

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: P312225

Luminaire Tested: **14FCZ2-35-UNV-L83050-CP125-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: P312225  
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: 14FCZ2-35-UNV-L83050-CP125-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 0.125" 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**

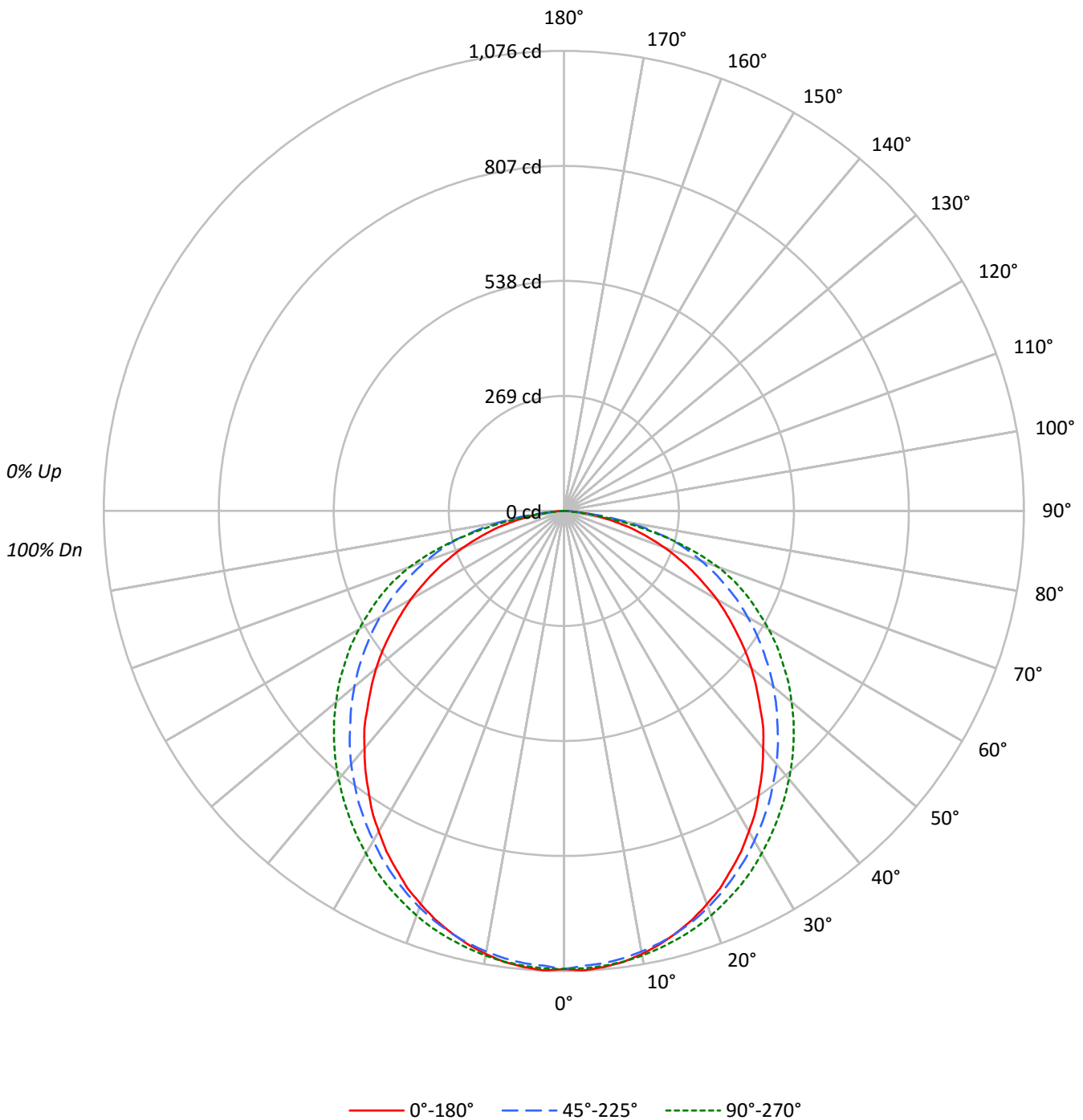
Lumens per Lamp: N/A  
Luminaire Lumens: 3110.0 lumens  
Efficiency: N/A  
Efficacy: 105.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2883	2883	2883
5°	2892	2868	2885
10°	2875	2859	2886
15°	2844	2846	2884
20°	2802	2826	2883
25°	2749	2798	2881
30°	2689	2769	2875
35°	2618	2745	2873
40°	2548	2719	2877
45°	2470	2689	2892
50°	2398	2677	2912
55°	2307	2668	2938
60°	2224	2672	2978
65°	2111	2680	3025
70°	1980	2701	3023
75°	1796	2725	2732
80°	1472	2354	1945
85°	1093	1115	451



