

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: P388115

Luminaire Tested: **22CZ2-60VHE-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: P388115
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: 22CZ2-60VHE-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: 5320.5 lumens
Efficiency: N/A
Efficacy: 120.6 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

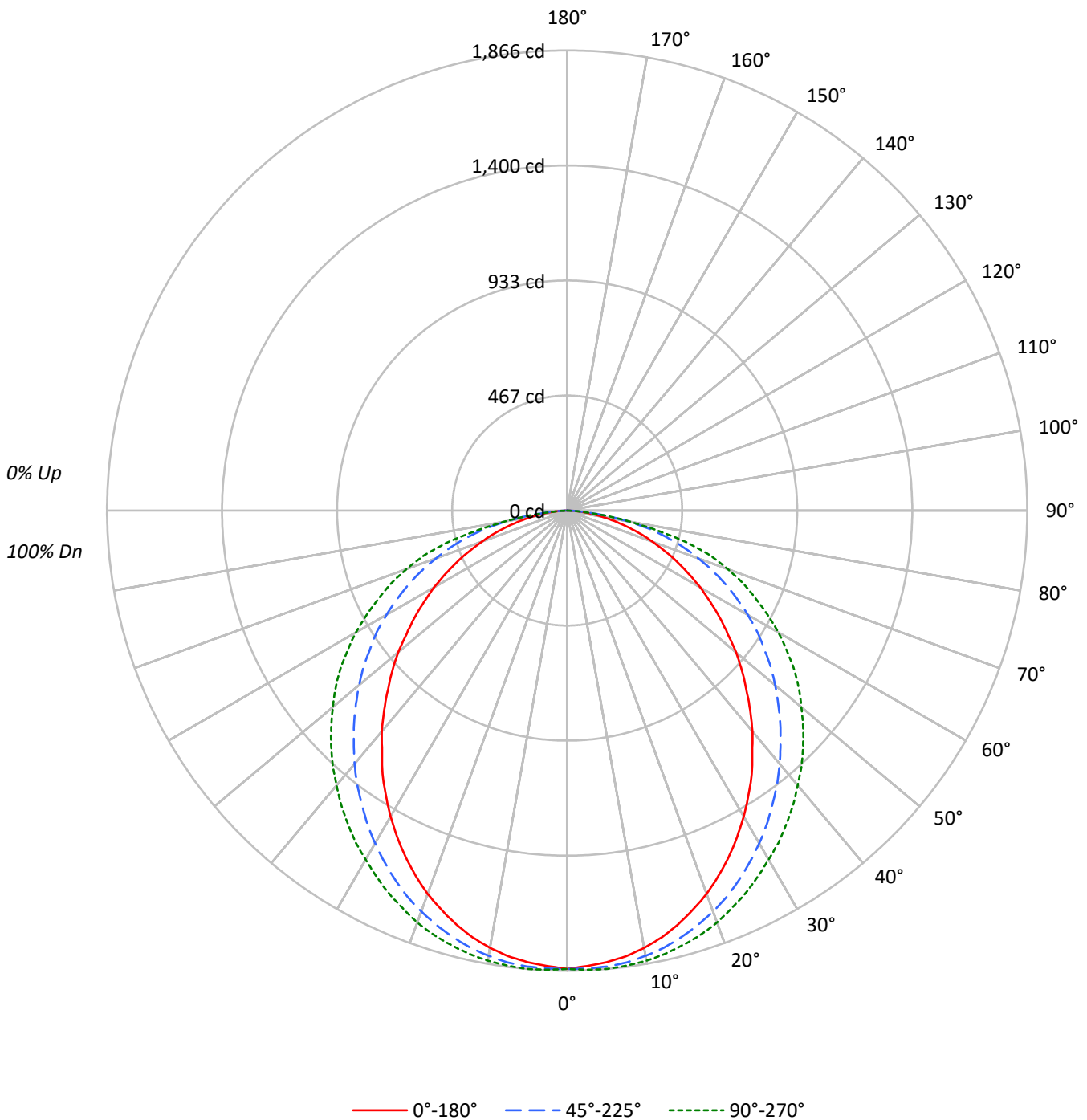
Input Watts (W): 44.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5001	5001	5001
5°	4966	5014	5041
10°	4920	5009	5065
15°	4840	4988	5079
20°	4737	4954	5091
25°	4604	4904	5084
30°	4449	4841	5077
35°	4289	4770	5094
40°	4107	4710	5109
45°	3911	4651	5151
50°	3742	4609	5191
55°	3542	4573	5272
60°	3357	4553	5328
65°	3135	4518	5370
70°	2881	4451	5444
75°	2599	4332	5251
80°	2230	3835	3952
85°	1794	2260	1794



