

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: P276581

Luminaire Tested: **24CZ2-45-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276581
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45-S-UNV-L82765-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4399.5 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

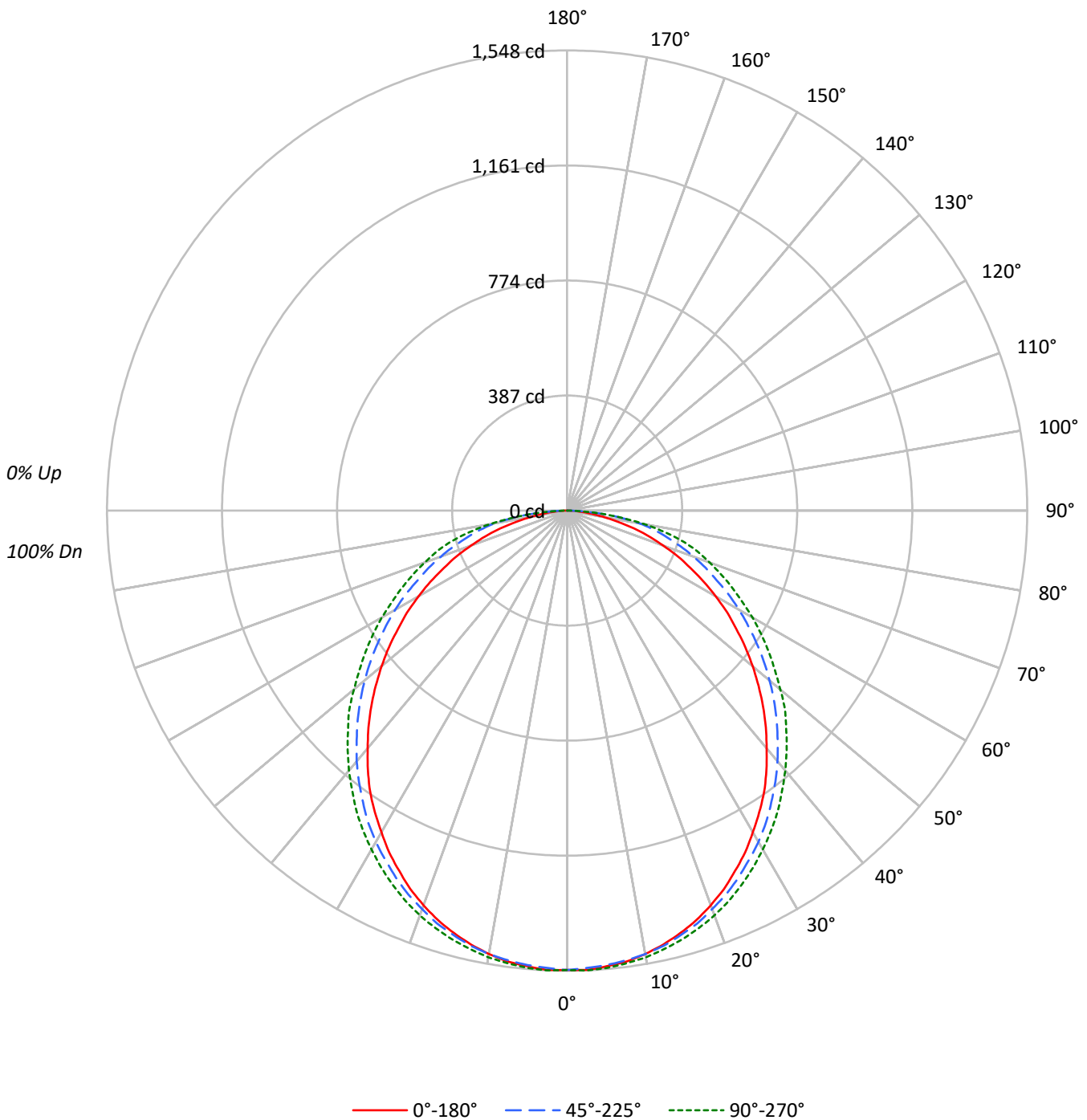
Input Watts (W): 35.154
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2079	2079	2079
5°	2078	2072	2086
10°	2070	2070	2085
15°	2050	2059	2081
20°	2023	2043	2075
25°	1985	2023	2062
30°	1941	2000	2045
35°	1898	1967	2029
40°	1834	1934	2005
45°	1774	1896	1984
50°	1705	1860	1960
55°	1629	1826	1941
60°	1553	1798	1937
65°	1455	1766	1949
70°	1347	1776	2001
75°	1206	1809	2114
80°	975	1916	2068
85°	733	1683	1639



