

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: P307000

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CP125-W2A-U-3500K**

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: P307000  
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-CP125-W2A-U-3500K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB SHEET  
Light Source: (168) 3500K 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**

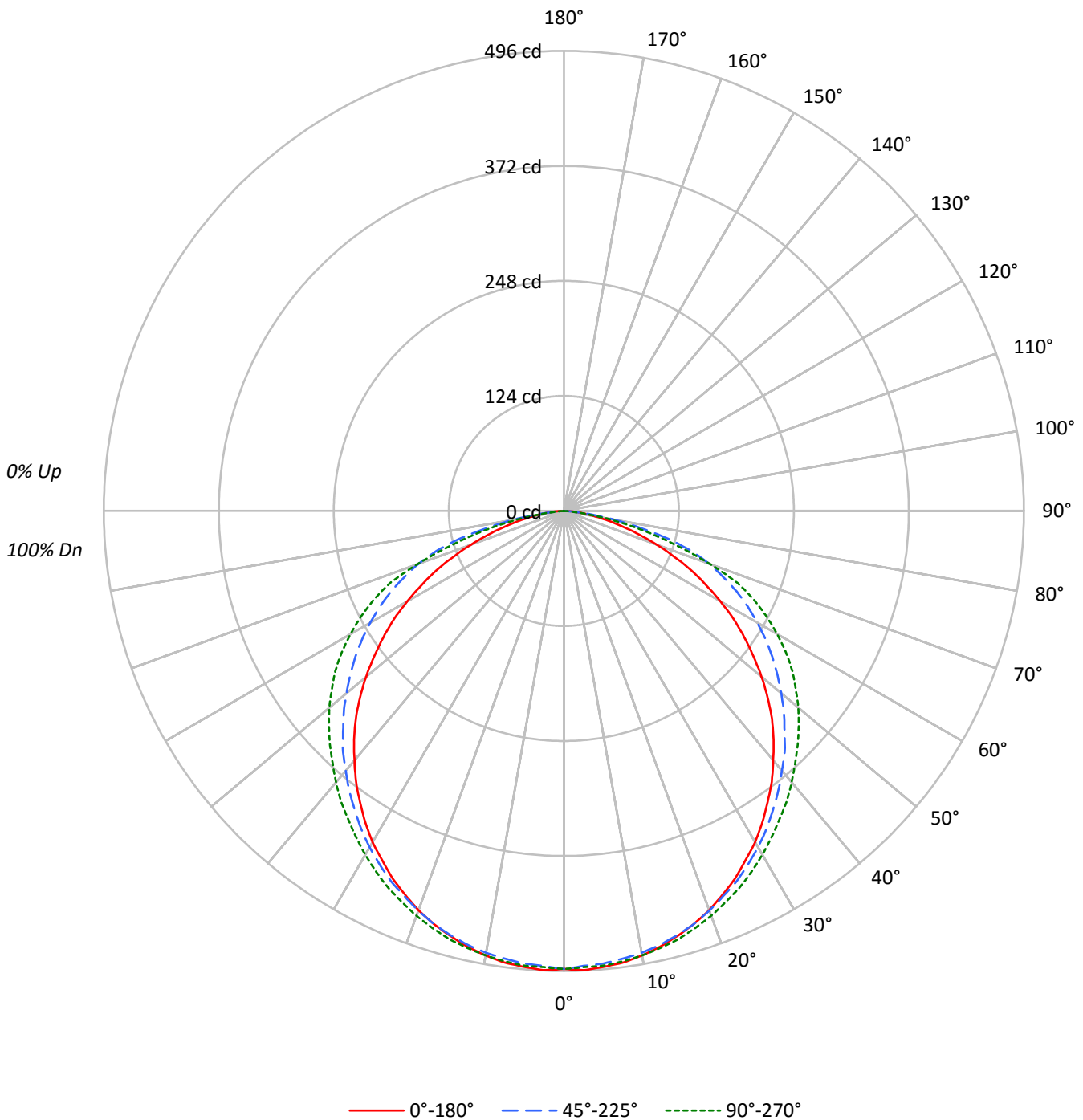
Lumens per Lamp: N/A  
Luminaire Lumens: 1454.0 lumens  
Efficiency: N/A  
Efficacy: 87.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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: P307000

