

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: P307968

Luminaire Tested: **14FCZ2-35-UNV-L82765-S-CP250-W2A-U-5700K**

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: P307968  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
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-S-CP250-W2A-U-5700K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET  
Light Source: (168) 5700K 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: 3293.0 lumens  
Efficiency: N/A  
Efficacy: 108.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

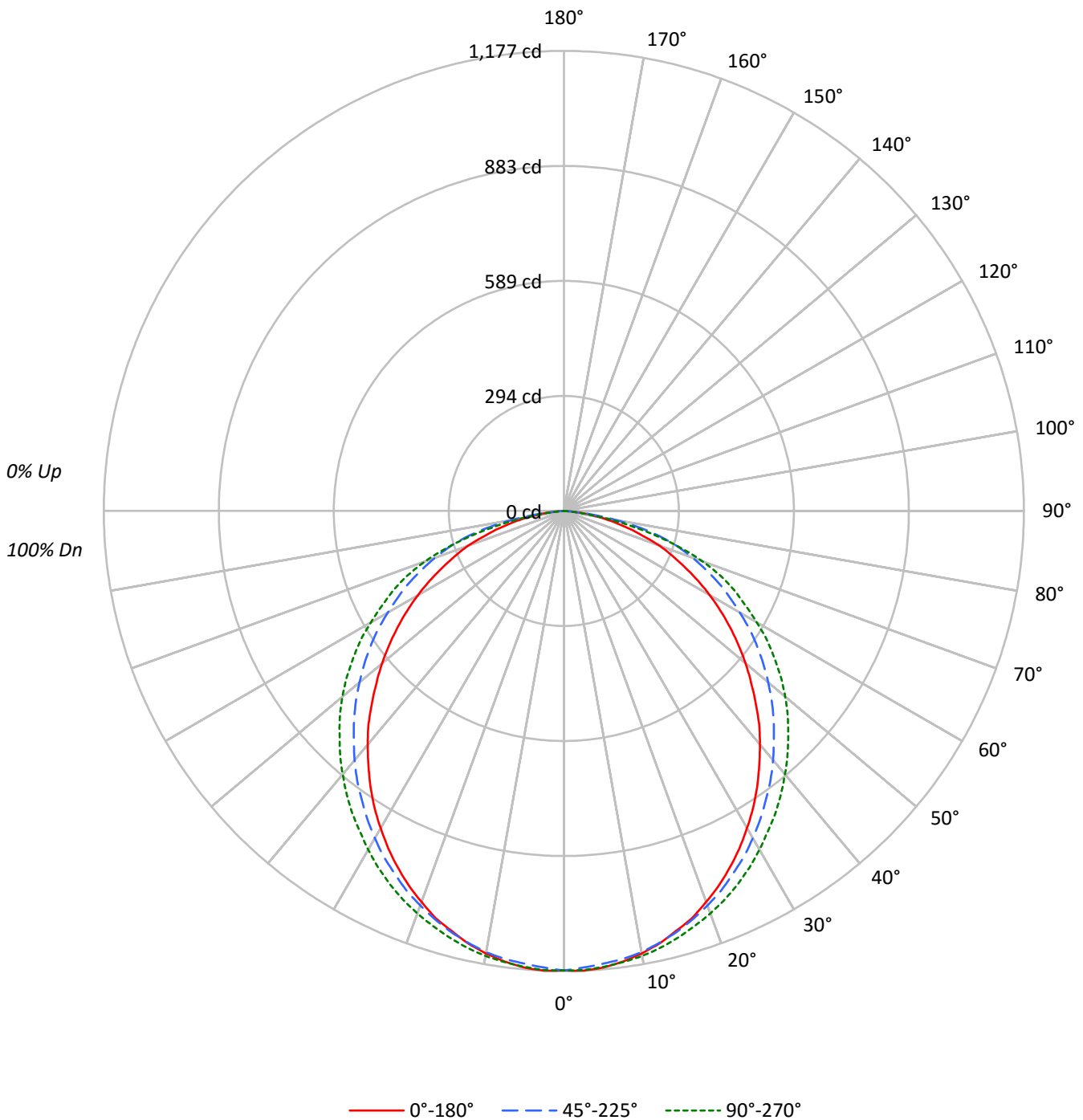
Input Watts (W): 30.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3163	3163	3163
5°	3167	3140	3162
10°	3141	3132	3159
15°	3098	3107	3148
20°	3048	3076	3137
25°	2986	3040	3127
30°	2912	3003	3110
35°	2832	2961	3100
40°	2741	2925	3091
45°	2641	2889	3088
50°	2543	2857	3096
55°	2436	2834	3087
60°	2320	2794	3067
65°	2183	2786	3067
70°	2055	2762	2980
75°	1782	2699	2546
80°	1443	2176	1695
85°	957	756	503



