

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: P311921

Luminaire Tested: **14FCZ2-35-UNV-L83050-HRP-CA125-W2A-U-3500K**

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: P311921  
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-3500K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET  
Light Source: (168) 3500K 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**

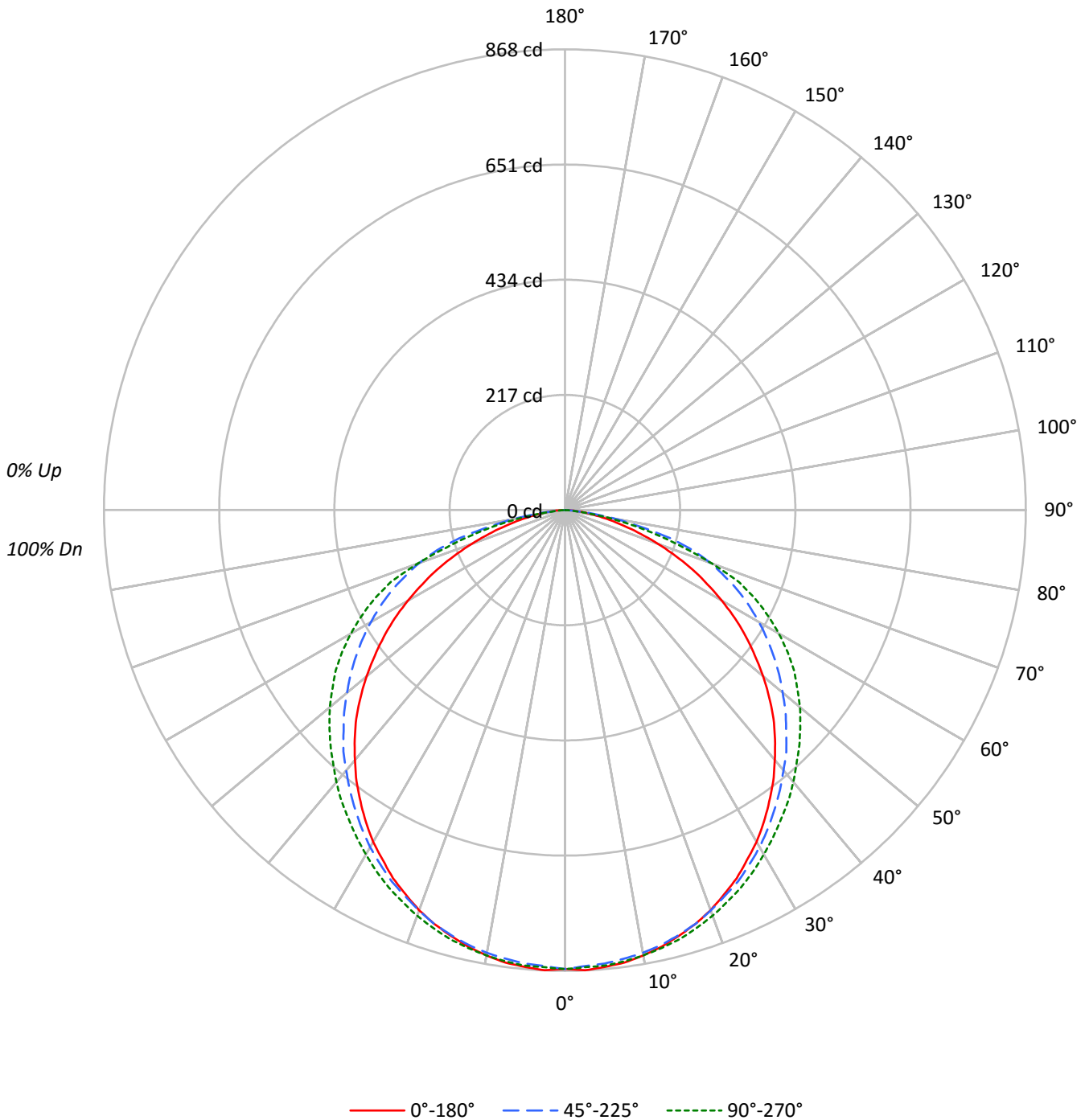
Lumens per Lamp: N/A  
Luminaire Lumens: 2546.0 lumens  
Efficiency: N/A  
Efficacy: 86.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.5  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2327	2327	2327
5°	2333	2316	2327
10°	2328	2314	2328
15°	2313	2308	2331
20°	2297	2300	2329
25°	2273	2292	2330
30°	2244	2279	2328
35°	2204	2262	2333
40°	2160	2250	2351
45°	2114	2242	2377
50°	2041	2242	2420
55°	1953	2254	2472
60°	1836	2271	2503
65°	1692	2294	2518
70°	1474	2299	2318
75°	1215	2140	1873
80°	955	1539	1254
85°	741	593	296



