

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: P475250

Luminaire Tested: **22CZ2-95VHE-SQR-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475250
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-95VHE-SQR-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8711.3 lumens
Efficiency: N/A
Efficacy: 122.3 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

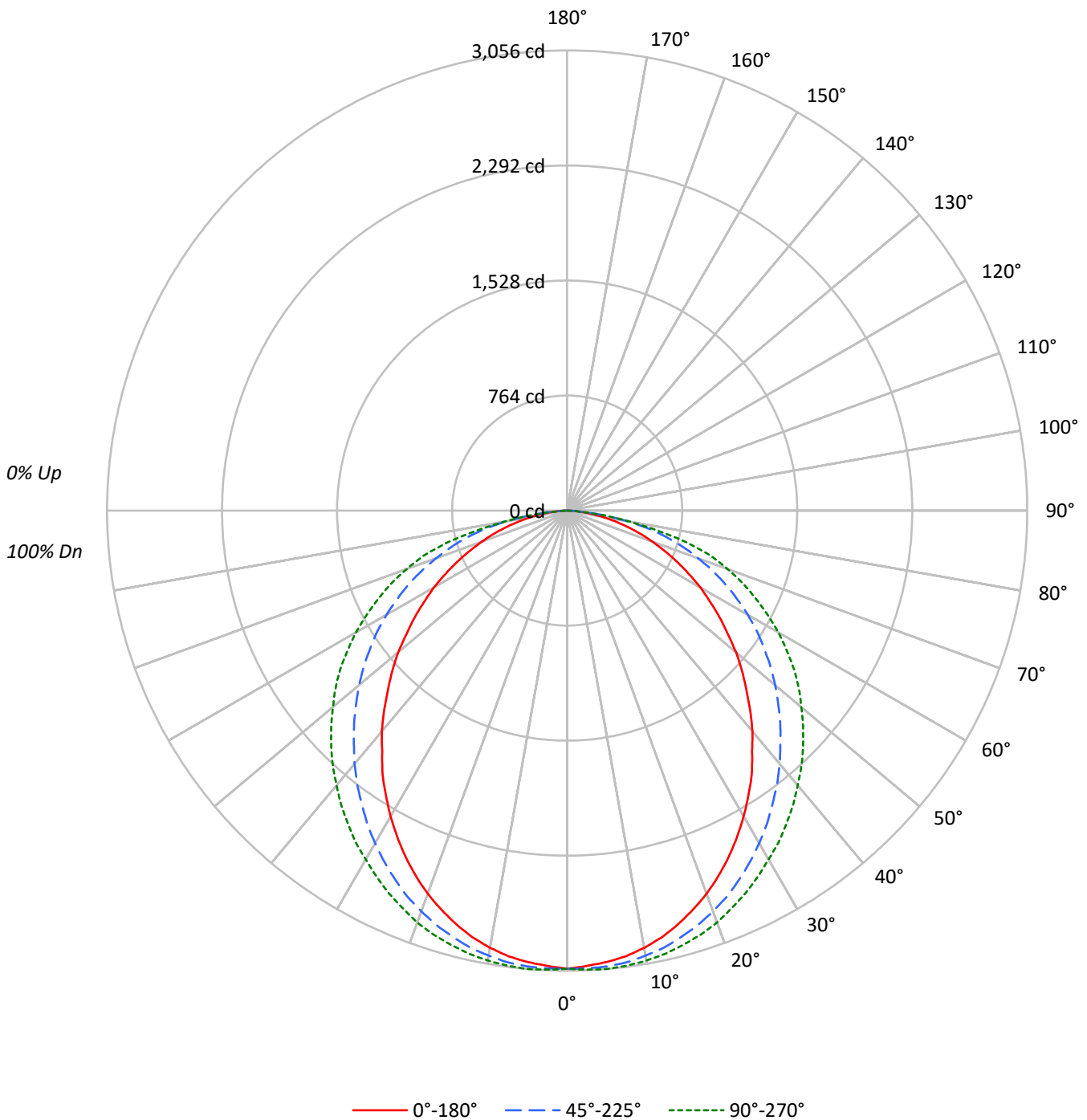
Input Watts (W): 71.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8188	8188	8188
5°	8131	8209	8254
10°	8056	8202	8292
15°	7925	8166	8316
20°	7755	8111	8335
25°	7538	8028	8323
30°	7284	7927	8312
35°	7022	7809	8340
40°	6724	7713	8367
45°	6404	7615	8434
50°	6127	7546	8498
55°	5800	7487	8633
60°	5496	7456	8724
65°	5133	7396	8792
70°	4715	7286	8913
75°	4258	7092	8595
80°	3651	6282	6473
85°	2939	3702	2939



