

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: P312371

Luminaire Tested: **14FCZ2-35-UNV-L83050-S-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: P312371  
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-CA125-W2A-U-3500K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH 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**

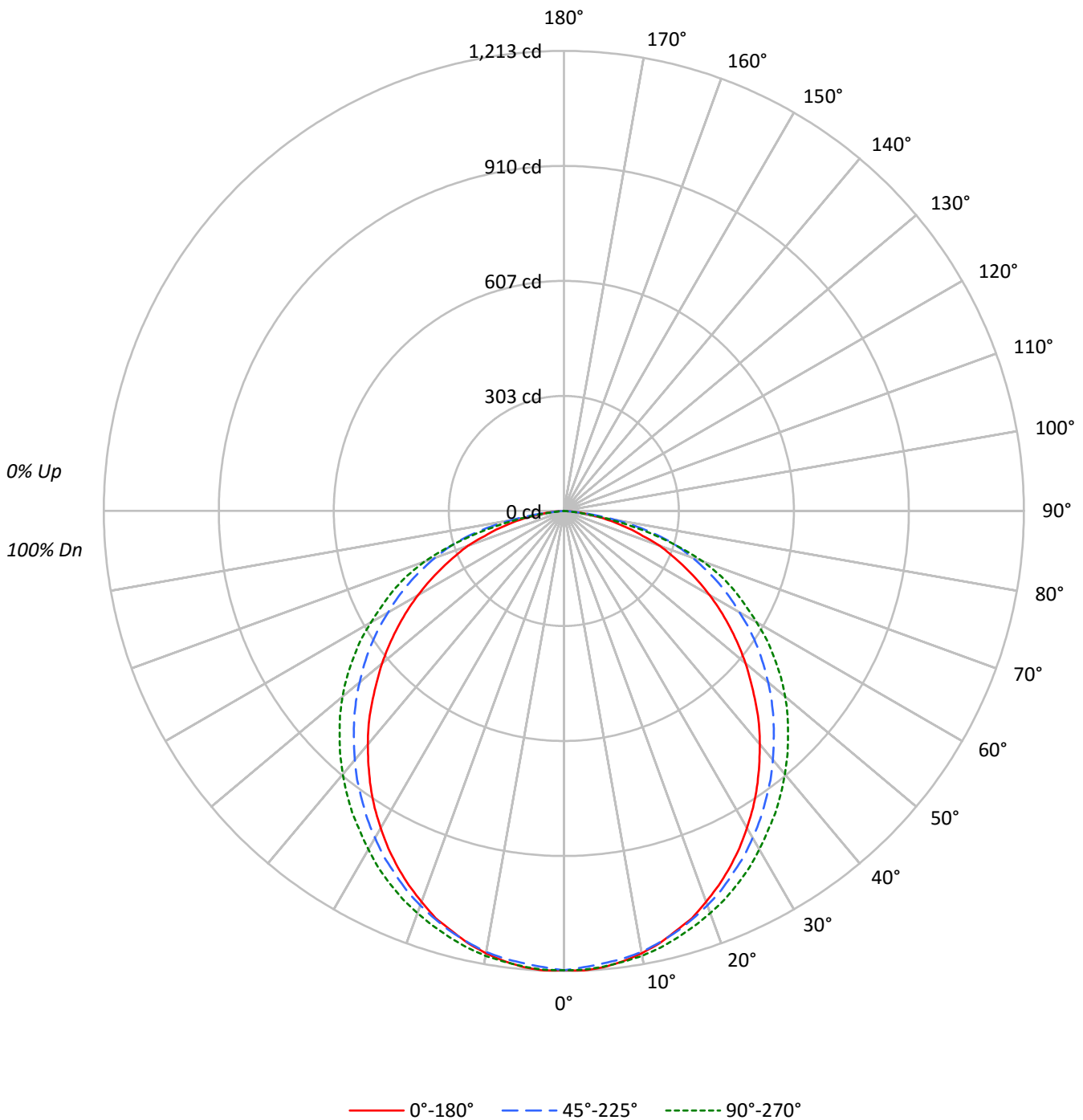
Lumens per Lamp: N/A  
Luminaire Lumens: 3392.0 lumens  
Efficiency: N/A  
Efficacy: 115.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.5  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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°	3259	3259	3259
5°	3262	3234	3257
10°	3235	3226	3254
15°	3191	3200	3242
20°	3140	3169	3232
25°	3076	3131	3221
30°	2999	3094	3203
35°	2917	3050	3193
40°	2824	3013	3184
45°	2720	2976	3181
50°	2619	2943	3190
55°	2509	2920	3180
60°	2390	2878	3159
65°	2249	2870	3159
70°	2117	2845	3070
75°	1836	2780	2623
80°	1486	2241	1746
85°	988	778	519



