

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: P306987

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CA08-W2A-U-5700K**

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: P306987  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)  
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-HRP-CA08-W2A-U-5700K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET  
Light Source: (168) 5700K 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**

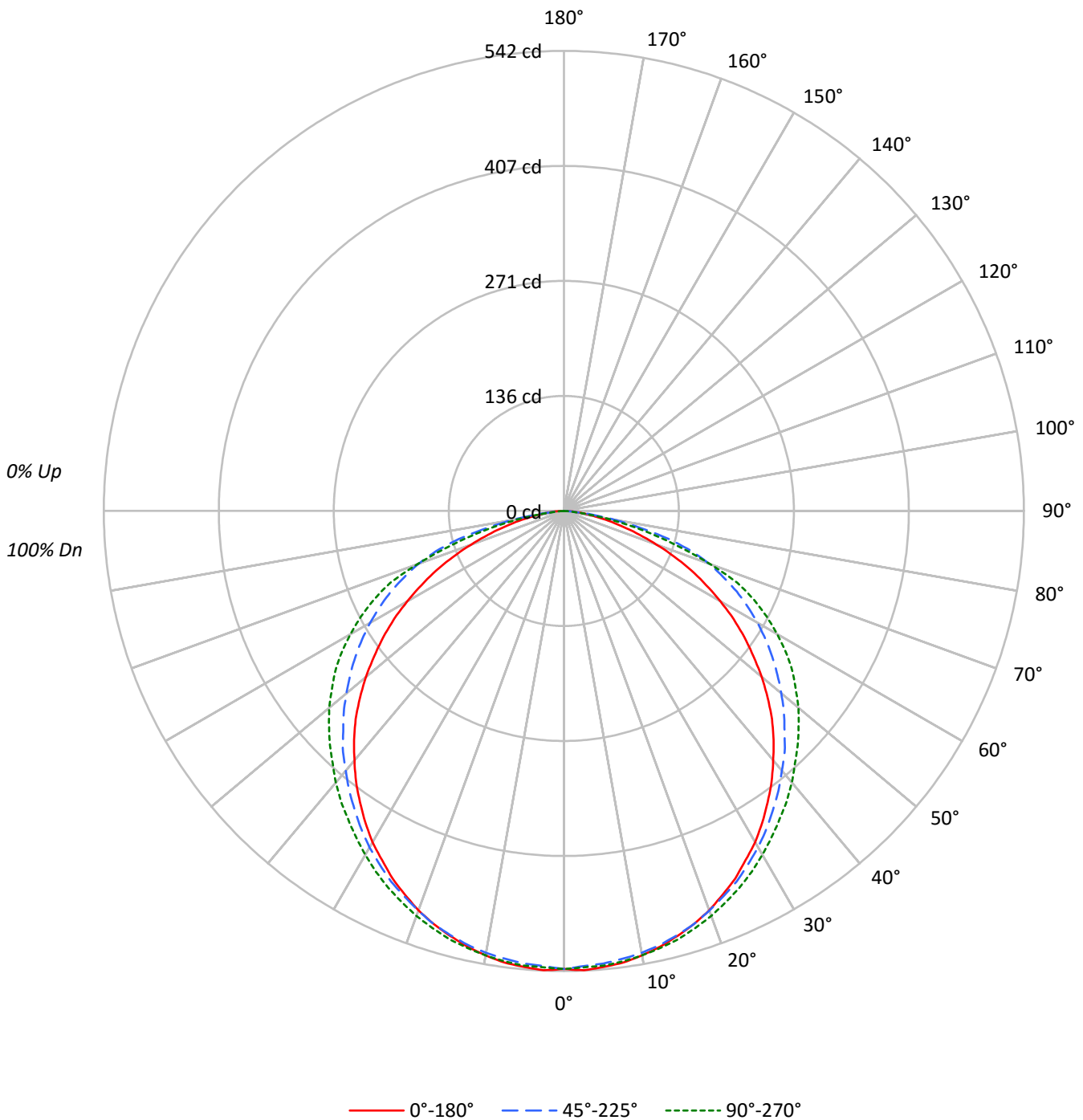
Lumens per Lamp: N/A  
Luminaire Lumens: 1589.0 lumens  
Efficiency: N/A  
Efficacy: 93.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	1452	1452	1452
5°	1456	1445	1452
10°	1453	1444	1453
15°	1443	1441	1455
20°	1434	1435	1454
25°	1418	1430	1454
30°	1400	1422	1453
35°	1375	1412	1456
40°	1348	1404	1467
45°	1320	1399	1483
50°	1274	1400	1510
55°	1219	1407	1543
60°	1146	1417	1562
65°	1056	1431	1571
70°	920	1435	1447
75°	759	1335	1169
80°	597	961	783
85°	463	371	185



