

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: P307207

Luminaire Tested: **14FCZ2-44-UNV-L82765-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: P307207  
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-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**

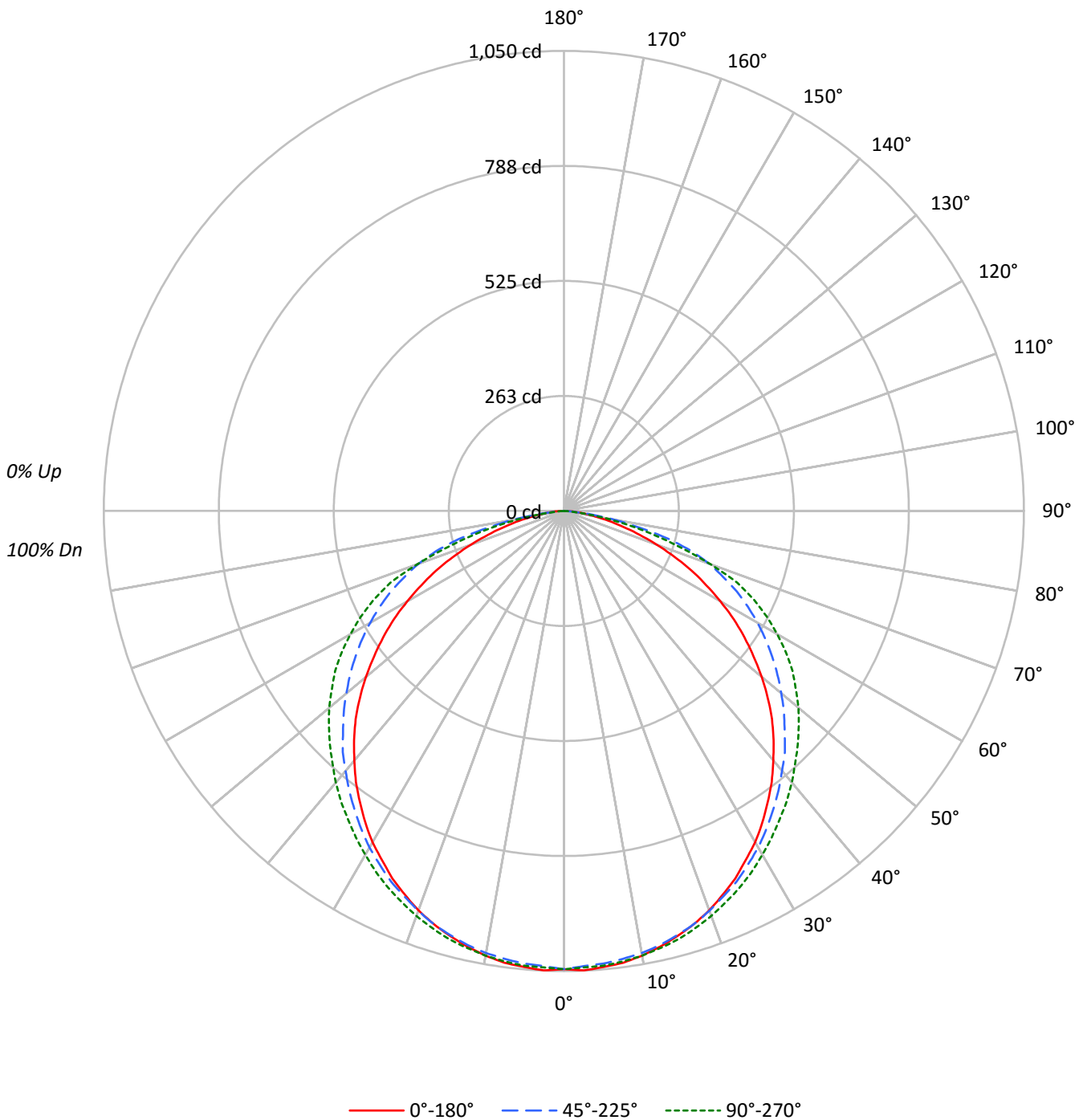
Lumens per Lamp: N/A  
Luminaire Lumens: 3079.0 lumens  
Efficiency: N/A  
Efficacy: 80.0 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	2814	2814	2814
5°	2822	2801	2814
10°	2815	2799	2815
15°	2797	2792	2819
20°	2778	2781	2817
25°	2748	2771	2817
30°	2714	2756	2816
35°	2665	2735	2821
40°	2612	2721	2843
45°	2557	2712	2874
50°	2468	2712	2926
55°	2362	2725	2989
60°	2220	2746	3027
65°	2046	2774	3046
70°	1783	2781	2803
75°	1470	2587	2264
80°	1156	1861	1516
85°	895	716	358



