

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: P307565

Luminaire Tested: **14FCZ2-25-UNV-L82765-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: P307565
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-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED 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: 2151.0 lumens
Efficiency: N/A
Efficacy: 109.7 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

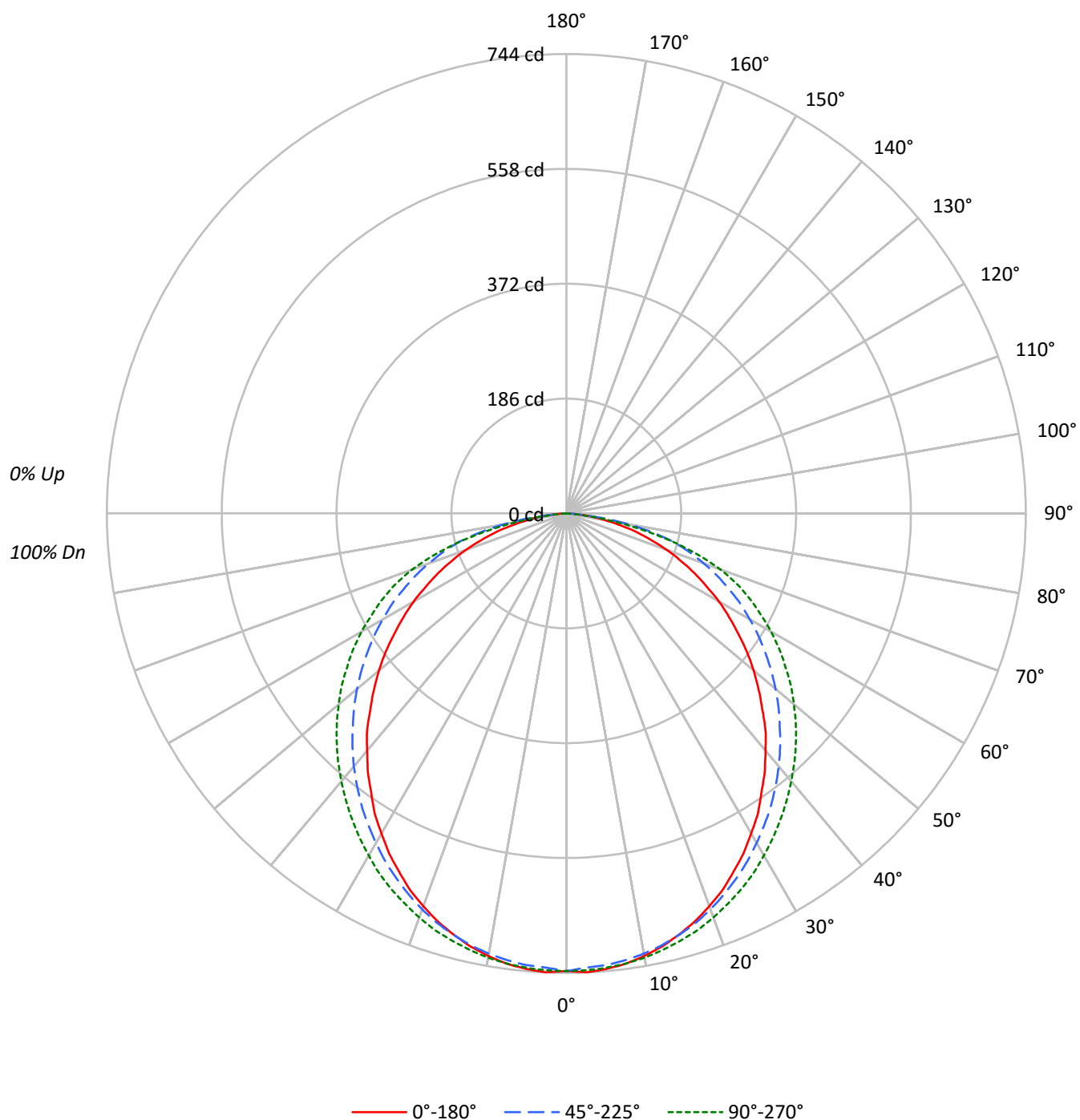
Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1994	1994	1994
5°	2000	1984	1995
10°	1988	1978	1996
15°	1967	1968	1995
20°	1938	1954	1994
25°	1901	1935	1992
30°	1860	1915	1988
35°	1810	1899	1987
40°	1762	1880	1990
45°	1708	1860	2001
50°	1659	1851	2014
55°	1596	1845	2032
60°	1539	1848	2060
65°	1460	1854	2092
70°	1370	1868	2090
75°	1241	1885	1890
80°	1018	1627	1345
85°	756	769	312



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.1	3.3
10°-20°	200.3	9.3
20°-30°	301.7	14.0
30°-40°	362.1	16.8
40°-50°	377.4	17.5
50°-60°	349.4	16.2
60°-70°	282.3	13.1
70°-80°	172.1	8.0
80°-90°	35.5	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°	572.2	26.6
0°-40°	934.3	43.4
0°-60°	1661.0	77.2
0°-90°	2151.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2151.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	741	741	741	741	741	
5°	740	739	734	740	739	70
15°	706	706	706	716	716	199
25°	640	644	652	668	671	295
35°	551	560	578	599	605	345
45°	449	462	489	516	526	347
55°	340	358	393	424	433	305
65°	229	252	291	320	328	227
75°	119	146	181	184	182	125
85°	24	36	25	14	10	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	741.0	741.0	741.0	741.0	741.0
2.5°	743.9	741.5	736.2	741.5	740.5
5°	740.5	738.6	734.3	739.6	738.6
7.5°	735.8	733.8	730.0	736.2	735.3
10°	727.6	726.6	723.8	731.0	730.5
12.5°	718.0	717.5	716.1	724.2	723.8
15°	706.0	706.5	706.5	716.1	716.1
17.5°	692.6	693.5	695.5	706.0	707.5
20°	676.8	678.7	682.5	694.5	696.4
22.5°	660.4	661.9	667.6	682.0	684.0
25°	640.3	644.1	651.8	668.1	671.0
27.5°	621.1	624.5	635.0	651.8	656.6
30°	598.6	603.9	616.3	634.5	639.8
32.5°	577.0	582.7	597.1	618.2	623.0
35°	551.1	559.7	578.0	599.1	604.8
37.5°	527.6	535.7	556.4	579.4	586.1
40°	501.7	511.8	535.3	559.7	566.4
42.5°	477.7	487.3	512.7	537.7	546.8
45°	448.9	462.4	488.7	516.1	525.7
47.5°	422.6	436.0	466.2	495.5	504.1
50°	396.2	410.6	442.2	472.4	481.1
52.5°	368.8	384.2	418.2	448.5	458.5
55°	340.1	357.8	393.3	424.0	433.1
57.5°	312.7	330.9	368.8	400.0	409.1
60°	285.9	304.6	343.4	373.2	382.7
62.5°	256.1	278.2	318.5	347.7	354.9
65°	229.3	251.8	291.1	320.4	328.5
67.5°	201.0	225.4	264.8	291.6	299.3
70°	174.1	199.5	237.4	262.4	265.7
72.5°	145.3	171.2	209.6	225.4	225.4
75°	119.4	145.8	181.3	184.2	181.8
77.5°	91.1	120.4	143.4	137.7	131.9
80°	65.7	94.5	105.0	94.5	86.8
82.5°	44.1	68.6	63.3	50.4	44.6
85°	24.5	36.5	24.9	13.9	10.1
87.5°	9.1	8.2	2.4	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)