

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: P388137

Luminaire Tested: **22CZ2-65VHE-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: P388137
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: 22CZ2-65VHE-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: 5572.6 lumens
Efficiency: N/A
Efficacy: 116.3 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

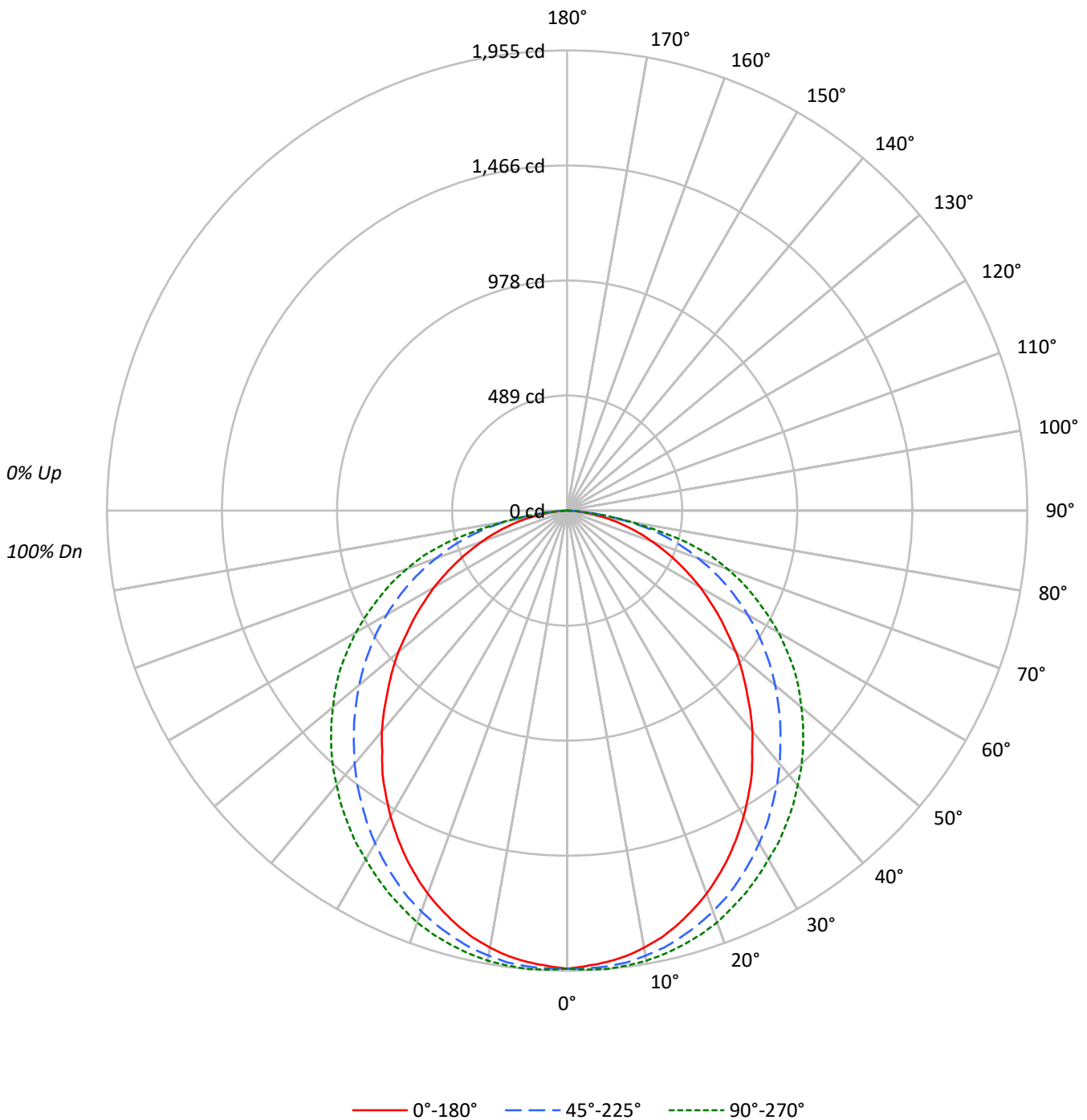
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5238	5238	5238
5°	5201	5251	5280
10°	5153	5247	5305
15°	5070	5224	5320
20°	4961	5188	5332
25°	4822	5136	5324
30°	4660	5071	5317
35°	4492	4996	5335
40°	4302	4933	5352
45°	4097	4872	5395
50°	3920	4828	5436
55°	3710	4790	5522
60°	3516	4768	5580
65°	3284	4732	5625
70°	3017	4662	5702
75°	2722	4537	5500
80°	2337	4017	4139
85°	1877	2368	1877



