

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: P308490

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CP125-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: P308490  
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-CP125-W2A-U-5700K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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: 2110.0 lumens  
Efficiency: N/A  
Efficacy: 74.3 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

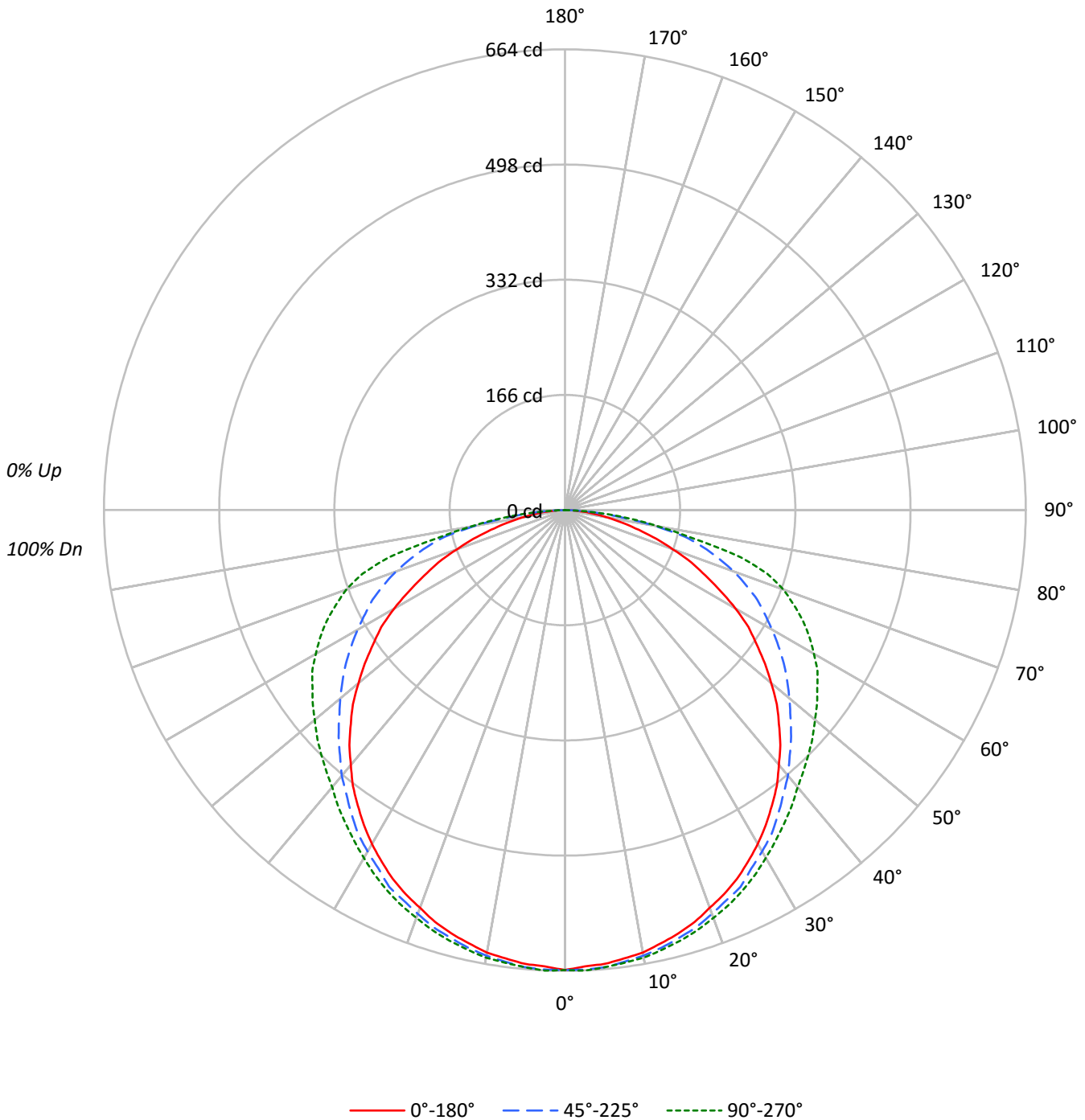
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1784	1784	1784
5°	1774	1786	1786
10°	1769	1781	1790
15°	1760	1777	1790
20°	1747	1773	1791
25°	1742	1779	1798
30°	1727	1765	1799
35°	1708	1759	1810
40°	1685	1756	1832
45°	1660	1754	1890
50°	1624	1768	1969
55°	1580	1806	2083
60°	1529	1855	2230
65°	1423	1947	2411
70°	1307	2039	2638
75°	1146	2146	2727
80°	986	2044	2140
85°	861	1485	1630



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.7	3.0
10°-20°	180.0	8.5
20°-30°	274.6	13.0
30°-40°	335.3	15.9
40°-50°	358.6	17.0
50°-60°	346.1	16.4
60°-70°	297.9	14.1
70°-80°	201.6	9.6
80°-90°	53.2	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°	517.3	24.5
0°-40°	852.7	40.4
0°-60°	1557.3	73.8
0°-90°	2110.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2110.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	663	663	663	663	663	
5°	657	658	661	661	661	62
15°	632	633	638	641	643	178
25°	587	590	599	602	605	270
35°	520	525	536	546	551	325
45°	436	444	461	484	497	337
55°	337	348	385	424	444	302
65°	224	245	306	354	379	222
75°	110	146	206	248	262	118
85°	28	39	48	50	53	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	662.8	662.8	662.8	662.8	662.8
2.5°	658.1	659.7	662.8	662.8	664.3
5°	656.6	658.1	661.2	661.2	661.2
7.5°	651.9	653.5	656.6	658.1	658.1
10°	647.3	648.8	651.9	653.5	655.0
12.5°	639.5	641.1	645.7	648.8	648.8
15°	631.7	633.3	638.0	641.1	642.6
17.5°	622.4	625.5	630.2	633.3	634.8
20°	610.0	613.1	619.3	624.0	625.5
22.5°	599.1	602.3	608.5	613.1	616.2
25°	586.7	589.8	599.1	602.3	605.4
27.5°	571.2	574.3	582.1	588.3	592.9
30°	555.7	558.8	568.1	575.9	579.0
32.5°	538.6	543.3	554.1	560.3	565.0
35°	520.0	524.6	535.5	546.4	551.0
37.5°	501.4	506.0	516.9	530.9	537.1
40°	479.6	485.8	499.8	518.4	521.5
42.5°	459.5	467.2	479.6	501.4	509.1
45°	436.2	443.9	461.0	484.3	496.7
47.5°	414.4	422.2	440.8	468.8	484.3
50°	388.0	398.9	422.2	454.8	470.3
52.5°	363.2	372.5	403.6	439.3	457.9
55°	336.8	347.7	384.9	423.7	443.9
57.5°	313.5	322.9	364.8	408.2	431.5
60°	284.1	296.5	344.6	391.2	414.4
62.5°	253.0	271.6	324.4	372.5	397.4
65°	223.5	245.2	305.8	353.9	378.7
67.5°	197.1	220.4	282.5	333.7	357.0
70°	166.1	195.6	259.2	308.9	335.3
72.5°	138.1	170.7	232.8	282.5	305.8
75°	110.2	145.9	206.4	248.4	262.3
77.5°	85.4	119.5	177.0	189.4	190.9
80°	63.6	94.7	131.9	133.5	138.1
82.5°	43.5	66.7	85.4	93.1	94.7
85°	27.9	38.8	48.1	49.7	52.8
87.5°	12.4	14.0	17.1	15.5	15.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)