

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: P312325

Luminaire Tested: **14FCZ2-25-UNV-L83050-S-CP125-W2A-U-3000K**

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: P312325  
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: 14FCZ2-25-UNV-L83050-S-CP125-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS, 0.125" POLYCARB SHEET  
Light Source: (168) 3000K 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**

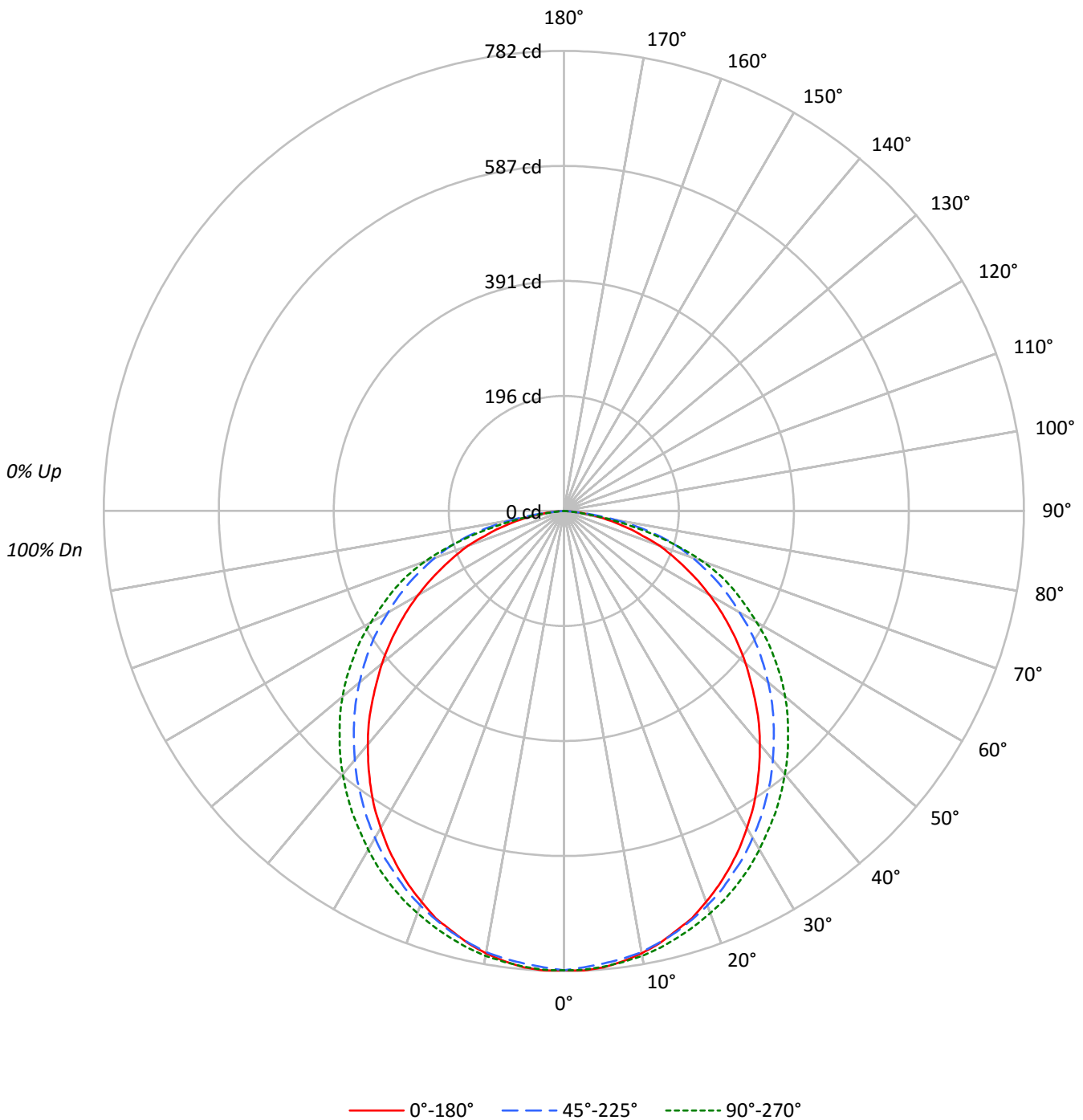
Lumens per Lamp: N/A  
Luminaire Lumens: 2187.0 lumens  
Efficiency: N/A  
Efficacy: 111.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2101	2101	2101
5°	2103	2085	2100
10°	2086	2080	2098
15°	2057	2063	2091
20°	2025	2043	2084
25°	1983	2019	2077
30°	1934	1995	2065
35°	1881	1966	2059
40°	1821	1943	2053
45°	1754	1919	2051
50°	1689	1898	2056
55°	1618	1882	2050
60°	1541	1856	2037
65°	1450	1850	2037
70°	1365	1834	1980
75°	1184	1792	1692
80°	958	1446	1127
85°	636	503	333



