

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: P474649

Luminaire Tested: **24CZ2-125VHE-SQR-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474649
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-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: 11820.6 lumens
Efficiency: N/A
Efficacy: 134.6 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

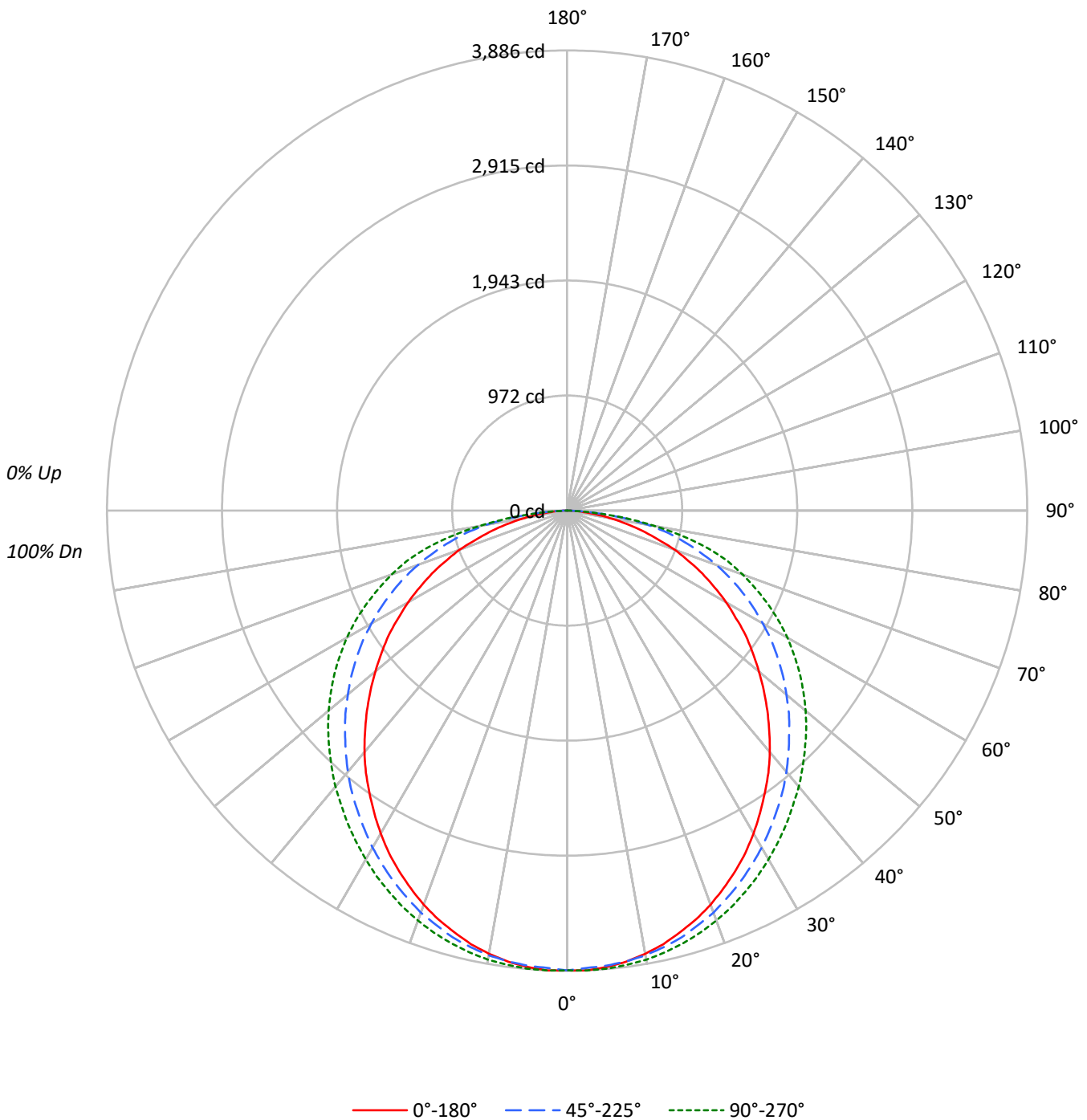
Input Watts (W): 87.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10448	10448	10448
5°	10447	10417	10488
10°	10382	10418	10522
15°	10270	10396	10538
20°	10140	10345	10551
25°	9975	10272	10553
30°	9782	10210	10568
35°	9560	10149	10609
40°	9354	10117	10694
45°	9098	10090	10809
50°	8855	10119	11005
55°	8647	10189	11252
60°	8354	10265	11566
65°	8020	10389	11917
70°	7607	10534	12392
75°	6813	10681	12802
80°	5735	10711	11618
85°	4258	8105	7639



