

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: P312056

Luminaire Tested: **14FCZ2-29-UNV-L83050-RDP-CP187-W2A-U-3500K**

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: P312056  
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-L83050-RDP-CP187-W2A-U-3500K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB SHEET  
Light Source: (168) 3500K 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**

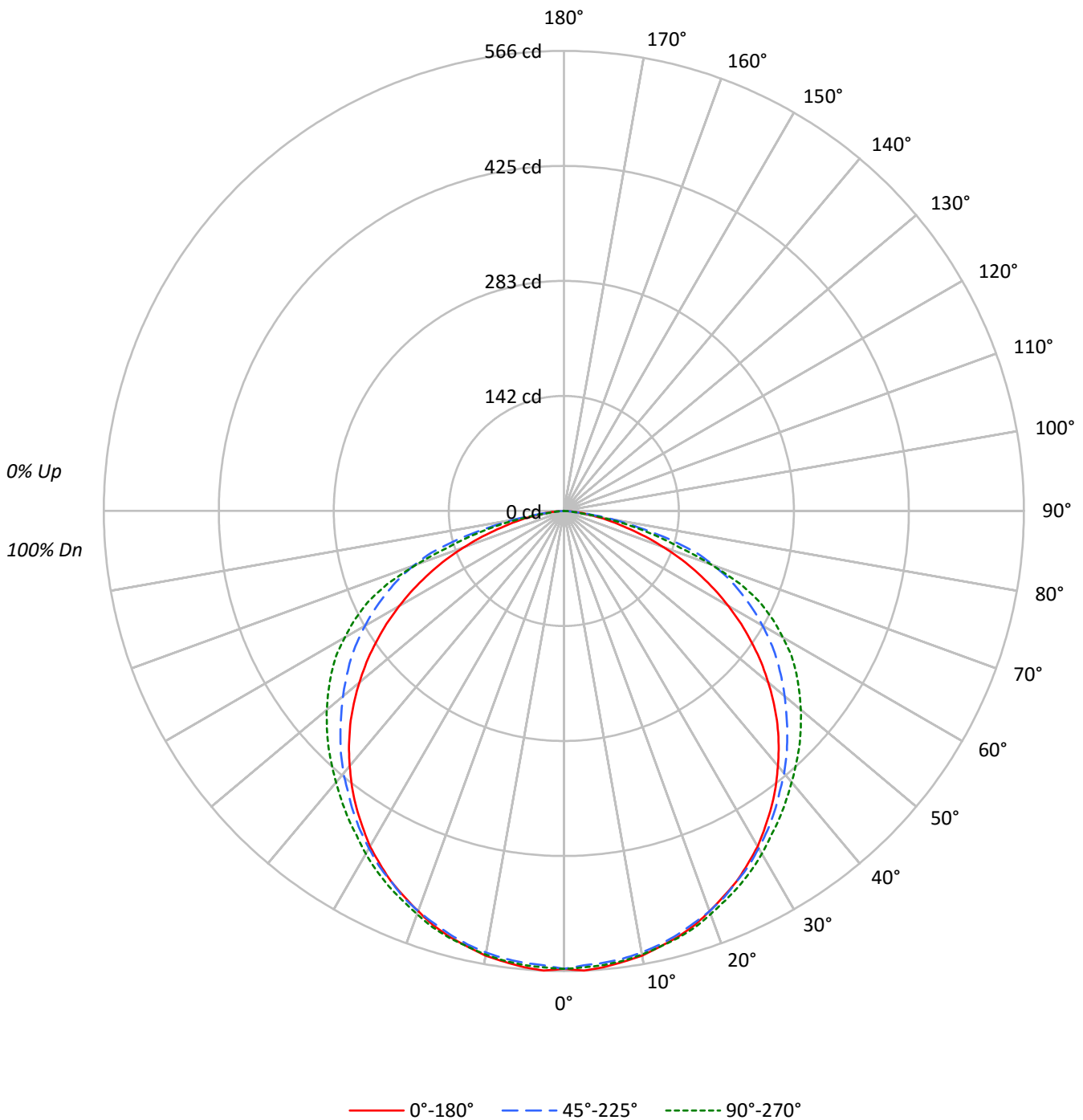
Lumens per Lamp: N/A  
Luminaire Lumens: 1682.0 lumens  
Efficiency: N/A  
Efficacy: 70.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1516	1516	1516
5°	1522	1508	1515
10°	1518	1507	1514
15°	1511	1504	1514
20°	1501	1501	1512
25°	1493	1493	1513
30°	1481	1489	1514
35°	1463	1484	1518
40°	1439	1481	1532
45°	1414	1479	1559
50°	1374	1485	1594
55°	1324	1503	1639
60°	1258	1519	1675
65°	1162	1538	1698
70°	1033	1550	1519
75°	833	1392	1215
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°	153.0	9.1
20°-30°	232.9	13.8
30°-40°	283.7	16.9
40°-50°	301.0	17.9
50°-60°	284.1	16.9
60°-70°	229.4	13.6
70°-80°	124.4	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°	439.2	26.1
0°-40°	723.0	43.0
0°-60°	1308.1	77.8
0°-90°	1682.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1682.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	563	563	563	563	563	
5°	563	562	558	562	561	54
15°	542	541	540	544	544	153
25°	503	502	503	508	510	232
35°	445	448	452	461	462	278
45°	372	377	389	403	410	286
55°	282	294	320	341	349	252
65°	182	205	242	261	267	181
75°	80	117	134	121	117	88
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°	563.3	563.3	563.3	563.3	563.3
2.5°	566.0	563.3	559.4	563.3	562.0
5°	563.3	562.0	558.1	562.0	560.7
7.5°	559.4	559.4	555.5	558.1	558.1
10°	555.5	554.2	551.5	555.5	554.2
12.5°	548.9	547.6	546.3	550.2	548.9
15°	542.3	541.0	539.7	543.6	543.6
17.5°	534.5	533.1	531.8	537.1	537.1
20°	524.0	524.0	524.0	529.2	527.9
22.5°	513.4	513.4	514.8	520.0	518.7
25°	502.9	501.6	502.9	508.2	509.5
27.5°	489.8	491.1	492.4	497.7	499.0
30°	476.7	478.0	479.3	485.9	487.2
32.5°	460.9	463.5	466.2	474.1	474.1
35°	445.2	447.8	451.7	460.9	462.2
37.5°	428.1	430.7	436.0	446.5	449.1
40°	409.7	413.6	421.5	432.0	436.0
42.5°	391.3	396.6	405.8	417.6	422.8
45°	371.6	376.9	388.7	403.1	409.7
47.5°	350.6	357.2	371.6	390.0	395.3
50°	328.3	337.5	354.6	374.3	380.8
52.5°	306.0	316.5	337.5	358.5	365.1
55°	282.3	294.1	320.4	341.4	349.3
57.5°	258.7	271.8	302.0	324.4	332.2
60°	233.7	249.5	282.3	304.7	311.2
62.5°	208.8	227.2	262.6	285.0	290.2
65°	182.5	204.9	241.6	261.3	266.6
67.5°	157.6	183.8	220.6	235.1	235.1
70°	131.3	160.2	197.0	200.9	193.0
72.5°	105.1	137.9	170.7	156.3	149.7
75°	80.1	116.9	133.9	120.8	116.9
77.5°	60.4	94.5	94.5	86.7	84.0
80°	42.0	72.2	63.0	55.2	51.2
82.5°	27.6	40.7	32.8	26.3	22.3
85°	14.4	15.8	9.2	7.9	6.6
87.5°	5.3	2.6	1.3	2.6	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)