

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: P312377

Luminaire Tested: **14FCZ2-35-UNV-L83050-S-CP125-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: P312377  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
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-S-CP125-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS, 0.125" POLYCARB 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**

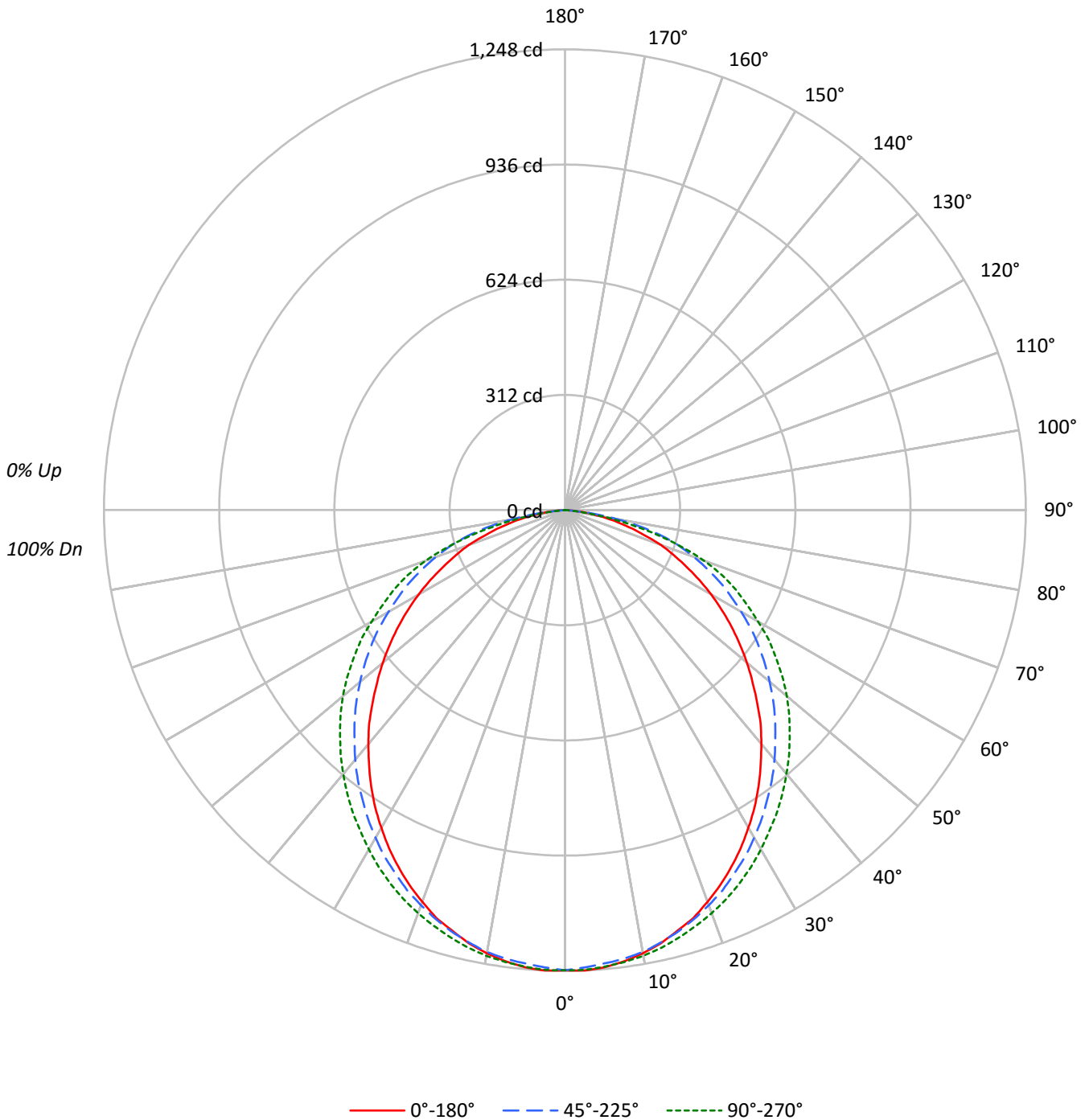
Lumens per Lamp: N/A  
Luminaire Lumens: 3492.0 lumens  
Efficiency: N/A  
Efficacy: 115.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 30.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3355	3355	3355
5°	3358	3330	3353
10°	3331	3321	3349
15°	3285	3294	3338
20°	3233	3262	3327
25°	3167	3223	3316
30°	3088	3185	3298
35°	3003	3140	3287
40°	2907	3102	3278
45°	2800	3064	3275
50°	2696	3030	3283
55°	2583	3005	3273
60°	2460	2963	3252
65°	2315	2954	3252
70°	2179	2928	3161
75°	1890	2862	2700
80°	1530	2307	1798
85°	1016	803	534