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.7	3.4
10°-20°	209.8	9.6
20°-30°	314.7	14.4
30°-40°	375.4	17.2
40°-50°	388.1	17.7
50°-60°	354.3	16.2
60°-70°	278.8	12.7
70°-80°	162.3	7.4
80°-90°	29.9	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°	598.2	27.4
0°-40°	973.6	44.5
0°-60°	1716.0	78.5
0°-90°	2187.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2187.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	781	781	781	781	781	
5°	779	776	772	779	778	74
15°	738	740	741	750	750	208
25°	668	671	680	696	699	308
35°	572	580	599	621	627	358
45°	461	476	504	532	539	356
55°	345	363	401	430	437	308
65°	228	252	291	313	320	226
75°	114	141	172	169	163	121
85°	21	29	16	13	11	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	780.7	780.7	780.7	780.7	780.7
2.5°	781.8	779.6	776.4	781.8	780.7
5°	778.6	776.4	772.0	778.6	777.5
7.5°	772.0	769.9	767.7	774.2	773.1
10°	763.4	762.3	761.2	768.8	767.7
12.5°	752.5	752.5	751.4	760.1	760.1
15°	738.4	739.5	740.6	750.4	750.4
17.5°	725.4	724.3	727.6	738.4	739.5
20°	707.0	709.2	713.5	726.5	727.6
22.5°	688.6	690.7	698.3	711.3	714.6
25°	668.0	671.2	679.9	696.1	699.4
27.5°	646.3	650.6	662.5	679.9	683.1
30°	622.4	628.9	641.9	661.4	664.7
32.5°	598.6	605.1	621.3	640.8	645.2
35°	572.5	580.1	598.6	621.3	626.7
37.5°	545.4	555.2	576.9	599.6	606.1
40°	518.3	529.2	553.0	576.9	584.5
42.5°	491.2	502.0	528.1	555.2	562.8
45°	460.8	476.0	504.2	532.4	538.9
47.5°	431.6	447.8	479.3	507.5	516.1
50°	403.4	419.6	453.3	482.5	491.2
52.5°	374.1	391.4	427.2	457.6	465.2
55°	344.8	363.3	401.2	430.5	437.0
57.5°	315.5	335.1	374.1	402.3	409.9
60°	286.3	306.9	344.8	373.0	378.4
62.5°	257.0	278.7	317.7	342.7	348.1
65°	227.7	251.6	290.6	313.4	319.9
67.5°	199.5	223.4	261.3	283.0	288.4
70°	173.5	195.2	233.1	249.4	251.6
72.5°	141.0	168.1	204.9	213.6	208.2
75°	113.9	141.0	172.4	169.2	162.7
77.5°	86.7	113.9	134.5	123.6	114.9
80°	61.8	88.9	93.3	77.0	72.7
82.5°	40.1	61.8	52.0	40.1	32.5
85°	20.6	29.3	16.3	13.0	10.8
87.5°	6.5	4.3	2.2	2.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)