

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: P312825

Luminaire Tested: **22FCZ2-34HE-UNV-L83050-CP125-W2A-U-3000K**

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: P312825  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-34HE-UNV-L83050-CP125-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS, 0.125" 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**

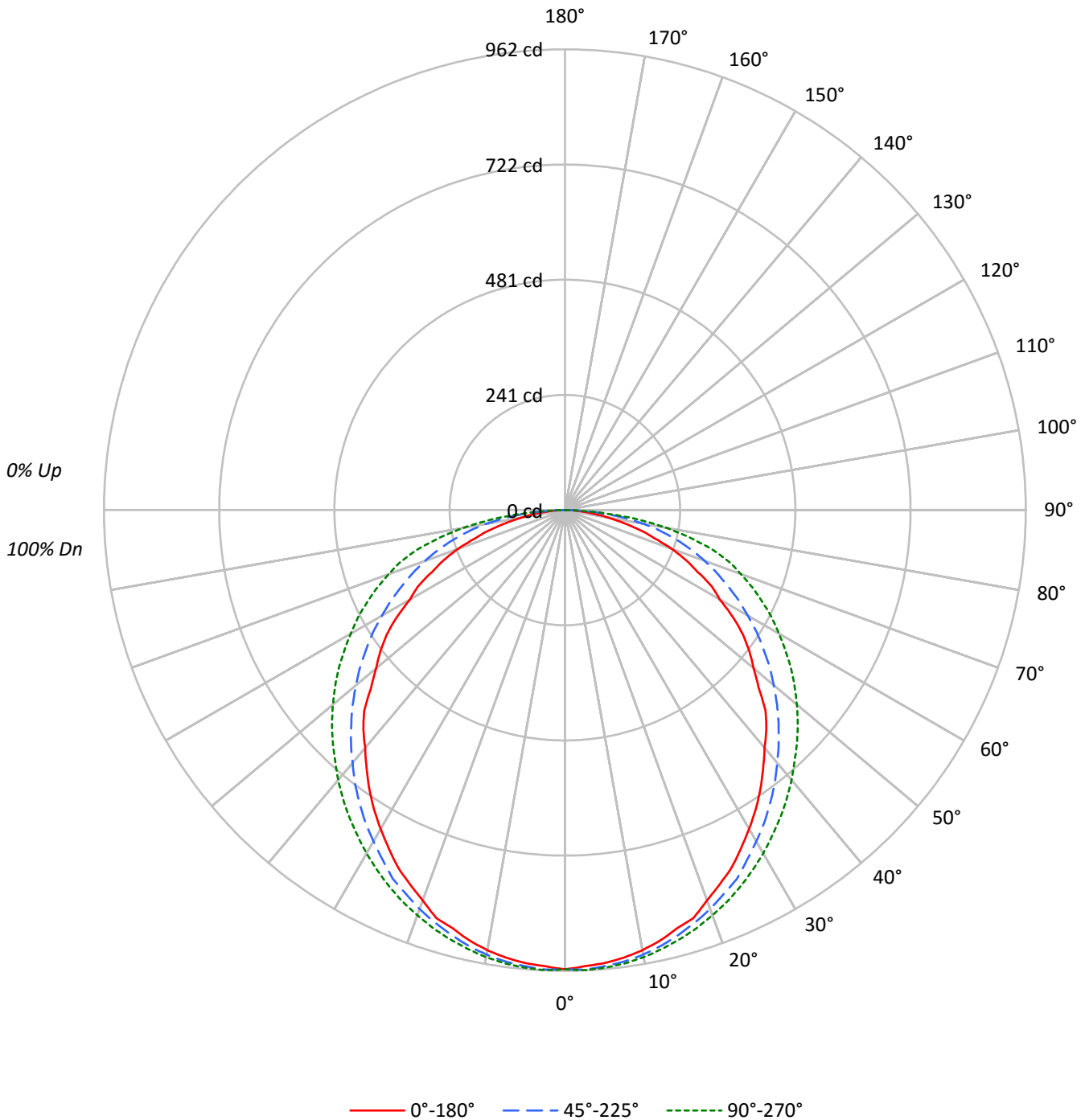
Lumens per Lamp: N/A  
Luminaire Lumens: 2858.0 lumens  
Efficiency: N/A  
Efficacy: 103.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.5  
Input Voltage (V): NR  
Input Current (A<sub>in</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: P312825

