

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: P308597

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CP250-W2A-U-5500K**

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: P308597  
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-CP250-W2A-U-5500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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**

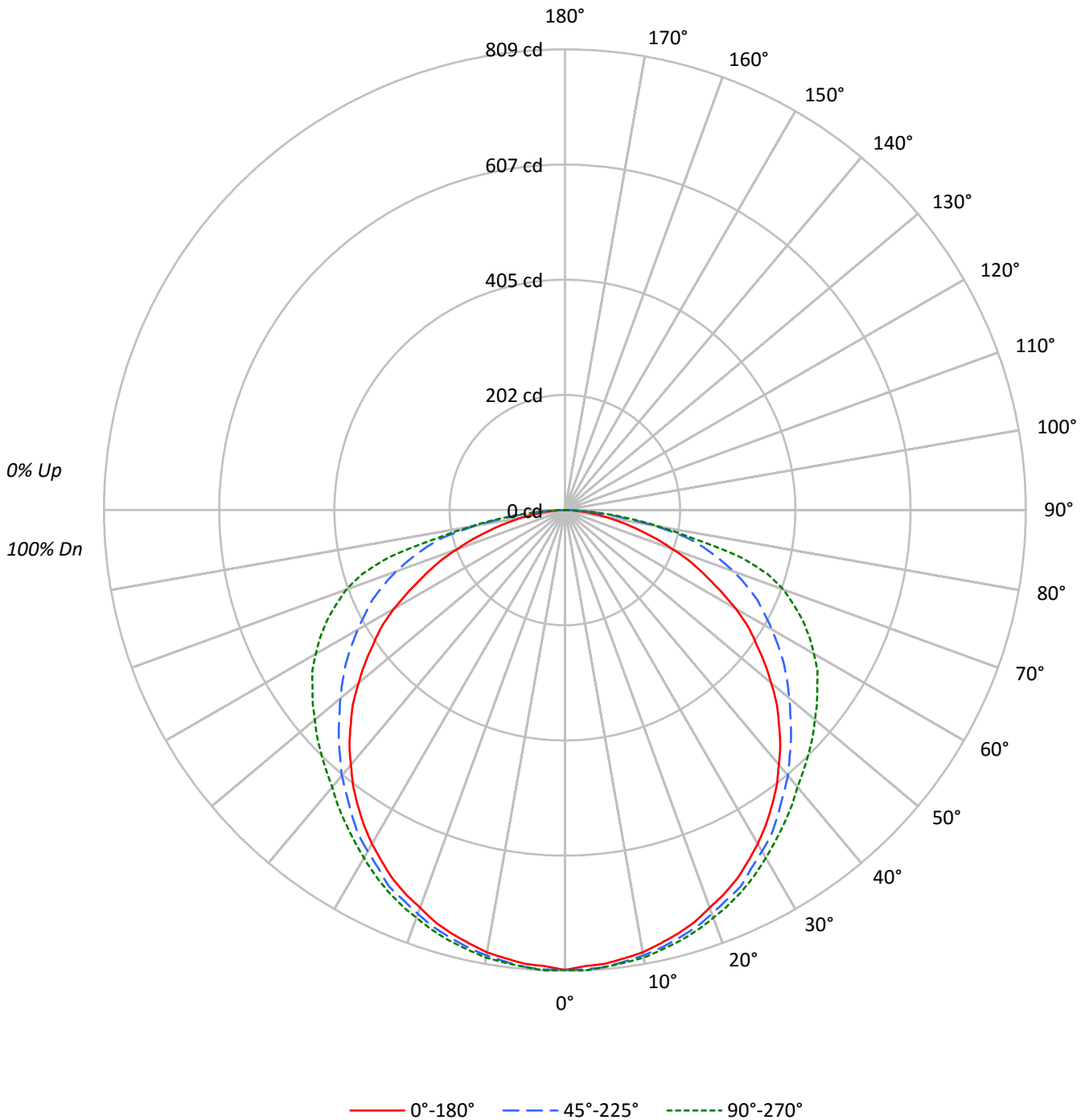
Lumens per Lamp: N/A  
Luminaire Lumens: 2570.0 lumens  
Efficiency: N/A  
Efficacy: 67.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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°	2172	2172	2172
5°	2160	2176	2176
10°	2154	2170	2180
15°	2144	2165	2181
20°	2128	2160	2182
25°	2122	2167	2189
30°	2103	2150	2191
35°	2080	2143	2205
40°	2052	2139	2231
45°	2022	2137	2302
50°	1979	2153	2398
55°	1925	2200	2537
60°	1862	2259	2717
65°	1733	2371	2937
70°	1592	2484	3213
75°	1395	2614	3322
80°	1201	2490	2608
85°	1050	1809	1985



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.4	3.0
10°-20°	219.3	8.5
20°-30°	334.5	13.0
30°-40°	408.4	15.9
40°-50°	436.7	17.0
50°-60°	421.5	16.4
60°-70°	362.9	14.1
70°-80°	245.5	9.6
80°-90°	64.8	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°	630.1	24.5
0°-40°	1038.6	40.4
0°-60°	1896.8	73.8
0°-90°	2570.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2570.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	807	807	807	807	807	
5°	800	802	805	805	805	76
15°	770	771	777	781	783	217
25°	715	718	730	734	737	329
35°	633	639	652	666	671	396
45°	531	541	562	590	605	410
55°	410	424	469	516	541	368
65°	272	299	372	431	461	271
75°	134	178	251	302	320	144
85°	34	47	59	60	64	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	807.3	807.3	807.3	807.3	807.3
2.5°	801.6	803.5	807.3	807.3	809.2
5°	799.7	801.6	805.4	805.4	805.4
7.5°	794.0	795.9	799.7	801.6	801.6
10°	788.4	790.3	794.0	795.9	797.8
12.5°	778.9	780.8	786.5	790.3	790.3
15°	769.5	771.4	777.0	780.8	782.7
17.5°	758.1	761.9	767.6	771.4	773.3
20°	743.0	746.8	754.3	760.0	761.9
22.5°	729.8	733.5	741.1	746.8	750.6
25°	714.6	718.4	729.8	733.5	737.3
27.5°	695.7	699.5	709.0	716.5	722.2
30°	676.8	680.6	692.0	701.4	705.2
32.5°	656.0	661.7	674.9	682.5	688.2
35°	633.3	639.0	652.3	665.5	671.2
37.5°	610.7	616.3	629.6	646.6	654.1
40°	584.2	591.8	608.8	631.5	635.2
42.5°	559.6	569.1	584.2	610.7	620.1
45°	531.3	540.7	561.5	589.9	605.0
47.5°	504.8	514.2	536.9	571.0	589.9
50°	472.6	485.9	514.2	553.9	572.8
52.5°	442.4	453.7	491.6	535.0	557.7
55°	410.3	423.5	468.9	516.1	540.7
57.5°	381.9	393.2	444.3	497.2	525.6
60°	346.0	361.1	419.7	476.4	504.8
62.5°	308.2	330.9	395.1	453.7	484.0
65°	272.2	298.7	372.4	431.1	461.3
67.5°	240.1	268.5	344.1	406.5	434.8
70°	202.3	238.2	315.7	376.2	408.4
72.5°	168.3	208.0	283.6	344.1	372.4
75°	134.2	177.7	251.4	302.5	319.5
77.5°	104.0	145.6	215.5	230.7	232.5
80°	77.5	115.3	160.7	162.6	168.3
82.5°	52.9	81.3	104.0	113.4	115.3
85°	34.0	47.3	58.6	60.5	64.3
87.5°	15.1	17.0	20.8	18.9	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)