

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: P306988

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CA08-W2A-U-6500K**

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: P306988  
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-6500K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08"  
ACRYLIC SHEET  
Light Source: (168) 6500K 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**

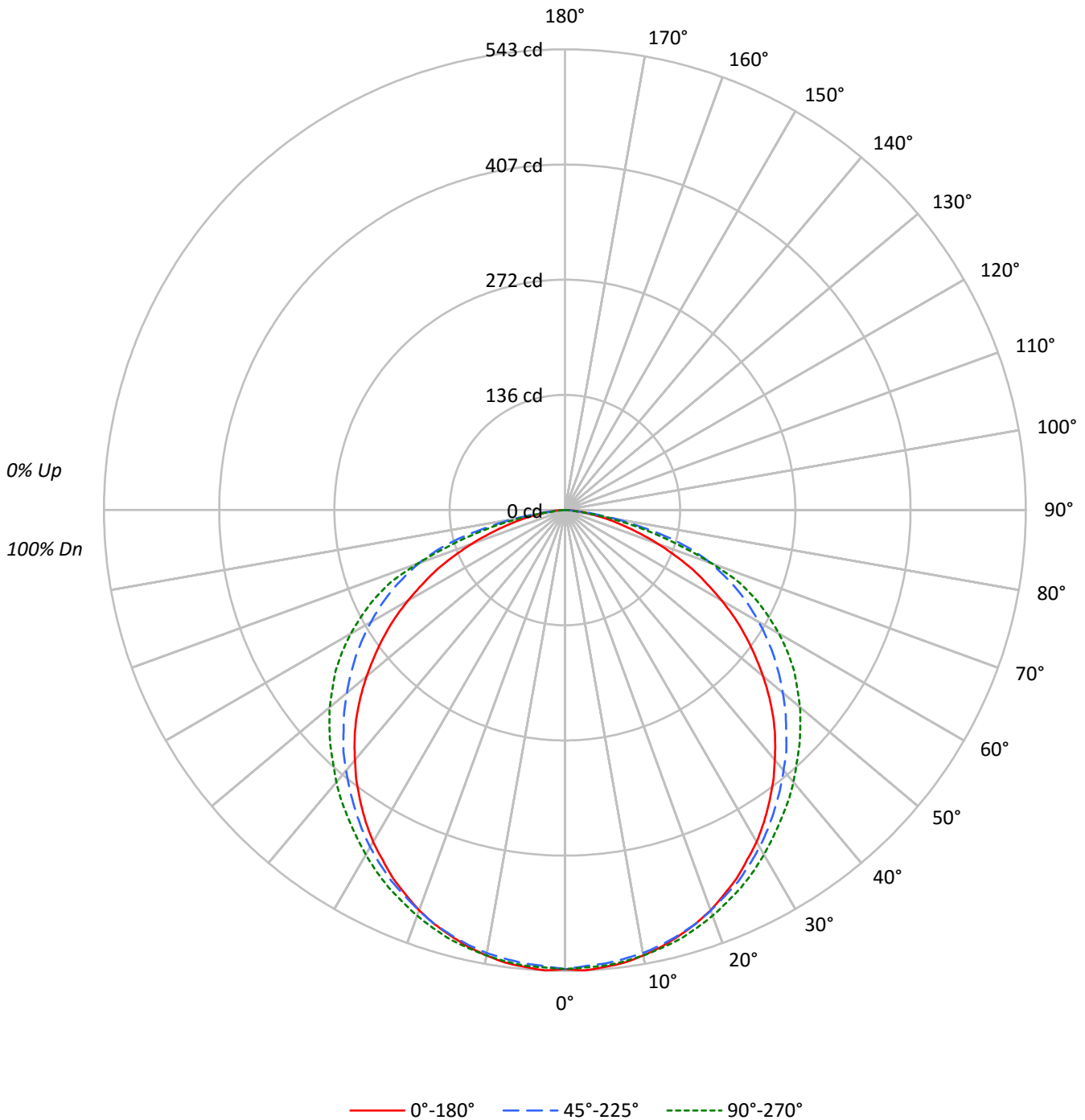
Lumens per Lamp: N/A  
Luminaire Lumens: 1593.0 lumens  
Efficiency: N/A  
Efficacy: 92.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1456	1456	1456
5°	1460	1449	1456
10°	1456	1448	1456
15°	1447	1444	1458
20°	1437	1439	1457
25°	1422	1434	1458
30°	1404	1426	1457
35°	1379	1415	1460
40°	1351	1408	1471
45°	1323	1403	1487
50°	1277	1403	1514
55°	1222	1410	1546
60°	1149	1421	1566
65°	1059	1435	1576
70°	922	1438	1450
75°	760	1338	1172
80°	598	962	784
85°	463	371	185



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.2	3.2
10°-20°	147.0	9.2
20°-30°	223.2	14.0
30°-40°	270.4	17.0
40°-50°	285.0	17.9
50°-60°	266.0	16.7
60°-70°	212.6	13.3
70°-80°	117.0	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°	421.4	26.5
0°-40°	691.8	43.4
0°-60°	1242.8	78.0
0°-90°	1593.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1593.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	541	541	541	541	541	
5°	540	539	536	540	539	51
15°	520	520	518	524	524	147
25°	479	480	483	490	491	220
35°	420	424	431	442	444	263
45°	348	354	369	385	391	267
55°	260	274	301	322	330	233
65°	166	187	225	244	248	164
75°	73	105	129	116	113	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°	541.0	541.0	541.0	541.0	541.0
2.5°	543.0	541.5	538.0	541.0	539.5
5°	540.5	539.0	536.5	540.0	539.0
7.5°	538.0	536.0	533.5	537.5	536.5
10°	533.0	531.5	530.0	533.5	533.0
12.5°	527.0	526.5	525.0	529.0	528.5
15°	519.5	519.5	518.4	523.5	523.5
17.5°	511.4	510.9	511.4	516.9	516.4
20°	501.9	501.9	502.4	508.9	508.9
22.5°	490.4	490.9	492.4	500.4	499.9
25°	478.9	479.9	482.9	489.9	490.9
27.5°	464.9	467.4	470.9	479.4	480.4
30°	451.8	453.3	458.8	466.9	468.9
32.5°	436.3	439.3	445.3	454.3	456.8
35°	419.8	423.8	430.8	441.8	444.3
37.5°	403.2	406.7	416.3	427.8	432.3
40°	384.7	390.7	400.7	413.8	418.8
42.5°	366.7	372.7	386.2	399.7	404.2
45°	347.6	354.1	368.7	385.2	390.7
47.5°	326.6	334.1	352.6	370.2	376.2
50°	305.1	314.6	335.1	354.6	361.7
52.5°	282.5	294.5	318.1	338.6	345.1
55°	260.5	273.5	300.6	321.6	329.6
57.5°	237.9	252.0	282.5	306.6	311.1
60°	213.4	230.4	264.0	285.0	291.0
62.5°	189.3	208.9	244.9	265.0	270.0
65°	166.3	187.3	225.4	243.9	247.5
67.5°	141.3	166.3	203.9	220.9	221.9
70°	117.2	146.3	182.8	190.8	184.3
72.5°	93.7	124.7	158.3	151.8	146.3
75°	73.1	104.7	128.7	115.7	112.7
77.5°	54.1	85.7	92.2	85.2	79.6
80°	38.6	67.6	62.1	53.1	50.6
82.5°	26.5	42.6	34.1	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)