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.3	3.3
10°-20°	418.1	9.5
20°-30°	628.5	14.3
30°-40°	748.6	17.0
40°-50°	766.2	17.4
50°-60°	689.8	15.7
60°-70°	541.7	12.3
70°-80°	351.6	8.0
80°-90°	108.7	2.5
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°	1192.9	27.1
0°-40°	1941.5	44.1
0°-60°	3397.4	77.2
0°-90°	4399.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4399.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1546	1546	1546	1546	1546	
5°	1539	1541	1534	1543	1544	146
15°	1472	1476	1478	1491	1494	415
25°	1337	1348	1362	1385	1389	616
35°	1156	1170	1198	1227	1235	721
45°	932	954	996	1034	1042	719
55°	694	725	778	819	827	623
65°	457	492	555	601	612	455
75°	232	277	348	396	407	246
85°	48	88	109	106	106	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1545.5	1545.5	1545.5	1545.5	1545.5
2.5°	1546.9	1546.9	1540.0	1546.9	1548.3
5°	1538.6	1541.4	1534.4	1542.7	1544.1
7.5°	1530.2	1530.2	1526.0	1534.4	1535.8
10°	1514.8	1516.2	1514.8	1524.6	1526.0
12.5°	1495.2	1498.0	1499.4	1509.2	1510.6
15°	1471.5	1475.7	1478.5	1491.0	1493.8
17.5°	1444.9	1449.1	1456.1	1470.1	1472.9
20°	1412.8	1418.4	1426.8	1444.9	1449.1
22.5°	1377.9	1383.4	1397.4	1414.2	1421.2
25°	1337.3	1348.5	1362.5	1384.8	1389.0
27.5°	1296.8	1306.6	1324.8	1348.5	1354.1
30°	1249.3	1264.7	1287.0	1310.8	1316.4
32.5°	1203.2	1218.5	1245.1	1270.3	1277.2
35°	1155.7	1169.6	1197.6	1226.9	1235.3
37.5°	1101.2	1119.3	1150.1	1179.4	1187.8
40°	1043.9	1066.2	1101.2	1131.9	1141.7
42.5°	989.4	1013.1	1048.1	1081.6	1092.8
45°	932.1	954.4	996.4	1034.1	1042.5
47.5°	873.4	898.5	943.3	981.0	995.0
50°	814.7	841.2	888.8	927.9	936.3
52.5°	756.0	784.0	834.3	876.2	880.4
55°	694.5	725.3	778.4	818.9	827.3
57.5°	638.6	665.2	722.5	764.4	774.2
60°	577.1	606.5	668.0	707.1	719.7
62.5°	518.4	549.2	613.5	652.6	663.8
65°	457.0	491.9	554.8	600.9	612.1
67.5°	403.9	437.4	504.5	549.2	560.4
70°	342.4	380.1	451.4	497.5	508.7
72.5°	289.3	328.4	399.7	444.4	461.1
75°	232.0	276.7	348.0	395.5	406.6
77.5°	176.1	227.8	300.4	336.8	336.8
80°	125.8	180.3	247.3	264.1	266.9
82.5°	82.4	135.5	183.1	181.7	181.7
85°	47.5	88.0	109.0	106.2	106.2
87.5°	18.2	36.3	39.1	39.1	37.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)