

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: P389814

Luminaire Tested: **24CZ2-55VHE-S-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: P389814
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-SDWPD1-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: 5177.5 lumens
Efficiency: N/A
Efficacy: 143.4 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

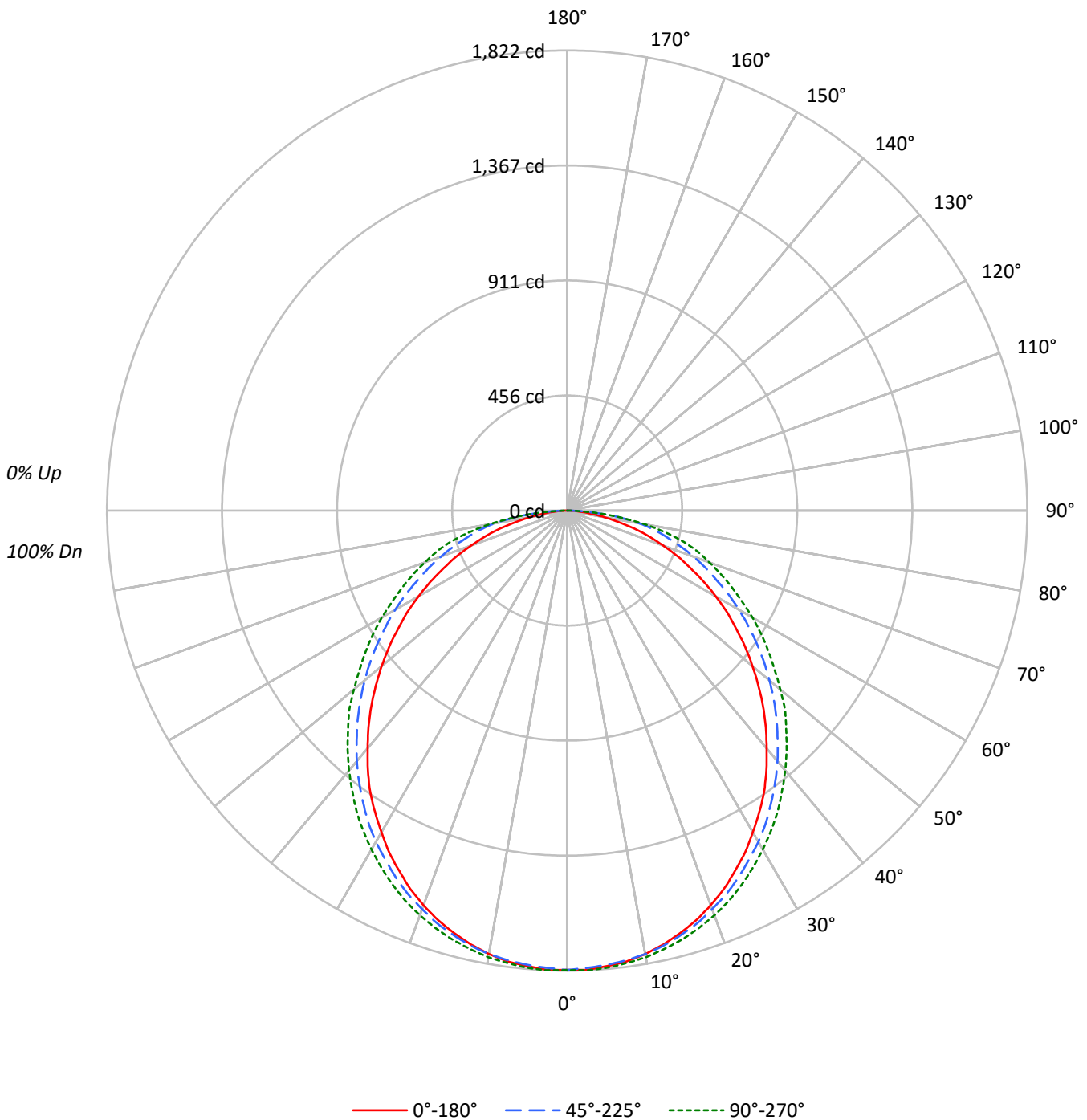
Input Watts (W): 36.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2447	2447	2447
5°	2446	2439	2454
10°	2436	2436	2454
15°	2412	2424	2449
20°	2381	2404	2442
25°	2336	2381	2427
30°	2284	2353	2407
35°	2234	2315	2388
40°	2158	2276	2360
45°	2087	2231	2334
50°	2007	2189	2307
55°	1917	2149	2284
60°	1828	2115	2279
65°	1712	2079	2293
70°	1585	2090	2355
75°	1419	2129	2488
80°	1147	2256	2434
85°	863	1981	1930



