

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: P475269

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475269
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44VHE-SQR-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4188.7 lumens
Efficiency: N/A
Efficacy: 138.7 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

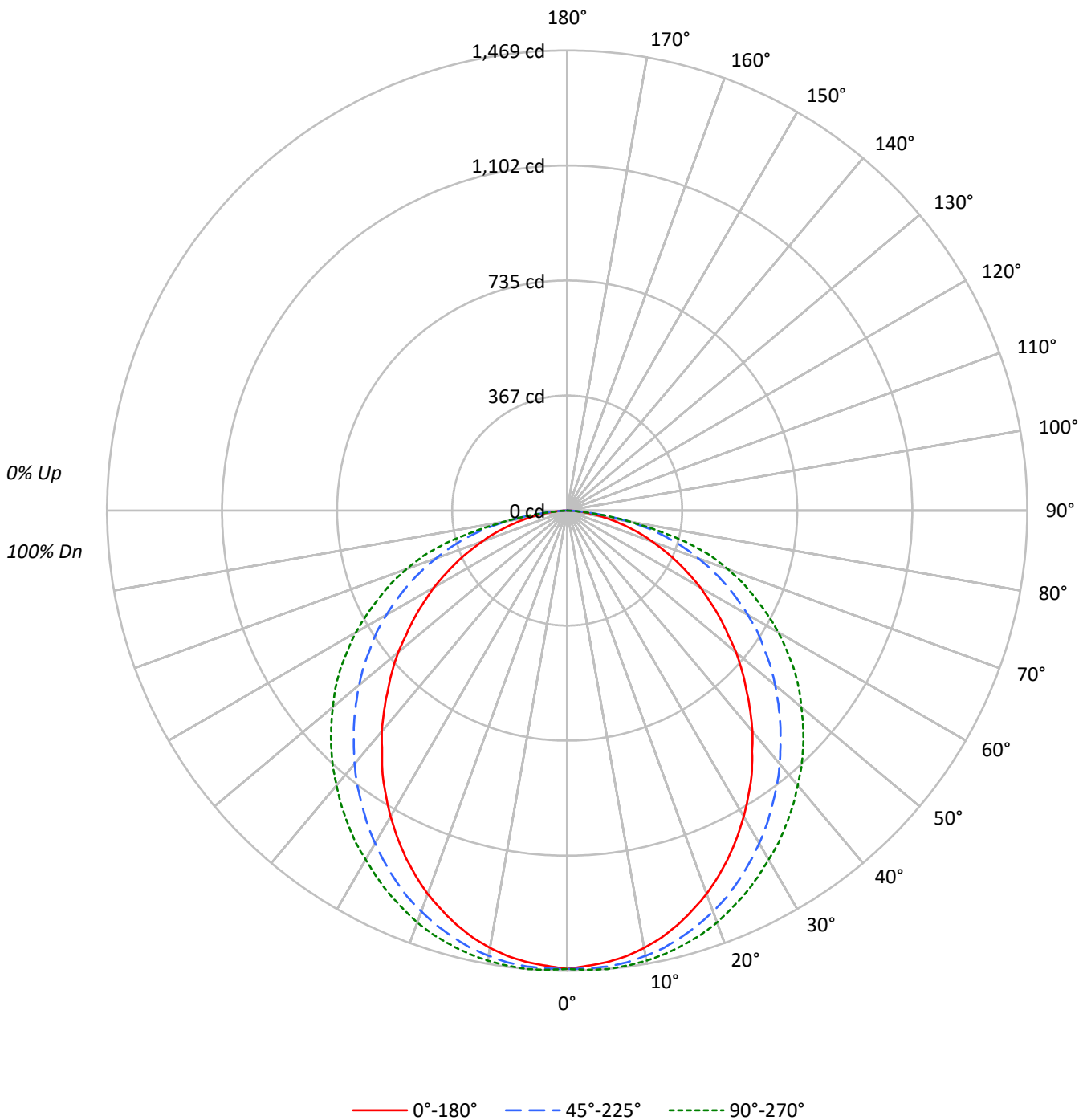
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3937	3937	3937
5°	3910	3947	3969
10°	3874	3944	3987
15°	3811	3927	3999
20°	3729	3900	4008
25°	3624	3860	4002
30°	3503	3811	3997
35°	3376	3755	4010
40°	3233	3708	4023
45°	3079	3662	4055
50°	2946	3628	4086
55°	2789	3600	4151
60°	2643	3585	4195
65°	2468	3556	4227
70°	2268	3504	4286
75°	2047	3410	4133
80°	1756	3020	3112
85°	1414	1778	1414



