

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: P307720

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP125-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: P307720  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-39-UNV-L82765-CP125-W2A-U-3500K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB 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**

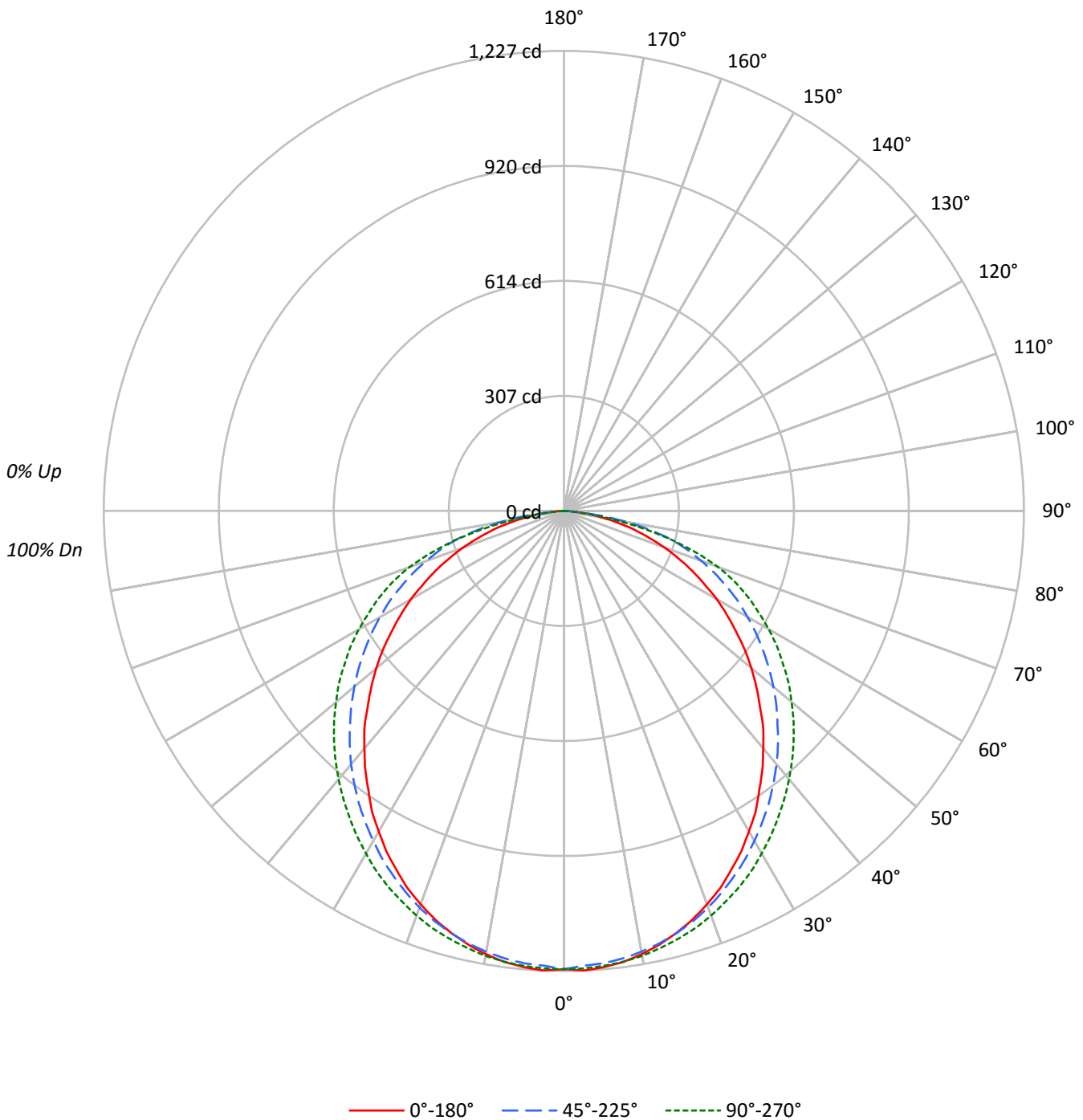
Lumens per Lamp: N/A  
Luminaire Lumens: 3547.0 lumens  
Efficiency: N/A  
Efficacy: 105.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.5  
Input Voltage (V): NR  
Input Current (A<sub>in</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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	3288	3288	3288
5°	3299	3271	3290
10°	3278	3261	3292
15°	3243	3246	3290
20°	3196	3223	3289
25°	3135	3191	3285
30°	3067	3158	3278
35°	2985	3131	3276
40°	2906	3101	3281
45°	2817	3067	3299
50°	2735	3053	3321
55°	2631	3042	3351
60°	2537	3048	3397
65°	2408	3057	3450
70°	2259	3080	3448
75°	2047	3109	3117
80°	1680	2684	2219
85°	1244	1269	513



