

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: P308745

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-CA125-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: P308745
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-3000K
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: 2912.0 lumens
Efficiency: N/A
Efficacy: 106.3 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

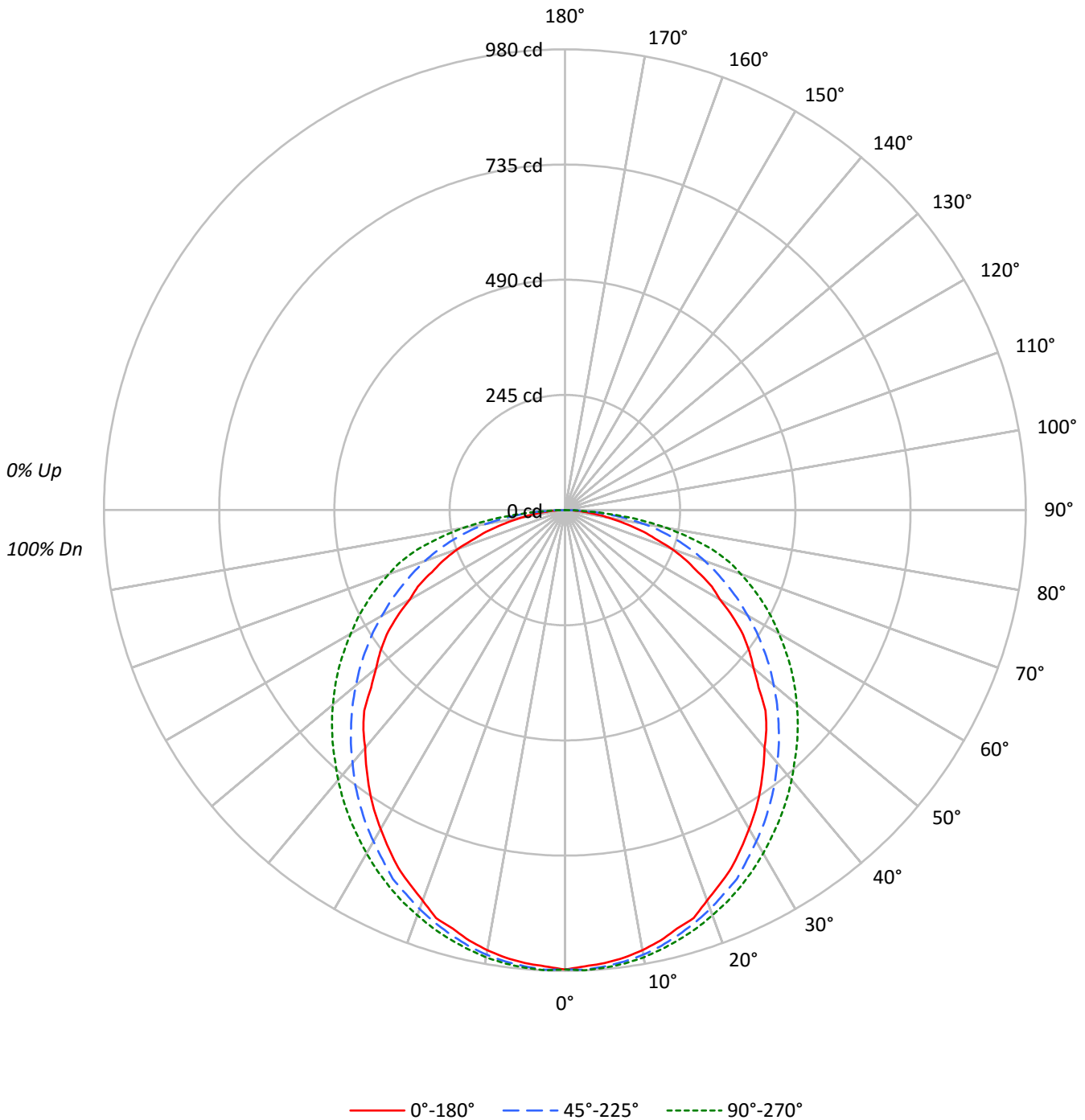
Input Watts (W): 27.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308745

