

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: P230049

Luminaire Tested: **24CZ-LD5-55-S-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230049
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-L935-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4834.0 lumens
Efficiency: N/A
Efficacy: 105.5 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

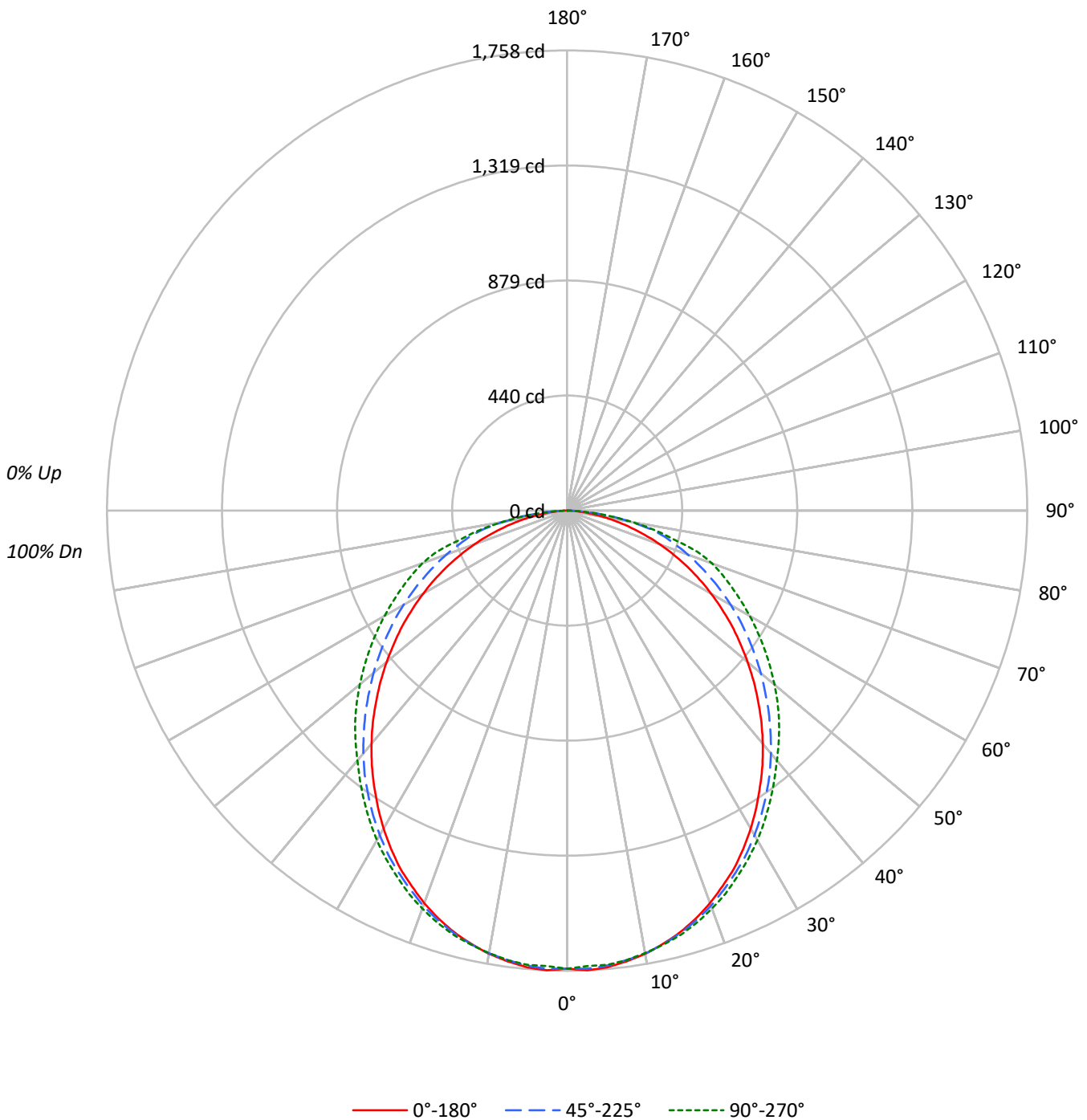
Input Watts (W): 45.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2355	2355	2355
5°	2366	2357	2353
10°	2349	2347	2345
15°	2323	2328	2337
20°	2285	2301	2317
25°	2240	2264	2288
30°	2179	2224	2259
35°	2111	2177	2222
40°	2043	2127	2190
45°	1965	2072	2179
50°	1885	2020	2165
55°	1803	1977	2158
60°	1710	1943	2168
65°	1608	1920	2212
70°	1481	1930	2316
75°	1313	1998	2157
80°	1096	1894	1944
85°	820	1514	1391



