

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: P307169

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CA125-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: P307169  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-39-UNV-L82765-HRP-CA125-W2A-U-2700K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET  
Light Source: (168) 2700K 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**

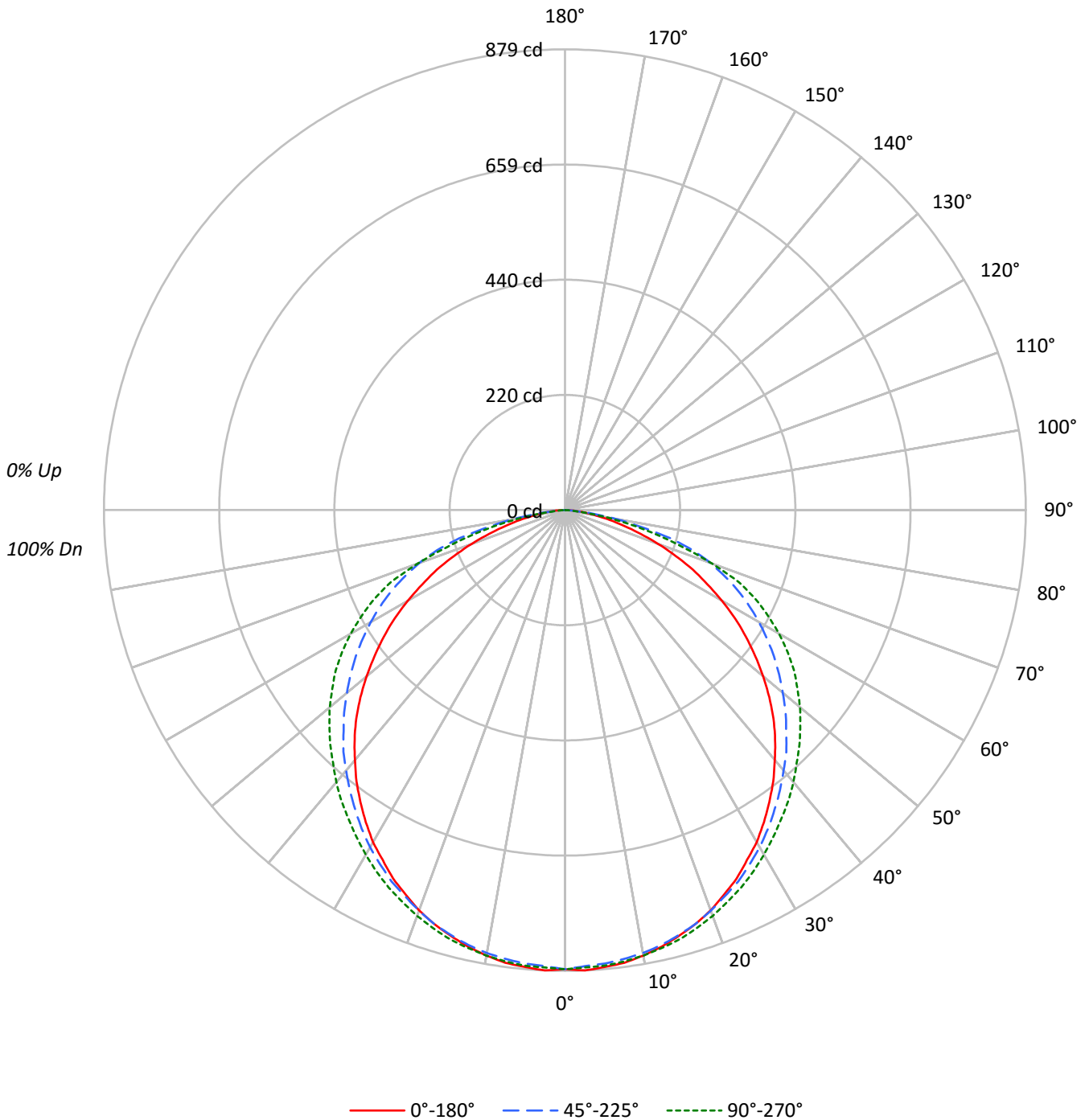
Lumens per Lamp: N/A  
Luminaire Lumens: 2579.0 lumens  
Efficiency: N/A  
Efficacy: 77.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (A<sub>in</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



