

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: P475270

Luminaire Tested: **22CZ2-50VHE-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475270
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-50VHE-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: 4832.9 lumens
Efficiency: N/A
Efficacy: 138.1 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

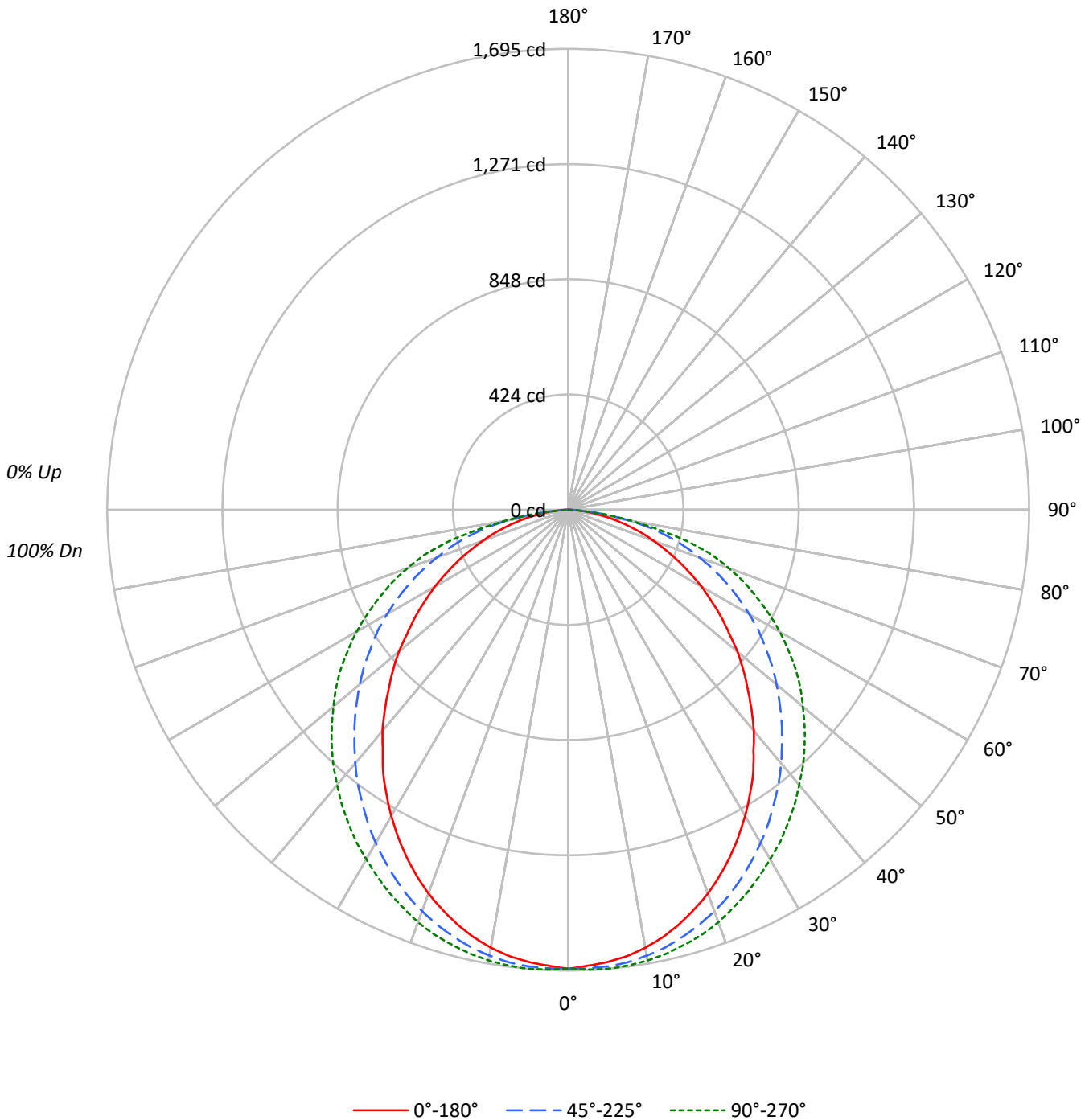
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4543	4543	4543
5°	4511	4554	4579
10°	4469	4550	4600
15°	4397	4530	4614
20°	4302	4500	4624
25°	4182	4454	4617
30°	4041	4398	4612
35°	3895	4332	4627
40°	3731	4279	4642
45°	3553	4225	4679
50°	3399	4186	4715
55°	3217	4153	4789
60°	3049	4137	4840
65°	2848	4103	4877
70°	2616	4042	4944
75°	2362	3934	4768
80°	2025	3485	3591
85°	1630	2053	1630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.0	3.3
10°-20°	457.6	9.5
20°-30°	687.3	14.2
30°-40°	819.7	17.0
40°-50°	847.5	17.5
50°-60°	779.1	16.1
60°-70°	620.3	12.8
70°-80°	379.0	7.8
80°-90°	82.4	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°	1304.9	27.0
0°-40°	2124.6	44.0
0°-60°	3751.2	77.6
0°-90°	4832.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4832.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1688	1688	1688	1688	1688	
5°	1670	1674	1686	1693	1695	158
15°	1578	1596	1626	1649	1656	444
25°	1408	1443	1500	1541	1555	648
35°	1186	1236	1319	1388	1408	740
45°	934	1000	1110	1200	1230	722
55°	686	761	885	986	1021	613
65°	447	523	644	734	766	443
