

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: P388233

Luminaire Tested: **22CZ2-85VHE-SQR-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: P388233
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: 22CZ2-85VHE-SQR-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7319.4 lumens
Efficiency: N/A
Efficacy: 115.1 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

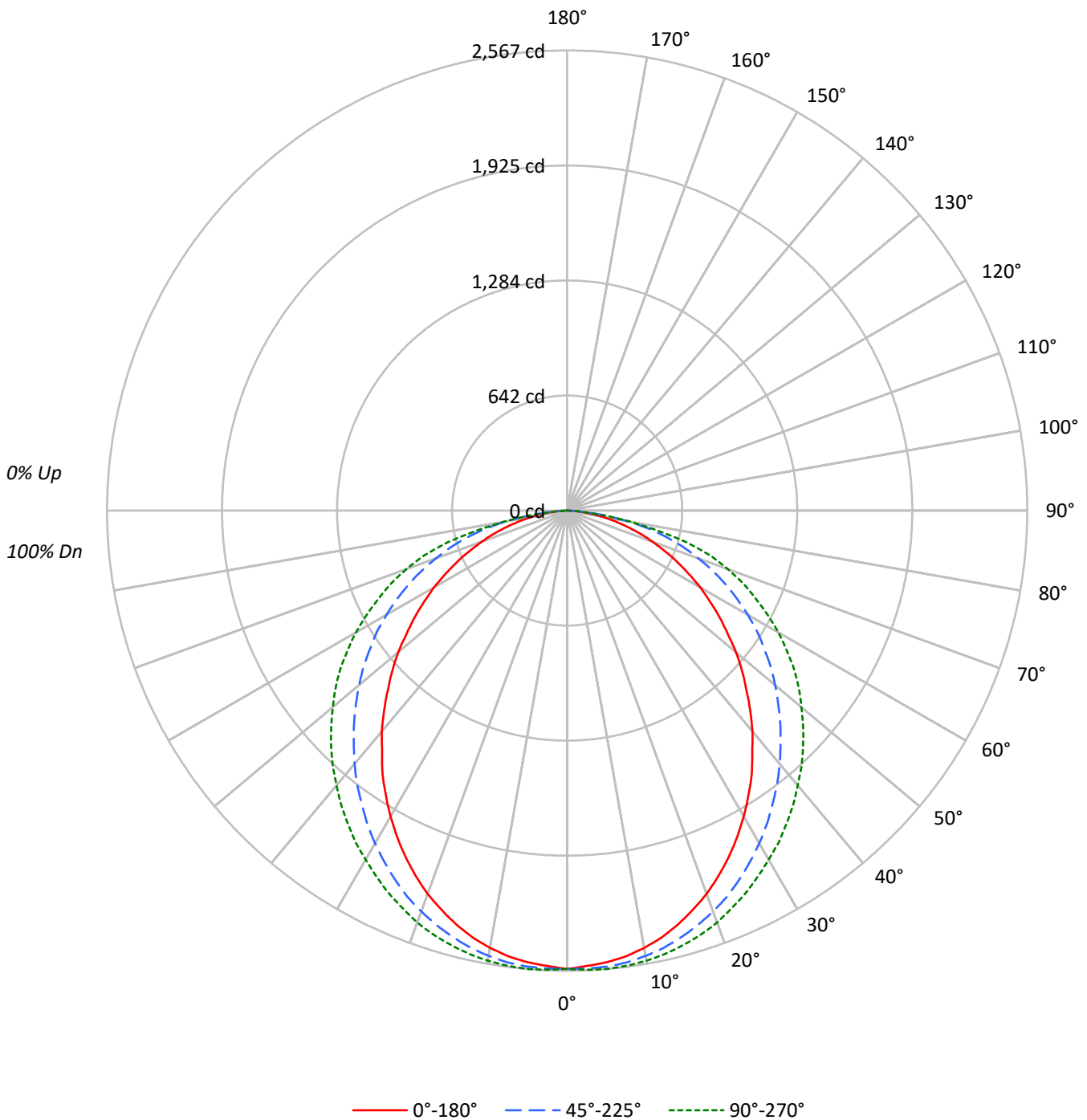
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P388233

CATALOG NUMBER: 22CZ2-85VHE-SQR-UNV-L950-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388233

