

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: P312022

Luminaire Tested: **14FCZ2-25-UNV-L83050-RDP-CA125-W2A-U-4000K**

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: P312022  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
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-L83050-RDP-CA125-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" ACRYLIC SHEET  
Light Source: (168) 4000K 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**

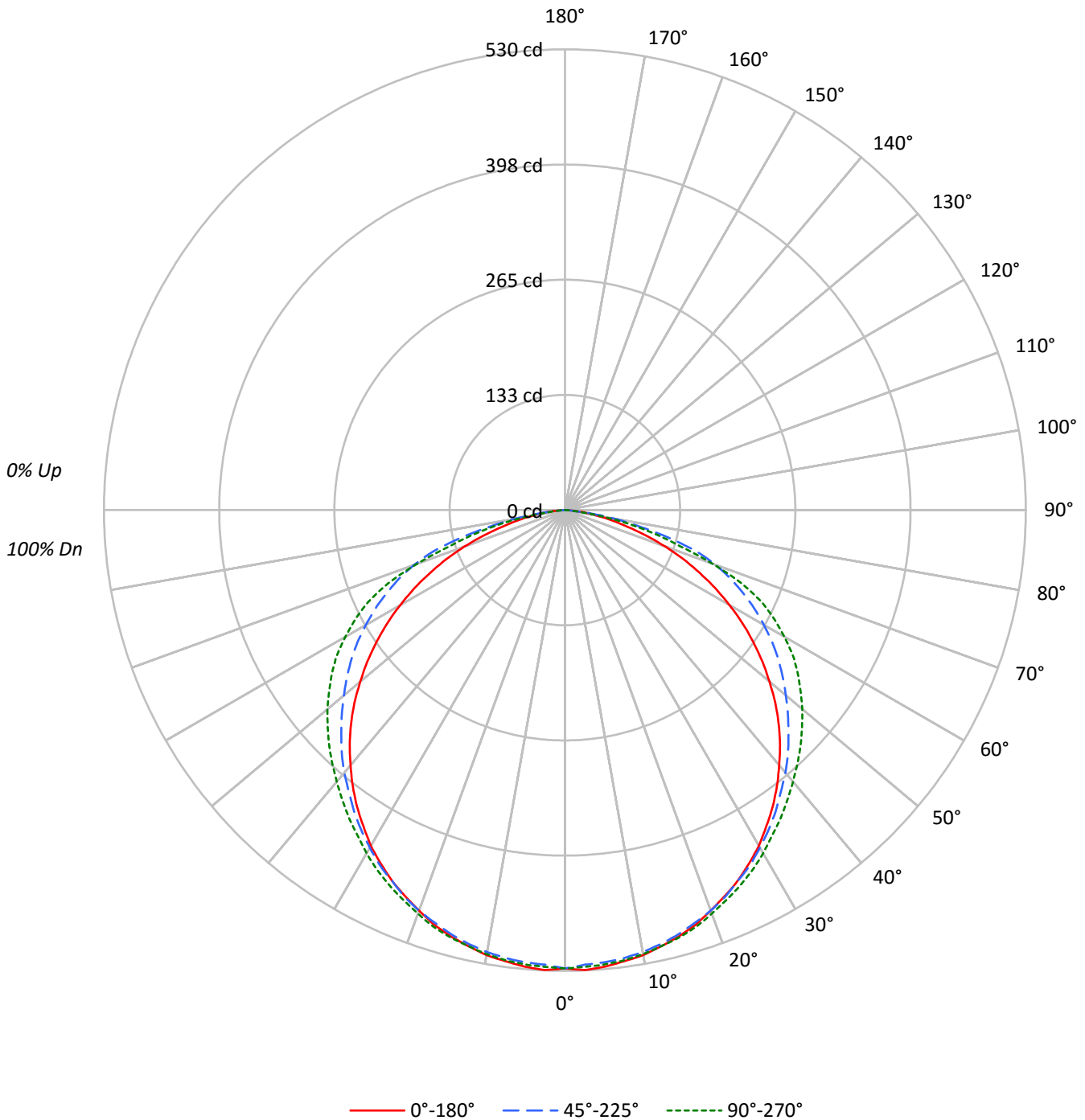
Lumens per Lamp: N/A  
Luminaire Lumens: 1574.0 lumens  
Efficiency: N/A  
Efficacy: 78.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 20.1  
Input Voltage (V): NR  
Input Current (A<sub>in</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