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.5	3.4
10°-20°	470.6	9.7
20°-30°	701.3	14.5
30°-40°	825.5	17.1
40°-50°	838.9	17.4
50°-60°	754.2	15.6
60°-70°	595.8	12.3
70°-80°	378.0	7.8
80°-90°	104.3	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°	1337.3	27.7
0°-40°	2162.8	44.7
0°-60°	3755.8	77.7
0°-90°	4834.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4834.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1750	1750	1750	1750	1750	
5°	1752	1737	1745	1742	1742	166
15°	1668	1660	1671	1676	1678	470
25°	1509	1507	1525	1534	1541	694
35°	1285	1293	1325	1340	1353	804
45°	1033	1047	1089	1121	1145	797
55°	769	788	843	898	920	687
65°	505	531	603	669	695	500
75°	252	296	384	418	415	269
85°	53	92	98	90	90	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1750.0	1750.0	1750.0	1750.0	1750.0
2.5°	1758.0	1745.2	1751.6	1748.4	1742.0
5°	1751.6	1737.1	1745.2	1742.0	1742.0
7.5°	1737.1	1725.9	1732.3	1730.7	1732.3
10°	1719.4	1708.2	1717.8	1717.8	1716.2
12.5°	1695.3	1685.7	1696.9	1696.9	1698.5
15°	1668.0	1659.9	1671.2	1676.0	1677.6
17.5°	1634.2	1626.1	1640.6	1645.4	1650.3
20°	1595.6	1592.4	1606.8	1611.7	1618.1
22.5°	1552.2	1552.2	1566.6	1573.1	1582.7
25°	1508.7	1507.1	1524.8	1534.5	1540.9
27.5°	1457.3	1458.9	1481.4	1491.0	1499.1
30°	1402.6	1405.8	1431.5	1442.8	1454.0
32.5°	1344.7	1351.1	1380.1	1392.9	1404.2
35°	1285.2	1293.2	1325.4	1339.8	1352.7
37.5°	1225.6	1236.9	1270.7	1285.2	1299.6
40°	1162.9	1172.6	1211.2	1228.9	1246.6
42.5°	1098.6	1111.4	1150.0	1175.8	1196.7
45°	1032.6	1047.1	1088.9	1121.1	1145.2
47.5°	966.7	986.0	1026.2	1069.6	1090.5
50°	900.7	920.0	965.1	1013.3	1034.2
52.5°	833.2	852.5	904.0	953.8	976.3
55°	768.8	788.1	842.8	897.5	920.0
57.5°	701.3	722.2	783.3	839.6	862.1
60°	635.3	656.2	722.2	781.7	805.8
62.5°	571.0	593.5	662.7	725.4	749.5
65°	505.1	530.8	603.2	669.1	694.9
67.5°	440.7	469.7	545.3	614.4	641.8
70°	376.4	410.2	490.6	561.4	588.7
72.5°	313.6	350.6	435.9	506.7	521.1
75°	252.5	296.0	384.4	418.2	415.0
77.5°	194.6	242.9	326.5	332.9	342.6
80°	141.5	194.6	244.5	257.4	250.9
82.5°	93.3	146.4	175.3	168.9	167.3
85°	53.1	91.7	98.1	90.1	90.1
87.5°	22.5	37.0	32.2	24.1	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)