

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: P474916

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474916
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44HE-S-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4658.6 lumens
Efficiency: N/A
Efficacy: 142.0 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

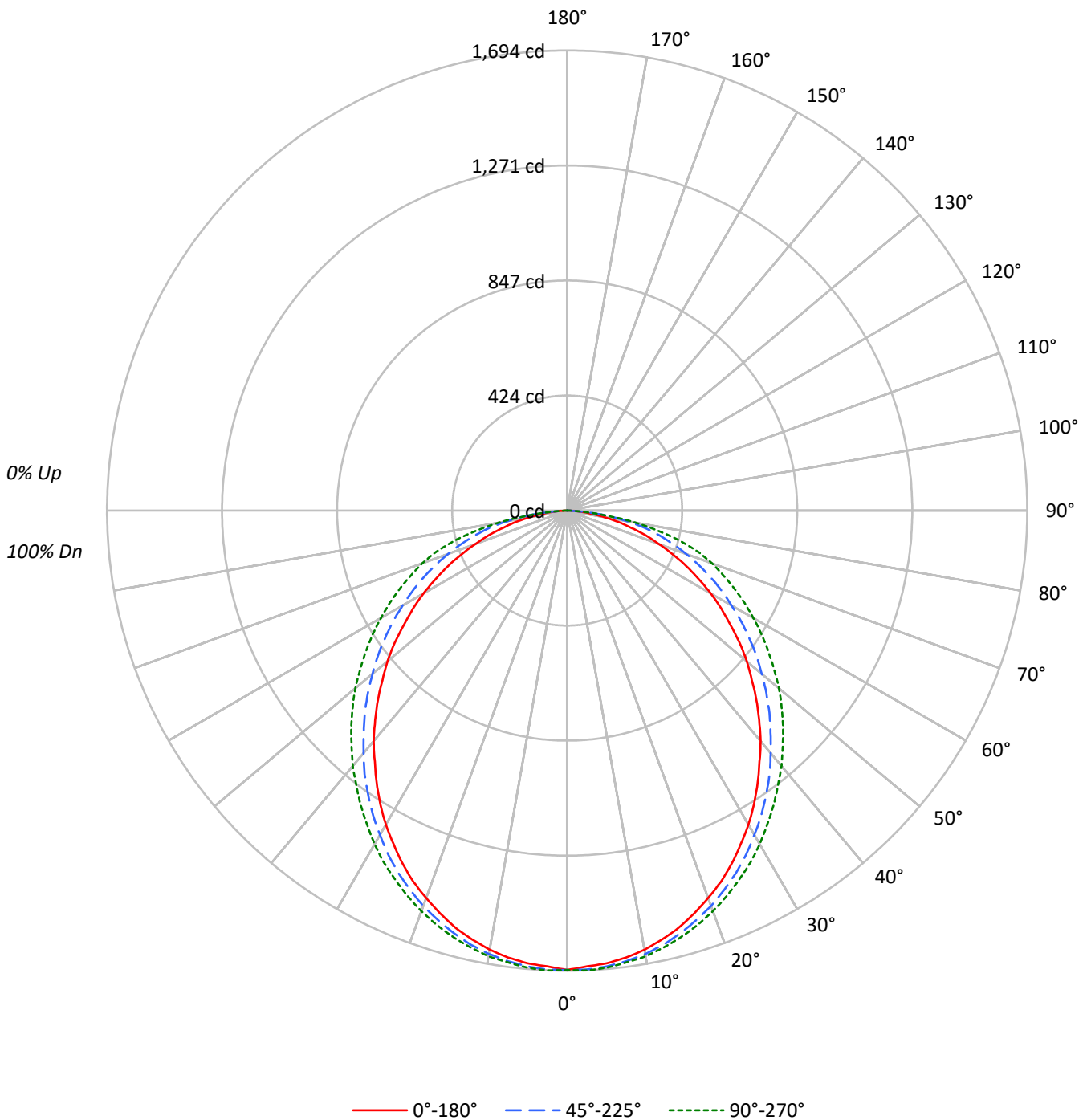
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4551	4551	4551
5°	4519	4550	4562
10°	4485	4529	4553
15°	4428	4488	4526
20°	4346	4436	4494
25°	4258	4368	4449
30°	4148	4284	4407
35°	4018	4196	4352
40°	3893	4095	4313
45°	3750	4007	4278
50°	3615	3917	4262
55°	3443	3840	4242
60°	3288	3762	4259
65°	3087	3719	4322
70°	2821	3672	4462
75°	2532	3645	4466
80°	2131	3442	3966
85°	1602	2331	2158



