

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: P474599

Luminaire Tested: **24CZ2-125VHE-SQR-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474599
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-125VHE-SQR-UNV-L830-CD1-U
Description: 2'X4' 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: 11406.9 lumens
Efficiency: N/A
Efficacy: 129.9 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

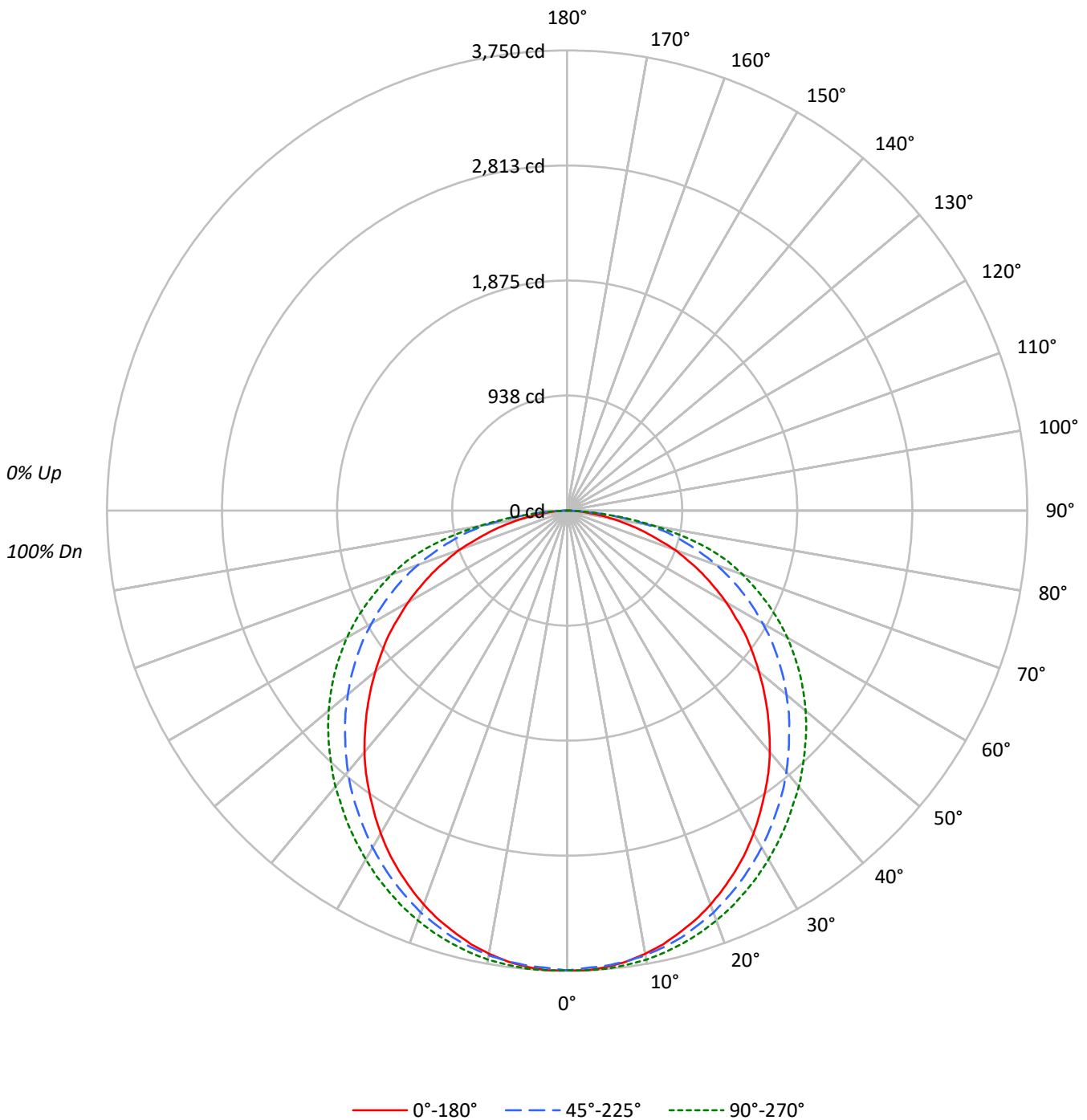
Input Watts (W): 87.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	10083	10083	10083
5°	10082	10052	10121
10°	10019	10054	10153
15°	9910	10032	10169
20°	9785	9983	10182
25°	9626	9913	10183
30°	9440	9853	10198
35°	9225	9794	10237
40°	9026	9762	10320
45°	8780	9737	10430
50°	8545	9765	10620
55°	8344	9832	10858
60°	8062	9906	11162
65°	7740	10025	11500
70°	7342	10166	11958
75°	6575	10308	12354
80°	5535	10336	11212
85°	4106	7821	7370