TEST NUMBER: P307169

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-HRP-CA125-W2A-U-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P307169

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-HRP-CA125-W2A-U-2700K

**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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2357	2357	2357
5°	2364	2346	2357
10°	2358	2344	2358
15°	2343	2338	2361
20°	2327	2329	2359
25°	2302	2321	2360
30°	2273	2308	2359
35°	2233	2291	2363
40°	2188	2279	2382
45°	2142	2272	2407
50°	2068	2271	2451
55°	1978	2283	2503
60°	1859	2300	2536
65°	1714	2323	2551
70°	1493	2329	2348
75°	1231	2167	1897
80°	967	1559	1269
85°	750	602	299



TEST NUMBER: P307169

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-HRP-CA125-W2A-U-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.9	3.2
10°-20°	237.9	9.2
20°-30°	361.3	14.0
30°-40°	437.8	17.0
40°-50°	461.3	17.9
50°-60°	430.7	16.7
60°-70°	344.2	13.3
70°-80°	189.4	7.3
80°-90°	33.4	1.3
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°	682.2	26.5
0°-40°	1120.0	43.4
0°-60°	2012.0	78.0
0°-90°	2579.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2579.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	876	876	876	876	876	
5°	875	873	868	874	873	83
15°	841	841	839	848	848	237
25°	775	777	782	793	795	357
35°	680	686	697	715	719	425
45°	563	573	597	624	633	433
55°	422	443	487	521	534	376
65°	269	303	365	395	401	265
75°	118	170	208	187	182	127
85°	24	31	20	12	10	30
90°	0	0	0	0	0	



TEST NUMBER: P307169

CATALOG NUMBER: 14FC22-39-UNV-L82765-HRP-CA125-W2A-U-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	875.8	875.8	875.8	875.8	875.8
2.5°	879.1	876.7	871.0	875.8	873.4
5°	875.0	872.6	868.5	874.2	872.6
7.5°	871.0	867.7	863.7	870.2	868.5
10°	862.9	860.4	858.0	863.7	862.9
12.5°	853.1	852.3	849.9	856.4	855.6
15°	841.0	841.0	839.3	847.5	847.5
17.5°	828.0	827.2	828.0	836.9	836.1
20°	812.6	812.6	813.4	823.9	823.9
22.5°	793.9	794.7	797.2	810.2	809.3
25°	775.3	776.9	781.8	793.1	794.7
27.5°	752.6	756.6	762.3	776.1	777.7
30°	731.5	733.9	742.8	755.8	759.1
32.5°	706.3	711.2	720.9	735.5	739.6
35°	679.6	686.1	697.4	715.3	719.3
37.5°	652.8	658.5	673.9	692.6	699.9
40°	622.8	632.6	648.8	669.9	678.0
42.5°	593.6	603.4	625.3	647.1	654.4
45°	562.8	573.4	596.9	623.6	632.6
47.5°	528.7	540.9	570.9	599.3	609.0
50°	493.9	509.3	542.5	574.2	585.5
52.5°	457.4	476.8	515.0	548.2	558.8
55°	421.7	442.8	486.6	520.6	533.6
57.5°	385.2	407.9	457.4	496.3	503.6
60°	345.5	373.0	427.4	461.4	471.2
62.5°	306.5	338.2	396.6	429.0	437.1
65°	269.2	303.3	364.9	394.9	400.6
67.5°	228.7	269.2	330.1	357.6	359.3
70°	189.8	236.8	296.0	309.0	298.4
72.5°	151.7	201.9	256.3	245.7	236.8
75°	118.4	169.5	208.4	187.3	182.5
77.5°	87.6	138.7	149.2	137.9	128.9
80°	62.4	109.5	100.6	86.0	81.9
82.5°	43.0	68.9	55.1	43.0	37.3
85°	24.3	30.8	19.5	12.2	9.7
87.5°	10.5	7.3	4.1	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)