

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: P473839

Luminaire Tested: **24CZ2-75VHE-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473839
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75VHE-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

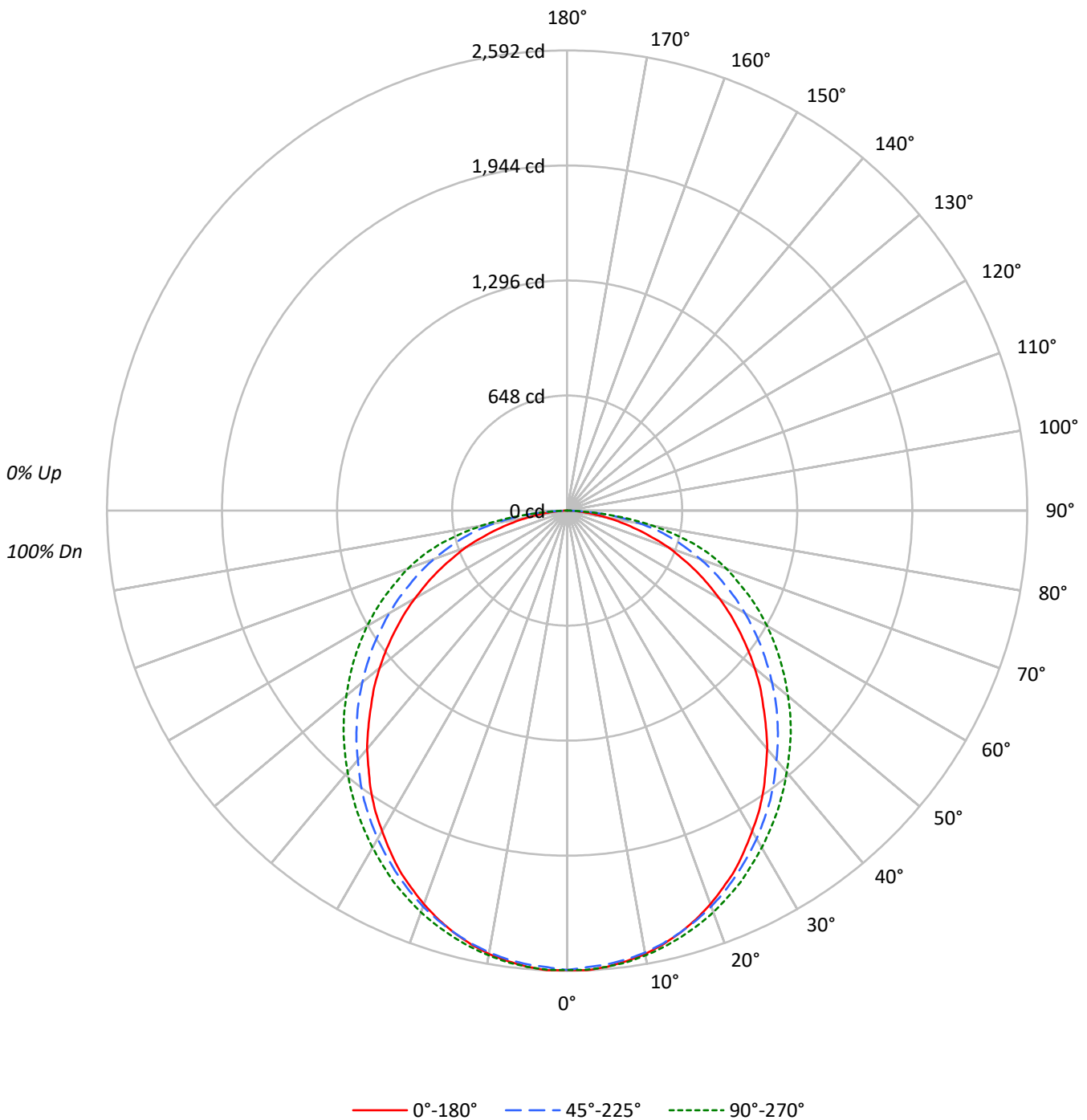
Lumens per Lamp: N/A
Luminaire Lumens: 7488.9 lumens
Efficiency: N/A
Efficacy: 145.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 51.4
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°	3482	3482	3482
5°	3484	3466	3484
10°	3465	3453	3476
15°	3430	3428	3461
20°	3378	3399	3447
25°	3319	3357	3431
30°	3239	3318	3406
35°	3166	3275	3392
40°	3079	3221	3379
45°	2974	3188	3389
50°	2884	3153	3399
55°	2778	3130	3437
60°	2663	3116	3500
65°	2538	3104	3590
70°	2389	3137	3755
75°	2101	3201	3906
80°	1753	3225	3769
85°	1252	2765	2802



