

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: P312260

Luminaire Tested: **14FCZ2-39-UNV-L83050-CP250-W2A-U-3000K**

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: P312260  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-39-UNV-L83050-CP250-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET  
Light Source: (168) 3000K 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**

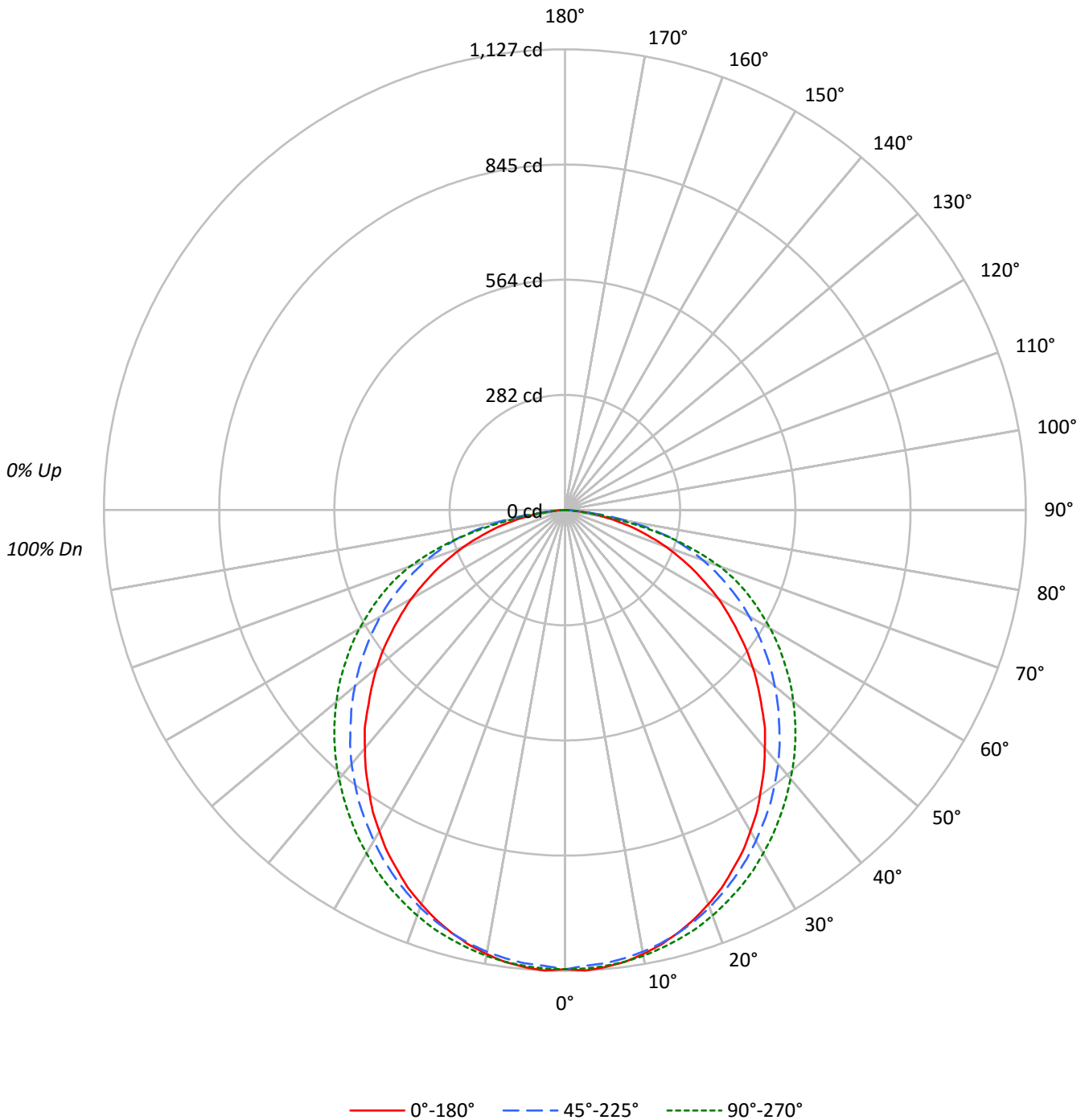
Lumens per Lamp: N/A  
Luminaire Lumens: 3260.0 lumens  
Efficiency: N/A  
Efficacy: 98.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3022	3022	3022
5°	3032	3006	3024
10°	3013	2997	3025
15°	2981	2983	3024
20°	2937	2962	3023
25°	2881	2933	3020
30°	2819	2903	3013
35°	2744	2877	3011
40°	2671	2850	3016
45°	2589	2819	3032
50°	2514	2806	3052
55°	2418	2797	3080
60°	2331	2801	3122
65°	2213	2809	3170
70°	2076	2831	3168
75°	1882	2857	2864
80°	1543	2467	2039
85°	1145	1167	472



