

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: P307502

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-CP187-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: P307502
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-44-UNV-L82765-RDP-CP187-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB 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: 2290.0 lumens
Efficiency: N/A
Efficacy: 59.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

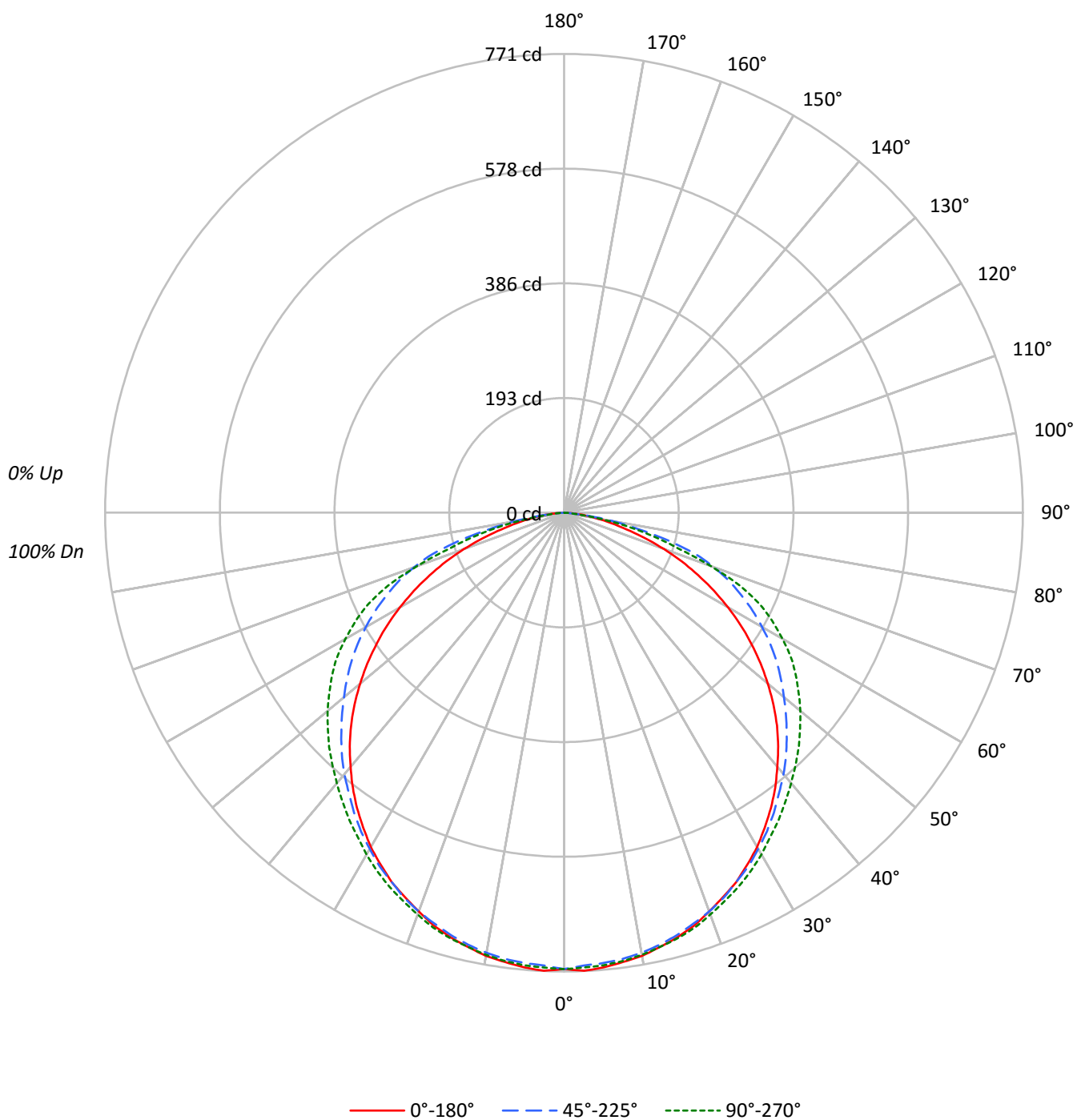
Input Watts (W): 38.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2064	2064	2064
5°	2072	2052	2062
10°	2067	2052	2062
15°	2057	2047	2062
20°	2043	2043	2058
25°	2033	2033	2060
30°	2017	2028	2061
35°	1991	2020	2067
40°	1959	2016	2085
45°	1926	2014	2123
50°	1871	2021	2171
55°	1803	2046	2231
60°	1713	2069	2280
65°	1582	2095	2311
70°	1407	2110	2068
75°	1134	1896	1654
80°	886	1330	1080
85°	608	386	275



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.6	3.2
10°-20°	208.3	9.1
20°-30°	317.1	13.8
30°-40°	386.3	16.9
40°-50°	409.8	17.9
50°-60°	386.8	16.9
60°-70°	312.3	13.6
70°-80°	169.4	7.4
80°-90°	27.4	1.2
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°	598.0	26.1
0°-40°	984.3	43.0
0°-60°	1780.9	77.8
0°-90°	2290.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2290.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	767	767	767	767	767	
5°	767	765	760	765	763	73
15°	738	737	735	740	740	208
25°	685	683	685	692	694	315
35°	606	610	615	628	629	379
45°	506	513	529	549	558	390
55°	384	400	436	465	476	343
65°	248	279	329	356	363	246
75°	109	159	182	164	159	119
85°	20	22	12	11	9	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	767.0	767.0	767.0	767.0	767.0
2.5°	770.6	767.0	761.6	767.0	765.2
5°	767.0	765.2	759.8	765.2	763.4
7.5°	761.6	761.6	756.3	759.8	759.8
10°	756.3	754.5	750.9	756.3	754.5
12.5°	747.3	745.5	743.7	749.1	747.3
15°	738.4	736.6	734.8	740.2	740.2
17.5°	727.6	725.9	724.1	731.2	731.2
20°	713.3	713.3	713.3	720.5	718.7
22.5°	699.0	699.0	700.8	708.0	706.2
25°	684.7	683.0	684.7	691.9	693.7
27.5°	666.9	668.6	670.4	677.6	679.4
30°	649.0	650.8	652.6	661.5	663.3
32.5°	627.5	631.1	634.7	645.4	645.4
35°	606.1	609.7	615.0	627.5	629.3
37.5°	582.8	586.4	593.6	607.9	611.4
40°	557.8	563.2	573.9	588.2	593.6
42.5°	532.8	539.9	552.4	568.5	575.7
45°	506.0	513.1	529.2	548.9	557.8
47.5°	477.4	486.3	506.0	531.0	538.1
50°	447.0	459.5	482.7	509.5	518.5
52.5°	416.6	430.9	459.5	488.1	497.0
55°	384.4	400.5	436.2	464.8	475.6
57.5°	352.2	370.1	411.2	441.6	452.3
60°	318.2	339.7	384.4	414.8	423.7
62.5°	284.3	309.3	357.6	388.0	395.1
65°	248.5	278.9	329.0	355.8	362.9
67.5°	214.5	250.3	300.4	320.0	320.0
70°	178.8	218.1	268.2	273.5	262.8
72.5°	143.0	187.7	232.4	212.8	203.8
75°	109.1	159.1	182.4	164.5	159.1
77.5°	82.2	128.7	128.7	118.0	114.4
80°	57.2	98.3	85.8	75.1	69.7
82.5°	37.5	55.4	44.7	35.8	30.4
85°	19.7	21.5	12.5	10.7	8.9
87.5°	7.2	3.6	1.8	3.6	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)