

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: P473849

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

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473849
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-125VHE-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12441.8 lumens
Efficiency: N/A
Efficacy: 141.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

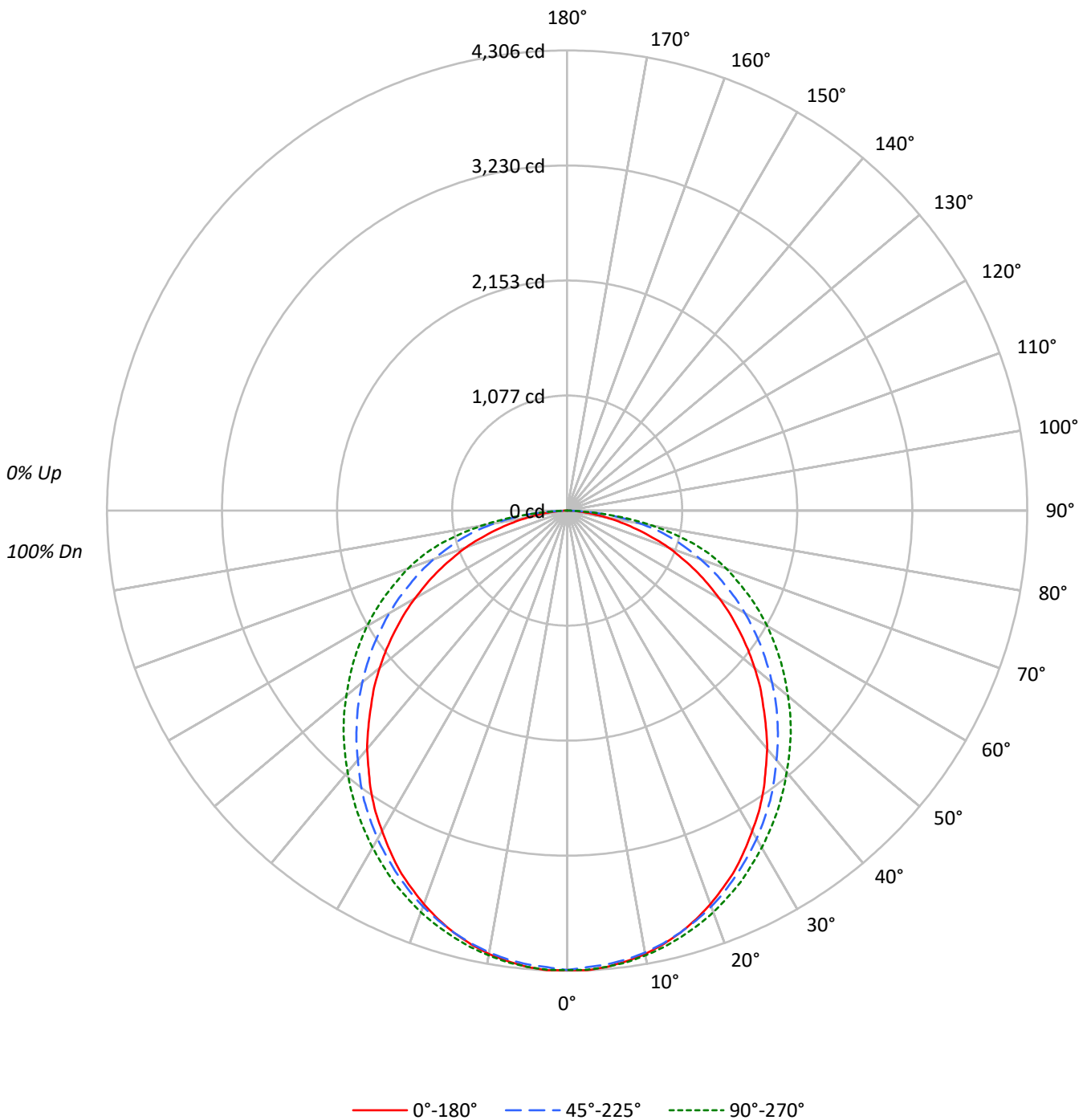
Input Watts (W): 87.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	88	81	75	84	78	74	81	76	72	78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5785	5785	5785
5°	5788	5758	5788
10°	5756	5737	5775
15°	5698	5695	5751
20°	5612	5647	5727
25°	5514	5577	5699
30°	5381	5512	5659
35°	5259	5441	5636
40°	5116	5352	5613
45°	4941	5297	5630
50°	4792	5238	5646
55°	4616	5201	5710
60°	4425	5176	5815
65°	4217	5158	5964
70°	3969	5211	6239
75°	3490	5319	6489
80°	2913	5357	6261
85°	2079	4593	4654



