

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: P311917

Luminaire Tested: **14FCZ2-35-UNV-L83050-HRP-CA08-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: P311917  
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-CA08-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" 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**

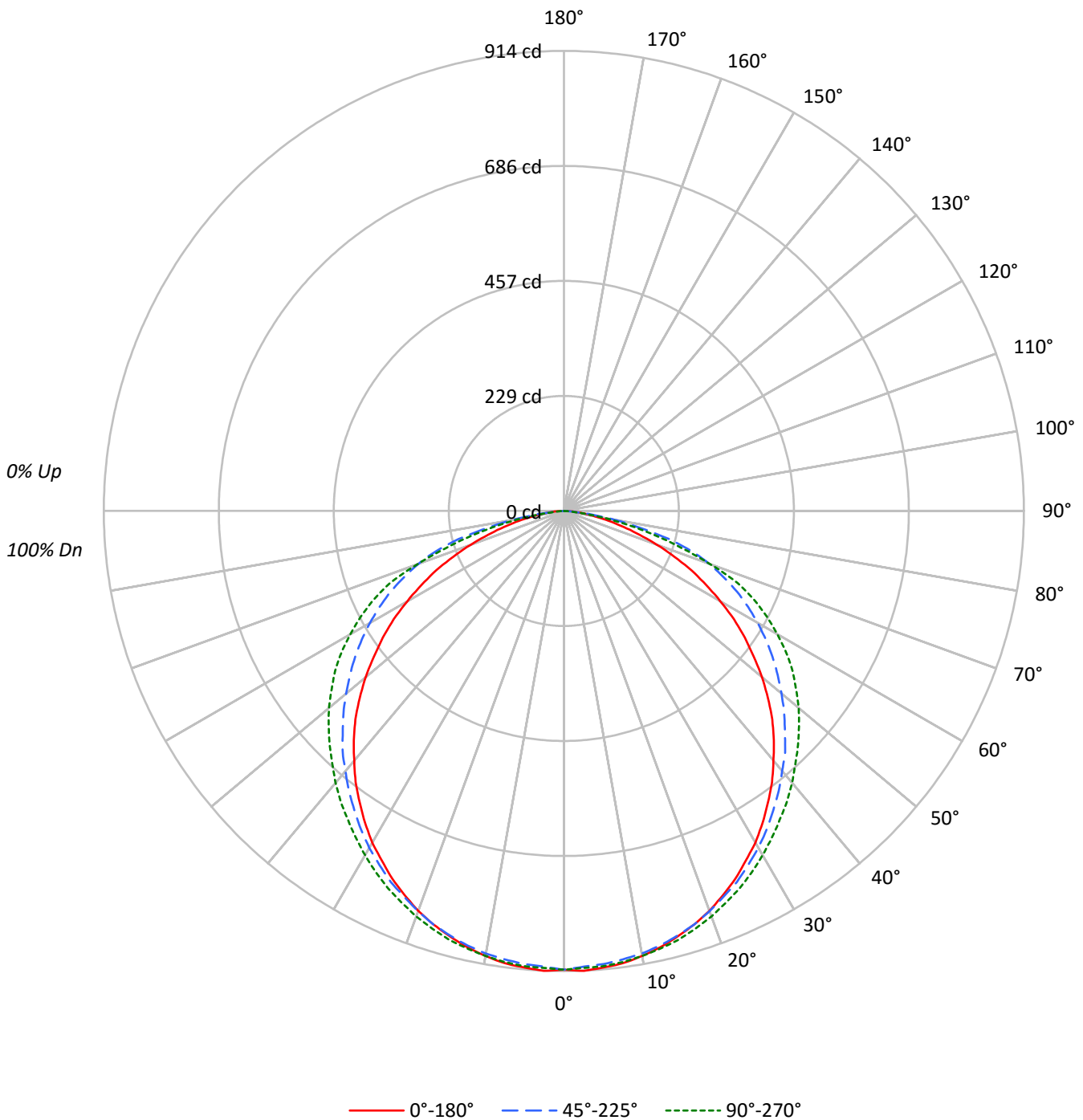
Lumens per Lamp: N/A  
Luminaire Lumens: 2683.0 lumens  
Efficiency: N/A  
Efficacy: 88.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 30.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	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°	2452	2452	2452
5°	2459	2441	2452
10°	2453	2439	2453
15°	2437	2433	2456
20°	2421	2423	2455
25°	2395	2415	2455
30°	2365	2401	2454
35°	2323	2384	2458
40°	2276	2371	2478
45°	2228	2363	2504
50°	2151	2363	2550
55°	2058	2375	2604
60°	1934	2393	2638
65°	1784	2418	2654
70°	1553	2423	2443
75°	1281	2254	1973
80°	1007	1621	1320
85°	781	624	312



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.3	3.2
10°-20°	247.5	9.2
20°-30°	375.9	14.0
30°-40°	455.5	17.0
40°-50°	479.9	17.9
50°-60°	448.0	16.7
60°-70°	358.1	13.3
70°-80°	197.0	7.3
80°-90°	34.8	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°	709.7	26.5
0°-40°	1165.1	43.4
0°-60°	2093.1	78.0
0°-90°	2683.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2683.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	911	911	911	911	911	
5°	910	908	904	910	908	87
15°	875	875	873	882	882	247
25°	806	808	813	825	827	371
35°	707	714	726	744	748	442
45°	586	596	621	649	658	450
55°	439	461	506	542	555	392
65°	280	316	380	411	417	276
75°	123	176	217	195	190	133
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°	911.2	911.2	911.2	911.2	911.2
2.5°	914.5	912.0	906.1	911.2	908.6
5°	910.3	907.8	903.6	909.5	907.8
7.5°	906.1	902.7	898.5	905.3	903.6
10°	897.7	895.1	892.6	898.5	897.7
12.5°	887.5	886.7	884.2	890.9	890.1
15°	874.9	874.9	873.2	881.6	881.6
17.5°	861.4	860.5	861.4	870.7	869.8
20°	845.4	845.4	846.2	857.2	857.2
22.5°	826.0	826.8	829.3	842.8	842.0
25°	806.5	808.2	813.3	825.1	826.8
27.5°	782.9	787.1	793.0	807.4	809.1
30°	761.0	763.5	772.8	786.3	789.7
32.5°	734.8	739.9	750.0	765.2	769.4
35°	707.0	713.7	725.6	744.1	748.3
37.5°	679.2	685.1	701.1	720.5	728.1
40°	647.9	658.1	674.9	696.9	705.3
42.5°	617.6	627.7	650.5	673.2	680.8
45°	585.5	596.5	620.9	648.8	658.1
47.5°	550.1	562.7	593.9	623.5	633.6
50°	513.8	529.8	564.4	597.3	609.1
52.5°	475.8	496.1	535.7	570.3	581.3
55°	438.7	460.6	506.2	541.6	555.1
57.5°	400.7	424.4	475.8	516.3	523.9
60°	359.4	388.1	444.6	480.0	490.2
62.5°	318.9	351.8	412.6	446.3	454.7
65°	280.1	315.5	379.7	410.9	416.8
67.5°	237.9	280.1	343.4	372.1	373.7
70°	197.4	246.4	307.9	321.4	310.5
72.5°	157.8	210.1	266.6	255.6	246.4
75°	123.2	176.3	216.8	194.9	189.8
77.5°	91.1	144.3	155.2	143.4	134.1
80°	65.0	113.9	104.6	89.4	85.2
82.5°	44.7	71.7	57.4	44.7	38.8
85°	25.3	32.1	20.2	12.7	10.1
87.5°	11.0	7.6	4.2	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)