

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: P389816

Luminaire Tested: **24CZ2-55VHE-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: P389816
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55VHE-S-UNV-L950-CD1-U
Description: 2x4 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: 5306.6 lumens
Efficiency: N/A
Efficacy: 147.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

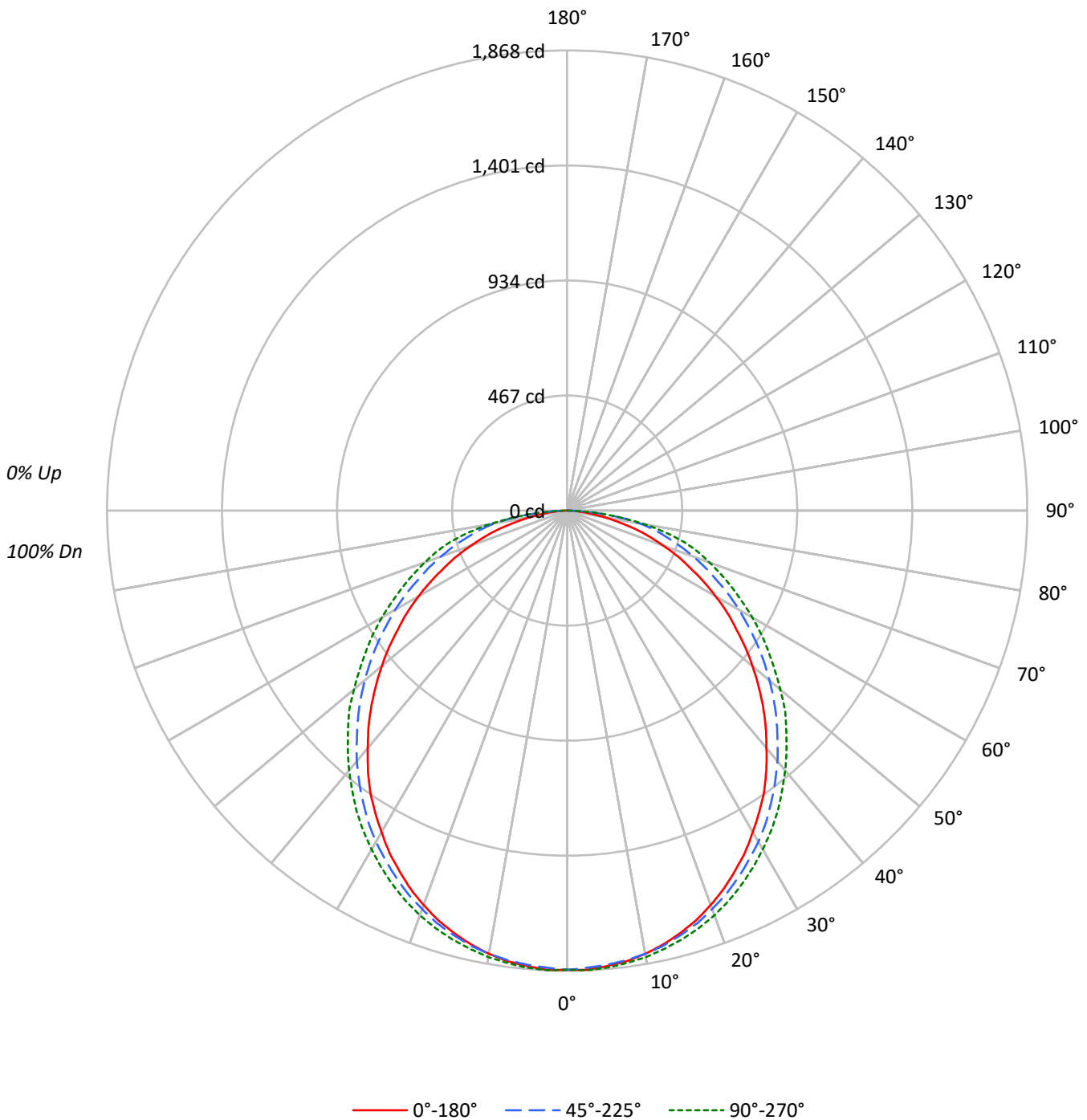
Input Watts (W): 36.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2508	2508	2508
5°	2506	2500	2516
10°	2496	2496	2515
15°	2472	2484	2510
20°	2440	2464	2503
25°	2395	2440	2487
30°	2341	2412	2467
35°	2290	2373	2447
40°	2211	2333	2419
45°	2139	2287	2393
50°	2057	2244	2364
55°	1965	2202	2341
60°	1873	2168	2336
65°	1755	2131	2351
70°	1625	2142	2413
75°	1455	2182	2550
80°	1175	2311	2494
85°	885	2030	1978



