

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: P307685

Luminaire Tested: **14FCZ2-35-UNV-L82765-CP187-W2A-U-4000K**

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: P307685  
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-4000K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB SHEET  
Light Source: (168) 4000K 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**

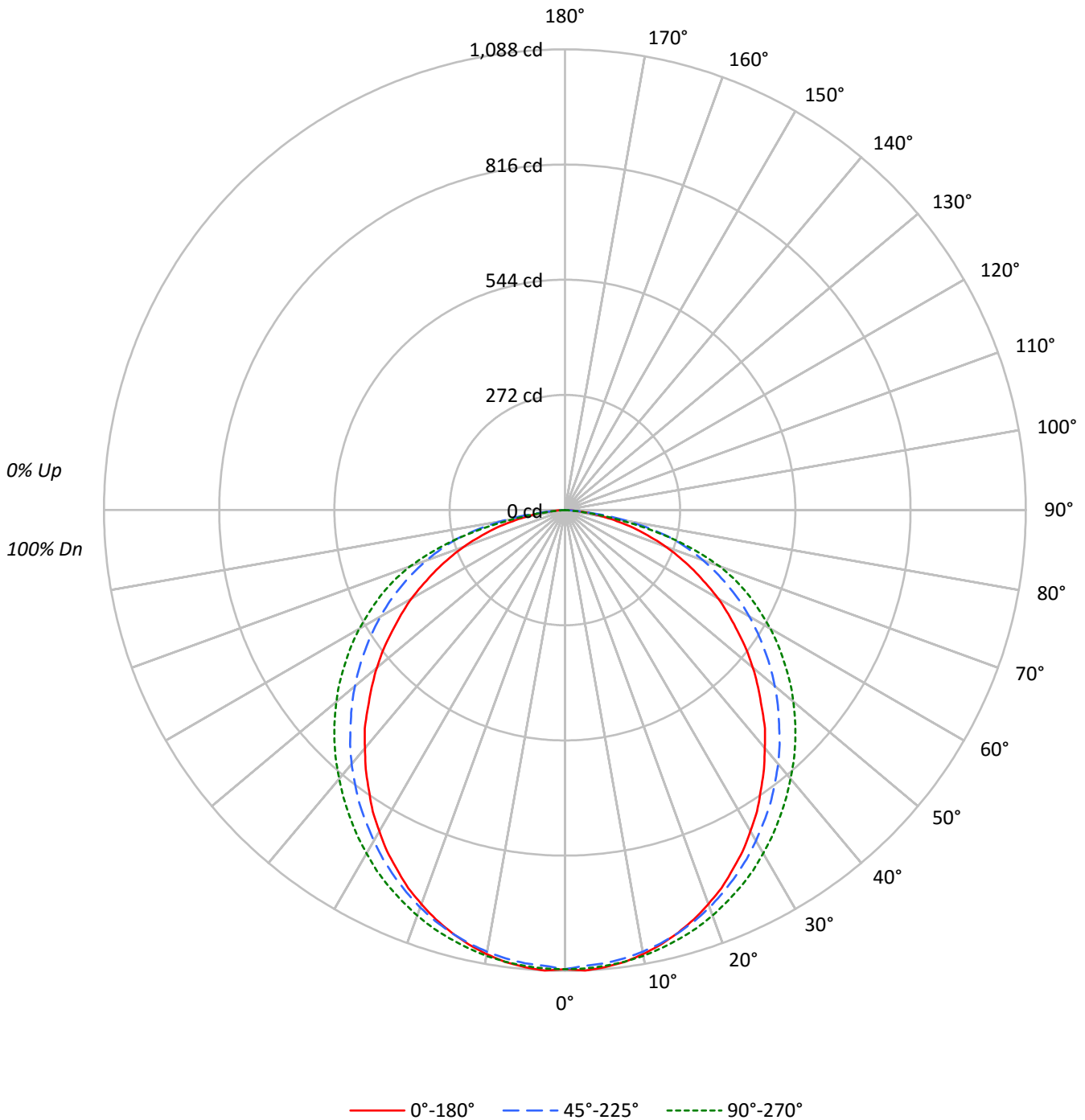
Lumens per Lamp: N/A  
Luminaire Lumens: 3146.9 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.8  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2918	2918	2918
5°	2927	2902	2919
10°	2909	2893	2920
15°	2878	2880	2919
20°	2835	2859	2918
25°	2782	2831	2915
30°	2721	2802	2909
35°	2649	2778	2907
40°	2578	2751	2911
45°	2500	2721	2927
50°	2426	2709	2946
55°	2334	2700	2973
60°	2251	2704	3014
65°	2136	2712	3061
70°	2004	2733	3059
75°	1816	2757	2766
80°	1489	2382	1968
85°	1105	1127	454



