

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: P271906

Luminaire Tested: **14CZ2-35-UNV-L935-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: P271906
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-35-UNV-L935-CD1-U
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 90CRI
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2997.0 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

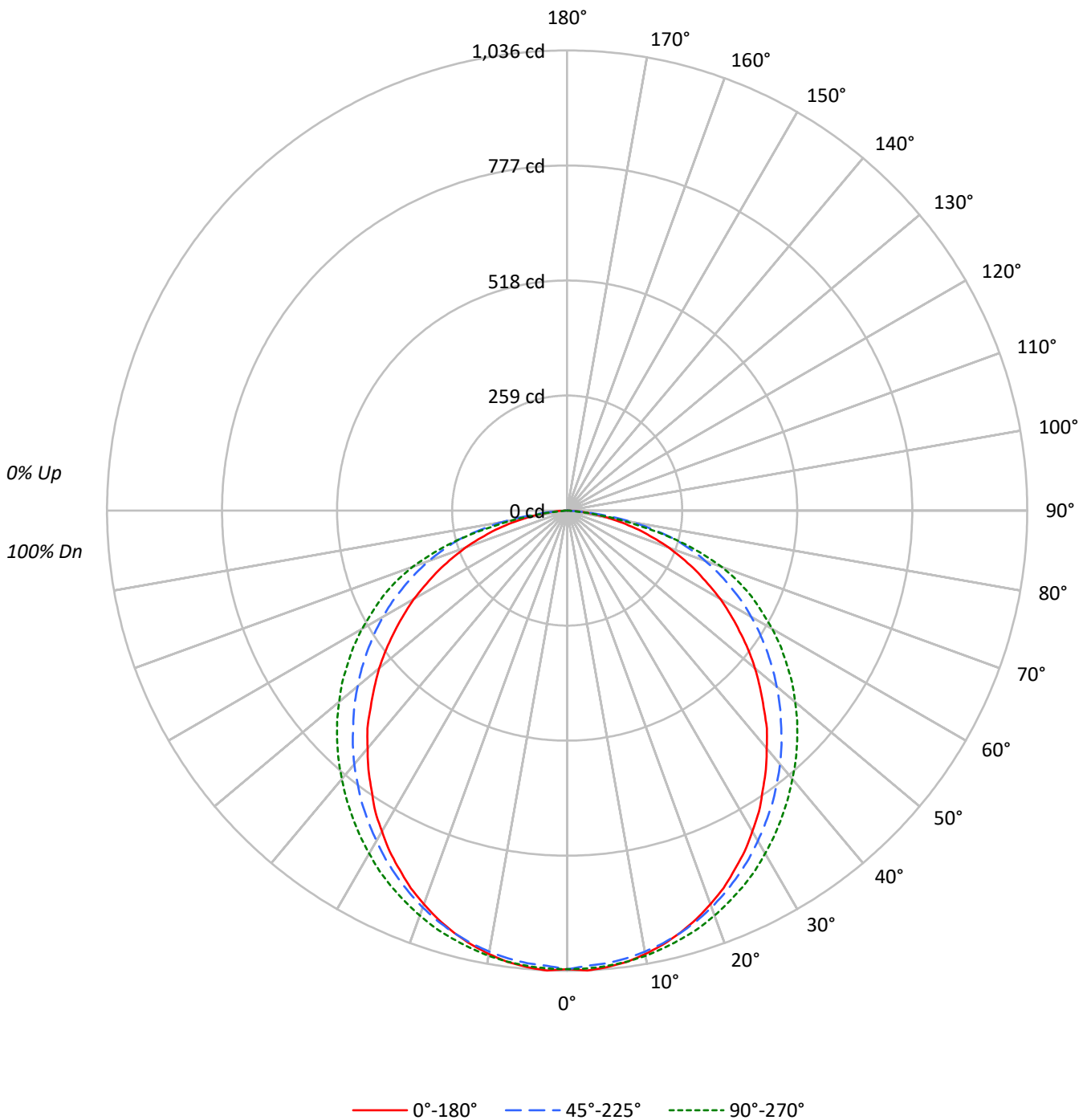
Input Watts (W): 31.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P271906

