

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: P307056

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP187-W2A-U-4500K**

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: P307056  
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: 14FCZ2-25-UNV-L82765-HRP-CP187-W2A-U-4500K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"  
POLYCARB SHEET  
Light Source: (168) 4500K 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**

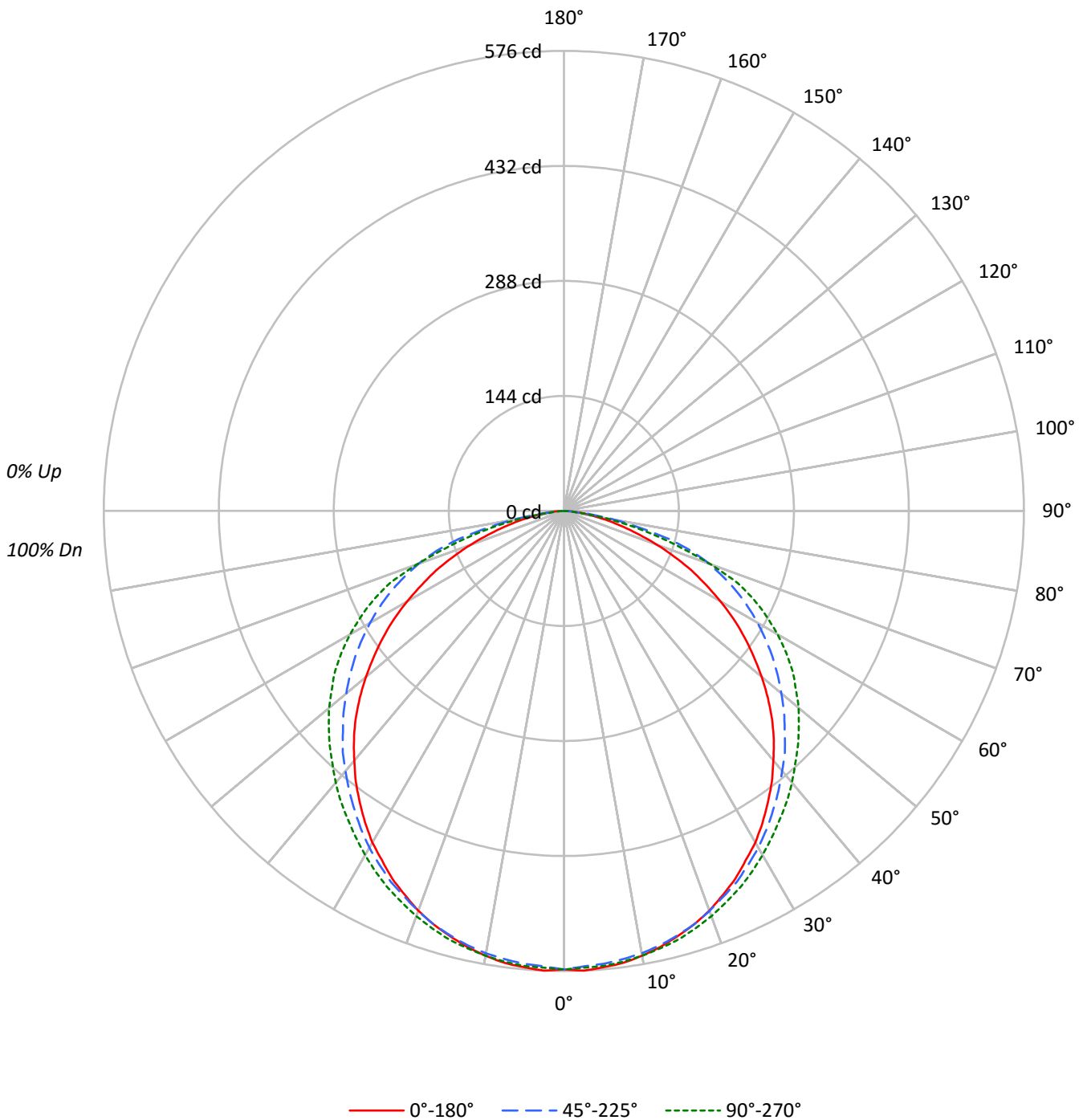
Lumens per Lamp: N/A  
Luminaire Lumens: 1690.0 lumens  
Efficiency: N/A  
Efficacy: 84.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1544	1544	1544
5°	1549	1537	1545
10°	1545	1536	1545
15°	1535	1532	1547
20°	1525	1526	1546
25°	1508	1521	1546
30°	1489	1513	1546
35°	1463	1501	1549
40°	1434	1493	1561
45°	1404	1488	1577
50°	1355	1488	1606
55°	1296	1496	1641
60°	1218	1507	1662
65°	1123	1522	1671
70°	979	1526	1539
75°	807	1420	1243
80°	634	1021	832
85°	491	395	198



