

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: P307727

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP187-W2A-U-2700K**

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: P307727  
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-L82765-CP187-W2A-U-2700K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB SHEET  
Light Source: (168) 2700K 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**

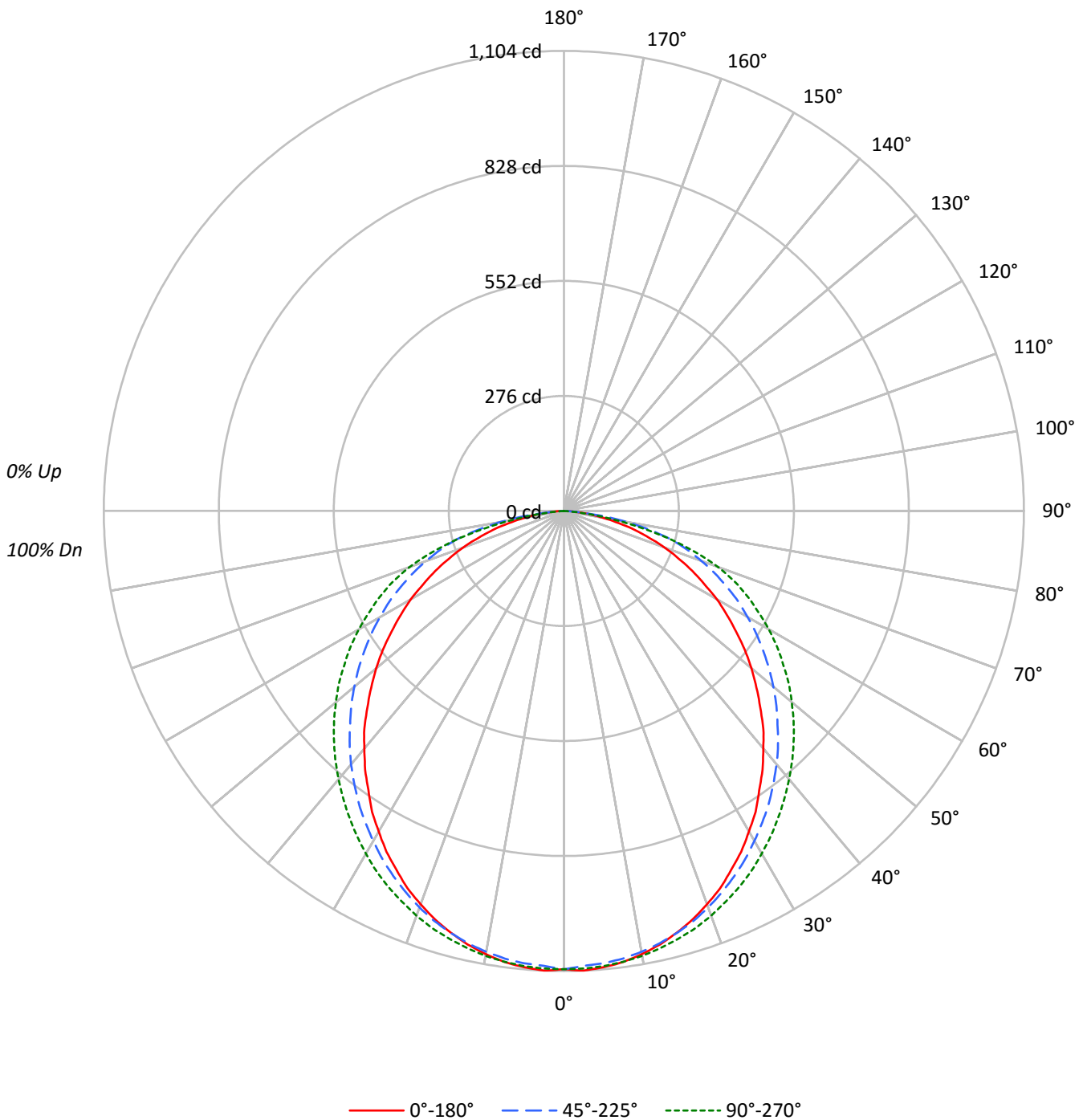
Lumens per Lamp: N/A  
Luminaire Lumens: 3192.0 lumens  
Efficiency: N/A  
Efficacy: 95.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2959	2959	2959
5°	2968	2944	2961
10°	2950	2935	2962
15°	2919	2921	2960
20°	2876	2900	2960
25°	2821	2872	2956
30°	2760	2842	2950
35°	2687	2818	2948
40°	2615	2790	2953
45°	2535	2760	2969
50°	2461	2747	2989
55°	2367	2738	3015
60°	2283	2743	3057
65°	2166	2751	3104
70°	2033	2772	3102
75°	1842	2797	2805
80°	1511	2416	1996
85°	1121	1142	460



