°	380.2	491.5	633.6	745.0	768.0
77.5°	295.7	395.5	514.6	564.5	572.2
80°	218.9	295.7	376.3	387.8	387.8
82.5°	145.9	203.5	234.2	238.1	234.2
85°	88.3	107.5	111.4	96.0	88.3
87.5°	30.7	30.7	19.2	11.5	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)