

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: P390841

Luminaire Tested: **22CZ2-95VHE-HRP-UNV-L935-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: P390841
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-95VHE-HRP-UNV-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6811.2 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

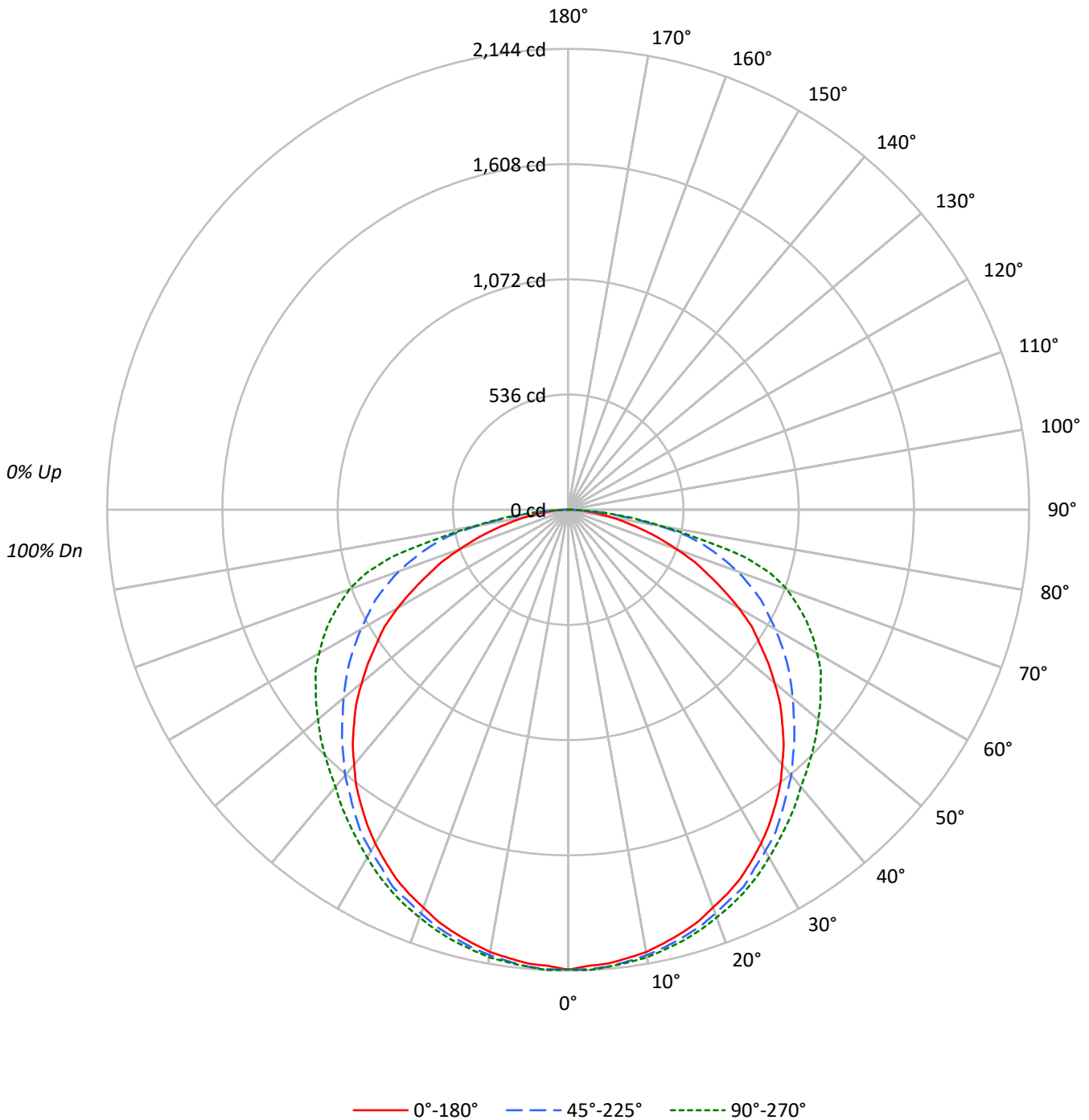
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5757	5757	5757
5°	5725	5766	5766
10°	5709	5750	5778
15°	5681	5737	5779
20°	5639	5725	5783
25°	5624	5743	5802
30°	5574	5698	5807
35°	5514	5679	5843
40°	5439	5668	5914
45°	5358	5663	6102
50°	5244	5706	6356
55°	5101	5830	6723
60°	4935	5986	7200
65°	4594	6285	7785
70°	4218	6584	8515
75°	3699	6929	8804
80°	3183	6600	6910
85°	2785	4795	5261



