

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: P388133

Luminaire Tested: **22CZ2-65VHE-SQR-UNV-L935-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: P388133
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-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: 5325.8 lumens
Efficiency: N/A
Efficacy: 111.2 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

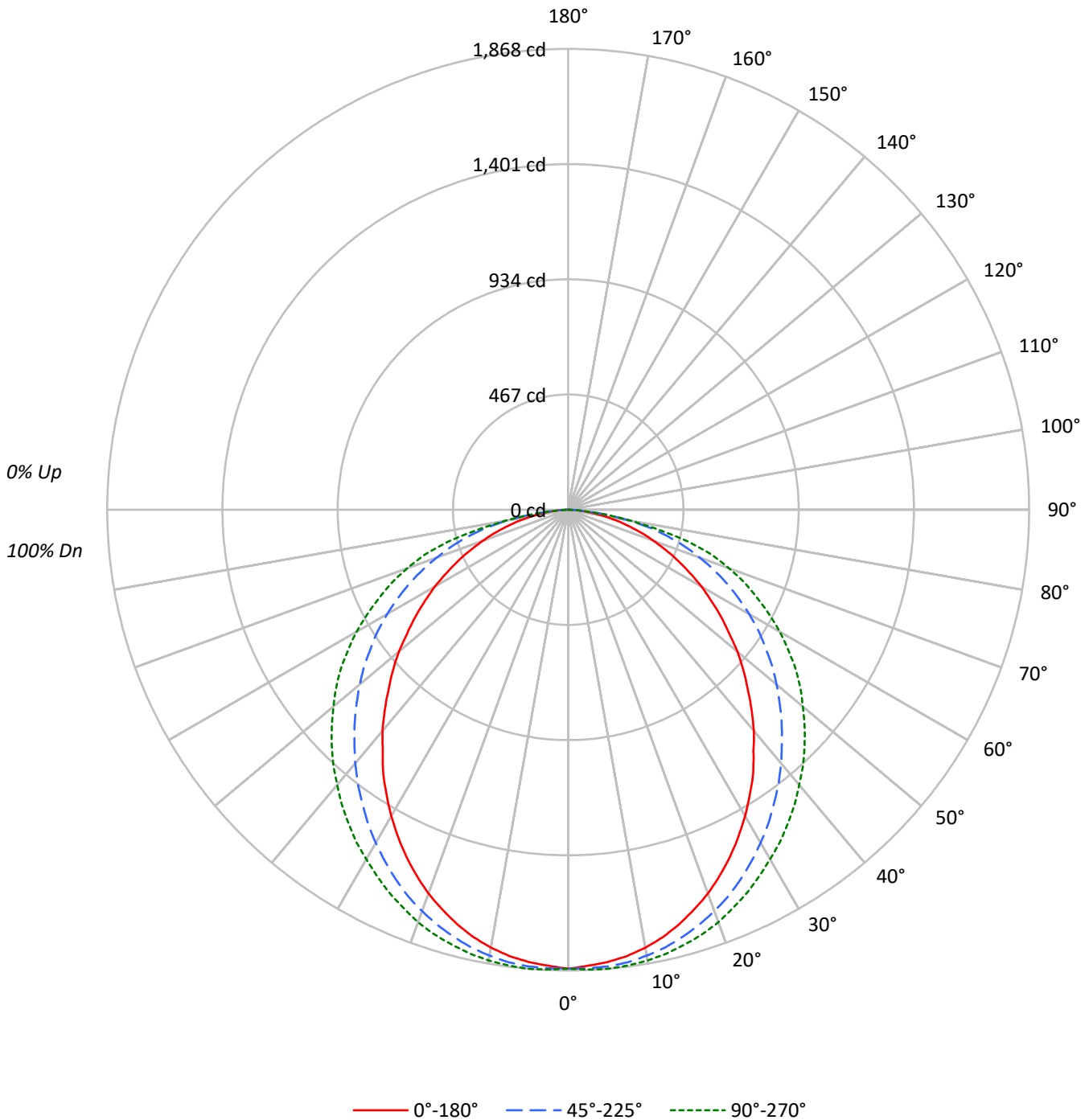
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5006	5006	5006
5°	4971	5019	5046
10°	4925	5015	5070
15°	4845	4993	5084
20°	4741	4958	5096
25°	4608	4909	5089
30°	4453	4846	5082
35°	4293	4775	5098
40°	4111	4715	5115
45°	3915	4656	5156
50°	3746	4614	5196
55°	3546	4578	5278
60°	3360	4557	5333
65°	3138	4523	5376
70°	2884	4455	5449
75°	2601	4337	5257
80°	2233	3839	3956
85°	1794	2263	1794



