

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: P307205

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CA08-W2A-U-2700K**

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: P307205
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: 14FCZ2-44-UNV-L82765-HRP-CA08-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 2700K 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: 2893.0 lumens
Efficiency: N/A
Efficacy: 75.5 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

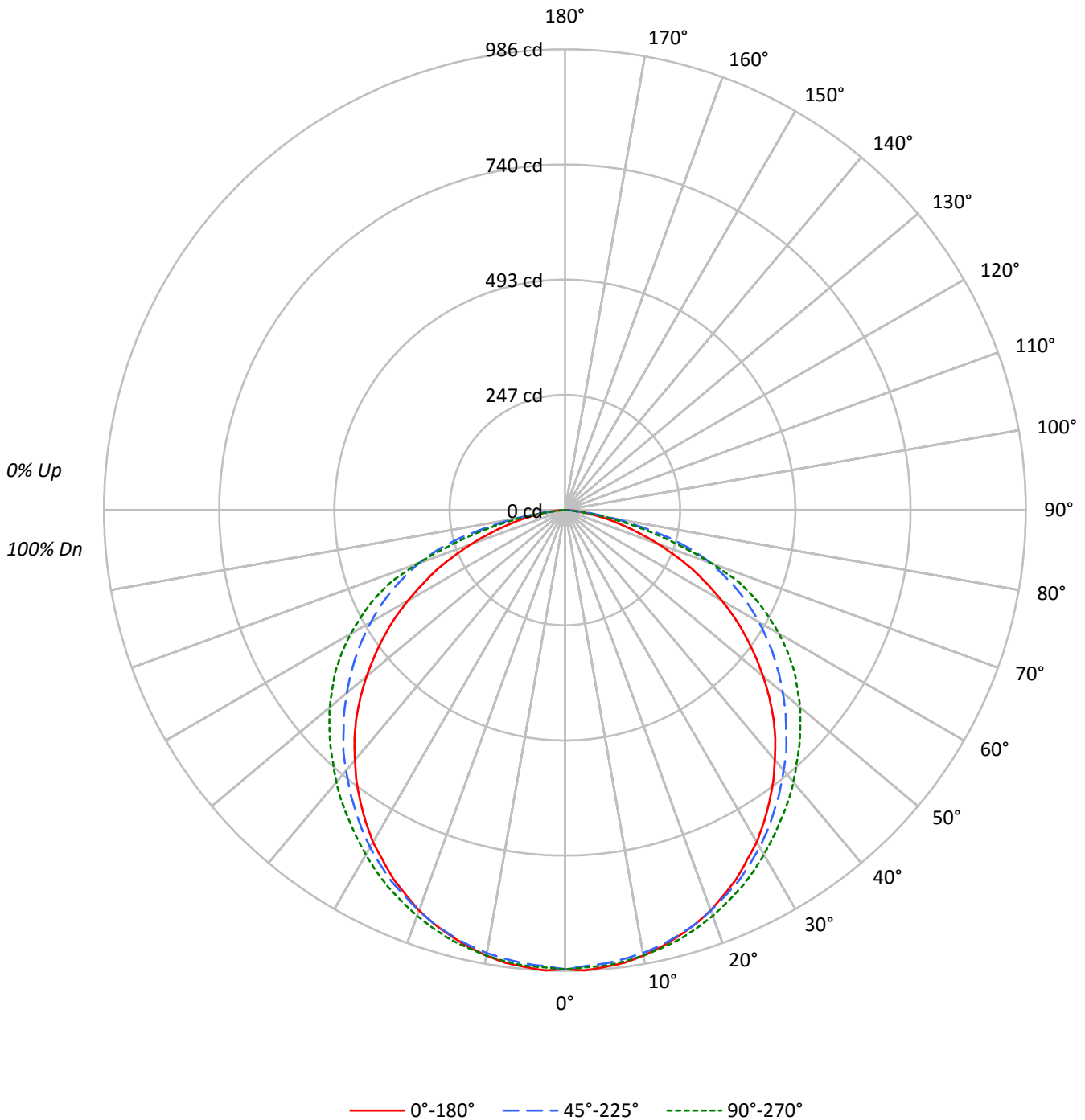
Input Watts (W): 38.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2644	2644	2644
5°	2652	2632	2644
10°	2645	2630	2645
15°	2628	2623	2648
20°	2610	2613	2647
25°	2582	2604	2647
30°	2550	2589	2646
35°	2504	2570	2651
40°	2454	2557	2672
45°	2402	2548	2700
50°	2319	2548	2750
55°	2219	2561	2808
60°	2086	2580	2844
65°	1923	2607	2862
70°	1675	2612	2634
75°	1381	2431	2128
80°	1085	1748	1424
85°	843	673	337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.0	3.2
10°-20°	266.9	9.2
20°-30°	405.3	14.0
30°-40°	491.1	17.0
40°-50°	517.5	17.9
50°-60°	483.1	16.7
60°-70°	386.1	13.3
70°-80°	212.4	7.3
80°-90°	37.5	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°	765.2	26.5
0°-40°	1256.3	43.4
0°-60°	2257.0	78.0
0°-90°	2893.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2893.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	982	982	982	982	982	
5°	982	979	974	981	979	93
15°	943	943	942	951	951	266
25°	870	872	877	890	892	400
35°	762	770	782	802	807	477
45°	631	643	670	700	710	486
55°	473	497	546	584	599	422
65°	302	340	409	443	449	297
75°	133	190	234	210	205	143
85°	27	35	22	14	11	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	982.5	982.5	982.5	982.5	982.5
2.5°	986.1	983.4	977.0	982.5	979.7
5°	981.6	978.8	974.3	980.7	978.8
7.5°	977.0	973.4	968.8	976.1	974.3
10°	967.9	965.2	962.5	968.8	967.9
12.5°	957.0	956.1	953.4	960.6	959.7
15°	943.4	943.4	941.5	950.6	950.6
17.5°	928.8	927.9	928.8	938.8	937.9
20°	911.5	911.5	912.4	924.3	924.3
22.5°	890.6	891.5	894.2	908.8	907.9
25°	869.7	871.5	877.0	889.7	891.5
27.5°	844.2	848.8	855.1	870.6	872.4
30°	820.6	823.3	833.3	847.8	851.5
32.5°	792.3	797.8	808.7	825.1	829.6
35°	762.3	769.6	782.3	802.4	806.9
37.5°	732.3	738.7	756.0	776.9	785.1
40°	698.7	709.6	727.8	751.4	760.5
42.5°	665.9	676.8	701.4	725.9	734.1
45°	631.3	643.2	669.5	699.6	709.6
47.5°	593.1	606.8	640.4	672.3	683.2
50°	554.0	571.3	608.6	644.1	656.8
52.5°	513.1	534.9	577.7	615.0	626.8
55°	473.0	496.7	545.8	584.0	598.6
57.5°	432.1	457.6	513.1	556.7	564.9
60°	387.5	418.5	479.4	517.6	528.5
62.5°	343.9	379.3	444.8	481.2	490.3
65°	302.0	340.2	409.4	443.0	449.4
67.5°	256.5	302.0	370.2	401.2	403.0
70°	212.9	265.6	332.0	346.6	334.8
72.5°	170.1	226.5	287.5	275.6	265.6
75°	132.8	190.1	233.8	210.1	204.7
77.5°	98.2	155.6	167.4	154.6	144.6
80°	70.0	122.8	112.8	96.4	91.9
82.5°	48.2	77.3	61.9	48.2	41.8
85°	27.3	34.6	21.8	13.6	10.9
87.5°	11.8	8.2	4.5	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)