

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: P475265

Luminaire Tested: **22CZ2-20VHE-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475265
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20VHE-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: 1934.3 lumens
Efficiency: N/A
Efficacy: 140.2 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

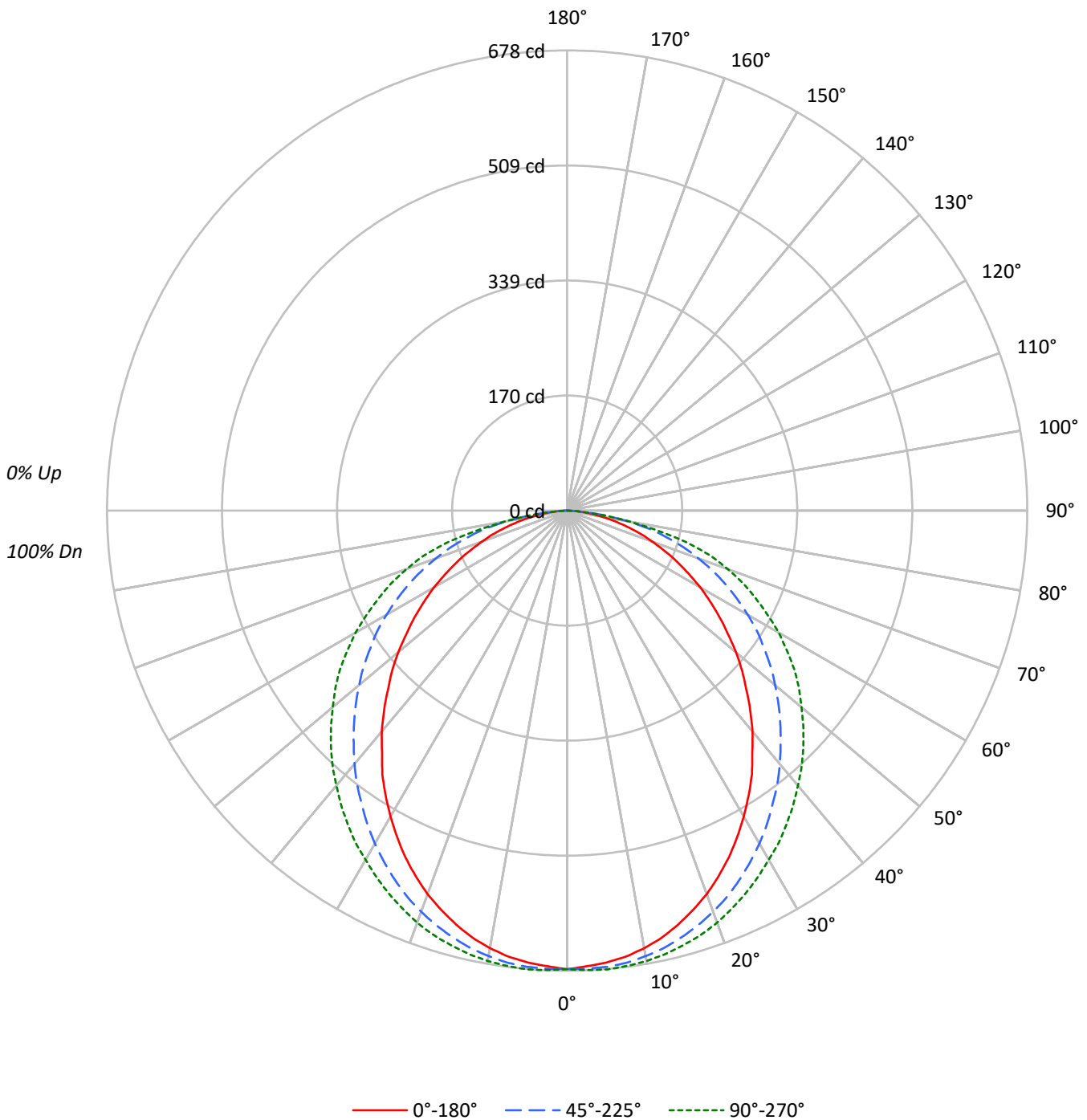
Input Watts (W): 13.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1818	1818	1818
5°	1805	1823	1833
10°	1789	1821	1841
15°	1760	1813	1846
20°	1722	1801	1851
25°	1674	1783	1848
30°	1617	1760	1846
35°	1559	1734	1852
40°	1493	1713	1858
45°	1422	1691	1873
50°	1361	1675	1887
55°	1288	1662	1917
60°	1220	1655	1937
65°	1140	1642	1952
70°	1047	1618	1979
75°	945	1575	1909
80°	810	1395	1437
85°	651	821	651



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.1	3.3
10°-20°	183.1	9.5
20°-30°	275.1	14.2
30°-40°	328.1	17.0
40°-50°	339.2	17.5
50°-60°	311.8	16.1
60°-70°	248.3	12.8
70°-80°	151.7	7.8
80°-90°	33.0	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°	522.3	27.0
0°-40°	850.3	44.0
0°-60°	1501.4	77.6
0°-90°	1934.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1934.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	676	676	676	676	676	
5°	668	670	675	678	678	63
15°	632	639	651	660	663	178
25°	564	577	600	617	622	259
35°	475	495	528	556	564	296
45°	374	400	444	480	492	289
55°	274	305	354	395	409	246
65°	179	209	258	294	307	177
75°	91	118	152	178	184	97
85°	21	26	27	23	21	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	675.6	675.6	675.6	675.6	675.6
2.5°	672.0	672.9	675.6	677.6	677.6
5°	668.3	670.2	674.7	677.6	678.5
7.5°	662.8	665.6	672.0	675.6	676.7
10°	654.6	658.3	666.5	672.0	673.8
12.5°	644.5	649.9	660.1	667.4	669.2
15°	631.7	639.0	650.9	660.1	662.8
17.5°	616.9	626.1	640.8	651.9	655.5
20°	601.3	610.5	628.9	641.7	646.3
22.5°	583.0	594.9	616.0	630.7	634.4
25°	563.7	577.4	600.4	616.9	622.4
27.5°	542.6	559.1	583.9	604.1	608.7
30°	520.5	538.0	566.4	588.5	594.0
32.5°	497.6	517.8	548.1	572.8	580.3
35°	474.6	494.8	527.8	555.5	563.7
37.5°	448.0	471.9	508.6	537.1	547.1
40°	425.0	448.0	487.5	518.7	528.9
42.5°	399.3	424.1	465.5	499.4	511.4
45°	373.6	400.2	444.3	480.2	492.1
47.5°	349.8	376.4	422.3	460.0	471.9
50°	325.0	352.5	400.2	438.9	450.7
52.5°	298.4	328.6	378.2	416.8	430.6
55°	274.5	304.8	354.3	394.8	408.6
57.5°	249.7	280.9	332.4	370.9	383.8
60°	226.7	257.0	307.6	345.2	359.9
62.5°	202.0	233.1	282.7	319.5	333.3
65°	179.0	209.4	257.9	293.8	306.6
67.5°	156.0	186.4	232.2	266.3	280.9
70°	133.1	163.5	205.6	238.7	251.5
72.5°	113.0	139.6	179.9	210.3	222.2
75°	90.9	117.5	151.5	178.1	183.6
77.5°	70.7	94.6	123.0	134.9	136.8
80°	52.3	70.7	90.0	92.7	92.7
82.5°	34.8	48.7	56.0	56.9	56.0
85°	21.1	25.7	26.6	23.0	21.1
87.5°	7.3	7.3	4.6	2.7	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)