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.9	3.2
10°-20°	234.9	9.2
20°-30°	356.7	14.0
30°-40°	432.2	17.0
40°-50°	455.4	17.9
50°-60°	425.2	16.7
60°-70°	339.8	13.3
70°-80°	187.0	7.3
80°-90°	33.0	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°	673.4	26.5
0°-40°	1105.6	43.4
0°-60°	1986.2	78.0
0°-90°	2546.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2546.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	865	865	865	865	865	
5°	864	861	857	863	861	82
15°	830	830	829	837	837	234
25°	765	767	772	783	785	352
35°	671	677	688	706	710	420
45°	556	566	589	616	624	427
55°	416	437	480	514	527	372
65°	266	299	360	390	396	262
75°	117	167	206	185	180	126
85°	24	30	19	12	10	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	864.6	864.6	864.6	864.6	864.6
2.5°	867.8	865.4	859.8	864.6	862.2
5°	863.8	861.4	857.4	863.0	861.4
7.5°	859.8	856.6	852.6	859.0	857.4
10°	851.8	849.4	847.0	852.6	851.8
12.5°	842.2	841.4	839.0	845.4	844.6
15°	830.2	830.2	828.6	836.6	836.6
17.5°	817.4	816.6	817.4	826.2	825.4
20°	802.2	802.2	803.0	813.4	813.4
22.5°	783.8	784.6	787.0	799.8	799.0
25°	765.4	767.0	771.8	783.0	784.6
27.5°	742.9	746.9	752.6	766.2	767.8
30°	722.1	724.5	733.3	746.1	749.3
32.5°	697.3	702.1	711.7	726.1	730.1
35°	670.9	677.3	688.5	706.1	710.1
37.5°	644.5	650.1	665.3	683.7	690.9
40°	614.9	624.5	640.5	661.3	669.3
42.5°	586.0	595.6	617.3	638.9	646.1
45°	555.6	566.0	589.2	615.7	624.5
47.5°	522.0	534.0	563.6	591.6	601.2
50°	487.6	502.8	535.6	566.8	578.0
52.5°	451.5	470.7	508.4	541.2	551.6
55°	416.3	437.1	480.4	514.0	526.8
57.5°	380.3	402.7	451.5	490.0	497.2
60°	341.1	368.3	421.9	455.5	465.1
62.5°	302.6	333.8	391.5	423.5	431.5
65°	265.8	299.4	360.3	389.9	395.5
67.5°	225.8	265.8	325.8	353.1	354.7
70°	187.3	233.8	292.2	305.0	294.6
72.5°	149.7	199.3	253.0	242.6	233.8
75°	116.9	167.3	205.8	184.9	180.1
77.5°	86.5	136.9	147.3	136.1	127.3
80°	61.6	108.1	99.3	84.9	80.9
82.5°	42.4	68.0	54.4	42.4	36.8
85°	24.0	30.4	19.2	12.0	9.6
87.5°	10.4	7.2	4.0	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)