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.5	3.3
10°-20°	824.8	9.5
20°-30°	1238.9	14.2
30°-40°	1477.5	17.0
40°-50°	1527.6	17.5
50°-60°	1404.4	16.1
60°-70°	1118.0	12.8
70°-80°	683.1	7.8
80°-90°	148.4	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°	2352.2	27.0
0°-40°	3829.7	44.0
0°-60°	6761.7	77.6
0°-90°	8711.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8711.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3043	3043	3043	3043	3043	
5°	3010	3018	3039	3052	3056	285
15°	2845	2878	2931	2973	2985	801
25°	2539	2600	2704	2778	2803	1168
35°	2138	2228	2377	2502	2539	1334
45°	1683	1803	2001	2163	2216	1301
55°	1236	1372	1596	1778	1840	1106
65°	806	943	1162	1323	1381	799
75°	410	529	682	802	827	436
85°	95	116	120	103	95	110
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3042.9	3042.9	3042.9	3042.9	3042.9
2.5°	3026.4	3030.5	3042.9	3051.6	3051.6
5°	3009.9	3018.2	3038.8	3051.6	3055.7
7.5°	2985.2	2997.6	3026.4	3042.9	3047.5
10°	2948.2	2964.7	3001.7	3026.4	3034.7
12.5°	2902.4	2927.1	2972.9	3005.8	3014.1
15°	2844.8	2877.7	2931.3	2972.9	2985.2
17.5°	2778.4	2819.6	2886.0	2935.8	2952.3
20°	2708.0	2749.6	2832.4	2890.1	2910.7
22.5°	2625.6	2679.2	2774.3	2840.7	2857.1
25°	2538.7	2600.5	2703.9	2778.4	2803.2
27.5°	2443.6	2518.1	2629.8	2720.8	2741.4
30°	2344.3	2423.0	2551.1	2650.3	2675.1
32.5°	2240.9	2331.9	2468.3	2579.9	2613.3
35°	2137.5	2228.5	2377.2	2501.7	2538.7
37.5°	2017.6	2125.1	2290.7	2418.8	2464.1
40°	1914.2	2017.6	2195.6	2336.0	2381.8
42.5°	1798.5	1910.1	2096.3	2249.1	2303.1
45°	1682.7	1802.6	2001.1	2162.6	2216.2
47.5°	1575.2	1695.1	1901.9	2071.6	2125.1
50°	1463.6	1587.6	1802.6	1976.4	2030.0
52.5°	1343.7	1480.0	1703.3	1877.2	1939.4
55°	1236.2	1372.5	1595.8	1777.9	1840.1
57.5°	1124.6	1265.0	1497.0	1670.4	1728.5
60°	1021.2	1157.5	1385.3	1554.6	1621.0
62.5°	909.5	1050.0	1273.2	1438.9	1501.1
65°	806.1	942.9	1161.6	1323.1	1380.8
67.5°	702.7	839.5	1045.9	1199.1	1265.0
70°	599.3	736.1	926.0	1075.1	1132.8
72.5°	508.7	628.6	810.2	947.0	1000.6
75°	409.5	529.3	682.1	802.0	826.7
77.5°	318.4	425.9	554.0	607.6	616.3
80°	235.6	318.4	405.4	417.7	417.7
82.5°	156.9	219.1	252.1	256.2	252.1
85°	95.2	115.7	119.9	103.4	95.2
87.5°	32.9	32.9	20.6	12.4	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)