

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: P312676

Luminaire Tested: **22FCZ2-34HE-UNV-L83050-RDP-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: P312676  
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-L83050-RDP-CP125-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" POLYCARB SHEET  
Light Source: (168) 3500K 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**

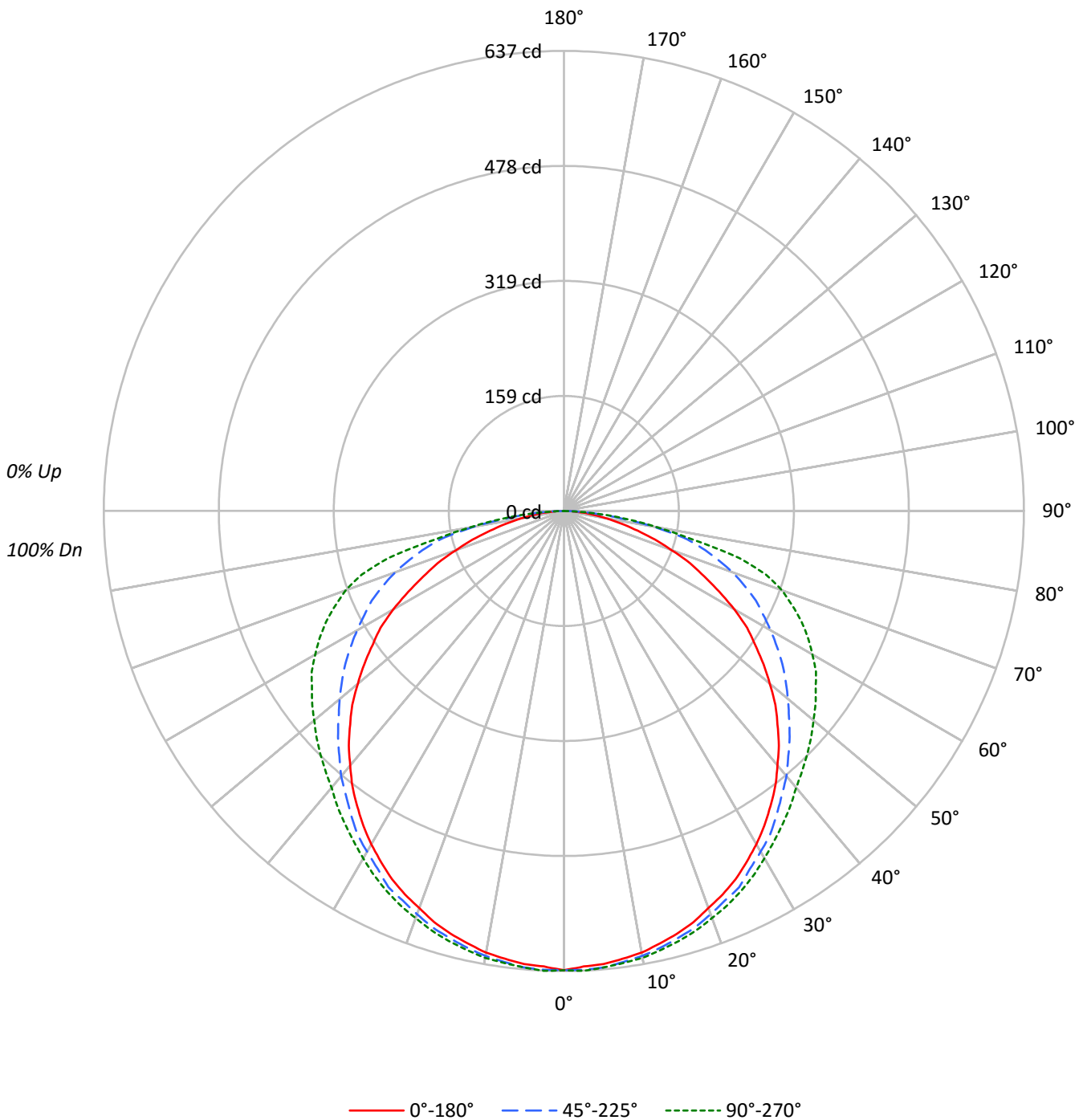
Lumens per Lamp: N/A  
Luminaire Lumens: 2024.0 lumens  
Efficiency: N/A  
Efficacy: 73.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	1711	1711	1711
5°	1701	1713	1713
10°	1697	1709	1717
15°	1688	1705	1717
20°	1676	1701	1718
25°	1671	1706	1724
30°	1656	1693	1726
35°	1639	1688	1736
40°	1616	1684	1757
45°	1592	1683	1813
50°	1558	1696	1888
55°	1516	1733	1998
60°	1467	1779	2139
65°	1365	1868	2313
70°	1253	1957	2530
75°	1099	2059	2616
80°	945	1962	2053
85°	827	1426	1562



