

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: P475268

Luminaire Tested: **22CZ2-39VHE-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475268
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39VHE-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: 3724.1 lumens
Efficiency: N/A
Efficacy: 139.5 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

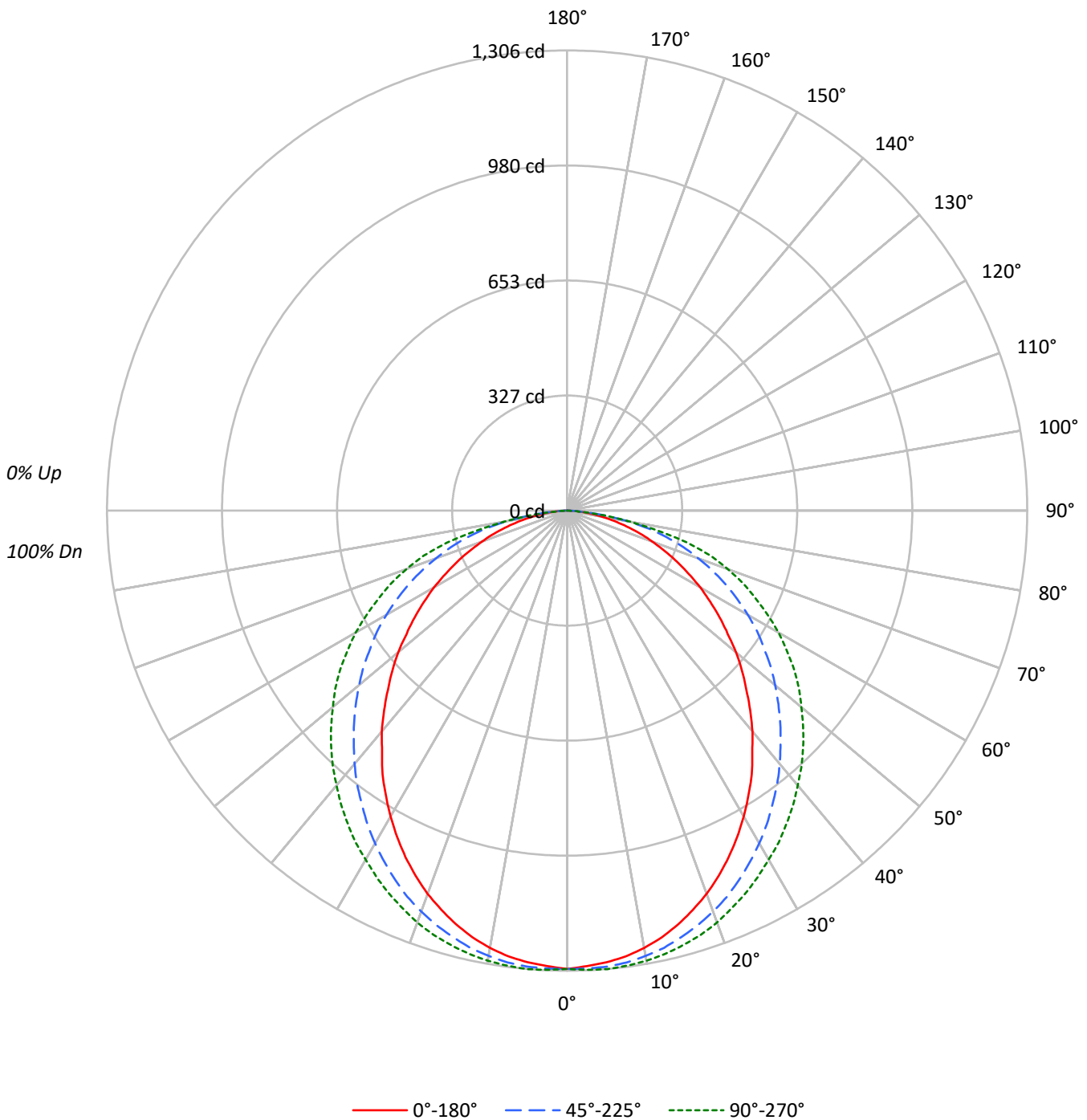
Input Watts (W): 26.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3501	3501	3501
5°	3476	3509	3529
10°	3444	3507	3545
15°	3388	3491	3555
20°	3315	3468	3563
25°	3222	3432	3558
30°	3114	3389	3553
35°	3002	3339	3565
40°	2875	3297	3577
45°	2738	3256	3605
50°	2619	3226	3633
55°	2479	3201	3691
60°	2350	3187	3730
65°	2194	3162	3759
70°	2016	3115	3810
75°	1821	3032	3674
80°	1561	2686	2768
85°	1257	1581	1257