CATALOG NUMBER: 14CZ2-35-UNV-L935-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P271906

CATALOG NUMBER: 14CZ2-35-UNV-L935-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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32					32			
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2778	2778	2778
5°	2787	2764	2780
10°	2770	2755	2781
15°	2740	2742	2779
20°	2700	2723	2779
25°	2649	2697	2776
30°	2591	2668	2770
35°	2522	2645	2768
40°	2455	2620	2772
45°	2380	2592	2787
50°	2311	2579	2806
55°	2223	2571	2831
60°	2144	2575	2870
65°	2034	2583	2915
70°	1909	2603	2913
75°	1730	2626	2634
80°	1420	2269	1875
85°	1053	1074	432



TEST NUMBER: P271906

CATALOG NUMBER: 14CZ2-35-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.7	3.3
10°-20°	279.1	9.3
20°-30°	420.4	14.0
30°-40°	504.5	16.8
40°-50°	525.8	17.5
50°-60°	486.8	16.2
60°-70°	393.3	13.1
70°-80°	239.8	8.0
80°-90°	49.5	1.7
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°	797.2	26.6
0°-40°	1301.7	43.4
0°-60°	2314.4	77.2
0°-90°	2997.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2997.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1032	1032	1032	1032	1032	
5°	1032	1029	1023	1030	1029	98
15°	984	984	984	998	998	277
25°	892	898	908	931	935	411
35°	768	780	805	835	843	481
45°	626	644	681	719	732	483
55°	474	498	548	591	603	424
65°	319	351	406	446	458	316
75°	166	203	253	257	253	175
85°	34	51	35	19	14	42
90°	0	0	0	0	0	



TEST NUMBER: P271906

CATALOG NUMBER: 14CZ2-35-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1032.5	1032.5	1032.5	1032.5	1032.5
2.5°	1036.5	1033.1	1025.8	1033.1	1031.8
5°	1031.8	1029.1	1023.1	1030.5	1029.1
7.5°	1025.1	1022.5	1017.1	1025.8	1024.5
10°	1013.8	1012.4	1008.4	1018.4	1017.8
12.5°	1000.4	999.7	997.7	1009.1	1008.4
15°	983.7	984.4	984.4	997.7	997.7
17.5°	965.0	966.3	969.0	983.7	985.7
20°	942.9	945.6	950.9	967.7	970.3
22.5°	920.2	922.2	930.2	950.3	953.0
25°	892.1	897.5	908.2	930.9	934.9
27.5°	865.4	870.1	884.8	908.2	914.9
30°	834.0	841.4	858.7	884.1	891.5
32.5°	803.9	811.9	832.0	861.4	868.1
35°	767.8	779.9	805.3	834.7	842.7
37.5°	735.1	746.5	775.2	807.3	816.6
40°	699.0	713.0	745.8	779.9	789.2
42.5°	665.6	679.0	714.4	749.1	761.8
45°	625.5	644.2	681.0	719.1	732.4
47.5°	588.7	607.5	649.6	690.3	702.4
50°	552.0	572.0	616.1	658.2	670.3
52.5°	513.9	535.3	582.7	624.8	638.9
55°	473.8	498.5	548.0	590.8	603.4
57.5°	435.7	461.1	513.9	557.3	570.0
60°	398.3	424.4	478.5	519.9	533.3
62.5°	356.9	387.6	443.7	484.5	494.5
65°	319.4	350.8	405.6	446.4	457.8
67.5°	280.0	314.1	368.9	406.3	417.0
70°	242.6	278.0	330.8	365.5	370.2
72.5°	202.5	238.6	292.0	314.1	314.1
75°	166.4	203.2	252.6	256.6	253.3
77.5°	127.0	167.7	199.8	191.8	183.8
80°	91.6	131.6	146.4	131.6	121.0
82.5°	61.5	95.6	88.2	70.2	62.1
85°	34.1	50.8	34.8	19.4	14.0
87.5°	12.7	11.4	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)