

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: P271997

Luminaire Tested: **22CZ2-39-UNV-L930-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: P271997
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: 22CZ2-39-UNV-L930-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (98) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3253.0 lumens
Efficiency: N/A
Efficacy: 94.3 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

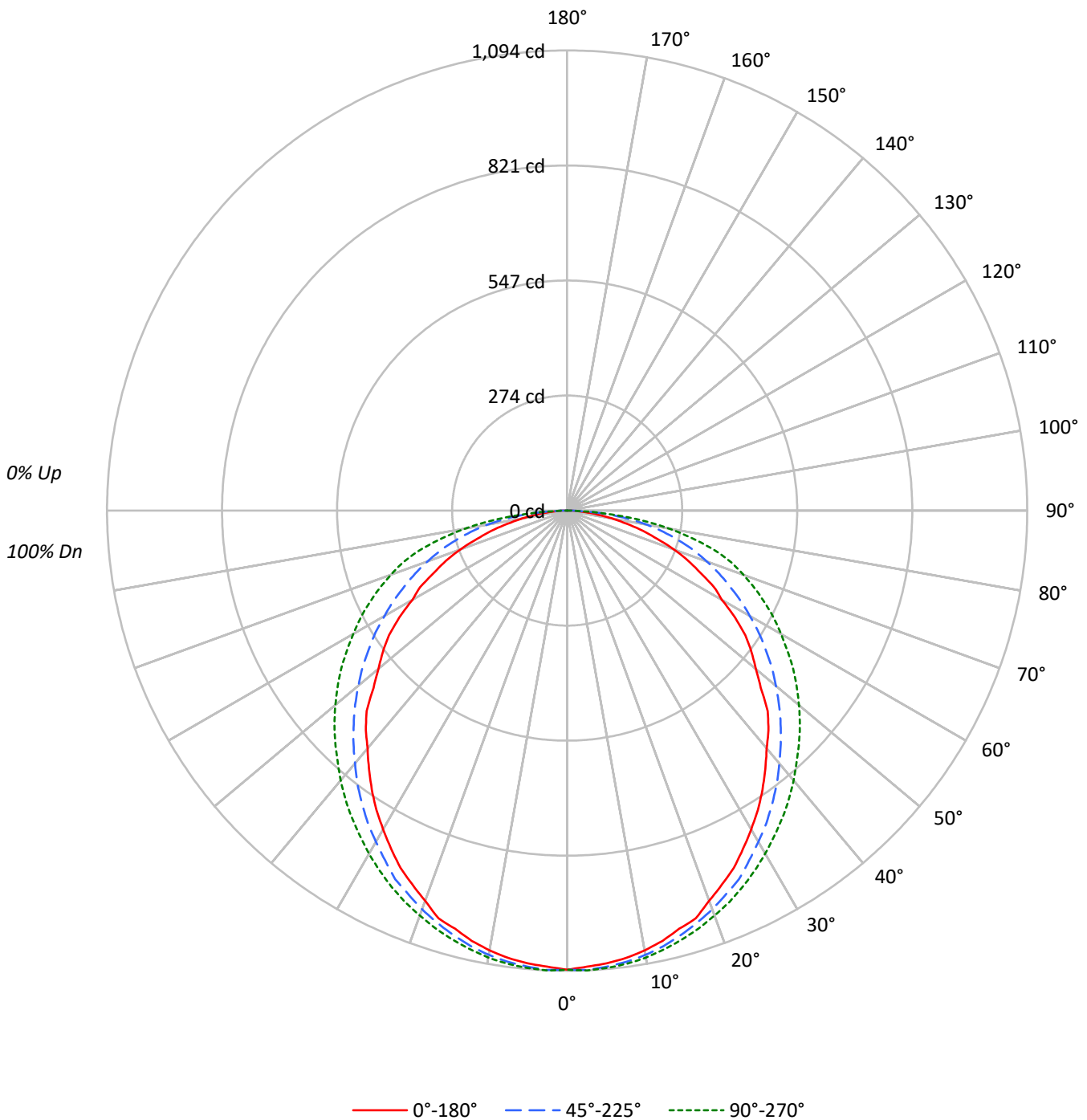
Input Watts (W): 34.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P271997

