

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: P389144

Luminaire Tested: **22CZ2-20VHE-S-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: P389144
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20VHE-S-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1913.0 lumens
Efficiency: N/A
Efficacy: 134.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

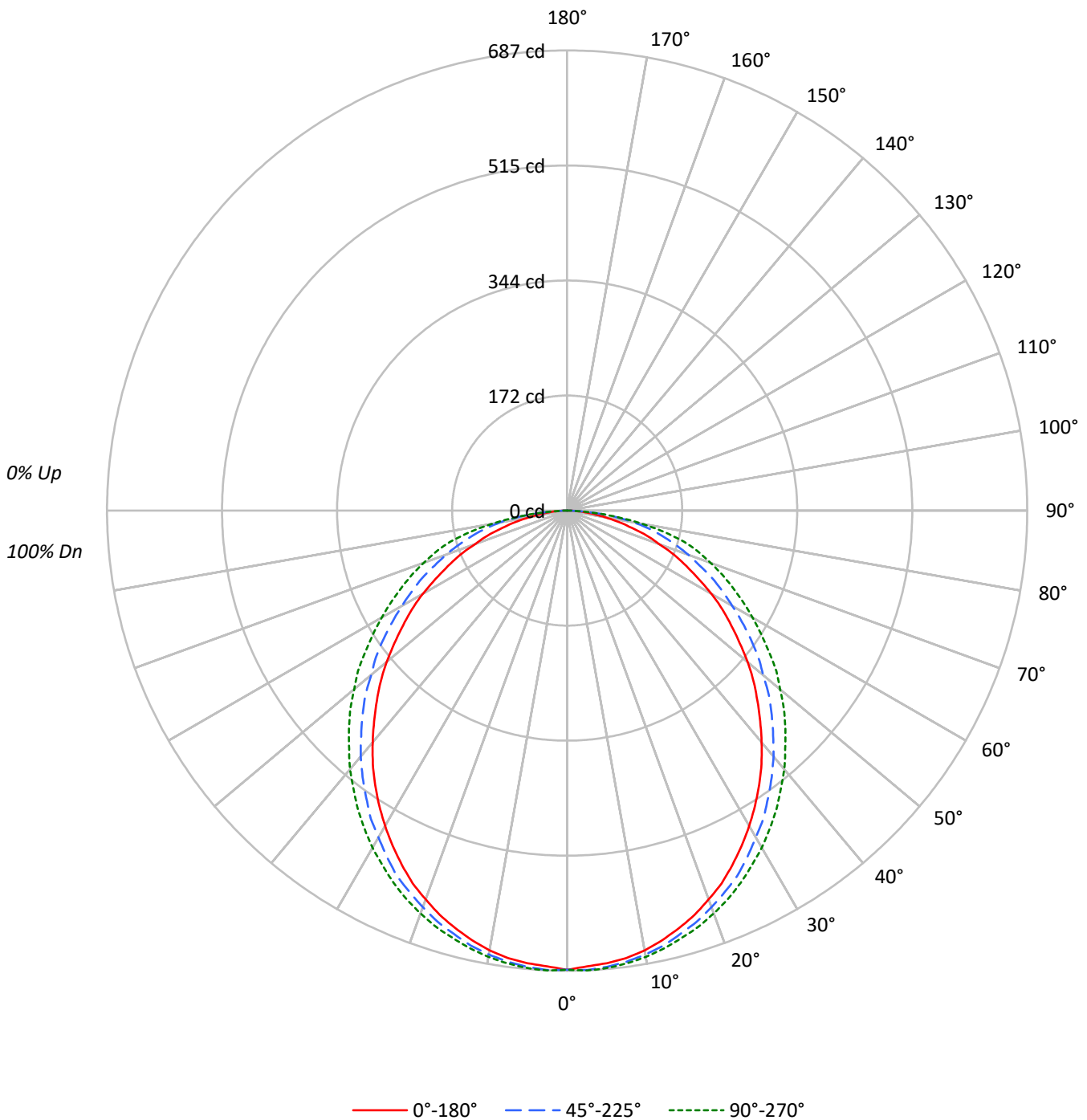
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	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	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1845	1845	1845
5°	1832	1847	1852
10°	1822	1839	1849
15°	1798	1823	1840
20°	1769	1804	1833
25°	1733	1786	1821
30°	1689	1750	1806
35°	1642	1718	1789
40°	1586	1684	1772
45°	1529	1644	1753
50°	1472	1599	1737
55°	1403	1570	1725
60°	1340	1532	1720
65°	1251	1523	1739
70°	1152	1510	1791
75°	1040	1531	1884
80°	899	1578	1770
85°	744	1321	1321



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.8	3.4
10°-20°	184.5	9.6
20°-30°	276.0	14.4
30°-40°	326.9	17.1
40°-50°	333.1	17.4
50°-60°	298.6	15.6
60°-70°	233.8	12.2
70°-80°	150.8	7.9
80°-90°	44.5	2.3
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°	525.3	27.5
0°-40°	852.2	44.5
0°-60°	1483.9	77.6
0°-90°	1913.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1913.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	686	686	686	686	686	
5°	678	680	684	685	686	64
15°	645	649	654	660	660	182
25°	584	589	602	610	613	269
35°	500	506	523	539	544	312
45°	402	411	432	454	461	310
55°	299	309	335	358	368	268
65°	196	208	239	262	273	195
75°	100	115	147	172	181	107
85°	24	33	43	43	43	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	685.5	685.5	685.5	685.5	685.5
2.5°	681.0	682.8	686.4	687.3	687.3
5°	678.3	680.1	683.7	684.6	685.5
7.5°	673.9	674.8	679.2	681.0	681.9
10°	666.7	668.5	673.0	675.7	676.6
12.5°	656.9	659.6	665.0	668.5	669.4
15°	645.3	648.9	654.2	659.6	660.5
17.5°	632.8	636.4	643.5	649.8	651.6
20°	617.7	622.1	630.1	637.3	640.0
22.5°	602.5	606.0	615.9	624.8	627.5
25°	583.7	589.1	601.6	609.6	613.2
27.5°	564.1	570.3	582.8	593.6	597.1
30°	543.6	549.8	563.2	576.6	581.1
32.5°	522.1	529.3	545.4	558.7	563.2
35°	499.8	506.1	523.0	539.1	544.5
37.5°	476.6	482.0	501.6	518.6	523.9
40°	451.6	458.8	479.3	498.9	504.3
42.5°	426.6	434.7	455.2	476.6	482.0
45°	401.7	410.6	432.0	454.3	460.6
47.5°	377.6	384.7	408.8	430.2	439.1
50°	351.7	358.8	382.0	406.1	415.0
52.5°	324.9	334.7	359.7	382.9	393.6
55°	299.0	308.8	334.7	357.9	367.7
57.5°	274.9	282.9	309.7	333.8	343.6
60°	249.0	256.2	284.7	310.6	319.5
62.5°	221.4	232.1	261.5	285.6	296.3
65°	196.4	208.0	239.2	262.4	273.1
67.5°	173.2	183.9	214.2	239.2	250.8
70°	146.4	160.7	191.9	216.9	227.6
72.5°	125.0	137.5	169.6	194.6	206.2
75°	100.0	115.1	147.3	172.3	181.2
77.5°	79.4	94.6	125.0	144.6	149.1
80°	58.0	73.2	101.8	111.6	114.2
82.5°	39.3	53.6	73.2	75.9	76.8
85°	24.1	33.0	42.8	42.8	42.8
87.5°	11.6	13.4	15.2	14.3	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)