

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: P312095

Luminaire Tested: **14FCZ2-39-UNV-L83050-RDP-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: P312095
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: 14FCZ2-39-UNV-L83050-RDP-CA125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 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: 2247.0 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

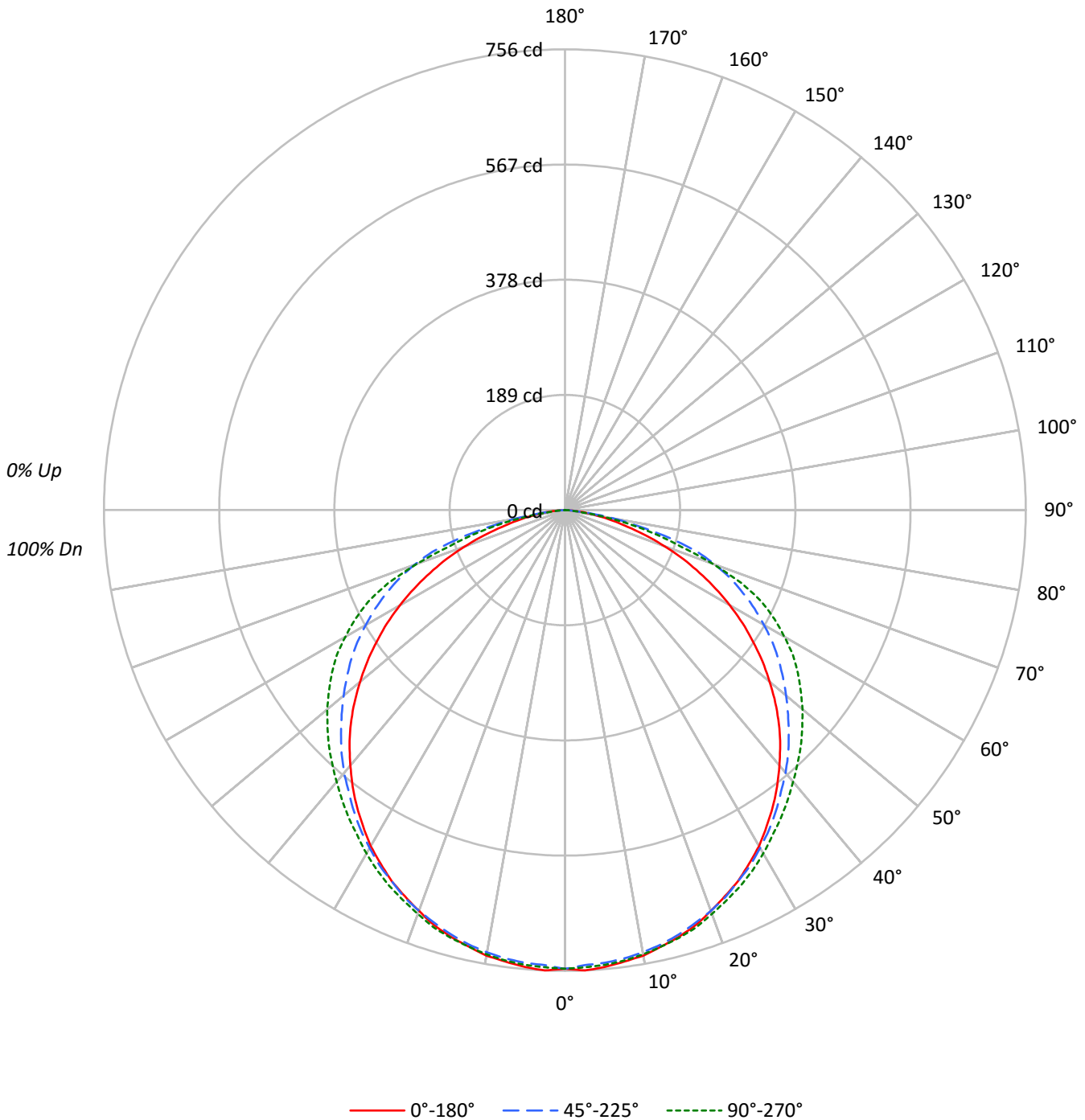
Input Watts (W): 33.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2025	2025	2025
5°	2033	2014	2024
10°	2028	2013	2023
15°	2018	2009	2023
20°	2004	2004	2019
25°	1995	1995	2021
30°	1979	1990	2022
35°	1954	1983	2029
40°	1923	1978	2046
45°	1889	1976	2083
50°	1836	1983	2130
55°	1770	2008	2189
60°	1681	2030	2238
65°	1552	2055	2267
70°	1380	2070	2029
75°	1112	1860	1623
80°	869	1305	1060
85°	596	380	272



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.2	3.2
10°-20°	204.4	9.1
20°-30°	311.2	13.8
30°-40°	379.0	16.9
40°-50°	402.1	17.9
50°-60°	379.5	16.9
60°-70°	306.4	13.6
70°-80°	166.2	7.4
80°-90°	26.9	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°	586.8	26.1
0°-40°	965.8	43.0
0°-60°	1747.5	77.8
0°-90°	2247.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2247.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	753	753	753	753	753	
5°	753	751	746	751	749	71
15°	724	723	721	726	726	204
25°	672	670	672	679	681	309
35°	595	598	604	616	618	372
45°	496	504	519	539	547	382
55°	377	393	428	456	467	337
65°	244	274	323	349	356	242
75°	107	156	179	161	156	117
85°	19	21	12	10	9	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	752.6	752.6	752.6	752.6	752.6
2.5°	756.1	752.6	747.3	752.6	750.8
5°	752.6	750.8	745.6	750.8	749.1
7.5°	747.3	747.3	742.1	745.6	745.6
10°	742.1	740.3	736.8	742.1	740.3
12.5°	733.3	731.5	729.8	735.0	733.3
15°	724.5	722.8	721.0	726.3	726.3
17.5°	714.0	712.2	710.5	717.5	717.5
20°	699.9	699.9	699.9	707.0	705.2
22.5°	685.9	685.9	687.7	694.7	692.9
25°	671.9	670.1	671.9	678.9	680.7
27.5°	654.3	656.1	657.8	664.9	666.6
30°	636.8	638.6	640.3	649.1	650.8
32.5°	615.7	619.3	622.8	633.3	633.3
35°	594.7	598.2	603.5	615.7	617.5
37.5°	571.9	575.4	582.4	596.4	600.0
40°	547.3	552.6	563.1	577.2	582.4
42.5°	522.8	529.8	542.1	557.9	564.9
45°	496.5	503.5	519.3	538.6	547.3
47.5°	468.4	477.2	496.5	521.0	528.0
50°	438.6	450.8	473.7	500.0	508.7
52.5°	408.7	422.8	450.8	478.9	487.7
55°	377.2	393.0	428.0	456.1	466.6
57.5°	345.6	363.1	403.5	433.3	443.8
60°	312.3	333.3	377.2	407.0	415.8
62.5°	278.9	303.5	350.9	380.7	387.7
65°	243.8	273.7	322.8	349.1	356.1
67.5°	210.5	245.6	294.7	314.0	314.0
70°	175.4	214.0	263.1	268.4	257.9
72.5°	140.3	184.2	228.1	208.8	200.0
75°	107.0	156.1	178.9	161.4	156.1
77.5°	80.7	126.3	126.3	115.8	112.3
80°	56.1	96.5	84.2	73.7	68.4
82.5°	36.8	54.4	43.9	35.1	29.8
85°	19.3	21.1	12.3	10.5	8.8
87.5°	7.0	3.5	1.8	3.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)