

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: P474251

Luminaire Tested: **24CZ2-135VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474251
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-135VHE-RDP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9098.7 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

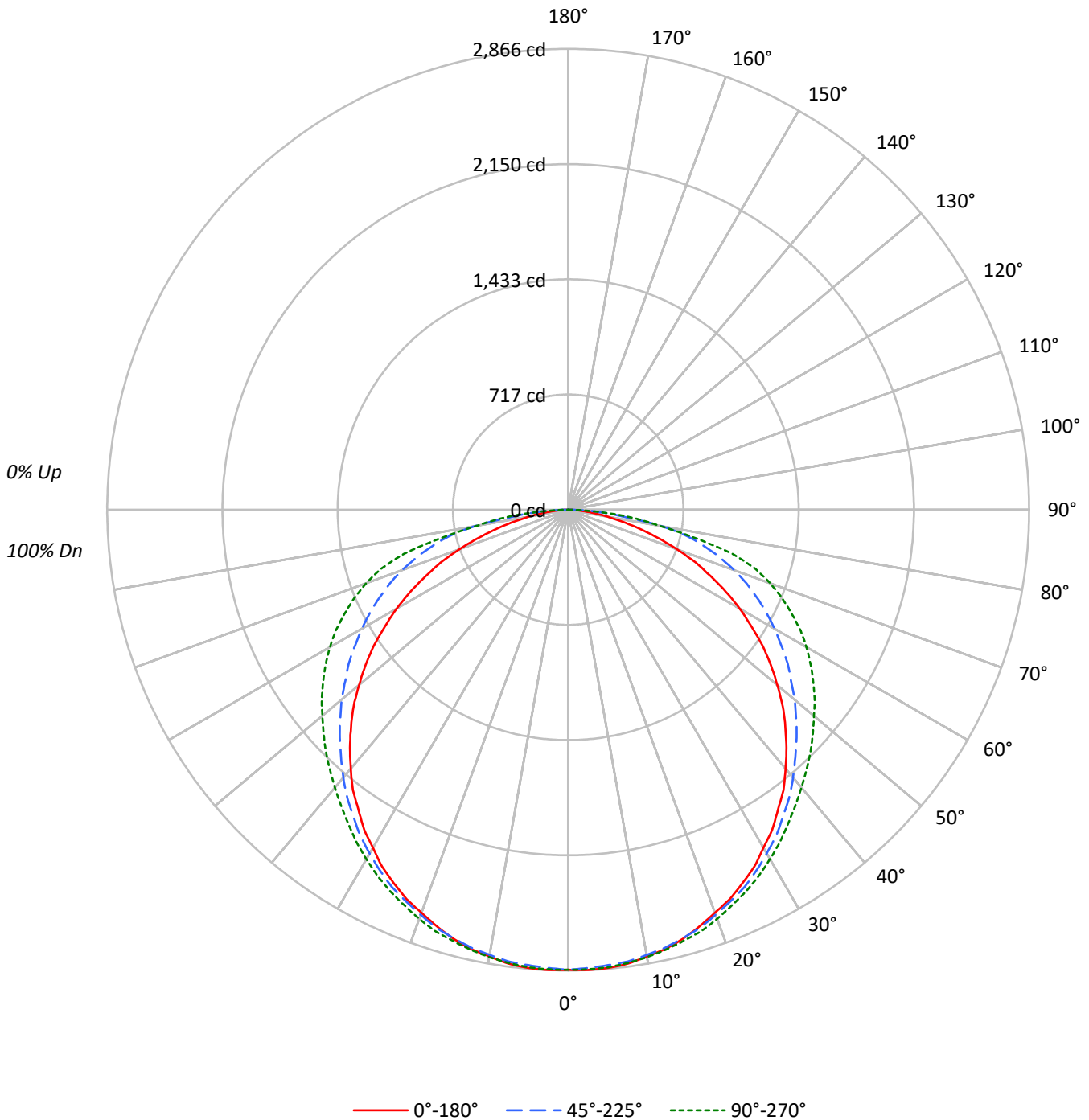
Input Watts (W): 96.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3850	3850	3850
5°	3865	3840	3859
10°	3854	3842	3860
15°	3847	3841	3866
20°	3819	3838	3877
25°	3806	3846	3886
30°	3772	3835	3898
35°	3736	3825	3914
40°	3694	3820	3963
45°	3633	3822	4053
50°	3552	3845	4176
55°	3461	3906	4362
60°	3316	3983	4603
65°	3104	4123	4885
70°	2823	4315	5255
75°	2392	4551	5491
80°	1889	4580	4440
85°	1394	3486	3904