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.7	3.4
10°-20°	453.6	9.7
20°-30°	676.3	14.5
30°-40°	798.0	17.1
40°-50°	813.0	17.5
50°-60°	733.3	15.7
60°-70°	575.9	12.4
70°-80°	360.0	7.7
80°-90°	88.7	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°	1289.6	27.7
0°-40°	2087.7	44.8
0°-60°	3634.0	78.0
0°-90°	4658.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4658.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1691	1691	1691	1691	1691	
5°	1673	1676	1684	1688	1689	159
15°	1590	1595	1611	1622	1625	448
25°	1434	1442	1471	1493	1498	660
35°	1223	1240	1277	1312	1325	765
45°	985	1002	1053	1104	1124	760
55°	734	758	818	882	904	658
65°	485	511	584	649	679	479
75°	244	277	351	410	430	260
85°	52	66	76	74	70	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1691.1	1691.1	1691.1	1691.1	1691.1
2.5°	1679.8	1683.2	1691.1	1694.5	1694.5
5°	1673.0	1676.4	1684.3	1687.7	1688.8
7.5°	1659.5	1664.0	1673.0	1677.5	1677.5
10°	1641.5	1647.1	1657.3	1664.0	1666.3
12.5°	1616.7	1623.4	1637.0	1644.8	1647.1
15°	1589.6	1595.2	1611.0	1622.3	1624.6
17.5°	1554.7	1563.7	1580.6	1595.2	1598.6
20°	1517.5	1527.6	1549.0	1565.9	1569.3
22.5°	1479.1	1487.0	1510.7	1531.0	1535.5
25°	1434.0	1441.9	1471.2	1492.7	1498.3
27.5°	1384.4	1398.0	1427.3	1452.1	1461.1
30°	1334.8	1348.3	1378.8	1408.1	1418.2
32.5°	1280.7	1295.4	1330.3	1360.7	1370.9
35°	1223.2	1240.1	1277.3	1312.3	1324.7
37.5°	1163.5	1182.6	1224.3	1261.5	1275.1
40°	1108.2	1121.7	1165.7	1208.6	1227.7
42.5°	1046.2	1064.2	1108.2	1156.7	1174.7
45°	985.3	1002.2	1053.0	1103.7	1124.0
47.5°	922.2	943.6	994.4	1050.7	1071.0
50°	863.6	881.6	935.7	995.5	1018.0
52.5°	800.4	819.6	878.2	940.2	960.5
55°	733.9	757.6	818.5	881.6	904.2
57.5°	673.0	695.6	759.9	825.2	848.9
60°	611.0	633.6	699.0	765.5	791.4
62.5°	545.7	571.6	642.6	706.9	736.2
65°	484.8	510.7	584.0	649.4	678.7
67.5°	420.5	451.0	524.2	593.0	622.3
70°	358.5	394.6	466.7	534.4	567.1
72.5°	303.3	332.6	408.1	479.1	506.2
75°	243.5	277.3	350.6	410.4	429.5
77.5°	192.8	222.1	292.0	331.5	343.9
80°	137.5	170.2	222.1	245.8	255.9
82.5°	91.3	118.4	151.1	155.6	153.3
85°	51.9	66.5	75.5	74.4	69.9
87.5°	20.3	22.5	16.9	10.1	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)