

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: P312586

Luminaire Tested: **22FCZ2-44HE-UNV-L83050-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: P312586  
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-L83050-HRP-CP250-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"  
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**

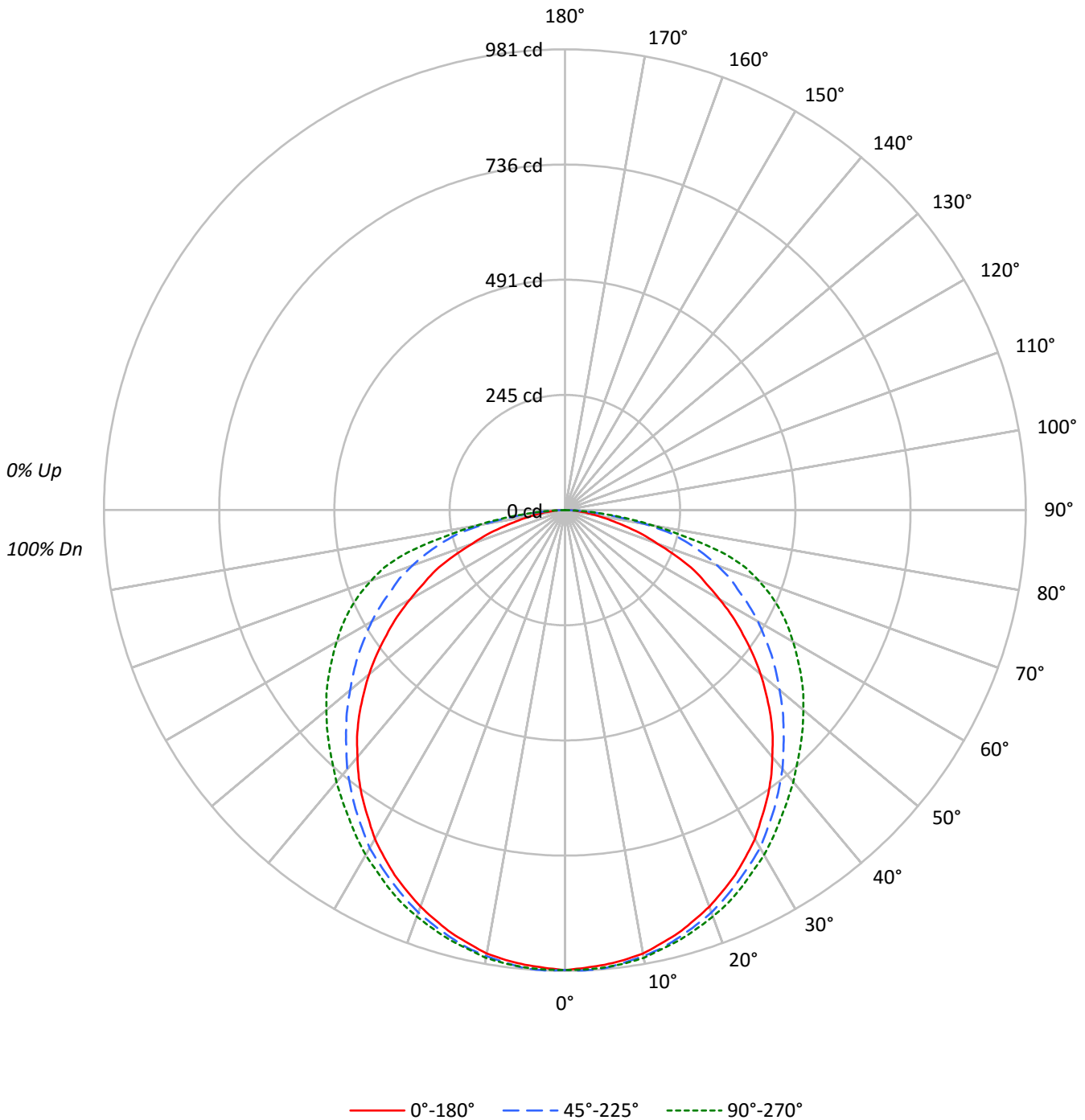
Lumens per Lamp: N/A  
Luminaire Lumens: 2974.0 lumens  
Efficiency: N/A  
Efficacy: 79.9 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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°	2635	2635	2635
5°	2625	2645	2640
10°	2620	2635	2645
15°	2598	2624	2639
20°	2573	2611	2638
25°	2546	2590	2635
30°	2513	2582	2635
35°	2465	2552	2632
40°	2412	2531	2656
45°	2356	2506	2699
50°	2278	2498	2773
55°	2174	2518	2878
60°	2049	2554	3019
65°	1935	2604	3225
70°	1653	2716	3454
75°	1385	2828	3589
80°	1134	2732	2994
85°	985	2029	2201



