

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: P388880

Luminaire Tested: **24CZ2-55VHE-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: P388880
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55VHE-UNV-L950-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

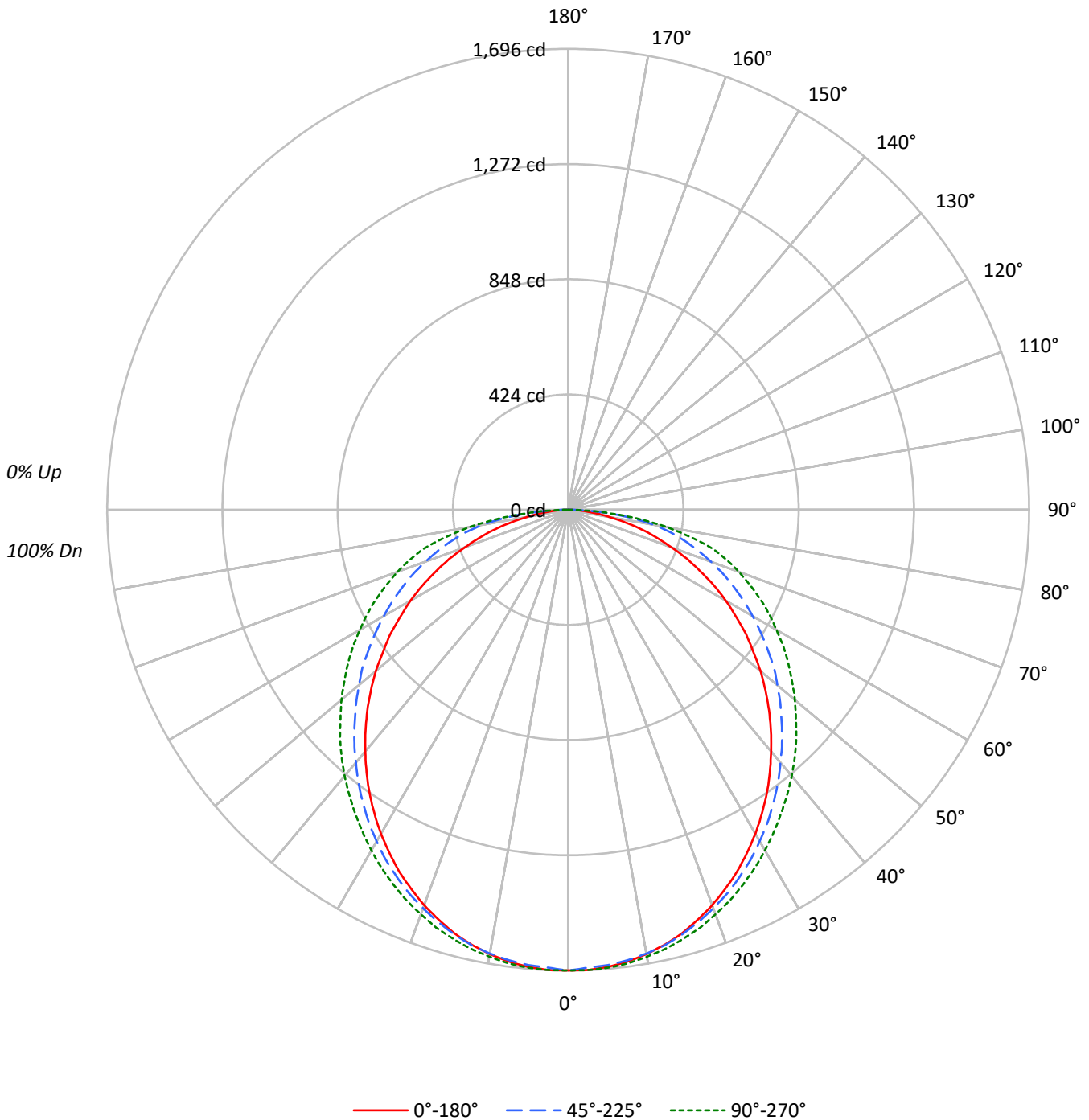
Lumens per Lamp: N/A
Luminaire Lumens: 5050.4 lumens
Efficiency: N/A
Efficacy: 139.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P388880
CATALOG NUMBER: 24CZ2-55VHE-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388880