CATALOG NUMBER: 22CZ2-85VHE-SQR-UNV-L950-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°	6880	6880	6880
5°	6832	6897	6935
10°	6768	6892	6968
15°	6659	6862	6988
20°	6516	6815	7004
25°	6333	6746	6994
30°	6120	6660	6984
35°	5900	6562	7007
40°	5650	6480	7029
45°	5381	6399	7086
50°	5148	6341	7141
55°	4873	6291	7253
60°	4618	6264	7329
65°	4313	6216	7388
70°	3963	6123	7489
75°	3576	5960	7224
80°	3068	5275	5438
85°	2467	3109	2467



TEST NUMBER: P388233

CATALOG NUMBER: 22CZ2-85VHE-SQR-UNV-L950-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.4	3.3
10°-20°	693.0	9.5
20°-30°	1040.9	14.2
30°-40°	1241.4	17.0
40°-50°	1283.5	17.5
50°-60°	1180.0	16.1
60°-70°	939.4	12.8
70°-80°	573.9	7.8
80°-90°	124.8	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°	1976.3	27.0
0°-40°	3217.7	44.0
0°-60°	5681.3	77.6
0°-90°	7319.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7319.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2557	2557	2557	2557	2557	
5°	2529	2536	2553	2564	2567	240
15°	2390	2418	2463	2498	2508	673
25°	2133	2185	2272	2334	2355	981
35°	1796	1872	1998	2102	2133	1120
45°	1414	1515	1681	1817	1862	1093
55°	1039	1153	1341	1494	1546	929
65°	677	792	976	1112	1160	671
75°	344	445	573	674	695	366
85°	80	97	101	87	80	92
90°	0	0	0	0	0	



TEST NUMBER: P388233

CATALOG NUMBER: 22CZ2-85VHE-SQR-UNV-L950-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2556.8	2556.8	2556.8	2556.8	2556.8
2.5°	2542.9	2546.4	2556.8	2563.8	2563.8
5°	2529.1	2536.0	2553.4	2563.8	2567.3
7.5°	2508.2	2518.6	2542.9	2556.8	2560.3
10°	2476.9	2490.8	2522.1	2542.9	2549.9
12.5°	2438.7	2459.6	2497.8	2525.6	2532.5
15°	2390.1	2417.9	2463.0	2497.8	2508.2
17.5°	2334.5	2369.2	2424.8	2466.5	2480.4
20°	2275.5	2310.2	2379.7	2428.3	2445.7
22.5°	2206.0	2251.1	2331.0	2386.6	2400.5
25°	2133.0	2185.1	2272.0	2334.5	2355.4
27.5°	2053.1	2115.6	2209.4	2285.9	2303.2
30°	1969.7	2035.7	2143.4	2226.8	2247.7
32.5°	1882.9	1959.3	2074.0	2167.8	2195.5
35°	1796.0	1872.5	1997.5	2101.8	2133.0
37.5°	1695.3	1785.6	1924.6	2032.3	2070.5
40°	1608.4	1695.3	1844.7	1962.8	2001.0
42.5°	1511.2	1605.0	1761.3	1889.8	1935.0
45°	1413.9	1514.7	1681.4	1816.9	1862.0
47.5°	1323.6	1424.3	1598.0	1740.5	1785.6
50°	1229.8	1334.0	1514.7	1660.6	1705.7
52.5°	1129.0	1243.7	1431.3	1577.2	1629.3
55°	1038.7	1153.4	1341.0	1493.8	1545.9
57.5°	944.9	1063.0	1257.6	1403.5	1452.1
60°	858.1	972.7	1163.8	1306.2	1361.8
62.5°	764.3	882.4	1070.0	1208.9	1261.1
65°	677.4	792.1	976.2	1111.7	1160.3
67.5°	590.6	705.2	878.9	1007.5	1063.0
70°	503.7	618.4	778.2	903.2	951.9
72.5°	427.3	528.0	680.9	795.5	840.7
75°	343.9	444.7	573.2	674.0	694.8
77.5°	267.5	357.8	465.5	510.7	517.6
80°	198.0	267.5	340.4	350.9	350.9
82.5°	132.0	184.1	211.9	215.4	211.9
85°	79.9	97.3	100.7	86.8	79.9
87.5°	27.8	27.8	17.4	10.4	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)