

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: P475235

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475235
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44HE-SQR-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,SQUARE LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4186.9 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

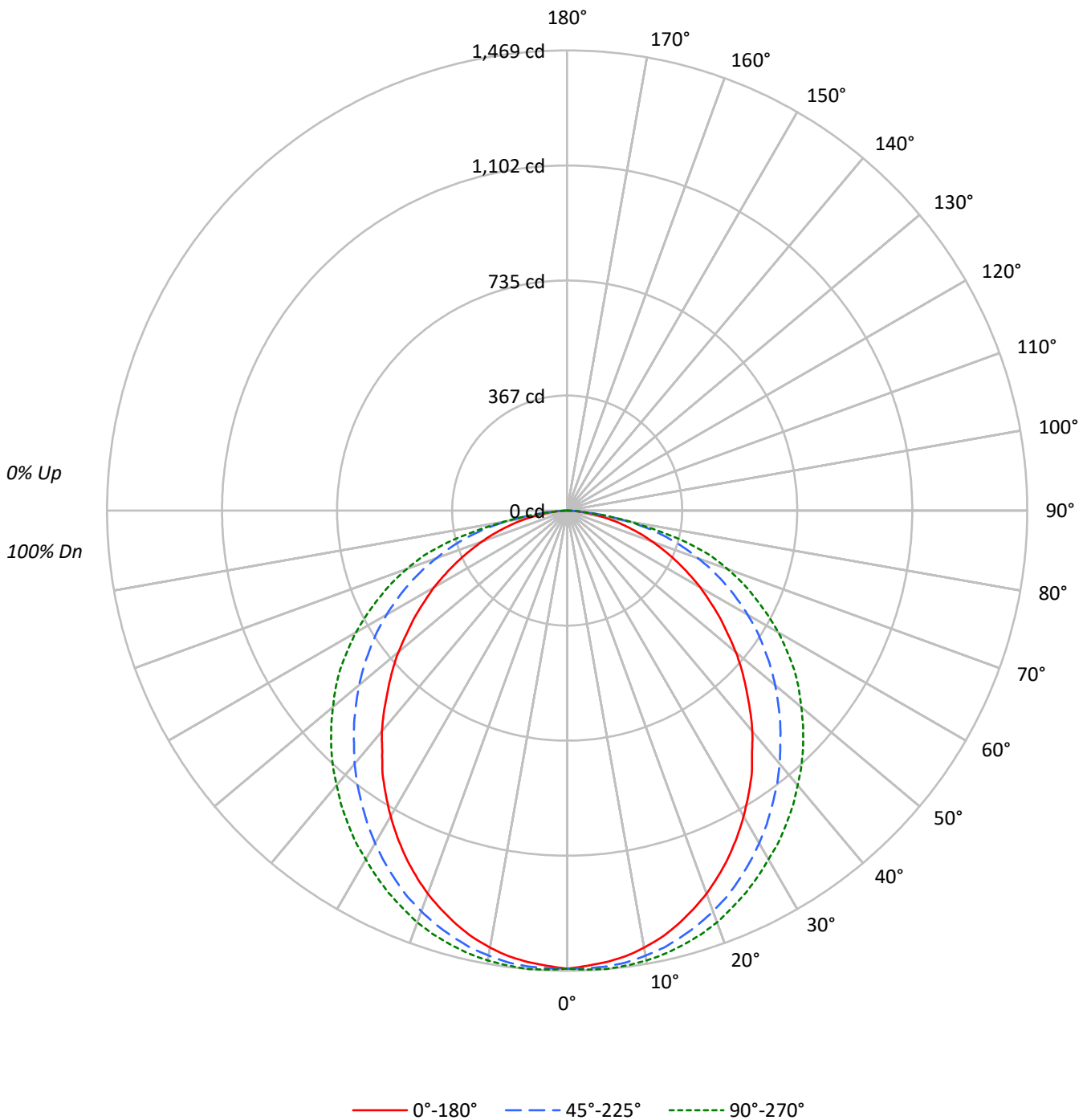
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62		72	66	61		69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40		52	45	40		50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35		47	40	35		46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32		43	36	31		42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28		40	33	28		39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3936	3936	3936
5°	3908	3945	3967
10°	3872	3942	3986
15°	3809	3925	3997
20°	3727	3899	4006
25°	3623	3859	4000
30°	3501	3810	3995
35°	3375	3754	4008
40°	3232	3707	4021
45°	3078	3660	4054
50°	2945	3627	4085
55°	2788	3598	4149
60°	2641	3583	4193
65°	2467	3555	4225
70°	2267	3502	4284
75°	2046	3409	4131
80°	1754	3019	3112
85°	1411	1778	1411