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.3	3.3
10°-20°	303.6	9.3
20°-30°	457.3	14.0
30°-40°	548.8	16.8
40°-50°	572.0	17.5
50°-60°	529.5	16.2
60°-70°	427.8	13.1
70°-80°	260.9	8.0
80°-90°	53.9	1.7
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°	867.2	26.6
0°-40°	1415.9	43.4
0°-60°	2517.5	77.2
0°-90°	3260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3260.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1122	1119	1113	1121	1119	107
15°	1070	1071	1071	1085	1085	302
25°	970	976	988	1013	1017	447
35°	835	848	876	908	917	523
45°	680	701	741	782	797	526
55°	515	542	596	643	656	462
65°	348	382	441	486	498	344
75°	181	221	275	279	276	190
85°	37	55	38	21	15	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1123.1	1123.1	1123.1	1123.1	1123.1
2.5°	1127.4	1123.8	1115.8	1123.8	1122.4
5°	1122.4	1119.4	1112.9	1120.9	1119.4
7.5°	1115.1	1112.2	1106.4	1115.8	1114.4
10°	1102.7	1101.3	1096.9	1107.8	1107.1
12.5°	1088.2	1087.5	1085.3	1097.6	1096.9
15°	1070.0	1070.7	1070.7	1085.3	1085.3
17.5°	1049.7	1051.1	1054.0	1070.0	1072.2
20°	1025.7	1028.6	1034.4	1052.6	1055.5
22.5°	1001.0	1003.1	1011.9	1033.7	1036.6
25°	970.4	976.2	987.9	1012.6	1017.0
27.5°	941.4	946.4	962.4	987.9	995.1
30°	907.2	915.2	934.1	961.7	969.7
32.5°	874.5	883.2	905.0	937.0	944.3
35°	835.2	848.3	875.9	907.9	916.6
37.5°	799.6	812.0	843.2	878.1	888.3
40°	760.4	775.6	811.2	848.3	858.5
42.5°	724.0	738.5	777.1	814.9	828.7
45°	680.4	700.7	740.7	782.2	796.7
47.5°	640.4	660.8	706.6	750.9	764.0
50°	600.4	622.2	670.2	716.0	729.1
52.5°	559.0	582.3	633.9	679.7	694.9
55°	515.4	542.3	596.1	642.6	656.4
57.5°	473.9	501.6	559.0	606.2	620.1
60°	433.2	461.6	520.5	565.5	580.1
62.5°	388.2	421.6	482.7	527.0	537.9
65°	347.5	381.6	441.2	485.6	497.9
67.5°	304.6	341.6	401.3	442.0	453.6
70°	263.9	302.4	359.8	397.6	402.7
72.5°	220.3	259.5	317.7	341.6	341.6
75°	181.0	221.0	274.8	279.1	275.5
77.5°	138.1	182.5	217.3	208.6	199.9
80°	99.6	143.2	159.2	143.2	131.6
82.5°	66.9	103.9	96.0	76.3	67.6
85°	37.1	55.2	37.8	21.1	15.3
87.5°	13.8	12.4	3.6	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)