

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: P308752

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-CA125-W2A-U-6500K**

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: P308752  
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-L82765-CA125-W2A-U-6500K  
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS, 0.125" ACRYLIC 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**

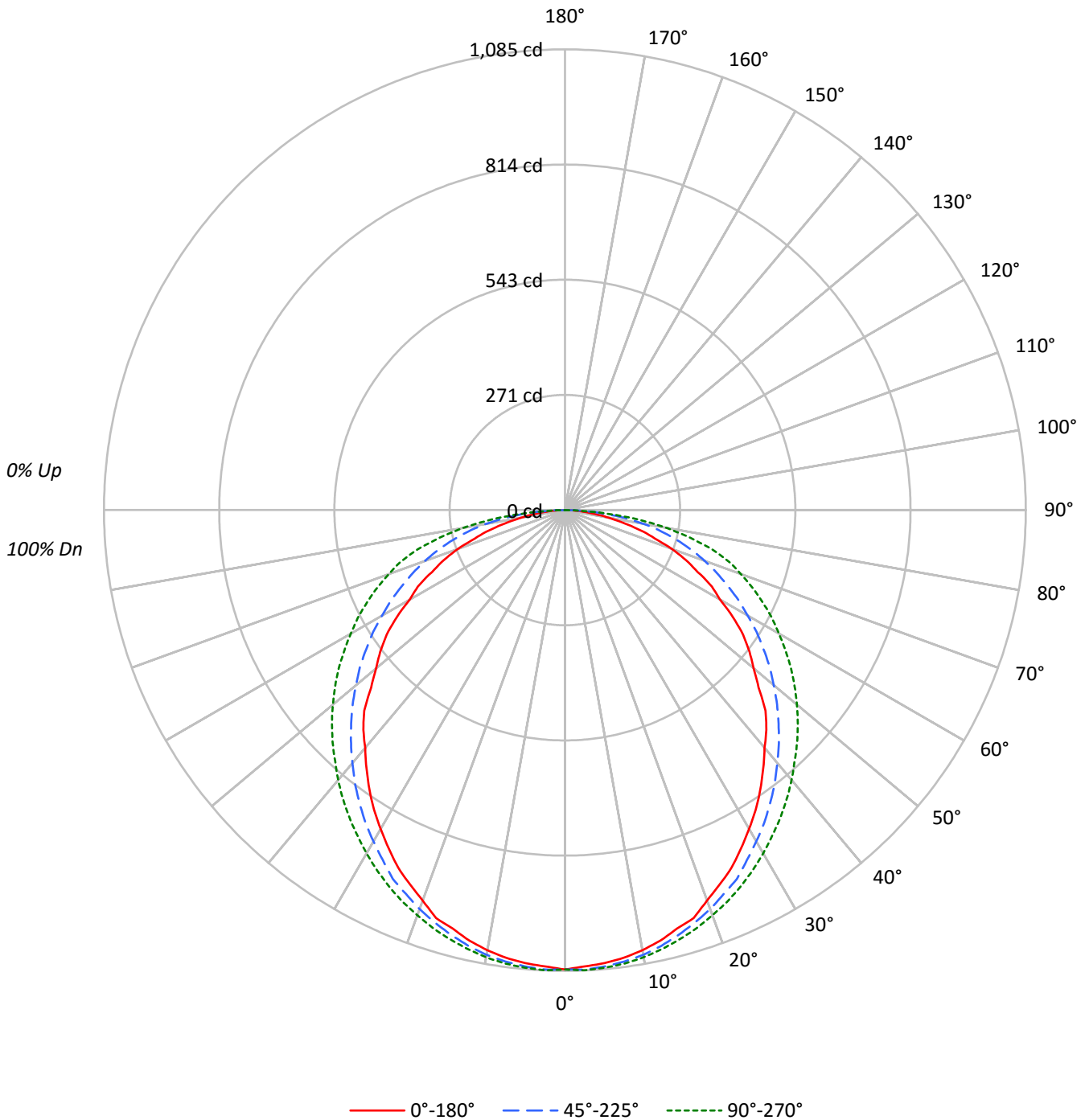
Lumens per Lamp: N/A  
Luminaire Lumens: 3224.0 lumens  
Efficiency: N/A  
Efficacy: 111.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 28.8  
Input Voltage (V): NR  
Input Current (A<sub>in</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: P308752