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.6	3.3
10°-20°	330.3	9.3
20°-30°	497.6	14.0
30°-40°	597.1	16.8
40°-50°	622.3	17.5
50°-60°	576.1	16.2
60°-70°	465.5	13.1
70°-80°	283.8	8.0
80°-90°	58.6	1.7
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°	943.5	26.6
0°-40°	1540.6	43.4
0°-60°	2739.1	77.2
0°-90°	3547.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3547.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1222	1222	1222	1222	1222	
5°	1221	1218	1211	1220	1218	116
15°	1164	1165	1165	1181	1181	328
25°	1056	1062	1075	1102	1106	487
35°	909	923	953	988	997	569
45°	740	762	806	851	867	572
55°	561	590	648	699	714	502
65°	378	415	480	528	542	374
75°	197	240	299	304	300	207
85°	40	60	41	23	17	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1222.0	1222.0	1222.0	1222.0	1222.0
2.5°	1226.7	1222.7	1214.0	1222.7	1221.2
5°	1221.2	1218.0	1210.9	1219.6	1218.0
7.5°	1213.3	1210.1	1203.8	1214.0	1212.5
10°	1199.8	1198.2	1193.5	1205.3	1204.6
12.5°	1184.0	1183.2	1180.8	1194.3	1193.5
15°	1164.2	1165.0	1165.0	1180.8	1180.8
17.5°	1142.1	1143.7	1146.8	1164.2	1166.6
20°	1116.0	1119.1	1125.5	1145.2	1148.4
22.5°	1089.1	1091.5	1100.9	1124.7	1127.8
25°	1055.9	1062.2	1074.8	1101.7	1106.5
27.5°	1024.2	1029.8	1047.2	1074.8	1082.8
30°	987.1	995.8	1016.3	1046.4	1055.1
32.5°	951.5	961.0	984.7	1019.5	1027.4
35°	908.8	923.0	953.0	987.8	997.3
37.5°	870.0	883.4	917.5	955.4	966.5
40°	827.3	843.9	882.7	923.0	934.1
42.5°	787.7	803.6	845.5	886.6	901.6
45°	740.3	762.4	805.9	851.0	866.8
47.5°	696.8	718.9	768.8	817.0	831.2
50°	653.3	677.0	729.2	779.0	793.3
52.5°	608.2	633.5	689.7	739.5	756.1
55°	560.8	590.0	648.5	699.2	714.2
57.5°	515.7	545.7	608.2	659.6	674.6
60°	471.4	502.2	566.3	615.3	631.1
62.5°	422.3	458.7	525.2	573.4	585.3
65°	378.1	415.2	480.1	528.3	541.8
67.5°	331.4	371.7	436.6	480.9	493.5
70°	287.1	329.0	391.5	432.6	438.2
72.5°	239.6	282.4	345.6	371.7	371.7
75°	196.9	240.4	299.0	303.7	299.8
77.5°	150.3	198.5	236.5	227.0	217.5
80°	108.4	155.8	173.2	155.8	143.2
82.5°	72.8	113.1	104.4	83.0	73.6
85°	40.3	60.1	41.1	22.9	16.6
87.5°	15.0	13.4	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)