

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: P311922

Luminaire Tested: **14FCZ2-35-UNV-L83050-HRP-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: P311922  
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: 14FCZ2-35-UNV-L83050-HRP-CA125-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 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**

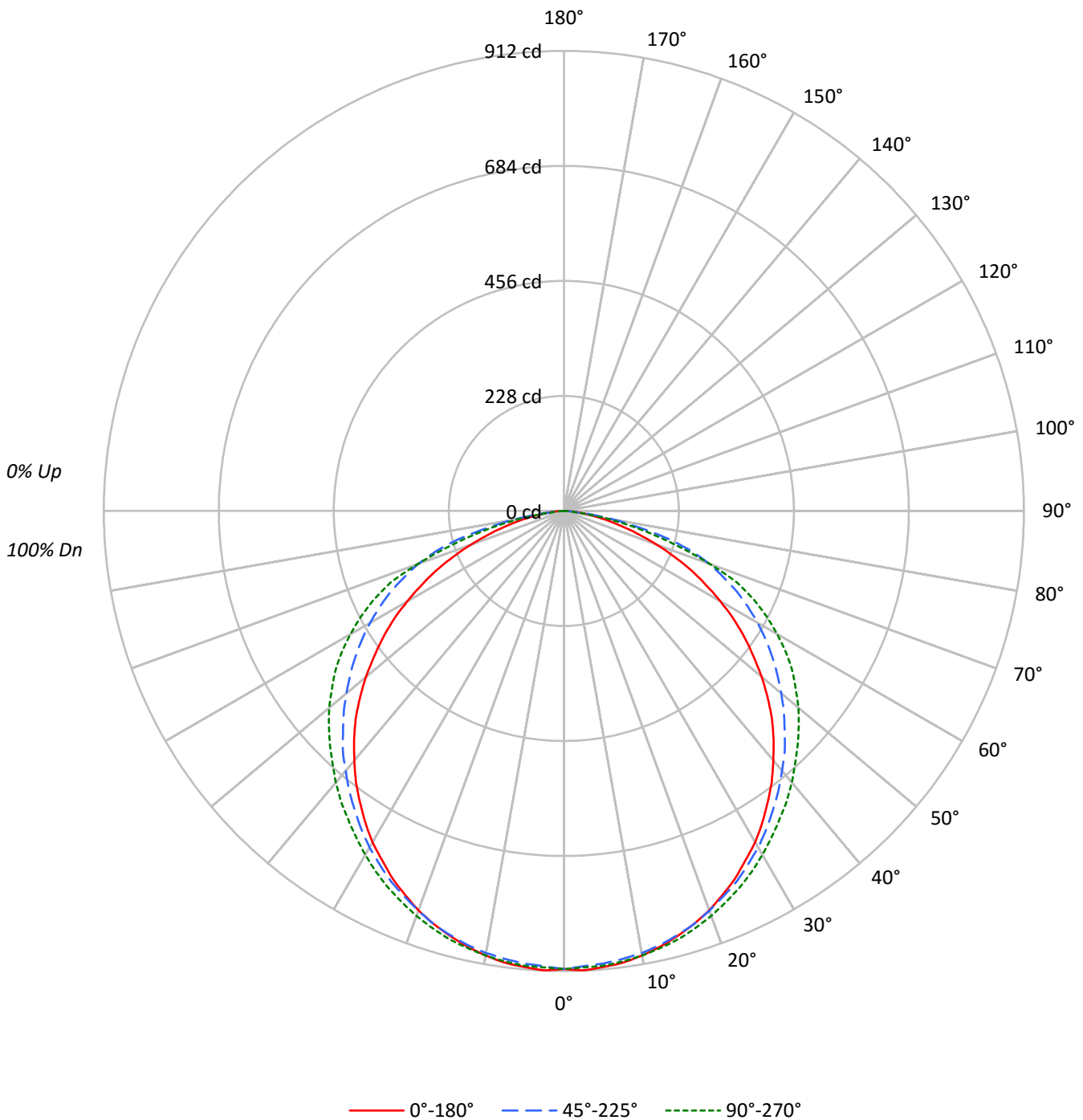
Lumens per Lamp: N/A  
Luminaire Lumens: 2674.0 lumens  
Efficiency: N/A  
Efficacy: 88.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 30.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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°	2444	2444	2444
5°	2451	2432	2444
10°	2445	2431	2445
15°	2429	2425	2448
20°	2413	2415	2446
25°	2387	2407	2447
30°	2357	2393	2445
35°	2315	2375	2450
40°	2269	2363	2469
45°	2221	2355	2496
50°	2144	2355	2542
55°	2051	2367	2596
60°	1928	2385	2629
65°	1778	2409	2645
70°	1548	2415	2434
75°	1277	2247	1967
80°	1003	1616	1316
85°	778	624	312



