

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: P307619

Luminaire Tested: **14FCZ2-29-UNV-L82765-CA125-W2A-U-2700K**

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: P307619
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-29-UNV-L82765-CA125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 2700K 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: 2562.0 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

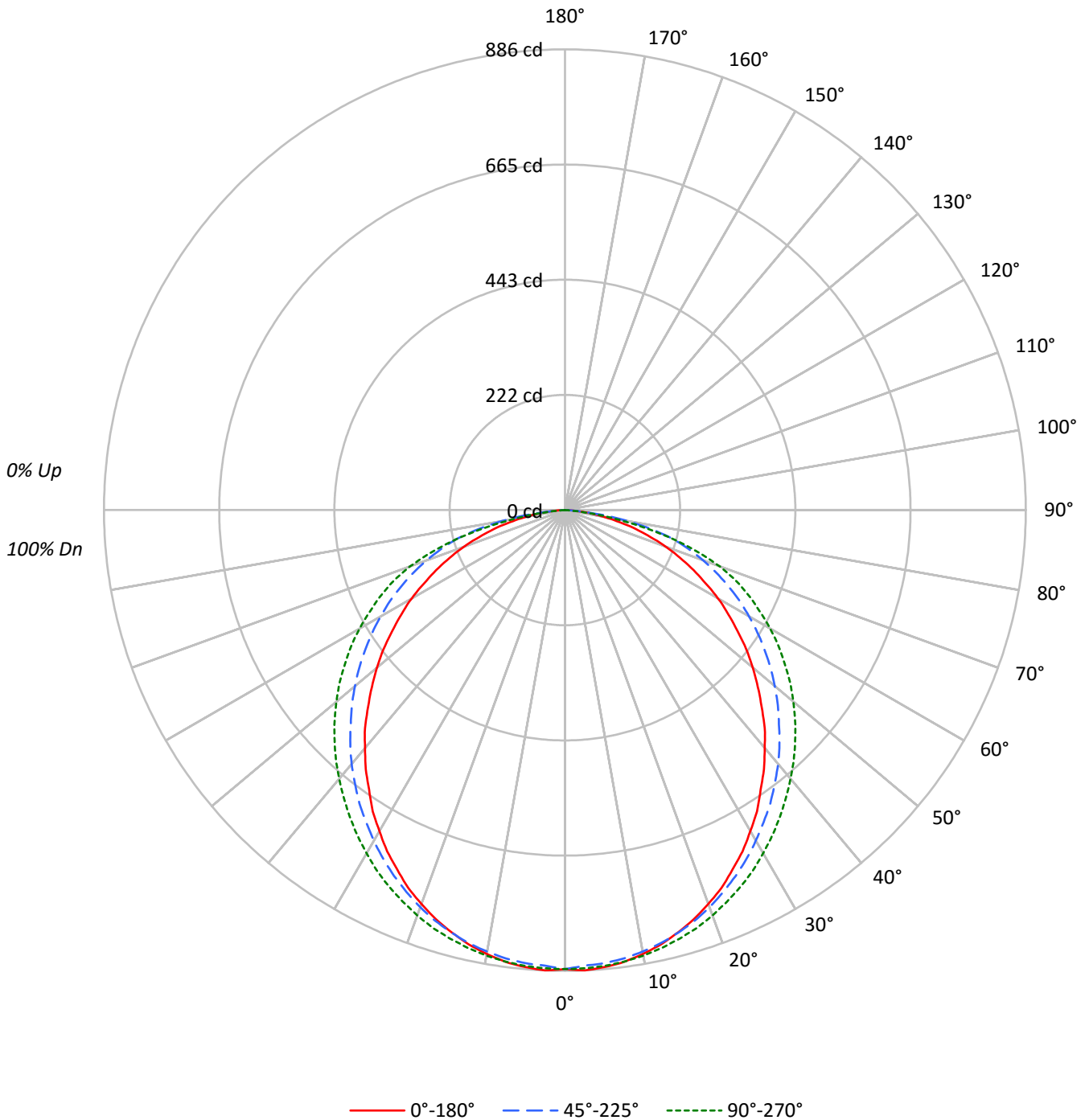
Input Watts (W): 23.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2375	2375	2375
5°	2383	2363	2377
10°	2368	2356	2377
15°	2343	2344	2376
20°	2308	2328	2375
25°	2264	2305	2373
30°	2215	2281	2368
35°	2156	2261	2367
40°	2099	2239	2370
45°	2035	2215	2383
50°	1976	2205	2399
55°	1900	2198	2420
60°	1833	2201	2454
65°	1739	2208	2492
70°	1632	2225	2490
75°	1478	2245	2251
80°	1213	1939	1602
85°	898	917	371



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.5	3.3
10°-20°	238.6	9.3
20°-30°	359.4	14.0
30°-40°	431.3	16.8
40°-50°	449.5	17.5
50°-60°	416.1	16.2
60°-70°	336.2	13.1
70°-80°	205.0	8.0
80°-90°	42.3	1.7
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°	681.5	26.6
0°-40°	1112.8	43.4
0°-60°	1978.4	77.2
0°-90°	2562.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2562.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	883	883	883	883	883	
5°	882	880	875	881	880	84
15°	841	842	842	853	853	237
25°	763	767	776	796	799	351
35°	656	667	688	714	720	411
45°	535	551	582	615	626	413
55°	405	426	468	505	516	363
65°	273	300	347	382	391	270
75°	142	174	216	219	216	149
85°	29	43	30	17	12	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	882.6	882.6	882.6	882.6	882.6
2.5°	886.0	883.2	876.9	883.2	882.0
5°	882.0	879.8	874.6	880.9	879.8
7.5°	876.3	874.0	869.5	876.9	875.8
10°	866.6	865.5	862.1	870.6	870.0
12.5°	855.2	854.6	852.9	862.6	862.1
15°	840.9	841.5	841.5	852.9	852.9
17.5°	824.9	826.1	828.3	840.9	842.6
20°	806.1	808.4	812.9	827.2	829.5
22.5°	786.6	788.4	795.2	812.4	814.6
25°	762.6	767.2	776.4	795.8	799.2
27.5°	739.8	743.8	756.4	776.4	782.1
30°	712.9	719.2	734.1	755.8	762.1
32.5°	687.2	694.1	711.2	736.4	742.1
35°	656.4	666.7	688.4	713.5	720.4
37.5°	628.4	638.1	662.7	690.1	698.1
40°	597.6	609.5	637.5	666.7	674.7
42.5°	569.0	580.4	610.7	640.4	651.3
45°	534.7	550.7	582.1	614.7	626.1
47.5°	503.3	519.3	555.3	590.1	600.4
50°	471.9	489.0	526.7	562.7	573.0
52.5°	439.3	457.6	498.2	534.1	546.1
55°	405.0	426.2	468.4	505.0	515.9
57.5°	372.5	394.2	439.3	476.4	487.3
60°	340.5	362.8	409.0	444.5	455.9
62.5°	305.1	331.3	379.3	414.2	422.7
65°	273.1	299.9	346.8	381.6	391.3
67.5°	239.4	268.5	315.3	347.3	356.5
70°	207.4	237.6	282.8	312.5	316.5
72.5°	173.1	203.9	249.6	268.5	268.5
75°	142.2	173.7	215.9	219.4	216.5
77.5°	108.5	143.4	170.8	164.0	157.1
80°	78.3	112.5	125.1	112.5	103.4
82.5°	52.6	81.7	75.4	60.0	53.1
85°	29.1	43.4	29.7	16.6	12.0
87.5°	10.9	9.7	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)