

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: P474794

Luminaire Tested: **22CZ2-44-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474794
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4461.8 lumens
Efficiency: N/A
Efficacy: 134.4 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

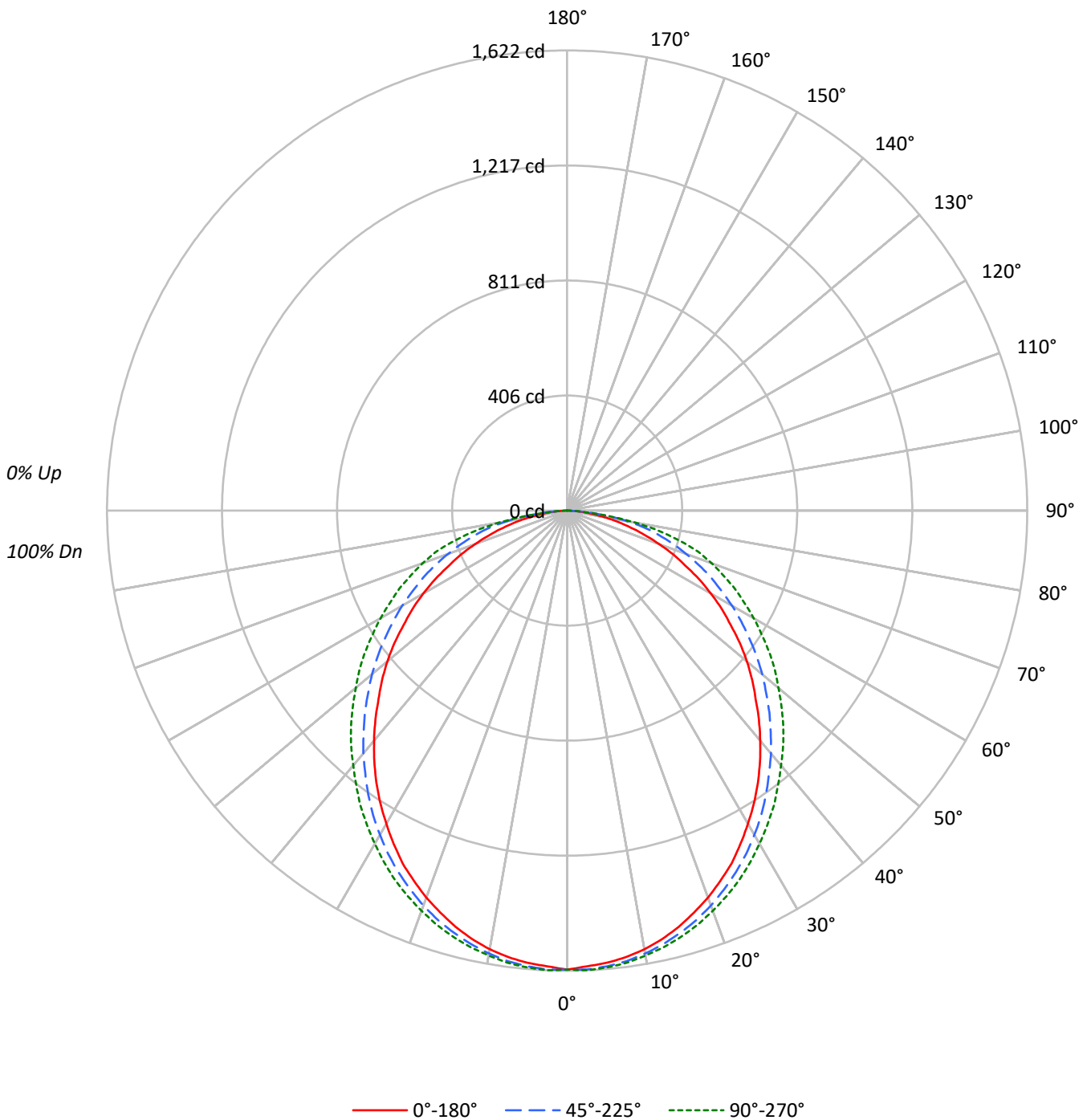
Input Watts (W): 33.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P474794

CATALOG NUMBER: 22CZ2-44-UNV-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P474794