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	368.0	3.1
10°-20°	1054.5	8.9
20°-30°	1596.3	13.5
30°-40°	1931.1	16.3
40°-50°	2038.4	17.2
50°-60°	1922.2	16.3
60°-70°	1584.7	13.4
70°-80°	1039.6	8.8
80°-90°	285.8	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°	3018.8	25.5
0°-40°	4949.8	41.9
0°-60°	8910.4	75.4
0°-90°	11820.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11820.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3883	3883	3883	3883	3883	
5°	3868	3868	3856	3883	3883	367
15°	3686	3707	3732	3775	3783	1040
25°	3360	3401	3460	3531	3554	1547
35°	2910	2986	3090	3195	3229	1822
45°	2391	2498	2651	2793	2840	1845
55°	1843	1973	2172	2334	2398	1642
65°	1260	1411	1632	1805	1872	1244
75°	655	823	1027	1190	1231	692
85°	138	238	262	255	247	171
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3882.7	3882.7	3882.7	3882.7	3882.7
2.5°	3886.5	3882.7	3865.7	3888.3	3886.5
5°	3867.6	3867.6	3856.2	3882.7	3882.7
7.5°	3841.1	3843.0	3839.2	3869.5	3869.5
10°	3799.6	3807.1	3812.8	3846.8	3850.6
12.5°	3750.5	3763.7	3775.0	3816.6	3820.4
15°	3686.3	3707.1	3731.6	3775.0	3782.6
17.5°	3620.2	3644.7	3671.2	3727.8	3737.3
20°	3540.9	3569.2	3612.6	3669.3	3684.4
22.5°	3452.1	3491.8	3537.1	3605.1	3624.0
25°	3359.6	3401.1	3459.7	3531.4	3554.1
27.5°	3259.5	3308.6	3374.7	3457.8	3482.3
30°	3148.1	3204.7	3285.9	3374.7	3401.1
32.5°	3031.0	3097.1	3187.7	3285.9	3316.1
35°	2910.1	2985.7	3089.5	3195.3	3229.3
37.5°	2791.2	2866.7	2989.4	3100.9	3133.0
40°	2662.7	2745.8	2879.9	2998.9	3044.2
42.5°	2526.8	2625.0	2766.6	2898.8	2942.2
45°	2390.8	2498.4	2651.4	2793.0	2840.3
47.5°	2252.9	2371.9	2540.0	2683.5	2738.3
50°	2115.1	2241.6	2417.2	2572.1	2628.7
52.5°	1975.3	2107.5	2298.3	2462.6	2513.5
55°	1843.1	1973.4	2171.7	2334.1	2398.4
57.5°	1690.2	1837.5	2047.1	2211.4	2273.7
60°	1552.3	1695.8	1907.3	2081.1	2149.1
62.5°	1403.1	1550.4	1773.3	1947.0	2013.1
65°	1259.6	1410.7	1631.6	1805.4	1871.5
67.5°	1104.8	1263.4	1490.0	1658.1	1722.3
70°	966.9	1116.1	1338.9	1510.8	1575.0
72.5°	798.8	968.8	1182.2	1352.1	1422.0
75°	655.3	823.4	1027.3	1189.7	1231.3
77.5°	504.2	672.3	874.4	980.1	1008.4
80°	370.1	528.8	691.2	747.8	749.7
82.5°	249.3	389.0	481.6	509.9	506.1
85°	137.9	237.9	262.5	254.9	247.4
87.5°	56.7	79.3	64.2	45.3	35.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)