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.5	3.3
10°-20°	527.6	9.5
20°-30°	792.5	14.2
30°-40°	945.1	17.0
40°-50°	977.2	17.5
50°-60°	898.4	16.1
60°-70°	715.2	12.8
70°-80°	437.0	7.8
80°-90°	95.0	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°	1504.7	27.0
0°-40°	2449.8	44.0
0°-60°	4325.4	77.6
0°-90°	5572.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5572.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1947	1947	1947	1947	1947	
5°	1926	1931	1944	1952	1955	183
15°	1820	1841	1875	1902	1910	512
25°	1624	1664	1730	1777	1793	747
35°	1367	1426	1521	1600	1624	853
45°	1076	1153	1280	1383	1418	832
55°	791	878	1021	1137	1177	707
65°	516	603	743	846	883	511
75°	262	338	436	513	529	279
85°	61	74	77	66	61	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1946.6	1946.6	1946.6	1946.6	1946.6
2.5°	1936.1	1938.7	1946.6	1951.9	1951.9
5°	1925.5	1930.8	1944.0	1951.9	1954.6
7.5°	1909.6	1917.5	1936.1	1946.6	1949.3
10°	1885.8	1896.4	1920.2	1936.1	1941.4
12.5°	1856.7	1872.6	1901.7	1922.8	1928.1
15°	1819.7	1840.8	1875.2	1901.7	1909.6
17.5°	1777.4	1803.8	1846.1	1877.9	1888.5
20°	1732.4	1758.9	1811.8	1848.8	1862.0
22.5°	1679.5	1713.9	1774.7	1817.0	1827.6
25°	1624.0	1663.6	1729.8	1777.4	1793.2
27.5°	1563.1	1610.7	1682.2	1740.3	1753.6
30°	1499.7	1549.9	1631.9	1695.4	1711.2
32.5°	1433.5	1491.7	1579.0	1650.4	1671.6
35°	1367.4	1425.6	1520.8	1600.2	1624.0
37.5°	1290.7	1359.5	1465.3	1547.3	1576.4
40°	1224.6	1290.7	1404.4	1494.4	1523.5
42.5°	1150.5	1221.9	1341.0	1438.8	1473.2
45°	1076.5	1153.2	1280.1	1383.3	1417.7
47.5°	1007.7	1084.4	1216.7	1325.1	1359.5
50°	936.3	1015.6	1153.2	1264.3	1298.6
52.5°	859.6	946.9	1089.7	1200.8	1240.5
55°	790.8	878.1	1020.9	1137.3	1177.0
57.5°	719.4	809.3	957.5	1068.5	1105.6
60°	653.3	740.6	886.0	994.5	1036.8
62.5°	581.9	671.8	814.6	920.4	960.1
65°	515.8	603.0	743.2	846.4	883.4
67.5°	449.6	536.9	669.2	767.0	809.3
70°	383.5	470.8	592.5	687.7	724.7
72.5°	325.3	402.0	518.4	605.7	640.1
75°	261.8	338.5	436.4	513.1	529.0
77.5°	203.7	272.4	354.4	388.8	394.1
80°	150.8	203.7	259.2	267.1	267.1
82.5°	100.5	140.2	161.3	164.0	161.3
85°	60.8	74.1	76.7	66.1	60.8
87.5°	21.2	21.2	13.2	7.9	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)