

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: P474892

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474892
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44VHE-S-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4340.0 lumens
Efficiency: N/A
Efficacy: 143.7 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

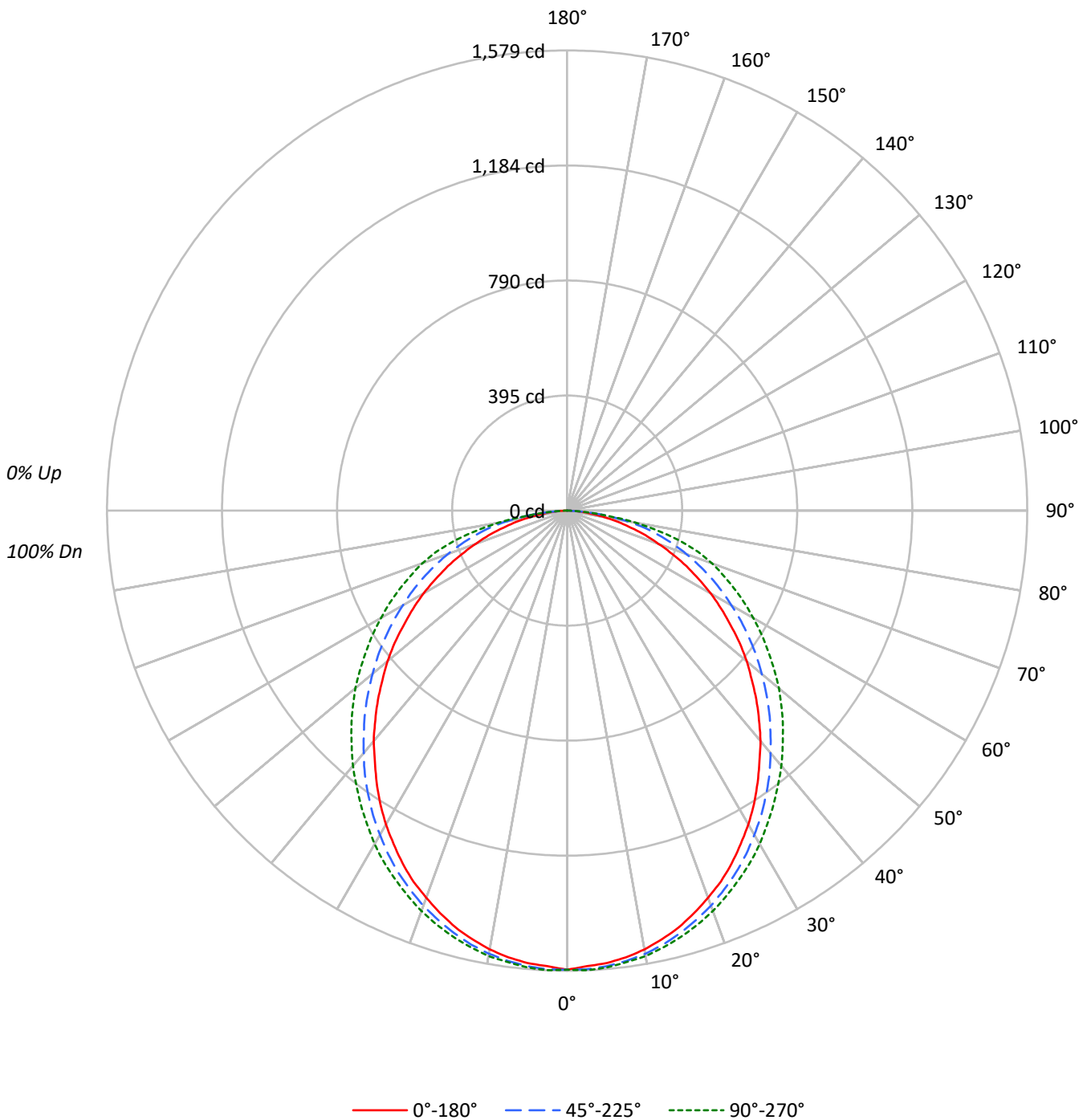
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4239	4239	4239
5°	4210	4239	4250
10°	4179	4219	4242
15°	4126	4181	4216
20°	4048	4133	4187
25°	3967	4070	4144
30°	3864	3991	4106
35°	3744	3909	4054
40°	3627	3815	4018
45°	3493	3733	3985
50°	3368	3649	3970
55°	3208	3577	3952
60°	3064	3505	3968
65°	2876	3464	4026
70°	2628	3421	4157
75°	2359	3396	4161
80°	1985	3206	3694
85°	1491	2174	2010



