

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: P307194

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CP187-W2A-U-5700K**

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: P307194  
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-CP187-W2A-U-5700K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"  
POLYCARB SHEET  
Light Source: (168) 5700K 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**

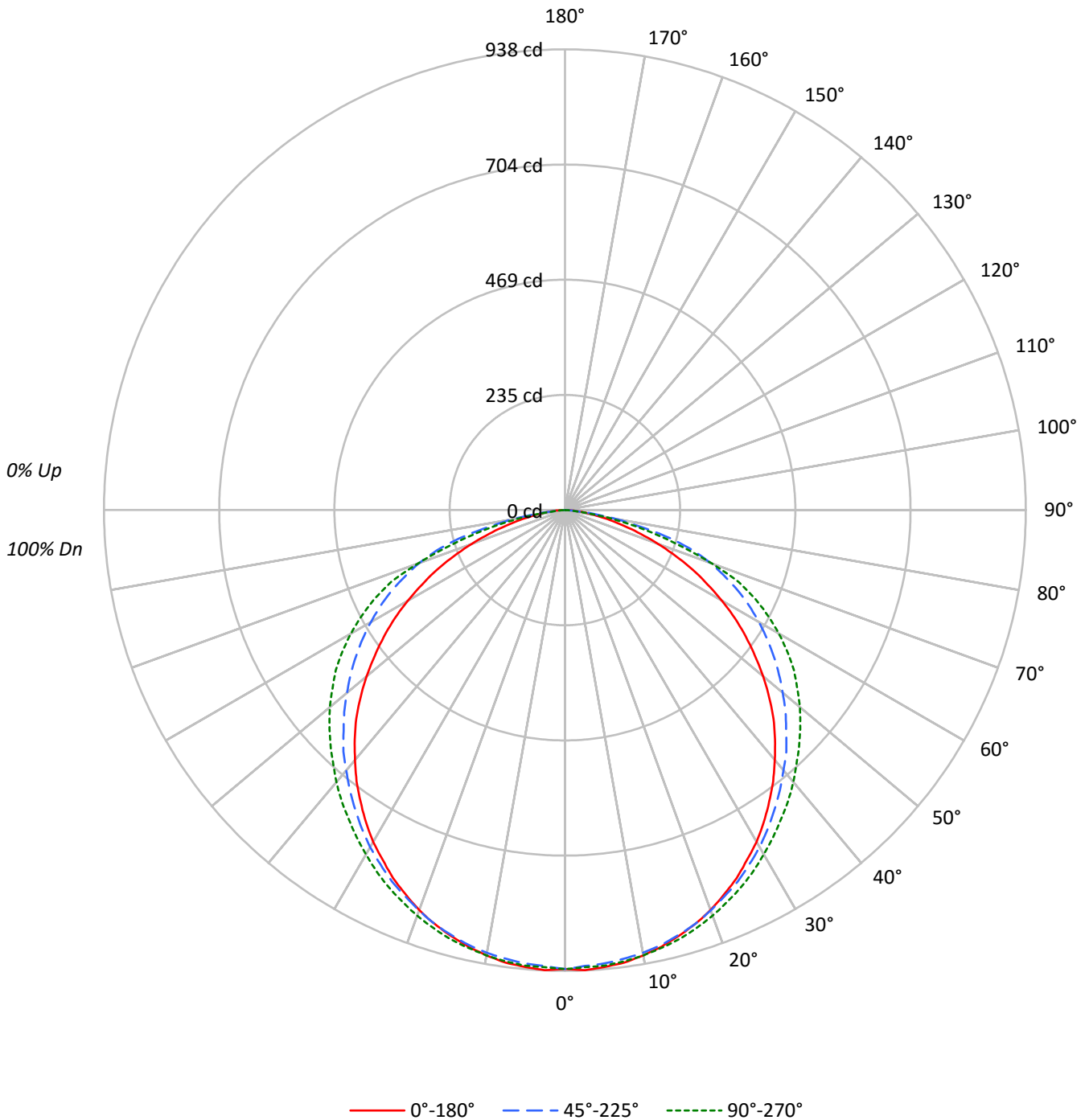
Lumens per Lamp: N/A  
Luminaire Lumens: 2751.0 lumens  
Efficiency: N/A  
Efficacy: 80.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 34.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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



