

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: P307370

Luminaire Tested: **14FCZ2-29-UNV-L82765-RDP-CP187-W2A-U-4000K**

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: P307370
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: 14FCZ2-29-UNV-L82765-RDP-CP187-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB SHEET
Light Source: (168) 4000K 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: 1680.0 lumens
Efficiency: N/A
Efficacy: 69.7 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

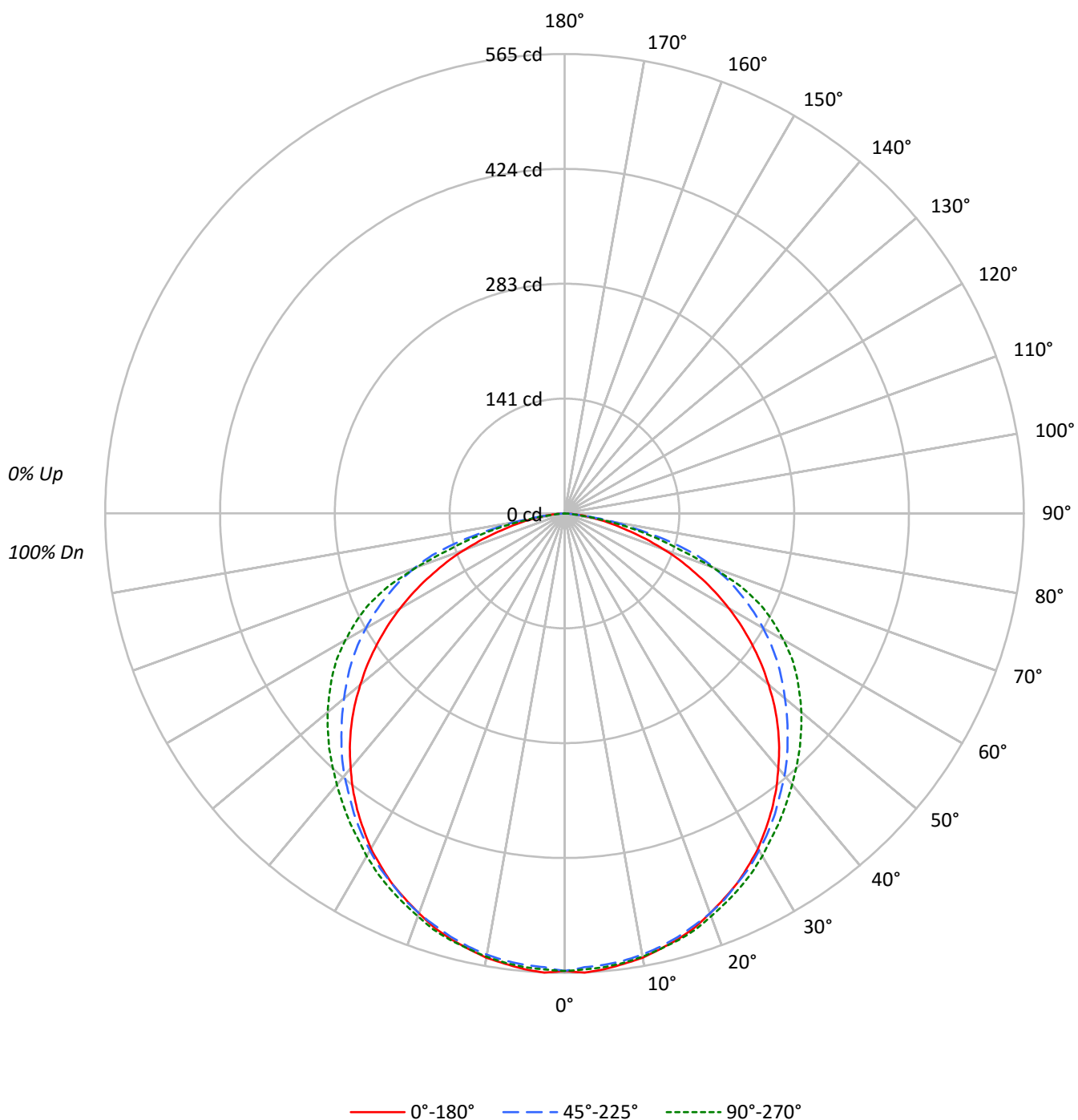
Input Watts (W): 24.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1514	1514	1514
5°	1520	1506	1513
10°	1516	1505	1512
15°	1509	1502	1513
20°	1499	1499	1510
25°	1491	1491	1511
30°	1479	1487	1512
35°	1461	1482	1517
40°	1437	1479	1530
45°	1413	1477	1557
50°	1373	1482	1593
55°	1323	1501	1637
60°	1257	1518	1673
65°	1161	1536	1696
70°	1032	1548	1517
75°	832	1391	1213
80°	651	976	793
85°	445	284	204



