

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: P307566

Luminaire Tested: **14FCZ2-25-UNV-L82765-CA08-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: P307566
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-25-UNV-L82765-CA08-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" 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: 2213.0 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

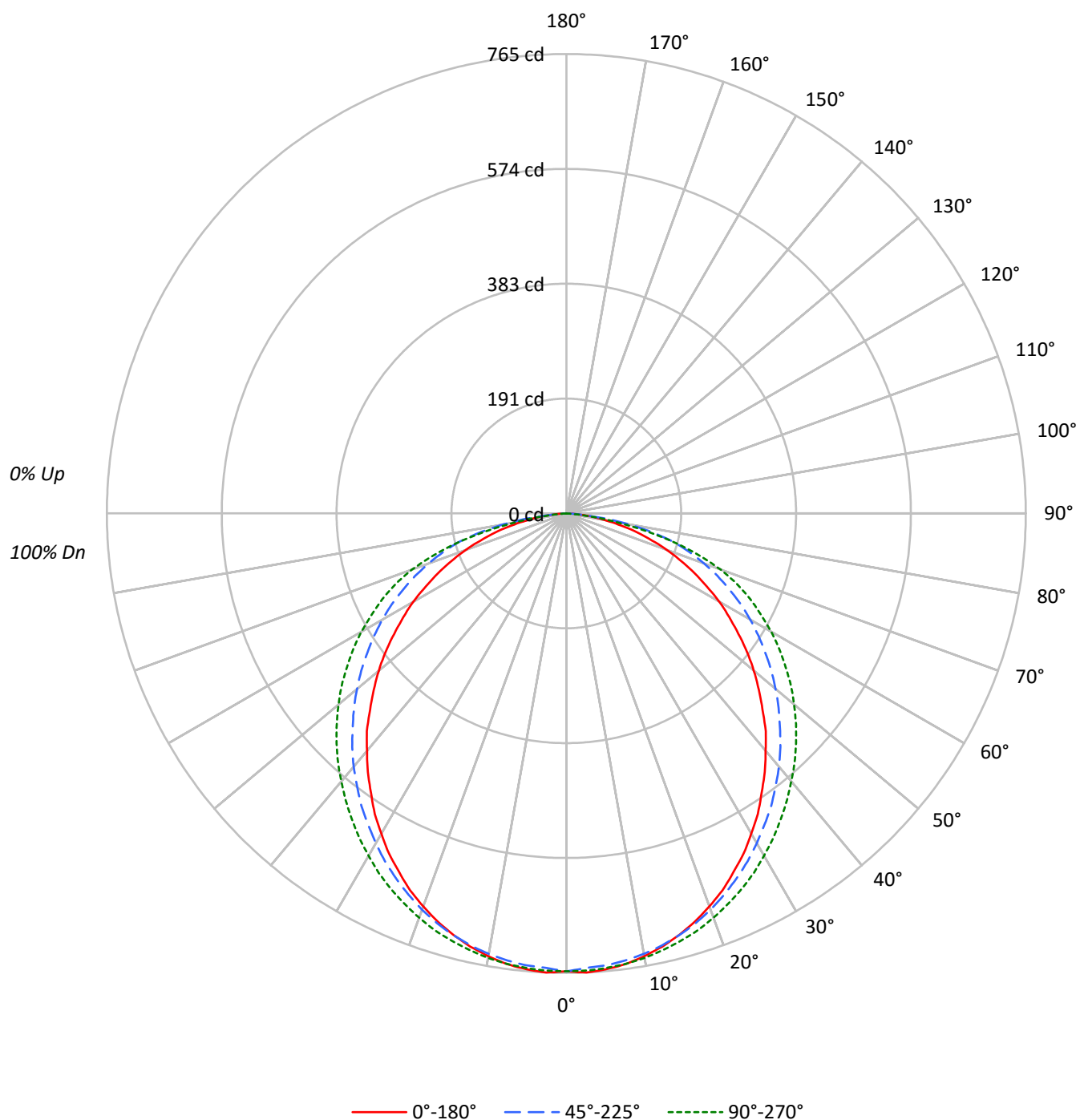
Input Watts (W): 19.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	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	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2052	2052	2052
5°	2058	2041	2053
10°	2046	2035	2053
15°	2024	2025	2052
20°	1994	2011	2052
25°	1956	1991	2050
30°	1913	1970	2046
35°	1863	1953	2044
40°	1813	1935	2047
45°	1758	1913	2058
50°	1706	1905	2072
55°	1642	1898	2091
60°	1583	1901	2119
65°	1502	1907	2152
70°	1409	1922	2151
75°	1278	1939	1944
80°	1048	1675	1384
85°	778	794	321



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.1	3.3
10°-20°	206.1	9.3
20°-30°	310.4	14.0
30°-40°	372.5	16.8
40°-50°	388.3	17.5
50°-60°	359.5	16.2
60°-70°	290.4	13.1
70°-80°	177.1	8.0
80°-90°	36.6	1.7
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°	588.7	26.6
0°-40°	961.2	43.4
0°-60°	1708.9	77.2
0°-90°	2213.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2213.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	762	762	762	762	762	
5°	762	760	756	761	760	72
15°	726	727	727	737	737	205
25°	659	663	671	687	690	304
35°	567	576	595	616	622	355
45°	462	476	503	531	541	357
55°	350	368	405	436	446	313
65°	236	259	300	330	338	233
75°	123	150	186	190	187	129
85°	25	38	26	14	10	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	762.4	762.4	762.4	762.4	762.4
2.5°	765.3	762.9	757.5	762.9	761.9
5°	761.9	759.9	755.5	760.9	759.9
7.5°	757.0	755.0	751.0	757.5	756.5
10°	748.6	747.6	744.6	752.0	751.5
12.5°	738.7	738.2	736.7	745.1	744.6
15°	726.4	726.9	726.9	736.7	736.7
17.5°	712.5	713.5	715.5	726.4	727.8
20°	696.3	698.2	702.2	714.5	716.5
22.5°	679.5	681.0	686.9	701.7	703.7
25°	658.8	662.7	670.6	687.4	690.3
27.5°	639.0	642.5	653.3	670.6	675.5
30°	615.8	621.3	634.1	652.8	658.3
32.5°	593.6	599.5	614.3	636.1	641.0
35°	567.0	575.9	594.6	616.3	622.2
37.5°	542.8	551.2	572.4	596.1	603.0
40°	516.2	526.5	550.7	575.9	582.8
42.5°	491.5	501.3	527.5	553.2	562.5
45°	461.9	475.7	502.8	531.0	540.8
47.5°	434.7	448.5	479.6	509.7	518.6
50°	407.6	422.4	455.0	486.1	494.9
52.5°	379.5	395.3	430.3	461.4	471.7
55°	349.9	368.1	404.6	436.2	445.6
57.5°	321.7	340.5	379.5	411.5	420.9
60°	294.1	313.3	353.3	383.9	393.8
62.5°	263.5	286.2	327.7	357.8	365.2
65°	235.9	259.1	299.5	329.6	338.0
67.5°	206.8	231.9	272.4	300.0	307.9
70°	179.1	205.3	244.3	269.9	273.4
72.5°	149.5	176.2	215.6	231.9	231.9
75°	122.9	150.0	186.5	189.5	187.0
77.5°	93.8	123.9	147.5	141.6	135.7
80°	67.6	97.2	108.1	97.2	89.3
82.5°	45.4	70.6	65.1	51.8	45.9
85°	25.2	37.5	25.7	14.3	10.4
87.5°	9.4	8.4	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)