

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: P308747

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-CA125-W2A-U-4000K**

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: P308747
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-4000K
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: 3079.0 lumens
Efficiency: N/A
Efficacy: 110.4 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

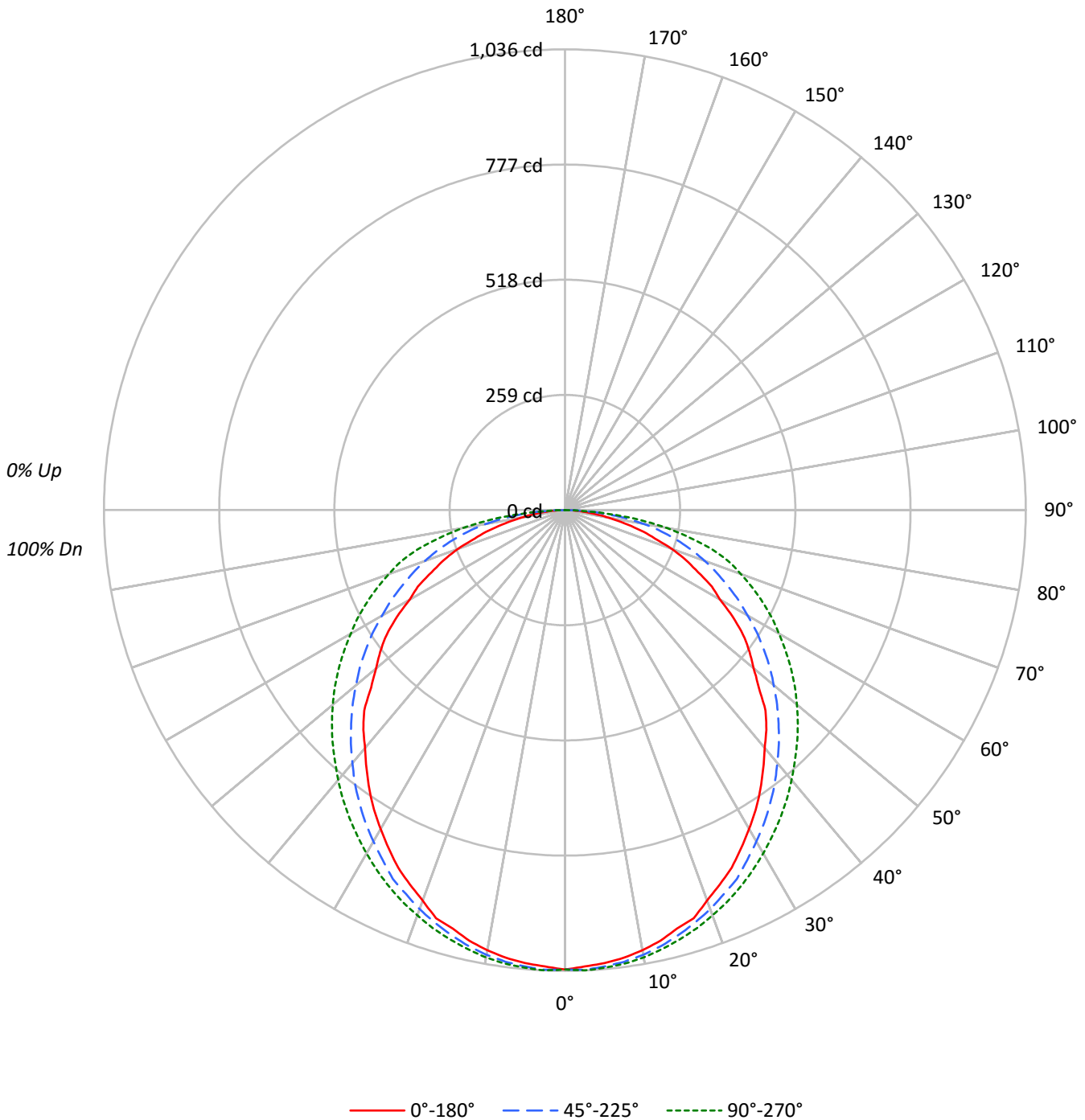
Input Watts (W): 27.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308747

