

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: P388130

Luminaire Tested: **22CZ2-65VHE-SQR-UNV-L930-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: P388130
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-L930-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5197.2 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

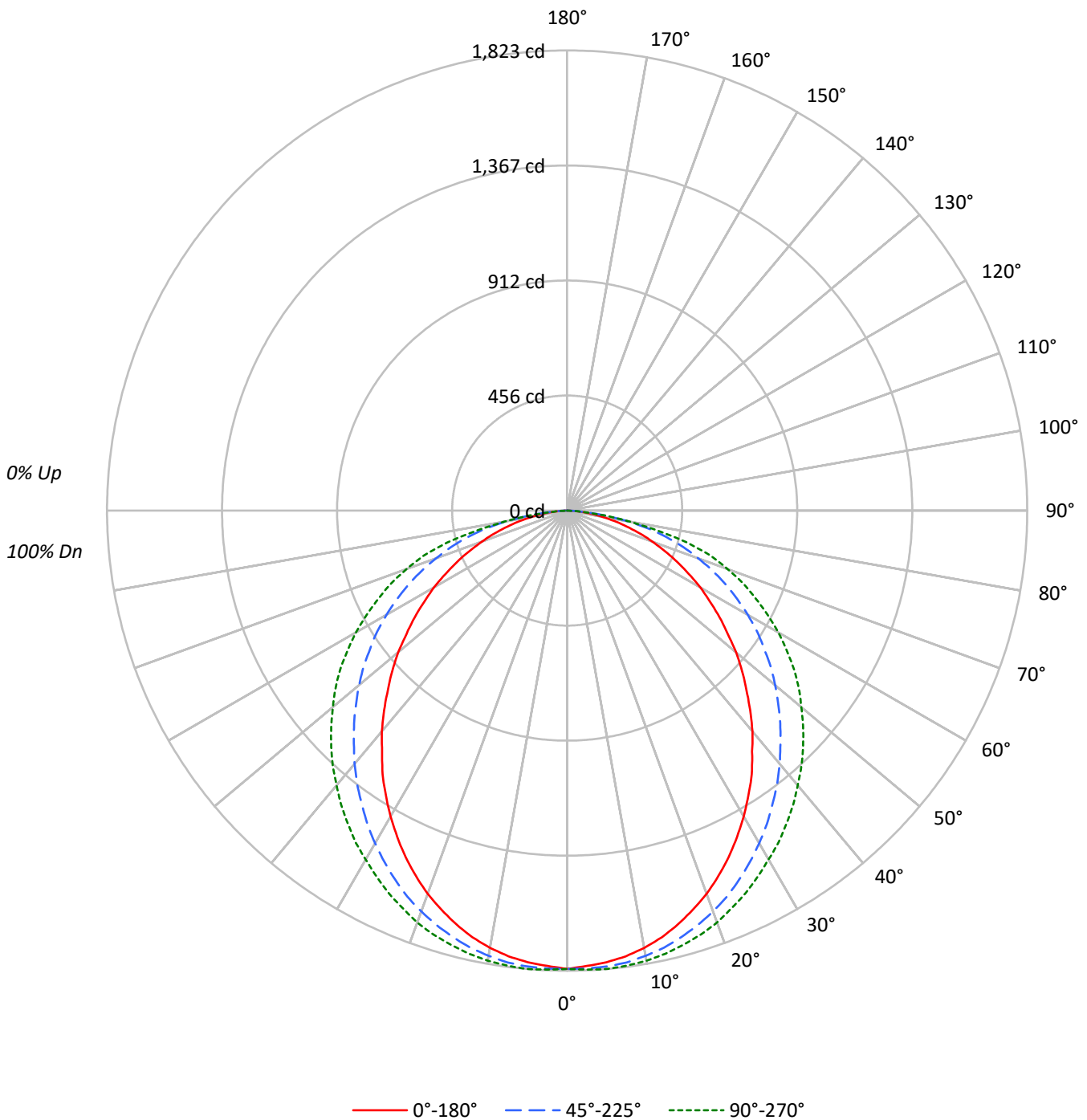
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4851	4897	4924
10°	4806	4893	4947
15°	4728	4872	4962
20°	4627	4839	4973
25°	4497	4790	4966
30°	4346	4729	4959
35°	4189	4660	4976
40°	4012	4601	4991
45°	3821	4544	5032
50°	3656	4502	5071
55°	3460	4467	5150
60°	3279	4448	5204
65°	3063	4413	5246
70°	2814	4347	5318
75°	2539	4232	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°	492.1	9.5
20°-30°	739.1	14.2
30°-40°	881.5	17.0
40°-50°	911.4	17.5
50°-60°	837.9	16.1
60°-70°	667.0	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°	1403.3	27.0
0°-40°	2284.8	44.0
0°-60°	4034.1	77.6
0°-90°	5197.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5197.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1816	1816	1816	1816	1816	
5°	1796	1801	1813	1820	1823	170
15°	1697	1717	1749	1774	1781	478
25°	1515	1552	1613	1658	1672	697
35°	1275	1330	1418	1492	1515	796
45°	1004	1076	1194	1290	1322	776
55°	738	819	952	1061	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°	1815.5	1815.5	1815.5	1815.5	1815.5
2.5°	1805.6	1808.1	1815.5	1820.4	1820.4
5°	1795.8	1800.7	1813.0	1820.4	1822.9
7.5°	1781.0	1788.4	1805.6	1815.5	1818.0
10°	1758.8	1768.6	1790.8	1805.6	1810.6
12.5°	1731.6	1746.4	1773.6	1793.3	1798.2
15°	1697.1	1716.8	1748.9	1773.6	1781.0
17.5°	1657.6	1682.3	1721.8	1751.4	1761.2
20°	1615.7	1640.4	1689.7	1724.2	1736.6
22.5°	1566.4	1598.4	1655.2	1694.6	1704.5
25°	1514.6	1551.6	1613.2	1657.6	1672.4
27.5°	1457.8	1502.2	1568.8	1623.1	1635.4
30°	1398.6	1445.5	1522.0	1581.2	1596.0
32.5°	1337.0	1391.2	1472.6	1539.2	1559.0
35°	1275.3	1329.6	1418.4	1492.4	1514.6
37.5°	1203.8	1267.9	1366.6	1443.0	1470.2
40°	1142.1	1203.8	1309.8	1393.7	1420.8
42.5°	1073.0	1139.6	1250.6	1341.9	1374.0
45°	1004.0	1075.5	1193.9	1290.1	1322.2
47.5°	939.8	1011.4	1134.7	1235.8	1267.9
50°	873.2	947.2	1075.5	1179.1	1211.2
52.5°	801.7	883.1	1016.3	1119.9	1156.9
55°	737.5	819.0	952.2	1060.7	1097.7
57.5°	670.9	754.8	893.0	996.6	1031.1
60°	609.3	690.7	826.4	927.5	967.0
62.5°	542.7	626.5	759.8	858.4	895.4
65°	481.0	562.4	693.1	789.4	823.9
67.5°	419.3	500.7	624.1	715.3	754.8
70°	357.7	439.1	552.5	641.3	675.9
72.5°	303.4	374.9	483.5	564.9	596.9
75°	244.2	315.7	407.0	478.5	493.3
77.5°	189.9	254.1	330.5	362.6	367.5
80°	140.6	189.9	241.7	249.1	249.1
82.5°	93.7	130.7	150.5	152.9	150.5
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)