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-CA125-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P308745

CATALOG NUMBER: 22FC22-34HE-UNV-L82765-CA125-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°	2629	2629	2629
5°	2613	2632	2639
10°	2597	2624	2639
15°	2567	2605	2632
20°	2530	2586	2626
25°	2491	2570	2624
30°	2434	2529	2620
35°	2381	2500	2623
40°	2321	2467	2634
45°	2297	2445	2657
50°	2194	2427	2696
55°	2171	2419	2753
60°	2048	2415	2828
65°	1988	2432	2955
70°	1908	2489	3136
75°	1738	2565	3376
80°	1491	2656	3412
85°	1204	2538	2927



TEST NUMBER: P308745

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-CA125-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.4	3.2
10°-20°	263.7	9.1
20°-30°	396.9	13.6
30°-40°	476.4	16.4
40°-50°	497.9	17.1
50°-60°	464.0	15.9
60°-70°	380.6	13.1
70°-80°	256.4	8.8
80°-90°	83.5	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°	753.1	25.9
0°-40°	1229.5	42.2
0°-60°	2191.4	75.3
0°-90°	2912.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2912.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	977	977	977	977	977	
5°	967	970	974	976	977	92
15°	921	927	935	944	945	260
25°	839	845	866	878	884	386
35°	725	734	761	788	799	453
45°	604	608	642	682	698	461
55°	463	471	516	564	587	410
65°	312	326	382	438	464	311
75°	167	185	247	302	325	176
85°	39	56	82	96	95	46
90°	0	0	0	0	0	



TEST NUMBER: P308745

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-CA125-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	977.0	977.0	977.0	977.0	977.0
2.5°	971.4	974.2	978.4	979.8	979.8
5°	967.2	970.0	974.2	975.6	977.0
7.5°	960.3	963.1	968.6	971.4	972.8
10°	950.5	953.3	960.3	964.5	965.9
12.5°	938.0	940.8	949.1	954.7	956.1
15°	921.3	926.8	935.2	943.6	944.9
17.5°	910.1	908.7	919.9	929.6	932.4
20°	883.6	890.6	903.1	914.3	917.1
22.5°	861.3	866.9	883.6	896.2	901.7
25°	839.0	844.6	865.5	878.0	883.6
27.5°	811.1	819.5	839.0	857.1	864.1
30°	783.3	791.6	813.9	834.8	843.2
32.5°	755.4	765.2	788.8	811.1	820.9
35°	724.7	734.5	761.0	787.5	798.6
37.5°	692.7	705.2	733.1	762.4	774.9
40°	660.6	673.2	702.4	735.9	749.8
42.5°	634.1	639.7	673.2	709.4	723.3
45°	603.5	607.7	642.5	681.5	698.3
47.5°	558.9	574.2	611.8	655.1	671.8
50°	524.0	540.8	579.8	625.8	643.9
52.5°	494.8	505.9	549.1	595.1	616.0
55°	462.7	471.1	515.7	564.5	586.8
57.5°	423.7	439.0	483.6	533.8	556.1
60°	380.5	400.0	448.8	503.1	525.4
62.5°	352.6	363.8	416.7	471.1	496.2
65°	312.2	326.1	381.9	437.6	464.1
67.5°	278.7	292.7	349.8	405.6	432.1
70°	242.5	256.4	316.4	372.1	398.6
72.5°	200.7	220.2	282.9	338.7	366.5
75°	167.2	185.4	246.7	302.4	324.7
77.5°	129.6	153.3	210.5	256.4	273.2
80°	96.2	119.9	171.4	204.9	220.2
82.5°	65.5	89.2	128.2	153.3	161.7
85°	39.0	55.7	82.2	96.2	94.8
87.5°	18.1	23.7	33.4	33.4	32.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)