

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: P#

Luminaire Tested: **24CZ-LD5-50SE-S-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-50SE-S-UNV-L830-CD1-U
Description: CRUZE 2x4 LED TROFFER

Light Source: -
Ballast/Driver: -

Summary

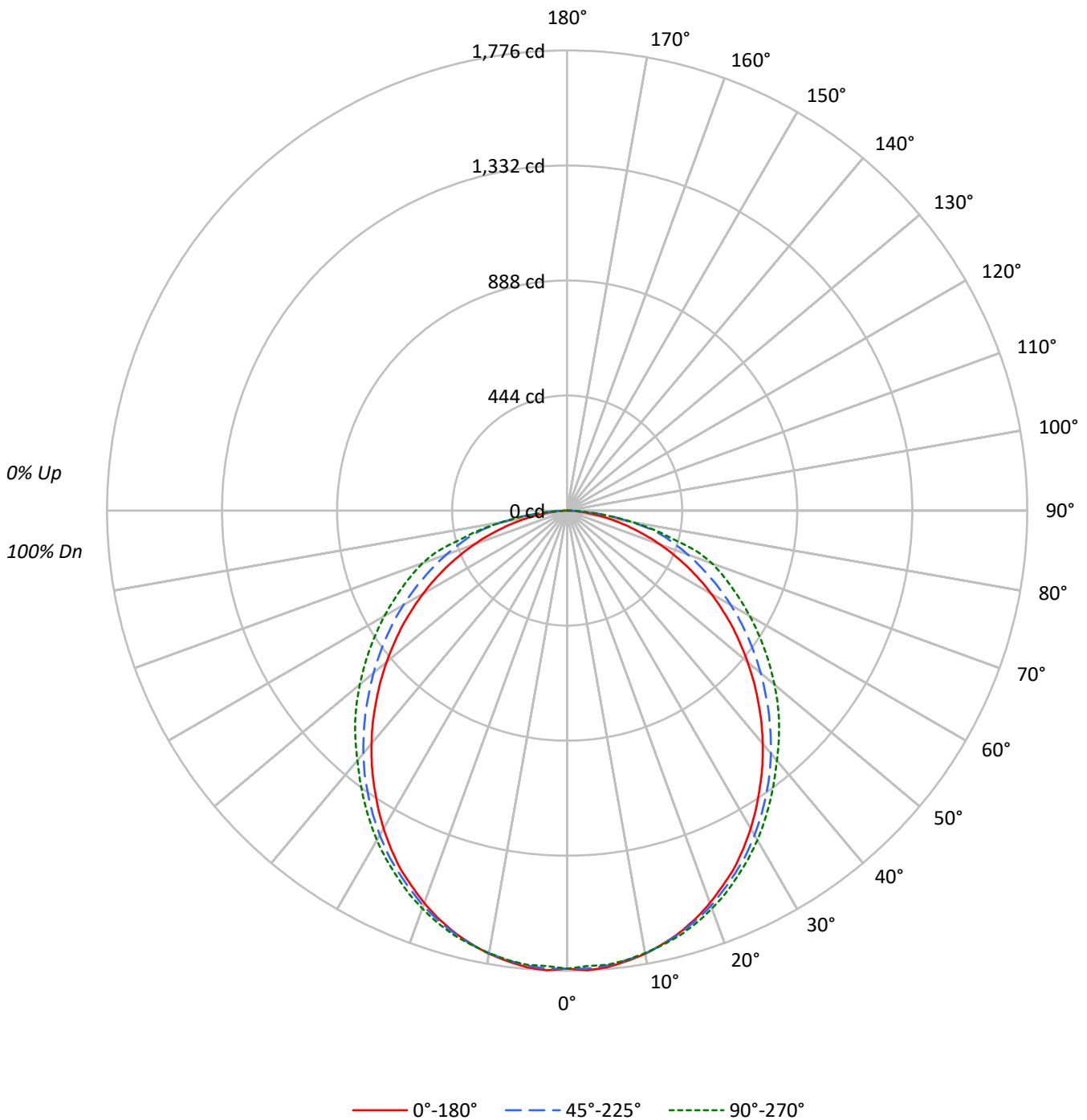
Lumens per Lamp: N/A
Luminaire Lumens: 4883.4 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 46.56
Input Voltage (V): NR
Input Current (A_{in}): 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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2379	2379	2379
5°	2385	2370	2366
10°	2363	2349	2348
15°	2332	2319	2330
20°	2287	2280	2299
25°	2237	2232	2258
30°	2170	2180	2218
35°	2096	2120	2169
40°	2021	2057	2123
45°	1937	1988	2097
50°	1850	1919	2064
55°	1759	1857	2035
60°	1655	1798	2016
65°	1542	1742	2019
70°	1400	1702	2057
75°	1213	1686	1837
80°	970	1471	1530
85°	644	953	894