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.1	3.3
10°-20°	297.2	9.3
20°-30°	447.8	14.0
30°-40°	537.3	16.8
40°-50°	560.0	17.5
50°-60°	518.5	16.2
60°-70°	418.9	13.1
70°-80°	255.4	8.0
80°-90°	52.7	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°	849.1	26.6
0°-40°	1386.4	43.4
0°-60°	2464.9	77.2
0°-90°	3192.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3192.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1100	1100	1100	1100	1100	
5°	1099	1096	1090	1098	1096	104
15°	1048	1048	1048	1063	1063	295
25°	950	956	967	992	996	438
35°	818	831	858	889	898	512
45°	666	686	725	766	780	515
55°	505	531	584	629	643	452
65°	340	374	432	475	488	336
75°	177	216	269	273	270	186
85°	36	54	37	21	15	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1099.7	1099.7	1099.7	1099.7	1099.7
2.5°	1103.9	1100.4	1092.5	1100.4	1098.9
5°	1098.9	1096.1	1089.7	1097.5	1096.1
7.5°	1091.8	1089.0	1083.3	1092.5	1091.1
10°	1079.7	1078.3	1074.0	1084.7	1084.0
12.5°	1065.5	1064.8	1062.6	1074.7	1074.0
15°	1047.7	1048.4	1048.4	1062.6	1062.6
17.5°	1027.8	1029.2	1032.0	1047.7	1049.8
20°	1004.3	1007.1	1012.8	1030.6	1033.5
22.5°	980.1	982.2	990.8	1012.1	1015.0
25°	950.2	955.9	967.3	991.5	995.7
27.5°	921.7	926.7	942.4	967.3	974.4
30°	888.3	896.1	914.6	941.6	949.5
32.5°	856.2	864.8	886.1	917.4	924.6
35°	817.8	830.6	857.7	889.0	897.5
37.5°	782.9	795.0	825.6	859.8	869.8
40°	744.5	759.4	794.3	830.6	840.6
42.5°	708.9	723.1	760.9	797.9	811.4
45°	666.2	686.1	725.3	765.8	780.1
47.5°	627.1	647.0	691.8	735.2	748.0
50°	587.9	609.3	656.2	701.1	713.9
52.5°	547.3	570.1	620.6	665.5	680.4
55°	504.6	531.0	583.6	629.2	642.7
57.5°	464.1	491.1	547.3	593.6	607.1
60°	424.2	452.0	509.6	553.7	568.0
62.5°	380.1	412.8	472.6	516.0	526.7
65°	340.2	373.7	432.0	475.4	487.5
67.5°	298.2	334.5	392.9	432.7	444.1
70°	258.4	296.1	352.3	389.3	394.3
72.5°	215.7	254.1	311.0	334.5	334.5
75°	177.2	216.4	269.0	273.3	269.8
77.5°	135.2	178.6	212.8	204.3	195.7
80°	97.5	140.2	155.9	140.2	128.8
82.5°	65.5	101.8	94.0	74.7	66.2
85°	36.3	54.1	37.0	20.6	14.9
87.5°	13.5	12.1	3.6	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)