

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: P473843

Luminaire Tested: **24CZ2-95VHE-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473843
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-95VHE-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

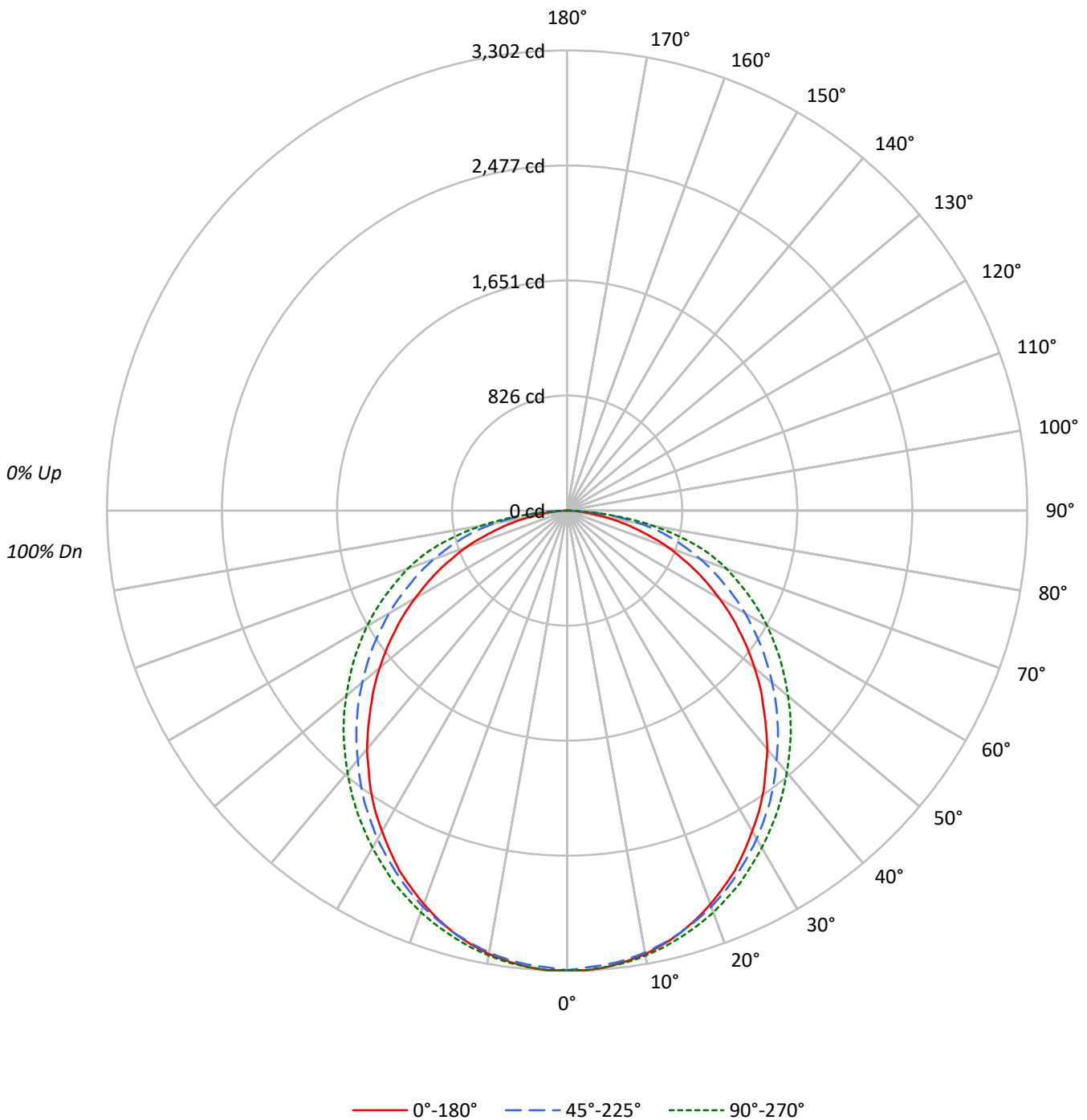
Lumens per Lamp: N/A
Luminaire Lumens: 9542.9 lumens
Efficiency: N/A
Efficacy: 141.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 67.6
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°	4437	4437	4437
5°	4439	4416	4439
10°	4415	4400	4430
15°	4370	4368	4411
20°	4305	4331	4393
25°	4230	4278	4372
30°	4127	4228	4340
35°	4034	4173	4323
40°	3924	4105	4305
45°	3790	4063	4318
50°	3676	4018	4331
55°	3540	3989	4380
60°	3394	3970	4460
65°	3235	3956	4574
70°	3044	3997	4785
75°	2677	4079	4977
80°	2234	4109	4802
85°	1595	3523	3571



