

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: P388211

Luminaire Tested: **22CZ2-80VHE-SQR-UNV-L950-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: P388211
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: 22CZ2-80VHE-SQR-UNV-L950-CD1-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: 7046.4 lumens
Efficiency: N/A
Efficacy: 119.2 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

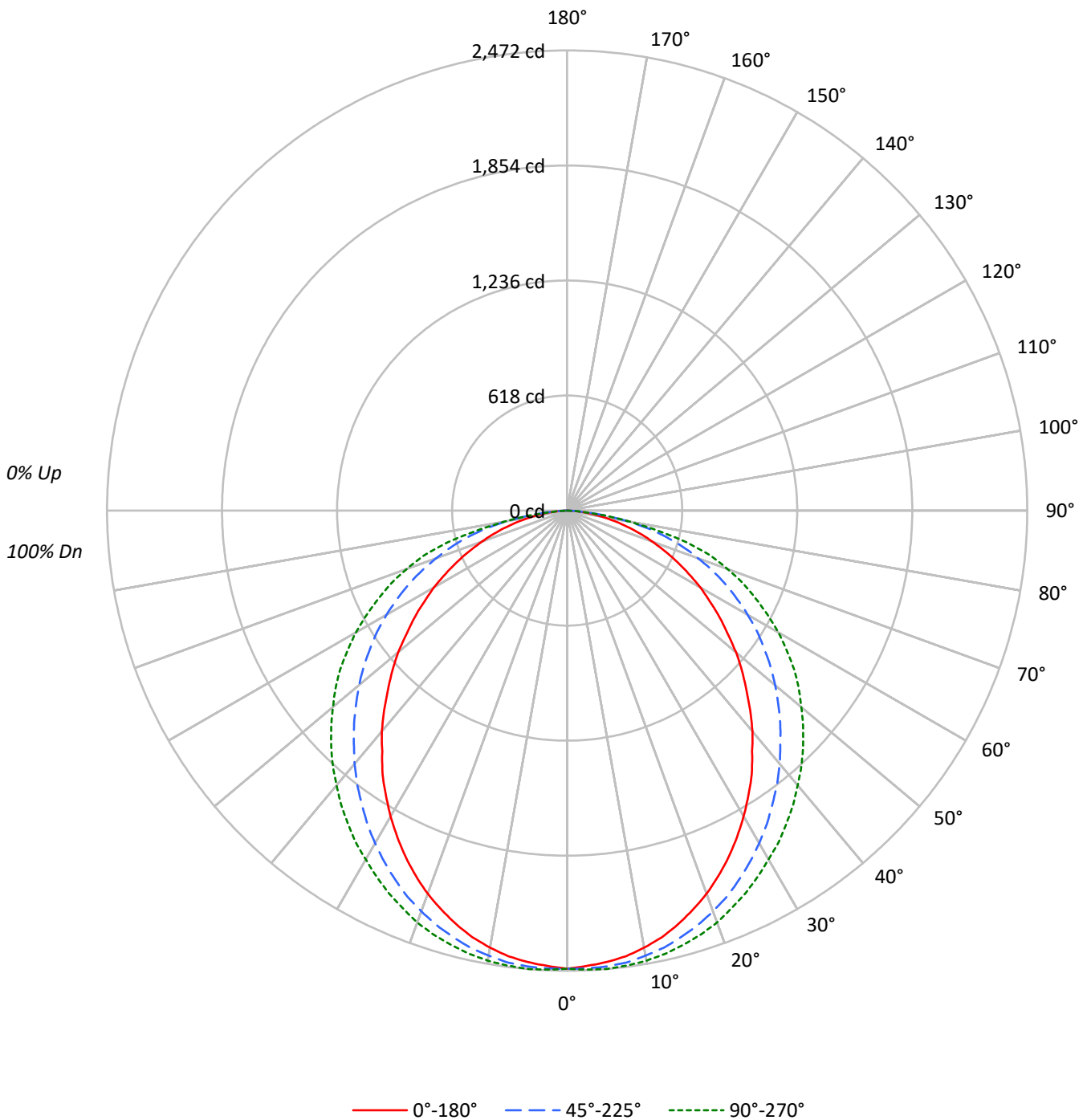
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6624	6624	6624
5°	6577	6640	6676
10°	6516	6634	6708
15°	6410	6606	6727
20°	6273	6560	6743
25°	6097	6494	6733
30°	5892	6412	6724
35°	5680	6317	6746
40°	5440	6238	6767
45°	5180	6160	6822
50°	4956	6105	6875
55°	4692	6056	6982
60°	4446	6030	7056
65°	4153	5984	7112
70°	3815	5894	7210
75°	3442	5737	6955
80°	2954	5080	5235
85°	2374	2995	2374



