

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: P312376

Luminaire Tested: **14FCZ2-35-UNV-L83050-S-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: P312376  
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-3500K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH 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**

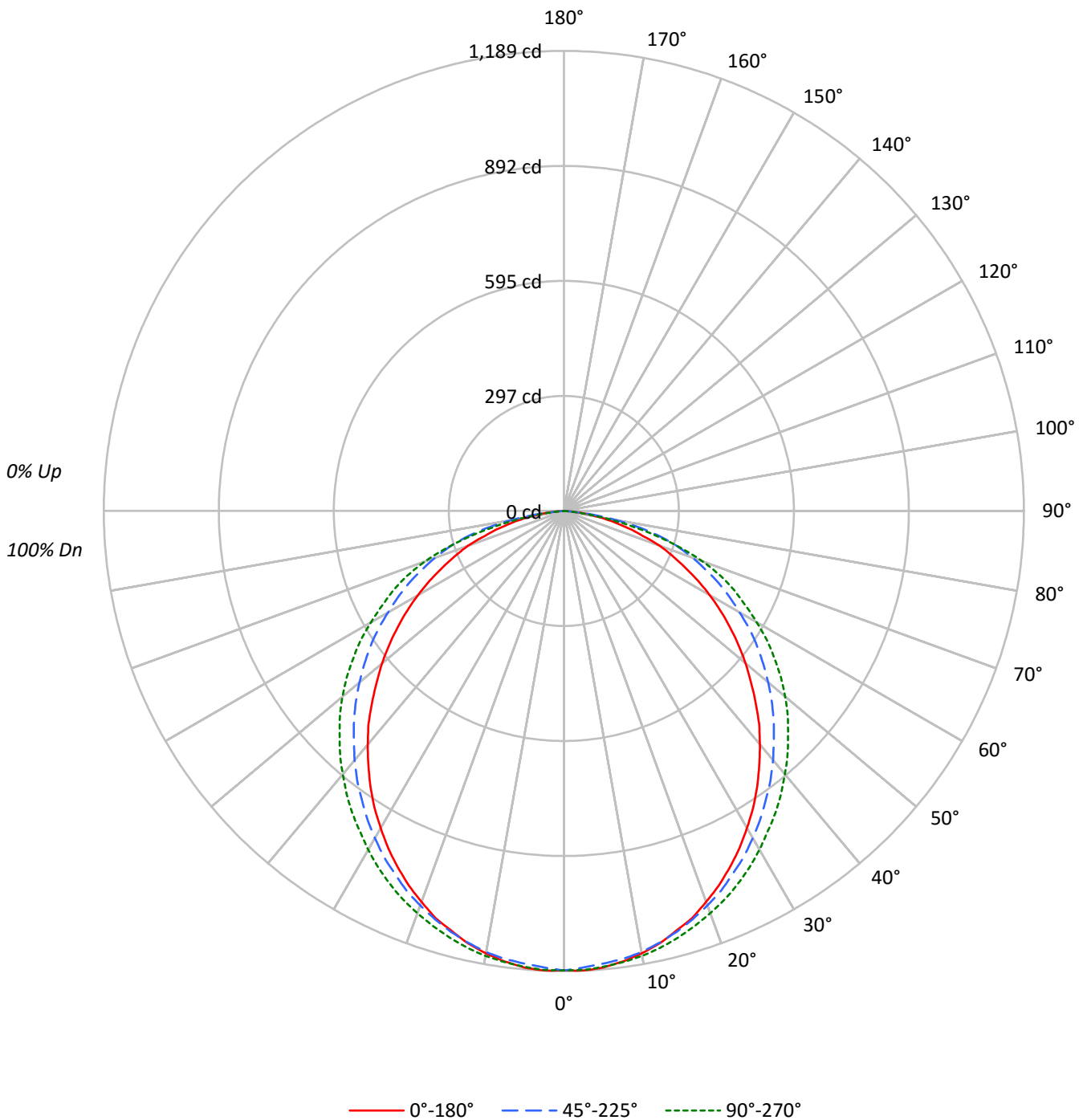
Lumens per Lamp: N/A  
Luminaire Lumens: 3326.0 lumens  
Efficiency: N/A  
Efficacy: 112.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.5  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	3195	3195	3195
5°	3198	3172	3194
10°	3172	3163	3190
15°	3129	3138	3179
20°	3079	3107	3169
25°	3016	3070	3158
30°	2941	3033	3141
35°	2860	2990	3131
40°	2769	2954	3122
45°	2667	2918	3119
50°	2568	2886	3127
55°	2460	2863	3118
60°	2343	2822	3097
65°	2205	2814	3098
70°	2076	2789	3010
75°	1801	2726	2572
80°	1457	2197	1712
85°	966	763	509



