

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: P271988

Luminaire Tested: **22CZ2-32-UNV-L950-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P271988
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-32-UNV-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (98) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2974.0 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

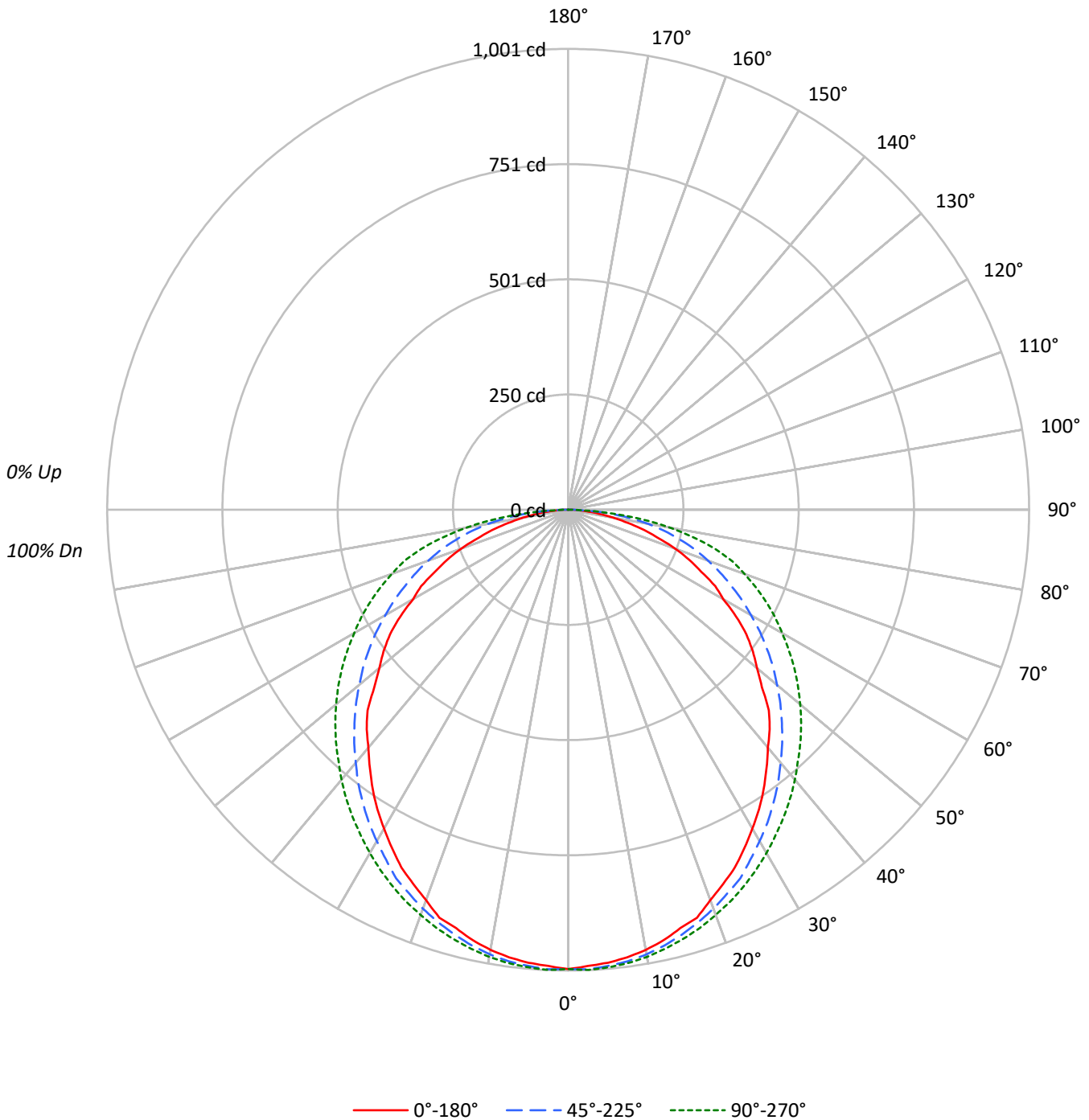
Input Watts (W): 26.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2685	2685	2685
5°	2668	2688	2695
10°	2653	2680	2695
15°	2621	2661	2689
20°	2584	2641	2682
25°	2544	2624	2679
30°	2486	2583	2676
35°	2432	2553	2679
40°	2370	2520	2690
45°	2345	2497	2714
50°	2241	2479	2753
55°	2217	2471	2812
60°	2091	2467	2888
65°	2030	2483	3018
70°	1949	2542	3203
75°	1776	2619	3449
80°	1522	2713	3485
85°	1232	2594	2989



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.4	3.2
10°-20°	269.3	9.1
20°-30°	405.4	13.6
30°-40°	486.5	16.4
40°-50°	508.5	17.1
50°-60°	473.9	15.9
60°-70°	388.7	13.1
70°-80°	261.9	8.8
80°-90°	85.3	2.9
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°	769.1	25.9
0°-40°	1255.7	42.2
0°-60°	2238.1	75.3
0°-90°	2974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2974.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	998	998	998	998	998	
5°	988	991	995	996	998	94
15°	941	947	955	964	965	266
25°	857	863	884	897	902	394
35°	740	750	777	804	816	463
45°	616	621	656	696	713	471
55°	473	481	527	576	599	419
65°	319	333	390	447	474	317
75°	171	189	252	309	332	180
85°	40	57	84	98	97	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	997.8	997.8	997.8	997.8	997.8
2.5°	992.1	995.0	999.2	1000.6	1000.6
5°	987.8	990.7	995.0	996.4	997.8
7.5°	980.7	983.6	989.3	992.1	993.5
10°	970.8	973.6	980.7	985.0	986.4
12.5°	957.9	960.8	969.3	975.0	976.5
15°	940.9	946.6	955.1	963.6	965.1
17.5°	929.5	928.1	939.4	949.4	952.3
20°	902.4	909.6	922.4	933.7	936.6
22.5°	879.7	885.4	902.4	915.2	920.9
25°	856.9	862.6	883.9	896.7	902.4
27.5°	828.4	837.0	856.9	875.4	882.5
30°	799.9	808.5	831.3	852.6	861.2
32.5°	771.5	781.4	805.6	828.4	838.4
35°	740.2	750.1	777.2	804.2	815.6
37.5°	707.4	720.2	748.7	778.6	791.4
40°	674.7	687.5	717.4	751.6	765.8
42.5°	647.6	653.3	687.5	724.5	738.7
45°	616.3	620.6	656.2	696.0	713.1
47.5°	570.8	586.4	624.9	669.0	686.1
50°	535.2	552.3	592.1	639.1	657.6
52.5°	505.3	516.7	560.8	607.8	629.1
55°	472.6	481.1	526.7	576.5	599.3
57.5°	432.7	448.4	493.9	545.2	567.9
60°	388.6	408.5	458.3	513.8	536.6
62.5°	360.1	371.5	425.6	481.1	506.7
65°	318.8	333.1	390.0	446.9	474.0
67.5°	284.7	298.9	357.3	414.2	441.3
70°	247.7	261.9	323.1	380.0	407.1
72.5°	205.0	224.9	288.9	345.9	374.4
75°	170.8	189.3	251.9	308.9	331.7
77.5°	132.4	156.6	214.9	261.9	279.0
80°	98.2	122.4	175.1	209.2	224.9
82.5°	66.9	91.1	131.0	156.6	165.1
85°	39.9	56.9	84.0	98.2	96.8
87.5°	18.5	24.2	34.2	34.2	32.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)