

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: P308594

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CP250-W2A-U-4000K**

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: P308594  
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-4000K  
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**

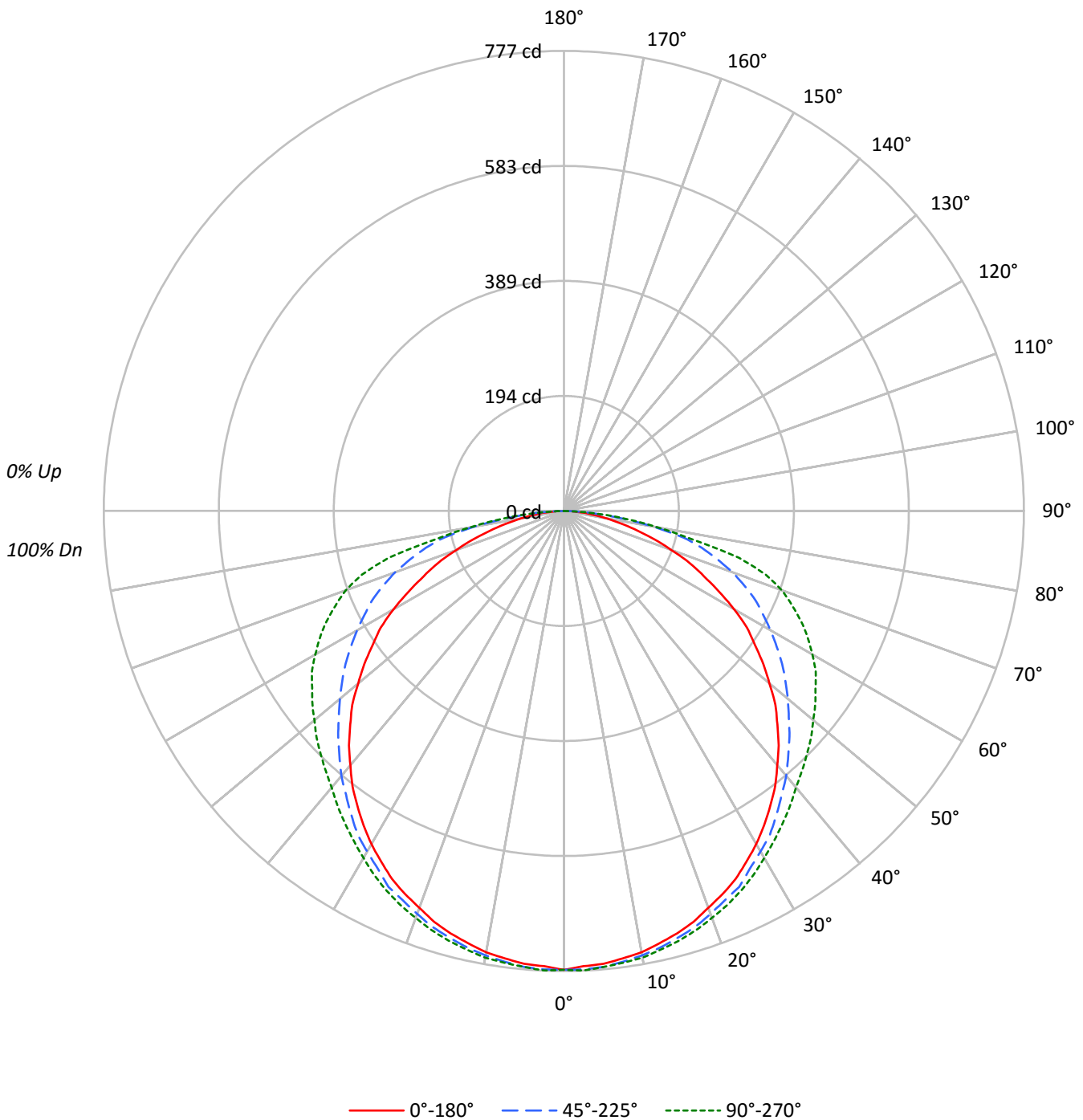
Lumens per Lamp: N/A  
Luminaire Lumens: 2467.0 lumens  
Efficiency: N/A  
Efficacy: 65.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2085	2085	2085
5°	2074	2088	2088
10°	2068	2083	2093
15°	2058	2078	2093
20°	2042	2074	2094
25°	2037	2080	2102
30°	2019	2064	2103
35°	1997	2057	2117
40°	1970	2053	2142
45°	1941	2051	2210
50°	1899	2066	2302
55°	1848	2112	2435
60°	1787	2168	2608
65°	1664	2276	2819
70°	1528	2385	3084
75°	1340	2510	3189
80°	1153	2391	2503
85°	1010	1738	1905



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.3	3.0
10°-20°	210.5	8.5
20°-30°	321.1	13.0
30°-40°	392.1	15.9
40°-50°	419.2	17.0
50°-60°	404.6	16.4
60°-70°	348.3	14.1
70°-80°	235.7	9.6
80°-90°	62.2	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°	604.9	24.5
0°-40°	996.9	40.4
0°-60°	1820.8	73.8
0°-90°	2467.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2467.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	768	770	773	773	773	73
15°	739	740	746	750	751	208
25°	686	690	700	704	708	316
35°	608	613	626	639	644	380
45°	510	519	539	566	581	394
55°	394	406	450	495	519	353
65°	261	287	358	414	443	260
75°	129	171	241	290	307	138
85°	33	45	56	58	62	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	774.9	774.9	774.9	774.9	774.9
2.5°	769.5	771.3	774.9	774.9	776.7
5°	767.7	769.5	773.1	773.1	773.1
7.5°	762.2	764.0	767.7	769.5	769.5
10°	756.8	758.6	762.2	764.0	765.9
12.5°	747.7	749.5	755.0	758.6	758.6
15°	738.6	740.4	745.9	749.5	751.3
17.5°	727.7	731.4	736.8	740.4	742.3
20°	713.2	716.9	724.1	729.6	731.4
22.5°	700.5	704.1	711.4	716.9	720.5
25°	686.0	689.6	700.5	704.1	707.8
27.5°	667.9	671.5	680.6	687.8	693.3
30°	649.7	653.3	664.2	673.3	676.9
32.5°	629.7	635.2	647.9	655.1	660.6
35°	608.0	613.4	626.1	638.8	644.3
37.5°	586.2	591.6	604.3	620.7	627.9
40°	560.8	568.0	584.4	606.1	609.8
42.5°	537.2	546.3	560.8	586.2	595.3
45°	510.0	519.0	539.0	566.2	580.7
47.5°	484.6	493.6	515.4	548.1	566.2
50°	453.7	466.4	493.6	531.7	549.9
52.5°	424.7	435.6	471.9	513.6	535.4
55°	393.8	406.5	450.1	495.4	519.0
57.5°	366.6	377.5	426.5	477.3	504.5
60°	332.1	346.6	402.9	457.3	484.6
62.5°	295.8	317.6	379.3	435.6	464.6
65°	261.3	286.7	357.5	413.8	442.8
67.5°	230.5	257.7	330.3	390.2	417.4
70°	194.2	228.7	303.1	361.1	392.0
72.5°	161.5	199.6	272.2	330.3	357.5
75°	128.9	170.6	241.4	290.4	306.7
77.5°	99.8	139.7	206.9	221.4	223.2
80°	74.4	110.7	154.3	156.1	161.5
82.5°	50.8	78.0	99.8	108.9	110.7
85°	32.7	45.4	56.3	58.1	61.7
87.5°	14.5	16.3	20.0	18.1	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)