

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: P276034

Luminaire Tested: **24CZ2-45-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276034
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3935.7 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

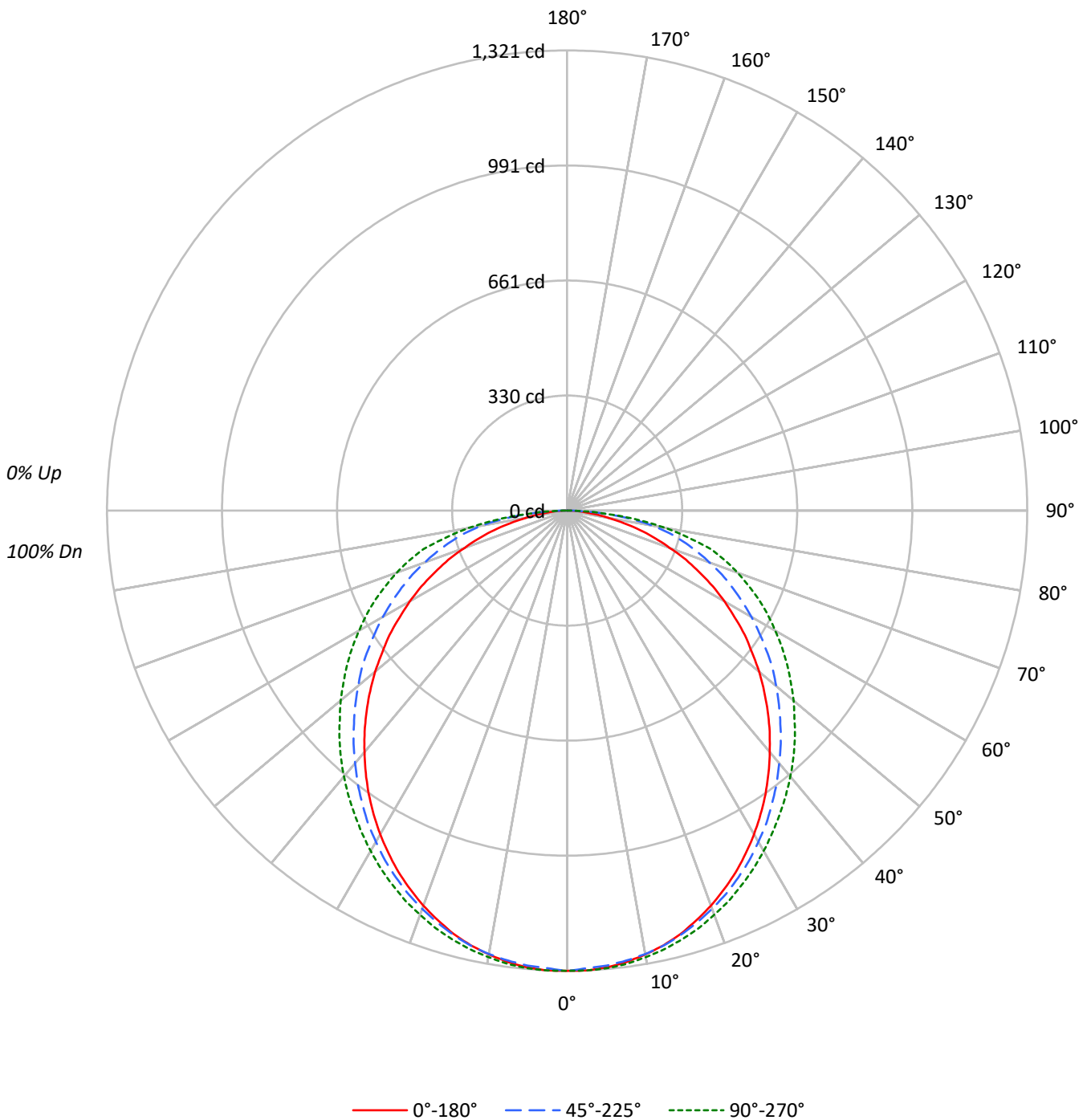
Input Watts (W): 35.877168
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1778	1778	1778
5°	1778	1771	1781
10°	1768	1766	1778
15°	1753	1757	1775
20°	1728	1742	1768
25°	1700	1726	1761
30°	1667	1706	1753
35°	1631	1685	1748
40°	1590	1663	1751
45°	1550	1647	1760
50°	1507	1639	1776
55°	1460	1636	1809
60°	1403	1644	1856
65°	1330	1669	1936
70°	1235	1710	2046
75°	1127	1796	2219
80°	926	1934	2218
85°	710	1785	1907