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.5	3.3
10°-20°	504.3	9.5
20°-30°	758.1	14.3
30°-40°	903.0	17.0
40°-50°	924.1	17.4
50°-60°	832.0	15.7
60°-70°	653.4	12.3
70°-80°	424.1	8.0
80°-90°	131.1	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°	1438.8	27.1
0°-40°	2341.8	44.1
0°-60°	4098.0	77.2
0°-90°	5306.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5306.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1864	1864	1864	1864	1864	
5°	1856	1859	1851	1861	1863	176
15°	1775	1780	1783	1798	1802	500
25°	1613	1627	1643	1670	1676	743
35°	1394	1411	1444	1480	1490	870
45°	1124	1151	1202	1247	1257	867
55°	838	875	939	988	998	751
65°	551	593	669	725	738	549
75°	280	334	420	477	490	296
85°	57	106	132	128	128	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1864.2	1864.2	1864.2	1864.2	1864.2
2.5°	1865.9	1865.9	1857.5	1865.9	1867.6
5°	1855.8	1859.2	1850.8	1860.9	1862.6
7.5°	1845.7	1845.7	1840.6	1850.8	1852.4
10°	1827.2	1828.8	1827.2	1839.0	1840.6
12.5°	1803.6	1806.9	1808.6	1820.4	1822.1
15°	1774.9	1780.0	1783.3	1798.5	1801.9
17.5°	1742.9	1747.9	1756.4	1773.2	1776.6
20°	1704.1	1710.9	1721.0	1742.9	1747.9
22.5°	1662.0	1668.7	1685.6	1705.8	1714.2
25°	1613.1	1626.6	1643.4	1670.4	1675.5
27.5°	1564.2	1576.0	1597.9	1626.6	1633.3
30°	1506.9	1525.4	1552.4	1581.1	1587.8
32.5°	1451.3	1469.8	1501.8	1532.2	1540.6
35°	1394.0	1410.8	1444.5	1479.9	1490.0
37.5°	1328.2	1350.1	1387.2	1422.6	1432.7
40°	1259.1	1286.1	1328.2	1365.3	1377.1
42.5°	1193.4	1222.0	1264.2	1304.6	1318.1
45°	1124.3	1151.2	1201.8	1247.3	1257.4
47.5°	1053.5	1083.8	1137.8	1183.3	1200.1
50°	982.7	1014.7	1072.0	1119.2	1129.3
52.5°	911.9	945.6	1006.3	1056.9	1061.9
55°	837.7	874.8	938.9	987.7	997.9
57.5°	770.3	802.3	871.4	922.0	933.8
60°	696.1	731.5	805.7	852.9	868.1
62.5°	625.3	662.4	740.0	787.2	800.6
65°	551.2	593.3	669.2	724.8	738.3
67.5°	487.1	527.6	608.5	662.4	675.9
70°	413.0	458.5	544.4	600.1	613.5
72.5°	348.9	396.1	482.1	536.0	556.2
75°	279.8	333.7	419.7	477.0	490.5
77.5°	212.4	274.7	362.4	406.2	406.2
80°	151.7	217.4	298.3	318.6	321.9
82.5°	99.4	163.5	220.8	219.1	219.1
85°	57.3	106.2	131.5	128.1	128.1
87.5°	21.9	43.8	47.2	47.2	45.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)