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.0	3.2
10°-20°	246.7	9.2
20°-30°	374.6	14.0
30°-40°	453.9	17.0
40°-50°	478.3	17.9
50°-60°	446.5	16.7
60°-70°	356.9	13.3
70°-80°	196.4	7.3
80°-90°	34.7	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°	707.3	26.5
0°-40°	1161.2	43.4
0°-60°	2086.1	78.0
0°-90°	2674.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2674.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	908	908	908	908	908	
5°	907	905	900	906	905	86
15°	872	872	870	879	879	246
25°	804	806	811	822	824	370
35°	705	711	723	742	746	441
45°	584	594	619	647	656	449
55°	437	459	504	540	553	390
65°	279	314	378	410	415	275
75°	123	176	216	194	189	132
85°	25	32	20	13	10	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	908.1	908.1	908.1	908.1	908.1
2.5°	911.5	908.9	903.1	908.1	905.6
5°	907.3	904.7	900.5	906.4	904.7
7.5°	903.1	899.7	895.5	902.2	900.5
10°	894.7	892.1	889.6	895.5	894.7
12.5°	884.6	883.7	881.2	887.9	887.1
15°	871.9	871.9	870.3	878.7	878.7
17.5°	858.5	857.7	858.5	867.7	866.9
20°	842.5	842.5	843.4	854.3	854.3
22.5°	823.2	824.0	826.5	840.0	839.2
25°	803.8	805.5	810.6	822.3	824.0
27.5°	780.3	784.5	790.4	804.7	806.4
30°	758.4	761.0	770.2	783.7	787.0
32.5°	732.4	737.4	747.5	762.6	766.8
35°	704.6	711.3	723.1	741.6	745.8
37.5°	676.9	682.8	698.7	718.1	725.6
40°	645.8	655.9	672.7	694.5	702.9
42.5°	615.5	625.6	648.3	671.0	678.6
45°	583.5	594.5	618.9	646.6	655.9
47.5°	548.2	560.8	591.9	621.4	631.5
50°	512.1	528.0	562.5	595.3	607.1
52.5°	474.2	494.4	533.9	568.4	579.3
55°	437.2	459.1	504.5	539.8	553.3
57.5°	399.4	422.9	474.2	514.6	522.2
60°	358.2	386.8	443.1	478.4	488.5
62.5°	317.8	350.6	411.2	444.8	453.2
65°	279.2	314.5	378.4	409.5	415.4
67.5°	237.1	279.2	342.2	370.8	372.5
70°	196.8	245.5	306.9	320.4	309.4
72.5°	157.2	209.4	265.7	254.8	245.5
75°	122.8	175.7	216.1	194.2	189.2
77.5°	90.8	143.8	154.7	142.9	133.7
80°	64.7	113.5	104.3	89.1	84.9
82.5°	44.6	71.5	57.2	44.6	38.7
85°	25.2	32.0	20.2	12.6	10.1
87.5°	10.9	7.6	4.2	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)