

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: P474817

Luminaire Tested: **22CZ2-105VHE-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474817
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-105VHE-UNV-L835-CD1-U
Description: 2'X2' 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: 10530.6 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

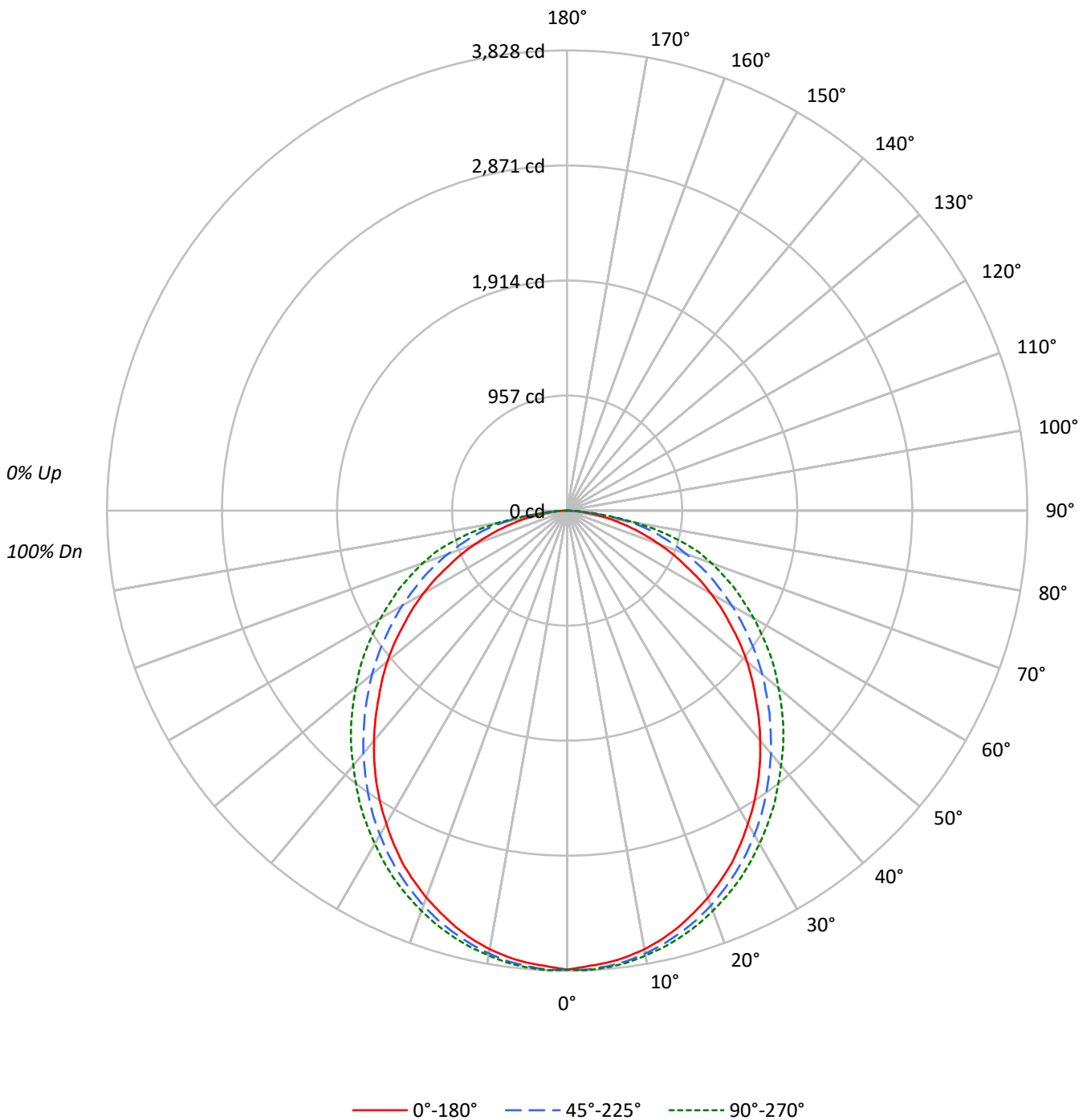
Input Watts (W): 79.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10277	10277	10277
5°	10202	10280	10304
10°	10125	10222	10271
15°	9988	10131	10224
20°	9808	10012	10146
25°	9614	9859	10064
30°	9349	9681	9944
35°	9088	9475	9848
40°	8779	9264	9725
45°	8444	9054	9680
50°	8171	8870	9606
55°	7789	8677	9627
60°	7438	8528	9654
65°	6915	8417	9806
70°	6391	8300	10050
75°	5715	8261	10111
80°	4793	7829	8828
85°	3711	5360	5017



