

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: P308563

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CA08-W2A-U-6500K**

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: P308563  
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: 22FCZ2-44HE-UNV-L82765-RDP-CA08-W2A-U-6500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.08" 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**

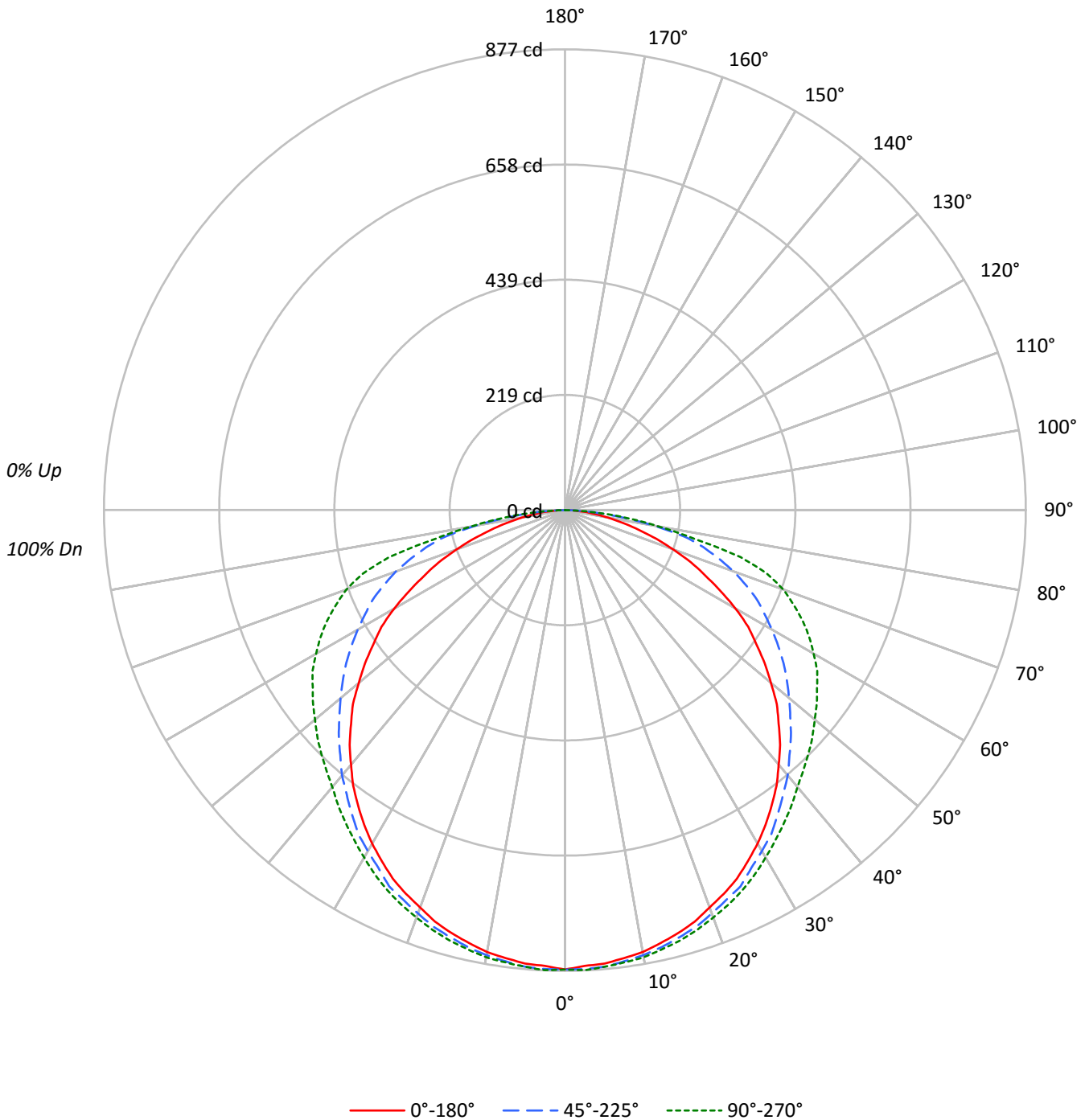
Lumens per Lamp: N/A  
Luminaire Lumens: 2784.0 lumens  
Efficiency: N/A  
Efficacy: 71.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	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°	2353	2353	2353
5°	2340	2357	2357
10°	2334	2350	2362
15°	2322	2345	2362
20°	2305	2340	2364
25°	2299	2347	2371
30°	2278	2329	2374
35°	2254	2321	2388
40°	2223	2317	2417
45°	2190	2315	2494
50°	2143	2332	2598
55°	2085	2383	2748
60°	2017	2447	2943
65°	1878	2569	3182
70°	1724	2691	3481
75°	1512	2832	3598
80°	1302	2698	2825
85°	1139	1961	2149



