

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: P390702

Luminaire Tested: **22CZ2-80VHE-HRP-UNV-L950-CD1-SDWPD1-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: P390702
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: 22CZ2-80VHE-HRP-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6076.5 lumens
Efficiency: N/A
Efficacy: 102.8 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

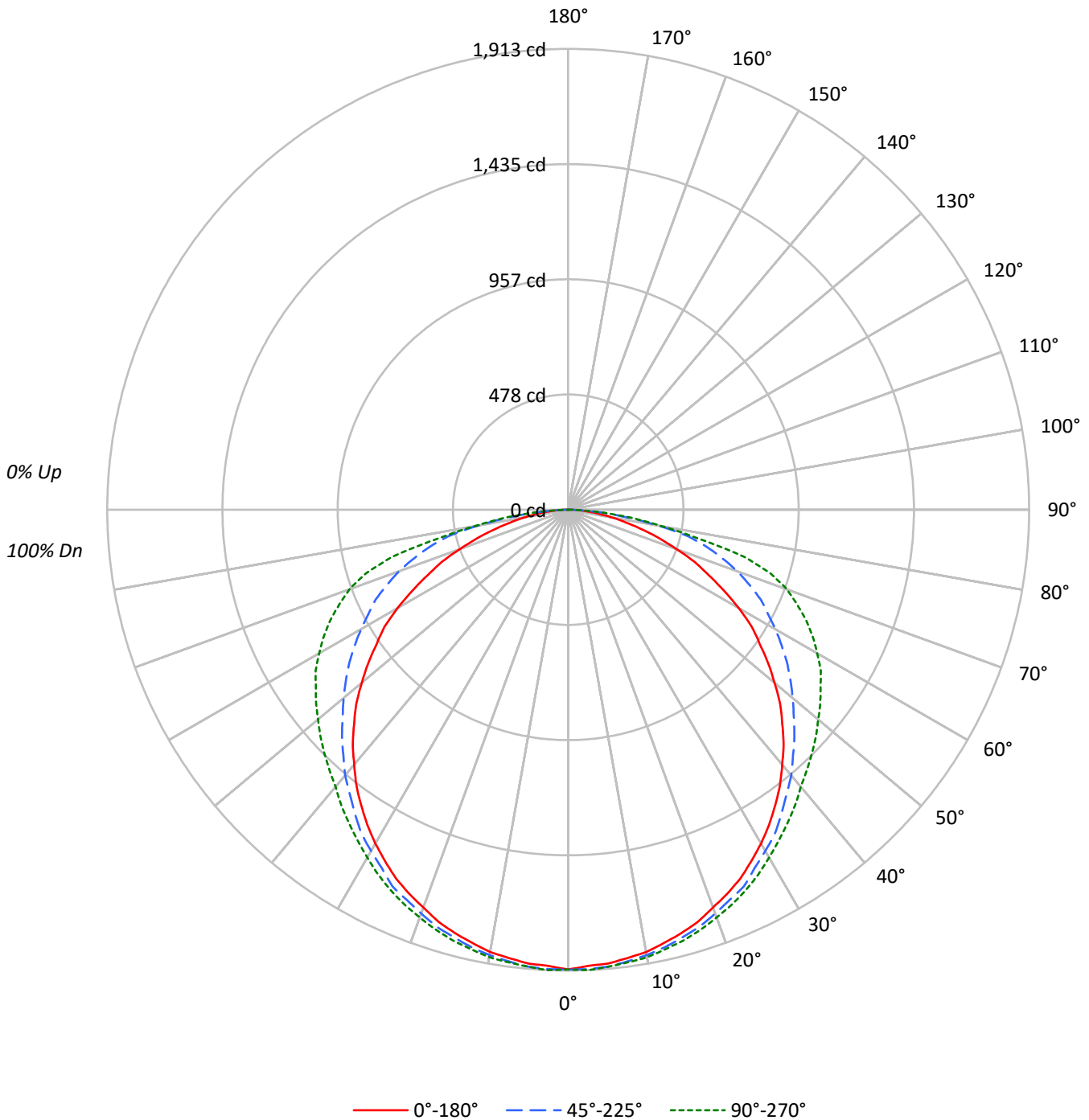
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5136	5136	5136
5°	5108	5144	5144
10°	5093	5130	5155
15°	5068	5118	5156
20°	5031	5108	5159
25°	5017	5123	5176
30°	4973	5084	5181
35°	4919	5066	5213
40°	4852	5056	5276
45°	4780	5052	5444
50°	4678	5090	5670
55°	4551	5201	5998
60°	4402	5341	6423
65°	4099	5607	6945
70°	3763	5873	7596
75°	3300	6181	7854
80°	2841	5889	6165
85°	2485	4279	4693



