

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: P307677

Luminaire Tested: **14FCZ2-35-UNV-L82765-CP125-W2A-U-4500K**

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: P307677  
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-L82765-CP125-W2A-U-4500K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB SHEET  
Light Source: (168) 4500K 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**

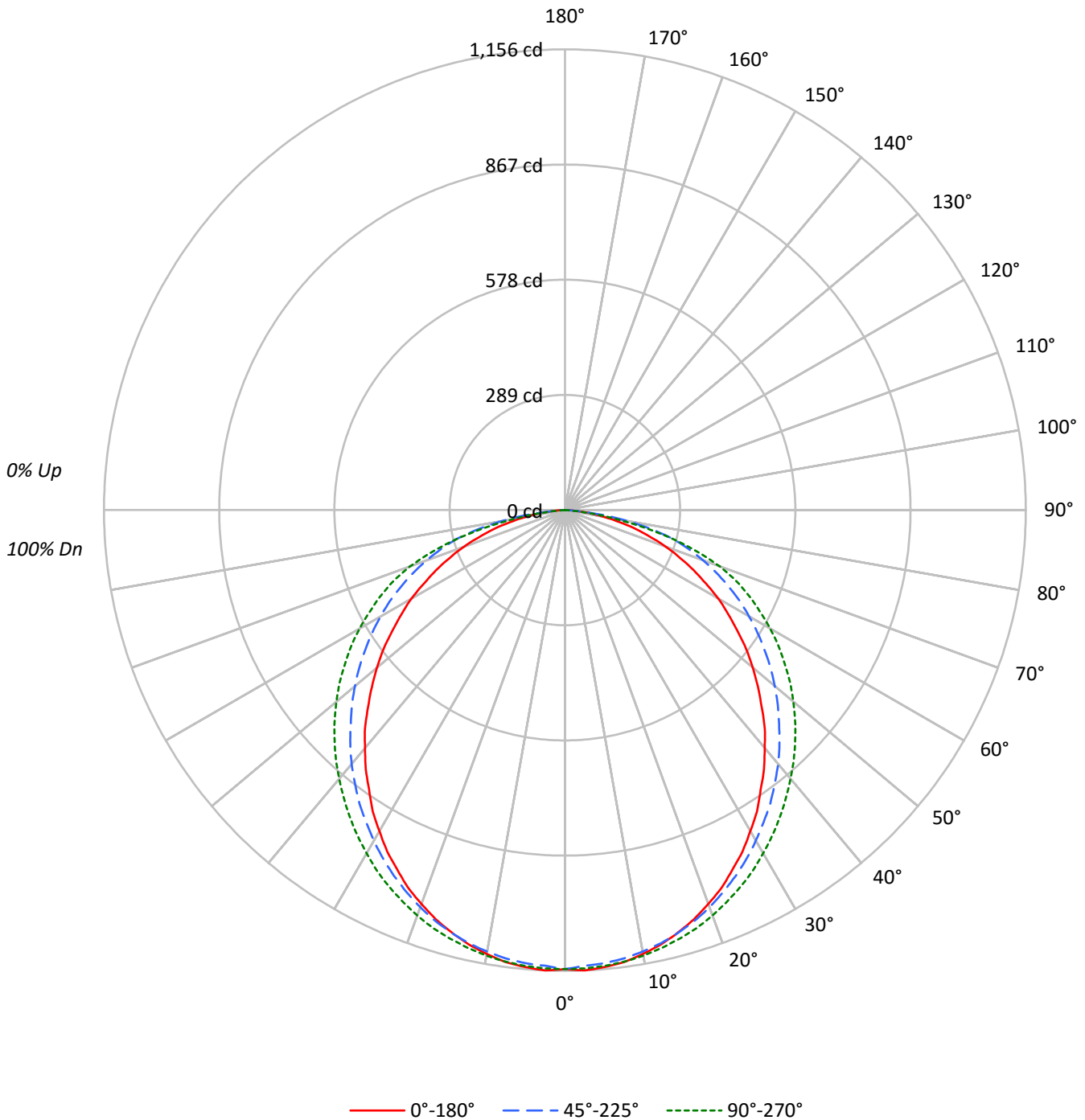
Lumens per Lamp: N/A  
Luminaire Lumens: 3343.0 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 30.1  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3099	3099	3099
5°	3109	3083	3101
10°	3090	3074	3102
15°	3057	3059	3100
20°	3012	3038	3100
25°	2955	3008	3096
30°	2891	2976	3090
35°	2814	2951	3088
40°	2739	2922	3092
45°	2655	2891	3109
50°	2578	2877	3130
55°	2479	2867	3158
60°	2391	2872	3201
65°	2269	2881	3251
70°	2129	2903	3249
75°	1930	2930	2937
80°	1582	2529	2091
85°	1173	1198	485



