

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: P474881

Luminaire Tested: **22CZ2-44-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474881
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44-S-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

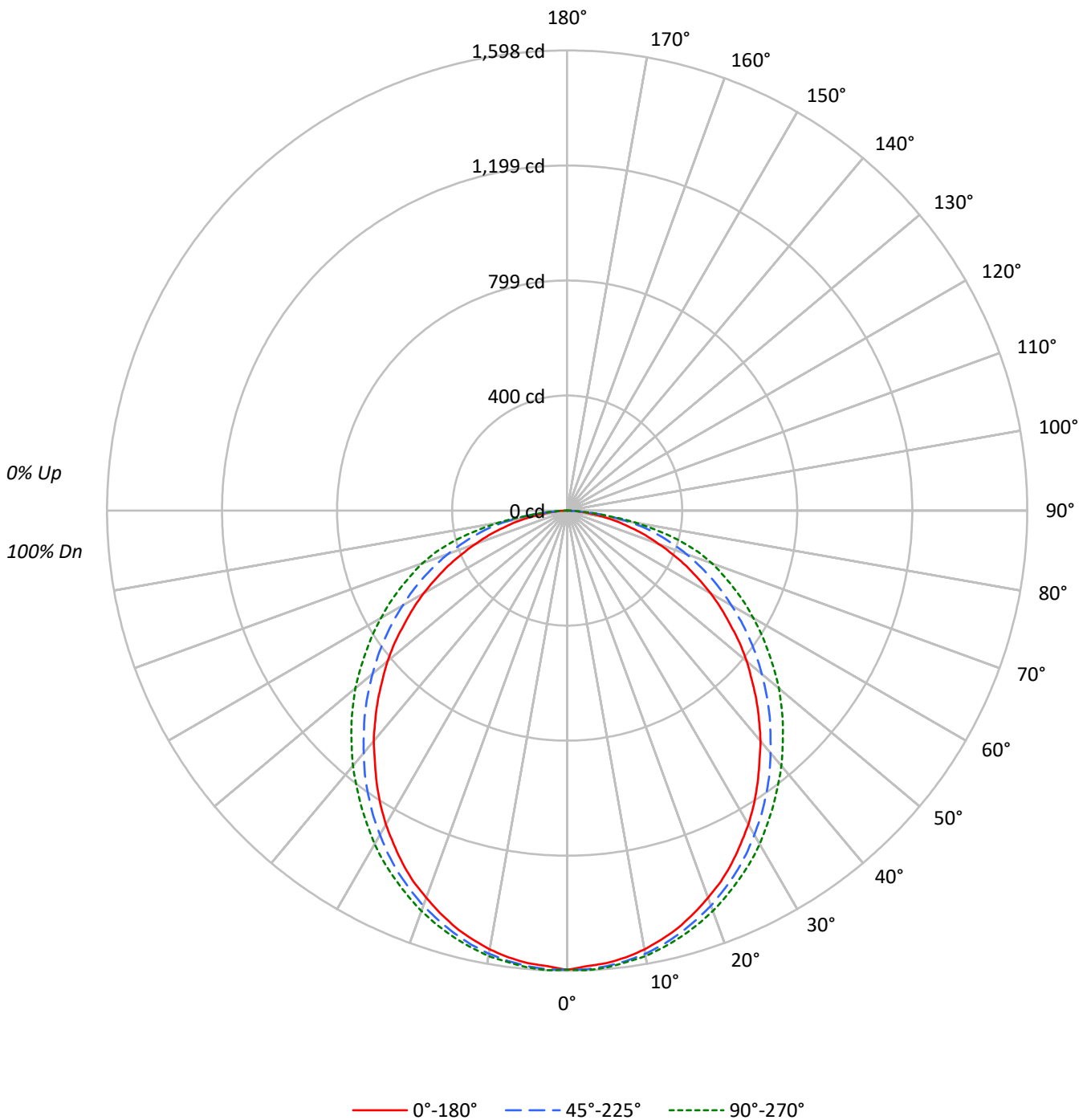
Lumens per Lamp: N/A
Luminaire Lumens: 4392.2 lumens
Efficiency: N/A
Efficacy: 132.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.2
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	99	95	106	101	97	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	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	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	32	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4290	4290	4290
5°	4261	4290	4301
10°	4229	4270	4293
15°	4175	4232	4267
20°	4097	4182	4237
25°	4014	4119	4194
30°	3911	4039	4155
35°	3789	3956	4103
40°	3670	3861	4066
45°	3535	3778	4033
50°	3409	3693	4018
55°	3247	3620	4000
60°	3101	3547	4016
65°	2911	3506	4074
70°	2659	3462	4206
75°	2387	3437	4211
80°	2010	3245	3739
85°	1510	2198	2035