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.6	3.0
10°-20°	518.4	8.5
20°-30°	790.9	13.0
30°-40°	965.7	15.9
40°-50°	1032.6	17.0
50°-60°	996.7	16.4
60°-70°	858.0	14.1
70°-80°	580.5	9.6
80°-90°	153.2	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°	1489.9	24.5
0°-40°	2455.6	40.4
0°-60°	4484.9	73.8
0°-90°	6076.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6076.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1909	1909	1909	1909	1909	
5°	1891	1895	1904	1904	1904	180
15°	1819	1824	1837	1846	1851	513
25°	1690	1699	1726	1734	1743	778
35°	1498	1511	1542	1574	1587	937
45°	1256	1278	1328	1395	1430	970
55°	970	1001	1109	1220	1278	869
65°	644	706	881	1019	1091	640
75°	317	420	594	715	755	341
85°	80	112	139	143	152	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1908.7	1908.7	1908.7	1908.7	1908.7
2.5°	1895.3	1899.8	1908.7	1908.7	1913.2
5°	1890.9	1895.3	1904.3	1904.3	1904.3
7.5°	1877.4	1881.9	1890.9	1895.3	1895.3
10°	1864.0	1868.5	1877.4	1881.9	1886.4
12.5°	1841.7	1846.2	1859.6	1868.5	1868.5
15°	1819.3	1823.8	1837.2	1846.2	1850.6
17.5°	1792.5	1801.5	1814.9	1823.8	1828.3
20°	1756.8	1765.7	1783.6	1797.0	1801.5
22.5°	1725.5	1734.4	1752.3	1765.7	1774.6
25°	1689.7	1698.6	1725.5	1734.4	1743.3
27.5°	1645.0	1653.9	1676.3	1694.2	1707.6
30°	1600.3	1609.2	1636.1	1658.4	1667.3
32.5°	1551.1	1564.5	1595.8	1613.7	1627.1
35°	1497.5	1510.9	1542.2	1573.5	1586.9
37.5°	1443.8	1457.3	1488.5	1528.8	1546.7
40°	1381.3	1399.1	1439.4	1493.0	1502.0
42.5°	1323.2	1345.5	1381.3	1443.8	1466.2
45°	1256.1	1278.4	1327.6	1394.7	1430.4
47.5°	1193.5	1215.9	1269.5	1350.0	1394.7
50°	1117.5	1148.8	1215.9	1309.7	1354.4
52.5°	1046.0	1072.8	1162.2	1265.0	1318.7
55°	970.0	1001.3	1108.6	1220.3	1278.4
57.5°	903.0	929.8	1050.5	1175.6	1242.7
60°	818.0	853.8	992.4	1126.5	1193.5
62.5°	728.6	782.3	934.3	1072.8	1144.3
65°	643.7	706.3	880.6	1019.2	1090.7
67.5°	567.7	634.8	813.6	961.1	1028.1
70°	478.3	563.2	746.5	889.6	965.5
72.5°	397.8	491.7	670.5	813.6	880.6
75°	317.4	420.2	594.5	715.2	755.4
77.5°	245.9	344.2	509.6	545.4	549.8
80°	183.3	272.7	380.0	384.4	397.8
82.5°	125.2	192.2	245.9	268.2	272.7
85°	80.5	111.8	138.6	143.0	152.0
87.5°	35.8	40.2	49.2	44.7	44.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)