

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: P307581

Luminaire Tested: **14FCZ2-25-UNV-L82765-CA125-W2A-U-5700K**

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: P307581
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: 14FCZ2-25-UNV-L82765-CA125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 5700K 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: 2436.0 lumens
Efficiency: N/A
Efficacy: 120.6 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

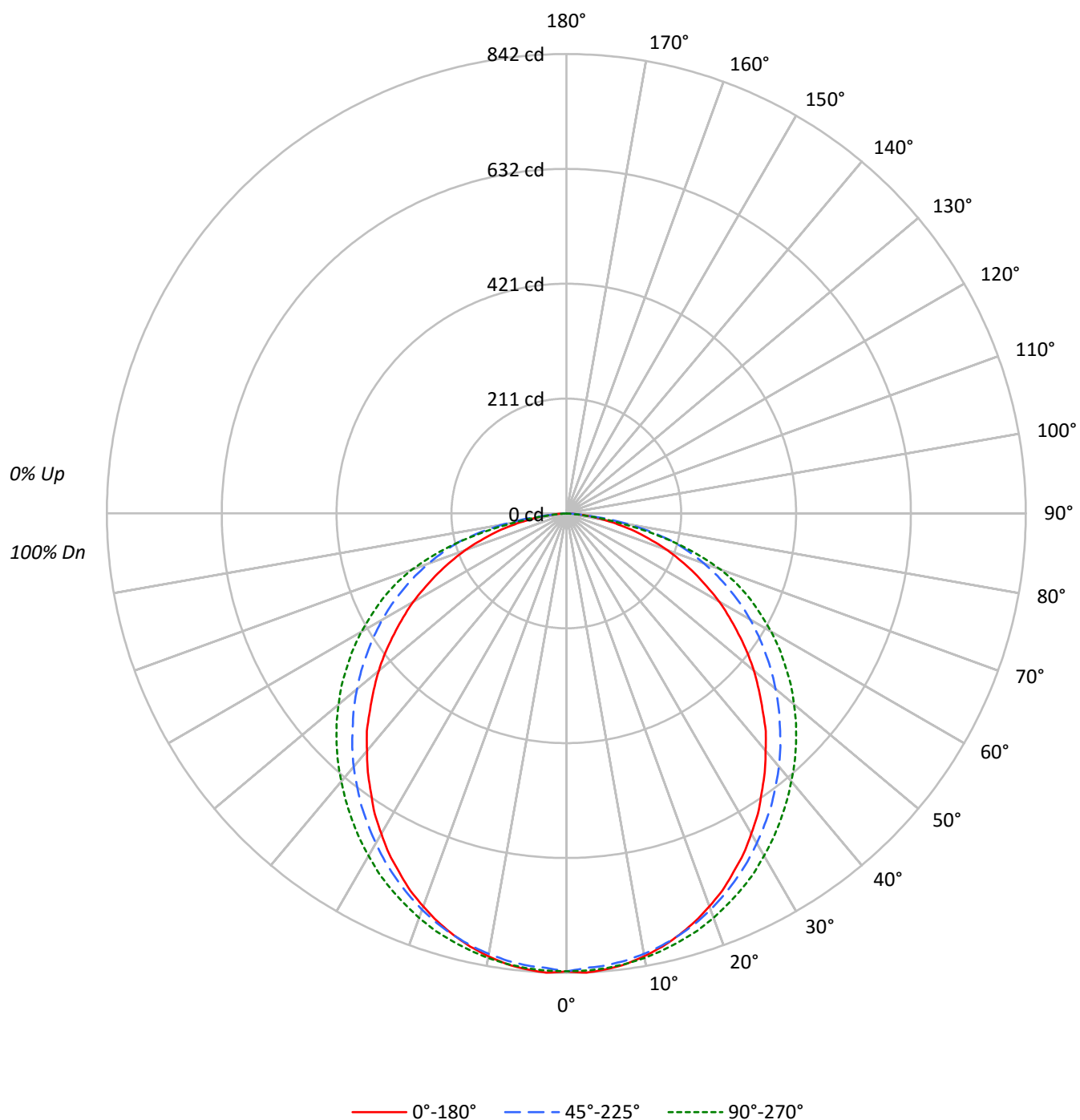
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2258	2258	2258
5°	2266	2246	2260
10°	2252	2240	2261
15°	2228	2229	2259
20°	2195	2213	2259
25°	2153	2192	2256
30°	2106	2169	2252
35°	2050	2150	2250
40°	1996	2129	2253
45°	1935	2106	2265
50°	1878	2097	2281
55°	1807	2090	2301
60°	1742	2093	2333
65°	1653	2099	2369
70°	1552	2116	2367
75°	1407	2135	2141
80°	1153	1844	1523
85°	855	871	352



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.4	3.3
10°-20°	226.8	9.3
20°-30°	341.7	14.0
30°-40°	410.1	16.8
40°-50°	427.4	17.5
50°-60°	395.7	16.2
60°-70°	319.7	13.1
70°-80°	194.9	8.0
80°-90°	40.2	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°	648.0	26.6
0°-40°	1058.1	43.4
0°-60°	1881.2	77.2
0°-90°	2436.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2436.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	839	836	832	838	836	80
15°	800	800	800	811	811	225
25°	725	730	738	757	760	334
35°	624	634	654	678	685	391
45°	508	524	554	584	595	393
55°	385	405	445	480	490	345
65°	260	285	330	363	372	257
75°	135	165	205	209	206	142
85°	28	41	28	16	11	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	839.2	839.2	839.2	839.2	839.2
2.5°	842.5	839.8	833.8	839.8	838.7
5°	838.7	836.5	831.6	837.6	836.5
7.5°	833.2	831.1	826.7	833.8	832.7
10°	824.0	822.9	819.7	827.8	827.3
12.5°	813.1	812.6	811.0	820.2	819.7
15°	799.6	800.1	800.1	811.0	811.0
17.5°	784.3	785.4	787.6	799.6	801.2
20°	766.4	768.6	772.9	786.5	788.7
22.5°	748.0	749.6	756.1	772.4	774.6
25°	725.1	729.5	738.2	756.6	759.9
27.5°	703.4	707.2	719.2	738.2	743.6
30°	677.9	683.9	698.0	718.6	724.6
32.5°	653.4	660.0	676.3	700.2	705.6
35°	624.1	633.9	654.5	678.4	684.9
37.5°	597.5	606.7	630.1	656.2	663.8
40°	568.2	579.6	606.2	633.9	641.5
42.5°	541.0	551.9	580.7	608.9	619.2
45°	508.4	523.6	553.5	584.5	595.3
47.5°	478.5	493.7	528.0	561.1	570.9
50°	448.7	465.0	500.8	535.0	544.8
52.5°	417.7	435.1	473.7	507.9	519.3
55°	385.1	405.2	445.4	480.2	490.5
57.5°	354.2	374.8	417.7	453.0	463.3
60°	323.7	344.9	388.9	422.6	433.5
62.5°	290.1	315.0	360.7	393.8	402.0
65°	259.6	285.2	329.7	362.8	372.1
67.5°	227.6	255.3	299.8	330.3	338.9
70°	197.2	226.0	268.9	297.1	300.9
72.5°	164.6	193.9	237.4	255.3	255.3
75°	135.3	165.1	205.3	208.6	205.9
77.5°	103.2	136.3	162.4	155.9	149.4
80°	74.4	107.0	119.0	107.0	98.3
82.5°	50.0	77.7	71.7	57.0	50.5
85°	27.7	41.3	28.2	15.8	11.4
87.5°	10.3	9.2	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)