CATALOG NUMBER: 22FCZ2-34HE-UNV-L83050-CP125-W2A-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P312825

CATALOG NUMBER: 22FC22-34HE-UNV-L83050-CP125-W2A-U-3000K

**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	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

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

	0°	45°	90°
0°	2580	2580	2580
5°	2564	2583	2590
10°	2549	2575	2590
15°	2519	2557	2584
20°	2483	2538	2578
25°	2445	2522	2575
30°	2389	2482	2572
35°	2337	2454	2575
40°	2278	2422	2585
45°	2254	2400	2608
50°	2153	2382	2646
55°	2130	2374	2702
60°	2010	2371	2775
65°	1951	2387	2900
70°	1873	2443	3078
75°	1706	2517	3314
80°	1463	2607	3349
85°	1183	2492	2871



TEST NUMBER: P312825

CATALOG NUMBER: 22FCZ2-34HE-UNV-L83050-CP125-W2A-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.7	3.2
10°-20°	258.8	9.1
20°-30°	389.6	13.6
30°-40°	467.6	16.4
40°-50°	488.7	17.1
50°-60°	455.4	15.9
60°-70°	373.5	13.1
70°-80°	251.7	8.8
80°-90°	82.0	2.9
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°	739.1	25.9
0°-40°	1206.7	42.2
0°-60°	2150.8	75.3
0°-90°	2858.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2858.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	959	959	959	959	959	
5°	949	952	956	958	959	90
15°	904	910	918	926	927	256
25°	824	829	850	862	867	379
35°	711	721	747	773	784	445
45°	592	596	631	669	685	452
55°	454	462	506	554	576	402
65°	306	320	375	430	456	305
75°	164	182	242	297	319	173
85°	38	55	81	94	93	46
90°	0	0	0	0	0	



TEST NUMBER: P312825

CATALOG NUMBER: 22FCZ2-34HE-UNV-L83050-CP125-W2A-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	958.9	958.9	958.9	958.9	958.9
2.5°	953.4	956.1	960.3	961.6	961.6
5°	949.3	952.0	956.1	957.5	958.9
7.5°	942.5	945.2	950.7	953.4	954.8
10°	932.9	935.6	942.5	946.6	947.9
12.5°	920.6	923.3	931.5	937.0	938.4
15°	904.2	909.6	917.8	926.1	927.4
17.5°	893.2	891.9	902.8	912.4	915.1
20°	867.2	874.1	886.4	897.3	900.1
22.5°	845.3	850.8	867.2	879.5	885.0
25°	823.5	828.9	849.5	861.8	867.2
27.5°	796.1	804.3	823.5	841.2	848.1
30°	768.7	777.0	798.8	819.4	827.6
32.5°	741.4	751.0	774.2	796.1	805.7
35°	711.3	720.9	746.9	772.9	783.8
37.5°	679.8	692.1	719.5	748.2	760.5
40°	648.4	660.7	689.4	722.2	735.9
42.5°	622.4	627.9	660.7	696.3	709.9
45°	592.3	596.4	630.6	668.9	685.3
47.5°	548.5	563.6	600.5	642.9	659.3
50°	514.3	530.7	569.0	614.2	632.0
52.5°	485.6	496.5	538.9	584.1	604.6
55°	454.1	462.3	506.1	554.0	575.9
57.5°	415.8	430.9	474.7	523.9	545.8
60°	373.4	392.6	440.5	493.8	515.7
62.5°	346.1	357.0	409.0	462.3	487.0
65°	306.4	320.1	374.8	429.5	455.5
67.5°	273.6	287.3	343.3	398.1	424.0
70°	238.0	251.7	310.5	365.2	391.2
72.5°	197.0	216.1	277.7	332.4	359.8
75°	164.1	181.9	242.1	296.8	318.7
77.5°	127.2	150.5	206.5	251.7	268.1
80°	94.4	117.6	168.2	201.1	216.1
82.5°	64.3	87.5	125.8	150.5	158.7
85°	38.3	54.7	80.7	94.4	93.0
87.5°	17.8	23.3	32.8	32.8	31.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)