

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: P307083

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-CA125-W2A-U-4500K**

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: P307083
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-4500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 4500K 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: 2152.0 lumens
Efficiency: N/A
Efficacy: 88.9 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

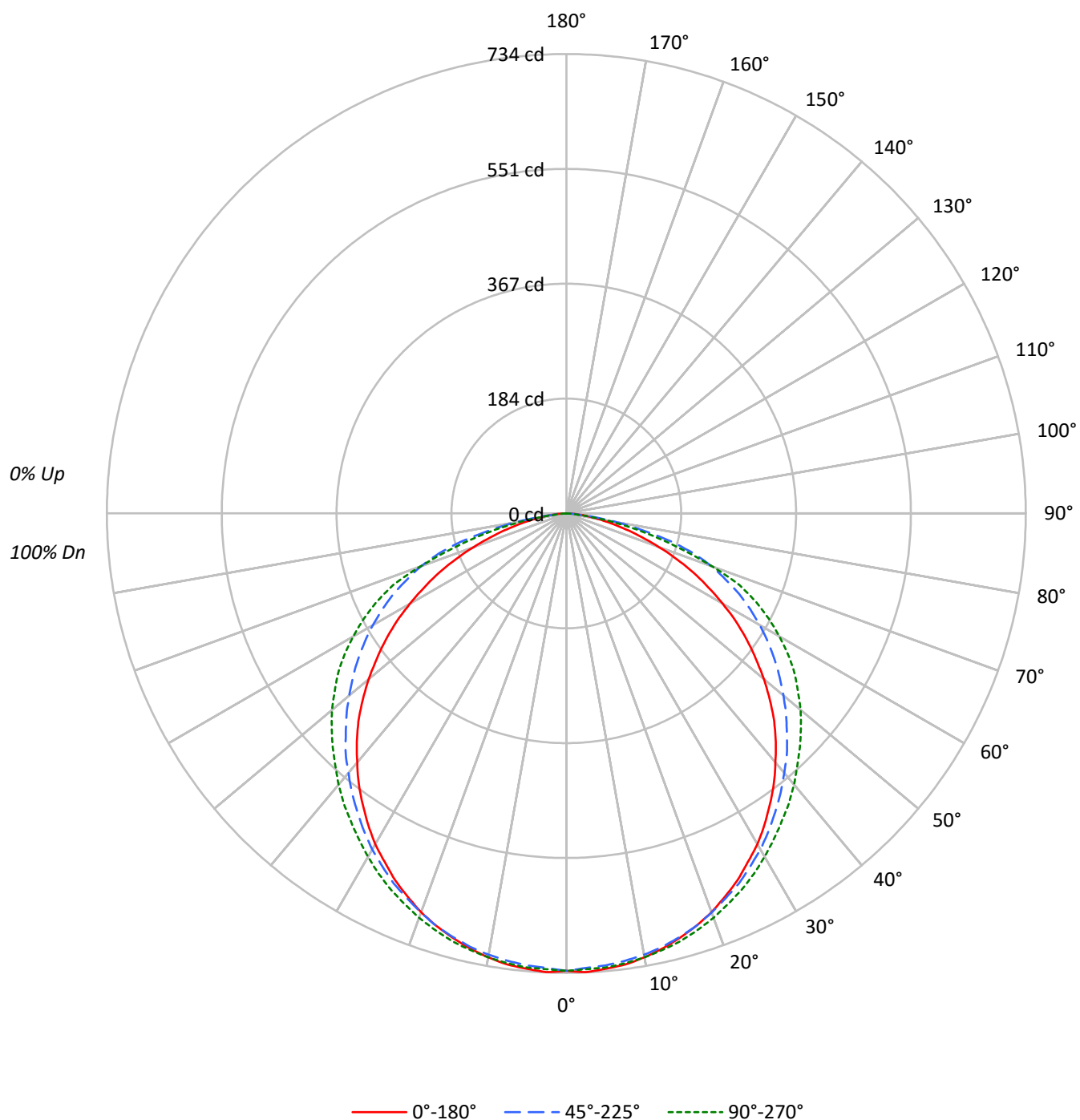
Input Watts (W): 24.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1967	1967	1967
5°	1972	1958	1967
10°	1967	1956	1967
15°	1955	1951	1970
20°	1942	1944	1969
25°	1921	1937	1969
30°	1897	1926	1968
35°	1863	1912	1972
40°	1826	1902	1987
45°	1787	1895	2009
50°	1725	1895	2045
55°	1651	1905	2089
60°	1552	1919	2116
65°	1431	1939	2129
70°	1245	1943	1959
75°	1027	1808	1583
80°	807	1300	1058
85°	627	500	250



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.2	3.2
10°-20°	198.5	9.2
20°-30°	301.5	14.0
30°-40°	365.3	17.0
40°-50°	385.0	17.9
50°-60°	359.4	16.7
60°-70°	287.2	13.3
70°-80°	158.0	7.3
80°-90°	27.9	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°	569.2	26.5
0°-40°	934.5	43.4
0°-60°	1678.9	78.0
0°-90°	2152.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2152.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	731	731	731	731	731	
5°	730	728	725	730	728	69
15°	702	702	700	707	707	198
25°	647	648	652	662	663	298
35°	567	572	582	597	600	355
45°	470	478	498	520	528	361
55°	352	370	406	434	445	314
65°	225	253	304	330	334	221
75°	99	141	174	156	152	106
85°	20	26	16	10	8	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	730.8	730.8	730.8	730.8	730.8
2.5°	733.5	731.5	726.8	730.8	728.8
5°	730.2	728.1	724.7	729.5	728.1
7.5°	726.8	724.1	720.7	726.1	724.7
10°	720.0	718.0	715.9	720.7	720.0
12.5°	711.9	711.2	709.2	714.6	713.9
15°	701.7	701.7	700.4	707.1	707.1
17.5°	690.9	690.2	690.9	698.3	697.7
20°	678.0	678.0	678.7	687.5	687.5
22.5°	662.5	663.2	665.2	676.0	675.3
25°	646.9	648.3	652.3	661.8	663.2
27.5°	628.0	631.4	636.1	647.6	649.0
30°	610.4	612.4	619.9	630.7	633.4
32.5°	589.4	593.5	601.6	613.8	617.1
35°	567.1	572.5	582.0	596.8	600.2
37.5°	544.7	549.5	562.3	577.9	584.0
40°	519.7	527.8	541.4	558.9	565.7
42.5°	495.3	503.5	521.7	540.0	546.1
45°	469.6	478.4	498.0	520.4	527.8
47.5°	441.2	451.4	476.4	500.1	508.2
50°	412.1	425.0	452.7	479.1	488.6
52.5°	381.7	397.9	429.7	457.4	466.2
55°	351.9	369.5	406.0	434.4	445.3
57.5°	321.4	340.4	381.7	414.1	420.2
60°	288.3	311.3	356.6	385.0	393.2
62.5°	255.8	282.2	330.9	358.0	364.7
65°	224.7	253.1	304.5	329.6	334.3
67.5°	190.8	224.7	275.4	298.4	299.8
70°	158.3	197.6	247.0	257.8	249.0
72.5°	126.5	168.5	213.8	205.0	197.6
75°	98.8	141.4	173.9	156.3	152.3
77.5°	73.1	115.7	124.5	115.0	107.6
80°	52.1	91.4	83.9	71.7	68.3
82.5°	35.9	57.5	46.0	35.9	31.1
85°	20.3	25.7	16.2	10.2	8.1
87.5°	8.8	6.1	3.4	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)