

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: P307047

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP125-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: P307047  
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-CP125-W2A-U-4500K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" 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: 1765.0 lumens  
Efficiency: N/A  
Efficacy: 88.3 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

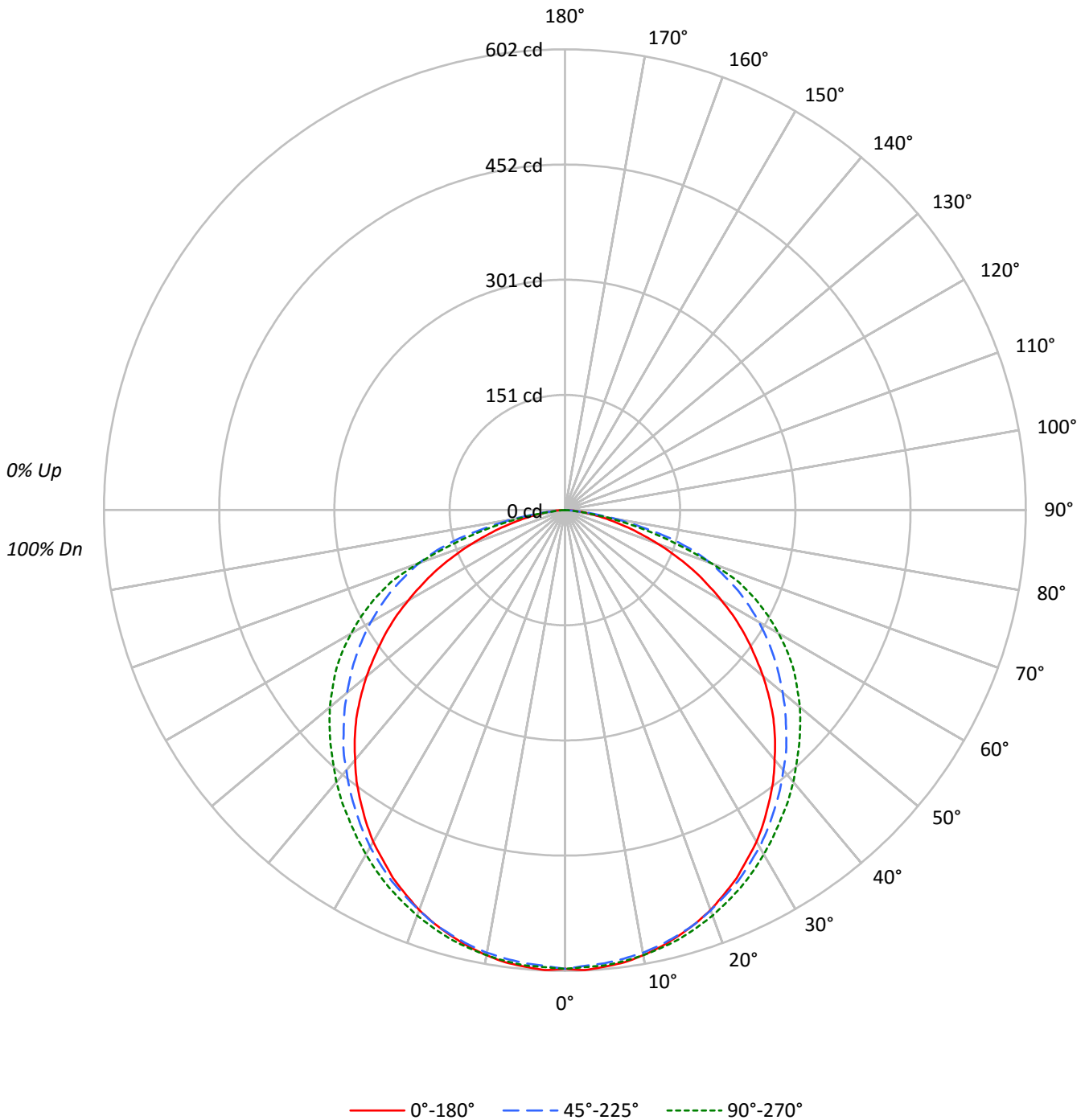
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P307047

