

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: P230050

Luminaire Tested: **24CZ-LD5-55-S-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230050
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-LD5-55-S-UNV-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

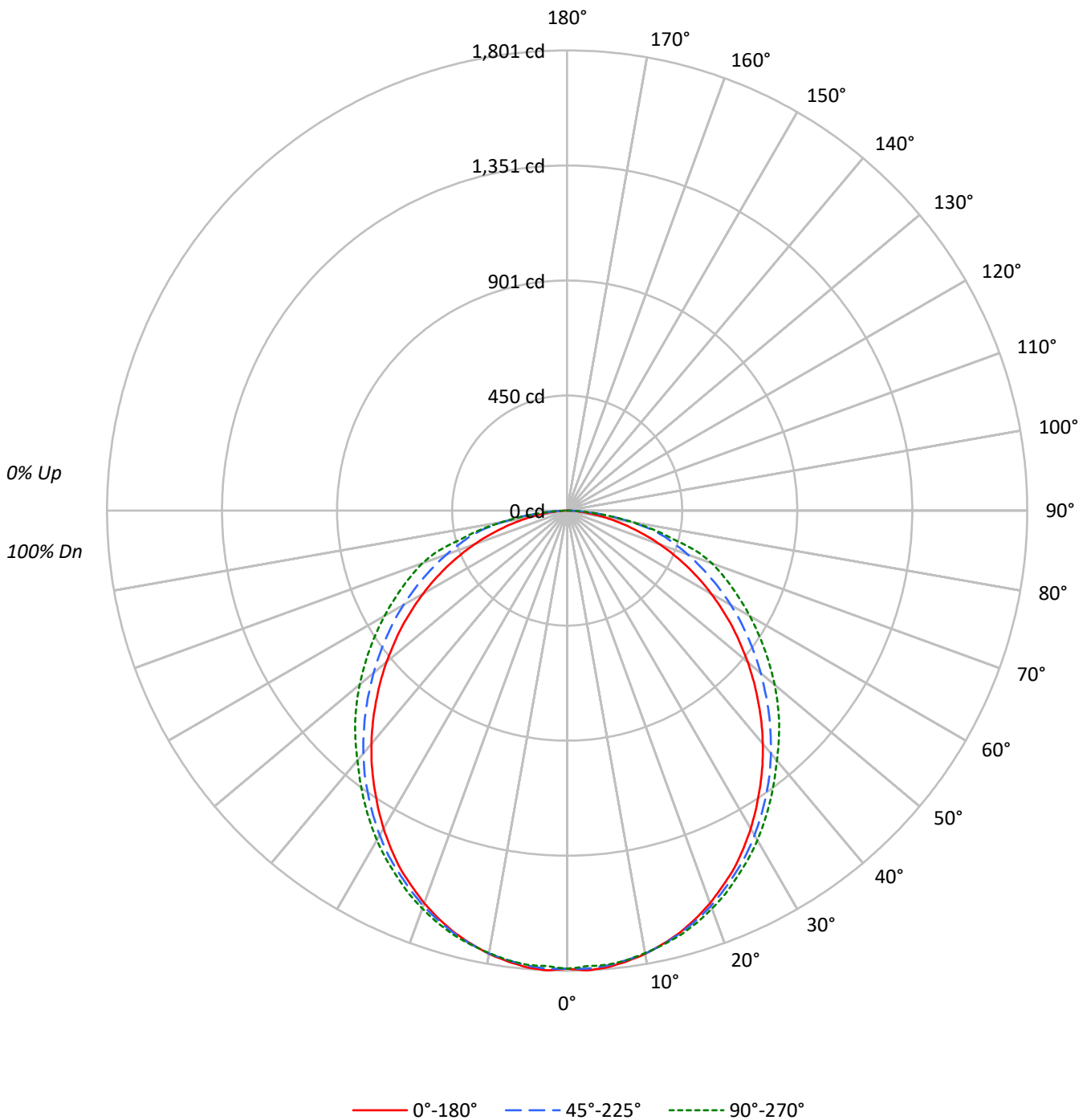
Lumens per Lamp: N/A
Luminaire Lumens: 4953.0 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 45.8
Input Voltage (V): 120
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	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°	2413	2413	2413
5°	2424	2415	2411
10°	2407	2405	2403
15°	2381	2385	2394
20°	2341	2357	2374
25°	2295	2320	2344
30°	2233	2279	2315
35°	2163	2231	2277
40°	2093	2180	2243
45°	2013	2123	2233
50°	1932	2070	2218
55°	1848	2026	2211
60°	1752	1991	2222
65°	1648	1968	2267
70°	1517	1978	2373
75°	1345	2048	2210
80°	1124	1941	1992
85°	840	1551	1425



