

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: P390025

Luminaire Tested: **22CZ2-100VHE-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: P390025
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: 22CZ2-100VHE-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: 7164.2 lumens
Efficiency: N/A
Efficacy: 92.2 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

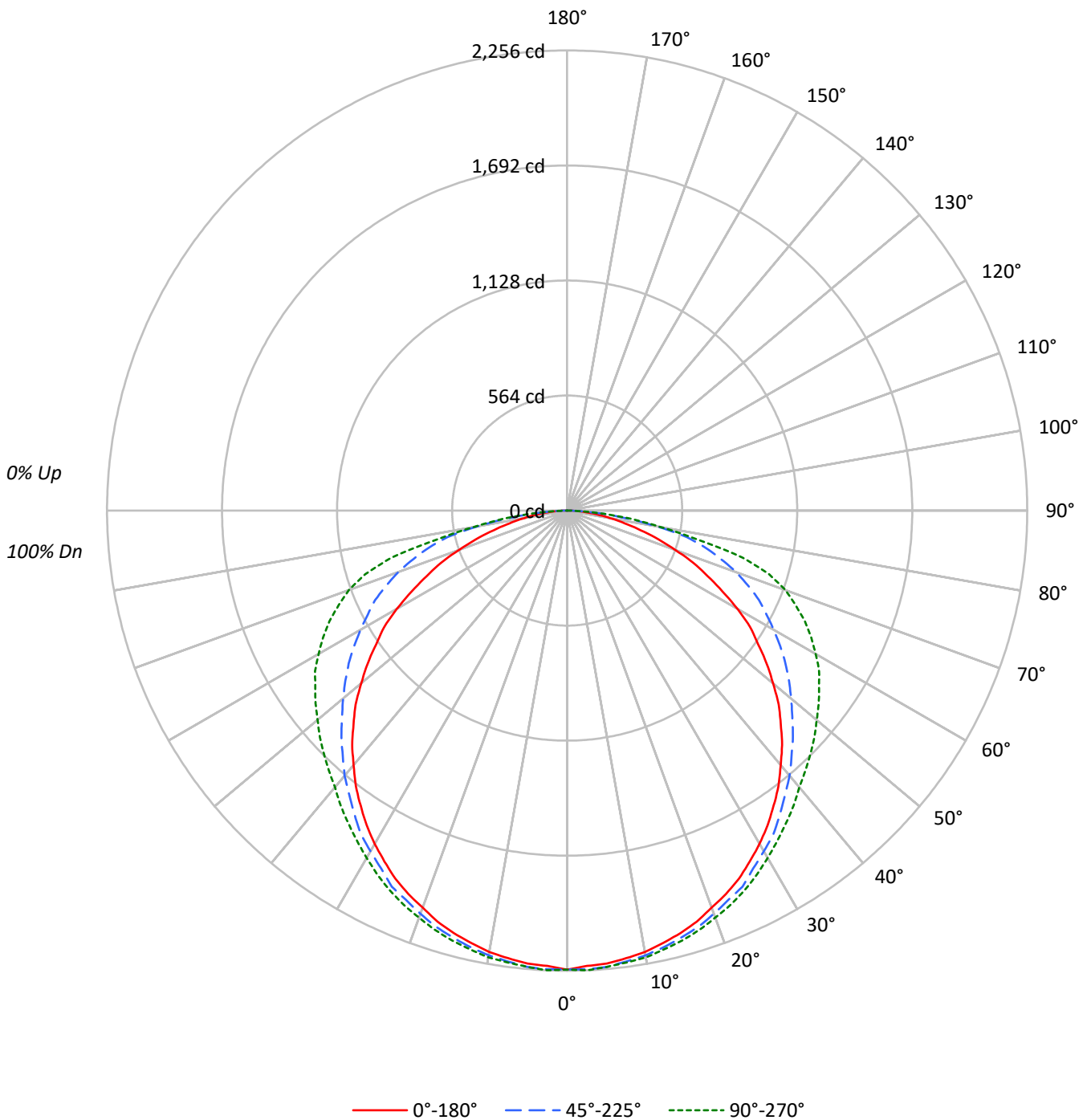
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6056	6056	6056
5°	6022	6065	6065
10°	6005	6048	6077
15°	5976	6035	6079
20°	5931	6022	6082
25°	5915	6040	6103
30°	5863	5994	6108
35°	5800	5973	6146
40°	5721	5961	6221
45°	5636	5957	6418
50°	5516	6001	6685
55°	5365	6132	7072
60°	5191	6297	7573
65°	4832	6611	8188
70°	4437	6925	8957
75°	3891	7287	9261
80°	3349	6943	7270
85°	2930	5045	5533