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.6	3.3
10°-20°	696.8	9.3
20°-30°	1045.4	14.0
30°-40°	1248.1	16.7
40°-50°	1292.7	17.3
50°-60°	1190.1	15.9
60°-70°	960.0	12.8
70°-80°	627.3	8.4
80°-90°	183.9	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°	1986.8	26.5
0°-40°	3234.9	43.2
0°-60°	5717.7	76.3
0°-90°	7488.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7488.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2588	2588	2588	2588	2588	
5°	2579	2577	2566	2581	2579	245
15°	2462	2462	2461	2485	2485	694
25°	2236	2241	2261	2302	2311	1028
35°	1927	1944	1994	2048	2065	1204
45°	1563	1602	1676	1751	1781	1208
55°	1184	1235	1334	1432	1465	1060
65°	797	852	975	1086	1128	788
75°	404	480	616	722	751	431
85°	81	140	179	190	182	101
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2587.9	2587.9	2587.9	2587.9	2587.9
2.5°	2591.5	2587.9	2574.6	2590.3	2589.1
5°	2579.4	2577.0	2566.1	2580.6	2579.4
7.5°	2560.1	2558.8	2550.4	2566.1	2566.1
10°	2535.9	2533.4	2527.4	2545.5	2544.3
12.5°	2502.0	2500.8	2497.1	2518.9	2517.7
15°	2462.1	2462.1	2460.8	2485.0	2485.0
17.5°	2413.7	2414.9	2419.7	2447.5	2448.7
20°	2359.2	2364.1	2373.7	2405.2	2407.6
22.5°	2297.5	2307.2	2320.5	2355.6	2359.2
25°	2235.8	2240.7	2261.2	2302.4	2310.8
27.5°	2160.8	2172.9	2199.5	2241.9	2250.3
30°	2084.6	2101.5	2135.4	2178.9	2192.3
32.5°	2009.6	2024.1	2064.0	2113.6	2129.3
35°	1927.3	1944.2	1993.8	2048.3	2065.2
37.5°	1836.6	1863.2	1915.2	1978.1	1996.3
40°	1753.1	1777.3	1834.1	1904.3	1923.7
42.5°	1657.5	1687.7	1756.7	1828.1	1852.3
45°	1563.1	1601.8	1675.6	1750.7	1780.9
47.5°	1474.8	1506.3	1593.4	1678.1	1704.7
50°	1378.0	1414.3	1506.3	1595.8	1623.6
52.5°	1282.4	1326.0	1419.2	1513.5	1543.8
55°	1184.4	1235.3	1334.5	1432.5	1465.1
57.5°	1090.1	1140.9	1243.7	1347.8	1381.7
60°	989.7	1044.1	1157.8	1258.2	1300.6
62.5°	892.9	947.3	1067.1	1176.0	1215.9
65°	797.3	851.7	975.1	1086.4	1127.6
67.5°	698.1	757.4	889.2	996.9	1036.8
70°	607.3	664.2	797.3	912.2	954.6
72.5°	503.3	571.1	706.6	820.3	860.2
75°	404.1	480.3	615.8	722.3	751.3
77.5°	312.1	388.4	523.9	603.7	621.9
80°	226.2	303.7	416.2	471.8	486.4
82.5°	146.4	226.2	301.3	338.8	343.6
85°	81.1	140.3	179.1	189.9	181.5
87.5°	29.0	53.2	52.0	42.3	33.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)