CATALOG NUMBER: 22CZ2-44-UNV-L835-CD1-U

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	87	85	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	73	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	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4354	4354	4354
5°	4323	4356	4366
10°	4290	4331	4352
15°	4232	4293	4332
20°	4156	4242	4299
25°	4074	4177	4264
30°	3961	4102	4213
35°	3850	4015	4172
40°	3720	3925	4121
45°	3578	3836	4102
50°	3462	3758	4070
55°	3300	3676	4079
60°	3152	3613	4090
65°	2930	3566	4155
70°	2708	3517	4258
75°	2421	3500	4285
80°	2032	3316	3741
85°	1572	2269	2124



TEST NUMBER: P474794

CATALOG NUMBER: 22CZ2-44-UNV-L835-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.9	3.4
10°-20°	434.0	9.7
20°-30°	647.1	14.5
30°-40°	763.9	17.1
40°-50°	778.5	17.4
50°-60°	702.1	15.7
60°-70°	551.8	12.4
70°-80°	345.5	7.7
80°-90°	86.1	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°	1233.9	27.7
0°-40°	1997.8	44.8
0°-60°	3478.4	78.0
0°-90°	4461.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4461.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1618	1618	1618	1618	1618	
5°	1600	1604	1612	1616	1616	152
15°	1519	1526	1541	1552	1555	428
25°	1372	1382	1407	1429	1436	631
35°	1172	1187	1222	1256	1270	732
45°	940	961	1008	1057	1078	727
55°	703	725	784	844	869	631
65°	460	488	560	622	652	459
75°	233	268	337	397	412	247
85°	51	65	74	74	69	61
90°	0	0	0	0	0	



TEST NUMBER: P474794

CATALOG NUMBER: 22CZ2-44-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1618.1	1618.1	1618.1	1618.1	1618.1
2.5°	1607.7	1611.5	1619.0	1621.9	1621.9
5°	1600.2	1603.9	1612.4	1616.2	1616.2
7.5°	1587.9	1591.7	1602.1	1606.8	1607.7
10°	1570.0	1574.7	1585.1	1592.6	1592.6
12.5°	1547.4	1552.1	1565.3	1574.7	1575.7
15°	1519.1	1525.7	1540.8	1552.1	1554.9
17.5°	1486.1	1496.4	1513.4	1527.6	1530.4
20°	1451.2	1461.6	1481.4	1497.4	1501.2
22.5°	1412.5	1422.0	1445.5	1465.3	1470.0
25°	1372.0	1382.4	1406.9	1428.6	1436.1
27.5°	1323.9	1336.1	1365.4	1389.9	1397.4
30°	1274.9	1289.9	1320.1	1347.5	1356.0
32.5°	1224.9	1239.0	1273.0	1302.2	1313.5
35°	1172.1	1187.2	1222.1	1256.0	1270.1
37.5°	1116.4	1131.5	1169.2	1207.9	1221.1
40°	1058.9	1076.8	1117.4	1158.9	1173.0
42.5°	1000.5	1019.3	1061.8	1108.0	1126.8
45°	940.1	960.9	1008.0	1057.0	1077.8
47.5°	885.4	902.4	951.4	1005.2	1025.0
50°	827.0	843.0	897.7	951.4	972.2
52.5°	767.6	782.6	841.1	897.7	923.1
55°	703.4	725.1	783.6	843.9	869.4
57.5°	646.9	666.7	727.0	788.3	812.8
60°	585.6	606.3	671.4	733.6	760.0
62.5°	524.3	546.9	612.9	679.9	704.4
65°	460.2	488.4	560.1	622.3	652.5
67.5°	405.5	432.8	503.5	568.6	595.0
70°	344.2	376.2	447.0	513.0	541.2
72.5°	286.7	318.7	391.3	457.3	485.6
75°	232.9	267.8	336.6	397.0	412.1
77.5°	181.0	214.0	282.9	317.8	333.8
80°	131.1	163.1	214.0	237.6	241.4
82.5°	88.6	116.0	145.2	151.8	148.0
85°	50.9	65.1	73.5	73.5	68.8
87.5°	20.7	20.7	17.9	11.3	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)