

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: P474644

Luminaire Tested: **24CZ2-100VHE-SQR-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474644
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-100VHE-SQR-UNV-L835-CD1-U
Description: 2'X4' 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: 9508.1 lumens
Efficiency: N/A
Efficacy: 133.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

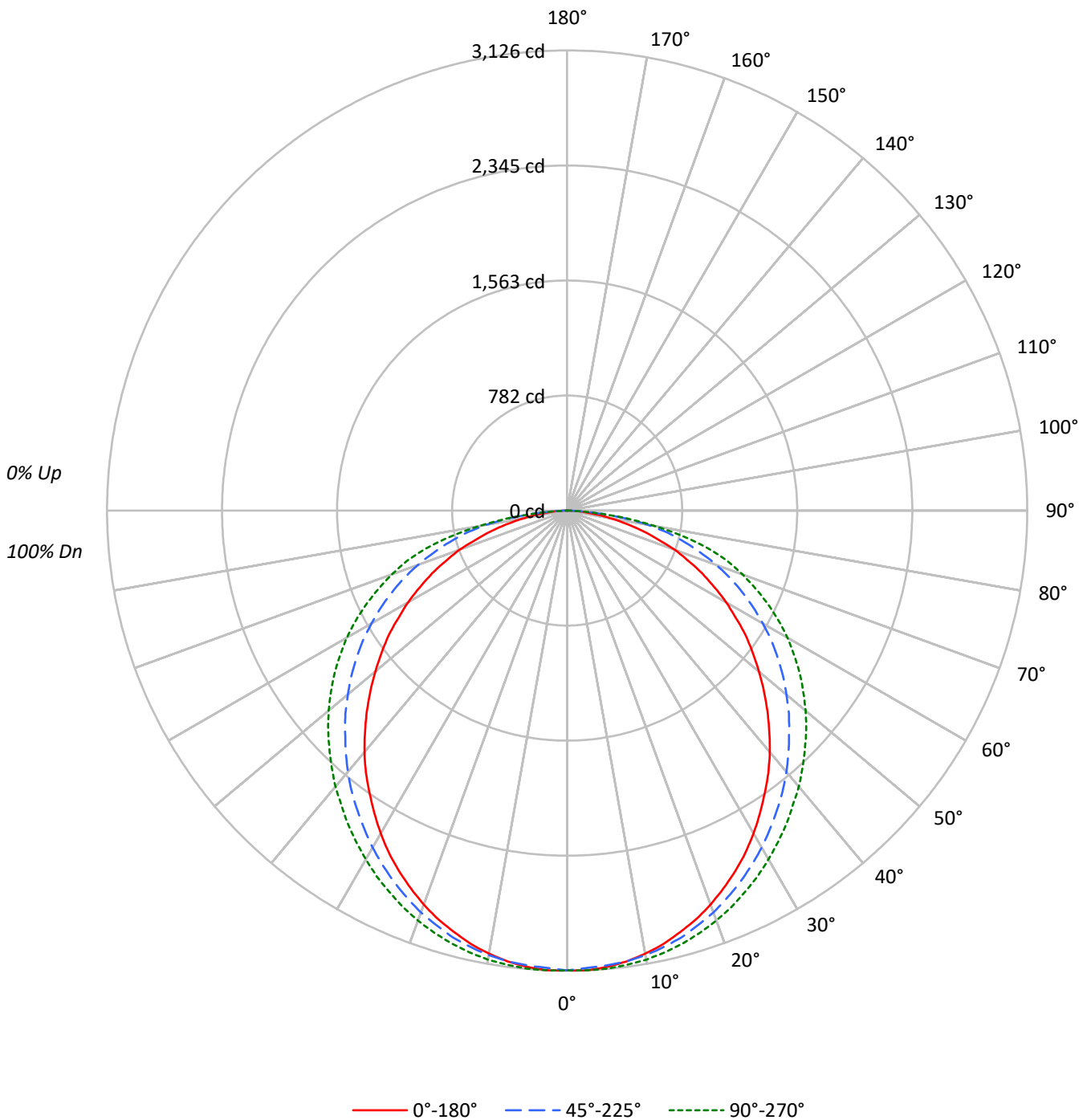
Input Watts (W): 71.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90		92	90	87		89	87	84	82
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	59	53	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	43	38		49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34		46	39	34		44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	25		35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8404	8404	8404
5°	8404	8379	8436
10°	8351	8380	8463
15°	8260	8362	8476
20°	8156	8322	8487
25°	8024	8263	8488
30°	7868	8213	8501
35°	7690	8164	8533
40°	7524	8137	8602
45°	7319	8116	8694
50°	7122	8140	8852
55°	6956	8196	9051
60°	6720	8257	9304
65°	6451	8357	9585
70°	6119	8474	9968
75°	5480	8592	10297
80°	4613	8616	9346
85°	3424	6518	6144



