

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: P306990

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CA125-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: P306990
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-20-UNV-L82765-HRP-CA125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC 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: 1433.0 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

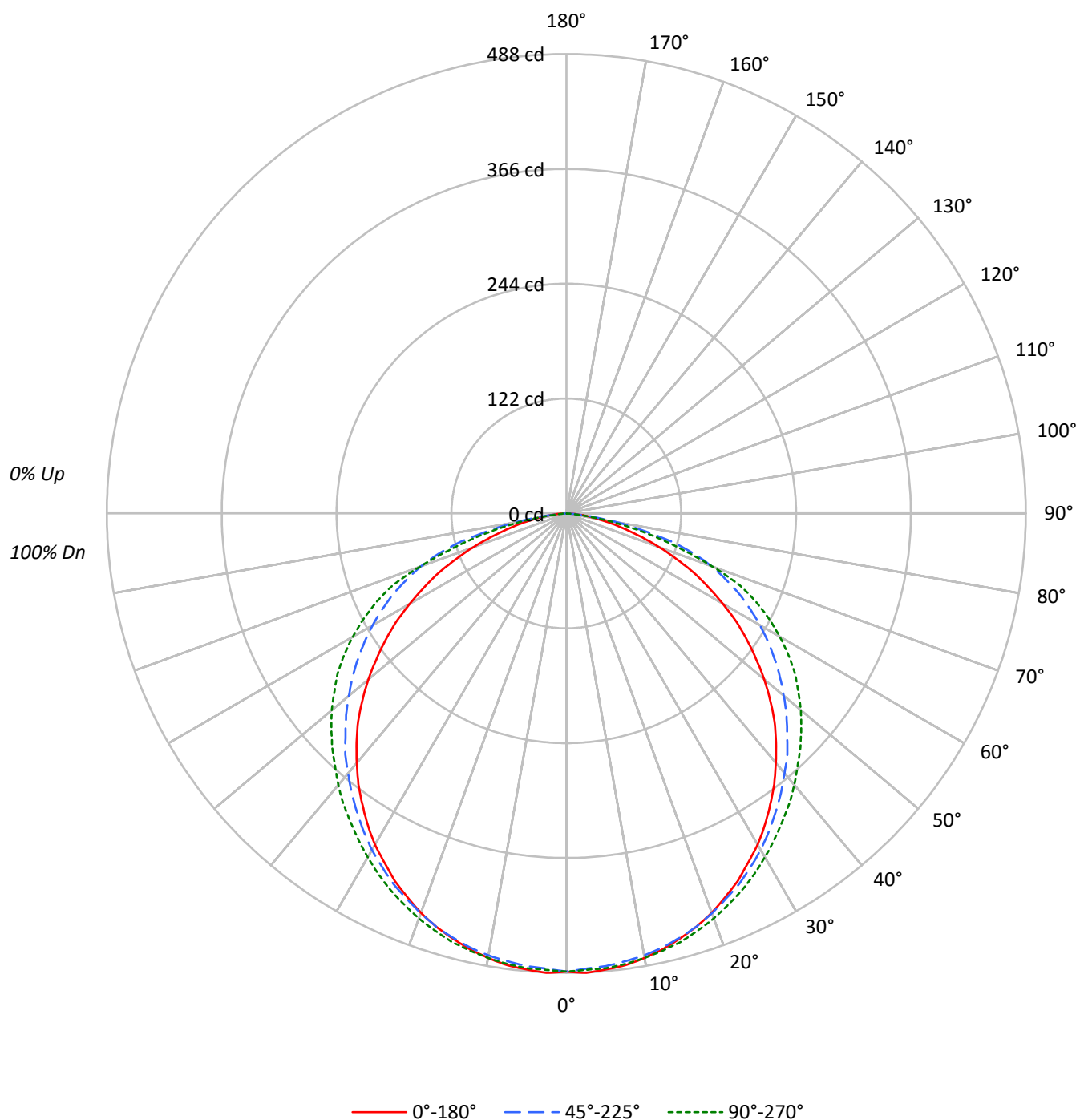
Input Watts (W): 16.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	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	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1310	1310	1310
5°	1313	1304	1310
10°	1310	1303	1310
15°	1302	1299	1312
20°	1293	1294	1311
25°	1279	1290	1311
30°	1263	1283	1311
35°	1240	1273	1313
40°	1216	1266	1323
45°	1190	1262	1338
50°	1149	1262	1362
55°	1099	1269	1391
60°	1033	1278	1409
65°	953	1291	1417
70°	829	1294	1304
75°	684	1204	1054
80°	538	866	705
85°	417	333	167



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.1	3.2
10°-20°	132.2	9.2
20°-30°	200.8	14.0
30°-40°	243.3	17.0
40°-50°	256.3	17.9
50°-60°	239.3	16.7
60°-70°	191.2	13.3
70°-80°	105.2	7.3
80°-90°	18.6	1.3
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°	379.0	26.5
0°-40°	622.3	43.4
0°-60°	1118.0	78.0
0°-90°	1433.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1433.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	487	487	487	487	487	
5°	486	485	483	486	485	46
15°	467	467	466	471	471	132
25°	431	432	434	441	442	198
35°	378	381	388	397	400	236
45°	313	319	332	346	352	241
55°	234	246	270	289	296	209
65°	150	168	203	219	223	147
75°	66	94	116	104	101	71
85°	14	17	11	7	5	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	486.7	486.7	486.7	486.7	486.7
2.5°	488.5	487.1	484.0	486.7	485.3
5°	486.2	484.9	482.6	485.8	484.9
7.5°	484.0	482.1	479.9	483.5	482.6
10°	479.4	478.1	476.7	479.9	479.4
12.5°	474.0	473.6	472.2	475.8	475.4
15°	467.3	467.3	466.4	470.9	470.9
17.5°	460.1	459.6	460.1	465.0	464.6
20°	451.5	451.5	452.0	457.8	457.8
22.5°	441.1	441.6	442.9	450.2	449.7
25°	430.8	431.7	434.4	440.7	441.6
27.5°	418.2	420.4	423.6	431.2	432.1
30°	406.4	407.8	412.8	420.0	421.8
32.5°	392.5	395.2	400.6	408.7	411.0
35°	377.6	381.2	387.5	397.4	399.7
37.5°	362.7	365.9	374.5	384.8	388.9
40°	346.1	351.5	360.5	372.2	376.7
42.5°	329.8	335.3	347.4	359.6	363.6
45°	312.7	318.6	331.6	346.5	351.5
47.5°	293.8	300.6	317.2	333.0	338.4
50°	274.4	283.0	301.5	319.0	325.3
52.5°	254.1	265.0	286.1	304.6	310.5
55°	234.3	246.0	270.4	289.3	296.5
57.5°	214.0	226.7	254.1	275.8	279.8
60°	192.0	207.3	237.5	256.4	261.8
62.5°	170.3	187.9	220.3	238.4	242.9
65°	149.6	168.5	202.8	219.4	222.6
67.5°	127.1	149.6	183.4	198.7	199.6
70°	105.4	131.6	164.5	171.7	165.8
72.5°	84.3	112.2	142.4	136.5	131.6
75°	65.8	94.2	115.8	104.1	101.4
77.5°	48.7	77.1	82.9	76.6	71.6
80°	34.7	60.8	55.9	47.8	45.5
82.5°	23.9	38.3	30.6	23.9	20.7
85°	13.5	17.1	10.8	6.8	5.4
87.5°	5.9	4.1	2.3	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)