

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: P307739

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP250-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: P307739  
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-4000K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" 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**

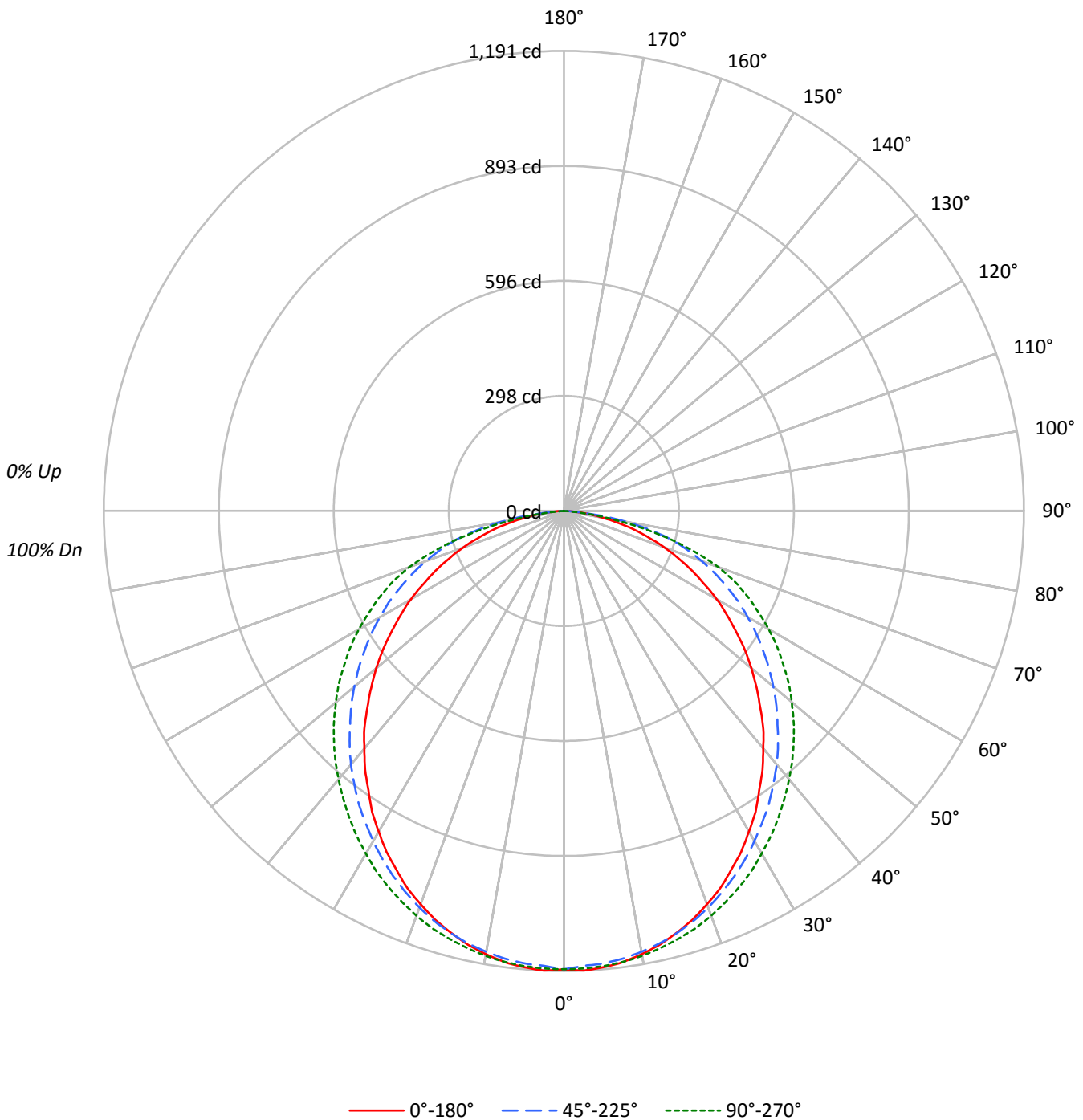
Lumens per Lamp: N/A  
Luminaire Lumens: 3444.0 lumens  
Efficiency: N/A  
Efficacy: 102.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.7  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3193	3193	3193
5°	3203	3176	3195
10°	3183	3166	3196
15°	3149	3151	3194
20°	3103	3129	3193
25°	3044	3099	3190
30°	2978	3066	3183
35°	2899	3040	3181
40°	2822	3010	3186
45°	2735	2978	3203
50°	2655	2964	3224
55°	2555	2954	3254
60°	2463	2959	3298
65°	2337	2968	3349
70°	2194	2991	3347
75°	1988	3018	3026
80°	1630	2607	2154
85°	1210	1232	497



