

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: P390745

Luminaire Tested: **22CZ2-85VHE-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: P390745
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: 22CZ2-85VHE-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: 6106.0 lumens
Efficiency: N/A
Efficacy: 96.0 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

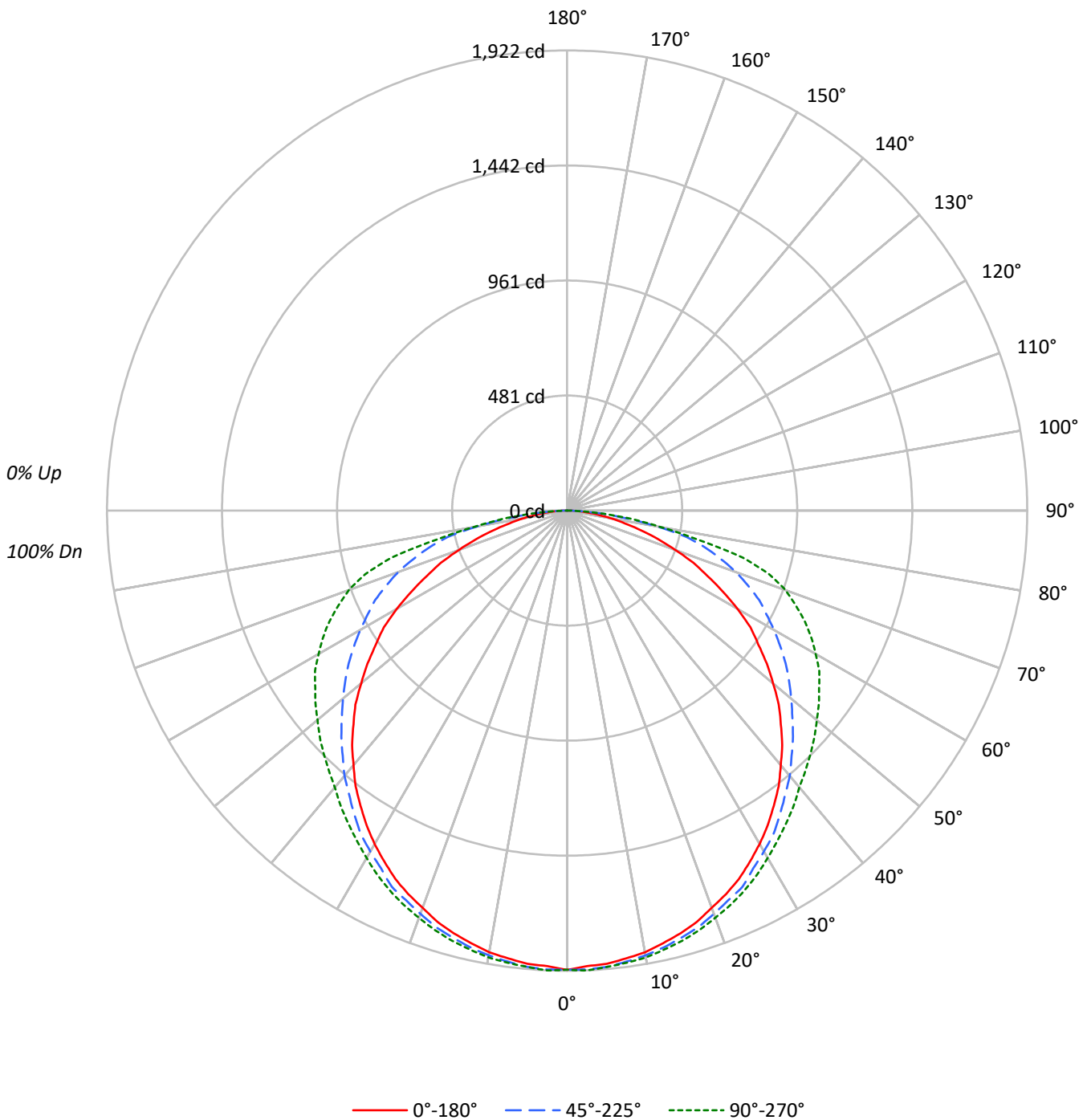
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5161	5161	5161
5°	5132	5169	5169
10°	5118	5155	5179
15°	5093	5143	5181
20°	5055	5132	5184
25°	5041	5148	5201
30°	4997	5108	5206
35°	4943	5091	5238
40°	4876	5081	5302
45°	4803	5077	5470
50°	4701	5115	5698
55°	4573	5226	6027
60°	4424	5367	6455
65°	4118	5635	6979
70°	3781	5902	7633
75°	3316	6211	7892
80°	2854	5917	6196
85°	2498	4298	4715



