

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: P388131

Luminaire Tested: **22CZ2-65VHE-SQR-UNV-L935-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: P388131
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-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5196.3 lumens
Efficiency: N/A
Efficacy: 108.5 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

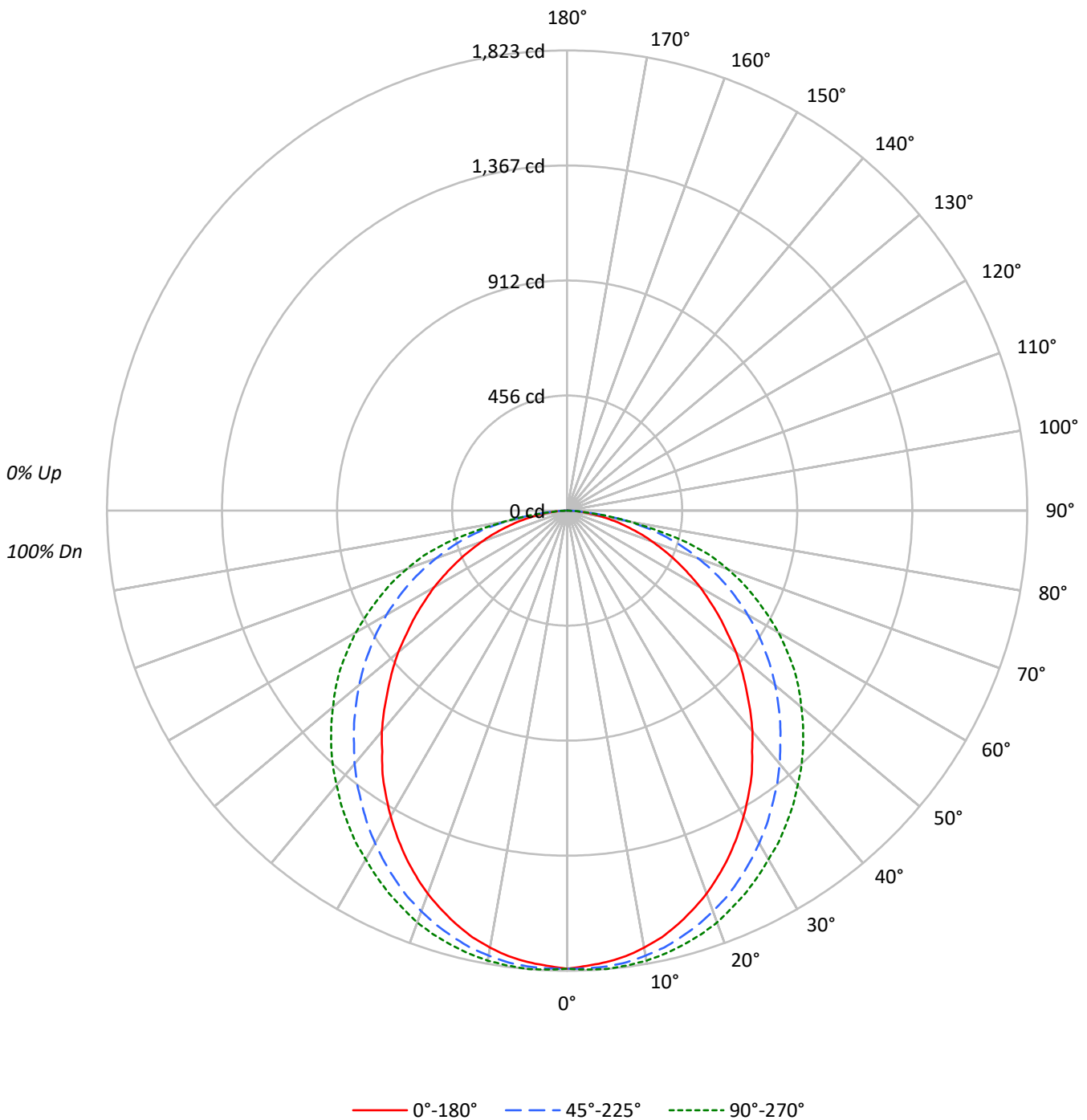
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4885	4885	4885
5°	4850	4897	4923
10°	4805	4893	4947
15°	4727	4871	4961
20°	4626	4838	4972
25°	4496	4789	4965
30°	4345	4728	4958
35°	4189	4659	4975
40°	4011	4600	4990
45°	3820	4543	5031
50°	3655	4502	5070
55°	3460	4466	5149
60°	3279	4447	5203
65°	3062	4413	5245
70°	2814	4346	5317
75°	2539	4231	5129
80°	2179	3746	3860
85°	1751	2208	1751



