

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: P308313

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-HRP-CP187-W2A-U-3000K**

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: P308313  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-44HE-UNV-L82765-HRP-CP187-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 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**

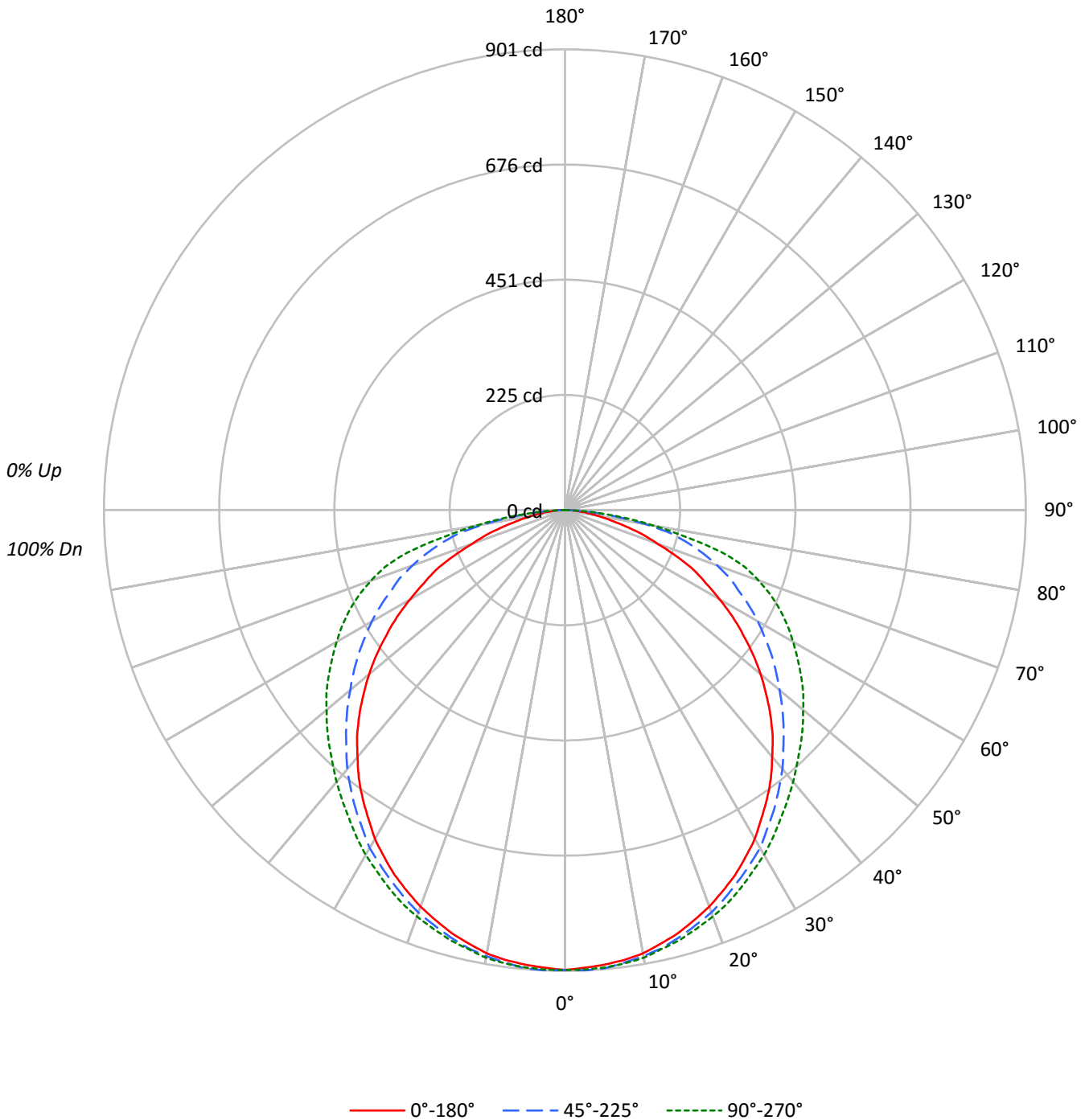
Lumens per Lamp: N/A  
Luminaire Lumens: 2731.0 lumens  
Efficiency: N/A  
Efficacy: 74.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