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.2	3.3
10°-20°	492.0	9.5
20°-30°	739.6	14.3
30°-40°	881.0	17.0
40°-50°	901.7	17.4
50°-60°	811.8	15.7
60°-70°	637.5	12.3
70°-80°	413.7	8.0
80°-90°	128.0	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°	1403.8	27.1
0°-40°	2284.9	44.1
0°-60°	3998.3	77.2
0°-90°	5177.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5177.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1819	1819	1819	1819	1819	
5°	1811	1814	1806	1816	1817	172
15°	1732	1737	1740	1755	1758	488
25°	1574	1587	1604	1630	1635	725
35°	1360	1376	1409	1444	1454	848
45°	1097	1123	1173	1217	1227	846
55°	817	854	916	964	974	733
65°	538	579	653	707	720	535
75°	273	326	410	465	479	289
85°	56	104	128	125	125	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1818.9	1818.9	1818.9	1818.9	1818.9
2.5°	1820.5	1820.5	1812.3	1820.5	1822.2
5°	1810.7	1814.0	1805.7	1815.6	1817.2
7.5°	1800.8	1800.8	1795.9	1805.7	1807.4
10°	1782.7	1784.4	1782.7	1794.2	1795.9
12.5°	1759.7	1763.0	1764.6	1776.1	1777.8
15°	1731.7	1736.7	1740.0	1754.8	1758.0
17.5°	1700.5	1705.4	1713.6	1730.1	1733.4
20°	1662.7	1669.2	1679.1	1700.5	1705.4
22.5°	1621.5	1628.1	1644.6	1664.3	1672.5
25°	1573.8	1587.0	1603.5	1629.8	1634.7
27.5°	1526.2	1537.7	1559.0	1587.0	1593.6
30°	1470.2	1488.3	1514.6	1542.6	1549.2
32.5°	1416.0	1434.1	1465.3	1494.9	1503.1
35°	1360.1	1376.5	1409.4	1443.9	1453.8
37.5°	1295.9	1317.3	1353.5	1388.0	1397.9
40°	1228.5	1254.8	1295.9	1332.1	1343.6
42.5°	1164.4	1192.3	1233.4	1272.9	1286.1
45°	1096.9	1123.2	1172.6	1217.0	1226.8
47.5°	1027.9	1057.5	1110.1	1154.5	1170.9
50°	958.8	990.0	1045.9	1092.0	1101.9
52.5°	889.7	922.6	981.8	1031.1	1036.1
55°	817.3	853.5	916.0	963.7	973.6
57.5°	751.6	782.8	850.2	899.6	911.1
60°	679.2	713.7	786.1	832.2	847.0
62.5°	610.1	646.3	722.0	768.0	781.2
65°	537.8	578.9	652.9	707.2	720.3
67.5°	475.3	514.7	593.7	646.3	659.5
70°	402.9	447.3	531.2	585.5	598.6
72.5°	340.4	386.5	470.3	523.0	542.7
75°	273.0	325.6	409.5	465.4	478.6
77.5°	207.2	268.1	353.6	396.3	396.3
80°	148.0	212.1	291.1	310.8	314.1
82.5°	97.0	159.5	215.4	213.8	213.8
85°	55.9	103.6	128.3	125.0	125.0
87.5°	21.4	42.8	46.0	46.0	44.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)