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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	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1419	1419	1419
5°	1424	1411	1417
10°	1420	1410	1417
15°	1414	1407	1417
20°	1404	1404	1415
25°	1397	1397	1416
30°	1386	1394	1417
35°	1369	1389	1421
40°	1347	1386	1433
45°	1324	1384	1459
50°	1286	1389	1492
55°	1240	1407	1534
60°	1177	1422	1567
65°	1088	1440	1589
70°	967	1450	1421
75°	780	1303	1137
80°	609	914	742
85°	417	266	188



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.9	3.2
10°-20°	143.2	9.1
20°-30°	218.0	13.8
30°-40°	265.5	16.9
40°-50°	281.7	17.9
50°-60°	265.8	16.9
60°-70°	214.6	13.6
70°-80°	116.4	7.4
80°-90°	18.8	1.2
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°	411.0	26.1
0°-40°	676.5	43.0
0°-60°	1224.1	77.8
0°-90°	1574.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1574.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	527	526	522	526	525	50
15°	508	506	505	509	509	143
25°	471	469	471	476	477	217
35°	417	419	423	431	433	260
45°	348	353	364	377	383	268
55°	264	275	300	320	327	236
65°	171	192	226	244	250	169
75°	75	109	125	113	109	82
85°	14	15	9	7	6	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	527.2	527.2	527.2	527.2	527.2
2.5°	529.6	527.2	523.5	527.2	525.9
5°	527.2	525.9	522.3	525.9	524.7
7.5°	523.5	523.5	519.8	522.3	522.3
10°	519.8	518.6	516.1	519.8	518.6
12.5°	513.7	512.4	511.2	514.9	513.7
15°	507.5	506.3	505.1	508.7	508.7
17.5°	500.1	498.9	497.7	502.6	502.6
20°	490.3	490.3	490.3	495.2	494.0
22.5°	480.5	480.5	481.7	486.6	485.4
25°	470.6	469.4	470.6	475.6	476.8
27.5°	458.4	459.6	460.8	465.7	467.0
30°	446.1	447.3	448.5	454.7	455.9
32.5°	431.3	433.8	436.2	443.6	443.6
35°	416.6	419.0	422.7	431.3	432.6
37.5°	400.6	403.1	408.0	417.8	420.3
40°	383.4	387.1	394.5	404.3	408.0
42.5°	366.2	371.1	379.7	390.8	395.7
45°	347.8	352.7	363.7	377.3	383.4
47.5°	328.1	334.2	347.8	365.0	369.9
50°	307.2	315.8	331.8	350.2	356.4
52.5°	286.3	296.2	315.8	335.5	341.6
55°	264.2	275.3	299.8	319.5	326.9
57.5°	242.1	254.4	282.6	303.5	310.9
60°	218.7	233.5	264.2	285.1	291.2
62.5°	195.4	212.6	245.8	266.7	271.6
65°	170.8	191.7	226.1	244.5	249.5
67.5°	147.5	172.0	206.4	220.0	220.0
70°	122.9	149.9	184.3	188.0	180.6
72.5°	98.3	129.0	159.7	146.2	140.1
75°	75.0	109.4	125.3	113.1	109.4
77.5°	56.5	88.5	88.5	81.1	78.6
80°	39.3	67.6	59.0	51.6	47.9
82.5°	25.8	38.1	30.7	24.6	20.9
85°	13.5	14.7	8.6	7.4	6.1
87.5°	4.9	2.5	1.2	2.5	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)