

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: P272000

Luminaire Tested: **22CZ2-39-UNV-L950-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: P272000
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-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (98) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

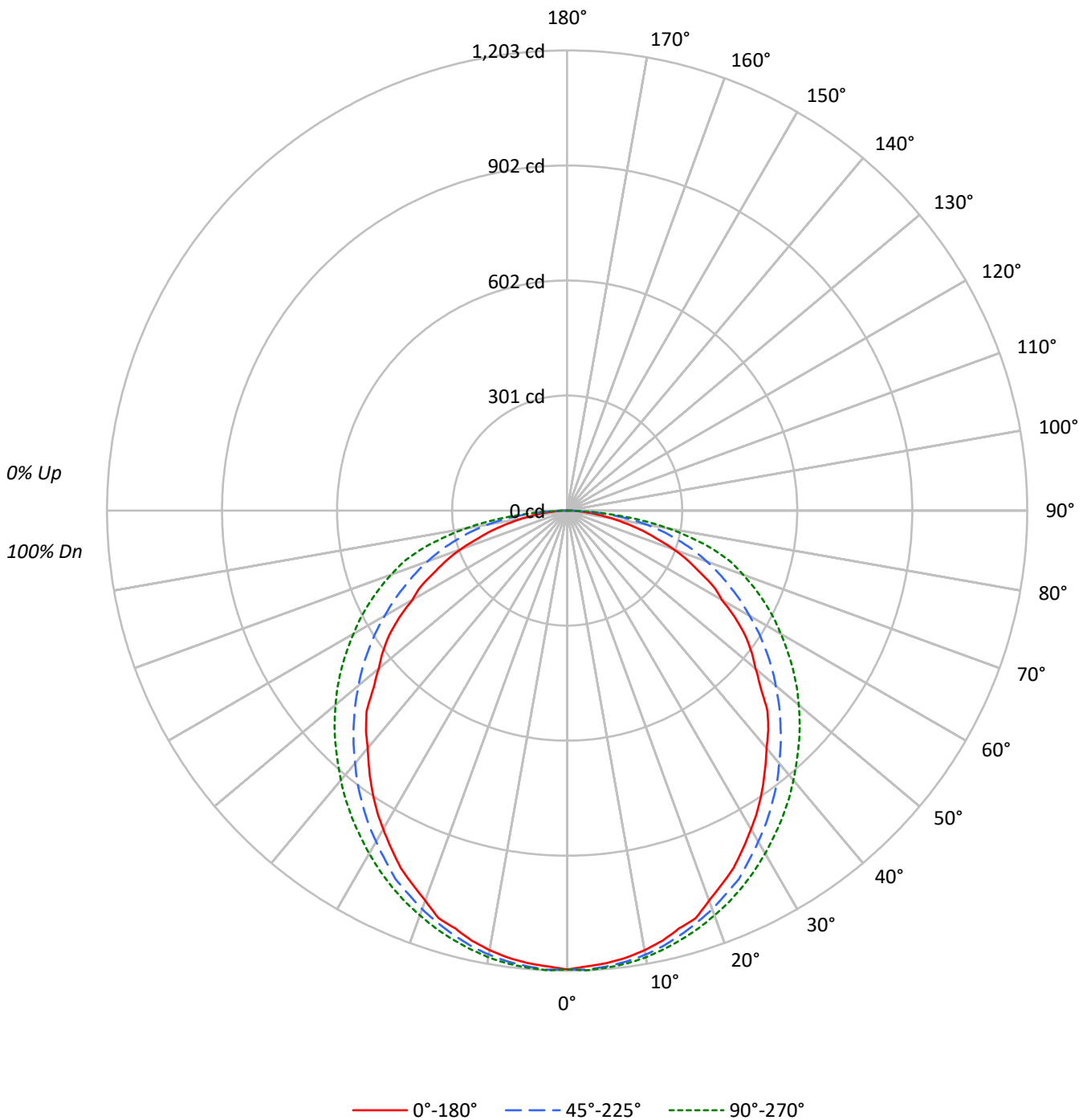
Lumens per Lamp: N/A
Luminaire Lumens: 3575.0 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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



