

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: P307003

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CP125-W2A-U-5000K**

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: P307003  
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-5000K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB SHEET  
Light Source: (168) 5000K 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**

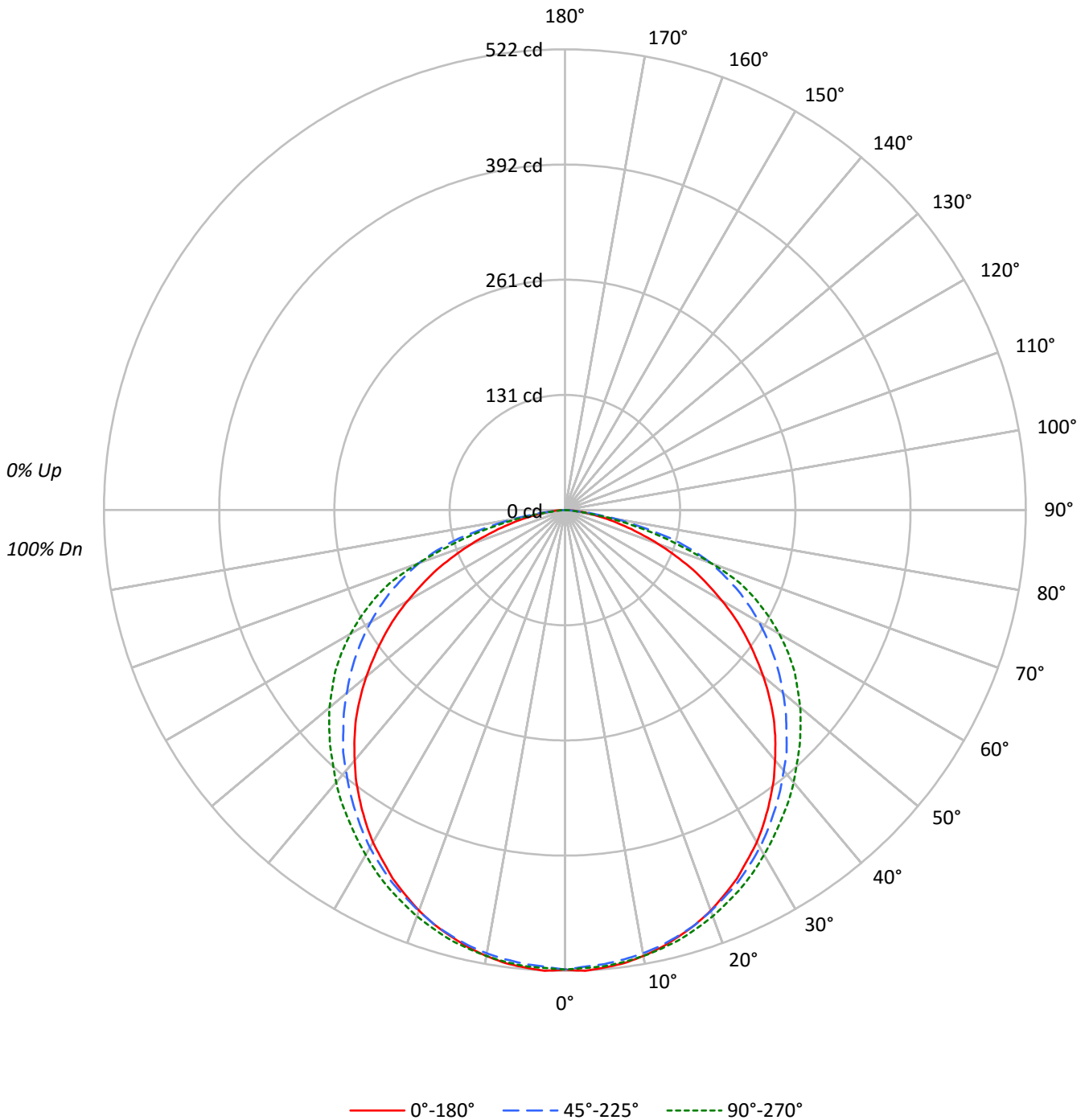
Lumens per Lamp: N/A  
Luminaire Lumens: 1533.0 lumens  
Efficiency: N/A  
Efficacy: 90.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