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	355.1	3.1
10°-20°	1017.6	8.9
20°-30°	1540.4	13.5
30°-40°	1863.5	16.3
40°-50°	1967.0	17.2
50°-60°	1854.9	16.3
60°-70°	1529.3	13.4
70°-80°	1003.2	8.8
80°-90°	275.8	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°	2913.1	25.5
0°-40°	4776.6	41.9
0°-60°	8598.5	75.4
0°-90°	11406.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11406.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3747	3747	3747	3747	3747	
5°	3732	3732	3721	3747	3747	354
15°	3557	3577	3601	3643	3650	1004
25°	3242	3282	3339	3408	3430	1493
35°	2808	2881	2981	3083	3116	1758
45°	2307	2411	2559	2695	2741	1780
55°	1779	1904	2096	2252	2314	1584
65°	1216	1361	1574	1742	1806	1200
75°	632	795	991	1148	1188	668
85°	133	230	253	246	239	165
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3746.8	3746.8	3746.8	3746.8	3746.8
2.5°	3750.4	3746.8	3730.4	3752.3	3750.4
5°	3732.2	3732.2	3721.3	3746.8	3746.8
7.5°	3706.7	3708.5	3704.9	3734.0	3734.0
10°	3666.6	3673.9	3679.4	3712.2	3715.8
12.5°	3619.2	3632.0	3642.9	3683.0	3686.7
15°	3557.3	3577.3	3601.0	3642.9	3650.2
17.5°	3493.5	3517.2	3542.7	3597.4	3606.5
20°	3416.9	3444.3	3486.2	3540.9	3555.4
22.5°	3331.3	3369.6	3413.3	3478.9	3497.1
25°	3242.0	3282.1	3338.6	3407.8	3429.7
27.5°	3145.4	3192.8	3256.6	3336.8	3360.4
30°	3037.9	3092.6	3170.9	3256.6	3282.1
32.5°	2924.9	2988.7	3076.2	3170.9	3200.1
35°	2808.3	2881.2	2981.4	3083.4	3116.2
37.5°	2693.5	2766.4	2884.8	2992.3	3023.3
40°	2569.5	2649.7	2779.1	2893.9	2937.7
42.5°	2438.3	2533.1	2669.8	2797.3	2839.2
45°	2307.1	2411.0	2558.6	2695.3	2740.8
47.5°	2174.1	2288.9	2451.1	2589.6	2642.4
50°	2041.1	2163.2	2332.6	2482.1	2536.7
52.5°	1906.2	2033.8	2217.8	2376.4	2425.6
55°	1778.6	1904.4	2095.7	2252.4	2314.4
57.5°	1631.0	1773.2	1975.4	2134.0	2194.1
60°	1498.0	1636.5	1840.6	2008.2	2073.9
62.5°	1354.0	1496.2	1711.2	1878.9	1942.6
65°	1215.5	1361.3	1574.5	1742.2	1806.0
67.5°	1066.1	1219.2	1437.8	1600.0	1662.0
70°	933.1	1077.0	1292.1	1457.9	1519.9
72.5°	770.9	934.9	1140.8	1304.8	1372.2
75°	632.4	794.6	991.4	1148.1	1188.2
77.5°	486.6	648.8	843.8	945.8	973.1
80°	357.2	510.3	667.0	721.7	723.5
82.5°	240.6	375.4	464.7	492.0	488.4
85°	133.0	229.6	253.3	246.0	238.7
87.5°	54.7	76.5	62.0	43.7	34.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)