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.7	3.3
10°-20°	396.4	9.5
20°-30°	595.4	14.2
30°-40°	710.1	17.0
40°-50°	734.2	17.5
50°-60°	675.0	16.1
60°-70°	537.4	12.8
70°-80°	328.3	7.8
80°-90°	71.3	1.7
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°	1130.5	27.0
0°-40°	1840.7	44.0
0°-60°	3249.9	77.6
0°-90°	4186.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4186.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1462	1462	1462	1462	1462	
5°	1447	1451	1460	1467	1469	137
15°	1367	1383	1409	1429	1435	385
25°	1220	1250	1300	1335	1347	561
35°	1027	1071	1143	1202	1220	641
45°	809	866	962	1039	1065	625
55°	594	660	767	854	884	531
65°	388	453	558	636	664	384
75°	197	254	328	386	397	210
85°	46	56	58	50	46	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1462.5	1462.5	1462.5	1462.5	1462.5
2.5°	1454.6	1456.6	1462.5	1466.7	1466.7
5°	1446.7	1450.6	1460.5	1466.7	1468.7
7.5°	1434.8	1440.8	1454.6	1462.5	1464.7
10°	1417.0	1424.9	1442.7	1454.6	1458.6
12.5°	1395.0	1406.9	1428.9	1444.7	1448.7
15°	1367.3	1383.1	1408.9	1428.9	1434.8
17.5°	1335.4	1355.2	1387.1	1411.1	1419.0
20°	1301.6	1321.6	1361.4	1389.1	1399.0
22.5°	1262.0	1287.7	1333.4	1365.3	1373.2
25°	1220.2	1249.9	1299.6	1335.4	1347.3
27.5°	1174.5	1210.3	1264.0	1307.7	1317.6
30°	1126.7	1164.6	1226.1	1273.9	1285.7
32.5°	1077.0	1120.8	1186.3	1240.0	1256.0
35°	1027.3	1071.1	1142.6	1202.4	1220.2
37.5°	969.7	1021.4	1101.0	1162.6	1184.4
40°	920.0	969.7	1055.3	1122.8	1144.8
42.5°	864.4	918.1	1007.6	1081.0	1107.0
45°	808.8	866.4	961.8	1039.4	1065.2
47.5°	757.1	814.7	914.1	995.7	1021.4
50°	703.4	763.0	866.4	949.9	975.7
52.5°	645.8	711.4	818.7	902.2	932.1
55°	594.2	659.7	767.0	854.5	884.4
57.5°	540.5	608.0	719.5	802.8	830.8
60°	490.8	556.3	665.8	747.2	779.1
62.5°	437.2	504.7	612.0	691.6	721.5
65°	387.5	453.2	558.3	635.9	663.6
67.5°	337.8	403.5	502.7	576.3	608.0
70°	288.1	353.8	445.1	516.8	544.5
72.5°	244.5	302.1	389.4	455.2	480.9
75°	196.8	254.4	327.9	385.5	397.3
77.5°	153.0	204.7	266.3	292.0	296.2
80°	113.2	153.0	194.8	200.8	200.8
82.5°	75.4	105.3	121.2	123.1	121.2
85°	45.7	55.6	57.6	49.7	45.7
87.5°	15.8	15.8	9.9	5.9	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)