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.4	3.3
10°-20°	289.6	9.3
20°-30°	436.3	14.0
30°-40°	523.5	16.8
40°-50°	545.7	17.5
50°-60°	505.2	16.2
60°-70°	408.2	13.1
70°-80°	248.9	8.0
80°-90°	51.4	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°	827.3	26.6
0°-40°	1350.8	43.4
0°-60°	2401.6	77.2
0°-90°	3110.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3110.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1071	1071	1071	1071	1071	
5°	1071	1068	1062	1069	1068	102
15°	1021	1022	1022	1035	1035	288
25°	926	931	942	966	970	427
35°	797	809	836	866	874	499
45°	649	668	707	746	760	502
55°	492	517	569	613	626	441
65°	332	364	421	463	475	328
75°	173	211	262	266	263	181
85°	35	53	36	20	15	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1071.4	1071.4	1071.4	1071.4	1071.4
2.5°	1075.6	1072.1	1064.5	1072.1	1070.7
5°	1070.7	1067.9	1061.7	1069.3	1067.9
7.5°	1063.8	1061.0	1055.5	1064.5	1063.1
10°	1052.0	1050.6	1046.4	1056.8	1056.1
12.5°	1038.1	1037.4	1035.3	1047.1	1046.4
15°	1020.8	1021.5	1021.5	1035.3	1035.3
17.5°	1001.4	1002.8	1005.5	1020.8	1022.9
20°	978.5	981.3	986.8	1004.1	1006.9
22.5°	954.9	957.0	965.3	986.1	988.9
25°	925.8	931.3	942.4	966.0	970.2
27.5°	898.0	902.9	918.1	942.4	949.4
30°	865.4	873.1	891.1	917.5	925.1
32.5°	834.2	842.6	863.4	893.9	900.8
35°	796.8	809.3	835.6	866.1	874.5
37.5°	762.8	774.6	804.4	837.7	847.4
40°	725.4	739.9	773.9	809.3	819.0
42.5°	690.7	704.6	741.3	777.4	790.6
45°	649.1	668.5	706.6	746.2	760.0
47.5°	610.9	630.4	674.0	716.4	728.8
50°	572.8	593.6	639.4	683.1	695.5
52.5°	533.3	555.5	604.7	648.4	663.0
55°	491.7	517.3	568.6	613.0	626.2
57.5°	452.1	478.5	533.3	578.4	591.5
60°	413.3	440.4	496.5	539.5	553.4
62.5°	370.3	402.2	460.5	502.8	513.2
65°	331.5	364.1	420.9	463.2	475.0
67.5°	290.6	325.9	382.8	421.6	432.7
70°	251.7	288.5	343.3	379.3	384.2
72.5°	210.1	247.6	303.0	325.9	325.9
75°	172.7	210.8	262.1	266.3	262.8
77.5°	131.8	174.1	207.3	199.0	190.7
80°	95.0	136.6	151.9	136.6	125.5
82.5°	63.8	99.2	91.5	72.8	64.5
85°	35.4	52.7	36.1	20.1	14.6
87.5°	13.2	11.8	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)