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.0	3.4
10°-20°	315.9	9.6
20°-30°	473.8	14.4
30°-40°	565.2	17.2
40°-50°	584.3	17.7
50°-60°	533.5	16.2
60°-70°	419.8	12.7
70°-80°	244.4	7.4
80°-90°	45.0	1.4
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°	900.7	27.4
0°-40°	1465.9	44.5
0°-60°	2583.8	78.5
0°-90°	3293.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3293.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1176	1176	1176	1176	1176	
5°	1172	1169	1162	1172	1171	111
15°	1112	1114	1115	1130	1130	314
25°	1006	1011	1024	1048	1053	463
35°	862	874	901	936	944	539
45°	694	717	759	802	812	536
55°	519	547	604	648	658	464
65°	343	379	438	472	482	340
75°	171	212	260	255	245	182
85°	31	44	24	20	16	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1175.5	1175.5	1175.5	1175.5	1175.5
2.5°	1177.2	1173.9	1169.0	1177.2	1175.5
5°	1172.3	1169.0	1162.5	1172.3	1170.6
7.5°	1162.5	1159.2	1156.0	1165.8	1164.1
10°	1149.4	1147.8	1146.2	1157.6	1156.0
12.5°	1133.1	1133.1	1131.5	1144.5	1144.5
15°	1111.9	1113.5	1115.1	1129.8	1129.8
17.5°	1092.3	1090.6	1095.5	1111.9	1113.5
20°	1064.5	1067.8	1074.3	1093.9	1095.5
22.5°	1036.8	1040.0	1051.5	1071.1	1076.0
25°	1005.7	1010.6	1023.7	1048.2	1053.1
27.5°	973.1	979.6	997.6	1023.7	1028.6
30°	937.2	947.0	966.6	995.9	1000.8
32.5°	901.3	911.0	935.5	964.9	971.5
35°	862.1	873.5	901.3	935.5	943.7
37.5°	821.2	835.9	868.6	902.9	912.7
40°	780.4	796.8	832.7	868.6	880.0
42.5°	739.6	755.9	795.1	835.9	847.4
45°	693.9	716.8	759.2	801.7	811.5
47.5°	649.8	674.3	721.7	764.1	777.2
50°	607.4	631.9	682.5	726.6	739.6
52.5°	563.3	589.4	643.3	689.0	700.4
55°	519.2	547.0	604.1	648.2	658.0
57.5°	475.1	504.5	563.3	605.7	617.2
60°	431.0	462.1	519.2	561.6	569.8
62.5°	387.0	419.6	478.4	515.9	524.1
65°	342.9	378.8	437.6	471.9	481.6
67.5°	300.4	336.3	393.5	426.1	434.3
70°	261.2	293.9	351.0	375.5	378.8
72.5°	212.3	253.1	308.6	321.6	313.5
75°	171.4	212.3	259.6	254.7	244.9
77.5°	130.6	171.4	202.5	186.1	173.1
80°	93.1	133.9	140.4	115.9	109.4
82.5°	60.4	93.1	78.4	60.4	49.0
85°	31.0	44.1	24.5	19.6	16.3
87.5°	9.8	6.5	3.3	3.3	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)