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.0	3.1
10°-20°	848.2	8.9
20°-30°	1284.0	13.5
30°-40°	1553.3	16.3
40°-50°	1639.6	17.2
50°-60°	1546.2	16.3
60°-70°	1274.7	13.4
70°-80°	836.2	8.8
80°-90°	229.9	2.4
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°	2428.2	25.5
0°-40°	3981.5	41.9
0°-60°	7167.3	75.4
0°-90°	9508.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9508.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3123	3123	3123	3123	3123	
5°	3111	3111	3102	3123	3123	295
15°	2965	2982	3002	3036	3043	836
25°	2702	2736	2783	2841	2859	1244
35°	2341	2402	2485	2570	2598	1465
45°	1923	2010	2133	2247	2285	1484
55°	1483	1587	1747	1878	1929	1321
65°	1013	1135	1312	1452	1505	1000
75°	527	662	826	957	990	557
85°	111	191	211	205	199	138
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3123.1	3123.1	3123.1	3123.1	3123.1
2.5°	3126.2	3123.1	3109.5	3127.7	3126.2
5°	3111.0	3111.0	3101.9	3123.1	3123.1
7.5°	3089.7	3091.2	3088.2	3112.5	3112.5
10°	3056.3	3062.4	3066.9	3094.3	3097.3
12.5°	3016.8	3027.4	3036.5	3070.0	3073.0
15°	2965.1	2981.9	3001.6	3036.5	3042.6
17.5°	2912.0	2931.7	2953.0	2998.6	3006.2
20°	2848.2	2871.0	2905.9	2951.5	2963.6
22.5°	2776.8	2808.7	2845.1	2899.8	2915.0
25°	2702.4	2735.8	2782.9	2840.6	2858.8
27.5°	2621.8	2661.3	2714.5	2781.3	2801.1
30°	2532.2	2577.8	2643.1	2714.5	2735.8
32.5°	2438.0	2491.2	2564.1	2643.1	2667.4
35°	2340.8	2401.6	2485.1	2570.2	2597.5
37.5°	2245.1	2305.9	2404.6	2494.2	2520.1
40°	2141.8	2208.7	2316.5	2412.2	2448.7
42.5°	2032.5	2111.4	2225.4	2331.7	2366.6
45°	1923.1	2009.7	2132.7	2246.6	2284.6
47.5°	1812.2	1907.9	2043.1	2158.5	2202.6
50°	1701.3	1803.1	1944.4	2068.9	2114.5
52.5°	1588.9	1695.2	1848.7	1980.8	2021.8
55°	1482.6	1587.4	1746.9	1877.5	1929.2
57.5°	1359.5	1478.0	1646.6	1778.8	1828.9
60°	1248.6	1364.1	1534.2	1674.0	1728.7
62.5°	1128.6	1247.1	1426.4	1566.1	1619.3
65°	1013.2	1134.7	1312.4	1452.2	1505.4
67.5°	888.6	1016.2	1198.5	1333.7	1385.4
70°	777.7	897.7	1077.0	1215.2	1266.9
72.5°	642.5	779.3	950.9	1087.6	1143.8
75°	527.1	662.3	826.4	957.0	990.4
77.5°	405.6	540.8	703.3	788.4	811.2
80°	297.7	425.3	556.0	601.5	603.1
82.5°	200.5	312.9	387.4	410.1	407.1
85°	110.9	191.4	211.1	205.1	199.0
87.5°	45.6	63.8	51.6	36.5	28.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)