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.4	3.3
10°-20°	504.3	9.5
20°-30°	757.4	14.2
30°-40°	903.3	17.0
40°-50°	933.9	17.5
50°-60°	858.6	16.1
60°-70°	683.5	12.8
70°-80°	417.6	7.8
80°-90°	90.8	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°	1438.0	27.0
0°-40°	2341.3	44.0
0°-60°	4133.9	77.6
0°-90°	5325.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5325.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1860	1860	1860	1860	1860	
5°	1840	1845	1858	1866	1868	175
15°	1739	1759	1792	1818	1825	490
25°	1552	1590	1653	1699	1714	714
35°	1307	1362	1454	1529	1552	815
45°	1029	1102	1223	1322	1355	796
55°	756	839	976	1087	1125	676
65°	493	576	710	809	844	488
75°	250	324	417	490	506	267
85°	58	71	73	63	58	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1860.4	1860.4	1860.4	1860.4	1860.4
2.5°	1850.3	1852.8	1860.4	1865.5	1865.5
5°	1840.2	1845.3	1857.9	1865.5	1868.0
7.5°	1825.0	1832.6	1850.3	1860.4	1863.0
10°	1802.3	1812.4	1835.2	1850.3	1855.4
12.5°	1774.5	1789.7	1817.5	1837.7	1842.7
15°	1739.1	1759.3	1792.2	1817.5	1825.0
17.5°	1698.7	1723.9	1764.4	1794.7	1804.8
20°	1655.7	1681.0	1731.5	1766.9	1779.5
22.5°	1605.1	1638.0	1696.1	1736.6	1746.7
25°	1552.0	1590.0	1653.2	1698.7	1713.8
27.5°	1493.9	1539.4	1607.7	1663.3	1675.9
30°	1433.2	1481.3	1559.6	1620.3	1635.5
32.5°	1370.0	1425.7	1509.1	1577.3	1597.5
35°	1306.9	1362.5	1453.5	1529.3	1552.0
37.5°	1233.5	1299.3	1400.4	1478.7	1506.5
40°	1170.4	1233.5	1342.2	1428.2	1456.0
42.5°	1099.6	1167.8	1281.6	1375.1	1408.0
45°	1028.8	1102.1	1223.4	1322.0	1354.9
47.5°	963.1	1036.4	1162.8	1266.4	1299.3
50°	894.8	970.7	1102.1	1208.3	1241.1
52.5°	821.5	904.9	1041.4	1147.6	1185.5
55°	755.8	839.2	975.7	1086.9	1124.9
57.5°	687.6	773.5	915.0	1021.2	1056.6
60°	624.4	707.8	846.8	950.4	990.9
62.5°	556.1	642.1	778.5	879.7	917.6
65°	492.9	576.3	710.3	808.9	844.3
67.5°	429.7	513.1	639.5	733.0	773.5
70°	366.5	449.9	566.2	657.2	692.6
72.5°	310.9	384.2	495.4	578.9	611.7
75°	250.2	323.6	417.1	490.4	505.6
77.5°	194.6	260.4	338.7	371.6	376.6
80°	144.1	194.6	247.7	255.3	255.3
82.5°	96.1	134.0	154.2	156.7	154.2
85°	58.1	70.8	73.3	63.2	58.1
87.5°	20.2	20.2	12.6	7.6	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)