

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: P271947

Luminaire Tested: **14CZ2-39-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: P271947
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39-S-UNV-L940-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (112) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

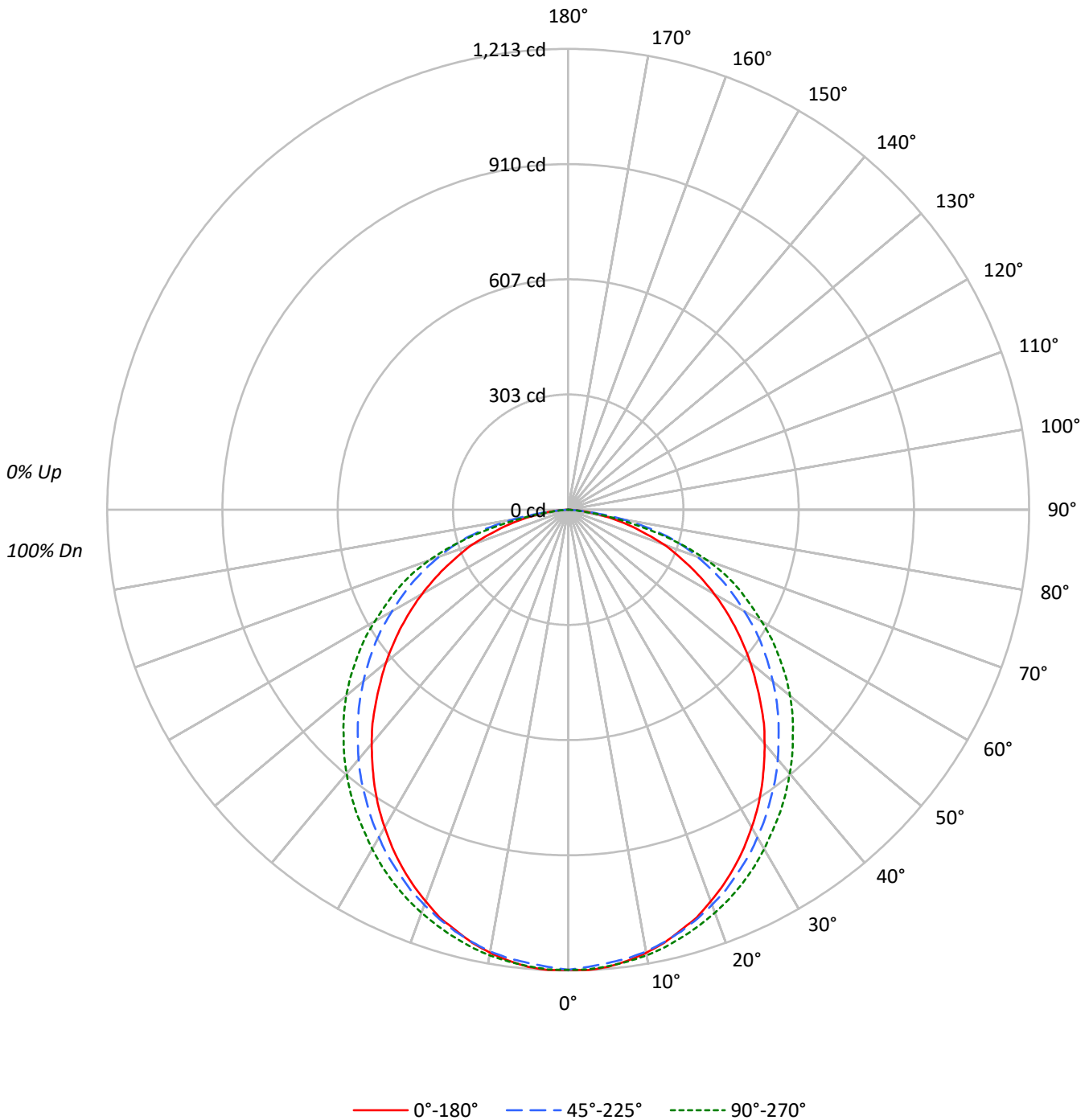
Lumens per Lamp: N/A
Luminaire Lumens: 3393.0 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	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	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3259	3259	3259
5°	3263	3236	3258
10°	3236	3227	3255
15°	3192	3201	3243
20°	3141	3170	3233
25°	3077	3132	3222
30°	3000	3095	3204
35°	2918	3051	3194
40°	2825	3014	3185
45°	2721	2977	3182
50°	2620	2944	3190
55°	2510	2920	3181
60°	2390	2879	3160
65°	2250	2871	3160
70°	2118	2846	3071
75°	1836	2781	2623
80°	1486	2242	1746
85°	988	778	519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	3.4
10°-20°	325.5	9.6
20°-30°	488.2	14.4
30°-40°	582.4	17.2
40°-50°	602.1	17.7
50°-60°	549.7	16.2
60°-70°	432.6	12.7
70°-80°	251.8	7.4
80°-90°	46.4	1.4
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°	928.0	27.4
0°-40°	1510.4	44.5
0°-60°	2662.2	78.5
0°-90°	3393.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3393.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1211	1211	1211	1211	1211	
5°	1208	1204	1198	1208	1206	115
15°	1146	1147	1149	1164	1164	323
25°	1036	1041	1055	1080	1085	477
35°	888	900	929	964	972	555
