

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: FAIL-SAFE

Report Number: P307211

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CA08-W2A-U-5500K**

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: P307211
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-44-UNV-L82765-HRP-CA08-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5500K TUNABLE CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3278.0 lumens
Efficiency: N/A
Efficacy: 83.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

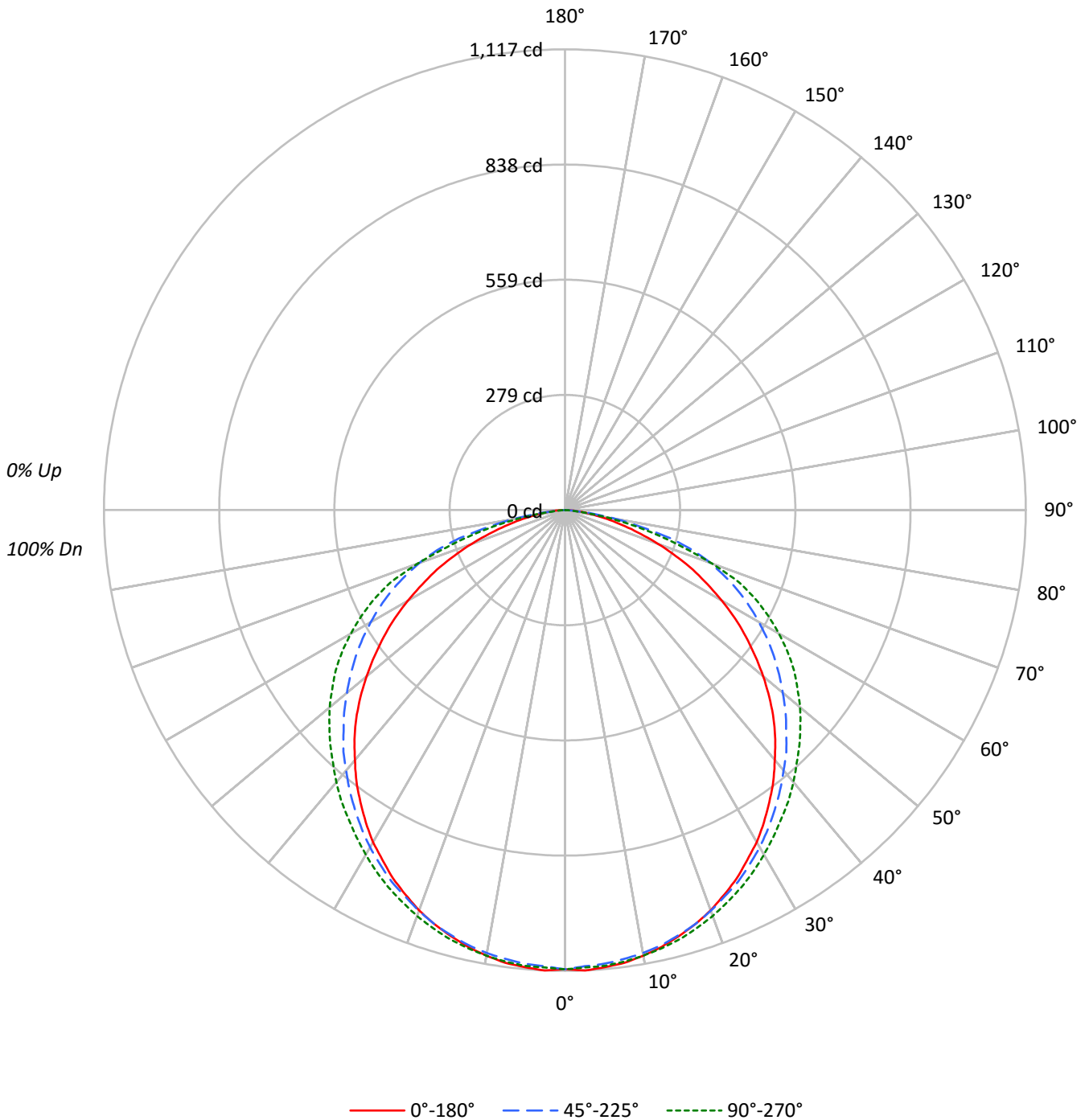
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	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	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2996	2996	2996
5°	3004	2982	2996
10°	2997	2980	2997
15°	2978	2972	3001
20°	2958	2961	2999
25°	2926	2950	2999
30°	2889	2934	2998
35°	2838	2912	3004
40°	2781	2897	3027
45°	2723	2887	3060
50°	2628	2887	3116
55°	2515	2902	3182
60°	2363	2923	3223
65°	2179	2953	3242
70°	1898	2960	2984
75°	1565	2754	2411
80°	1230	1980	1613
85°	954	763	383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.4	3.2
10°-20°	302.4	9.2
20°-30°	459.2	14.0
30°-40°	556.5	17.0
40°-50°	586.4	17.9
50°-60°	547.4	16.7
60°-70°	437.5	13.3
70°-80°	240.7	7.3
80°-90°	42.5	1.3
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°	867.0	26.5
0°-40°	1423.5	43.4
0°-60°	2557.3	78.0
0°-90°	3278.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3278.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1113	1113	1113	1113	1113	
5°	1112	1109	1104	1111	1109	106
15°	1069	1069	1067	1077	1077	302