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.9	3.0
10°-20°	611.2	8.5
20°-30°	932.5	13.0
30°-40°	1138.6	15.9
40°-50°	1217.4	17.0
50°-60°	1175.1	16.4
60°-70°	1011.5	14.1
70°-80°	684.4	9.6
80°-90°	180.6	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°	1756.6	24.5
0°-40°	2895.2	40.4
0°-60°	5287.7	73.8
0°-90°	7164.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7164.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2250	2250	2250	2250	2250	
5°	2229	2235	2245	2245	2245	212
15°	2145	2150	2166	2177	2182	605
25°	1992	2003	2034	2045	2055	917
35°	1766	1781	1818	1855	1871	1105
45°	1481	1507	1565	1644	1686	1143
55°	1144	1180	1307	1439	1507	1025
65°	759	833	1038	1202	1286	755
75°	374	495	701	843	891	401
85°	95	132	163	169	179	107
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2250.4	2250.4	2250.4	2250.4	2250.4
2.5°	2234.6	2239.9	2250.4	2250.4	2255.7
5°	2229.3	2234.6	2245.1	2245.1	2245.1
7.5°	2213.5	2218.8	2229.3	2234.6	2234.6
10°	2197.7	2203.0	2213.5	2218.8	2224.0
12.5°	2171.3	2176.6	2192.4	2203.0	2203.0
15°	2145.0	2150.3	2166.1	2176.6	2181.9
17.5°	2113.4	2123.9	2139.7	2150.3	2155.5
20°	2071.2	2081.8	2102.8	2118.6	2123.9
22.5°	2034.3	2044.9	2065.9	2081.8	2092.3
25°	1992.2	2002.7	2034.3	2044.9	2055.4
27.5°	1939.5	1950.0	1976.3	1997.4	2013.2
30°	1886.8	1897.3	1928.9	1955.3	1965.8
32.5°	1828.8	1844.6	1881.5	1902.6	1918.4
35°	1765.5	1781.3	1818.2	1855.1	1870.9
37.5°	1702.3	1718.1	1755.0	1802.4	1823.5
40°	1628.5	1649.6	1697.0	1760.3	1770.8
42.5°	1560.0	1586.3	1628.5	1702.3	1728.6
45°	1480.9	1507.3	1565.3	1644.3	1686.5
47.5°	1407.2	1433.5	1496.8	1591.6	1644.3
50°	1317.6	1354.5	1433.5	1544.2	1596.9
52.5°	1233.2	1264.9	1370.3	1491.5	1554.7
55°	1143.6	1180.5	1307.0	1438.8	1507.3
57.5°	1064.6	1096.2	1238.5	1386.1	1465.1
60°	964.5	1006.6	1170.0	1328.1	1407.2
62.5°	859.1	922.3	1101.5	1264.9	1349.2
65°	758.9	832.7	1038.2	1201.6	1285.9
67.5°	669.3	748.4	959.2	1133.1	1212.2
70°	563.9	664.1	880.1	1048.8	1138.4
72.5°	469.1	579.7	790.5	959.2	1038.2
75°	374.2	495.4	700.9	843.2	890.7
77.5°	289.9	405.8	600.8	643.0	648.2
80°	216.1	321.5	448.0	453.2	469.1
82.5°	147.6	226.6	289.9	316.2	321.5
85°	94.9	131.8	163.4	168.6	179.2
87.5°	42.2	47.4	58.0	52.7	52.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)