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.7	3.4
10°-20°	335.0	9.6
20°-30°	502.5	14.4
30°-40°	599.4	17.2
40°-50°	619.6	17.7
50°-60°	565.7	16.2
60°-70°	445.2	12.7
70°-80°	259.2	7.4
80°-90°	47.8	1.4
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°	955.1	27.4
0°-40°	1554.5	44.5
0°-60°	2739.9	78.5
0°-90°	3492.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3492.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1247	1247	1247	1247	1247	
5°	1243	1240	1233	1243	1241	118
15°	1179	1181	1182	1198	1198	333
25°	1066	1072	1086	1112	1117	491
35°	914	926	956	992	1001	571
45°	736	760	805	850	860	568
55°	551	580	641	687	698	492
65°	364	402	464	500	511	361
75°	182	225	275	270	260	193
85°	33	47	26	21	17	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1246.6	1246.6	1246.6	1246.6	1246.6
2.5°	1248.3	1244.9	1239.7	1248.3	1246.6
5°	1243.1	1239.7	1232.7	1243.1	1241.4
7.5°	1232.7	1229.3	1225.8	1236.2	1234.5
10°	1218.9	1217.2	1215.4	1227.5	1225.8
12.5°	1201.6	1201.6	1199.8	1213.7	1213.7
15°	1179.1	1180.8	1182.5	1198.1	1198.1
17.5°	1158.3	1156.6	1161.7	1179.1	1180.8
20°	1128.9	1132.3	1139.2	1160.0	1161.7
22.5°	1099.4	1102.9	1115.0	1135.8	1141.0
25°	1066.5	1071.7	1085.6	1111.5	1116.7
27.5°	1031.9	1038.8	1057.9	1085.6	1090.8
30°	993.8	1004.2	1025.0	1056.1	1061.3
32.5°	955.7	966.1	992.1	1023.2	1030.2
35°	914.2	926.3	955.7	992.1	1000.7
37.5°	870.9	886.5	921.1	957.4	967.8
40°	827.6	844.9	883.0	921.1	933.2
42.5°	784.3	801.6	843.2	886.5	898.6
45°	735.8	760.1	805.1	850.1	860.5
47.5°	689.1	715.1	765.3	810.3	824.1
50°	644.1	670.0	723.7	770.5	784.3
52.5°	597.3	625.0	682.2	730.6	742.8
55°	550.6	580.0	640.6	687.4	697.7
57.5°	503.8	535.0	597.3	642.3	654.5
60°	457.1	490.0	550.6	595.6	604.2
62.5°	410.3	445.0	507.3	547.1	555.8
65°	363.6	401.7	464.0	500.4	510.8
67.5°	318.6	356.7	417.3	451.9	460.5
70°	277.0	311.6	372.2	398.2	401.7
72.5°	225.1	268.4	327.2	341.1	332.4
75°	181.8	225.1	275.3	270.1	259.7
77.5°	138.5	181.8	214.7	197.4	183.5
80°	98.7	142.0	148.9	122.9	116.0
82.5°	64.1	98.7	83.1	64.1	51.9
85°	32.9	46.7	26.0	20.8	17.3
87.5°	10.4	6.9	3.5	3.5	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)