

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: P272031

Luminaire Tested: **22CZ2-32-S-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: P272031
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-32-S-UNV-L940-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (98) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

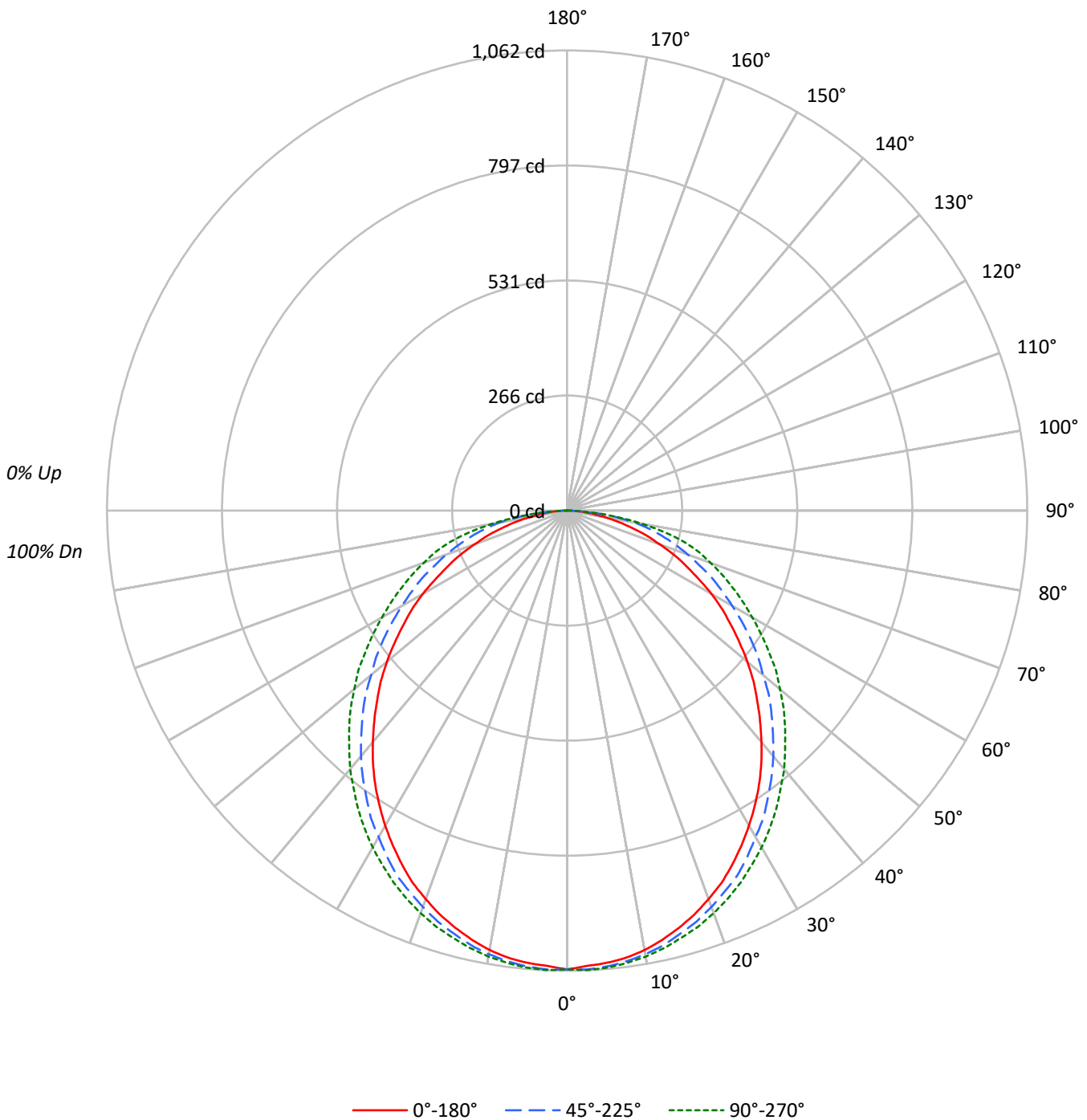
Lumens per Lamp: N/A
Luminaire Lumens: 2955.0 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2849	2849	2849
5°	2830	2853	2860
10°	2814	2841	2856
15°	2777	2815	2842
20°	2732	2788	2831
25°	2677	2759	2812
30°	2609	2703	2789
35°	2536	2654	2763
40°	2451	2601	2736
45°	2361	2539	2707
50°	2274	2470	2684
55°	2167	2426	2665
60°	2070	2367	2657
65°	1931	2353	2686
70°	1779	2332	2766
75°	1605	2365	2910
80°	1389	2436	2735
85°	1149	2044	2044



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.1	3.4
10°-20°	285.0	9.6
20°-30°	426.4	14.4
30°-40°	504.9	17.1
40°-50°	514.6	17.4
50°-60°	461.2	15.6
60°-70°	361.1	12.2
70°-80°	232.9	7.9
80°-90°	68.8	2.3
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°	811.5	27.5
0°-40°	1316.4	44.5
0°-60°	2292.3	77.6
0°-90°	2955.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2955.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1048	1051	1056	1058	1059	99
15°	997	1002	1011	1019	1020	281
25°	902	910	929	942	947	415
35°	772	782	808	833	841	483
45°	620	634	667	702	711	479
55°	462	477	517	553	568	414
65°	303	321	370	405	422	301
75°	154	178	228	266	280	166
85°	37	51	66	66	66	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1058.9	1058.9	1058.9	1058.9	1058.9
2.5°	1052.0	1054.7	1060.2	1061.6	1061.6
5°	1047.8	1050.6	1056.1	1057.5	1058.9
7.5°	1040.9	1042.3	1049.2	1052.0	1053.4
10°	1029.9	1032.7	1039.6	1043.7	1045.1
12.5°	1014.7	1018.9	1027.2	1032.7	1034.1
15°	996.8	1002.3	1010.6	1018.9	1020.3
17.5°	977.5	983.0	994.1	1003.7	1006.5
20°	954.1	961.0	973.4	984.4	988.6
22.5°	930.6	936.2	951.3	965.1	969.3
25°	901.7	910.0	929.3	941.7	947.2
27.5°	871.4	881.0	900.3	916.9	922.4
30°	839.6	849.3	870.0	890.7	897.6
32.5°	806.6	817.6	842.4	863.1	870.0
35°	772.1	781.7	807.9	832.8	841.0
37.5°	736.2	744.5	774.8	801.0	809.3
40°	697.6	708.7	740.4	770.7	779.0
42.5°	659.0	671.4	703.2	736.2	744.5
45°	620.4	634.2	667.3	701.8	711.4
47.5°	583.2	594.2	631.5	664.6	678.3
50°	543.2	554.3	590.1	627.3	641.1
52.5°	501.9	517.0	555.6	591.5	608.0
55°	461.9	477.0	517.0	552.9	568.0
57.5°	424.7	437.1	478.4	515.6	530.8
60°	384.7	395.7	439.8	479.8	493.6
62.5°	341.9	358.5	404.0	441.2	457.7
65°	303.3	321.2	369.5	405.3	421.9
67.5°	267.5	284.0	330.9	369.5	387.4
70°	226.1	248.2	296.4	335.0	351.6
72.5°	193.0	212.3	262.0	300.6	318.5
75°	154.4	177.9	227.5	266.1	279.9
77.5°	122.7	146.1	193.0	223.4	230.2
80°	89.6	113.1	157.2	172.3	176.5
82.5°	60.7	82.7	113.1	117.2	118.6
85°	37.2	51.0	66.2	66.2	66.2
87.5°	17.9	20.7	23.4	22.1	22.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)