

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: P307736

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP250-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: P307736  
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-CP250-W2A-U-2700K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" 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: 3166.0 lumens  
Efficiency: N/A  
Efficacy: 95.1 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

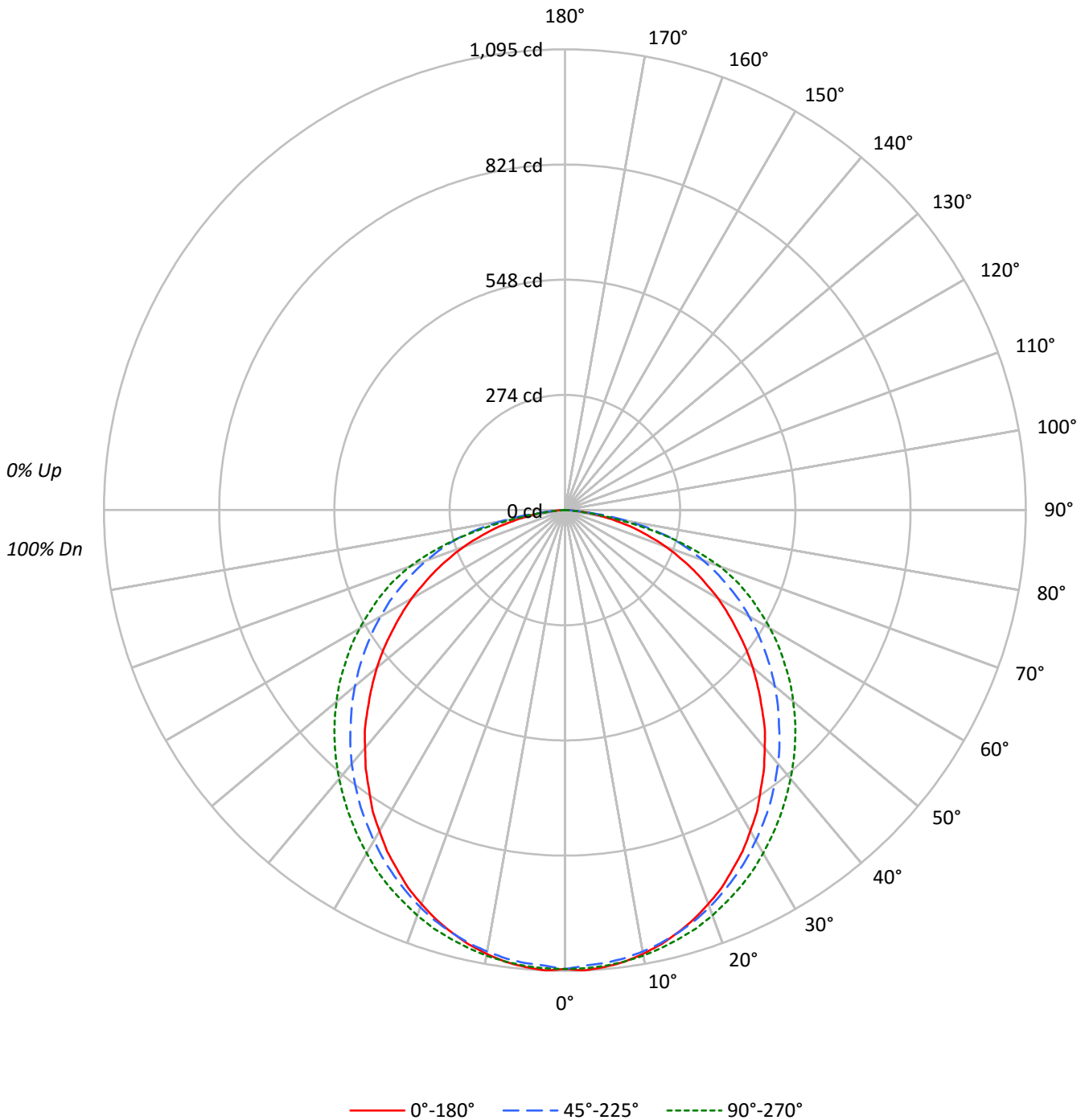
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2935	2935	2935
5°	2944	2920	2937
10°	2926	2911	2938
15°	2895	2897	2936
20°	2853	2877	2935
25°	2798	2849	2932
30°	2738	2819	2926
35°	2665	2795	2924
40°	2594	2767	2929
45°	2515	2738	2944
50°	2441	2725	2964
55°	2348	2716	2991
60°	2264	2721	3032
65°	2148	2728	3079
70°	2017	2749	3077
75°	1828	2775	2782
80°	1499	2396	1980
85°	1112	1133	457



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.2	3.3
10°-20°	294.8	9.3
20°-30°	444.1	14.0
30°-40°	532.9	16.8
40°-50°	555.5	17.5
50°-60°	514.3	16.2
60°-70°	415.5	13.1
70°-80°	253.3	8.0
80°-90°	52.3	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°	842.2	26.6
0°-40°	1375.1	43.4
0°-60°	2444.9	77.2
0°-90°	3166.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3166.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1090	1087	1081	1089	1087	103
15°	1039	1040	1040	1054	1054	293
25°	942	948	959	983	988	434
35°	811	824	851	882	890	508
45°	661	680	719	760	774	511
55°	500	527	579	624	638	448
65°	337	371	428	472	484	334
75°	176	215	267	271	268	185
85°	36	54	37	20	15	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1090.7	1090.7	1090.7	1090.7	1090.7
2.5°	1094.9	1091.4	1083.6	1091.4	1090.0
5°	1090.0	1087.2	1080.8	1088.6	1087.2
7.5°	1082.9	1080.1	1074.5	1083.6	1082.2
10°	1070.9	1069.5	1065.3	1075.9	1075.2
12.5°	1056.8	1056.1	1054.0	1066.0	1065.3
15°	1039.2	1039.9	1039.9	1054.0	1054.0
17.5°	1019.4	1020.8	1023.6	1039.2	1041.3
20°	996.1	998.9	1004.6	1022.2	1025.0
22.5°	972.1	974.2	982.7	1003.9	1006.7
25°	942.4	948.1	959.4	983.4	987.6
27.5°	914.2	919.2	934.7	959.4	966.4
30°	881.0	888.8	907.1	934.0	941.7
32.5°	849.3	857.7	878.9	910.0	917.0
35°	811.1	823.8	850.7	881.7	890.2
37.5°	776.5	788.5	818.9	852.8	862.7
40°	738.4	753.3	787.8	823.8	833.7
42.5°	703.1	717.2	754.7	791.4	804.8
45°	660.8	680.5	719.4	759.6	773.7
47.5°	621.9	641.7	686.2	729.2	742.0
50°	583.1	604.3	650.9	695.4	708.1
52.5°	542.9	565.5	615.6	660.1	674.9
55°	500.5	526.6	578.9	624.1	637.5
57.5°	460.3	487.1	542.9	588.8	602.2
60°	420.7	448.3	505.5	549.2	563.4
62.5°	377.0	409.5	468.8	511.8	522.4
65°	337.4	370.6	428.5	471.6	483.6
67.5°	295.8	331.8	389.7	429.2	440.5
70°	256.3	293.7	349.4	386.2	391.1
72.5°	213.9	252.0	308.5	331.8	331.8
75°	175.8	214.6	266.9	271.1	267.6
77.5°	134.1	177.2	211.1	202.6	194.1
80°	96.7	139.1	154.6	139.1	127.8
82.5°	64.9	101.0	93.2	74.1	65.7
85°	36.0	53.7	36.7	20.5	14.8
87.5°	13.4	12.0	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)