

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: P309025

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-S-CP125-W2A-U-3500K**

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: P309025  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-34HE-UNV-L82765-S-CP125-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH 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**

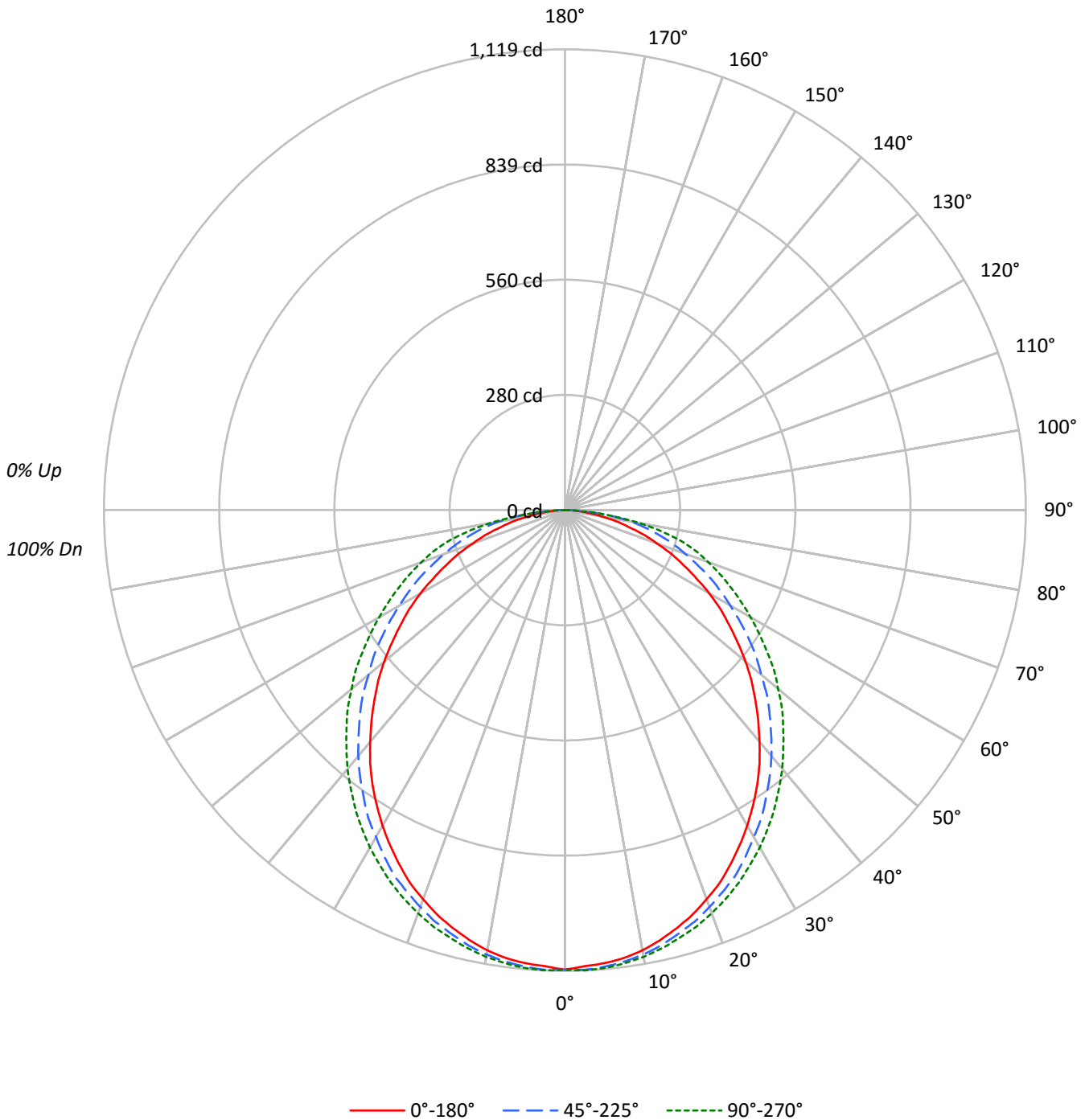
Lumens per Lamp: N/A  
Luminaire Lumens: 3115.0 lumens  
Efficiency: N/A  
Efficacy: 112.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.7  
Input Voltage (V): NR  
Input Current (A<sub>in</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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	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	51	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3004	3004	3004
5°	2984	3007	3015
10°	2967	2995	3010
15°	2927	2968	2996
20°	2880	2938	2984
25°	2822	2909	2965
30°	2750	2850	2940
35°	2674	2798	2913
40°	2583	2742	2885
45°	2489	2677	2854
50°	2397	2604	2829
55°	2284	2557	2809
60°	2182	2495	2800
65°	2036	2480	2832
70°	1876	2459	2916
75°	1693	2493	3067
80°	1464	2568	2882
85°	1210	2155	2155