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.4	3.0
10°-20°	581.1	8.5
20°-30°	886.6	13.0
30°-40°	1082.5	15.9
40°-50°	1157.4	17.0
50°-60°	1117.2	16.4
60°-70°	961.7	14.1
70°-80°	650.7	9.6
80°-90°	171.7	2.5
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°	1670.0	24.5
0°-40°	2752.5	40.4
0°-60°	5027.1	73.8
0°-90°	6811.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6811.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2140	2140	2140	2140	2140	
5°	2120	2124	2134	2134	2134	201
15°	2039	2044	2059	2069	2074	575
25°	1894	1904	1934	1944	1954	872
35°	1678	1694	1729	1764	1779	1050
45°	1408	1433	1488	1563	1603	1087
55°	1087	1122	1243	1368	1433	974
65°	722	792	987	1142	1223	718
75°	356	471	666	802	847	382
85°	90	125	155	160	170	102
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2139.5	2139.5	2139.5	2139.5	2139.5
2.5°	2124.5	2129.5	2139.5	2139.5	2144.5
5°	2119.5	2124.5	2134.5	2134.5	2134.5
7.5°	2104.4	2109.5	2119.5	2124.5	2124.5
10°	2089.4	2094.4	2104.4	2109.5	2114.5
12.5°	2064.4	2069.4	2084.4	2094.4	2094.4
15°	2039.3	2044.3	2059.3	2069.4	2074.4
17.5°	2009.2	2019.3	2034.3	2044.3	2049.3
20°	1969.2	1979.2	1999.2	2014.3	2019.3
22.5°	1934.1	1944.1	1964.1	1979.2	1989.2
25°	1894.0	1904.0	1934.1	1944.1	1954.1
27.5°	1843.9	1853.9	1879.0	1899.0	1914.0
30°	1793.8	1803.8	1833.9	1858.9	1868.9
32.5°	1738.7	1753.7	1788.8	1808.8	1823.9
35°	1678.5	1693.6	1728.6	1763.7	1778.8
37.5°	1618.4	1633.4	1668.5	1713.6	1733.7
40°	1548.3	1568.3	1613.4	1673.5	1683.6
42.5°	1483.1	1508.2	1548.3	1618.4	1643.5
45°	1408.0	1433.0	1488.1	1563.3	1603.4
47.5°	1337.8	1362.9	1423.0	1513.2	1563.3
50°	1252.6	1287.7	1362.9	1468.1	1518.2
52.5°	1172.5	1202.5	1302.8	1418.0	1478.1
55°	1087.3	1122.4	1242.6	1367.9	1433.0
57.5°	1012.1	1042.2	1177.5	1317.8	1392.9
60°	916.9	957.0	1112.3	1262.7	1337.8
62.5°	816.7	876.9	1047.2	1202.5	1282.7
65°	721.5	791.7	987.1	1142.4	1222.6
67.5°	636.3	711.5	911.9	1077.3	1152.4
70°	536.1	631.3	836.8	997.1	1082.3
72.5°	445.9	551.2	751.6	911.9	987.1
75°	355.8	471.0	666.4	801.7	846.8
77.5°	275.6	385.8	571.2	611.3	616.3
80°	205.4	305.6	425.9	430.9	445.9
82.5°	140.3	215.5	275.6	300.6	305.6
85°	90.2	125.3	155.3	160.3	170.4
87.5°	40.1	45.1	55.1	50.1	50.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)