

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: P307688

Luminaire Tested: **14FCZ2-35-UNV-L82765-CP187-W2A-U-5500K**

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: P307688  
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-CP187-W2A-U-5500K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB SHEET  
Light Source: (168) 5500K 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**

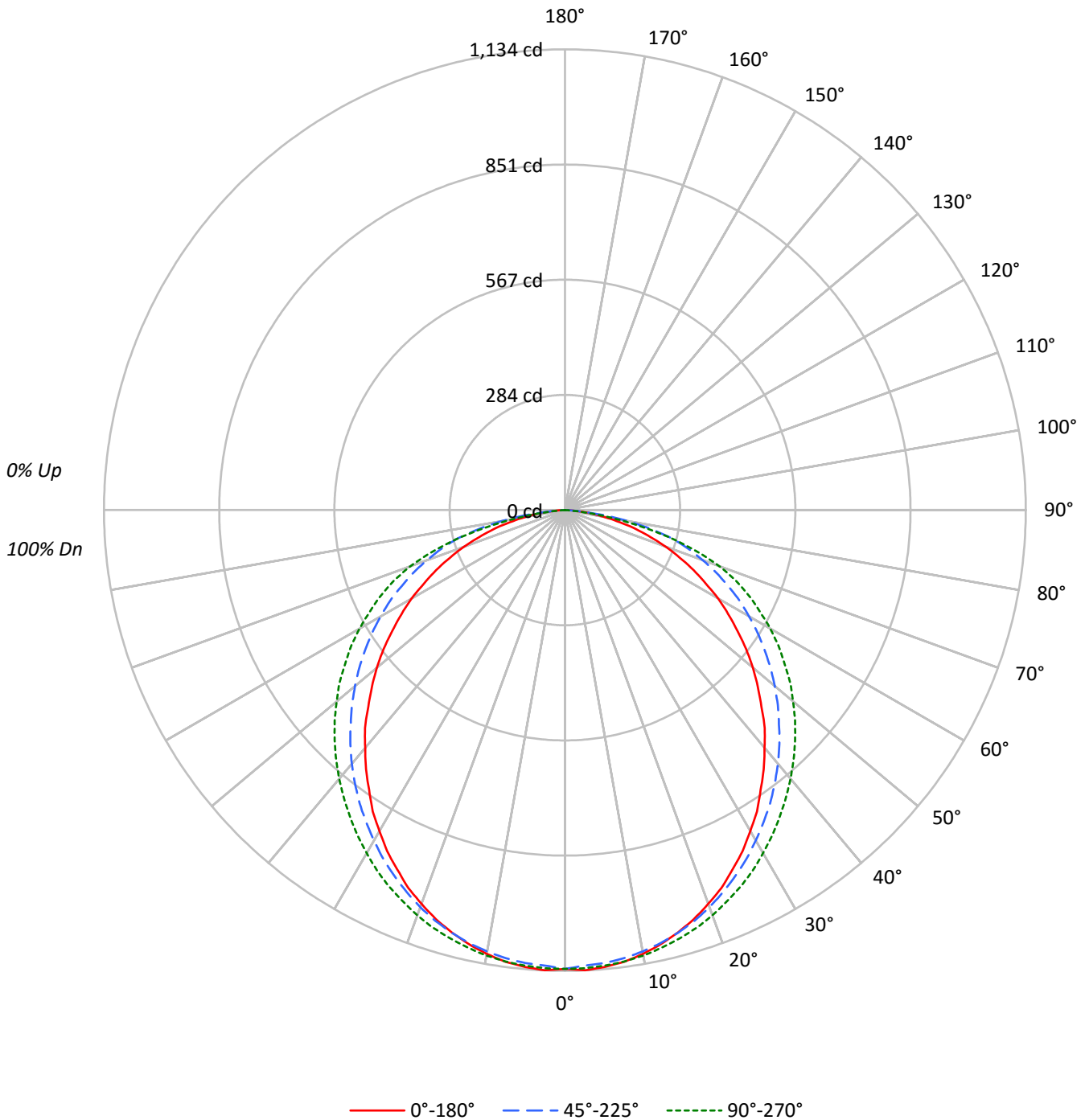
Lumens per Lamp: N/A  
Luminaire Lumens: 3278.0 lumens  
Efficiency: N/A  
Efficacy: 108.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 30.3  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3039	3039	3039
5°	3049	3023	3041
10°	3030	3014	3042
15°	2997	3000	3040
20°	2953	2979	3039
25°	2897	2949	3036
30°	2834	2918	3030
35°	2759	2893	3028
40°	2686	2865	3032
45°	2603	2834	3049
50°	2527	2821	3069
55°	2431	2812	3096
60°	2344	2816	3139
65°	2225	2825	3188
70°	2087	2847	3186
75°	1892	2873	2880
80°	1551	2481	2050
85°	1152	1173	472



