

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: P312015

Luminaire Tested: **14FCZ2-25-UNV-L83050-RDP-CA08-W2A-U-3000K**

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: P312015  
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-CA08-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET  
Light Source: (168) 3000K 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**

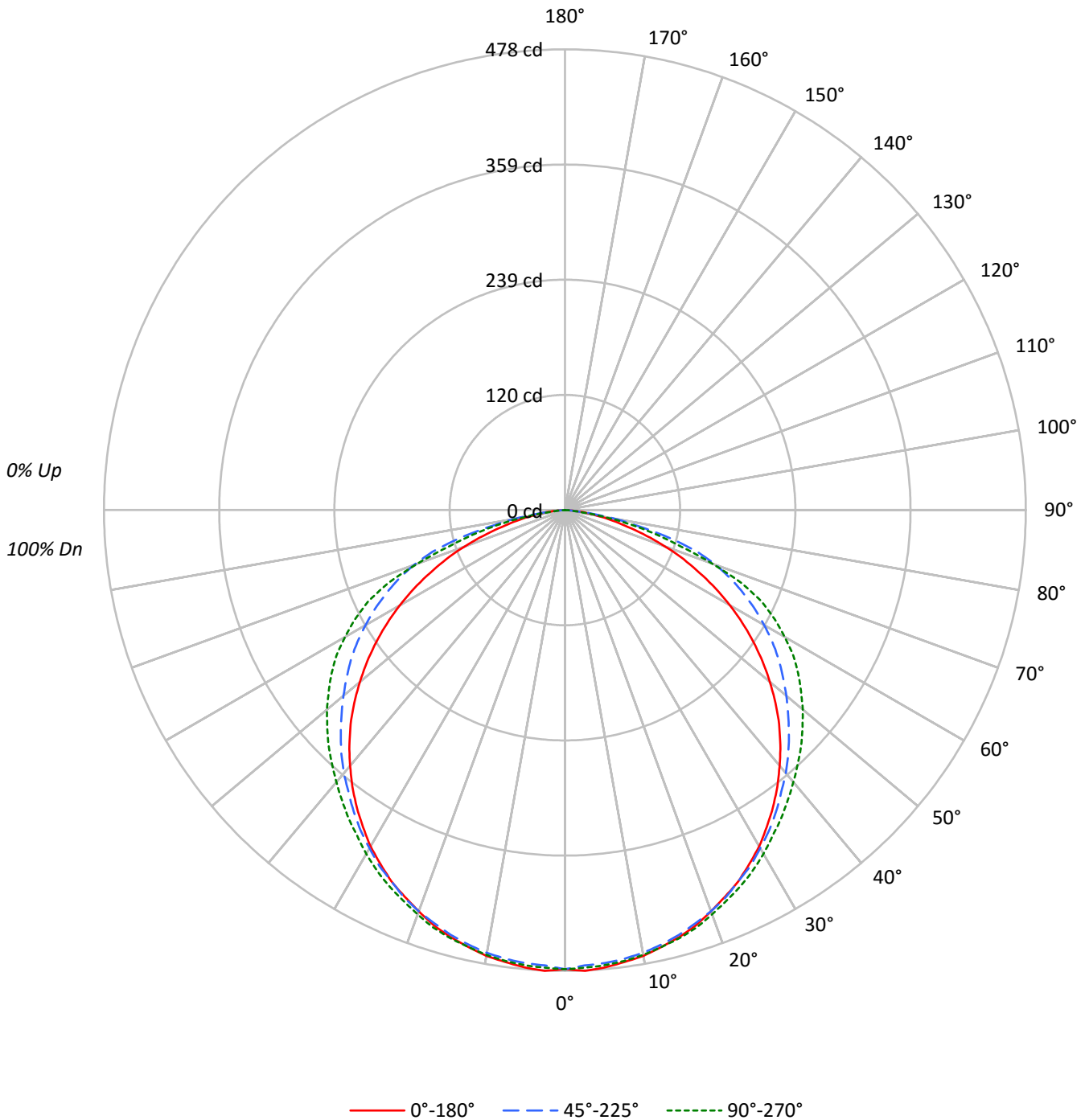
Lumens per Lamp: N/A  
Luminaire Lumens: 1422.0 lumens  
Efficiency: N/A  
Efficacy: 72.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	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°	1282	1282	1282
5°	1287	1274	1280
10°	1283	1274	1280
15°	1277	1271	1280
20°	1269	1269	1278
25°	1262	1262	1279
30°	1252	1259	1280
35°	1236	1255	1284
40°	1217	1252	1295
45°	1196	1251	1318
50°	1162	1255	1348
55°	1120	1271	1385
60°	1063	1285	1416
65°	982	1301	1435
70°	873	1310	1284
75°	704	1177	1027
80°	550	826	671
85°	377	241	173



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.1	3.2
10°-20°	129.3	9.1
20°-30°	196.9	13.8
30°-40°	239.9	16.9
40°-50°	254.5	17.9
50°-60°	240.2	16.9
60°-70°	193.9	13.6
70°-80°	105.2	7.4
80°-90°	17.0	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°	371.4	26.1
0°-40°	611.2	43.0
0°-60°	1105.9	77.8
0°-90°	1422.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1422.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	474	45
15°	458	457	456	460	460	129
25°	425	424	425	430	431	196
35°	376	379	382	390	391	235
45°	314	319	329	341	346	242
55°	239	249	271	289	295	213
65°	154	173	204	221	225	153
75°	68	99	113	102	99	74
85°	12	13	8	7	6	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	476.3	476.3	476.3	476.3	476.3
2.5°	478.5	476.3	472.9	476.3	475.2
5°	476.3	475.2	471.8	475.2	474.0
7.5°	472.9	472.9	469.6	471.8	471.8
10°	469.6	468.5	466.3	469.6	468.5
12.5°	464.1	462.9	461.8	465.2	464.1
15°	458.5	457.4	456.3	459.6	459.6
17.5°	451.8	450.7	449.6	454.1	454.1
20°	443.0	443.0	443.0	447.4	446.3
22.5°	434.1	434.1	435.2	439.6	438.5
25°	425.2	424.1	425.2	429.6	430.7
27.5°	414.1	415.2	416.3	420.8	421.9
30°	403.0	404.1	405.2	410.8	411.9
32.5°	389.7	391.9	394.1	400.8	400.8
35°	376.3	378.6	381.9	389.7	390.8
37.5°	361.9	364.1	368.6	377.5	379.7
40°	346.4	349.7	356.4	365.2	368.6
42.5°	330.8	335.3	343.0	353.0	357.5
45°	314.2	318.6	328.6	340.8	346.4
47.5°	296.4	302.0	314.2	329.7	334.2
50°	277.5	285.3	299.7	316.4	322.0
52.5°	258.7	267.6	285.3	303.1	308.6
55°	238.7	248.7	270.9	288.6	295.3
57.5°	218.7	229.8	255.3	274.2	280.9
60°	197.6	210.9	238.7	257.6	263.1
62.5°	176.5	192.1	222.0	240.9	245.3
65°	154.3	173.2	204.3	220.9	225.4
67.5°	133.2	155.4	186.5	198.7	198.7
70°	111.0	135.4	166.5	169.9	163.2
72.5°	88.8	116.6	144.3	132.1	126.6
75°	67.7	98.8	113.2	102.1	98.8
77.5°	51.1	79.9	79.9	73.3	71.1
80°	35.5	61.1	53.3	46.6	43.3
82.5°	23.3	34.4	27.8	22.2	18.9
85°	12.2	13.3	7.8	6.7	5.6
87.5°	4.4	2.2	1.1	2.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)