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.3	3.3
10°-20°	352.6	9.5
20°-30°	529.6	14.2
30°-40°	631.6	17.0
40°-50°	653.1	17.5
50°-60°	600.4	16.1
60°-70°	478.0	12.8
70°-80°	292.0	7.8
80°-90°	63.5	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°	1005.6	27.0
0°-40°	1637.2	44.0
0°-60°	2890.7	77.6
0°-90°	3724.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3724.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1301	1301	1301	1301	1301	
5°	1287	1290	1299	1305	1306	122
15°	1216	1230	1253	1271	1276	342
25°	1085	1112	1156	1188	1198	499
35°	914	953	1016	1070	1085	570
45°	719	771	856	924	947	556
55°	528	587	682	760	787	473
65°	345	403	497	566	590	341
75°	175	226	292	343	353	186
85°	41	50	51	44	41	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1300.9	1300.9	1300.9	1300.9	1300.9
2.5°	1293.8	1295.6	1300.9	1304.6	1304.6
5°	1286.8	1290.3	1299.1	1304.6	1306.3
7.5°	1276.2	1281.5	1293.8	1300.9	1302.8
10°	1260.4	1267.4	1283.3	1293.8	1297.3
12.5°	1240.8	1251.4	1270.9	1285.0	1288.5
15°	1216.2	1230.2	1253.1	1270.9	1276.2
17.5°	1187.8	1205.4	1233.8	1255.1	1262.1
20°	1157.7	1175.5	1210.9	1235.5	1244.3
22.5°	1122.5	1145.4	1186.0	1214.4	1221.4
25°	1085.3	1111.7	1155.9	1187.8	1198.4
27.5°	1044.6	1076.5	1124.2	1163.2	1172.0
30°	1002.2	1035.8	1090.6	1133.0	1143.6
32.5°	958.0	996.9	1055.2	1102.9	1117.2
35°	913.8	952.7	1016.3	1069.5	1085.3
37.5°	862.5	908.5	979.3	1034.1	1053.4
40°	818.3	862.5	938.6	998.7	1018.2
42.5°	768.9	816.6	896.2	961.5	984.6
45°	719.4	770.6	855.5	924.5	947.4
47.5°	673.4	724.7	813.1	885.6	908.5
50°	625.7	678.7	770.6	844.9	867.8
52.5°	574.4	632.7	728.2	802.5	829.1
55°	528.5	586.8	682.2	760.1	786.7
57.5°	480.8	540.8	640.0	714.1	738.9
60°	436.6	494.8	592.2	664.6	693.0
62.5°	388.8	448.9	544.3	615.1	641.7
65°	344.6	403.1	496.6	565.6	590.3
67.5°	300.4	358.9	447.1	512.6	540.8
70°	256.2	314.7	395.9	459.6	484.3
72.5°	217.5	268.7	346.4	404.9	427.8
75°	175.1	226.3	291.6	342.9	353.4
77.5°	136.1	182.1	236.9	259.7	263.5
80°	100.7	136.1	173.3	178.6	178.6
82.5°	67.1	93.7	107.8	109.5	107.8
85°	40.7	49.5	51.2	44.2	40.7
87.5°	14.1	14.1	8.8	5.3	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)