

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: P261243

Luminaire Tested: **24CZ-LD5-45SE-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261243
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-LD5-45SE-S-UNV-L82765-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4696.0 lumens
Efficiency: N/A
Efficacy: 131.8 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

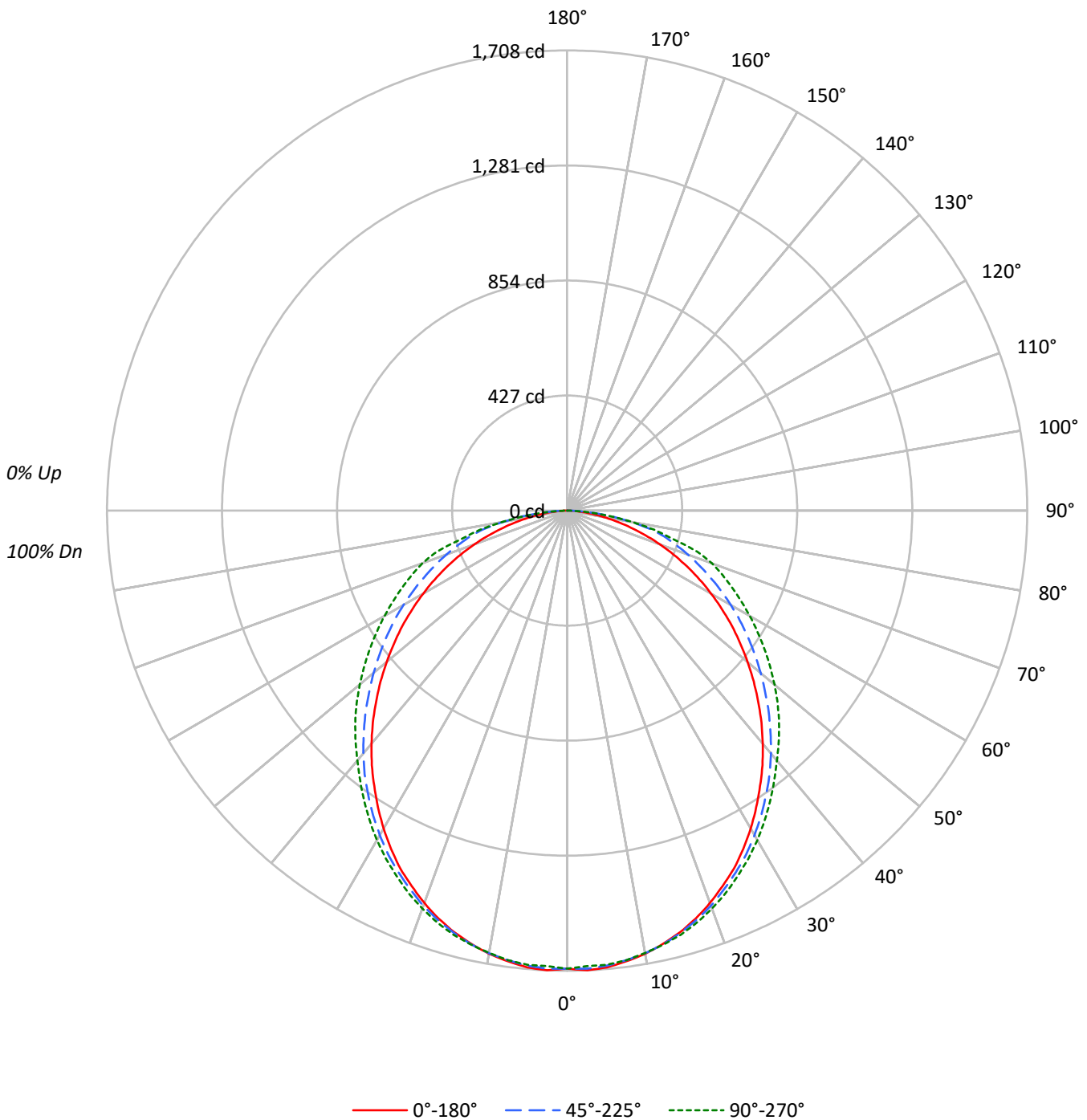
Input Watts (W): 35.619
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2287	2287	2287
5°	2298	2290	2286
10°	2282	2280	2278
15°	2257	2261	2270
20°	2219	2235	2251
25°	2176	2199	2222
30°	2117	2161	2195
35°	2051	2115	2158
40°	1984	2067	2127
45°	1909	2013	2117
50°	1832	1962	2103
55°	1752	1921	2097
60°	1661	1888	2106
65°	1562	1866	2149
70°	1438	1875	2250
75°	1275	1941	2096
80°	1065	1840	1889
85°	797	1471	1351