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.8	3.1
10°-20°	265.5	8.9
20°-30°	402.4	13.5
30°-40°	485.9	16.3
40°-50°	510.5	17.2
50°-60°	480.3	16.2
60°-70°	400.5	13.5
70°-80°	265.4	8.9
80°-90°	70.7	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°	760.7	25.6
0°-40°	1246.5	41.9
0°-60°	2237.4	75.2
0°-90°	2974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2974.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	979	979	979	979	979	
5°	972	974	979	979	977	92
15°	932	936	942	946	947	263
25°	857	863	872	884	887	395
35°	750	758	777	794	801	469
45°	619	628	658	692	709	477
55°	463	484	537	591	614	415
65°	304	330	409	476	506	296
75°	133	186	272	328	345	145
85°	32	49	66	71	71	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	979.3	979.3	979.3	979.3	979.3
2.5°	975.6	977.4	981.2	981.2	979.3
5°	971.8	973.7	979.3	979.3	977.4
7.5°	966.2	968.0	971.8	975.6	973.7
10°	958.7	960.5	964.3	968.0	968.0
12.5°	945.5	947.4	954.9	956.8	956.8
15°	932.4	936.2	941.8	945.5	947.4
17.5°	915.5	919.3	926.8	934.3	934.3
20°	898.6	902.4	911.8	919.3	921.1
22.5°	878.0	883.6	893.0	902.4	906.1
25°	857.4	863.0	872.4	883.6	887.4
27.5°	833.0	838.6	851.7	864.9	866.7
30°	808.6	814.2	831.1	842.4	848.0
32.5°	778.6	786.1	803.0	819.8	825.5
35°	750.4	757.9	776.7	793.6	801.1
37.5°	720.4	727.9	748.5	769.2	778.6
40°	686.6	696.0	720.4	742.9	756.1
42.5°	654.7	664.1	688.5	718.5	731.7
45°	619.1	628.5	658.5	692.3	709.2
47.5°	581.6	592.8	628.5	669.8	686.6
50°	544.1	557.2	596.6	643.5	662.3
52.5°	504.7	521.5	566.6	617.2	639.7
55°	463.4	484.0	536.6	591.0	613.5
57.5°	424.0	442.8	504.7	562.8	587.2
60°	380.8	405.2	474.6	534.7	560.9
62.5°	339.6	365.8	442.8	506.5	534.7
65°	303.9	330.2	409.0	476.5	506.5
67.5°	257.0	292.7	380.8	444.6	474.6
70°	210.1	258.9	345.2	410.9	439.0
72.5°	174.5	221.4	309.6	375.2	401.5
75°	133.2	185.7	272.0	328.3	345.2
77.5°	99.4	153.8	232.6	260.8	262.6
80°	73.2	118.2	176.3	185.7	193.2
82.5°	50.7	82.5	114.4	125.7	129.4
85°	31.9	48.8	65.7	71.3	71.3
87.5°	16.9	18.8	22.5	22.5	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)