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.6	3.4
10°-20°	427.7	9.7
20°-30°	637.6	14.5
30°-40°	752.4	17.1
40°-50°	766.6	17.5
50°-60°	691.3	15.7
60°-70°	542.9	12.4
70°-80°	339.4	7.7
80°-90°	83.7	1.9
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°	1215.9	27.7
0°-40°	1968.3	44.8
0°-60°	3426.2	78.0
0°-90°	4392.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4392.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1577	1580	1588	1591	1592	150
15°	1499	1504	1519	1530	1532	422
25°	1352	1360	1387	1407	1413	622
35°	1153	1169	1204	1237	1249	721
45°	929	945	993	1041	1060	717
55°	692	714	772	831	852	621
65°	457	482	551	612	640	451
75°	230	262	331	387	405	245
85°	49	63	71	70	66	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1594.4	1594.4	1594.4	1594.4	1594.4
2.5°	1583.7	1586.9	1594.4	1597.6	1597.6
5°	1577.4	1580.5	1588.0	1591.2	1592.2
7.5°	1564.6	1568.9	1577.4	1581.6	1581.6
10°	1547.6	1552.9	1562.5	1568.9	1571.0
12.5°	1524.2	1530.6	1543.3	1550.8	1552.9
15°	1498.7	1504.0	1518.9	1529.5	1531.7
17.5°	1465.8	1474.3	1490.2	1504.0	1507.2
20°	1430.7	1440.2	1460.4	1476.4	1479.6
22.5°	1394.5	1402.0	1424.3	1443.4	1447.7
25°	1352.0	1359.5	1387.1	1407.3	1412.6
27.5°	1305.3	1318.0	1345.6	1369.0	1377.5
30°	1258.5	1271.2	1299.9	1327.6	1337.1
32.5°	1207.5	1221.3	1254.2	1282.9	1292.5
35°	1153.3	1169.2	1204.3	1237.2	1248.9
37.5°	1096.9	1115.0	1154.3	1189.4	1202.2
40°	1044.8	1057.6	1099.0	1139.4	1157.5
42.5°	986.4	1003.4	1044.8	1090.5	1107.6
45°	929.0	944.9	992.8	1040.6	1059.7
47.5°	869.5	889.7	937.5	990.6	1009.8
50°	814.2	831.2	882.2	938.6	959.8
52.5°	754.7	772.7	828.0	886.5	905.6
55°	692.0	714.3	771.7	831.2	852.5
57.5°	634.6	655.8	716.4	778.1	800.4
60°	576.1	597.4	659.0	721.7	746.2
62.5°	514.4	538.9	605.9	666.4	694.1
65°	457.1	481.5	550.6	612.2	639.9
67.5°	396.5	425.2	494.3	559.1	586.7
70°	338.0	372.0	440.0	503.8	534.6
72.5°	285.9	313.6	384.8	451.7	477.2
75°	229.6	261.5	330.6	386.9	405.0
77.5°	181.8	209.4	275.3	312.5	324.2
80°	129.7	160.5	209.4	231.7	241.3
82.5°	86.1	111.6	142.4	146.7	144.6
85°	48.9	62.7	71.2	70.2	65.9
87.5°	19.1	21.3	15.9	9.6	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)