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.8	3.4
10°-20°	1024.2	9.7
20°-30°	1527.2	14.5
30°-40°	1802.8	17.1
40°-50°	1837.4	17.4
50°-60°	1657.0	15.7
60°-70°	1302.4	12.4
70°-80°	815.4	7.7
80°-90°	203.3	1.9
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°	2912.2	27.7
0°-40°	4715.0	44.8
0°-60°	8209.5	78.0
0°-90°	10530.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10530.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3819	3819	3819	3819	3819	
5°	3777	3786	3806	3814	3814	358
15°	3585	3601	3636	3663	3670	1010
25°	3238	3263	3320	3372	3389	1489
35°	2766	2802	2884	2964	2998	1729
45°	2219	2268	2379	2495	2544	1716
55°	1660	1711	1849	1992	2052	1490
65°	1086	1153	1322	1469	1540	1083
75°	550	632	794	937	972	584
85°	120	154	174	174	162	145
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3818.9	3818.9	3818.9	3818.9	3818.9
2.5°	3794.5	3803.4	3821.2	3827.8	3827.8
5°	3776.6	3785.6	3805.6	3814.5	3814.5
7.5°	3747.7	3756.6	3781.1	3792.2	3794.5
10°	3705.4	3716.6	3741.0	3758.8	3758.8
12.5°	3652.0	3663.2	3694.3	3716.6	3718.8
15°	3585.3	3600.8	3636.4	3663.2	3669.8
17.5°	3507.4	3531.8	3571.9	3605.3	3612.0
20°	3425.0	3449.5	3496.2	3534.1	3543.0
22.5°	3333.8	3356.0	3411.7	3458.4	3469.5
25°	3238.1	3262.6	3320.4	3371.6	3389.4
27.5°	3124.6	3153.5	3222.5	3280.4	3298.2
30°	3008.9	3044.5	3115.7	3180.2	3200.2
32.5°	2890.9	2924.3	3004.4	3073.4	3100.1
35°	2766.3	2801.9	2884.2	2964.3	2997.7
37.5°	2635.0	2670.6	2759.6	2850.8	2882.0
40°	2499.2	2541.5	2637.2	2735.1	2768.5
42.5°	2361.2	2405.8	2505.9	2614.9	2659.5
45°	2218.8	2267.8	2379.0	2494.8	2543.7
47.5°	2089.7	2129.8	2245.5	2372.4	2419.1
50°	1951.8	1989.6	2118.7	2245.5	2294.5
52.5°	1811.5	1847.2	1985.1	2118.7	2178.8
55°	1660.2	1711.4	1849.4	1991.8	2051.9
57.5°	1526.7	1573.4	1715.8	1860.5	1918.4
60°	1382.0	1431.0	1584.5	1731.4	1793.7
62.5°	1237.4	1290.8	1446.6	1604.6	1662.4
65°	1086.0	1152.8	1321.9	1468.8	1540.0
67.5°	957.0	1021.5	1188.4	1342.0	1404.3
70°	812.3	888.0	1054.9	1210.7	1277.4
72.5°	676.5	752.2	923.6	1079.4	1146.1
75°	549.7	632.0	794.5	936.9	972.5
77.5°	427.3	505.2	667.6	750.0	787.8
80°	309.3	385.0	505.2	560.8	569.7
82.5°	209.2	273.7	342.7	358.3	349.4
85°	120.2	153.6	173.6	173.6	162.5
87.5°	49.0	49.0	42.3	26.7	15.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)