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.7	3.0
10°-20°	237.5	8.5
20°-30°	362.4	13.0
30°-40°	442.5	15.9
40°-50°	473.1	17.0
50°-60°	456.6	16.4
60°-70°	393.1	14.1
70°-80°	266.0	9.6
80°-90°	70.2	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°	682.6	24.5
0°-40°	1125.1	40.4
0°-60°	2054.8	73.8
0°-90°	2784.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2784.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	874	874	874	874	874	
5°	866	868	872	872	872	82
15°	834	836	842	846	848	235
25°	774	778	790	795	799	356
35°	686	692	707	721	727	429
45°	576	586	608	639	655	444
55°	444	459	508	559	586	398
65°	295	324	404	467	500	293
75°	145	192	272	328	346	156
85°	37	51	64	66	70	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	874.5	874.5	874.5	874.5	874.5
2.5°	868.4	870.4	874.5	874.5	876.6
5°	866.3	868.4	872.5	872.5	872.5
7.5°	860.2	862.2	866.3	868.4	868.4
10°	854.0	856.1	860.2	862.2	864.3
12.5°	843.8	845.8	852.0	856.1	856.1
15°	833.5	835.6	841.7	845.8	847.9
17.5°	821.3	825.4	831.5	835.6	837.6
20°	804.9	809.0	817.2	823.3	825.4
22.5°	790.5	794.6	802.8	809.0	813.1
25°	774.2	778.2	790.5	794.6	798.7
27.5°	753.7	757.8	768.0	776.2	782.3
30°	733.2	737.3	749.6	759.8	763.9
32.5°	710.7	716.8	731.1	739.3	745.5
35°	686.1	692.2	706.6	720.9	727.0
37.5°	661.5	667.7	682.0	700.4	708.6
40°	632.8	641.0	659.5	684.0	688.1
42.5°	606.2	616.5	632.8	661.5	671.7
45°	575.5	585.7	608.3	639.0	655.4
47.5°	546.8	557.1	581.6	618.5	639.0
50°	512.0	526.3	557.1	600.1	620.5
52.5°	479.2	491.5	532.5	579.6	604.2
55°	444.4	458.8	507.9	559.1	585.7
57.5°	413.7	426.0	481.3	538.6	569.3
60°	374.8	391.2	454.7	516.1	546.8
62.5°	333.8	358.4	428.0	491.5	524.3
65°	294.9	323.6	403.5	466.9	499.7
67.5°	260.1	290.8	372.7	440.3	471.0
70°	219.1	258.1	342.0	407.6	442.4
72.5°	182.3	225.3	307.2	372.7	403.5
75°	145.4	192.5	272.4	327.7	346.1
77.5°	112.6	157.7	233.5	249.9	251.9
80°	84.0	124.9	174.1	176.1	182.3
82.5°	57.3	88.1	112.6	122.9	124.9
85°	36.9	51.2	63.5	65.5	69.6
87.5°	16.4	18.4	22.5	20.5	20.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)