

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: P307741

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP250-W2A-U-5000K**

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: P307741  
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-CP250-W2A-U-5000K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET  
Light Source: (168) 5000K 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**

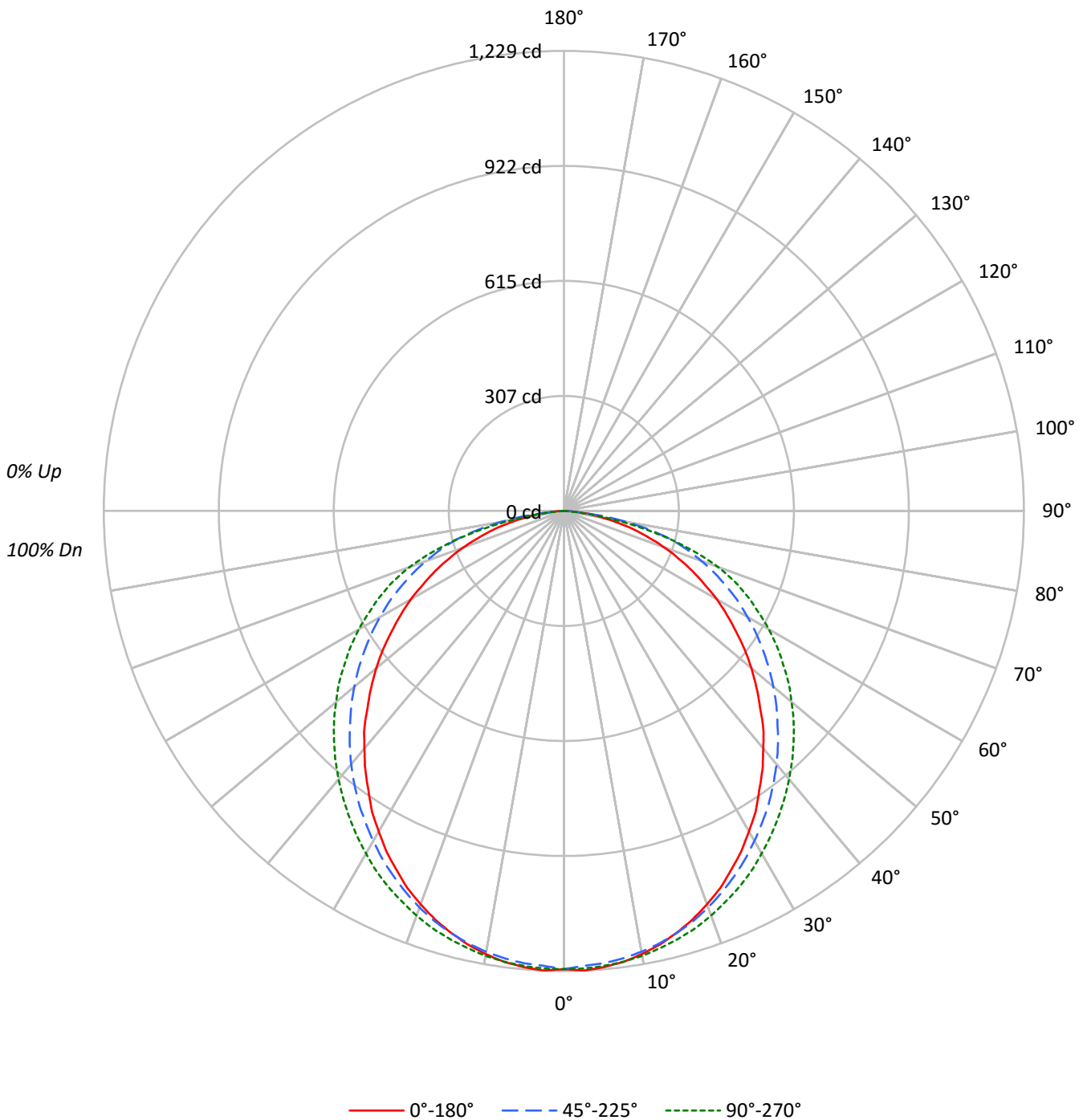
Lumens per Lamp: N/A  
Luminaire Lumens: 3553.0 lumens  
Efficiency: N/A  
Efficacy: 104.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 34.1  
Input Voltage (V): NR  
Input Current (A<sub>in</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