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.4	3.0
10°-20°	520.9	8.5
20°-30°	794.8	13.0
30°-40°	970.4	15.9
40°-50°	1037.6	17.0
50°-60°	1001.5	16.4
60°-70°	862.1	14.1
70°-80°	583.3	9.6
80°-90°	153.9	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°	1497.1	24.5
0°-40°	2467.5	40.4
0°-60°	4506.7	73.8
0°-90°	6106.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6106.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1918	1918	1918	1918	1918	
5°	1900	1904	1914	1914	1914	180
15°	1828	1833	1846	1855	1860	516
25°	1698	1707	1734	1743	1752	781
35°	1505	1518	1550	1581	1595	942
45°	1262	1285	1334	1401	1437	974
55°	975	1006	1114	1226	1285	873
65°	647	710	885	1024	1096	643
75°	319	422	597	719	759	342
85°	81	112	139	144	153	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1918.0	1918.0	1918.0	1918.0	1918.0
2.5°	1904.5	1909.0	1918.0	1918.0	1922.5
5°	1900.0	1904.5	1913.5	1913.5	1913.5
7.5°	1886.6	1891.1	1900.0	1904.5	1904.5
10°	1873.1	1877.6	1886.6	1891.1	1895.5
12.5°	1850.6	1855.1	1868.6	1877.6	1877.6
15°	1828.2	1832.7	1846.1	1855.1	1859.6
17.5°	1801.2	1810.2	1823.7	1832.7	1837.1
20°	1765.3	1774.3	1792.2	1805.7	1810.2
22.5°	1733.8	1742.8	1760.8	1774.3	1783.2
25°	1697.9	1706.9	1733.8	1742.8	1751.8
27.5°	1653.0	1662.0	1684.4	1702.4	1715.9
30°	1608.1	1617.0	1644.0	1666.5	1675.4
32.5°	1558.7	1572.1	1603.6	1621.5	1635.0
35°	1504.8	1518.2	1549.7	1581.1	1594.6
37.5°	1450.9	1464.3	1495.8	1536.2	1554.2
40°	1388.0	1405.9	1446.4	1500.3	1509.2
42.5°	1329.6	1352.0	1388.0	1450.9	1473.3
45°	1262.2	1284.7	1334.1	1401.4	1437.4
47.5°	1199.3	1221.8	1275.7	1356.5	1401.4
50°	1123.0	1154.4	1221.8	1316.1	1361.0
52.5°	1051.1	1078.0	1167.9	1271.2	1325.1
55°	974.7	1006.2	1114.0	1226.3	1284.7
57.5°	907.3	934.3	1055.6	1181.3	1248.7
60°	822.0	857.9	997.2	1131.9	1199.3
62.5°	732.2	786.1	938.8	1078.0	1149.9
65°	646.8	709.7	884.9	1024.1	1096.0
67.5°	570.5	637.8	817.5	965.7	1033.1
70°	480.6	566.0	750.1	893.9	970.2
72.5°	399.8	494.1	673.8	817.5	884.9
75°	318.9	422.2	597.4	718.7	759.1
77.5°	247.0	345.9	512.1	548.0	552.5
80°	184.2	274.0	381.8	386.3	399.8
82.5°	125.8	193.1	247.0	269.5	274.0
85°	80.9	112.3	139.2	143.7	152.7
87.5°	35.9	40.4	49.4	44.9	44.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)