

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: P307058

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP187-W2A-U-5500K**

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: P307058  
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-5500K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"  
POLYCARB SHEET  
Light Source: (168) 5500K 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**

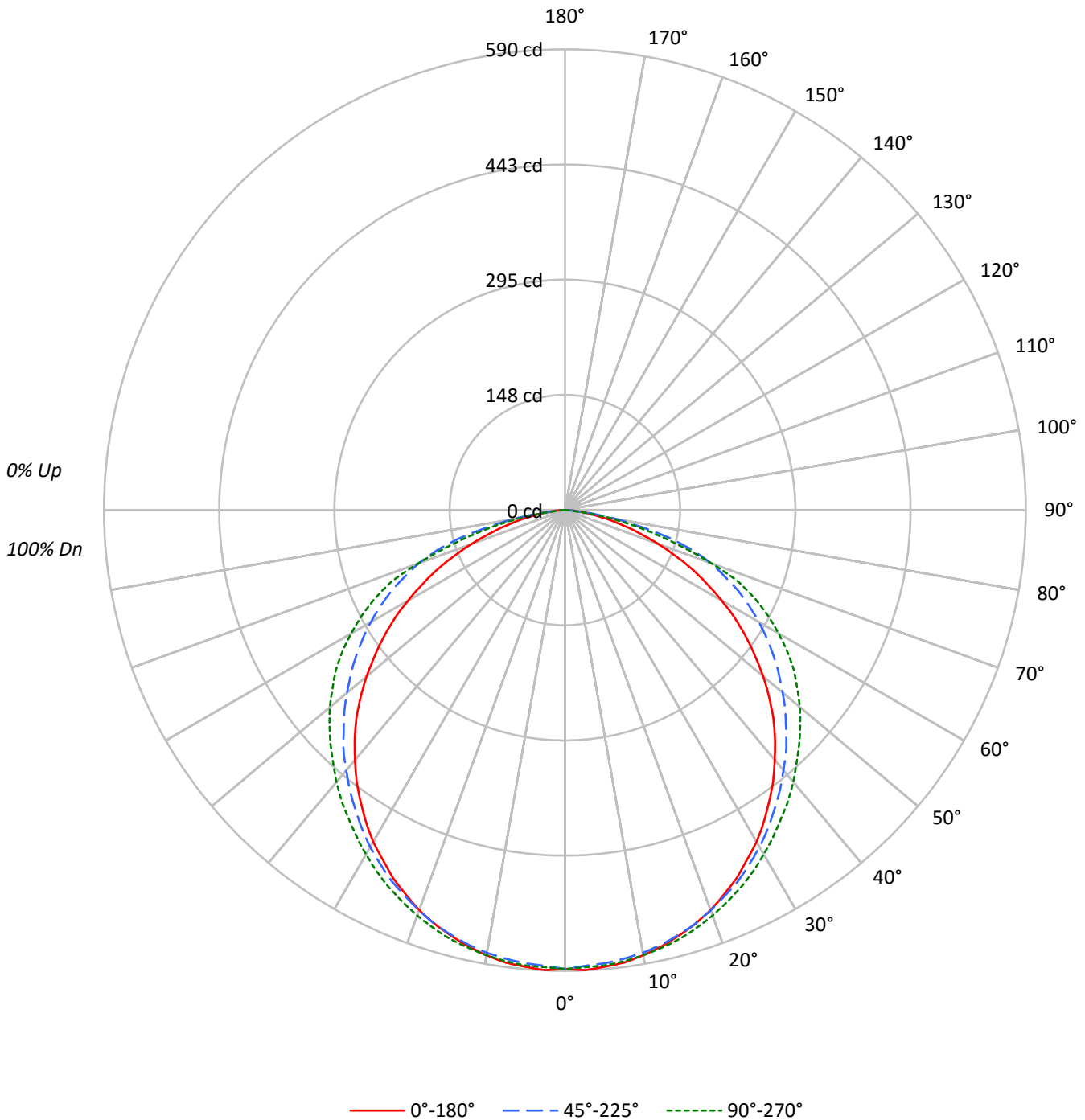
Lumens per Lamp: N/A  
Luminaire Lumens: 1730.0 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 20.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1581	1581	1581
5°	1586	1574	1581
10°	1582	1573	1582
15°	1572	1568	1584
20°	1561	1562	1583
25°	1544	1557	1583
30°	1525	1548	1582
35°	1498	1537	1585
40°	1468	1529	1598
45°	1437	1524	1615
50°	1387	1523	1644
55°	1327	1531	1680
60°	1247	1543	1701
65°	1150	1559	1711
70°	1002	1563	1575
75°	826	1454	1273
80°	649	1046	851
85°	503	404	201



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.6	3.2
10°-20°	159.6	9.2
20°-30°	242.4	14.0
30°-40°	293.7	17.0
40°-50°	309.5	17.9
50°-60°	288.9	16.7
60°-70°	230.9	13.3
70°-80°	127.0	7.3
80°-90°	22.4	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°	457.6	26.5
0°-40°	751.3	43.4
0°-60°	1349.6	78.0
0°-90°	1730.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1730.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	588	588	588	588	588	
5°	587	585	583	586	585	56
15°	564	564	563	568	568	159
25°	520	521	524	532	533	239
35°	456	460	468	480	482	285
45°	378	385	400	418	424	290
55°	283	297	326	349	358	253
65°	181	204	245	265	269	178
75°	79	114	140	126	122	85
85°	16	21	13	8	6	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	587.5	587.5	587.5	587.5	587.5
2.5°	589.7	588.1	584.3	587.5	585.9
5°	587.0	585.3	582.6	586.4	585.3
7.5°	584.3	582.1	579.4	583.7	582.6
10°	578.8	577.2	575.5	579.4	578.8
12.5°	572.3	571.7	570.1	574.5	573.9
15°	564.1	564.1	563.0	568.5	568.5
17.5°	555.4	554.9	555.4	561.4	560.9
20°	545.1	545.1	545.6	552.7	552.7
22.5°	532.6	533.1	534.7	543.5	542.9
25°	520.1	521.1	524.4	532.0	533.1
27.5°	504.8	507.5	511.4	520.6	521.7
30°	490.7	492.3	498.3	507.0	509.2
32.5°	473.8	477.1	483.6	493.4	496.1
35°	455.9	460.2	467.8	479.8	482.5
37.5°	437.9	441.7	452.1	464.6	469.5
40°	417.8	424.3	435.2	449.3	454.8
42.5°	398.2	404.7	419.4	434.1	439.0
45°	377.5	384.6	400.4	418.3	424.3
47.5°	354.7	362.8	383.0	402.0	408.5
50°	331.3	341.6	363.9	385.1	392.8
52.5°	306.8	319.9	345.4	367.7	374.8
55°	282.9	297.0	326.4	349.2	358.0
57.5°	258.4	273.6	306.8	332.9	337.8
60°	231.7	250.2	286.7	309.5	316.1
62.5°	205.6	226.8	266.0	287.8	293.2
65°	180.6	203.5	244.8	264.9	268.7
67.5°	153.4	180.6	221.4	239.9	241.0
70°	127.3	158.8	198.6	207.3	200.2
72.5°	101.7	135.5	171.9	164.8	158.8
75°	79.4	113.7	139.8	125.7	122.4
77.5°	58.8	93.0	100.1	92.5	86.5
80°	41.9	73.4	67.5	57.7	54.9
82.5°	28.8	46.2	37.0	28.8	25.0
85°	16.3	20.7	13.1	8.2	6.5
87.5°	7.1	4.9	2.7	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)