TEST NUMBER: P307741

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP250-W2A-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P307741

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP250-W2A-U-5000K

**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°	3294	3294	3294
5°	3304	3276	3296
10°	3284	3267	3297
15°	3249	3251	3295
20°	3201	3229	3294
25°	3140	3197	3291
30°	3072	3163	3284
35°	2990	3136	3282
40°	2911	3106	3287
45°	2822	3072	3304
50°	2740	3058	3327
55°	2635	3048	3356
60°	2541	3053	3402
65°	2411	3062	3456
70°	2263	3086	3453
75°	2051	3114	3122
80°	1681	2689	2222
85°	1247	1272	513



TEST NUMBER: P307741

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP250-W2A-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.8	3.3
10°-20°	330.9	9.3
20°-30°	498.4	14.0
30°-40°	598.1	16.8
40°-50°	623.4	17.5
50°-60°	577.1	16.2
60°-70°	466.3	13.1
70°-80°	284.3	8.0
80°-90°	58.7	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°	945.1	26.6
0°-40°	1543.2	43.4
0°-60°	2743.7	77.2
0°-90°	3553.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3553.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1224	1224	1224	1224	1224	
5°	1223	1220	1213	1222	1220	116
15°	1166	1167	1167	1183	1183	329
25°	1058	1064	1077	1104	1108	487
35°	910	925	955	990	999	570
45°	742	764	807	852	868	573
55°	562	591	650	700	715	503
65°	379	416	481	529	543	374
75°	197	241	300	304	300	207
85°	40	60	41	23	17	50
90°	0	0	0	0	0	



TEST NUMBER: P307741

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP250-W2A-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1224.0	1224.0	1224.0	1224.0	1224.0
2.5°	1228.8	1224.8	1216.1	1224.8	1223.2
5°	1223.2	1220.1	1212.9	1221.6	1220.1
7.5°	1215.3	1212.1	1205.8	1216.1	1214.5
10°	1201.8	1200.3	1195.5	1207.4	1206.6
12.5°	1186.0	1185.2	1182.8	1196.3	1195.5
15°	1166.2	1167.0	1167.0	1182.8	1182.8
17.5°	1144.0	1145.6	1148.8	1166.2	1168.6
20°	1117.9	1121.0	1127.4	1147.2	1150.3
22.5°	1090.9	1093.3	1102.8	1126.6	1129.7
25°	1057.6	1064.0	1076.7	1103.6	1108.4
27.5°	1026.0	1031.5	1048.9	1076.7	1084.6
30°	988.7	997.4	1018.0	1048.1	1056.9
32.5°	953.1	962.6	986.3	1021.2	1029.1
35°	910.3	924.6	954.7	989.5	999.0
37.5°	871.5	884.9	919.0	957.0	968.1
40°	828.7	845.3	884.1	924.6	935.6
42.5°	789.1	804.9	846.9	888.1	903.2
45°	741.5	763.7	807.3	852.5	868.3
47.5°	698.0	720.2	770.1	818.4	832.7
50°	654.4	678.2	730.5	780.4	794.6
52.5°	609.2	634.6	690.8	740.8	757.4
55°	561.7	591.0	649.6	700.3	715.4
57.5°	516.5	546.6	609.2	660.7	675.8
60°	472.2	503.1	567.2	616.4	632.2
62.5°	423.1	459.5	526.1	574.4	586.3
65°	378.7	415.9	480.9	529.2	542.7
67.5°	332.0	372.4	437.3	481.7	494.4
70°	287.6	329.6	392.2	433.4	438.9
72.5°	240.1	282.8	346.2	372.4	372.4
75°	197.3	240.8	299.5	304.2	300.3
77.5°	150.5	198.9	236.9	227.4	217.9
80°	108.5	156.1	173.5	156.1	143.4
82.5°	72.9	113.3	104.6	83.2	73.7
85°	40.4	60.2	41.2	23.0	16.6
87.5°	15.1	13.5	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)