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.2	3.3
10°-20°	503.8	9.5
20°-30°	756.6	14.2
30°-40°	902.4	17.0
40°-50°	933.0	17.5
50°-60°	857.8	16.1
60°-70°	682.9	12.8
70°-80°	417.2	7.8
80°-90°	90.7	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°	1436.6	27.0
0°-40°	2339.0	44.0
0°-60°	4129.7	77.6
0°-90°	5320.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5320.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1859	1859	1859	1859	1859	
5°	1838	1843	1856	1864	1866	174
15°	1737	1758	1790	1816	1823	489
25°	1550	1588	1652	1697	1712	713
35°	1306	1361	1452	1528	1550	815
45°	1028	1101	1222	1321	1354	795
55°	755	838	975	1086	1124	675
65°	492	576	710	808	843	488
75°	250	323	417	490	505	266
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°	1858.6	1858.6	1858.6	1858.6	1858.6
2.5°	1848.5	1851.0	1858.6	1863.6	1863.6
5°	1838.4	1843.4	1856.1	1863.6	1866.2
7.5°	1823.2	1830.8	1848.5	1858.6	1861.1
10°	1800.5	1810.6	1833.3	1848.5	1853.5
12.5°	1772.7	1787.9	1815.6	1835.9	1840.9
15°	1737.4	1757.6	1790.4	1815.6	1823.2
17.5°	1697.0	1722.2	1762.6	1792.9	1803.0
20°	1654.0	1679.3	1729.8	1765.1	1777.8
22.5°	1603.5	1636.4	1694.4	1734.8	1744.9
25°	1550.5	1588.4	1651.5	1697.0	1712.1
27.5°	1492.4	1537.9	1606.1	1661.6	1674.2
30°	1431.8	1479.8	1558.1	1618.7	1633.8
32.5°	1368.7	1424.2	1507.6	1575.8	1596.0
35°	1305.6	1361.1	1452.0	1527.8	1550.5
37.5°	1232.3	1298.0	1399.0	1477.3	1505.0
40°	1169.2	1232.3	1340.9	1426.8	1454.5
42.5°	1098.5	1166.7	1280.3	1373.7	1406.6
45°	1027.8	1101.0	1222.2	1320.7	1353.5
47.5°	962.1	1035.3	1161.6	1265.1	1298.0
50°	893.9	969.7	1101.0	1207.1	1239.9
52.5°	820.7	904.0	1040.4	1146.5	1184.3
55°	755.0	838.4	974.7	1085.9	1123.7
57.5°	686.9	772.7	914.1	1020.2	1055.6
60°	623.7	707.1	846.0	949.5	989.9
62.5°	555.6	641.4	777.8	878.8	916.7
65°	492.4	575.8	709.6	808.1	843.4
67.5°	429.3	512.6	638.9	732.3	772.7
70°	366.2	449.5	565.7	656.6	691.9
72.5°	310.6	383.8	494.9	578.3	611.1
75°	250.0	323.2	416.7	489.9	505.0
77.5°	194.4	260.1	338.4	371.2	376.3
80°	143.9	194.4	247.5	255.0	255.0
82.5°	96.0	133.8	154.0	156.6	154.0
85°	58.1	70.7	73.2	63.1	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)