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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°	3228	3228	3228
5°	3208	3231	3240
10°	3189	3221	3240
15°	3151	3198	3232
20°	3107	3175	3224
25°	3058	3155	3221
30°	2988	3105	3217
35°	2923	3069	3221
40°	2849	3029	3234
45°	2820	3002	3262
50°	2694	2980	3309
55°	2665	2970	3380
60°	2514	2965	3472
65°	2441	2985	3628
70°	2342	3056	3851
75°	2135	3149	4145
80°	1830	3262	4189
85°	1479	3118	3594



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.5	3.2
10°-20°	323.8	9.1
20°-30°	487.3	13.6
30°-40°	584.8	16.4
40°-50°	611.3	17.1
50°-60°	569.7	15.9
60°-70°	467.2	13.1
70°-80°	314.8	8.8
80°-90°	102.6	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°	924.6	25.9
0°-40°	1509.4	42.2
0°-60°	2690.4	75.3
0°-90°	3575.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3575.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1199	1199	1199	1199	1199	
5°	1188	1191	1196	1198	1199	113
15°	1131	1138	1148	1158	1160	320
25°	1030	1037	1063	1078	1085	474
35°	890	902	934	967	980	556
45°	741	746	789	837	857	566
55°	568	578	633	693	720	503
65°	383	400	469	537	570	381
75°	205	228	303	371	399	216
85°	48	68	101	118	116	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1199.4	1199.4	1199.4	1199.4	1199.4
2.5°	1192.6	1196.0	1201.2	1202.9	1202.9
5°	1187.5	1190.9	1196.0	1197.7	1199.4
7.5°	1178.9	1182.3	1189.2	1192.6	1194.3
10°	1166.9	1170.4	1178.9	1184.0	1185.8
12.5°	1151.5	1155.0	1165.2	1172.1	1173.8
15°	1131.0	1137.8	1148.1	1158.4	1160.1
17.5°	1117.3	1115.6	1129.3	1141.3	1144.7
20°	1084.8	1093.4	1108.8	1122.4	1125.9
22.5°	1057.4	1064.3	1084.8	1100.2	1107.0
25°	1030.0	1036.9	1062.6	1078.0	1084.8
27.5°	995.8	1006.1	1030.0	1052.3	1060.8
30°	961.6	971.9	999.3	1024.9	1035.2
32.5°	927.4	939.4	968.5	995.8	1007.8
35°	889.7	901.7	934.2	966.7	980.4
37.5°	850.4	865.8	900.0	935.9	951.3
40°	811.0	826.4	862.4	903.4	920.5
42.5°	778.5	785.4	826.4	870.9	888.0
45°	740.9	746.0	788.8	836.7	857.2
47.5°	686.1	705.0	751.1	804.2	824.7
50°	643.4	663.9	711.8	768.3	790.5
52.5°	607.4	621.1	674.2	730.6	756.3
55°	568.1	578.3	633.1	693.0	720.4
57.5°	520.2	539.0	593.7	655.3	682.7
60°	467.1	491.1	551.0	617.7	645.1
62.5°	432.9	446.6	511.6	578.3	609.1
65°	383.3	400.4	468.8	537.3	569.8
67.5°	342.2	359.3	429.5	497.9	530.4
70°	297.7	314.8	388.4	456.8	489.4
72.5°	246.4	270.3	347.3	415.8	450.0
75°	205.3	227.6	302.9	371.3	398.7
77.5°	159.1	188.2	258.4	314.8	335.4
80°	118.1	147.1	210.5	251.5	270.3
82.5°	80.4	109.5	157.4	188.2	198.5
85°	47.9	68.4	101.0	118.1	116.4
87.5°	22.2	29.1	41.1	41.1	39.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)