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.7	3.4
10°-20°	457.1	9.7
20°-30°	681.2	14.5
30°-40°	801.9	17.1
40°-50°	814.9	17.4
50°-60°	732.7	15.6
60°-70°	578.8	12.3
70°-80°	367.2	7.8
80°-90°	101.4	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°	1299.1	27.7
0°-40°	2101.0	44.7
0°-60°	3648.6	77.7
0°-90°	4696.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4696.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1702	1688	1695	1692	1692	161
15°	1620	1612	1624	1628	1630	456
25°	1466	1464	1481	1491	1497	674
35°	1248	1256	1288	1302	1314	781
45°	1003	1017	1058	1089	1112	774
55°	747	766	819	872	894	667
65°	491	516	586	650	675	486
75°	245	288	373	406	403	261
85°	52	89	95	88	88	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1700.0	1700.0	1700.0	1700.0	1700.0
2.5°	1707.9	1695.4	1701.6	1698.5	1692.2
5°	1701.6	1687.5	1695.4	1692.2	1692.2
7.5°	1687.5	1676.6	1682.9	1681.3	1682.9
10°	1670.4	1659.4	1668.8	1668.8	1667.2
12.5°	1646.9	1637.5	1648.5	1648.5	1650.0
15°	1620.3	1612.5	1623.5	1628.2	1629.7
17.5°	1587.5	1579.7	1593.8	1598.5	1603.2
20°	1550.0	1546.9	1561.0	1565.7	1571.9
22.5°	1507.8	1507.8	1521.9	1528.2	1537.5
25°	1465.7	1464.1	1481.3	1490.7	1496.9
27.5°	1415.7	1417.2	1439.1	1448.5	1456.3
30°	1362.5	1365.7	1390.7	1401.6	1412.5
32.5°	1306.3	1312.5	1340.7	1353.2	1364.1
35°	1248.5	1256.3	1287.5	1301.6	1314.1
37.5°	1190.7	1201.6	1234.4	1248.5	1262.5
40°	1129.7	1139.1	1176.6	1193.8	1211.0
42.5°	1067.2	1079.7	1117.2	1142.2	1162.5
45°	1003.1	1017.2	1057.8	1089.1	1112.5
47.5°	939.1	957.8	996.9	1039.1	1059.4
50°	875.0	893.8	937.5	984.4	1004.7
52.5°	809.4	828.1	878.1	926.6	948.5
55°	746.9	765.6	818.8	871.9	893.8
57.5°	681.3	701.6	761.0	815.6	837.5
60°	617.2	637.5	701.6	759.4	782.8
62.5°	554.7	576.6	643.8	704.7	728.1
65°	490.6	515.6	586.0	650.0	675.0
67.5°	428.1	456.3	529.7	596.9	623.5
70°	365.6	398.4	476.6	545.3	571.9
72.5°	304.7	340.6	423.4	492.2	506.3
75°	245.3	287.5	373.4	406.3	403.1
77.5°	189.1	235.9	317.2	323.4	332.8
80°	137.5	189.1	237.5	250.0	243.8
82.5°	90.6	142.2	170.3	164.1	162.5
85°	51.6	89.1	95.3	87.5	87.5
87.5°	21.9	35.9	31.3	23.4	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)