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.8	3.4
10°-20°	422.6	9.7
20°-30°	630.1	14.5
30°-40°	743.4	17.1
40°-50°	757.5	17.5
50°-60°	683.1	15.7
60°-70°	536.5	12.4
70°-80°	335.4	7.7
80°-90°	82.7	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°	1201.5	27.7
0°-40°	1944.9	44.8
0°-60°	3385.5	78.0
0°-90°	4340.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4340.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1575	1575	1575	1575	1575	
5°	1559	1562	1569	1572	1573	148
15°	1481	1486	1501	1511	1514	417
25°	1336	1343	1371	1391	1396	615
35°	1140	1155	1190	1222	1234	713
45°	918	934	981	1028	1047	708
55°	684	706	762	821	842	613
65°	452	476	544	605	632	446
75°	227	258	327	382	400	243
85°	48	62	70	69	65	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1575.4	1575.4	1575.4	1575.4	1575.4
2.5°	1564.9	1568.1	1575.4	1578.6	1578.6
5°	1558.6	1561.8	1569.1	1572.3	1573.3
7.5°	1546.0	1550.2	1558.6	1562.8	1562.8
10°	1529.2	1534.5	1543.9	1550.2	1552.3
12.5°	1506.1	1512.4	1525.0	1532.4	1534.5
15°	1480.9	1486.2	1500.9	1511.4	1513.5
17.5°	1448.3	1456.7	1472.5	1486.2	1489.3
20°	1413.7	1423.1	1443.1	1458.8	1462.0
22.5°	1378.0	1385.3	1407.4	1426.3	1430.5
25°	1336.0	1343.3	1370.6	1390.6	1395.8
27.5°	1289.8	1302.4	1329.7	1352.8	1361.2
30°	1243.5	1256.1	1284.5	1311.8	1321.3
32.5°	1193.1	1206.8	1239.3	1267.7	1277.1
35°	1139.6	1155.3	1190.0	1222.5	1234.1
37.5°	1083.9	1101.7	1140.6	1175.3	1187.9
40°	1032.4	1045.0	1086.0	1125.9	1143.8
42.5°	974.7	991.5	1032.4	1077.6	1094.4
45°	917.9	933.7	981.0	1028.2	1047.1
47.5°	859.1	879.1	926.4	978.9	997.8
50°	804.5	821.3	871.7	927.4	948.4
52.5°	745.7	763.6	818.2	875.9	894.8
55°	683.7	705.8	762.5	821.3	842.3
57.5°	627.0	648.0	707.9	768.8	790.9
60°	569.3	590.3	651.2	713.1	737.3
62.5°	508.3	532.5	598.7	658.5	685.8
65°	451.6	475.8	544.0	605.0	632.3
67.5°	391.8	420.1	488.4	552.5	579.8
70°	334.0	367.6	434.8	497.8	528.3
72.5°	282.5	309.8	380.2	446.4	471.6
75°	226.9	258.4	326.6	382.3	400.2
77.5°	179.6	206.9	272.0	308.8	320.3
80°	128.1	158.6	206.9	229.0	238.4
82.5°	85.1	110.3	140.7	144.9	142.8
85°	48.3	62.0	70.4	69.3	65.1
87.5°	18.9	21.0	15.8	9.5	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)