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.6	3.3
10°-20°	293.1	9.3
20°-30°	441.5	14.0
30°-40°	529.8	16.8
40°-50°	552.2	17.5
50°-60°	511.2	16.2
60°-70°	413.0	13.1
70°-80°	251.8	8.0
80°-90°	52.0	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°	837.1	26.6
0°-40°	1366.9	43.4
0°-60°	2430.2	77.2
0°-90°	3146.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3146.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1084	1084	1084	1084	1084	
5°	1084	1081	1074	1082	1081	103
15°	1033	1034	1034	1048	1048	291
25°	937	942	954	978	982	432
35°	806	819	846	876	885	505
45°	657	676	715	755	769	508
55°	498	524	575	620	634	446
65°	335	368	426	469	481	332
75°	175	213	265	270	266	183
85°	36	53	36	20	15	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1084.2	1084.2	1084.2	1084.2	1084.2
2.5°	1088.4	1084.9	1077.1	1084.9	1083.5
5°	1083.5	1080.6	1074.3	1082.0	1080.6
7.5°	1076.4	1073.6	1068.0	1077.1	1075.7
10°	1064.5	1063.1	1058.9	1069.4	1068.7
12.5°	1050.5	1049.8	1047.7	1059.6	1058.9
15°	1032.9	1033.6	1033.6	1047.7	1047.7
17.5°	1013.3	1014.7	1017.5	1032.9	1035.0
20°	990.1	992.9	998.5	1016.1	1018.9
22.5°	966.3	968.4	976.8	997.8	1000.6
25°	936.8	942.4	953.6	977.5	981.7
27.5°	908.7	913.6	929.1	953.6	960.6
30°	875.7	883.5	901.7	928.4	936.1
32.5°	844.2	852.6	873.6	904.5	911.5
35°	806.3	818.9	845.6	876.4	884.9
37.5°	771.9	783.8	814.0	847.7	857.5
40°	734.0	748.7	783.1	818.9	828.7
42.5°	698.9	712.9	750.1	786.6	800.0
45°	656.8	676.5	715.0	755.0	769.1
47.5°	618.2	637.9	682.1	724.9	737.5
50°	579.6	600.7	647.0	691.2	703.8
52.5°	539.6	562.1	611.9	656.1	670.8
55°	497.5	523.5	575.4	620.3	633.6
57.5°	457.5	484.2	539.6	585.2	598.6
60°	418.2	445.6	502.4	545.9	560.0
62.5°	374.7	407.0	465.9	508.7	519.3
65°	335.4	368.4	425.9	468.7	480.7
67.5°	294.0	329.8	387.3	426.6	437.9
70°	254.7	291.9	347.3	383.8	388.8
72.5°	212.6	250.5	306.7	329.8	329.8
75°	174.7	213.3	265.2	269.5	266.0
77.5°	133.3	176.1	209.8	201.4	193.0
80°	96.1	138.2	153.7	138.2	127.0
82.5°	64.6	100.3	92.6	73.7	65.3
85°	35.8	53.3	36.5	20.3	14.7
87.5°	13.3	11.9	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)