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.0	3.2
10°-20°	356.8	9.1
20°-30°	536.9	13.6
30°-40°	643.4	16.3
40°-50°	670.5	17.0
50°-60°	623.8	15.9
60°-70°	513.8	13.1
70°-80°	349.9	8.9
80°-90°	115.5	2.9
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°	1018.7	25.9
0°-40°	1662.1	42.2
0°-60°	2956.5	75.1
0°-90°	3935.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3935.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1321	1321	1321	1321	1321	
5°	1316	1316	1311	1318	1319	125
15°	1258	1260	1261	1273	1274	355
25°	1145	1151	1162	1182	1186	527
35°	993	1005	1026	1053	1064	621
45°	814	832	866	909	925	628
55°	623	644	698	753	771	555
65°	418	453	524	586	608	415
75°	217	265	346	407	427	228
85°	46	89	116	124	124	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1321.4	1321.4	1321.4	1321.4	1321.4
2.5°	1321.4	1321.4	1314.8	1321.4	1321.4
5°	1316.1	1316.1	1310.9	1317.5	1318.8
7.5°	1307.0	1308.3	1303.0	1310.9	1312.2
10°	1293.8	1295.1	1292.5	1300.4	1301.7
12.5°	1278.1	1279.4	1279.4	1288.6	1289.9
15°	1258.4	1259.7	1261.0	1272.8	1274.1
17.5°	1233.4	1237.3	1240.0	1254.4	1257.0
20°	1207.1	1211.1	1216.3	1232.1	1234.7
22.5°	1176.9	1182.2	1191.4	1208.4	1212.4
25°	1145.4	1150.6	1162.5	1182.2	1186.1
27.5°	1109.9	1117.8	1132.3	1153.3	1158.5
30°	1073.1	1081.0	1098.1	1120.4	1128.3
32.5°	1033.7	1044.2	1064.0	1088.9	1096.8
35°	993.0	1004.8	1025.9	1053.4	1064.0
37.5°	949.7	962.8	987.8	1018.0	1031.1
40°	905.0	920.8	947.0	982.5	997.0
42.5°	860.4	874.8	907.6	945.7	961.5
45°	814.4	831.5	865.6	909.0	924.7
47.5°	767.1	784.2	824.9	870.9	885.3
50°	719.8	736.9	782.9	831.5	848.5
52.5°	668.6	690.9	743.5	792.1	809.1
55°	622.6	643.6	697.5	752.6	771.0
57.5°	570.1	595.0	654.1	711.9	731.6
60°	521.5	547.7	610.8	669.9	689.6
62.5°	471.6	500.5	567.4	627.9	650.2
65°	417.7	453.2	524.1	585.8	608.2
67.5°	369.1	405.9	480.7	543.8	563.5
70°	313.9	358.6	434.8	497.8	520.2
72.5°	266.6	311.3	391.4	453.2	475.5
75°	216.7	265.3	345.5	407.2	426.9
77.5°	166.8	220.7	300.8	348.1	354.7
80°	119.5	176.0	249.6	277.2	286.3
82.5°	84.1	135.3	183.9	202.3	207.5
85°	46.0	89.3	115.6	123.5	123.5
87.5°	19.7	38.1	46.0	47.3	48.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)