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-CA125-W2A-U-6500K

### Luminous Intensity Polar Plot





TEST NUMBER: P308752

CATALOG NUMBER: 22FC22-34HE-UNV-L82765-CA125-W2A-U-6500K

**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°	2911	2911	2911
5°	2893	2914	2922
10°	2876	2905	2922
15°	2842	2885	2915
20°	2802	2863	2907
25°	2758	2845	2905
30°	2695	2800	2901
35°	2636	2768	2905
40°	2569	2732	2916
45°	2543	2707	2942
50°	2429	2687	2984
55°	2403	2678	3048
60°	2267	2674	3131
65°	2201	2692	3272
70°	2113	2756	3472
75°	1926	2839	3738
80°	1650	2941	3778
85°	1334	2810	3239



TEST NUMBER: P308752

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-CA125-W2A-U-6500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.4	3.2
10°-20°	292.0	9.1
20°-30°	439.5	13.6
30°-40°	527.4	16.4
40°-50°	551.3	17.1
50°-60°	513.7	15.9
60°-70°	421.4	13.1
70°-80°	283.9	8.8
80°-90°	92.5	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°	833.8	25.9
0°-40°	1361.2	42.2
0°-60°	2426.2	75.3
0°-90°	3224.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3224.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1071	1074	1079	1080	1082	102
15°	1020	1026	1035	1045	1046	288
25°	929	935	958	972	978	427
35°	802	813	842	872	884	502
45°	668	673	711	755	773	510
55°	512	522	571	625	650	454
65°	346	361	423	484	514	344
75°	185	205	273	335	360	195
85°	43	62	91	106	105	51
90°	0	0	0	0	0	



TEST NUMBER: P308752

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-CA125-W2A-U-6500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1081.7	1081.7	1081.7	1081.7	1081.7
2.5°	1075.5	1078.6	1083.2	1084.8	1084.8
5°	1070.9	1074.0	1078.6	1080.1	1081.7
7.5°	1063.2	1066.2	1072.4	1075.5	1077.1
10°	1052.4	1055.4	1063.2	1067.8	1069.3
12.5°	1038.5	1041.6	1050.8	1057.0	1058.5
15°	1020.0	1026.1	1035.4	1044.6	1046.2
17.5°	1007.6	1006.1	1018.4	1029.2	1032.3
20°	978.3	986.0	999.9	1012.2	1015.3
22.5°	953.6	959.8	978.3	992.2	998.4
25°	928.9	935.1	958.2	972.1	978.3
27.5°	898.1	907.3	928.9	949.0	956.7
30°	867.2	876.5	901.1	924.3	933.5
32.5°	836.3	847.1	873.4	898.1	908.9
35°	802.4	813.2	842.5	871.8	884.2
37.5°	766.9	780.8	811.6	844.0	857.9
40°	731.4	745.3	777.7	814.7	830.2
42.5°	702.1	708.3	745.3	785.4	800.8
45°	668.1	672.8	711.3	754.6	773.1
47.5°	618.8	635.7	677.4	725.2	743.8
50°	580.2	598.7	641.9	692.8	712.9
52.5°	547.8	560.1	608.0	658.9	682.0
55°	512.3	521.6	570.9	624.9	649.6
57.5°	469.1	486.1	535.4	591.0	615.7
60°	421.3	442.9	496.9	557.0	581.7
62.5°	390.4	402.7	461.4	521.6	549.3
65°	345.6	361.1	422.8	484.5	513.8
67.5°	308.6	324.0	387.3	449.0	478.3
70°	268.5	283.9	350.3	412.0	441.3
72.5°	222.2	243.8	313.2	375.0	405.8
75°	185.2	205.2	273.1	334.8	359.5
77.5°	143.5	169.7	233.0	283.9	302.4
80°	106.5	132.7	189.8	226.8	243.8
82.5°	72.5	98.8	142.0	169.7	179.0
85°	43.2	61.7	91.0	106.5	104.9
87.5°	20.1	26.2	37.0	37.0	35.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)