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.1	3.0
10°-20°	172.7	8.5
20°-30°	263.4	13.0
30°-40°	321.7	15.9
40°-50°	343.9	17.0
50°-60°	332.0	16.4
60°-70°	285.8	14.1
70°-80°	193.3	9.6
80°-90°	51.0	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°	496.3	24.5
0°-40°	817.9	40.4
0°-60°	1493.8	73.8
0°-90°	2024.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2024.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	636	636	636	636	636	
5°	630	631	634	634	634	60
15°	606	608	612	615	616	171
25°	563	566	575	578	581	259
35°	499	503	514	524	529	312
45°	418	426	442	464	476	323
55°	323	334	369	406	426	290
65°	214	235	293	340	363	213
75°	106	140	198	238	252	113
85°	27	37	46	48	51	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	635.8	635.8	635.8	635.8	635.8
2.5°	631.3	632.8	635.8	635.8	637.3
5°	629.8	631.3	634.3	634.3	634.3
7.5°	625.4	626.8	629.8	631.3	631.3
10°	620.9	622.4	625.4	626.8	628.3
12.5°	613.4	614.9	619.4	622.4	622.4
15°	606.0	607.5	612.0	614.9	616.4
17.5°	597.1	600.0	604.5	607.5	609.0
20°	585.1	588.1	594.1	598.6	600.0
22.5°	574.7	577.7	583.7	588.1	591.1
25°	562.8	565.8	574.7	577.7	580.7
27.5°	547.9	550.9	558.3	564.3	568.8
30°	533.0	536.0	544.9	552.4	555.4
32.5°	516.7	521.1	531.5	537.5	542.0
35°	498.8	503.3	513.7	524.1	528.6
37.5°	480.9	485.4	495.8	509.2	515.2
40°	460.1	466.0	479.4	497.3	500.3
42.5°	440.7	448.2	460.1	480.9	488.4
45°	418.4	425.8	442.2	464.5	476.5
47.5°	397.5	405.0	422.9	449.7	464.5
50°	372.2	382.7	405.0	436.3	451.1
52.5°	348.4	357.3	387.1	421.4	439.2
55°	323.1	333.5	369.3	406.5	425.8
57.5°	300.8	309.7	349.9	391.6	413.9
60°	272.5	284.4	330.5	375.2	397.5
62.5°	242.7	260.6	311.2	357.3	381.2
65°	214.4	235.3	293.3	339.5	363.3
67.5°	189.1	211.4	271.0	320.1	342.5
70°	159.3	187.6	248.7	296.3	321.6
72.5°	132.5	163.8	223.3	271.0	293.3
75°	105.7	140.0	198.0	238.2	251.6
77.5°	81.9	114.6	169.7	181.6	183.1
80°	61.0	90.8	126.6	128.0	132.5
82.5°	41.7	64.0	81.9	89.3	90.8
85°	26.8	37.2	46.2	47.6	50.6
87.5°	11.9	13.4	16.4	14.9	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)