45°	715	738	782	826	836	552
55°	535	564	622	668	678	478
65°	353	390	451	486	496	351
75°	177	219	268	262	252	188
85°	32	45	25	20	17	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1211.2	1211.2	1211.2	1211.2	1211.2
2.5°	1212.9	1209.6	1204.5	1212.9	1211.2
5°	1207.9	1204.5	1197.8	1207.9	1206.2
7.5°	1197.8	1194.4	1191.1	1201.2	1199.5
10°	1184.3	1182.6	1181.0	1192.7	1191.1
12.5°	1167.5	1167.5	1165.8	1179.3	1179.3
15°	1145.6	1147.3	1149.0	1164.1	1164.1
17.5°	1125.4	1123.8	1128.8	1145.6	1147.3
20°	1096.8	1100.2	1106.9	1127.1	1128.8
22.5°	1068.3	1071.6	1083.4	1103.6	1108.6
25°	1036.3	1041.3	1054.8	1080.0	1085.1
27.5°	1002.6	1009.4	1027.9	1054.8	1059.8
30°	965.6	975.7	995.9	1026.2	1031.2
32.5°	928.6	938.7	963.9	994.2	1001.0
35°	888.2	900.0	928.6	963.9	972.4
37.5°	846.2	861.3	895.0	930.3	940.4
40°	804.1	821.0	858.0	895.0	906.8
42.5°	762.1	778.9	819.3	861.3	873.1
45°	715.0	738.5	782.3	826.0	836.1
47.5°	669.5	694.8	743.6	787.3	800.8
50°	625.8	651.0	703.2	748.6	762.1
52.5°	580.4	607.3	662.8	709.9	721.7
55°	535.0	563.6	622.4	667.9	678.0
57.5°	489.5	519.8	580.4	624.1	635.9
60°	444.1	476.1	535.0	578.7	587.1
62.5°	398.7	432.3	492.9	531.6	540.0
65°	353.3	390.3	450.9	486.2	496.3
67.5°	309.5	346.6	405.4	439.1	447.5
70°	269.2	302.8	361.7	386.9	390.3
72.5°	218.7	260.8	318.0	331.4	323.0
75°	176.6	218.7	267.5	262.4	252.3
77.5°	134.6	176.6	208.6	191.8	178.3
80°	95.9	137.9	144.7	119.4	112.7
82.5°	62.2	95.9	80.7	62.2	50.5
85°	32.0	45.4	25.2	20.2	16.8
87.5°	10.1	6.7	3.4	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)