

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: P312322

Luminaire Tested: **14FCZ2-25-UNV-L83050-S-CA125-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: P312322
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-4000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC 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: 2478.0 lumens
Efficiency: N/A
Efficacy: 123.3 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

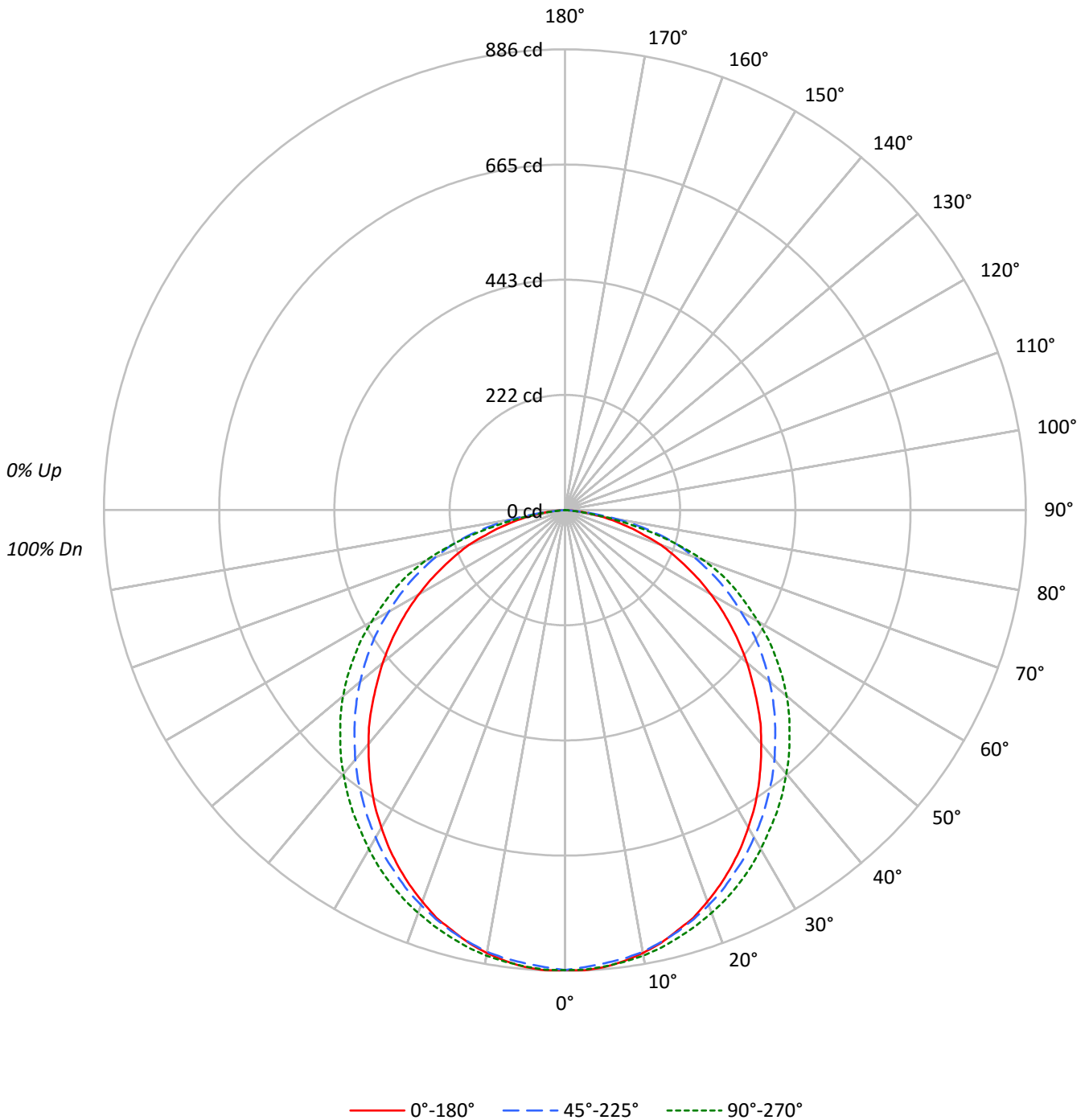
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2380	2380	2380
5°	2383	2363	2380
10°	2363	2357	2377
15°	2331	2338	2369
20°	2294	2315	2361
25°	2247	2287	2353
30°	2191	2260	2340
35°	2131	2228	2333
40°	2063	2201	2326
45°	1987	2174	2324
50°	1913	2150	2330
55°	1833	2133	2323
60°	1746	2103	2308
65°	1643	2097	2308
70°	1547	2079	2242
75°	1341	2032	1916
80°	1085	1638	1275
85°	719	568	380



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.5	3.4
10°-20°	237.7	9.6
20°-30°	356.6	14.4
30°-40°	425.3	17.2
40°-50°	439.7	17.7
50°-60°	401.5	16.2
60°-70°	315.9	12.7
70°-80°	183.9	7.4
80°-90°	33.9	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°	677.8	27.4
0°-40°	1103.1	44.5
0°-60°	1944.3	78.5
0°-90°	2478.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2478.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	885	885	885	885	885	
5°	882	880	875	882	881	84
15°	837	838	839	850	850	236
25°	757	760	770	789	792	348
35°	649	657	678	704	710	405
45°	522	539	571	603	611	403
55°	391	412	455	488	495	349
65°	258	285	329	355	362	256
75°	129	160	195	192	184	137
85°	23	33	18	15	12	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	884.6	884.6	884.6	884.6	884.6
2.5°	885.8	883.4	879.7	885.8	884.6
5°	882.1	879.7	874.8	882.1	880.9
7.5°	874.8	872.3	869.9	877.2	876.0
10°	864.9	863.7	862.5	871.1	869.9
12.5°	852.7	852.7	851.4	861.3	861.3
15°	836.7	837.9	839.1	850.2	850.2
17.5°	821.9	820.7	824.4	836.7	837.9
20°	801.1	803.5	808.4	823.2	824.4
22.5°	780.2	782.6	791.2	806.0	809.7
25°	756.8	760.5	770.3	788.8	792.5
27.5°	732.3	737.2	750.7	770.3	774.0
30°	705.2	712.6	727.3	749.5	753.1
32.5°	678.2	685.6	704.0	726.1	731.0
35°	648.7	657.3	678.2	704.0	710.1
37.5°	618.0	629.1	653.6	679.4	686.8
40°	587.3	599.6	626.6	653.6	662.2
42.5°	556.6	568.9	598.3	629.1	637.7
45°	522.2	539.4	571.3	603.3	610.6
47.5°	489.0	507.4	543.0	575.0	584.8
50°	457.0	475.5	513.6	546.7	556.6
52.5°	423.9	443.5	484.1	518.5	527.1
55°	390.7	411.6	454.6	487.8	495.1
57.5°	357.5	379.6	423.9	455.8	464.4
60°	324.4	347.7	390.7	422.6	428.8
62.5°	291.2	315.8	360.0	388.2	394.4
65°	258.0	285.0	329.3	355.1	362.4
67.5°	226.1	253.1	296.1	320.7	326.8
70°	196.6	221.2	264.2	282.6	285.0
72.5°	159.7	190.4	232.2	242.0	235.9
75°	129.0	159.7	195.4	191.7	184.3
77.5°	98.3	129.0	152.3	140.1	130.2
80°	70.0	100.7	105.7	87.2	82.3
82.5°	45.5	70.0	59.0	45.5	36.9
85°	23.3	33.2	18.4	14.7	12.3
87.5°	7.4	4.9	2.5	2.5	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)