

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: P308499

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CP187-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: P308499  
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-CP187-W2A-U-5700K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.187" 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**

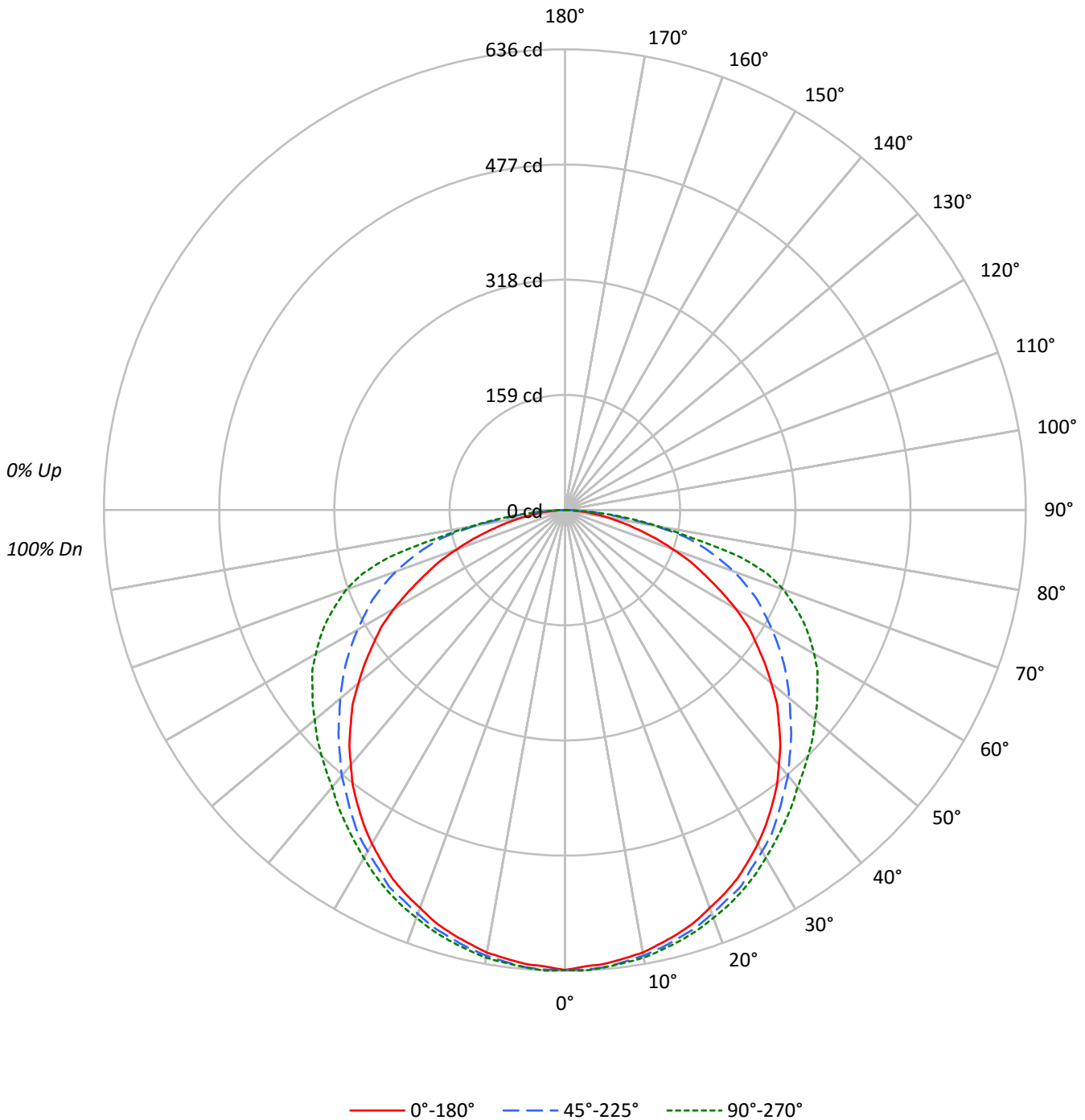
Lumens per Lamp: N/A  
Luminaire Lumens: 2021.0 lumens  
Efficiency: N/A  
Efficacy: 71.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1708	1708	1708
5°	1699	1711	1711
10°	1694	1706	1714
15°	1686	1702	1715
20°	1673	1699	1716
25°	1669	1704	1722
30°	1654	1691	1723
35°	1636	1685	1734
40°	1614	1682	1755
45°	1590	1681	1811
50°	1556	1693	1886
55°	1514	1730	1995
60°	1464	1777	2137
65°	1363	1865	2310
70°	1252	1954	2526
75°	1098	2056	2613
80°	945	1959	2050
85°	827	1423	1559



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.1	3.0
10°-20°	172.4	8.5
20°-30°	263.1	13.0
30°-40°	321.2	15.9
40°-50°	343.4	17.0
50°-60°	331.5	16.4
60°-70°	285.4	14.1
70°-80°	193.1	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°	495.5	24.5
0°-40°	816.7	40.4
0°-60°	1491.6	73.8
0°-90°	2021.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2021.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	635	635	635	635	635	
5°	629	630	633	633	633	60
15°	605	607	611	614	616	171
25°	562	565	574	577	580	259
35°	498	502	513	523	528	312
45°	418	425	442	464	476	322
55°	323	333	369	406	425	289
65°	214	235	293	339	363	213
75°	106	140	198	238	251	113
85°	27	37	46	48	50	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	634.8	634.8	634.8	634.8	634.8
2.5°	630.4	631.9	634.8	634.8	636.3
5°	628.9	630.4	633.3	633.3	633.3
7.5°	624.4	625.9	628.9	630.4	630.4
10°	620.0	621.5	624.4	625.9	627.4
12.5°	612.5	614.0	618.5	621.5	621.5
15°	605.1	606.6	611.0	614.0	615.5
17.5°	596.2	599.1	603.6	606.6	608.1
20°	584.3	587.3	593.2	597.7	599.1
22.5°	573.9	576.8	582.8	587.3	590.2
25°	562.0	565.0	573.9	576.8	579.8
27.5°	547.1	550.1	557.5	563.5	567.9
30°	532.2	535.2	544.1	551.6	554.5
32.5°	515.9	520.4	530.8	536.7	541.2
35°	498.1	502.5	512.9	523.3	527.8
37.5°	480.2	484.7	495.1	508.5	514.4
40°	459.4	465.3	478.7	496.6	499.5
42.5°	440.1	447.5	459.4	480.2	487.6
45°	417.8	425.2	441.6	463.9	475.8
47.5°	397.0	404.4	422.2	449.0	463.9
50°	371.7	382.1	404.4	435.6	450.5
52.5°	347.9	356.8	386.5	420.7	438.6
55°	322.6	333.0	368.7	405.9	425.2
57.5°	300.3	309.2	349.4	391.0	413.3
60°	272.1	284.0	330.1	374.7	397.0
62.5°	242.3	260.2	310.7	356.8	380.6
65°	214.1	234.9	292.9	339.0	362.8
67.5°	188.8	211.1	270.6	319.6	341.9
70°	159.1	187.3	248.3	295.9	321.1
72.5°	132.3	163.5	223.0	270.6	292.9
75°	105.6	139.8	197.7	237.9	251.3
77.5°	81.8	114.5	169.5	181.4	182.9
80°	61.0	90.7	126.4	127.9	132.3
82.5°	41.6	63.9	81.8	89.2	90.7
85°	26.8	37.2	46.1	47.6	50.5
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)