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.3	3.2
10°-20°	155.9	9.2
20°-30°	236.8	14.0
30°-40°	286.9	17.0
40°-50°	302.3	17.9
50°-60°	282.2	16.7
60°-70°	225.6	13.3
70°-80°	124.1	7.3
80°-90°	21.9	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°	447.0	26.5
0°-40°	733.9	43.4
0°-60°	1318.4	78.0
0°-90°	1690.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1690.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	574	574	574	574	574	
5°	573	572	569	573	572	55
15°	551	551	550	555	555	156
25°	508	509	512	520	521	234
35°	445	450	457	469	471	279
45°	369	376	391	409	414	284
55°	276	290	319	341	350	247
65°	176	199	239	259	262	174
75°	78	111	137	123	120	84
85°	16	20	13	8	6	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	573.9	573.9	573.9	573.9	573.9
2.5°	576.1	574.5	570.7	573.9	572.3
5°	573.4	571.8	569.1	572.9	571.8
7.5°	570.7	568.6	566.0	570.2	569.1
10°	565.4	563.8	562.2	566.0	565.4
12.5°	559.1	558.5	556.9	561.2	560.6
15°	551.1	551.1	550.0	555.3	555.3
17.5°	542.6	542.0	542.6	548.4	547.9
20°	532.5	532.5	533.0	539.9	539.9
22.5°	520.3	520.8	522.4	530.9	530.4
25°	508.0	509.1	512.3	519.7	520.8
27.5°	493.2	495.8	499.5	508.6	509.6
30°	479.3	480.9	486.8	495.3	497.4
32.5°	462.9	466.1	472.4	482.0	484.7
35°	445.3	449.6	457.0	468.7	471.4
37.5°	427.8	431.5	441.6	453.8	458.6
40°	408.1	414.5	425.1	439.0	444.3
42.5°	389.0	395.4	409.7	424.1	428.9
45°	368.8	375.7	391.1	408.7	414.5
47.5°	346.5	354.5	374.1	392.7	399.1
50°	323.6	333.7	355.5	376.2	383.7
52.5°	299.7	312.5	337.5	359.2	366.1
55°	276.3	290.2	318.9	341.2	349.7
57.5°	252.4	267.3	299.7	325.2	330.0
60°	226.4	244.5	280.1	302.4	308.8
62.5°	200.9	221.6	259.9	281.1	286.4
65°	176.4	198.8	239.1	258.8	262.5
67.5°	149.9	176.4	216.3	234.4	235.4
70°	124.4	155.2	194.0	202.5	195.6
72.5°	99.4	132.3	167.9	161.0	155.2
75°	77.6	111.1	136.6	122.8	119.6
77.5°	57.4	90.9	97.8	90.3	84.5
80°	40.9	71.7	65.9	56.3	53.7
82.5°	28.2	45.2	36.1	28.2	24.4
85°	15.9	20.2	12.8	8.0	6.4
87.5°	6.9	4.8	2.7	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)