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-HRP-CP125-W2A-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P307047

CATALOG NUMBER: 14FC22-25-UNV-L82765-HRP-CP125-W2A-U-4500K

**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°	1613	1613	1613
5°	1618	1606	1613
10°	1614	1605	1614
15°	1603	1600	1616
20°	1592	1594	1615
25°	1575	1589	1615
30°	1556	1580	1614
35°	1528	1568	1617
40°	1497	1560	1630
45°	1466	1555	1647
50°	1415	1554	1677
55°	1354	1562	1713
60°	1272	1574	1736
65°	1174	1591	1746
70°	1022	1594	1607
75°	842	1483	1299
80°	662	1066	869
85°	516	411	207



TEST NUMBER: P307047

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-HRP-CP125-W2A-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.7	3.2
10°-20°	162.8	9.2
20°-30°	247.3	14.0
30°-40°	299.6	17.0
40°-50°	315.7	17.9
50°-60°	294.7	16.7
60°-70°	235.6	13.3
70°-80°	129.6	7.3
80°-90°	22.9	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°	466.9	26.5
0°-40°	766.5	43.4
0°-60°	1376.9	78.0
0°-90°	1765.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1765.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	599	599	599	599	599	
5°	599	597	594	598	597	57
15°	576	576	574	580	580	162
25°	531	532	535	543	544	244
35°	465	470	477	490	492	291
45°	385	392	408	427	433	296
55°	289	303	333	356	365	258
65°	184	208	250	270	274	181
75°	81	116	143	128	125	87
85°	17	21	13	8	7	20
90°	0	0	0	0	0	



TEST NUMBER: P307047

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-HRP-CP125-W2A-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	599.4	599.4	599.4	599.4	599.4
2.5°	601.6	600.0	596.1	599.4	597.7
5°	598.8	597.2	594.4	598.3	597.2
7.5°	596.1	593.9	591.1	595.5	594.4
10°	590.5	588.9	587.2	591.1	590.5
12.5°	583.9	583.3	581.6	586.1	585.5
15°	575.5	575.5	574.4	580.0	580.0
17.5°	566.7	566.1	566.7	572.8	572.2
20°	556.1	556.1	556.7	563.9	563.9
22.5°	543.3	543.9	545.6	554.4	553.9
25°	530.6	531.7	535.0	542.8	543.9
27.5°	515.0	517.8	521.7	531.1	532.2
30°	500.6	502.3	508.4	517.3	519.5
32.5°	483.4	486.7	493.4	503.4	506.2
35°	465.1	469.5	477.3	489.5	492.3
37.5°	446.8	450.7	461.2	474.0	479.0
40°	426.2	432.9	444.0	458.4	464.0
42.5°	406.3	412.9	427.9	442.9	447.9
45°	385.2	392.4	408.5	426.8	432.9
47.5°	361.9	370.2	390.7	410.1	416.8
50°	338.0	348.5	371.3	392.9	400.7
52.5°	313.0	326.3	352.4	375.2	382.4
55°	288.6	303.0	333.0	356.3	365.2
57.5°	263.6	279.2	313.0	339.7	344.7
60°	236.4	255.3	292.5	315.8	322.5
62.5°	209.8	231.4	271.4	293.6	299.1
65°	184.3	207.6	249.8	270.3	274.2
67.5°	156.5	184.3	225.9	244.8	245.9
70°	129.9	162.1	202.6	211.5	204.2
72.5°	103.8	138.2	175.4	168.2	162.1
75°	81.0	116.0	142.6	128.2	124.9
77.5°	59.9	94.9	102.1	94.4	88.2
80°	42.7	74.9	68.8	58.8	56.1
82.5°	29.4	47.2	37.7	29.4	25.5
85°	16.7	21.1	13.3	8.3	6.7
87.5°	7.2	5.0	2.8	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)