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.7	3.3
10°-20°	396.6	9.5
20°-30°	595.7	14.2
30°-40°	710.4	17.0
40°-50°	734.5	17.5
50°-60°	675.3	16.1
60°-70°	537.6	12.8
70°-80°	328.5	7.8
80°-90°	71.4	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°	1131.0	27.0
0°-40°	1841.5	44.0
0°-60°	3251.3	77.6
0°-90°	4188.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4188.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1463	1463	1463	1463	1463	
5°	1447	1451	1461	1467	1469	137
15°	1368	1384	1410	1430	1435	385
25°	1221	1250	1300	1336	1348	561
35°	1028	1072	1143	1203	1221	641
45°	809	867	962	1040	1066	626
55°	594	660	767	855	885	532
65°	388	453	558	636	664	384
75°	197	254	328	386	398	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°	1463.1	1463.1	1463.1	1463.1	1463.1
2.5°	1455.2	1457.2	1463.1	1467.3	1467.3
5°	1447.3	1451.3	1461.2	1467.3	1469.3
7.5°	1435.4	1441.4	1455.2	1463.1	1465.3
10°	1417.6	1425.5	1443.3	1455.2	1459.2
12.5°	1395.6	1407.5	1429.5	1445.3	1449.3
15°	1367.9	1383.7	1409.5	1429.5	1435.4
17.5°	1336.0	1355.8	1387.7	1411.7	1419.6
20°	1302.1	1322.1	1361.9	1389.7	1399.6
22.5°	1262.5	1288.2	1334.0	1365.9	1373.8
25°	1220.7	1250.4	1300.1	1336.0	1347.9
27.5°	1174.9	1210.8	1264.5	1308.3	1318.2
30°	1127.2	1165.1	1226.6	1274.4	1286.3
32.5°	1077.5	1121.3	1186.8	1240.5	1256.6
35°	1027.8	1071.6	1143.1	1202.9	1220.7
37.5°	970.1	1021.8	1101.5	1163.1	1184.8
40°	920.4	970.1	1055.7	1123.3	1145.3
42.5°	864.8	918.4	1008.0	1081.5	1107.4
45°	809.1	866.7	962.2	1039.9	1065.6
47.5°	757.4	815.1	914.5	996.1	1021.8
50°	703.7	763.4	866.7	950.3	976.1
52.5°	646.1	711.7	819.0	902.6	932.5
55°	594.4	660.0	767.3	854.9	884.8
57.5°	540.7	608.3	719.8	803.2	831.1
60°	491.0	556.6	666.1	747.5	779.4
62.5°	437.3	504.9	612.2	691.9	721.8
65°	387.6	453.4	558.5	636.2	663.9
67.5°	337.9	403.7	502.9	576.6	608.3
70°	288.2	354.0	445.3	517.0	544.7
72.5°	244.6	302.3	389.6	455.4	481.1
75°	196.9	254.5	328.0	385.6	397.5
77.5°	153.1	204.8	266.4	292.1	296.3
80°	113.3	153.1	194.9	200.8	200.8
82.5°	75.5	105.4	121.2	123.2	121.2
85°	45.8	55.7	57.6	49.7	45.8
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)