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.9	3.3
10°-20°	305.3	9.3
20°-30°	459.8	14.0
30°-40°	551.8	16.8
40°-50°	575.1	17.5
50°-60°	532.4	16.2
60°-70°	430.2	13.1
70°-80°	262.3	8.0
80°-90°	54.2	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°	872.0	26.6
0°-40°	1423.8	43.4
0°-60°	2531.4	77.2
0°-90°	3278.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3278.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1129	1129	1129	1129	1129	
5°	1129	1126	1119	1127	1126	107
15°	1076	1077	1077	1091	1091	303
25°	976	982	993	1018	1023	450
35°	840	853	881	913	922	526
45°	684	705	745	786	801	529
55°	518	545	599	646	660	464
65°	349	384	444	488	501	345
75°	182	222	276	281	277	191
85°	37	56	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°	1129.3	1129.3	1129.3	1129.3	1129.3
2.5°	1133.7	1130.0	1122.0	1130.0	1128.6
5°	1128.6	1125.6	1119.0	1127.1	1125.6
7.5°	1121.2	1118.3	1112.5	1122.0	1120.5
10°	1108.8	1107.4	1103.0	1113.9	1113.2
12.5°	1094.2	1093.5	1091.3	1103.7	1103.0
15°	1075.9	1076.7	1076.7	1091.3	1091.3
17.5°	1055.5	1056.9	1059.8	1075.9	1078.1
20°	1031.3	1034.3	1040.1	1058.4	1061.3
22.5°	1006.5	1008.7	1017.4	1039.4	1042.3
25°	975.8	981.6	993.3	1018.2	1022.6
27.5°	946.6	951.7	967.7	993.3	1000.6
30°	912.2	920.2	939.2	967.0	975.1
32.5°	879.3	888.1	910.0	942.2	949.5
35°	839.8	853.0	880.8	912.9	921.7
37.5°	804.0	816.4	847.9	883.0	893.2
40°	764.5	779.9	815.7	853.0	863.2
42.5°	728.0	742.6	781.4	819.4	833.3
45°	684.1	704.6	744.8	786.5	801.1
47.5°	643.9	664.4	710.5	755.0	768.2
50°	603.7	625.7	673.9	720.0	733.1
52.5°	562.1	585.5	637.4	683.4	698.8
55°	518.2	545.3	599.4	646.1	660.0
57.5°	476.6	504.3	562.1	609.6	623.5
60°	435.6	464.1	523.3	568.7	583.3
62.5°	390.3	423.9	485.3	529.9	540.9
65°	349.4	383.7	443.7	488.3	500.7
67.5°	306.3	343.5	403.5	444.4	456.1
70°	265.3	304.1	361.8	399.8	404.9
72.5°	221.5	260.9	319.4	343.5	343.5
75°	182.0	222.2	276.3	280.7	277.0
77.5°	138.9	183.5	218.5	209.8	201.0
80°	100.1	144.0	160.1	144.0	132.3
82.5°	67.2	104.5	96.5	76.7	68.0
85°	37.3	55.6	38.0	21.2	15.3
87.5°	13.9	12.4	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)