

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: P308591

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CP250-W2A-U-2700K**

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: P308591  
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-2700K  
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**

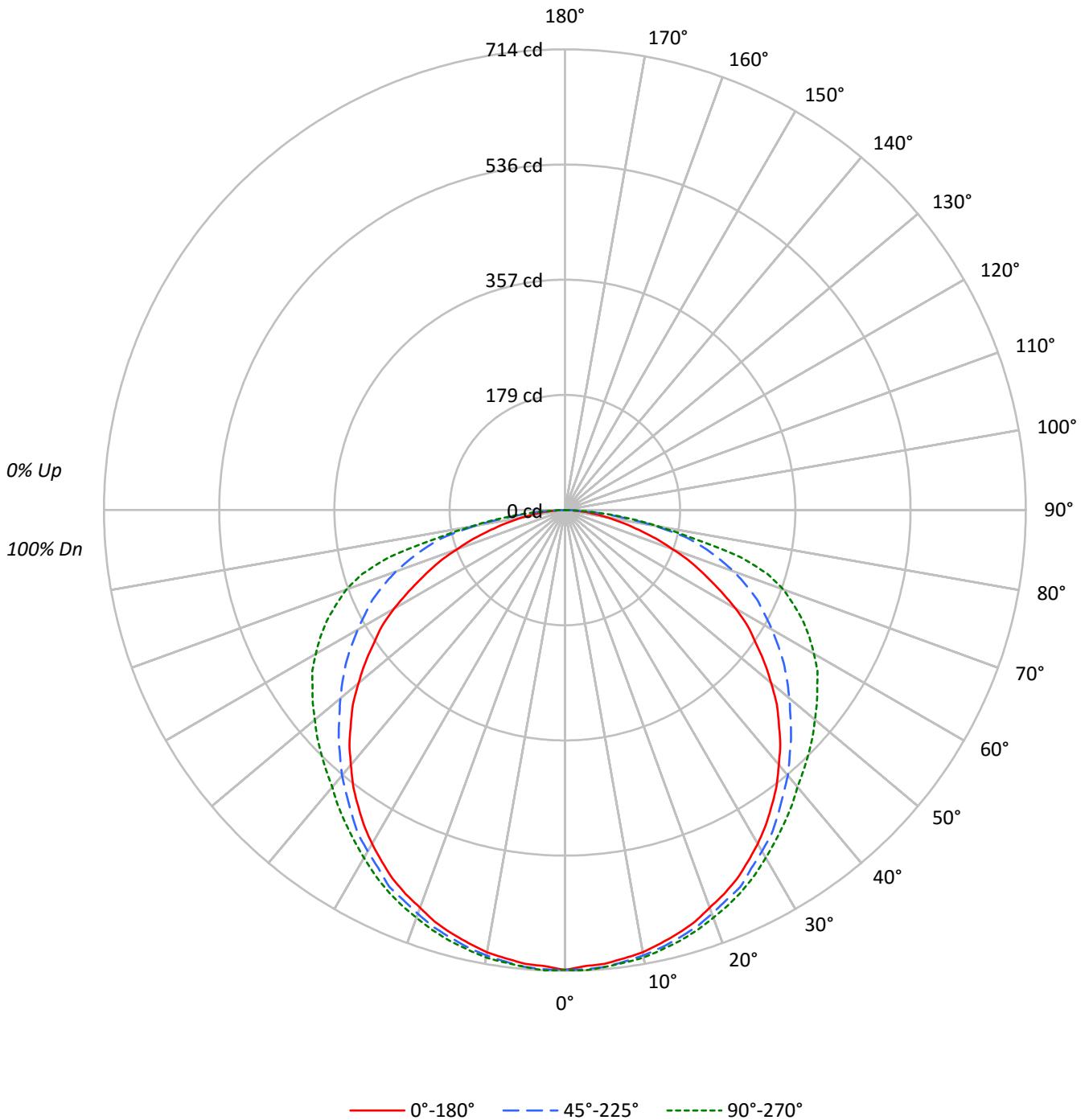
Lumens per Lamp: N/A  
Luminaire Lumens: 2268.0 lumens  
Efficiency: N/A  
Efficacy: 61.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	1917	1917	1917
5°	1906	1920	1920
10°	1901	1915	1924
15°	1892	1910	1924
20°	1878	1906	1926
25°	1873	1912	1932
30°	1856	1897	1934
35°	1836	1891	1946
40°	1811	1887	1969
45°	1784	1886	2032
50°	1746	1900	2116
55°	1698	1941	2239
60°	1643	1993	2398
65°	1530	2093	2592
70°	1404	2192	2836
75°	1232	2307	2932
80°	1060	2197	2301
85°	926	1596	1751



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.4	3.0
10°-20°	193.5	8.5
20°-30°	295.2	13.0
30°-40°	360.4	15.9
40°-50°	385.4	17.0
50°-60°	372.0	16.4
60°-70°	320.2	14.1
70°-80°	216.7	9.6
80°-90°	57.2	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°	556.1	24.5
0°-40°	916.5	40.4
0°-60°	1673.9	73.8
0°-90°	2268.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2268.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	712	712	712	712	712	
5°	706	707	711	711	711	67
15°	679	681	686	689	691	192
25°	631	634	644	647	651	290
35°	559	564	576	587	592	350
45°	469	477	496	520	534	362
55°	362	374	414	456	477	324
65°	240	264	329	380	407	239
75°	118	157	222	267	282	127
85°	30	42	52	53	57	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	712.4	712.4	712.4	712.4	712.4
2.5°	707.4	709.1	712.4	712.4	714.1
5°	705.7	707.4	710.7	710.7	710.7
7.5°	700.7	702.4	705.7	707.4	707.4
10°	695.7	697.4	700.7	702.4	704.1
12.5°	687.4	689.1	694.1	697.4	697.4
15°	679.0	680.7	685.7	689.1	690.7
17.5°	669.0	672.4	677.4	680.7	682.4
20°	655.7	659.0	665.7	670.7	672.4
22.5°	644.0	647.3	654.0	659.0	662.4
25°	630.7	634.0	644.0	647.3	650.7
27.5°	614.0	617.3	625.7	632.3	637.3
30°	597.3	600.6	610.6	619.0	622.3
32.5°	578.9	583.9	595.6	602.3	607.3
35°	558.9	563.9	575.6	587.3	592.3
37.5°	538.9	543.9	555.6	570.6	577.3
40°	515.5	522.2	537.2	557.3	560.6
42.5°	493.9	502.2	515.5	538.9	547.2
45°	468.8	477.2	495.5	520.5	533.9
47.5°	445.5	453.8	473.8	503.9	520.5
50°	417.1	428.8	453.8	488.8	505.5
52.5°	390.4	400.4	433.8	472.2	492.2
55°	362.0	373.7	413.8	455.5	477.2
57.5°	337.0	347.0	392.1	438.8	463.8
60°	305.3	318.7	370.4	420.4	445.5
62.5°	272.0	292.0	348.7	400.4	427.1
65°	240.3	263.6	328.7	380.4	407.1
67.5°	211.9	236.9	303.7	358.7	383.7
70°	178.5	210.2	278.6	332.0	360.4
72.5°	148.5	183.5	250.3	303.7	328.7
75°	118.5	156.8	221.9	266.9	282.0
77.5°	91.8	128.5	190.2	203.5	205.2
80°	68.4	101.8	141.8	143.5	148.5
82.5°	46.7	71.7	91.8	100.1	101.8
85°	30.0	41.7	51.7	53.4	56.7
87.5°	13.3	15.0	18.4	16.7	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)