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.1	3.4
10°-20°	319.0	9.6
20°-30°	478.6	14.4
30°-40°	570.9	17.2
40°-50°	590.2	17.7
50°-60°	538.8	16.2
60°-70°	424.0	12.7
70°-80°	246.9	7.4
80°-90°	45.5	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°	909.7	27.4
0°-40°	1480.6	44.5
0°-60°	2609.6	78.5
0°-90°	3326.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3326.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1187	1187	1187	1187	1187	
5°	1184	1181	1174	1184	1182	112
15°	1123	1125	1126	1141	1141	317
25°	1016	1021	1034	1059	1064	468
35°	871	882	910	945	953	544
45°	701	724	767	810	820	541
55°	524	552	610	655	665	469
65°	346	383	442	477	486	344
75°	173	214	262	257	247	184
85°	31	44	25	20	16	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1187.3	1187.3	1187.3	1187.3	1187.3
2.5°	1189.0	1185.7	1180.7	1189.0	1187.3
5°	1184.0	1180.7	1174.1	1184.0	1182.4
7.5°	1174.1	1170.8	1167.5	1177.4	1175.8
10°	1160.9	1159.3	1157.6	1169.2	1167.5
12.5°	1144.5	1144.5	1142.8	1156.0	1156.0
15°	1123.0	1124.7	1126.3	1141.2	1141.2
17.5°	1103.2	1101.6	1106.5	1123.0	1124.7
20°	1075.2	1078.5	1085.1	1104.9	1106.5
22.5°	1047.2	1050.5	1062.0	1081.8	1086.7
25°	1015.8	1020.8	1034.0	1058.7	1063.6
27.5°	982.8	989.4	1007.6	1034.0	1038.9
30°	946.6	956.5	976.2	1005.9	1010.9
32.5°	910.3	920.2	944.9	974.6	981.2
35°	870.7	882.2	910.3	944.9	953.2
37.5°	829.5	844.3	877.3	911.9	921.8
40°	788.3	804.7	841.0	877.3	888.8
42.5°	747.0	763.5	803.1	844.3	855.9
45°	700.9	723.9	766.8	809.7	819.6
47.5°	656.3	681.1	728.9	771.8	785.0
50°	613.5	638.2	689.3	733.8	747.0
52.5°	568.9	595.3	649.7	695.9	707.4
55°	524.4	552.4	610.2	654.7	664.6
57.5°	479.9	509.6	568.9	611.8	623.3
60°	435.4	466.7	524.4	567.3	575.5
62.5°	390.8	423.8	483.2	521.1	529.3
65°	346.3	382.6	441.9	476.6	486.5
67.5°	303.4	339.7	397.4	430.4	438.7
70°	263.9	296.8	354.5	379.3	382.6
72.5°	214.4	255.6	311.7	324.9	316.6
75°	173.2	214.4	262.2	257.3	247.4
77.5°	131.9	173.2	204.5	188.0	174.8
80°	94.0	135.2	141.8	117.1	110.5
82.5°	61.0	94.0	79.2	61.0	49.5
85°	31.3	44.5	24.7	19.8	16.5
87.5°	9.9	6.6	3.3	3.3	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)