

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: P307795

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CA08-W2A-U-5000K**

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: P307795
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-20-UNV-L82765-S-CA08-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5000K 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: 2091.0 lumens
Efficiency: N/A
Efficacy: 123.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

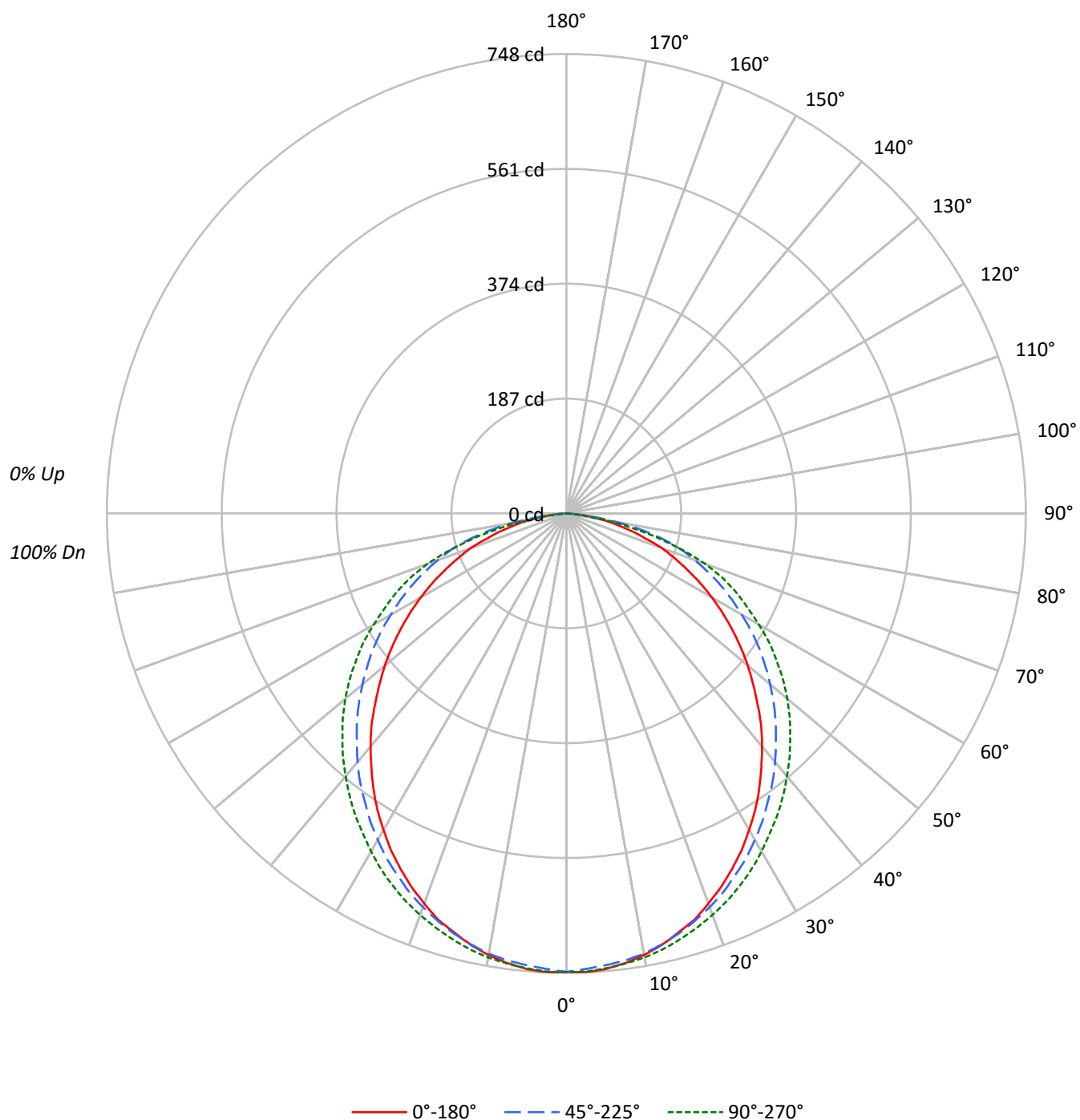
Input Watts (W): 16.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2009	2009	2009
5°	2011	1994	2008
10°	1994	1989	2006
15°	1967	1973	1999
20°	1936	1954	1992
25°	1896	1930	1985
30°	1849	1907	1975
35°	1798	1880	1968
40°	1741	1857	1963
45°	1677	1835	1961
50°	1615	1814	1966
55°	1547	1800	1960
60°	1473	1774	1947
65°	1386	1769	1947
70°	1305	1754	1892
75°	1132	1713	1617
80°	916	1382	1077
85°	608	482	321



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.5	3.4
10°-20°	200.6	9.6
20°-30°	300.9	14.4
30°-40°	358.9	17.2
40°-50°	371.0	17.7
50°-60°	338.8	16.2
60°-70°	266.6	12.7
70°-80°	155.2	7.4
80°-90°	28.6	1.4
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°	571.9	27.4
0°-40°	930.8	44.5
0°-60°	1640.6	78.5
0°-90°	2091.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2091.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	744	742	738	744	743	71
15°	706	707	708	717	717	199
25°	639	642	650	666	669	294
35°	547	555	572	594	599	342
45°	441	455	482	509	515	340
55°	330	347	384	412	418	295
65°	218	240	278	300	306	216
75°	109	135	165	162	156	116
85°	20	28	16	12	10	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	746.5	746.5	746.5	746.5	746.5
2.5°	747.5	745.4	742.3	747.5	746.5
5°	744.4	742.3	738.2	744.4	743.3
7.5°	738.2	736.1	734.0	740.2	739.2
10°	729.9	728.8	727.8	735.0	734.0
12.5°	719.5	719.5	718.5	726.8	726.8
15°	706.0	707.1	708.1	717.4	717.4
17.5°	693.6	692.5	695.7	706.0	707.1
20°	676.0	678.0	682.2	694.6	695.7
22.5°	658.3	660.4	667.7	680.1	683.2
25°	638.6	641.7	650.0	665.6	668.7
27.5°	617.9	622.0	633.4	650.0	653.1
30°	595.1	601.3	613.7	632.4	635.5
32.5°	572.3	578.5	594.1	612.7	616.9
35°	547.4	554.7	572.3	594.1	599.2
37.5°	521.5	530.8	551.5	573.3	579.5
40°	495.6	505.9	528.7	551.5	558.8
42.5°	469.6	480.0	504.9	530.8	538.1
45°	440.6	455.1	482.1	509.0	515.3
47.5°	412.6	428.2	458.2	485.2	493.5
50°	385.7	401.2	433.4	461.3	469.6
52.5°	357.7	374.3	408.5	437.5	444.8
55°	329.7	347.3	383.6	411.6	417.8
57.5°	301.7	320.4	357.7	384.6	391.9
60°	273.7	293.4	329.7	356.6	361.8
62.5°	245.7	266.4	303.8	327.6	332.8
65°	217.7	240.5	277.8	299.6	305.8
67.5°	190.8	213.6	249.9	270.6	275.8
70°	165.9	186.6	222.9	238.5	240.5
72.5°	134.8	160.7	195.9	204.2	199.1
75°	108.9	134.8	164.8	161.7	155.5
77.5°	82.9	108.9	128.6	118.2	109.9
80°	59.1	85.0	89.2	73.6	69.5
82.5°	38.4	59.1	49.8	38.4	31.1
85°	19.7	28.0	15.6	12.4	10.4
87.5°	6.2	4.1	2.1	2.1	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)