

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: P388129

Luminaire Tested: **22CZ2-65VHE-SQR-UNV-L930-CD1-SWPD1-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: P388129
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-SWPD1-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: 5132.8 lumens
Efficiency: N/A
Efficacy: 107.2 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

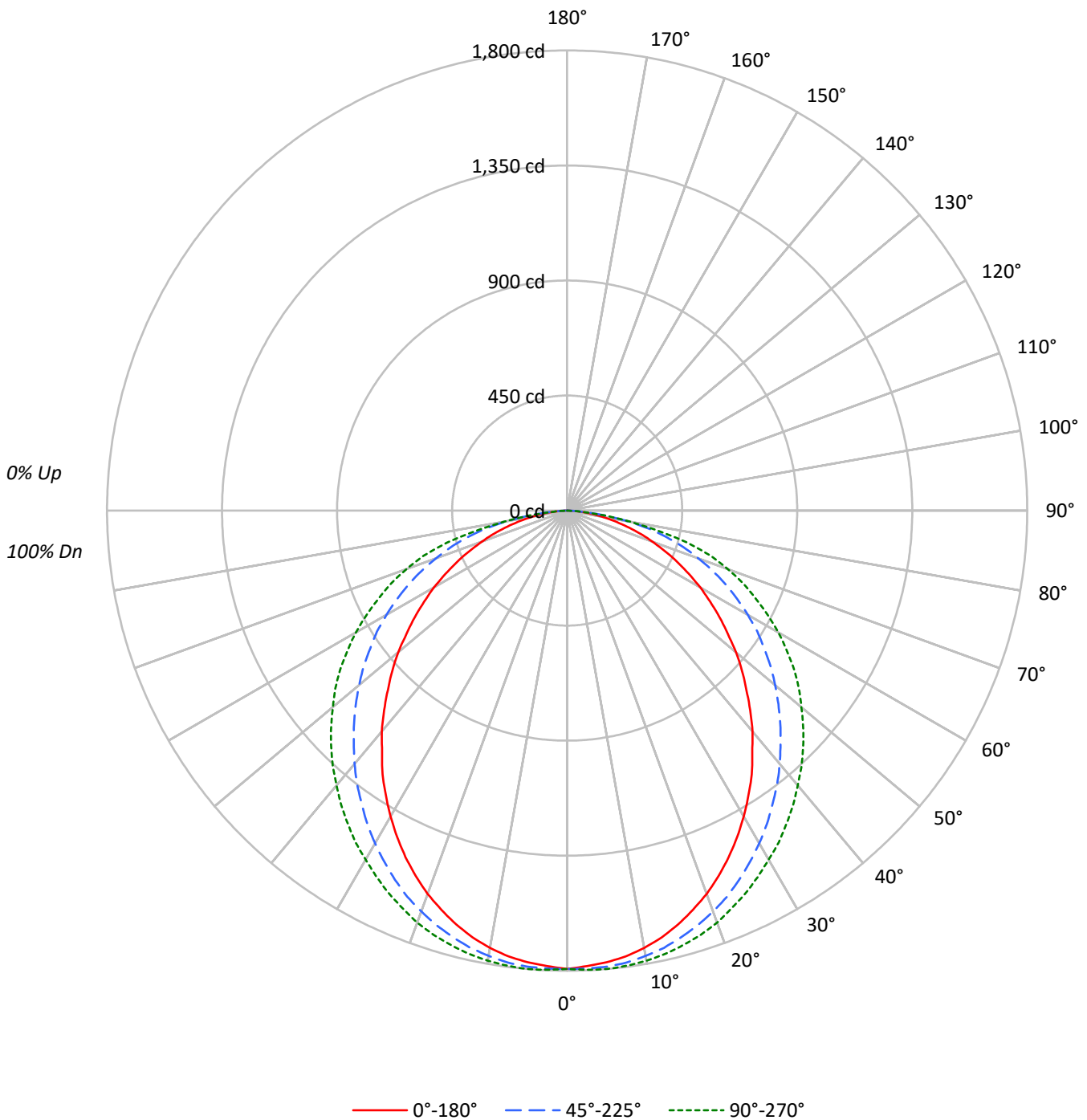
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4825	4825	4825
5°	4791	4837	4863
10°	4746	4833	4886
15°	4669	4812	4900
20°	4570	4779	4911
25°	4441	4730	4904
30°	4292	4671	4898
35°	4138	4602	4914
40°	3962	4544	4929
45°	3773	4487	4969
50°	3610	4447	5008
55°	3417	4412	5086
60°	3238	4392	5140
65°	3025	4359	5181
70°	2779	4294	5252
75°	2508	4180	5065
80°	2152	3699	3814
85°	1729	2180	1729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.0	3.3
10°-20°	486.0	9.5
20°-30°	729.9	14.2
30°-40°	870.6	17.0
40°-50°	900.1	17.5
50°-60°	827.5	16.1
60°-70°	658.8	12.8
70°-80°	402.5	7.8
80°-90°	87.5	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°	1385.9	27.0
0°-40°	2256.5	44.0
0°-60°	3984.1	77.6
0°-90°	5132.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5132.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1793	1793	1793	1793	1793	
5°	1774	1778	1791	1798	1800	168
15°	1676	1696	1727	1752	1759	472
25°	1496	1532	1593	1637	1652	688
35°	1260	1313	1401	1474	1496	786
45°	992	1062	1179	1274	1306	767
55°	728	809	940	1048	1084	652
65°	475	555	685	780	814	471