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.3	3.2
10°-20°	152.8	9.1
20°-30°	232.7	13.8
30°-40°	283.4	16.9
40°-50°	300.7	17.9
50°-60°	283.8	16.9
60°-70°	229.1	13.6
70°-80°	124.3	7.4
80°-90°	20.1	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°	438.7	26.1
0°-40°	722.1	43.0
0°-60°	1306.5	77.8
0°-90°	1680.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1680.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	563	563	563	563	563	
5°	563	561	557	561	560	53
15°	542	540	539	543	543	153
25°	502	501	502	508	509	231
35°	445	447	451	460	462	278
45°	371	376	388	403	409	286
55°	282	294	320	341	349	252
65°	182	205	241	261	266	181
75°	80	117	134	121	117	87
85°	14	16	9	8	7	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	562.7	562.7	562.7	562.7	562.7
2.5°	565.3	562.7	558.7	562.7	561.4
5°	562.7	561.4	557.4	561.4	560.1
7.5°	558.7	558.7	554.8	557.4	557.4
10°	554.8	553.5	550.9	554.8	553.5
12.5°	548.2	546.9	545.6	549.6	548.2
15°	541.7	540.4	539.1	543.0	543.0
17.5°	533.8	532.5	531.2	536.4	536.4
20°	523.3	523.3	523.3	528.6	527.3
22.5°	512.8	512.8	514.1	519.4	518.1
25°	502.3	501.0	502.3	507.6	508.9
27.5°	489.2	490.5	491.8	497.1	498.4
30°	476.1	477.4	478.7	485.3	486.6
32.5°	460.4	463.0	465.6	473.5	473.5
35°	444.6	447.3	451.2	460.4	461.7
37.5°	427.6	430.2	435.5	445.9	448.6
40°	409.2	413.2	421.0	431.5	435.5
42.5°	390.9	396.1	405.3	417.1	422.3
45°	371.2	376.4	388.2	402.7	409.2
47.5°	350.2	356.8	371.2	389.5	394.8
50°	327.9	337.1	354.1	373.8	380.4
52.5°	305.6	316.1	337.1	358.1	364.6
55°	282.0	293.8	320.0	341.0	348.9
57.5°	258.4	271.5	301.7	324.0	331.8
60°	233.5	249.2	282.0	304.3	310.8
62.5°	208.5	226.9	262.3	284.6	289.9
65°	182.3	204.6	241.3	261.0	266.3
67.5°	157.4	183.6	220.3	234.8	234.8
70°	131.2	160.0	196.7	200.7	192.8
72.5°	104.9	137.7	170.5	156.1	149.5
75°	80.0	116.7	133.8	120.7	116.7
77.5°	60.3	94.4	94.4	86.6	83.9
80°	42.0	72.1	63.0	55.1	51.2
82.5°	27.5	40.7	32.8	26.2	22.3
85°	14.4	15.7	9.2	7.9	6.6
87.5°	5.2	2.6	1.3	2.6	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)