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.3	3.3
10°-20°	320.7	9.3
20°-30°	483.1	14.0
30°-40°	579.8	16.8
40°-50°	604.3	17.5
50°-60°	559.4	16.2
60°-70°	452.0	13.1
70°-80°	275.6	8.0
80°-90°	56.9	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°	916.1	26.6
0°-40°	1495.9	43.4
0°-60°	2659.5	77.2
0°-90°	3444.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3444.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1186	1186	1186	1186	1186	
5°	1186	1183	1176	1184	1183	113
15°	1130	1131	1131	1146	1146	319
25°	1025	1031	1044	1070	1074	473
35°	882	896	925	959	968	553
45°	719	740	782	826	842	556
55°	544	573	630	679	694	488
65°	367	403	466	513	526	363
75°	191	234	290	295	291	201
85°	39	58	40	22	16	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1186.5	1186.5	1186.5	1186.5	1186.5
2.5°	1191.1	1187.2	1178.8	1187.2	1185.7
5°	1185.7	1182.6	1175.7	1184.2	1182.6
7.5°	1178.0	1175.0	1168.8	1178.8	1177.3
10°	1165.0	1163.4	1158.8	1170.3	1169.6
12.5°	1149.6	1148.8	1146.5	1159.6	1158.8
15°	1130.4	1131.2	1131.2	1146.5	1146.5
17.5°	1108.9	1110.4	1113.5	1130.4	1132.7
20°	1083.6	1086.6	1092.8	1112.0	1115.1
22.5°	1057.5	1059.8	1069.0	1092.0	1095.1
25°	1025.2	1031.3	1043.6	1069.7	1074.3
27.5°	994.5	999.9	1016.8	1043.6	1051.3
30°	958.4	966.8	986.8	1016.0	1024.4
32.5°	923.8	933.0	956.1	989.9	997.6
35°	882.4	896.2	925.4	959.2	968.4
37.5°	844.7	857.8	890.8	927.7	938.4
40°	803.3	819.4	857.0	896.2	906.9
42.5°	764.9	780.2	820.9	860.9	875.5
45°	718.8	740.3	782.5	826.3	841.7
47.5°	676.6	698.1	746.4	793.3	807.1
50°	634.3	657.4	708.0	756.4	770.2
52.5°	590.5	615.1	669.6	718.0	734.2
55°	544.5	572.9	629.7	678.9	693.5
57.5°	500.7	529.9	590.5	640.5	655.1
60°	457.7	487.6	549.8	597.5	612.8
62.5°	410.1	445.4	509.9	556.8	568.3
65°	367.1	403.2	466.1	513.0	526.0
67.5°	321.8	360.9	423.9	466.9	479.2
70°	278.8	319.5	380.1	420.1	425.4
72.5°	232.7	274.2	335.6	360.9	360.9
75°	191.2	233.5	290.3	294.9	291.0
77.5°	145.9	192.8	229.6	220.4	211.2
80°	105.2	151.3	168.2	151.3	139.0
82.5°	70.7	109.8	101.4	80.6	71.4
85°	39.2	58.4	39.9	22.3	16.1
87.5°	14.6	13.1	3.8	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)