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

	0°	45°	90°
0°	2420	2420	2420
5°	2411	2429	2425
10°	2405	2420	2429
15°	2385	2409	2424
20°	2363	2398	2422
25°	2338	2379	2420
30°	2307	2371	2420
35°	2264	2343	2417
40°	2215	2324	2439
45°	2163	2301	2478
50°	2092	2293	2546
55°	1996	2312	2643
60°	1882	2346	2772
65°	1777	2392	2961
70°	1519	2494	3172
75°	1272	2597	3296
80°	1041	2509	2749
85°	905	1862	2022



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.2	3.1
10°-20°	243.8	8.9
20°-30°	369.5	13.5
30°-40°	446.1	16.3
40°-50°	468.8	17.2
50°-60°	441.1	16.2
60°-70°	367.8	13.5
70°-80°	243.7	8.9
80°-90°	65.0	2.4
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°	698.5	25.6
0°-40°	1144.7	41.9
0°-60°	2054.6	75.2
0°-90°	2731.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2731.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	899	899	899	899	899	
5°	892	894	899	899	898	85
15°	856	860	865	868	870	241
25°	787	792	801	811	815	363
35°	689	696	713	729	736	431
45°	568	577	605	636	651	438
55°	426	444	493	543	563	381
65°	279	303	376	438	465	272
75°	122	171	250	302	317	133
85°	29	45	60	66	66	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	899.3	899.3	899.3	899.3	899.3
2.5°	895.8	897.6	901.0	901.0	899.3
5°	892.4	894.1	899.3	899.3	897.6
7.5°	887.2	889.0	892.4	895.8	894.1
10°	880.3	882.1	885.5	889.0	889.0
12.5°	868.3	870.0	876.9	878.6	878.6
15°	856.2	859.7	864.8	868.3	870.0
17.5°	840.7	844.2	851.0	857.9	857.9
20°	825.2	828.7	837.3	844.2	845.9
22.5°	806.3	811.4	820.0	828.7	832.1
25°	787.3	792.5	801.1	811.4	814.9
27.5°	764.9	770.1	782.1	794.2	795.9
30°	742.5	747.7	763.2	773.5	778.7
32.5°	715.0	721.8	737.3	752.9	758.0
35°	689.1	696.0	713.2	728.7	735.6
37.5°	661.5	668.4	687.4	706.3	715.0
40°	630.5	639.1	661.5	682.2	694.3
42.5°	601.2	609.9	632.3	659.8	671.9
45°	568.5	577.1	604.7	635.7	651.2
47.5°	534.1	544.4	577.1	615.0	630.5
50°	499.6	511.7	547.8	590.9	608.1
52.5°	463.4	478.9	520.3	566.8	587.5
55°	425.5	444.5	492.7	542.7	563.3
57.5°	389.3	406.6	463.4	516.8	539.2
60°	349.7	372.1	435.9	491.0	515.1
62.5°	311.8	335.9	406.6	465.1	491.0
65°	279.1	303.2	375.6	437.6	465.1
67.5°	236.0	268.8	349.7	408.3	435.9
70°	193.0	237.7	317.0	377.3	403.1
72.5°	160.2	203.3	284.3	344.6	368.7
75°	122.3	170.6	249.8	301.5	317.0
77.5°	91.3	141.3	213.6	239.5	241.2
80°	67.2	108.5	161.9	170.6	177.4
82.5°	46.5	75.8	105.1	115.4	118.9
85°	29.3	44.8	60.3	65.5	65.5
87.5°	15.5	17.2	20.7	20.7	20.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)