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.4	3.3
10°-20°	667.2	9.5
20°-30°	1002.1	14.2
30°-40°	1195.1	17.0
40°-50°	1235.6	17.5
50°-60°	1136.0	16.1
60°-70°	904.4	12.8
70°-80°	552.5	7.8
80°-90°	120.1	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°	1902.6	27.0
0°-40°	3097.7	44.0
0°-60°	5469.4	77.6
0°-90°	7046.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7046.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2462	2462	2462	2462	2462	
5°	2435	2441	2458	2468	2472	231
15°	2301	2328	2371	2405	2415	648
25°	2054	2104	2187	2247	2268	945
35°	1729	1803	1923	2023	2054	1079
45°	1361	1458	1619	1749	1793	1053
55°	1000	1110	1291	1438	1488	894
65°	652	762	940	1070	1117	646
75°	331	428	552	649	669	353
85°	77	94	97	84	77	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2461.5	2461.5	2461.5	2461.5	2461.5
2.5°	2448.1	2451.4	2461.5	2468.2	2468.2
5°	2434.7	2441.4	2458.1	2468.2	2471.5
7.5°	2414.7	2424.7	2448.1	2461.5	2464.8
10°	2384.6	2397.9	2428.0	2448.1	2454.8
12.5°	2347.8	2367.8	2404.6	2431.4	2438.1
15°	2300.9	2327.7	2371.2	2404.6	2414.7
17.5°	2247.4	2280.9	2334.4	2374.5	2387.9
20°	2190.6	2224.0	2290.9	2337.7	2354.5
22.5°	2123.7	2167.2	2244.1	2297.6	2311.0
25°	2053.5	2103.6	2187.2	2247.4	2267.5
27.5°	1976.5	2036.7	2127.0	2200.6	2217.3
30°	1896.3	1959.8	2063.5	2143.8	2163.8
32.5°	1812.7	1886.2	1996.6	2086.9	2113.7
35°	1729.1	1802.6	1923.0	2023.4	2053.5
37.5°	1632.1	1719.0	1852.8	1956.5	1993.3
40°	1548.5	1632.1	1775.9	1889.6	1926.4
42.5°	1454.8	1545.1	1695.6	1819.4	1862.8
45°	1361.2	1458.2	1618.7	1749.1	1792.6
47.5°	1274.2	1371.2	1538.4	1675.5	1719.0
50°	1183.9	1284.2	1458.2	1598.6	1642.1
52.5°	1086.9	1197.3	1377.9	1518.4	1568.5
55°	1000.0	1110.3	1290.9	1438.1	1488.3
57.5°	909.7	1023.4	1210.7	1351.1	1398.0
60°	826.1	936.4	1120.4	1257.5	1311.0
62.5°	735.8	849.5	1030.1	1163.9	1214.0
65°	652.2	762.5	939.8	1070.2	1117.0
67.5°	568.5	678.9	846.1	969.9	1023.4
70°	484.9	595.3	749.1	869.5	916.4
72.5°	411.4	508.3	655.5	765.9	809.3
75°	331.1	428.1	551.8	648.8	668.9
77.5°	257.5	344.5	448.1	491.6	498.3
80°	190.6	257.5	327.8	337.8	337.8
82.5°	127.1	177.3	204.0	207.4	204.0
85°	76.9	93.6	97.0	83.6	76.9
87.5°	26.8	26.8	16.7	10.0	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)