CATALOG NUMBER: 22CZ2-39-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P271997

CATALOG NUMBER: 22CZ2-39-UNV-L930-CD1-U

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°	2937	2937	2937
5°	2919	2940	2948
10°	2901	2931	2948
15°	2867	2910	2941
20°	2827	2889	2934
25°	2783	2871	2931
30°	2719	2825	2927
35°	2660	2793	2931
40°	2592	2757	2942
45°	2566	2731	2968
50°	2451	2712	3011
55°	2425	2703	3075
60°	2287	2698	3159
65°	2221	2716	3301
70°	2131	2781	3504
75°	1942	2865	3772
80°	1664	2968	3812
85°	1346	2837	3270



TEST NUMBER: P271997

CATALOG NUMBER: 22CZ2-39-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.3	3.2
10°-20°	294.6	9.1
20°-30°	443.4	13.6
30°-40°	532.2	16.4
40°-50°	556.2	17.1
50°-60°	518.4	15.9
60°-70°	425.2	13.1
70°-80°	286.5	8.8
80°-90°	93.3	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°	841.3	25.9
0°-40°	1373.5	42.2
0°-60°	2448.1	75.3
0°-90°	3253.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3253.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1080	1084	1088	1090	1091	103
15°	1029	1035	1045	1054	1056	291
25°	937	944	967	981	987	431
35°	810	820	850	880	892	506
45°	674	679	718	761	780	515
55°	517	526	576	631	656	458
65°	349	364	427	489	518	347
75°	187	207	276	338	363	196
85°	44	62	92	107	106	52
90°	0	0	0	0	0	



TEST NUMBER: P271997

CATALOG NUMBER: 22CZ2-39-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1091.4	1091.4	1091.4	1091.4	1091.4
2.5°	1085.2	1088.3	1093.0	1094.5	1094.5
5°	1080.5	1083.6	1088.3	1089.9	1091.4
7.5°	1072.7	1075.8	1082.1	1085.2	1086.7
10°	1061.8	1064.9	1072.7	1077.4	1079.0
12.5°	1047.8	1050.9	1060.3	1066.5	1068.1
15°	1029.1	1035.4	1044.7	1054.0	1055.6
17.5°	1016.7	1015.1	1027.6	1038.5	1041.6
20°	987.1	994.9	1008.9	1021.3	1024.5
22.5°	962.2	968.4	987.1	1001.1	1007.3
25°	937.3	943.5	966.9	980.9	987.1
27.5°	906.1	915.5	937.3	957.5	965.3
30°	875.0	884.3	909.2	932.6	941.9
32.5°	843.9	854.8	881.2	906.1	917.0
35°	809.6	820.5	850.1	879.7	892.1
37.5°	773.8	787.8	818.9	851.6	865.7
40°	738.0	752.0	784.7	822.1	837.6
42.5°	708.4	714.6	752.0	792.5	808.0
45°	674.2	678.8	717.7	761.3	780.0
47.5°	624.3	641.5	683.5	731.8	750.4
50°	585.4	604.1	647.7	699.1	719.3
52.5°	552.7	565.2	613.4	664.8	688.2
55°	516.9	526.2	576.1	630.6	655.5
57.5°	473.3	490.4	540.3	596.3	621.2
60°	425.0	446.8	501.3	562.1	587.0
62.5°	393.9	406.4	465.5	526.2	554.3
65°	348.8	364.3	426.6	488.9	518.5
67.5°	311.4	327.0	390.8	453.1	482.6
70°	270.9	286.5	353.4	415.7	445.3
72.5°	224.2	246.0	316.1	378.3	409.5
75°	186.8	207.1	275.6	337.9	362.8
77.5°	144.8	171.3	235.1	286.5	305.2
80°	107.4	133.9	191.5	228.9	246.0
82.5°	73.2	99.6	143.2	171.3	180.6
85°	43.6	62.3	91.9	107.4	105.9
87.5°	20.2	26.5	37.4	37.4	35.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)