

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: P308481

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CA125-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: P308481  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
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-RDP-CA125-W2A-U-5700K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" ACRYLIC 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: 2152.0 lumens  
Efficiency: N/A  
Efficacy: 75.8 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

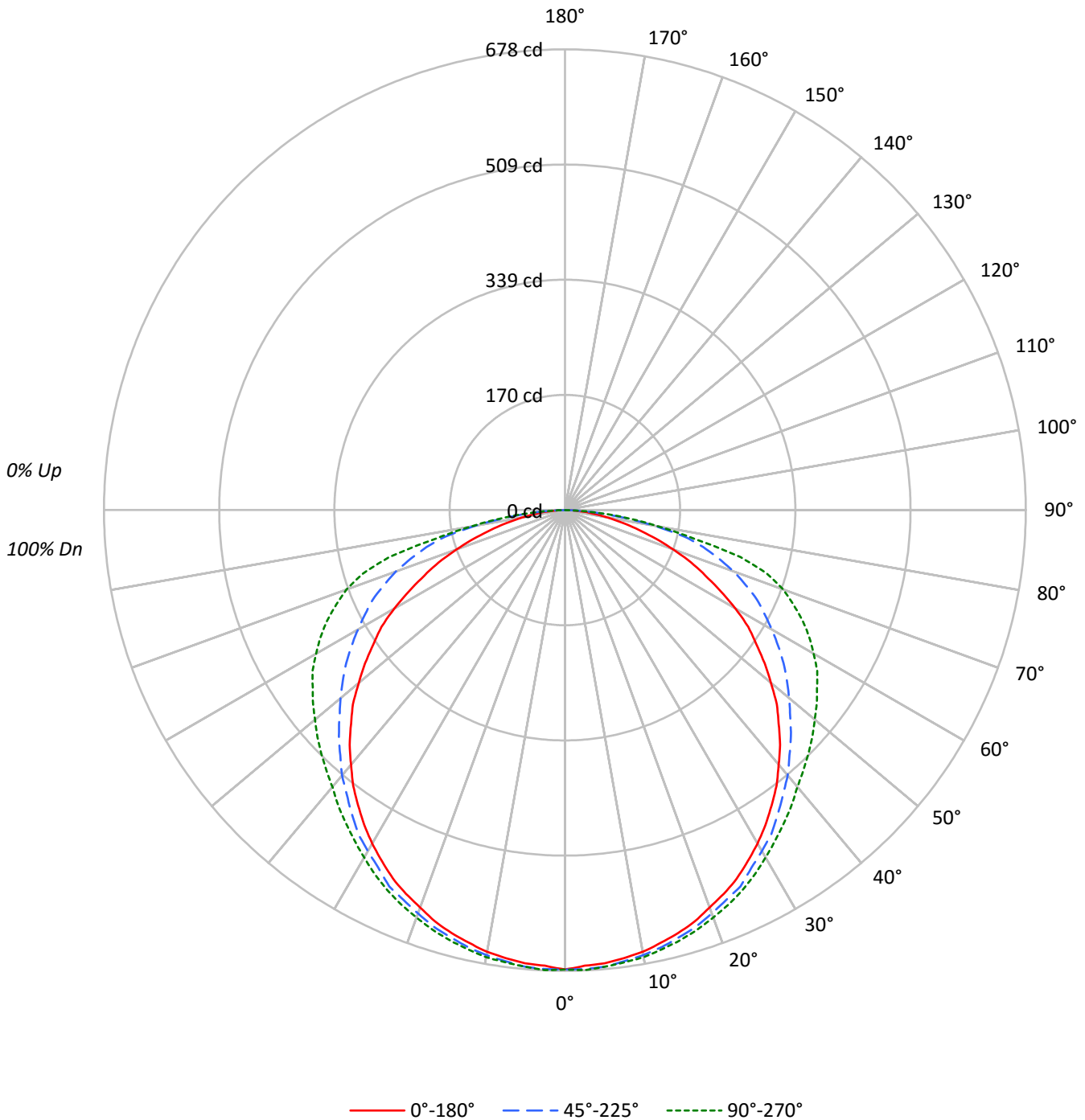
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1819	1819	1819
5°	1809	1822	1822
10°	1804	1817	1826
15°	1795	1813	1826
20°	1782	1809	1827
25°	1777	1814	1833
30°	1761	1800	1835
35°	1742	1794	1846
40°	1718	1791	1868
45°	1693	1789	1928
50°	1657	1803	2008
55°	1612	1842	2124
60°	1559	1891	2275
65°	1452	1986	2460
70°	1333	2080	2690
75°	1169	2190	2781
80°	1006	2086	2183
85°	880	1516	1661



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.9	3.0
10°-20°	183.6	8.5
20°-30°	280.1	13.0
30°-40°	342.0	15.9
40°-50°	365.7	17.0
50°-60°	353.0	16.4
60°-70°	303.8	14.1
70°-80°	205.6	9.6
80°-90°	54.3	2.5
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°	527.6	24.5
0°-40°	869.7	40.4
0°-60°	1588.3	73.8
0°-90°	2152.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2152.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	676	676	676	676	676	
5°	670	671	674	674	674	64
15°	644	646	651	654	655	182
25°	598	602	611	614	617	275
35°	530	535	546	557	562	332
45°	445	453	470	494	507	343
55°	344	355	393	432	453	308
65°	228	250	312	361	386	227
75°	112	149	211	253	268	121
85°	28	40	49	51	54	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	676.0	676.0	676.0	676.0	676.0
2.5°	671.2	672.8	676.0	676.0	677.6
5°	669.6	671.2	674.4	674.4	674.4
7.5°	664.9	666.5	669.6	671.2	671.2
10°	660.1	661.7	664.9	666.5	668.1
12.5°	652.2	653.8	658.6	661.7	661.7
15°	644.3	645.9	650.7	653.8	655.4
17.5°	634.8	638.0	642.7	645.9	647.5
20°	622.2	625.3	631.7	636.4	638.0
22.5°	611.1	614.2	620.6	625.3	628.5
25°	598.4	601.6	611.1	614.2	617.4
27.5°	582.6	585.7	593.7	600.0	604.7
30°	566.7	569.9	579.4	587.3	590.5
32.5°	549.3	554.1	565.2	571.5	576.2
35°	530.3	535.1	546.2	557.2	562.0
37.5°	511.3	516.1	527.2	541.4	547.8
40°	489.2	495.5	509.8	528.8	531.9
42.5°	468.6	476.5	489.2	511.3	519.3
45°	444.8	452.8	470.2	493.9	506.6
47.5°	422.7	430.6	449.6	478.1	493.9
50°	395.8	406.9	430.6	463.8	479.7
52.5°	370.4	379.9	411.6	448.0	467.0
55°	343.5	354.6	392.6	432.2	452.8
57.5°	319.8	329.3	372.0	416.4	440.1
60°	289.7	302.4	351.4	398.9	422.7
62.5°	258.0	277.0	330.9	379.9	405.3
65°	228.0	250.1	311.9	360.9	386.3
67.5°	201.1	224.8	288.1	340.4	364.1
70°	169.4	199.5	264.4	315.0	341.9
72.5°	140.9	174.1	237.5	288.1	311.9
75°	112.4	148.8	210.6	253.3	267.5
77.5°	87.1	121.9	180.5	193.1	194.7
80°	64.9	96.6	134.6	136.1	140.9
82.5°	44.3	68.1	87.1	95.0	96.6
85°	28.5	39.6	49.1	50.7	53.8
87.5°	12.7	14.2	17.4	15.8	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)