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.1	3.3
10°-20°	492.0	9.5
20°-30°	739.0	14.2
30°-40°	881.3	17.0
40°-50°	911.2	17.5
50°-60°	837.8	16.1
60°-70°	666.9	12.8
70°-80°	407.5	7.8
80°-90°	88.6	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°	1403.1	27.0
0°-40°	2284.4	44.0
0°-60°	4033.3	77.6
0°-90°	5196.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5196.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1815	1815	1815	1815	1815	
5°	1796	1800	1813	1820	1823	170
15°	1697	1716	1749	1773	1781	478
25°	1514	1551	1613	1657	1672	697
35°	1275	1329	1418	1492	1514	795
45°	1004	1075	1194	1290	1322	776
55°	737	819	952	1060	1098	660
65°	481	562	693	789	824	476
75°	244	316	407	478	493	260
85°	57	69	72	62	57	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1815.2	1815.2	1815.2	1815.2	1815.2
2.5°	1805.3	1807.8	1815.2	1820.1	1820.1
5°	1795.5	1800.4	1812.7	1820.1	1822.6
7.5°	1780.7	1788.1	1805.3	1815.2	1817.7
10°	1758.5	1768.3	1790.5	1805.3	1810.3
12.5°	1731.3	1746.1	1773.3	1793.0	1797.9
15°	1696.8	1716.5	1748.6	1773.3	1780.7
17.5°	1657.3	1682.0	1721.5	1751.1	1760.9
20°	1615.4	1640.1	1689.4	1723.9	1736.3
22.5°	1566.1	1598.2	1654.9	1694.3	1704.2
25°	1514.3	1551.3	1613.0	1657.3	1672.1
27.5°	1457.6	1502.0	1568.6	1622.8	1635.2
30°	1398.4	1445.2	1521.7	1580.9	1595.7
32.5°	1336.7	1391.0	1472.4	1539.0	1558.7
35°	1275.1	1329.3	1418.1	1492.1	1514.3
37.5°	1203.6	1267.7	1366.3	1442.8	1469.9
40°	1141.9	1203.6	1309.6	1393.5	1420.6
42.5°	1072.8	1139.4	1250.4	1341.7	1373.7
45°	1003.8	1075.3	1193.7	1289.9	1321.9
47.5°	939.7	1011.2	1134.5	1235.6	1267.7
50°	873.1	947.1	1075.3	1178.9	1211.0
52.5°	801.5	882.9	1016.1	1119.7	1156.7
55°	737.4	818.8	952.0	1060.5	1097.5
57.5°	670.8	754.7	892.8	996.4	1030.9
60°	609.2	690.6	826.2	927.3	966.8
62.5°	542.6	626.4	759.6	858.3	895.3
65°	480.9	562.3	693.0	789.2	823.7
67.5°	419.3	500.7	624.0	715.2	754.7
70°	357.6	439.0	552.4	641.2	675.8
72.5°	303.4	374.9	483.4	564.8	596.8
75°	244.2	315.7	406.9	478.5	493.3
77.5°	189.9	254.0	330.5	362.5	367.5
80°	140.6	189.9	241.7	249.1	249.1
82.5°	93.7	130.7	150.4	152.9	150.4
85°	56.7	69.1	71.5	61.7	56.7
87.5°	19.7	19.7	12.3	7.4	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)