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.3	3.4
10°-20°	325.4	9.6
20°-30°	488.1	14.4
30°-40°	582.2	17.2
40°-50°	601.9	17.7
50°-60°	549.5	16.2
60°-70°	432.4	12.7
70°-80°	251.7	7.4
80°-90°	46.4	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°	927.8	27.4
0°-40°	1510.0	44.5
0°-60°	2661.4	78.5
0°-90°	3392.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3392.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1211	1211	1211	1211	1211	
5°	1208	1204	1197	1208	1206	114
15°	1145	1147	1149	1164	1164	323
25°	1036	1041	1054	1080	1085	477
35°	888	900	928	964	972	555
45°	715	738	782	826	836	552
55°	535	563	622	668	678	478
65°	353	390	451	486	496	351
75°	177	219	267	262	252	188
85°	32	45	25	20	17	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1210.9	1210.9	1210.9	1210.9	1210.9
2.5°	1212.6	1209.2	1204.2	1212.6	1210.9
5°	1207.5	1204.2	1197.4	1207.5	1205.8
7.5°	1197.4	1194.1	1190.7	1200.8	1199.1
10°	1184.0	1182.3	1180.6	1192.4	1190.7
12.5°	1167.2	1167.2	1165.5	1178.9	1178.9
15°	1145.3	1147.0	1148.7	1163.8	1163.8
17.5°	1125.1	1123.4	1128.5	1145.3	1147.0
20°	1096.5	1099.9	1106.6	1126.8	1128.5
22.5°	1067.9	1071.3	1083.1	1103.3	1108.3
25°	1036.0	1041.0	1054.5	1079.7	1084.8
27.5°	1002.3	1009.1	1027.6	1054.5	1059.5
30°	965.3	975.4	995.6	1025.9	1030.9
32.5°	928.3	938.4	963.7	993.9	1000.7
35°	888.0	899.8	928.3	963.7	972.1
37.5°	845.9	861.1	894.7	930.0	940.1
40°	803.9	820.7	857.7	894.7	906.5
42.5°	761.9	778.7	819.0	861.1	872.8
45°	714.8	738.3	782.0	825.8	835.8
47.5°	669.4	694.6	743.4	787.1	800.5
50°	625.6	650.9	703.0	748.4	761.9
52.5°	580.2	607.1	662.6	709.7	721.5
55°	534.8	563.4	622.3	667.7	677.8
57.5°	489.4	519.7	580.2	623.9	635.7
60°	444.0	475.9	534.8	578.5	586.9
62.5°	398.6	432.2	492.8	531.4	539.9
65°	353.2	390.2	450.7	486.0	496.1
67.5°	309.4	346.4	405.3	438.9	447.4
70°	269.1	302.7	361.6	386.8	390.2
72.5°	218.6	260.7	317.9	331.3	322.9
75°	176.6	218.6	267.4	262.4	252.3
77.5°	134.5	176.6	208.5	191.7	178.3
80°	95.9	137.9	144.6	119.4	112.7
82.5°	62.2	95.9	80.7	62.2	50.5
85°	32.0	45.4	25.2	20.2	16.8
87.5°	10.1	6.7	3.4	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)