TEST NUMBER: P307194

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-HRP-CP187-W2A-U-5700K

### Luminous Intensity Polar Plot





TEST NUMBER: P307194

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-HRP-CP187-W2A-U-5700K

**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°	2514	2514	2514
5°	2521	2503	2514
10°	2515	2501	2515
15°	2499	2494	2518
20°	2482	2485	2517
25°	2456	2476	2517
30°	2425	2462	2516
35°	2381	2444	2521
40°	2334	2431	2540
45°	2285	2423	2568
50°	2205	2423	2615
55°	2110	2435	2670
60°	1983	2454	2705
65°	1829	2479	2721
70°	1592	2484	2504
75°	1313	2311	2023
80°	1032	1663	1354
85°	803	642	321



TEST NUMBER: P307194

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-HRP-CP187-W2A-U-5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.4	3.2
10°-20°	253.8	9.2
20°-30°	385.4	14.0
30°-40°	467.0	17.0
40°-50°	492.1	17.9
50°-60°	459.4	16.7
60°-70°	367.1	13.3
70°-80°	202.0	7.3
80°-90°	35.7	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°	727.7	26.5
0°-40°	1194.7	43.4
0°-60°	2146.2	78.0
0°-90°	2751.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2751.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	934	934	934	934	934	
5°	933	931	926	932	931	89
15°	897	897	895	904	904	253
25°	827	829	834	846	848	381
35°	725	732	744	763	767	454
45°	600	612	637	665	675	462
55°	450	472	519	555	569	402
65°	287	324	389	421	427	283
75°	126	181	222	200	195	136
85°	26	33	21	13	10	32
90°	0	0	0	0	0	



TEST NUMBER: P307194

CATALOG NUMBER: 14FC22-39-UNV-L82765-HRP-CP187-W2A-U-5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	934.3	934.3	934.3	934.3	934.3
2.5°	937.7	935.1	929.1	934.3	931.7
5°	933.4	930.8	926.5	932.5	930.8
7.5°	929.1	925.6	921.3	928.2	926.5
10°	920.4	917.8	915.2	921.3	920.4
12.5°	910.0	909.2	906.6	913.5	912.6
15°	897.1	897.1	895.3	904.0	904.0
17.5°	883.2	882.4	883.2	892.7	891.9
20°	866.8	866.8	867.6	878.9	878.9
22.5°	846.9	847.7	850.3	864.2	863.3
25°	827.0	828.7	833.9	846.0	847.7
27.5°	802.8	807.1	813.1	827.9	829.6
30°	780.3	782.9	792.4	806.2	809.7
32.5°	753.5	758.6	769.0	784.6	788.9
35°	724.9	731.8	743.9	763.0	767.3
37.5°	696.4	702.4	718.9	738.8	746.5
40°	664.4	674.7	692.0	714.5	723.2
42.5°	633.2	643.6	667.0	690.3	698.1
45°	600.3	611.6	636.7	665.2	674.7
47.5°	564.0	577.0	609.0	639.3	649.7
50°	526.8	543.3	578.7	612.5	624.6
52.5°	487.9	508.6	549.3	584.8	596.0
55°	449.8	472.3	519.0	555.4	569.2
57.5°	410.9	435.1	487.9	529.4	537.2
60°	368.5	397.9	455.9	492.2	502.6
62.5°	327.0	360.7	423.0	457.6	466.3
65°	287.2	323.5	389.3	421.3	427.3
67.5°	243.9	287.2	352.1	381.5	383.2
70°	202.4	252.6	315.7	329.6	318.3
72.5°	161.8	215.4	273.4	262.1	252.6
75°	126.3	180.8	222.3	199.8	194.6
77.5°	93.4	147.9	159.2	147.1	137.5
80°	66.6	116.8	107.3	91.7	87.4
82.5°	45.8	73.5	58.8	45.8	39.8
85°	26.0	32.9	20.8	13.0	10.4
87.5°	11.2	7.8	4.3	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)