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.7	3.3
10°-20°	887.9	9.3
20°-30°	1332.1	14.0
30°-40°	1590.4	16.7
40°-50°	1647.3	17.3
50°-60°	1516.5	15.9
60°-70°	1223.3	12.8
70°-80°	799.3	8.4
80°-90°	234.3	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°	2531.7	26.5
0°-40°	4122.1	43.2
0°-60°	7285.9	76.3
0°-90°	9542.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9542.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3298	3298	3298	3298	3298	
5°	3287	3284	3270	3288	3287	312
15°	3137	3137	3136	3167	3167	884
25°	2849	2855	2881	2934	2945	1310
35°	2456	2478	2541	2610	2632	1534
45°	1992	2041	2135	2231	2269	1540
55°	1509	1574	1700	1825	1867	1351
65°	1016	1085	1243	1384	1437	1005
75°	515	612	785	920	957	550
85°	103	179	228	242	231	128
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3297.7	3297.7	3297.7	3297.7	3297.7
2.5°	3302.3	3297.7	3280.7	3300.7	3299.2
5°	3286.9	3283.8	3269.9	3288.4	3286.9
7.5°	3262.2	3260.7	3249.9	3269.9	3269.9
10°	3231.4	3228.3	3220.6	3243.7	3242.2
12.5°	3188.2	3186.7	3182.0	3209.8	3208.2
15°	3137.3	3137.3	3135.8	3166.6	3166.6
17.5°	3075.7	3077.2	3083.4	3118.8	3120.4
20°	3006.3	3012.4	3024.8	3064.9	3067.9
22.5°	2927.7	2940.0	2956.9	3001.7	3006.3
25°	2849.0	2855.2	2881.4	2933.8	2944.6
27.5°	2753.4	2768.9	2802.8	2856.7	2867.5
30°	2656.3	2677.9	2721.1	2776.6	2793.5
32.5°	2560.7	2579.2	2630.1	2693.3	2713.4
35°	2455.9	2477.5	2540.7	2610.1	2631.6
37.5°	2340.3	2374.2	2440.5	2520.6	2543.8
40°	2233.9	2264.7	2337.2	2426.6	2451.3
42.5°	2112.1	2150.6	2238.5	2329.5	2360.3
45°	1991.9	2041.2	2135.2	2230.8	2269.4
47.5°	1879.3	1919.4	2030.4	2138.3	2172.2
50°	1756.0	1802.2	1919.4	2033.5	2068.9
52.5°	1634.2	1689.7	1808.4	1928.6	1967.2
55°	1509.3	1574.1	1700.5	1825.3	1867.0
57.5°	1389.1	1453.8	1584.8	1717.4	1760.6
60°	1261.1	1330.5	1475.4	1603.3	1657.3
62.5°	1137.8	1207.1	1359.8	1498.5	1549.4
65°	1016.0	1085.3	1242.6	1384.4	1436.8
67.5°	889.5	965.1	1133.1	1270.3	1321.2
70°	773.9	846.4	1016.0	1162.4	1216.4
72.5°	641.3	727.7	900.3	1045.3	1096.1
75°	514.9	612.0	784.7	920.4	957.4
77.5°	397.8	494.9	667.5	769.3	792.4
80°	288.3	387.0	530.3	601.3	619.8
82.5°	186.5	288.3	383.9	431.7	437.8
85°	103.3	178.8	228.2	242.0	231.3
87.5°	37.0	67.8	66.3	54.0	43.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)