

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: P271910

Luminaire Tested: **14CZ2-39-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: P271910
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: 14CZ2-39-UNV-L935-CD1-U
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 90CRI
Light Source: (112) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

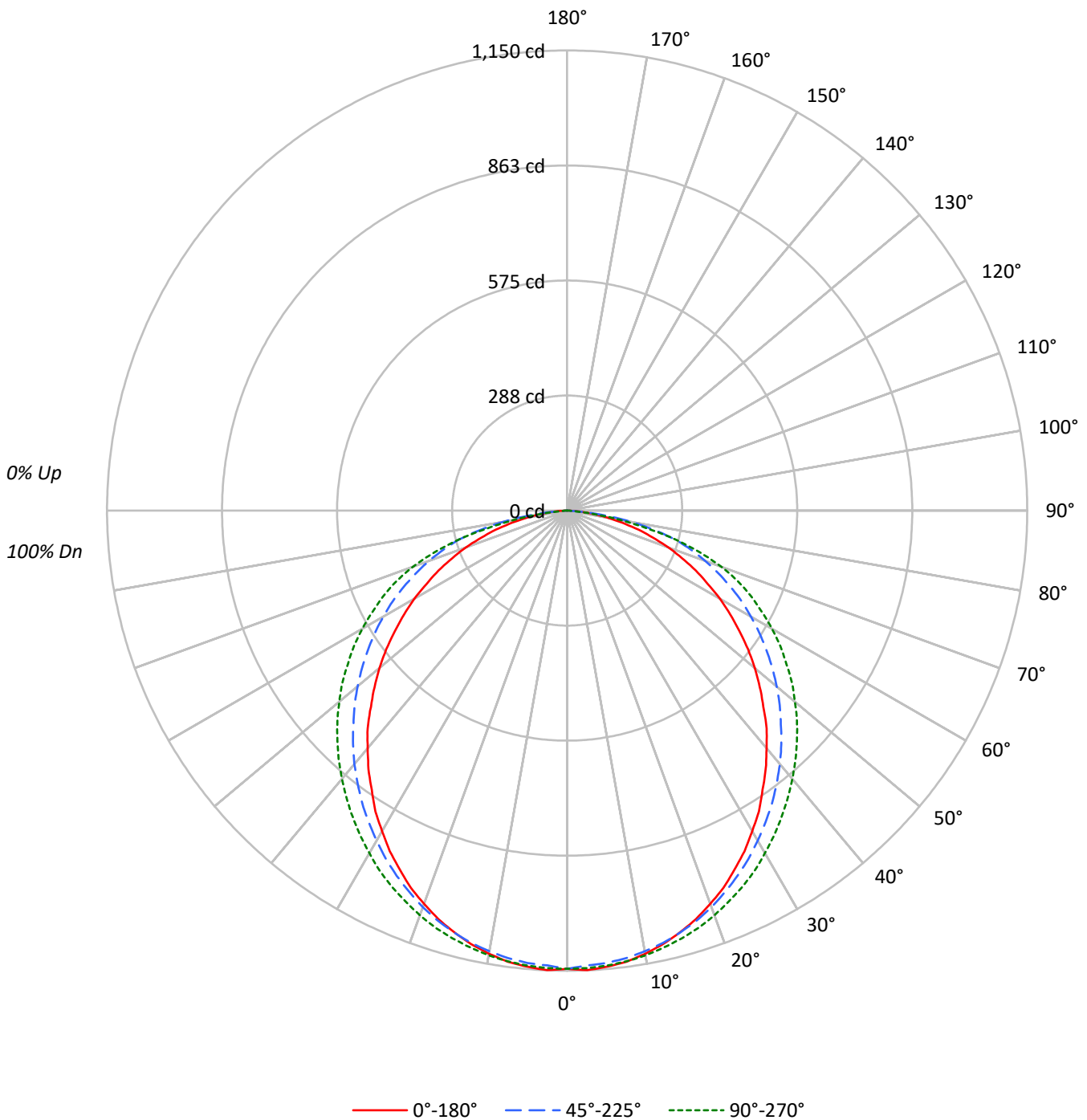
Lumens per Lamp: N/A
Luminaire Lumens: 3324.0 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 32.3
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	109	104	99	95	106	101	97	94	97	94	91		93	90	88		90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3081	3081	3081
5°	3091	3065	3083
10°	3072	3056	3084
15°	3039	3042	3083
20°	2995	3020	3082
25°	2938	2991	3079
30°	2874	2959	3072
35°	2798	2934	3070
40°	2723	2906	3075
45°	2640	2874	3091
50°	2563	2861	3112
55°	2465	2852	3140
60°	2377	2856	3183
65°	2256	2865	3233
70°	2116	2887	3231
75°	1919	2913	2921
80°	1573	2515	2080
85°	1167	1189	482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.4	3.3
10°-20°	309.5	9.3
20°-30°	466.3	14.0
30°-40°	559.6	16.8
40°-50°	583.2	17.5
50°-60°	539.9	16.2
60°-70°	436.2	13.1
70°-80°	266.0	8.0
80°-90°	54.9	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°	884.2	26.6
0°-40°	1443.7	43.4
0°-60°	2566.9	77.2
0°-90°	3324.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3324.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1145	1145	1145	1145	1145	
5°	1144	1141	1135	1143	1141	109
15°	1091	1092	1092	1107	1107	308
25°	990	995	1007	1032	1037	456