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.5	3.4
10°-20°	482.1	9.7
20°-30°	718.5	14.5
30°-40°	845.8	17.1
40°-50°	859.5	17.4
50°-60°	772.8	15.6
60°-70°	610.5	12.3
70°-80°	387.3	7.8
80°-90°	106.9	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°	1370.2	27.7
0°-40°	2216.0	44.7
0°-60°	3848.3	77.7
0°-90°	4953.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4953.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1793	1793	1793	1793	1793	
5°	1795	1780	1788	1785	1785	170
15°	1709	1701	1712	1717	1719	481
25°	1546	1544	1562	1572	1579	711
35°	1317	1325	1358	1373	1386	824
45°	1058	1073	1116	1149	1173	816
55°	788	808	864	920	943	704
65°	518	544	618	686	712	513
75°	259	303	394	428	425	275
85°	54	94	100	92	92	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1793.1	1793.1	1793.1	1793.1	1793.1
2.5°	1801.3	1788.1	1794.7	1791.4	1784.8
5°	1794.7	1779.9	1788.1	1784.8	1784.8
7.5°	1779.9	1768.4	1774.9	1773.3	1774.9
10°	1761.8	1750.2	1760.1	1760.1	1758.5
12.5°	1737.0	1727.2	1738.7	1738.7	1740.3
15°	1709.0	1700.8	1712.3	1717.3	1718.9
17.5°	1674.4	1666.2	1681.0	1686.0	1690.9
20°	1634.9	1631.6	1646.4	1651.3	1657.9
22.5°	1590.4	1590.4	1605.2	1611.8	1621.7
25°	1545.9	1544.2	1562.4	1572.2	1578.8
27.5°	1493.1	1494.8	1517.9	1527.7	1536.0
30°	1437.1	1440.4	1466.8	1478.3	1489.8
32.5°	1377.8	1384.4	1414.0	1427.2	1438.7
35°	1316.8	1325.0	1358.0	1372.8	1386.0
37.5°	1255.8	1267.3	1302.0	1316.8	1331.6
40°	1191.5	1201.4	1241.0	1259.1	1277.2
42.5°	1125.6	1138.8	1178.4	1204.7	1226.1
45°	1058.0	1072.9	1115.7	1148.7	1173.4
47.5°	990.5	1010.3	1051.5	1096.0	1117.4
50°	922.9	942.7	988.8	1038.3	1059.7
52.5°	853.7	873.5	926.2	977.3	1000.4
55°	787.8	807.5	863.6	919.6	942.7
57.5°	718.5	740.0	802.6	860.3	883.4
60°	651.0	672.4	740.0	801.0	825.7
62.5°	585.1	608.1	679.0	743.3	768.0
65°	517.5	543.9	618.0	685.6	712.0
67.5°	451.6	481.2	558.7	629.6	657.6
70°	385.6	420.3	502.7	575.2	603.2
72.5°	321.4	359.3	446.6	519.1	534.0
75°	258.7	303.2	393.9	428.5	425.2
77.5°	199.4	248.9	334.6	341.1	351.0
80°	145.0	199.4	250.5	263.7	257.1
82.5°	95.6	150.0	179.6	173.0	171.4
85°	54.4	93.9	100.5	92.3	92.3
87.5°	23.1	37.9	33.0	24.7	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)