

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: P271987

Luminaire Tested: **22CZ2-32-UNV-L940-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: P271987
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-L940-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (98) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

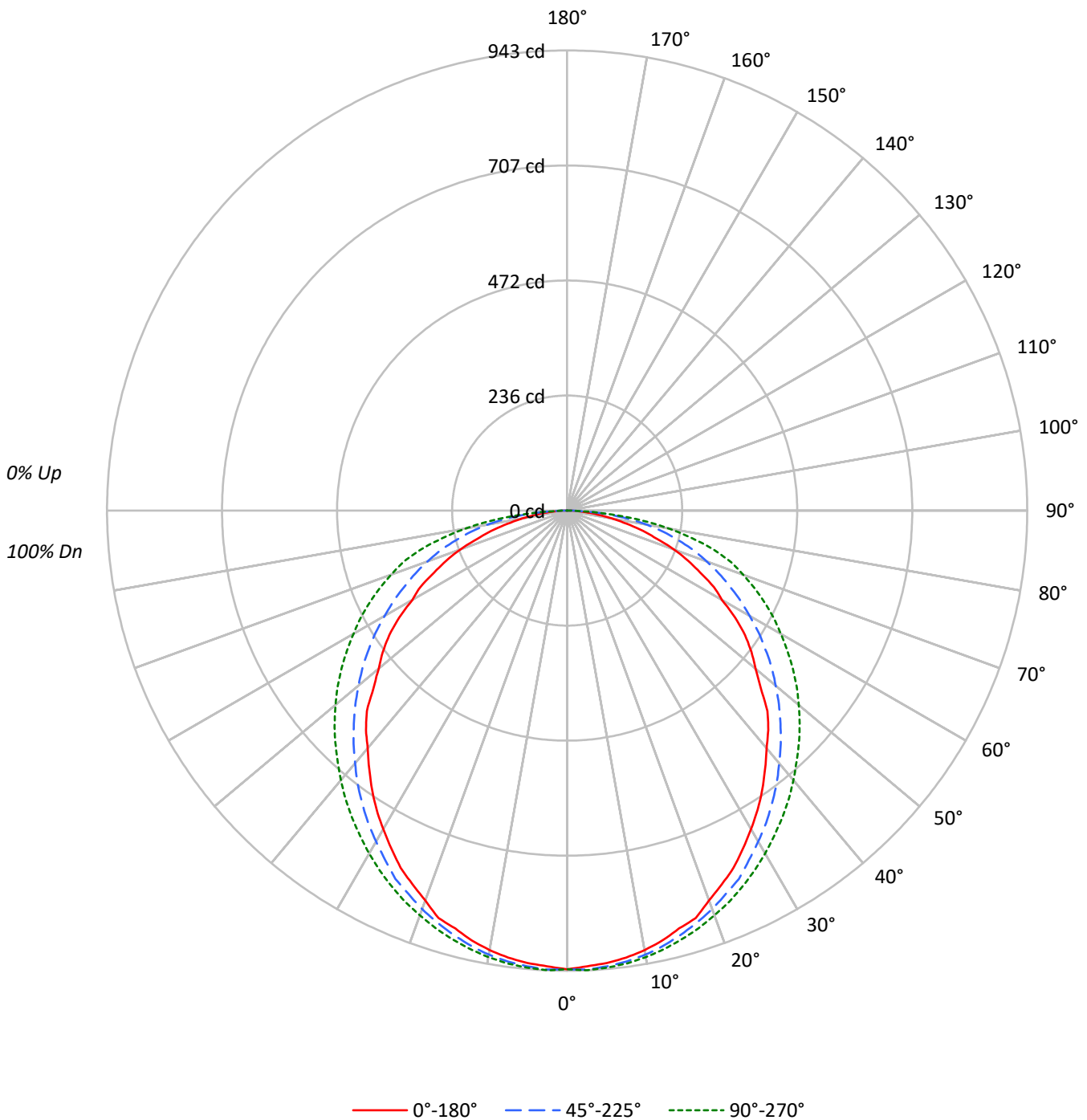
Lumens per Lamp: N/A
Luminaire Lumens: 2802.0 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	2530	2530	2530
5°	2514	2532	2539
10°	2499	2525	2540
15°	2470	2507	2533
20°	2435	2489	2527
25°	2397	2473	2524
30°	2342	2434	2521
35°	2291	2405	2524
40°	2233	2374	2535
45°	2210	2353	2557
50°	2111	2336	2594
55°	2089	2328	2649
60°	1970	2324	2721
65°	1913	2340	2844
70°	1836	2395	3017
75°	1673	2468	3249
80°	1433	2557	3284
85°	1161	2442	2816



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.0	3.2
10°-20°	253.8	9.1
20°-30°	381.9	13.6
30°-40°	458.4	16.4
40°-50°	479.1	17.1
50°-60°	446.5	15.9
60°-70°	366.2	13.1
70°-80°	246.8	8.8
80°-90°	80.4	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°	724.7	25.9
0°-40°	1183.0	42.2
0°-60°	2108.6	75.3
0°-90°	2802.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2802.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	940	940	940	940	940	
5°	931	933	937	939	940	88
15°	886	892	900	908	909	251
25°	807	813	833	845	850	371
35°	697	707	732	758	768	436
45°	581	585	618	656	672	444
55°	445	453	496	543	565	395
65°	300	314	368	421	447	299
75°	161	178	237	291	312	169
85°	38	54	79	92	91	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	940.1	940.1	940.1	940.1	940.1
2.5°	934.7	937.4	941.4	942.8	942.8
5°	930.7	933.4	937.4	938.8	940.1
7.5°	924.0	926.7	932.0	934.7	936.1
10°	914.6	917.3	924.0	928.0	929.4
12.5°	902.5	905.2	913.3	918.6	920.0
15°	886.5	891.8	899.9	907.9	909.3
17.5°	875.7	874.4	885.1	894.5	897.2
20°	850.2	856.9	869.0	879.7	882.4
22.5°	828.8	834.1	850.2	862.3	867.7
25°	807.3	812.7	832.8	844.9	850.2
27.5°	780.5	788.6	807.3	824.8	831.5
30°	753.7	761.7	783.2	803.3	811.4
32.5°	726.9	736.3	759.0	780.5	789.9
35°	697.4	706.7	732.2	757.7	768.4
37.5°	666.5	678.6	705.4	733.6	745.6
40°	635.7	647.7	675.9	708.1	721.5
42.5°	610.2	615.6	647.7	682.6	696.0
45°	580.7	584.7	618.2	655.8	671.9
47.5°	537.8	552.5	588.7	630.3	646.4
50°	504.2	520.3	557.9	602.1	619.6
52.5°	476.1	486.8	528.4	572.6	592.8
55°	445.2	453.3	496.2	543.1	564.6
57.5°	407.7	422.4	465.4	513.6	535.1
60°	366.1	384.9	431.8	484.1	505.6
62.5°	339.3	350.0	401.0	453.3	477.4
65°	300.4	313.8	367.5	421.1	446.6
67.5°	268.2	281.6	336.6	390.3	415.7
70°	233.3	246.8	304.4	358.1	383.5
72.5°	193.1	211.9	272.2	325.9	352.7
75°	160.9	178.4	237.4	291.0	312.5
77.5°	124.7	147.5	202.5	246.8	262.9
80°	92.5	115.3	165.0	197.1	211.9
82.5°	63.0	85.8	123.4	147.5	155.6
85°	37.6	53.6	79.1	92.5	91.2
87.5°	17.4	22.8	32.2	32.2	30.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)