

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: P312321

Luminaire Tested: **14FCZ2-25-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: P312321  
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-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**

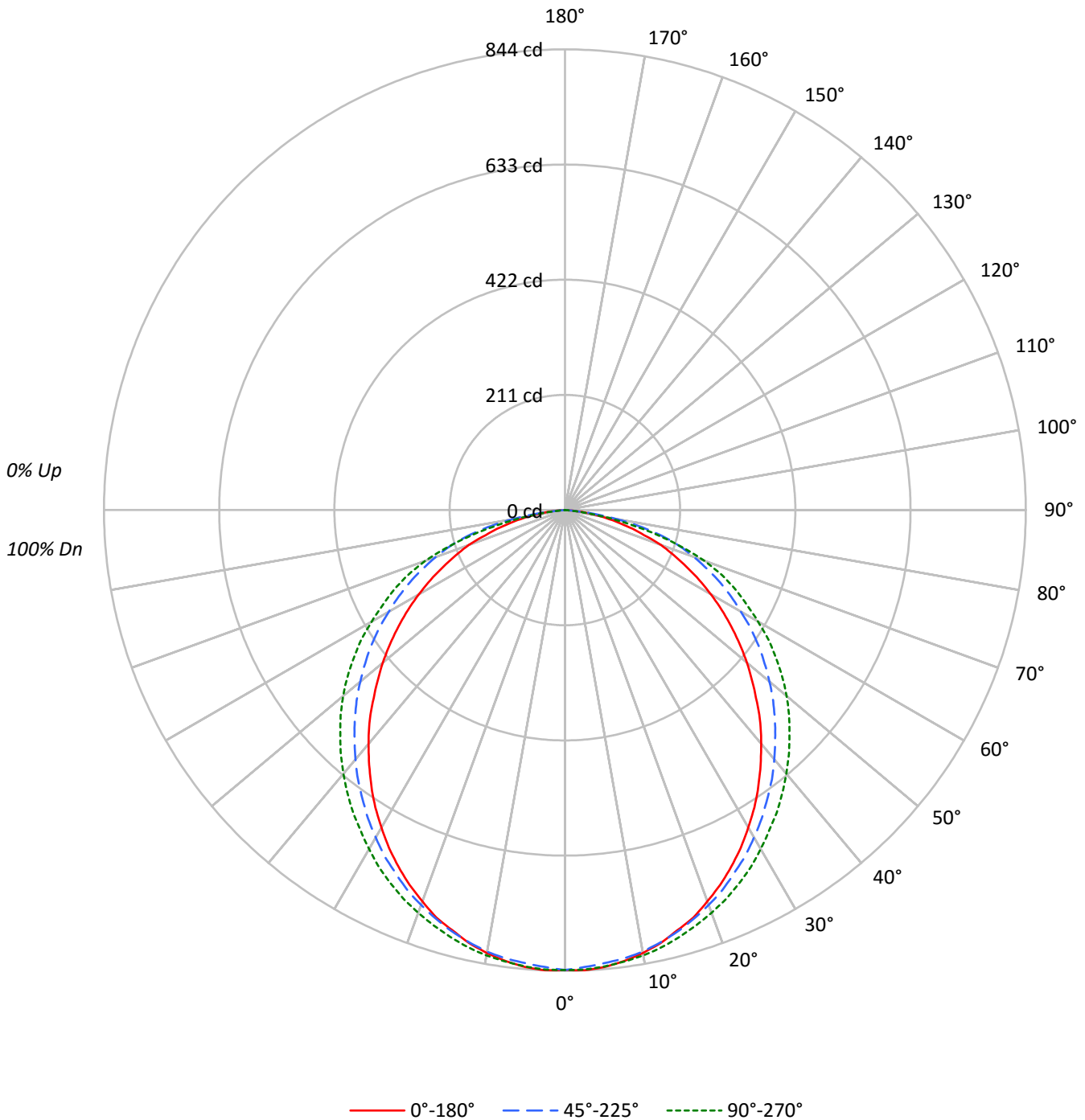
Lumens per Lamp: N/A  
Luminaire Lumens: 2360.0 lumens  
Efficiency: N/A  
Efficacy: 120.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2267	2267	2267
5°	2269	2250	2266
10°	2251	2244	2264
15°	2220	2226	2256
20°	2185	2205	2248
25°	2140	2178	2241
30°	2087	2152	2229
35°	2030	2122	2222
40°	1965	2096	2216
45°	1893	2071	2213
50°	1822	2048	2219
55°	1746	2031	2213
60°	1662	2003	2198
65°	1564	1997	2198
70°	1473	1980	2136
75°	1278	1934	1825
80°	1034	1559	1215
85°	685	543	361



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.6	3.4
10°-20°	226.4	9.6
20°-30°	339.6	14.4
30°-40°	405.1	17.2
40°-50°	418.8	17.7
50°-60°	382.3	16.2
60°-70°	300.9	12.7
70°-80°	175.1	7.4
80°-90°	32.3	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°	645.5	27.4
0°-40°	1050.6	44.5
0°-60°	1851.7	78.5
0°-90°	2360.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2360.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	842	842	842	842	842	
5°	840	838	833	840	839	80
15°	797	798	799	810	810	225
25°	721	724	734	751	755	332
35°	618	626	646	670	676	386
45°	497	514	544	574	582	384
55°	372	392	433	464	472	333
65°	246	272	314	338	345	244
75°	123	152	186	182	176	131
85°	22	32	18	14	12	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	842.5	842.5	842.5	842.5	842.5
2.5°	843.7	841.3	837.8	843.7	842.5
5°	840.1	837.8	833.1	840.1	839.0
7.5°	833.1	830.8	828.4	835.5	834.3
10°	823.8	822.6	821.4	829.6	828.4
12.5°	812.1	812.1	810.9	820.2	820.2
15°	796.8	798.0	799.2	809.7	809.7
17.5°	782.8	781.6	785.1	796.8	798.0
20°	762.9	765.3	769.9	784.0	785.1
22.5°	743.0	745.4	753.6	767.6	771.1
25°	720.8	724.3	733.7	751.2	754.7
27.5°	697.4	702.1	714.9	733.7	737.2
30°	671.6	678.7	692.7	713.8	717.3
32.5°	645.9	652.9	670.5	691.5	696.2
35°	617.8	626.0	645.9	670.5	676.3
37.5°	588.6	599.1	622.5	647.1	654.1
40°	559.3	571.0	596.8	622.5	630.7
42.5°	530.1	541.8	569.8	599.1	607.3
45°	497.3	513.7	544.1	574.5	581.5
47.5°	465.7	483.3	517.2	547.6	557.0
50°	435.3	452.8	489.1	520.7	530.1
52.5°	403.7	422.4	461.0	493.8	502.0
55°	372.1	392.0	432.9	464.5	471.6
57.5°	340.5	361.6	403.7	434.1	442.3
60°	308.9	331.1	372.1	402.5	408.4
62.5°	277.3	300.7	342.8	369.8	375.6
65°	245.7	271.5	313.6	338.2	345.2
67.5°	215.3	241.0	282.0	305.4	311.2
70°	187.2	210.6	251.6	269.1	271.5
72.5°	152.1	181.4	221.2	230.5	224.7
75°	122.9	152.1	186.0	182.5	175.5
77.5°	93.6	122.9	145.1	133.4	124.0
80°	66.7	95.9	100.6	83.1	78.4
82.5°	43.3	66.7	56.2	43.3	35.1
85°	22.2	31.6	17.6	14.0	11.7
87.5°	7.0	4.7	2.3	2.3	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)