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.0	3.2
10°-20°	284.1	9.2
20°-30°	431.4	14.0
30°-40°	522.7	17.0
40°-50°	550.8	17.9
50°-60°	514.2	16.7
60°-70°	410.9	13.3
70°-80°	226.1	7.3
80°-90°	39.9	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°	814.4	26.5
0°-40°	1337.1	43.4
0°-60°	2402.1	78.0
0°-90°	3079.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3079.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1046	1046	1046	1046	1046	
5°	1045	1042	1037	1044	1042	99
15°	1004	1004	1002	1012	1012	283
25°	926	928	933	947	949	426
35°	811	819	833	854	859	508
45°	672	684	713	744	755	517
55°	504	529	581	622	637	449
65°	321	362	436	472	478	316
75°	141	202	249	224	218	152
85°	29	37	23	14	12	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1045.6	1045.6	1045.6	1045.6	1045.6
2.5°	1049.5	1046.6	1039.8	1045.6	1042.7
5°	1044.7	1041.8	1036.9	1043.7	1041.8
7.5°	1039.8	1036.0	1031.1	1038.9	1036.9
10°	1030.2	1027.2	1024.3	1031.1	1030.2
12.5°	1018.5	1017.6	1014.7	1022.4	1021.4
15°	1004.0	1004.0	1002.1	1011.8	1011.8
17.5°	988.5	987.6	988.5	999.2	998.2
20°	970.1	970.1	971.1	983.7	983.7
22.5°	947.9	948.8	951.7	967.2	966.3
25°	925.6	927.5	933.3	946.9	948.8
27.5°	898.5	903.3	910.1	926.6	928.5
30°	873.3	876.2	886.9	902.4	906.2
32.5°	843.3	849.1	860.7	878.1	883.0
35°	811.3	819.1	832.6	853.9	858.8
37.5°	779.4	786.2	804.6	826.8	835.5
40°	743.6	755.2	774.6	799.7	809.4
42.5°	708.7	720.3	746.5	772.6	781.3
45°	671.9	684.5	712.6	744.5	755.2
47.5°	631.3	645.8	681.6	715.5	727.1
50°	589.6	608.0	647.7	685.5	699.0
52.5°	546.1	569.3	614.8	654.5	667.1
55°	503.5	528.6	580.9	621.6	637.1
57.5°	459.9	487.0	546.1	592.5	601.2
60°	412.4	445.4	510.2	550.9	562.5
62.5°	366.0	403.7	473.4	512.2	521.9
65°	321.4	362.1	435.7	471.5	478.3
67.5°	273.0	321.4	394.1	427.0	428.9
70°	226.6	282.7	353.4	368.9	356.3
72.5°	181.1	241.1	305.9	293.4	282.7
75°	141.4	202.4	248.8	223.7	217.8
77.5°	104.6	165.6	178.1	164.6	153.9
80°	74.6	130.7	120.1	102.6	97.8
82.5°	51.3	82.3	65.8	51.3	44.5
85°	29.0	36.8	23.2	14.5	11.6
87.5°	12.6	8.7	4.8	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)