

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: P307482

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-CA08-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: P307482
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-44-UNV-L82765-RDP-CA08-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" 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: 2781.0 lumens
Efficiency: N/A
Efficacy: 70.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

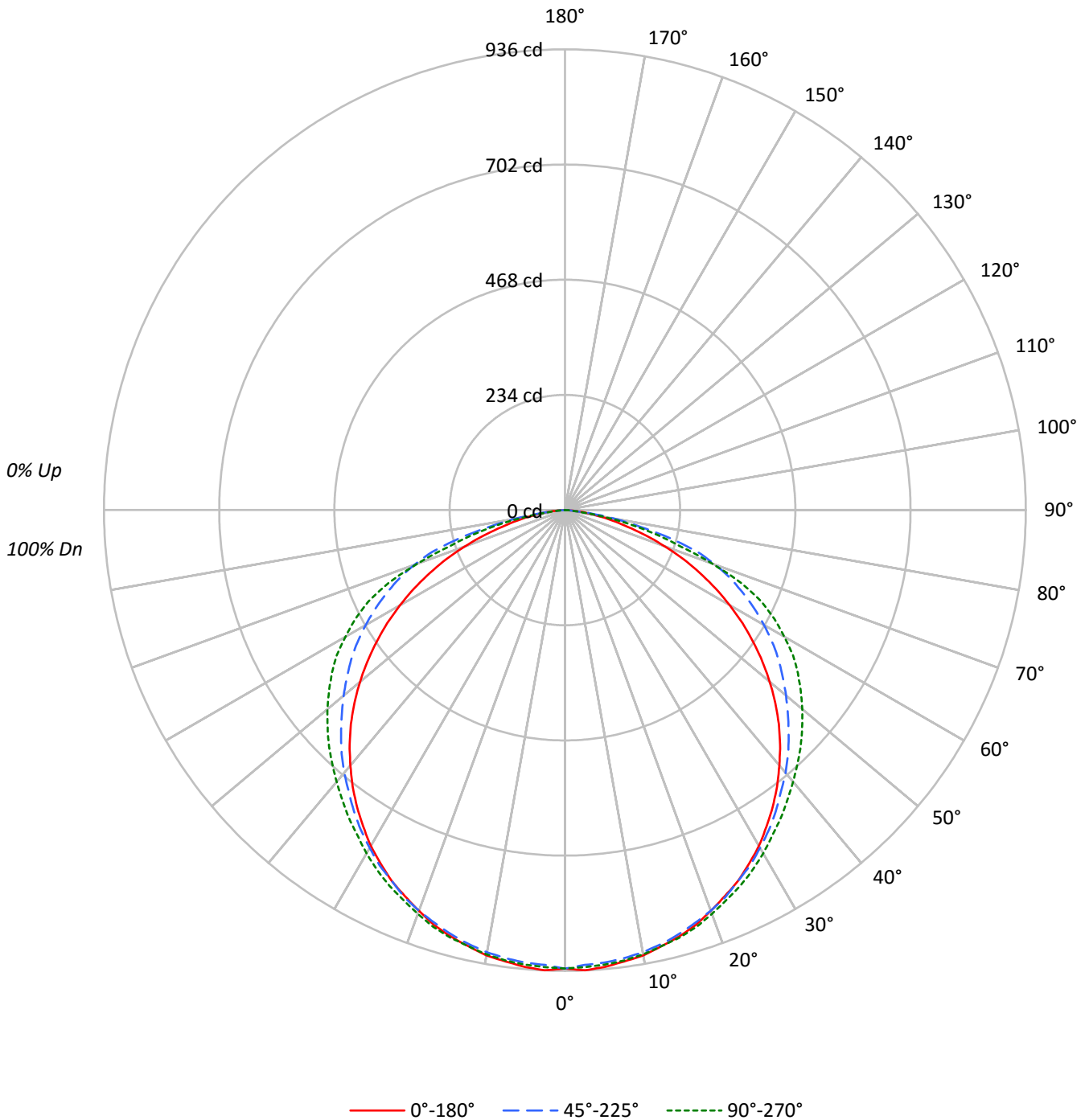
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2506	2506	2506
5°	2516	2492	2504
10°	2510	2492	2504
15°	2498	2486	2504
20°	2481	2481	2499
25°	2469	2469	2501
30°	2449	2463	2503
35°	2418	2454	2510
40°	2380	2448	2532
45°	2338	2446	2578
50°	2272	2454	2636
55°	2190	2486	2709
60°	2080	2512	2770
65°	1922	2544	2806
70°	1708	2563	2511
75°	1377	2303	2009
80°	1077	1615	1313
85°	738	469	337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	3.2
10°-20°	252.9	9.1
20°-30°	385.1	13.8
30°-40°	469.1	16.9
40°-50°	497.7	17.9
50°-60°	469.7	16.9
60°-70°	379.2	13.6
70°-80°	205.7	7.4
80°-90°	33.3	1.2
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°	726.2	26.1
0°-40°	1195.3	43.0
0°-60°	2162.7	77.8
0°-90°	2781.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2781.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	931	931	931	931	931	
5°	931	929	923	929	927	88
15°	897	894	892	899	899	253
25°	832	829	832	840	842	383
35°	736	740	747	762	764	460
45°	614	623	643	666	677	473
55°	467	486	530	564	578	417
65°	302	339	400	432	441	299
75°	132	193	222	200	193	145
85°	24	26	15	13	11	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	931.4	931.4	931.4	931.4	931.4
2.5°	935.8	931.4	924.9	931.4	929.3
5°	931.4	929.3	922.7	929.3	927.1
7.5°	924.9	924.9	918.4	922.7	922.7
10°	918.4	916.2	911.9	918.4	916.2
12.5°	907.5	905.4	903.2	909.7	907.5
15°	896.7	894.5	892.3	898.9	898.9
17.5°	883.7	881.5	879.3	888.0	888.0
20°	866.3	866.3	866.3	875.0	872.8
22.5°	848.9	848.9	851.1	859.8	857.6
25°	831.6	829.4	831.6	840.2	842.4
27.5°	809.8	812.0	814.2	822.9	825.0
30°	788.1	790.3	792.5	803.3	805.5
32.5°	762.1	766.4	770.8	783.8	783.8
35°	736.0	740.4	746.9	762.1	764.2
37.5°	707.8	712.1	720.8	738.2	742.5
40°	677.4	683.9	696.9	714.3	720.8
42.5°	647.0	655.7	670.9	690.4	699.1
45°	614.4	623.1	642.7	666.5	677.4
47.5°	579.7	590.6	614.4	644.8	653.5
50°	542.8	558.0	586.2	618.8	629.6
52.5°	505.9	523.2	558.0	592.7	603.6
55°	466.8	486.3	529.8	564.5	577.5
57.5°	427.7	449.4	499.4	536.3	549.3
60°	386.5	412.5	466.8	503.7	514.6
62.5°	345.2	375.6	434.2	471.1	479.8
65°	301.8	338.7	399.5	432.1	440.7
67.5°	260.5	304.0	364.8	388.6	388.6
70°	217.1	264.9	325.7	332.2	319.2
72.5°	173.7	228.0	282.3	258.4	247.5
75°	132.4	193.2	221.5	199.7	193.2
77.5°	99.9	156.3	156.3	143.3	139.0
80°	69.5	119.4	104.2	91.2	84.7
82.5°	45.6	67.3	54.3	43.4	36.9
85°	23.9	26.1	15.2	13.0	10.9
87.5°	8.7	4.3	2.2	4.3	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)