

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: P311966

Luminaire Tested: **14FCZ2-44-UNV-L83050-HRP-CA08-W2A-U-3500K**

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: P311966  
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-L83050-HRP-CA08-W2A-U-3500K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET  
Light Source: (168) 3500K 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**

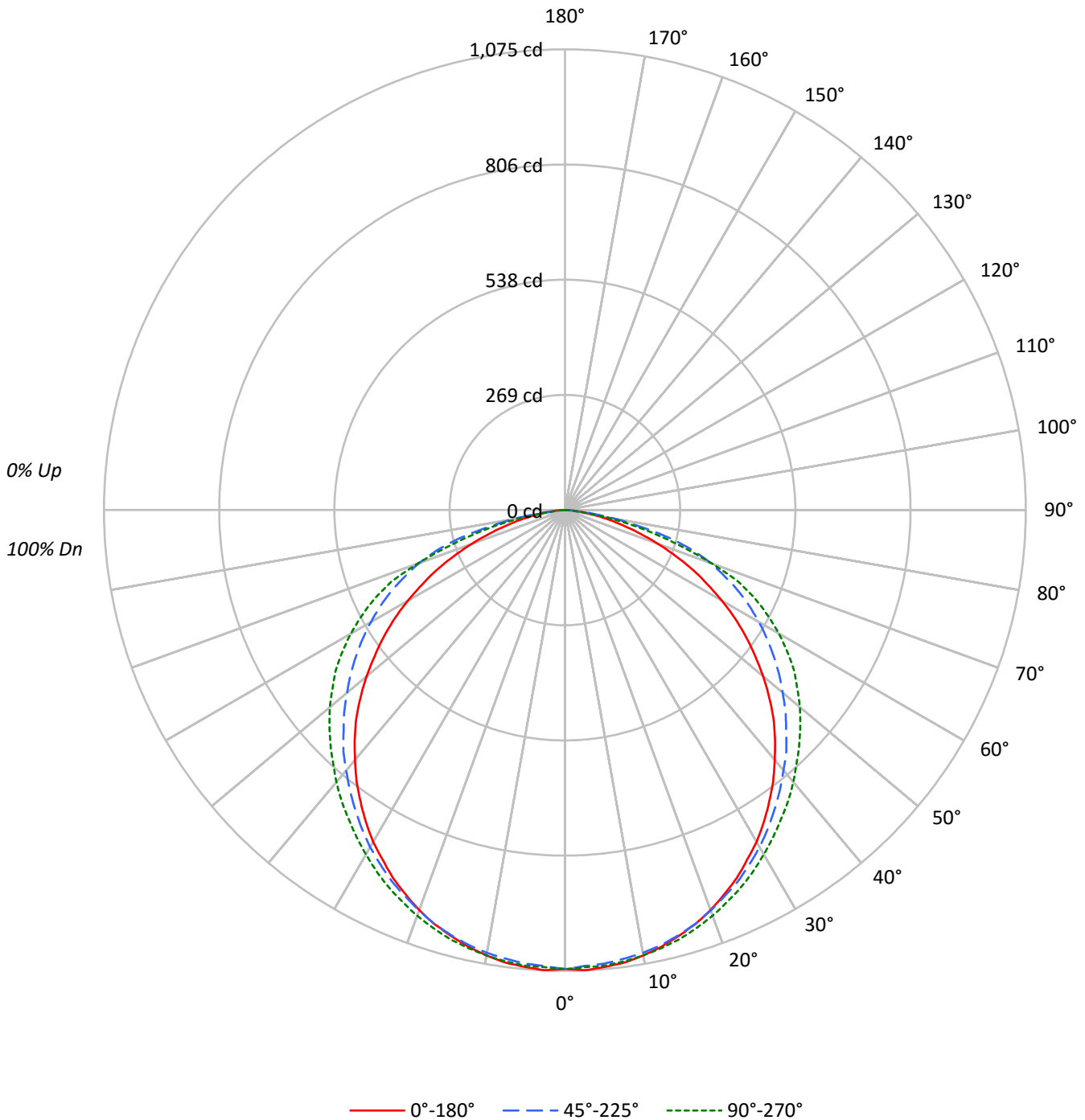
Lumens per Lamp: N/A  
Luminaire Lumens: 3153.0 lumens  
Efficiency: N/A  
Efficacy: 82.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	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°	2882	2882	2882
5°	2890	2868	2882
10°	2883	2866	2883
15°	2864	2859	2886
20°	2845	2848	2885
25°	2814	2838	2885
30°	2779	2822	2884
35°	2729	2801	2889
40°	2675	2786	2912
45°	2619	2777	2943
50°	2528	2777	2997
55°	2419	2791	3061
60°	2273	2812	3100
65°	2096	2841	3119
70°	1825	2847	2871
75°	1506	2649	2320
80°	1182	1905	1551
85°	917	735	367



