

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: P307311

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-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: P307311
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
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-RDP-CA125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 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: 1563.0 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

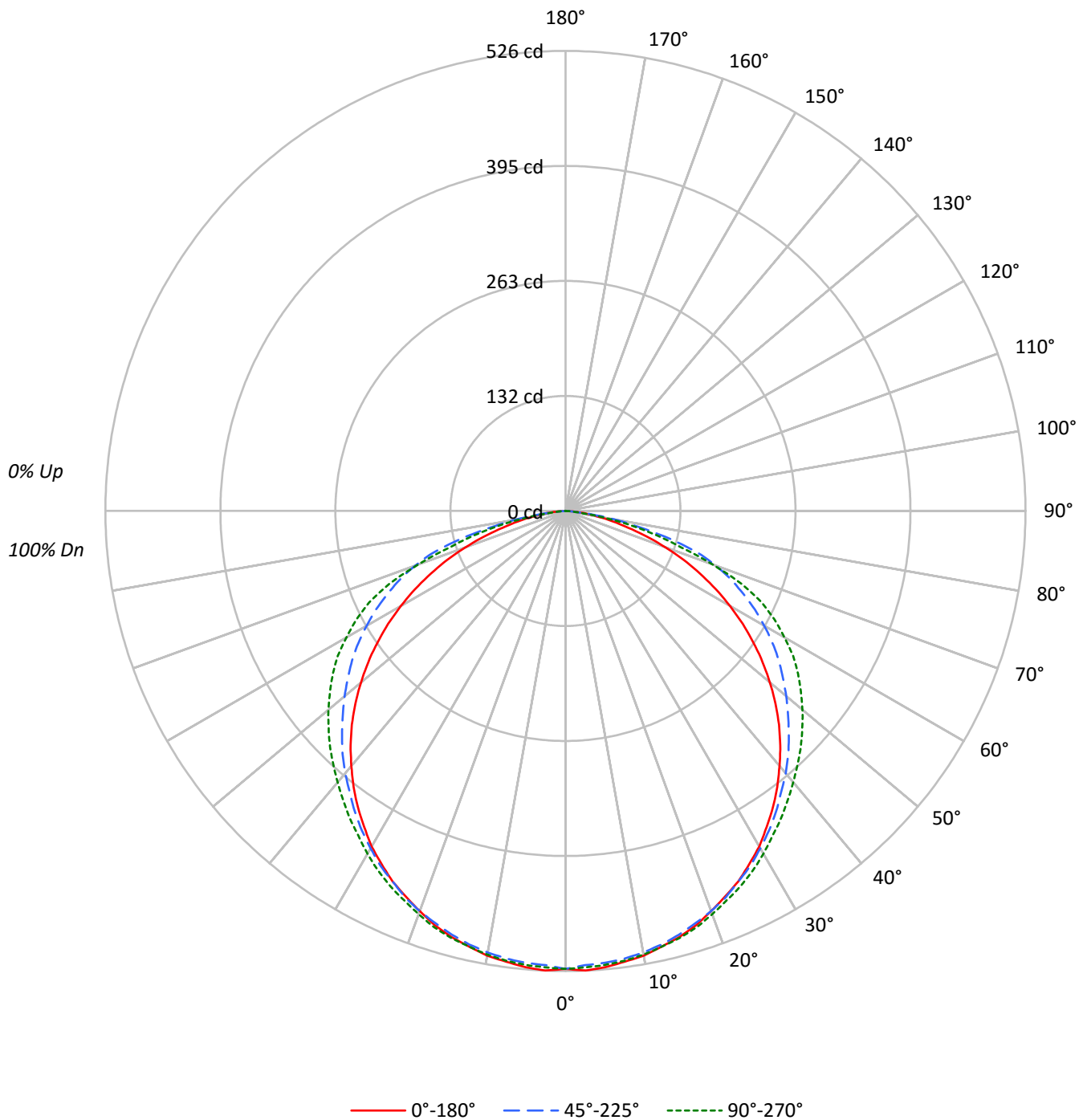
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1409	1409	1409
5°	1414	1401	1407
10°	1411	1400	1407
15°	1404	1397	1407
20°	1394	1394	1405
25°	1388	1388	1406
30°	1377	1384	1407
35°	1359	1379	1411
40°	1337	1376	1423
45°	1314	1375	1449
50°	1277	1379	1482
55°	1231	1397	1523
60°	1169	1412	1556
65°	1080	1429	1577
70°	960	1440	1412
75°	774	1294	1129
80°	604	908	738
85°	414	262	188



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.5	3.2
10°-20°	142.2	9.1
20°-30°	216.5	13.8
30°-40°	263.6	16.9
40°-50°	279.7	17.9
50°-60°	264.0	16.9
60°-70°	213.1	13.6
70°-80°	115.6	7.4
80°-90°	18.7	1.2
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°	408.2	26.1
0°-40°	671.8	43.0
0°-60°	1215.5	77.8
0°-90°	1563.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1563.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	524	524	524	524	524	
5°	524	522	519	522	521	50
15°	504	503	502	505	505	142
25°	467	466	467	472	474	215
35°	414	416	420	428	430	259
45°	345	350	361	375	381	266
55°	262	273	298	317	325	234
65°	170	190	224	243	248	168
75°	74	109	124	112	109	81
85°	13	15	8	7	6	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	523.5	523.5	523.5	523.5	523.5
2.5°	525.9	523.5	519.8	523.5	522.3
5°	523.5	522.3	518.6	522.3	521.0
7.5°	519.8	519.8	516.2	518.6	518.6
10°	516.2	514.9	512.5	516.2	514.9
12.5°	510.1	508.8	507.6	511.3	510.1
15°	504.0	502.7	501.5	505.2	505.2
17.5°	496.6	495.4	494.2	499.1	499.1
20°	486.9	486.9	486.9	491.8	490.5
22.5°	477.1	477.1	478.3	483.2	482.0
25°	467.4	466.1	467.4	472.2	473.5
27.5°	455.2	456.4	457.6	462.5	463.7
30°	443.0	444.2	445.4	451.5	452.7
32.5°	428.3	430.7	433.2	440.5	440.5
35°	413.7	416.1	419.8	428.3	429.5
37.5°	397.8	400.2	405.1	414.9	417.3
40°	380.7	384.4	391.7	401.5	405.1
42.5°	363.6	368.5	377.1	388.0	392.9
45°	345.3	350.2	361.2	374.6	380.7
47.5°	325.8	331.9	345.3	362.4	367.3
50°	305.1	313.6	329.5	347.8	353.9
52.5°	284.3	294.1	313.6	333.1	339.2
55°	262.4	273.3	297.7	317.3	324.6
57.5°	240.4	252.6	280.7	301.4	308.7
60°	217.2	231.8	262.4	283.1	289.2
62.5°	194.0	211.1	244.1	264.8	269.7
65°	169.6	190.4	224.5	242.8	247.7
67.5°	146.4	170.8	205.0	218.4	218.4
70°	122.0	148.9	183.0	186.7	179.4
72.5°	97.6	128.1	158.6	145.2	139.1
75°	74.4	108.6	124.5	112.3	108.6
77.5°	56.1	87.9	87.9	80.5	78.1
80°	39.0	67.1	58.6	51.3	47.6
82.5°	25.6	37.8	30.5	24.4	20.7
85°	13.4	14.6	8.5	7.3	6.1
87.5°	4.9	2.4	1.2	2.4	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)