

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: P307176

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CA125-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: P307176
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-CA125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC 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: 2929.0 lumens
Efficiency: N/A
Efficacy: 85.6 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

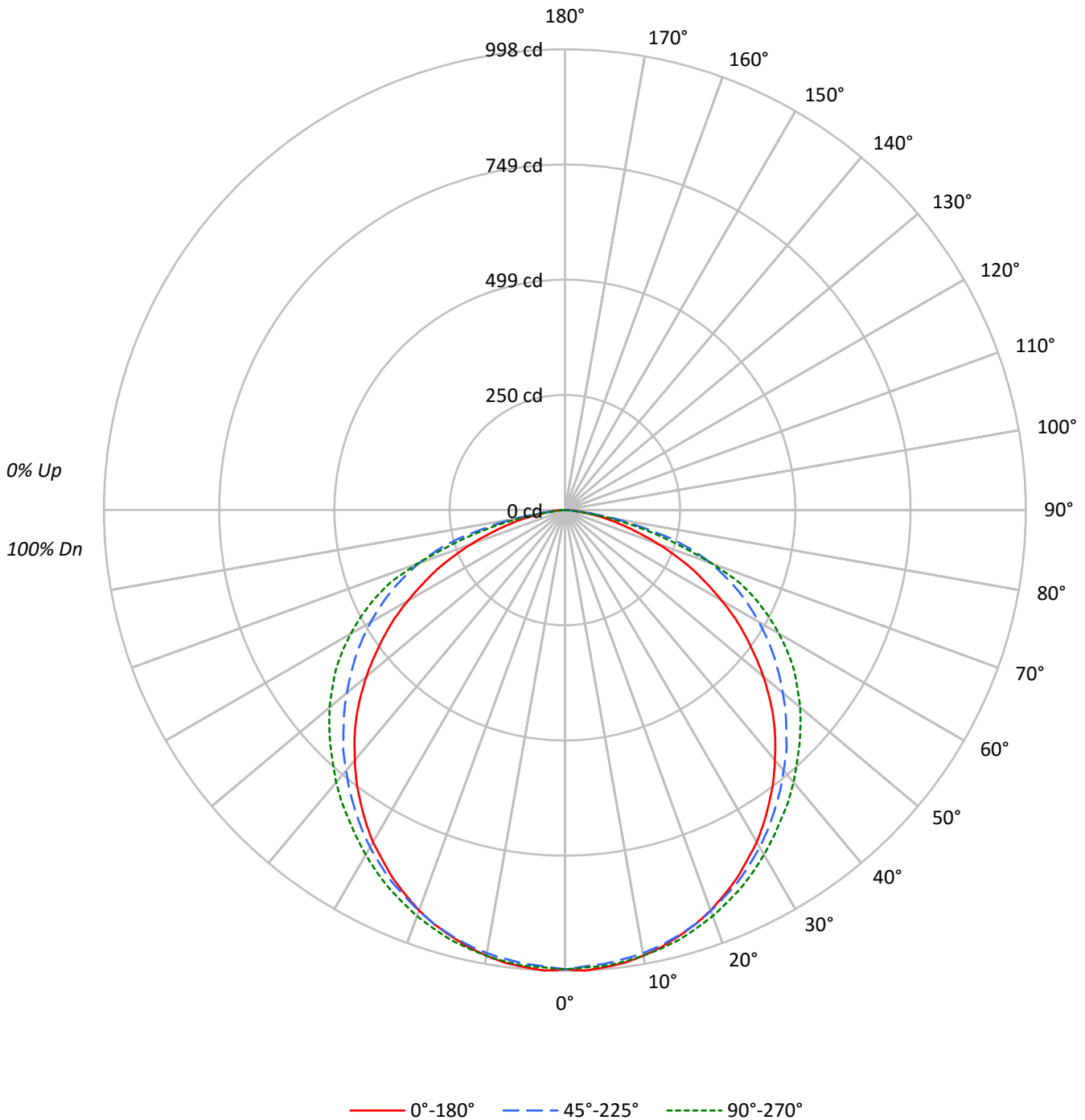
Input Watts (W): 34.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307176