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.4	3.0
10°-20°	781.2	8.6
20°-30°	1194.5	13.1
30°-40°	1460.2	16.0
40°-50°	1556.4	17.1
50°-60°	1488.1	16.4
60°-70°	1260.6	13.9
70°-80°	847.2	9.3
80°-90°	239.1	2.6
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°	2247.1	24.7
0°-40°	3707.4	40.7
0°-60°	6751.9	74.2
0°-90°	9098.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9098.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2861	2861	2861	2861	2861	
5°	2861	2857	2843	2857	2857	272
15°	2762	2762	2758	2780	2776	779
25°	2563	2572	2590	2613	2618	1181
35°	2274	2292	2329	2374	2383	1425
45°	1909	1941	2008	2094	2130	1473
55°	1476	1530	1665	1796	1860	1314
65°	975	1074	1295	1467	1534	968
75°	460	627	876	1025	1056	493
85°	90	185	226	244	253	112
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2861.4	2861.4	2861.4	2861.4	2861.4
2.5°	2865.9	2865.9	2852.4	2861.4	2861.4
5°	2861.4	2856.9	2843.4	2856.9	2856.9
7.5°	2847.9	2843.4	2834.3	2847.9	2843.4
10°	2820.8	2820.8	2811.8	2825.3	2825.3
12.5°	2798.2	2793.7	2789.2	2807.2	2802.7
15°	2762.1	2762.1	2757.6	2780.2	2775.6
17.5°	2716.9	2721.5	2726.0	2744.0	2748.5
20°	2667.3	2676.3	2680.8	2707.9	2707.9
22.5°	2622.1	2626.6	2635.7	2662.8	2662.8
25°	2563.4	2572.4	2590.5	2613.1	2617.6
27.5°	2504.7	2509.2	2531.8	2563.4	2567.9
30°	2427.9	2441.5	2468.6	2504.7	2509.2
32.5°	2360.2	2373.8	2405.4	2441.5	2450.5
35°	2274.4	2292.5	2328.6	2373.8	2382.8
37.5°	2197.7	2211.2	2256.4	2306.0	2319.6
40°	2103.3	2129.9	2175.1	2233.8	2256.4
42.5°	2008.5	2035.6	2089.7	2166.1	2193.1
45°	1909.1	1940.7	2008.5	2094.3	2129.9
47.5°	1809.8	1845.9	1922.7	2022.0	2062.7
50°	1696.9	1742.1	1836.9	1949.8	1994.9
52.5°	1588.5	1642.7	1746.6	1873.0	1931.7
55°	1475.6	1529.8	1665.3	1796.2	1859.5
57.5°	1349.2	1421.5	1570.5	1719.5	1787.2
60°	1232.3	1299.5	1480.2	1642.7	1710.4
62.5°	1105.8	1196.1	1389.9	1561.4	1629.2
65°	974.9	1074.2	1295.0	1466.6	1534.3
67.5°	857.5	965.9	1200.7	1371.8	1439.5
70°	717.5	853.0	1096.8	1267.9	1335.7
72.5°	586.6	735.6	988.4	1155.5	1218.7
75°	460.1	627.2	875.5	1024.6	1056.2
77.5°	343.2	518.8	758.1	821.4	798.8
80°	243.8	415.4	591.1	559.5	573.0
82.5°	158.0	316.1	365.8	415.4	428.5
85°	90.3	185.1	225.8	243.8	252.9
87.5°	40.6	67.7	90.3	90.3	85.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)