CATALOG NUMBER: 24CZ2-55VHE-UNV-L950-CD1-U

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	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2282	2282	2282
5°	2281	2272	2286
10°	2268	2266	2282
15°	2249	2254	2277
20°	2218	2235	2269
25°	2182	2215	2260
30°	2140	2189	2250
35°	2093	2162	2243
40°	2040	2135	2247
45°	1988	2114	2258
50°	1933	2103	2279
55°	1874	2099	2321
60°	1801	2109	2381
65°	1706	2141	2485
70°	1585	2195	2626
75°	1446	2305	2848
80°	1189	2482	2847
85°	911	2289	2445



TEST NUMBER: P388880

CATALOG NUMBER: 24CZ2-55VHE-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.4	3.2
10°-20°	457.8	9.1
20°-30°	689.0	13.6
30°-40°	825.7	16.3
40°-50°	860.4	17.0
50°-60°	800.5	15.9
60°-70°	659.3	13.1
70°-80°	449.0	8.9
80°-90°	148.2	2.9
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°	1307.2	25.9
0°-40°	2132.8	42.2
0°-60°	3793.8	75.1
0°-90°	5050.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5050.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1696	1696	1696	1696	1696	
5°	1689	1689	1682	1691	1692	160
15°	1615	1616	1618	1633	1635	455
25°	1470	1476	1492	1517	1522	677
35°	1274	1289	1316	1352	1365	797
45°	1045	1067	1111	1166	1187	806
55°	799	826	895	966	989	712
65°	536	582	672	752	780	532
75°	278	340	443	522	548	293
85°	59	115	148	158	158	73
90°	0	0	0	0	0	



TEST NUMBER: P388880

CATALOG NUMBER: 24CZ2-55VHE-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1695.7	1695.7	1695.7	1695.7	1695.7
2.5°	1695.7	1695.7	1687.2	1695.7	1695.7
5°	1688.9	1688.9	1682.2	1690.6	1692.3
7.5°	1677.1	1678.8	1672.1	1682.2	1683.9
10°	1660.3	1661.9	1658.6	1668.7	1670.4
12.5°	1640.0	1641.7	1641.7	1653.5	1655.2
15°	1614.7	1616.4	1618.1	1633.3	1635.0
17.5°	1582.7	1587.8	1591.2	1609.7	1613.1
20°	1549.0	1554.1	1560.8	1581.0	1584.4
22.5°	1510.2	1517.0	1528.8	1550.7	1555.8
25°	1469.8	1476.5	1491.7	1517.0	1522.0
27.5°	1424.3	1434.4	1452.9	1479.9	1486.6
30°	1377.1	1387.2	1409.1	1437.8	1447.9
32.5°	1326.5	1340.0	1365.3	1397.3	1407.4
35°	1274.3	1289.4	1316.4	1351.8	1365.3
37.5°	1218.6	1235.5	1267.5	1306.3	1323.1
40°	1161.3	1181.6	1215.3	1260.8	1279.3
42.5°	1104.0	1122.6	1164.7	1213.6	1233.8
45°	1045.0	1066.9	1110.8	1166.4	1186.6
47.5°	984.4	1006.3	1058.5	1117.5	1136.1
50°	923.7	945.6	1004.6	1066.9	1088.9
52.5°	857.9	886.6	954.0	1016.4	1038.3
55°	798.9	825.9	895.0	965.8	989.4
57.5°	731.5	763.6	839.4	913.6	938.8
60°	669.2	702.9	783.8	859.6	884.9
62.5°	605.1	642.2	728.2	805.7	834.3
65°	536.0	581.5	672.5	751.8	780.4
67.5°	473.6	520.8	616.9	697.8	723.1
70°	402.8	460.2	557.9	638.8	667.5
72.5°	342.2	399.5	502.3	581.5	610.2
75°	278.1	340.5	443.3	522.5	547.8
77.5°	214.1	283.2	386.0	446.7	455.1
80°	153.4	225.9	320.3	355.6	367.4
82.5°	107.9	173.6	236.0	259.6	266.3
85°	59.0	114.6	148.3	158.4	158.4
87.5°	25.3	48.9	59.0	60.7	62.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)