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-HRP-CP125-W2A-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P307000

CATALOG NUMBER: 14FC22-20-UNV-L82765-HRP-CP125-W2A-U-3500K

**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°	1329	1329	1329
5°	1333	1323	1329
10°	1329	1322	1329
15°	1321	1318	1331
20°	1312	1313	1330
25°	1298	1309	1330
30°	1281	1301	1330
35°	1259	1292	1332
40°	1233	1285	1343
45°	1208	1281	1357
50°	1165	1281	1382
55°	1115	1287	1411
60°	1048	1297	1429
65°	967	1310	1438
70°	842	1313	1324
75°	695	1222	1070
80°	545	879	716
85°	423	340	170



TEST NUMBER: P307000

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-HRP-CP125-W2A-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.7	3.2
10°-20°	134.1	9.2
20°-30°	203.7	14.0
30°-40°	246.8	17.0
40°-50°	260.1	17.9
50°-60°	242.8	16.7
60°-70°	194.0	13.3
70°-80°	106.8	7.3
80°-90°	18.9	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°	384.6	26.5
0°-40°	631.4	43.4
0°-60°	1134.3	78.0
0°-90°	1454.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1454.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	494	494	494	494	494	
5°	493	492	490	493	492	47
15°	474	474	473	478	478	134
25°	437	438	441	447	448	201
35°	383	387	393	403	406	240
45°	317	323	336	352	357	244
55°	238	250	274	294	301	212
65°	152	171	206	223	226	149
75°	67	96	118	106	103	72
85°	14	17	11	7	6	17
90°	0	0	0	0	0	



TEST NUMBER: P307000

CATALOG NUMBER: 14FC22-20-UNV-L82765-HRP-CP125-W2A-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	493.8	493.8	493.8	493.8	493.8
2.5°	495.6	494.2	491.0	493.8	492.4
5°	493.3	492.0	489.7	492.9	492.0
7.5°	491.0	489.2	486.9	490.6	489.7
10°	486.5	485.1	483.7	486.9	486.5
12.5°	481.0	480.5	479.2	482.8	482.4
15°	474.1	474.1	473.2	477.8	477.8
17.5°	466.8	466.4	466.8	471.8	471.4
20°	458.1	458.1	458.6	464.5	464.5
22.5°	447.6	448.1	449.4	456.8	456.3
25°	437.1	438.0	440.7	447.2	448.1
27.5°	424.3	426.6	429.8	437.5	438.5
30°	412.4	413.8	418.8	426.1	427.9
32.5°	398.2	401.0	406.5	414.7	417.0
35°	383.1	386.8	393.2	403.3	405.5
37.5°	368.1	371.3	379.9	390.5	394.6
40°	351.1	356.6	365.8	377.7	382.2
42.5°	334.7	340.2	352.5	364.9	369.0
45°	317.3	323.2	336.5	351.6	356.6
47.5°	298.1	305.0	321.9	337.9	343.4
50°	278.4	287.1	305.9	323.7	330.1
52.5°	257.9	268.8	290.3	309.1	315.0
55°	237.7	249.6	274.3	293.5	300.8
57.5°	217.2	230.0	257.9	279.8	283.9
60°	194.8	210.3	240.9	260.2	265.6
62.5°	172.8	190.7	223.6	241.9	246.4
65°	151.8	171.0	205.7	222.7	225.9
67.5°	128.9	151.8	186.1	201.6	202.5
70°	107.0	133.5	166.9	174.2	168.3
72.5°	85.5	113.8	144.5	138.5	133.5
75°	66.8	95.6	117.5	105.6	102.9
77.5°	49.4	78.2	84.1	77.7	72.7
80°	35.2	61.7	56.7	48.5	46.2
82.5°	24.2	38.9	31.1	24.2	21.0
85°	13.7	17.4	11.0	6.9	5.5
87.5°	5.9	4.1	2.3	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)