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.1	3.2
10°-20°	146.6	9.2
20°-30°	222.6	14.0
30°-40°	269.7	17.0
40°-50°	284.2	17.9
50°-60°	265.4	16.7
60°-70°	212.1	13.3
70°-80°	116.7	7.3
80°-90°	20.6	1.3
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°	420.3	26.5
0°-40°	690.0	43.4
0°-60°	1239.6	78.0
0°-90°	1589.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1589.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	540	540	540	540	540	
5°	539	538	535	539	538	51
15°	518	518	517	522	522	146
25°	478	479	482	489	490	220
35°	419	423	430	441	443	262
45°	347	353	368	384	390	267
55°	260	273	300	321	329	232
65°	166	187	225	243	247	163
75°	73	104	128	115	112	79
85°	15	19	12	8	6	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	539.6	539.6	539.6	539.6	539.6
2.5°	541.6	540.1	536.6	539.6	538.1
5°	539.1	537.6	535.1	538.6	537.6
7.5°	536.6	534.6	532.1	536.1	535.1
10°	531.6	530.1	528.6	532.1	531.6
12.5°	525.6	525.1	523.6	527.6	527.1
15°	518.1	518.1	517.1	522.1	522.1
17.5°	510.2	509.7	510.2	515.6	515.1
20°	500.7	500.7	501.2	507.7	507.7
22.5°	489.2	489.7	491.2	499.2	498.7
25°	477.7	478.7	481.7	488.7	489.7
27.5°	463.7	466.2	469.7	478.2	479.2
30°	450.7	452.2	457.7	465.7	467.7
32.5°	435.2	438.2	444.2	453.2	455.7
35°	418.7	422.7	429.7	440.7	443.2
37.5°	402.2	405.7	415.2	426.7	431.2
40°	383.7	389.7	399.7	412.7	417.7
42.5°	365.8	371.7	385.2	398.7	403.2
45°	346.8	353.3	367.7	384.2	389.7
47.5°	325.8	333.3	351.8	369.2	375.2
50°	304.3	313.8	334.3	353.8	360.8
52.5°	281.8	293.8	317.3	337.8	344.3
55°	259.8	272.8	299.8	320.8	328.8
57.5°	237.3	251.3	281.8	305.8	310.3
60°	212.9	229.8	263.3	284.3	290.3
62.5°	188.9	208.4	244.3	264.3	269.3
65°	165.9	186.9	224.8	243.3	246.8
67.5°	140.9	165.9	203.4	220.3	221.3
70°	116.9	145.9	182.4	190.4	183.9
72.5°	93.4	124.4	157.9	151.4	145.9
75°	73.0	104.4	128.4	115.4	112.4
77.5°	54.0	85.4	91.9	84.9	79.4
80°	38.5	67.5	62.0	53.0	50.5
82.5°	26.5	42.5	34.0	26.5	23.0
85°	15.0	19.0	12.0	7.5	6.0
87.5°	6.5	4.5	2.5	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)