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-CA125-W2A-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P308747

CATALOG NUMBER: 22FC22-34HE-UNV-L82765-CA125-W2A-U-4000K

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°	2780	2780	2780
5°	2763	2783	2790
10°	2746	2774	2790
15°	2714	2755	2783
20°	2676	2735	2777
25°	2634	2717	2774
30°	2573	2674	2770
35°	2517	2643	2774
40°	2454	2609	2785
45°	2428	2586	2810
50°	2320	2566	2850
55°	2296	2558	2911
60°	2165	2554	2990
65°	2102	2571	3124
70°	2017	2632	3316
75°	1838	2712	3570
80°	1576	2810	3608
85°	1275	2683	3094



TEST NUMBER: P308747

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-CA125-W2A-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.7	3.2
10°-20°	278.9	9.1
20°-30°	419.7	13.6
30°-40°	503.7	16.4
40°-50°	526.5	17.1
50°-60°	490.6	15.9
60°-70°	402.4	13.1
70°-80°	271.2	8.8
80°-90°	88.3	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°	796.3	25.9
0°-40°	1300.0	42.2
0°-60°	2317.1	75.3
0°-90°	3079.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3079.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1033	1033	1033	1033	1033	
5°	1023	1026	1030	1032	1033	97
15°	974	980	989	998	999	275
25°	887	893	915	928	934	408
35°	766	777	805	833	844	479
45°	638	642	679	721	738	487
55°	489	498	545	597	620	434
65°	330	345	404	463	491	328
75°	177	196	261	320	343	186
85°	41	59	87	102	100	49
90°	0	0	0	0	0	



TEST NUMBER: P308747

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-CA125-W2A-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1033.0	1033.0	1033.0	1033.0	1033.0
2.5°	1027.1	1030.1	1034.5	1036.0	1036.0
5°	1022.7	1025.7	1030.1	1031.6	1033.0
7.5°	1015.3	1018.3	1024.2	1027.1	1028.6
10°	1005.0	1008.0	1015.3	1019.8	1021.2
12.5°	991.8	994.7	1003.6	1009.5	1010.9
15°	974.1	980.0	988.8	997.7	999.1
17.5°	962.3	960.8	972.6	982.9	985.9
20°	934.3	941.7	954.9	966.7	969.7
22.5°	910.7	916.6	934.3	947.6	953.5
25°	887.1	893.0	915.1	928.4	934.3
27.5°	857.7	866.5	887.1	906.3	913.7
30°	828.2	837.0	860.6	882.7	891.6
32.5°	798.7	809.0	834.1	857.7	868.0
35°	766.3	776.6	804.6	832.6	844.4
37.5°	732.4	745.7	775.1	806.1	819.4
40°	698.5	711.8	742.7	778.1	792.8
42.5°	670.5	676.4	711.8	750.1	764.8
45°	638.1	642.5	679.4	720.6	738.3
47.5°	590.9	607.1	646.9	692.6	710.3
50°	554.1	571.8	613.0	661.7	680.8
52.5°	523.1	534.9	580.6	629.2	651.4
55°	489.3	498.1	545.3	596.8	620.4
57.5°	448.0	464.2	511.4	564.4	588.0
60°	402.3	422.9	474.5	532.0	555.6
62.5°	372.8	384.6	440.6	498.1	524.6
65°	330.1	344.8	403.8	462.7	490.7
67.5°	294.7	309.5	369.9	428.8	456.8
70°	256.4	271.2	334.5	393.5	421.5
72.5°	212.2	232.8	299.2	358.1	387.6
75°	176.8	196.0	260.8	319.8	343.4
77.5°	137.0	162.1	222.5	271.2	288.8
80°	101.7	126.7	181.3	216.6	232.8
82.5°	69.3	94.3	135.6	162.1	170.9
85°	41.3	58.9	86.9	101.7	100.2
87.5°	19.2	25.1	35.4	35.4	33.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)