75°	241	312	402	473	487	257
85°	56	68	71	61	56	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1793.0	1793.0	1793.0	1793.0	1793.0
2.5°	1783.3	1785.7	1793.0	1797.9	1797.9
5°	1773.5	1778.4	1790.6	1797.9	1800.3
7.5°	1758.9	1766.2	1783.3	1793.0	1795.4
10°	1737.0	1746.7	1768.6	1783.3	1788.1
12.5°	1710.2	1724.8	1751.6	1771.1	1776.0
15°	1676.1	1695.6	1727.2	1751.6	1758.9
17.5°	1637.1	1661.5	1700.4	1729.7	1739.4
20°	1595.7	1620.0	1668.8	1702.9	1715.1
22.5°	1547.0	1578.6	1634.7	1673.6	1683.4
25°	1495.8	1532.3	1593.2	1637.1	1651.7
27.5°	1439.8	1483.6	1549.4	1603.0	1615.2
30°	1381.3	1427.6	1503.1	1561.6	1576.2
32.5°	1320.4	1374.0	1454.4	1520.2	1539.7
35°	1259.5	1313.1	1400.8	1473.9	1495.8
37.5°	1188.8	1252.2	1349.6	1425.2	1451.9
40°	1127.9	1188.8	1293.6	1376.4	1403.2
42.5°	1059.7	1125.5	1235.1	1325.3	1356.9
45°	991.5	1062.2	1179.1	1274.1	1305.8
47.5°	928.2	998.8	1120.6	1220.5	1252.2
50°	862.4	935.5	1062.2	1164.5	1196.2
52.5°	791.8	872.1	1003.7	1106.0	1142.6
55°	728.4	808.8	940.4	1047.5	1084.1
57.5°	662.6	745.5	881.9	984.2	1018.3
60°	601.7	682.1	816.1	916.0	955.0
62.5°	536.0	618.8	750.3	847.8	884.3
65°	475.1	555.4	684.6	779.6	813.7
67.5°	414.1	494.5	616.3	706.5	745.5
70°	353.2	433.6	545.7	633.4	667.5
72.5°	299.6	370.3	477.5	557.9	589.5
75°	241.2	311.8	402.0	472.6	487.2
77.5°	187.6	250.9	326.4	358.1	363.0
80°	138.9	187.6	238.7	246.1	246.1
82.5°	92.6	129.1	148.6	151.0	148.6
85°	56.0	68.2	70.6	60.9	56.0
87.5°	19.5	19.5	12.2	7.3	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)