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.0	3.3
10°-20°	311.3	9.3
20°-30°	469.0	14.0
30°-40°	562.7	16.8
40°-50°	586.5	17.5
50°-60°	543.0	16.2
60°-70°	438.7	13.1
70°-80°	267.5	8.0
80°-90°	55.2	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°	889.2	26.6
0°-40°	1452.0	43.4
0°-60°	2581.5	77.2
0°-90°	3343.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3343.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1152	1152	1152	1152	1152	
5°	1151	1148	1141	1149	1148	109
15°	1097	1098	1098	1113	1113	309
25°	995	1001	1013	1038	1043	459
35°	856	870	898	931	940	537
45°	698	719	760	802	817	539
55°	528	556	611	659	673	473
65°	356	391	452	498	511	352
75°	186	227	282	286	282	195
85°	38	57	39	22	16	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1151.7	1151.7	1151.7	1151.7	1151.7
2.5°	1156.1	1152.4	1144.2	1152.4	1150.9
5°	1150.9	1147.9	1141.2	1149.4	1147.9
7.5°	1143.5	1140.5	1134.5	1144.2	1142.7
10°	1130.8	1129.3	1124.8	1136.0	1135.3
12.5°	1115.9	1115.1	1112.9	1125.6	1124.8
15°	1097.3	1098.0	1098.0	1112.9	1112.9
17.5°	1076.4	1077.9	1080.9	1097.3	1099.5
20°	1051.8	1054.8	1060.7	1079.4	1082.4
22.5°	1026.4	1028.7	1037.6	1060.0	1063.0
25°	995.1	1001.1	1013.0	1038.4	1042.8
27.5°	965.3	970.5	986.9	1013.0	1020.5
30°	930.3	938.5	957.9	986.2	994.4
32.5°	896.7	905.7	928.0	960.8	968.3
35°	856.5	869.9	898.2	931.0	940.0
37.5°	820.0	832.6	864.7	900.5	910.9
40°	779.7	795.4	831.9	869.9	880.3
42.5°	742.4	757.3	796.9	835.6	849.8
45°	697.7	718.6	759.6	802.1	817.0
47.5°	656.7	677.6	724.5	770.0	783.4
50°	615.7	638.1	687.3	734.2	747.7
52.5°	573.2	597.1	650.0	697.0	712.6
55°	528.5	556.1	611.2	659.0	673.1
57.5°	486.0	514.3	573.2	621.7	635.8
60°	444.3	473.3	533.7	579.9	594.8
62.5°	398.1	432.3	495.0	540.4	551.6
65°	356.3	391.3	452.5	497.9	510.6
67.5°	312.3	350.3	411.5	453.2	465.1
70°	270.6	310.1	369.0	407.7	413.0
72.5°	225.9	266.1	325.7	350.3	350.3
75°	185.6	226.6	281.8	286.2	282.5
77.5°	141.6	187.1	222.9	213.9	205.0
80°	102.1	146.8	163.2	146.8	134.9
82.5°	68.6	106.6	98.4	78.3	69.3
85°	38.0	56.7	38.8	21.6	15.7
87.5°	14.2	12.7	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)