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	406.4	3.3
10°-20°	1157.7	9.3
20°-30°	1736.7	14.0
30°-40°	2073.5	16.7
40°-50°	2147.7	17.3
50°-60°	1977.2	15.9
60°-70°	1594.9	12.8
70°-80°	1042.1	8.4
80°-90°	305.5	2.5
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°	3300.8	26.5
0°-40°	5374.3	43.2
0°-60°	9499.2	76.3
0°-90°	12441.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12441.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4299	4299	4299	4299	4299	
5°	4285	4281	4263	4287	4285	407
15°	4090	4090	4088	4129	4129	1153
25°	3714	3722	3757	3825	3839	1708
35°	3202	3230	3312	3403	3431	2000
45°	2597	2661	2784	2908	2959	2007
55°	1968	2052	2217	2380	2434	1761
65°	1325	1415	1620	1805	1873	1310
75°	671	798	1023	1200	1248	717
85°	135	233	298	316	302	167
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4299.4	4299.4	4299.4	4299.4	4299.4
2.5°	4305.5	4299.4	4277.3	4303.4	4301.4
5°	4285.4	4281.3	4263.2	4287.4	4285.4
7.5°	4253.2	4251.2	4237.1	4263.2	4263.2
10°	4213.0	4209.0	4198.9	4229.1	4227.1
12.5°	4156.7	4154.7	4148.7	4184.9	4182.8
15°	4090.4	4090.4	4088.4	4128.6	4128.6
17.5°	4010.0	4012.0	4020.0	4066.3	4068.3
20°	3919.5	3927.6	3943.7	3995.9	3999.9
22.5°	3817.0	3833.1	3855.2	3913.5	3919.5
25°	3714.5	3722.5	3756.7	3825.1	3839.1
27.5°	3589.9	3610.0	3654.2	3724.6	3738.6
30°	3463.3	3491.4	3547.7	3620.0	3642.1
32.5°	3338.6	3362.8	3429.1	3511.5	3537.6
35°	3202.0	3230.1	3312.5	3403.0	3431.1
37.5°	3051.2	3095.4	3181.9	3286.4	3316.5
40°	2912.5	2952.7	3047.2	3163.8	3195.9
42.5°	2753.7	2804.0	2918.5	3037.1	3077.3
45°	2596.9	2661.3	2783.9	2908.5	2958.7
47.5°	2450.2	2502.5	2647.2	2787.9	2832.1
50°	2289.4	2349.7	2502.5	2651.2	2697.4
52.5°	2130.6	2203.0	2357.7	2514.5	2564.8
55°	1967.8	2052.2	2217.0	2379.9	2434.1
57.5°	1811.0	1895.4	2066.3	2239.2	2295.4
60°	1644.2	1734.6	1923.6	2090.4	2160.8
62.5°	1483.4	1573.8	1772.8	1953.7	2020.1
65°	1324.6	1415.1	1620.1	1805.0	1873.3
67.5°	1159.8	1258.3	1477.4	1656.3	1722.6
70°	1009.0	1103.5	1324.6	1515.6	1585.9
72.5°	836.2	948.7	1173.8	1362.8	1429.1
75°	671.3	798.0	1023.1	1200.0	1248.2
77.5°	518.6	645.2	870.3	1003.0	1033.1
80°	375.9	504.5	691.4	783.9	808.0
82.5°	243.2	375.9	500.5	562.8	570.8
85°	134.7	233.2	297.5	315.6	301.5
87.5°	48.2	88.4	86.4	70.4	56.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)