TEST NUMBER: P307003

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-HRP-CP125-W2A-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P307003

CATALOG NUMBER: 14FC22-20-UNV-L82765-HRP-CP125-W2A-U-5000K

**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°	1401	1401	1401
5°	1405	1395	1401
10°	1401	1394	1401
15°	1393	1390	1403
20°	1383	1385	1403
25°	1368	1380	1403
30°	1351	1372	1402
35°	1327	1362	1405
40°	1300	1355	1416
45°	1273	1350	1431
50°	1229	1350	1457
55°	1176	1357	1488
60°	1105	1367	1507
65°	1019	1381	1516
70°	887	1384	1396
75°	732	1288	1128
80°	575	927	755
85°	448	358	179



TEST NUMBER: P307003

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-HRP-CP125-W2A-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.3	3.2
10°-20°	141.4	9.2
20°-30°	214.8	14.0
30°-40°	260.2	17.0
40°-50°	274.2	17.9
50°-60°	256.0	16.7
60°-70°	204.6	13.3
70°-80°	112.6	7.3
80°-90°	19.9	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°	405.5	26.5
0°-40°	665.7	43.4
0°-60°	1196.0	78.0
0°-90°	1533.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1533.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	520	519	516	520	519	49
15°	500	500	499	504	504	141
25°	461	462	465	471	472	212
35°	404	408	415	425	428	253
45°	334	341	355	371	376	257
55°	251	263	289	310	317	224
65°	160	180	217	235	238	158
75°	70	101	124	111	108	76
85°	14	18	12	7	6	18
90°	0	0	0	0	0	



TEST NUMBER: P307003

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-HRP-CP125-W2A-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	520.6	520.6	520.6	520.6	520.6
2.5°	522.5	521.1	517.7	520.6	519.2
5°	520.1	518.7	516.3	519.7	518.7
7.5°	517.7	515.8	513.4	517.2	516.3
10°	512.9	511.5	510.0	513.4	512.9
12.5°	507.1	506.6	505.2	509.0	508.6
15°	499.9	499.9	498.9	503.7	503.7
17.5°	492.2	491.7	492.2	497.5	497.0
20°	483.0	483.0	483.5	489.8	489.8
22.5°	471.9	472.4	473.9	481.6	481.1
25°	460.8	461.8	464.7	471.4	472.4
27.5°	447.3	449.8	453.1	461.3	462.3
30°	434.8	436.3	441.6	449.3	451.2
32.5°	419.9	422.8	428.5	437.2	439.6
35°	404.0	407.8	414.6	425.2	427.6
37.5°	388.1	391.4	400.6	411.7	416.0
40°	370.2	376.0	385.6	398.2	403.0
42.5°	352.9	358.6	371.7	384.7	389.0
45°	334.5	340.8	354.8	370.7	376.0
47.5°	314.3	321.5	339.4	356.2	362.0
50°	293.6	302.7	322.5	341.3	348.0
52.5°	271.9	283.4	306.1	325.9	332.1
55°	250.7	263.2	289.2	309.5	317.2
57.5°	229.0	242.5	271.9	295.0	299.4
60°	205.4	221.7	254.0	274.3	280.1
62.5°	182.2	201.0	235.7	255.0	259.8
65°	160.0	180.3	216.9	234.8	238.1
67.5°	135.9	160.0	196.2	212.6	213.5
70°	112.8	140.8	175.9	183.7	177.4
72.5°	90.1	120.0	152.3	146.1	140.8
75°	70.4	100.7	123.9	111.4	108.5
77.5°	52.1	82.4	88.7	81.9	76.6
80°	37.1	65.1	59.8	51.1	48.7
82.5°	25.5	41.0	32.8	25.5	22.2
85°	14.5	18.3	11.6	7.2	5.8
87.5°	6.3	4.3	2.4	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)