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.6	3.4
10°-20°	300.4	9.6
20°-30°	449.5	14.4
30°-40°	532.3	17.1
40°-50°	542.5	17.4
50°-60°	486.2	15.6
60°-70°	380.6	12.2
70°-80°	245.5	7.9
80°-90°	72.5	2.3
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°	855.4	27.5
0°-40°	1387.7	44.5
0°-60°	2416.4	77.6
0°-90°	3115.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3115.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1105	1108	1113	1115	1116	105
15°	1051	1057	1065	1074	1076	296
25°	950	959	980	993	998	438
35°	814	824	852	878	887	509
45°	654	669	703	740	750	505
55°	487	503	545	583	599	437
65°	320	339	390	427	445	318
75°	163	188	240	280	295	175
85°	39	54	70	70	70	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1116.2	1116.2	1116.2	1116.2	1116.2
2.5°	1108.9	1111.8	1117.7	1119.1	1119.1
5°	1104.6	1107.5	1113.3	1114.7	1116.2
7.5°	1097.3	1098.8	1106.0	1108.9	1110.4
10°	1085.7	1088.6	1095.9	1100.2	1101.7
12.5°	1069.7	1074.1	1082.8	1088.6	1090.0
15°	1050.8	1056.6	1065.3	1074.1	1075.5
17.5°	1030.5	1036.3	1047.9	1058.1	1061.0
20°	1005.7	1013.0	1026.1	1037.7	1042.1
22.5°	981.0	986.9	1002.8	1017.4	1021.7
25°	950.5	959.2	979.6	992.7	998.5
27.5°	918.5	928.7	949.1	966.5	972.3
30°	885.1	895.3	917.1	938.9	946.2
32.5°	850.2	861.9	888.0	909.8	917.1
35°	813.9	824.1	851.7	877.8	886.6
37.5°	776.1	784.8	816.8	844.4	853.1
40°	735.4	747.0	780.5	812.4	821.2
42.5°	694.7	707.8	741.2	776.1	784.8
45°	654.0	668.6	703.4	739.8	749.9
47.5°	614.8	626.4	665.7	700.5	715.1
50°	572.6	584.3	622.0	661.3	675.8
52.5°	529.0	545.0	585.7	623.5	640.9
55°	486.9	502.9	545.0	582.8	598.8
57.5°	447.6	460.7	504.3	543.6	559.6
60°	405.5	417.1	463.6	505.8	520.3
62.5°	360.4	377.9	425.8	465.1	482.5
65°	319.7	338.6	389.5	427.3	444.7
67.5°	282.0	299.4	348.8	389.5	408.4
70°	238.4	261.6	312.5	353.2	370.6
72.5°	203.5	223.8	276.1	316.8	335.7
75°	162.8	187.5	239.8	280.5	295.0
77.5°	129.4	154.1	203.5	235.4	242.7
80°	94.5	119.2	165.7	181.7	186.0
82.5°	63.9	87.2	119.2	123.5	125.0
85°	39.2	53.8	69.8	69.8	69.8
87.5°	18.9	21.8	24.7	23.3	23.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)