35°	852	865	893	926	935	533
45°	694	714	755	798	812	536
55°	526	553	608	655	669	471
65°	354	389	450	495	508	350
75°	185	225	280	285	281	194
85°	38	56	38	22	16	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1145.1	1145.1	1145.1	1145.1	1145.1
2.5°	1149.6	1145.9	1137.7	1145.9	1144.4
5°	1144.4	1141.4	1134.8	1142.9	1141.4
7.5°	1137.0	1134.0	1128.1	1137.7	1136.2
10°	1124.4	1122.9	1118.4	1129.6	1128.8
12.5°	1109.6	1108.8	1106.6	1119.2	1118.4
15°	1091.0	1091.8	1091.8	1106.6	1106.6
17.5°	1070.3	1071.8	1074.7	1091.0	1093.2
20°	1045.8	1048.8	1054.7	1073.2	1076.2
22.5°	1020.6	1022.8	1031.7	1054.0	1056.9
25°	989.5	995.4	1007.3	1032.5	1036.9
27.5°	959.8	965.0	981.3	1007.3	1014.7
30°	925.0	933.2	952.4	980.6	988.7
32.5°	891.6	900.5	922.8	955.4	962.8
35°	851.6	865.0	893.1	925.7	934.6
37.5°	815.3	827.9	859.8	895.3	905.7
40°	775.3	790.8	827.2	865.0	875.3
42.5°	738.2	753.0	792.3	830.9	844.9
45°	693.7	714.5	755.3	797.5	812.3
47.5°	653.0	673.7	720.4	765.6	779.0
50°	612.2	634.5	683.4	730.1	743.4
52.5°	570.0	593.7	646.3	693.0	708.6
55°	525.5	552.9	607.8	655.2	669.3
57.5°	483.3	511.4	570.0	618.1	632.2
60°	441.7	470.7	530.7	576.6	591.5
62.5°	395.8	429.9	492.1	537.4	548.5
65°	354.3	389.1	449.9	495.1	507.7
67.5°	310.6	348.4	409.1	450.6	462.5
70°	269.0	308.3	366.9	405.4	410.6
72.5°	224.6	264.6	323.9	348.4	348.4
75°	184.6	225.3	280.2	284.6	280.9
77.5°	140.8	186.0	221.6	212.7	203.8
80°	101.5	146.0	162.3	146.0	134.2
82.5°	68.2	106.0	97.8	77.8	68.9
85°	37.8	56.3	38.5	21.5	15.6
87.5°	14.1	12.6	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)