25°	985	988	994	1008	1010	454
35°	864	872	886	909	914	540
45°	715	729	759	793	804	550
55°	536	563	618	662	678	478
65°	342	386	464	502	509	337
75°	150	215	265	238	232	162
85°	31	39	25	16	12	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1113.2	1113.2	1113.2	1113.2	1113.2
2.5°	1117.3	1114.3	1107.0	1113.2	1110.1
5°	1112.2	1109.1	1103.9	1111.2	1109.1
7.5°	1107.0	1102.9	1097.8	1106.0	1103.9
10°	1096.7	1093.6	1090.5	1097.8	1096.7
12.5°	1084.4	1083.3	1080.2	1088.5	1087.5
15°	1068.9	1068.9	1066.8	1077.1	1077.1
17.5°	1052.4	1051.4	1052.4	1063.7	1062.7
20°	1032.8	1032.8	1033.9	1047.3	1047.3
22.5°	1009.1	1010.1	1013.2	1029.7	1028.7
25°	985.4	987.5	993.7	1008.1	1010.1
27.5°	956.5	961.7	968.9	986.4	988.5
30°	929.7	932.8	944.2	960.7	964.8
32.5°	897.8	904.0	916.3	934.9	940.1
35°	863.8	872.0	886.5	909.1	914.3
37.5°	829.8	837.0	856.6	880.3	889.5
40°	791.6	804.0	824.6	851.4	861.7
42.5°	754.5	766.9	794.7	822.5	831.8
45°	715.4	728.8	758.6	792.7	804.0
47.5°	672.1	687.5	725.7	761.7	774.1
50°	627.7	647.3	689.6	729.8	744.2
52.5°	581.4	606.1	654.5	696.8	710.2
55°	536.0	562.8	618.5	661.8	678.2
57.5°	489.6	518.5	581.4	630.8	640.1
60°	439.1	474.2	543.2	586.5	598.9
62.5°	389.6	429.8	504.0	545.3	555.6
65°	342.2	385.5	463.8	502.0	509.2
67.5°	290.7	342.2	419.5	454.6	456.6
70°	241.2	301.0	376.2	392.7	379.3
72.5°	192.8	256.7	325.7	312.3	301.0
75°	150.5	215.4	264.9	238.1	231.9
77.5°	111.3	176.3	189.7	175.2	163.9
80°	79.4	139.2	127.8	109.3	104.1
82.5°	54.6	87.6	70.1	54.6	47.4
85°	30.9	39.2	24.7	15.5	12.4
87.5°	13.4	9.3	5.2	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)