

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: P475391

Luminaire Tested: **14CZ2-44-S-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475391
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-44-S-UNV-L835-CD1-U
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

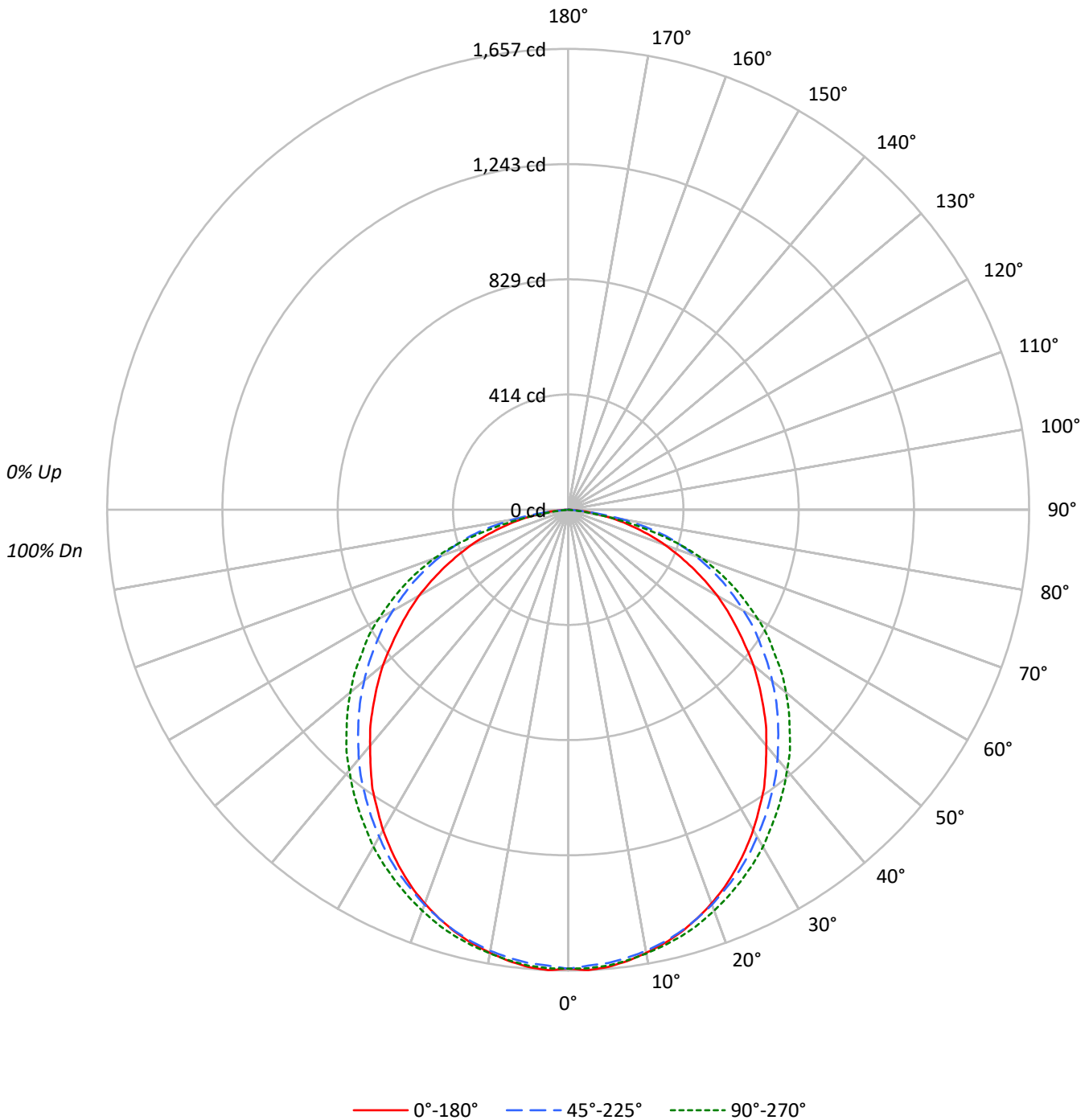
Lumens per Lamp: N/A
Luminaire Lumens: 4613.0 lumens
Efficiency: N/A
Efficacy: 133.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.6
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	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	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	36	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°	4441	4441	4441
5°	4458	4420	4445
10°	4421	4402	4427
15°	4378	4372	4417
20°	4314	4328	4394
25°	4233	4281	4370
30°	4134	4220	4350
35°	4028	4165	4317
40°	3892	4112	4299
45°	3766	4058	4287
50°	3639	4008	4279
55°	3469	3958	4252
60°	3331	3917	4242
65°	3129	3896	4176
70°	2917	3829	4030
75°	2578	3760	3398
80°	2083	3053	2011
85°	1504	858	216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.0	3.4
10°-20°	444.4	9.6
20°-30°	666.7	14.5
30°-40°	794.7	17.2
40°-50°	820.6	17.8
50°-60°	747.4	16.2
60°-70°	585.5	12.7
70°-80°	338.8	7.3
80°-90°	58.9	1.3
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°	1267.1	27.5
0°-40°	2061.8	44.7
0°-60°	3629.8	78.7
0°-90°	4613.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4613.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1650	1650	1650	1650	1650	
5°	1650	1646	1636	1648	1646	156
15°	1572	1569	1569	1585	1585	443
25°	1426	1430	1442	1470	1472	656
