

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: P307079

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-CA125-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: P307079
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: 14FCZ2-29-UNV-L82765-HRP-CA125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" 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: 1943.0 lumens
Efficiency: N/A
Efficacy: 81.6 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

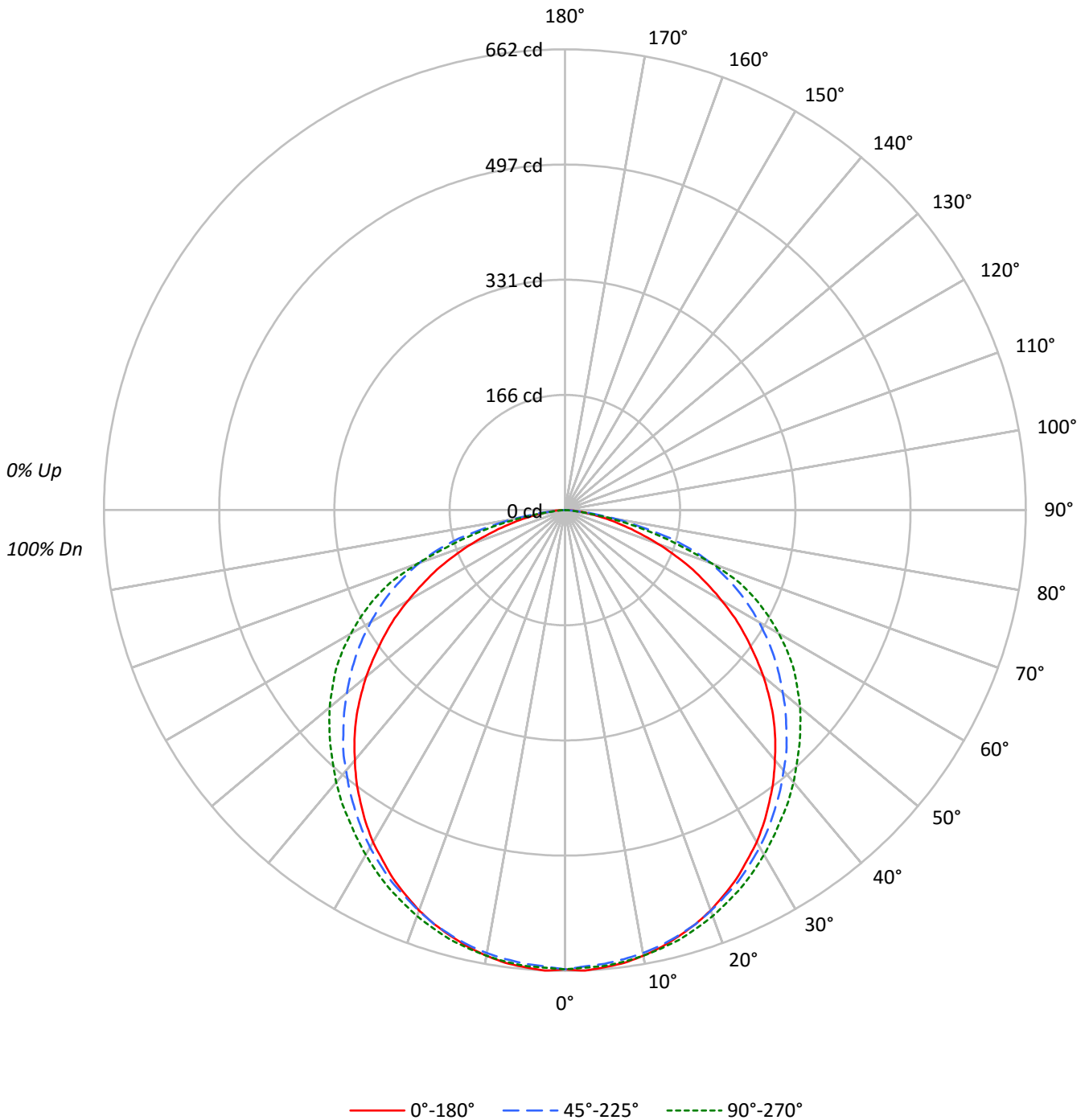
Input Watts (W): 23.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1776	1776	1776
5°	1781	1768	1776
10°	1776	1766	1776
15°	1765	1762	1779
20°	1753	1755	1778
25°	1734	1749	1778
30°	1712	1739	1777
35°	1682	1726	1780
40°	1648	1717	1794
45°	1614	1711	1814
50°	1558	1711	1847
55°	1491	1720	1886
60°	1401	1733	1911
65°	1291	1750	1922
70°	1125	1755	1769
75°	927	1632	1430
80°	728	1175	956
85°	565	454	225



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.5	3.2
10°-20°	179.3	9.2
20°-30°	272.2	14.0
30°-40°	329.8	17.0
40°-50°	347.6	17.9
50°-60°	324.5	16.7
60°-70°	259.3	13.3
70°-80°	142.7	7.3
80°-90°	25.2	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°	513.9	26.5
0°-40°	843.8	43.4
0°-60°	1515.8	78.0
0°-90°	1943.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1943.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	659	657	654	659	657	63
15°	634	634	632	638	638	179
25°	584	585	589	598	599	269
35°	512	517	525	539	542	320
45°	424	432	450	470	477	326
55°	318	334	367	392	402	284
65°	203	228	275	298	302	200
75°	89	128	157	141	138	96
85°	18	23	15	9	7	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	659.9	659.9	659.9	659.9	659.9
2.5°	662.3	660.5	656.2	659.9	658.0
5°	659.2	657.4	654.4	658.6	657.4
7.5°	656.2	653.7	650.7	655.6	654.4
10°	650.1	648.2	646.4	650.7	650.1
12.5°	642.7	642.1	640.3	645.2	644.6
15°	633.6	633.6	632.4	638.5	638.5
17.5°	623.8	623.2	623.8	630.5	629.9
20°	612.2	612.2	612.8	620.8	620.8
22.5°	598.1	598.8	600.6	610.4	609.8
25°	584.1	585.3	589.0	597.5	598.8
27.5°	567.0	570.0	574.3	584.7	585.9
30°	551.1	552.9	559.7	569.4	571.9
32.5°	532.2	535.8	543.2	554.2	557.2
35°	512.0	516.9	525.4	538.9	541.9
37.5°	491.8	496.1	507.7	521.8	527.3
40°	469.2	476.6	488.8	504.7	510.8
42.5°	447.2	454.6	471.1	487.6	493.1
45°	424.0	432.0	449.7	469.8	476.6
47.5°	398.4	407.5	430.1	451.5	458.8
50°	372.1	383.7	408.7	432.6	441.1
52.5°	344.6	359.3	388.0	413.0	421.0
55°	317.7	333.6	366.6	392.2	402.0
57.5°	290.2	307.3	344.6	373.9	379.4
60°	260.3	281.0	322.0	347.6	355.0
62.5°	230.9	254.8	298.8	323.2	329.3
65°	202.8	228.5	274.9	297.5	301.8
67.5°	172.3	202.8	248.7	269.4	270.7
70°	143.0	178.4	223.0	232.8	224.8
72.5°	114.3	152.1	193.1	185.1	178.4
75°	89.2	127.7	157.0	141.1	137.5
77.5°	66.0	104.5	112.4	103.9	97.1
80°	47.0	82.5	75.8	64.8	61.7
82.5°	32.4	51.9	41.5	32.4	28.1
85°	18.3	23.2	14.7	9.2	7.3
87.5°	7.9	5.5	3.1	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)