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.4	3.2
10°-20°	290.9	9.2
20°-30°	441.7	14.0
30°-40°	535.2	17.0
40°-50°	564.0	17.9
50°-60°	526.6	16.7
60°-70°	420.8	13.3
70°-80°	231.5	7.3
80°-90°	40.9	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°	834.0	26.5
0°-40°	1369.2	43.4
0°-60°	2459.8	78.0
0°-90°	3153.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3153.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1071	1071	1071	1071	1071	
5°	1070	1067	1062	1069	1067	102
15°	1028	1028	1026	1036	1036	290
25°	948	950	956	970	972	436
35°	831	839	853	874	879	520
45°	688	701	730	762	773	529
55°	516	541	595	636	652	460
65°	329	371	446	483	490	324
75°	145	207	255	229	223	156
85°	30	38	24	15	12	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1070.8	1070.8	1070.8	1070.8	1070.8
2.5°	1074.7	1071.8	1064.8	1070.8	1067.8
5°	1069.8	1066.8	1061.9	1068.8	1066.8
7.5°	1064.8	1060.9	1055.9	1063.8	1061.9
10°	1054.9	1051.9	1049.0	1055.9	1054.9
12.5°	1043.0	1042.0	1039.0	1047.0	1046.0
15°	1028.1	1028.1	1026.2	1036.1	1036.1
17.5°	1012.3	1011.3	1012.3	1023.2	1022.2
20°	993.4	993.4	994.4	1007.3	1007.3
22.5°	970.6	971.6	974.6	990.5	989.5
25°	947.8	949.8	955.8	969.6	971.6
27.5°	920.1	925.0	932.0	948.8	950.8
30°	894.3	897.3	908.2	924.0	928.0
32.5°	863.6	869.5	881.4	899.3	904.2
35°	830.8	838.8	852.7	874.5	879.4
37.5°	798.1	805.1	823.9	846.7	855.6
40°	761.4	773.3	793.2	818.9	828.9
42.5°	725.7	737.6	764.4	791.2	800.1
45°	688.1	701.0	729.7	762.4	773.3
47.5°	646.4	661.3	698.0	732.7	744.6
50°	603.8	622.6	663.3	702.0	715.8
52.5°	559.2	583.0	629.6	670.2	683.1
55°	515.6	541.3	594.9	636.5	652.4
57.5°	470.9	498.7	559.2	606.8	615.7
60°	422.4	456.1	522.5	564.1	576.0
62.5°	374.8	413.4	484.8	524.5	534.4
65°	329.2	370.8	446.2	482.8	489.8
67.5°	279.6	329.2	403.5	437.2	439.2
70°	232.0	289.5	361.9	377.7	364.9
72.5°	185.4	246.9	313.3	300.4	289.5
75°	144.8	207.2	254.8	229.0	223.1
77.5°	107.1	169.5	182.4	168.5	157.6
80°	76.3	133.8	122.9	105.1	100.1
82.5°	52.5	84.3	67.4	52.5	45.6
85°	29.7	37.7	23.8	14.9	11.9
87.5°	12.9	8.9	5.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)