35°	1226	1238	1268	1307	1314	765
45°	990	1015	1066	1115	1126	764
55°	739	776	844	897	906	663
65°	491	535	612	651	656	487
75°	248	301	362	350	327	265
85°	49	65	28	9	7	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1650.3	1650.3	1650.3	1650.3	1650.3
2.5°	1657.2	1650.3	1641.0	1650.3	1650.3
5°	1650.3	1645.6	1636.4	1648.0	1645.6
7.5°	1636.4	1631.7	1624.8	1636.4	1634.1
10°	1617.8	1615.5	1610.9	1624.8	1620.1
12.5°	1597.0	1594.7	1592.3	1606.2	1603.9
15°	1571.5	1569.2	1569.2	1585.4	1585.4
17.5°	1541.3	1541.3	1541.3	1562.2	1562.2
20°	1506.6	1506.6	1511.2	1534.4	1534.4
22.5°	1469.5	1469.5	1476.4	1501.9	1504.3
25°	1425.5	1430.1	1441.7	1469.5	1471.8
27.5°	1379.1	1386.0	1402.3	1432.4	1437.0
30°	1330.4	1337.4	1358.2	1393.0	1400.0
32.5°	1277.1	1288.7	1314.2	1349.0	1355.9
35°	1226.1	1237.7	1267.8	1307.2	1314.2
37.5°	1165.9	1184.4	1221.5	1258.6	1270.2
40°	1107.9	1128.8	1170.5	1214.5	1223.8
42.5°	1052.3	1070.8	1117.2	1165.9	1179.8
45°	989.7	1015.2	1066.2	1114.9	1126.5
47.5°	929.4	954.9	1012.9	1063.9	1075.5
50°	869.2	894.7	957.3	1008.2	1022.2
52.5°	802.0	839.0	901.6	952.6	968.8
55°	739.4	776.5	843.7	897.0	906.3
57.5°	679.1	716.2	790.4	839.0	853.0
60°	618.9	655.9	727.8	776.5	788.1
62.5°	554.0	595.7	669.8	711.6	720.8
65°	491.4	535.4	611.9	651.3	655.9
67.5°	428.8	475.2	549.3	581.8	586.4
70°	370.8	417.2	486.7	516.9	512.2
72.5°	310.6	356.9	424.2	440.4	426.5
75°	248.0	301.3	361.6	350.0	326.8
77.5°	192.4	243.4	282.8	248.0	229.5
80°	134.4	187.7	197.0	153.0	129.8
82.5°	88.1	132.1	106.6	64.9	57.9
85°	48.7	64.9	27.8	9.3	7.0
87.5°	16.2	9.3	4.6	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)