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-HRP-CA125-W2A-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P307176

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-HRP-CA125-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°	2677	2677	2677
5°	2685	2665	2677
10°	2678	2663	2678
15°	2661	2656	2681
20°	2643	2645	2680
25°	2614	2636	2680
30°	2582	2622	2679
35°	2535	2602	2684
40°	2485	2588	2705
45°	2433	2580	2734
50°	2348	2580	2784
55°	2247	2593	2843
60°	2112	2612	2880
65°	1947	2639	2897
70°	1696	2645	2666
75°	1398	2461	2154
80°	1099	1770	1441
85°	852	682	343



TEST NUMBER: P307176

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-HRP-CA125-W2A-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.2	3.2
10°-20°	270.2	9.2
20°-30°	410.4	14.0
30°-40°	497.2	17.0
40°-50°	523.9	17.9
50°-60°	489.2	16.7
60°-70°	390.9	13.3
70°-80°	215.1	7.3
80°-90°	38.0	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°	774.8	26.5
0°-40°	1272.0	43.4
0°-60°	2285.1	78.0
0°-90°	2929.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2929.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	995	995	995	995	995	
5°	994	991	986	993	991	94
15°	955	955	953	962	962	270
25°	880	882	888	901	903	405
35°	772	779	792	812	817	483
45°	639	651	678	708	718	492
55°	479	503	553	591	606	428
65°	306	344	414	448	455	301
75°	134	192	237	213	207	145
85°	28	35	22	14	11	34
90°	0	0	0	0	0	



TEST NUMBER: P307176

CATALOG NUMBER: 14FC22-39-UNV-L82765-HRP-CA125-W2A-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	994.7	994.7	994.7	994.7	994.7
2.5°	998.4	995.6	989.2	994.7	991.9
5°	993.8	991.0	986.4	992.9	991.0
7.5°	989.2	985.5	980.9	988.3	986.4
10°	980.0	977.2	974.4	980.9	980.0
12.5°	968.9	968.0	965.2	972.6	971.7
15°	955.1	955.1	953.3	962.5	962.5
17.5°	940.4	939.4	940.4	950.5	949.6
20°	922.9	922.9	923.8	935.8	935.8
22.5°	901.7	902.6	905.4	920.1	919.2
25°	880.5	882.3	887.9	900.8	902.6
27.5°	854.7	859.3	865.8	881.4	883.3
30°	830.8	833.5	843.7	858.4	862.1
32.5°	802.2	807.7	818.8	835.4	840.0
35°	771.8	779.2	792.1	812.3	816.9
37.5°	741.4	747.9	765.4	786.6	794.8
40°	707.3	718.4	736.8	760.8	770.0
42.5°	674.2	685.2	710.1	735.0	743.3
45°	639.2	651.2	677.9	708.3	718.4
47.5°	600.5	614.3	648.4	680.6	691.7
50°	560.9	578.4	616.2	652.1	665.0
52.5°	519.5	541.6	584.8	622.6	634.6
55°	478.9	502.9	552.6	591.3	606.0
57.5°	437.5	463.3	519.5	563.7	572.0
60°	392.4	423.7	485.4	524.1	535.1
62.5°	348.1	384.1	450.4	487.2	496.4
65°	305.8	344.5	414.5	448.5	455.0
67.5°	259.7	305.8	374.9	406.2	408.0
70°	215.5	268.9	336.2	350.9	338.9
72.5°	172.2	229.3	291.0	279.1	268.9
75°	134.5	192.5	236.7	212.8	207.2
77.5°	99.5	157.5	169.5	156.6	146.4
80°	70.9	124.3	114.2	97.6	93.0
82.5°	48.8	78.3	62.6	48.8	42.4
85°	27.6	35.0	22.1	13.8	11.1
87.5°	12.0	8.3	4.6	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)