75°	227	294	378	445	459	242
85°	53	64	66	57	53	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1688.1	1688.1	1688.1	1688.1	1688.1
2.5°	1679.0	1681.3	1688.1	1693.0	1693.0
5°	1669.9	1674.4	1685.8	1693.0	1695.2
7.5°	1656.1	1663.0	1679.0	1688.1	1690.7
10°	1635.6	1644.7	1665.3	1679.0	1683.6
12.5°	1610.2	1623.9	1649.3	1667.6	1672.1
15°	1578.2	1596.5	1626.2	1649.3	1656.1
17.5°	1541.4	1564.3	1601.1	1628.7	1637.9
20°	1502.3	1525.4	1571.4	1603.4	1614.8
22.5°	1456.6	1486.3	1539.1	1575.9	1585.1
25°	1408.4	1442.7	1500.1	1541.4	1555.1
27.5°	1355.6	1397.0	1458.9	1509.4	1520.9
30°	1300.6	1344.2	1415.3	1470.4	1484.1
32.5°	1243.2	1293.7	1369.3	1431.3	1449.8
35°	1185.8	1236.3	1318.8	1387.9	1408.4
37.5°	1119.3	1179.0	1270.9	1341.9	1367.1
40°	1062.0	1119.3	1218.1	1296.0	1321.4
42.5°	997.7	1059.7	1163.0	1247.8	1277.7
45°	933.5	1000.0	1110.2	1199.8	1229.5
47.5°	873.9	940.4	1055.1	1149.3	1179.0
50°	812.0	880.7	1000.0	1096.5	1126.2
52.5°	745.5	821.1	945.0	1041.4	1075.9
55°	685.8	761.4	885.3	986.3	1020.8
57.5°	623.9	701.8	830.5	926.7	958.9
60°	566.5	642.2	768.6	862.5	899.3
62.5°	504.6	582.5	706.4	798.3	832.8
65°	447.2	523.1	644.4	734.0	766.0
67.5°	389.9	465.8	580.2	665.3	701.8
70°	332.5	408.4	513.7	596.5	628.4
72.5°	282.2	348.7	449.5	525.4	555.1
75°	227.2	293.7	378.4	444.9	458.6
77.5°	176.7	236.3	307.4	337.1	341.9
80°	130.7	176.7	224.9	231.7	231.7
82.5°	87.1	121.6	139.9	142.1	139.9
85°	52.8	64.2	66.5	57.4	52.8
87.5°	18.3	18.3	11.4	6.9	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)