

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: P308323

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-HRP-CP250-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: P308323  
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-CP250-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"  
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**

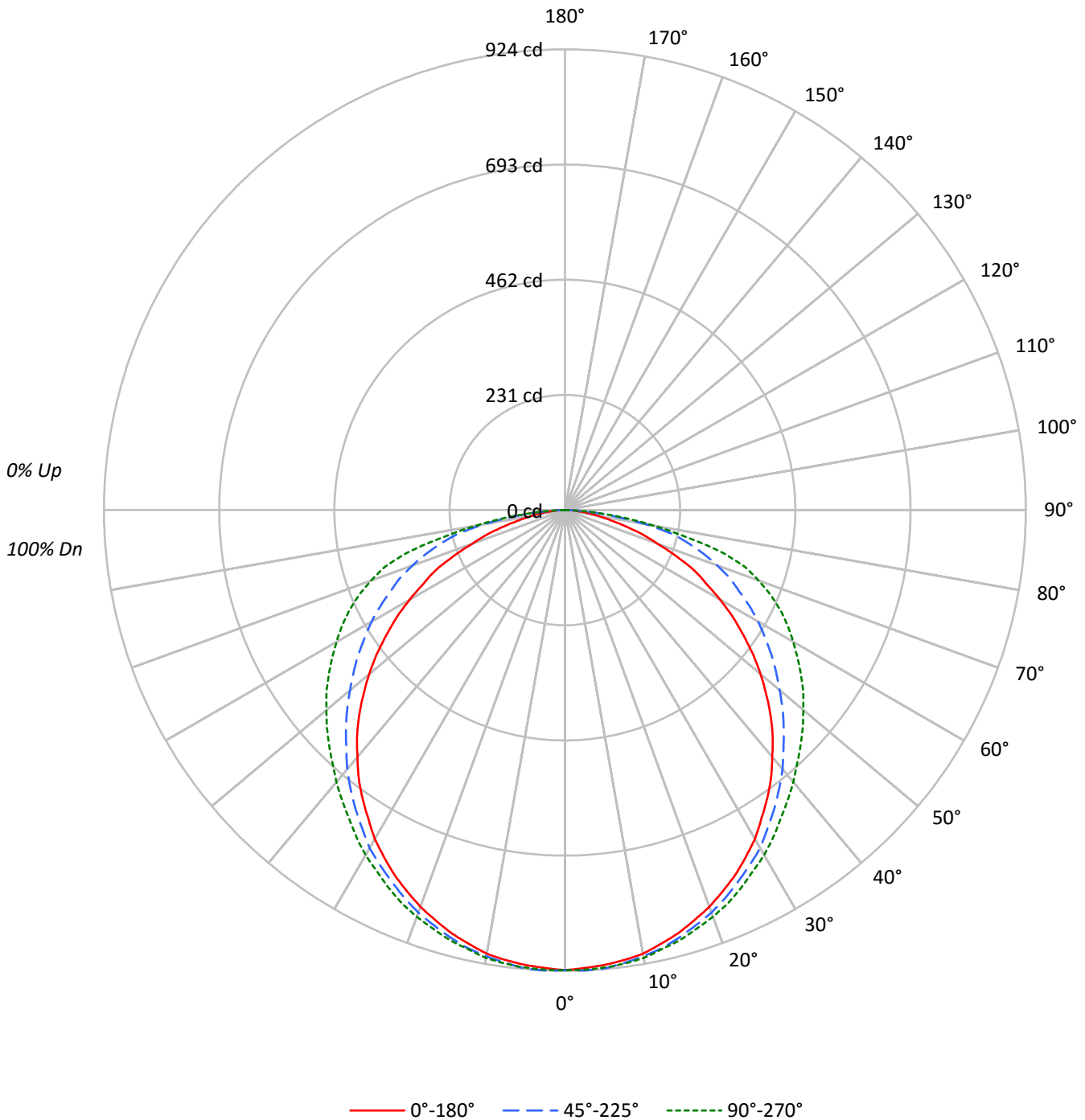
Lumens per Lamp: N/A  
Luminaire Lumens: 2802.0 lumens  
Efficiency: N/A  
Efficacy: 74.9 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	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°	2483	2483	2483
5°	2473	2492	2488
10°	2468	2482	2492
15°	2447	2472	2487
20°	2425	2460	2485
25°	2398	2440	2483
30°	2367	2433	2482
35°	2323	2404	2479
40°	2272	2384	2502
45°	2220	2361	2543
50°	2146	2353	2612
55°	2048	2372	2712
60°	1931	2407	2844
65°	1823	2453	3039
70°	1558	2559	3254
75°	1305	2665	3381
80°	1068	2576	2822
85°	926	1911	2075



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.4	3.1
10°-20°	250.1	8.9
20°-30°	379.1	13.5
30°-40°	457.7	16.3
40°-50°	481.0	17.2
50°-60°	452.6	16.2
60°-70°	377.3	13.5
70°-80°	250.0	8.9
80°-90°	66.6	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°	716.7	25.6
0°-40°	1174.4	41.9
0°-60°	2108.0	75.2
0°-90°	2802.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2802.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	923	923	923	923	923	
5°	916	917	923	923	921	87
15°	878	882	887	891	893	248
25°	808	813	822	832	836	372
35°	707	714	732	748	755	442
45°	583	592	620	652	668	449
55°	437	456	506	557	578	391
65°	286	311	385	449	477	279
75°	126	175	256	309	325	136
85°	30	46	62	67	67	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	922.7	922.7	922.7	922.7	922.7
2.5°	919.1	920.9	924.4	924.4	922.7
5°	915.6	917.4	922.7	922.7	920.9
7.5°	910.3	912.1	915.6	919.1	917.4
10°	903.2	905.0	908.5	912.1	912.1
12.5°	890.9	892.6	899.7	901.5	901.5
15°	878.5	882.0	887.3	890.9	892.6
17.5°	862.6	866.1	873.2	880.2	880.2
20°	846.7	850.2	859.0	866.1	867.9
22.5°	827.2	832.5	841.4	850.2	853.7
25°	807.8	813.1	821.9	832.5	836.1
27.5°	784.8	790.1	802.5	814.8	816.6
30°	761.8	767.1	783.0	793.6	798.9
32.5°	733.5	740.6	756.5	772.4	777.7
35°	707.0	714.1	731.8	747.7	754.7
37.5°	678.7	685.8	705.3	724.7	733.5
40°	646.9	655.8	678.7	700.0	712.3
42.5°	616.9	625.7	648.7	677.0	689.3
45°	583.3	592.1	620.4	652.2	668.1
47.5°	547.9	558.5	592.1	631.0	646.9
50°	512.6	525.0	562.1	606.3	623.9
52.5°	475.5	491.4	533.8	581.5	602.7
55°	436.6	456.0	505.5	556.8	578.0
57.5°	399.5	417.1	475.5	530.3	553.2
60°	358.8	381.8	447.2	503.8	528.5
62.5°	319.9	344.7	417.1	477.2	503.8
65°	286.3	311.1	385.3	449.0	477.2
67.5°	242.2	275.7	358.8	418.9	447.2
70°	198.0	243.9	325.2	387.1	413.6
72.5°	164.4	208.6	291.6	353.5	378.3
75°	125.5	175.0	256.3	309.3	325.2
77.5°	93.7	144.9	219.2	245.7	247.5
80°	68.9	111.4	166.2	175.0	182.1
82.5°	47.7	77.8	107.8	118.4	122.0
85°	30.0	46.0	61.9	67.2	67.2
87.5°	15.9	17.7	21.2	21.2	21.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)