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.1	3.4
10°-20°	475.4	9.7
20°-30°	708.4	14.5
30°-40°	833.9	17.1
40°-50°	847.4	17.4
50°-60°	761.9	15.6
60°-70°	601.9	12.3
70°-80°	381.9	7.8
80°-90°	105.4	2.2
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°	1350.9	27.7
0°-40°	2184.8	44.7
0°-60°	3794.2	77.7
0°-90°	4883.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4883.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1768	1768	1768	1768	1768	
5°	1770	1755	1763	1760	1760	168
15°	1685	1677	1688	1693	1695	475
25°	1524	1523	1540	1550	1557	701
35°	1298	1306	1339	1354	1367	812
45°	1043	1058	1100	1133	1157	805
55°	777	796	852	907	930	694
65°	510	536	609	676	702	505
75°	255	299	388	422	419	272
85°	54	93	99	91	91	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1767.9	1767.9	1767.9	1767.9	1767.9
2.5°	1776.0	1763.0	1769.5	1766.2	1759.8
5°	1769.5	1754.8	1763.0	1759.8	1759.8
7.5°	1754.8	1743.5	1750.0	1748.4	1750.0
10°	1737.0	1725.7	1735.4	1735.4	1733.8
12.5°	1712.7	1702.9	1714.3	1714.3	1715.9
15°	1685.0	1676.8	1688.2	1693.1	1694.8
17.5°	1650.9	1642.7	1657.4	1662.2	1667.2
20°	1611.9	1608.6	1623.3	1628.1	1634.7
22.5°	1568.0	1568.0	1582.6	1589.2	1598.8
25°	1524.2	1522.6	1540.4	1550.1	1556.7
27.5°	1472.1	1473.7	1496.5	1506.2	1514.4
30°	1416.9	1420.2	1446.2	1457.5	1468.9
32.5°	1358.4	1364.9	1394.1	1407.1	1418.5
35°	1298.3	1306.4	1338.9	1353.6	1366.6
37.5°	1238.1	1249.5	1283.6	1298.3	1312.9
40°	1174.8	1184.6	1223.5	1241.5	1259.3
42.5°	1109.8	1122.8	1161.8	1187.8	1208.9
45°	1043.2	1057.8	1100.0	1132.6	1156.9
47.5°	976.6	996.1	1036.6	1080.5	1101.7
50°	909.9	929.5	974.9	1023.7	1044.8
52.5°	841.7	861.2	913.1	963.6	986.3
55°	776.7	796.2	851.5	906.7	929.5
57.5°	708.4	729.6	791.3	848.2	871.0
60°	641.8	662.9	729.6	789.7	814.1
62.5°	576.8	599.5	669.5	732.8	757.2
65°	510.2	536.2	609.3	675.9	702.0
67.5°	445.3	474.4	550.8	620.7	648.4
70°	380.2	414.4	495.6	567.1	594.7
72.5°	316.8	354.3	440.3	511.9	526.5
75°	255.1	299.0	388.4	422.5	419.2
77.5°	196.6	245.4	329.8	336.4	346.1
80°	143.0	196.6	247.0	260.0	253.5
82.5°	94.2	147.8	177.1	170.6	169.0
85°	53.6	92.6	99.1	91.0	91.0
87.5°	22.7	37.3	32.5	24.4	22.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)