

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: P307320

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CP125-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: P307320
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-CP125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB 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: 1533.0 lumens
Efficiency: N/A
Efficacy: 75.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

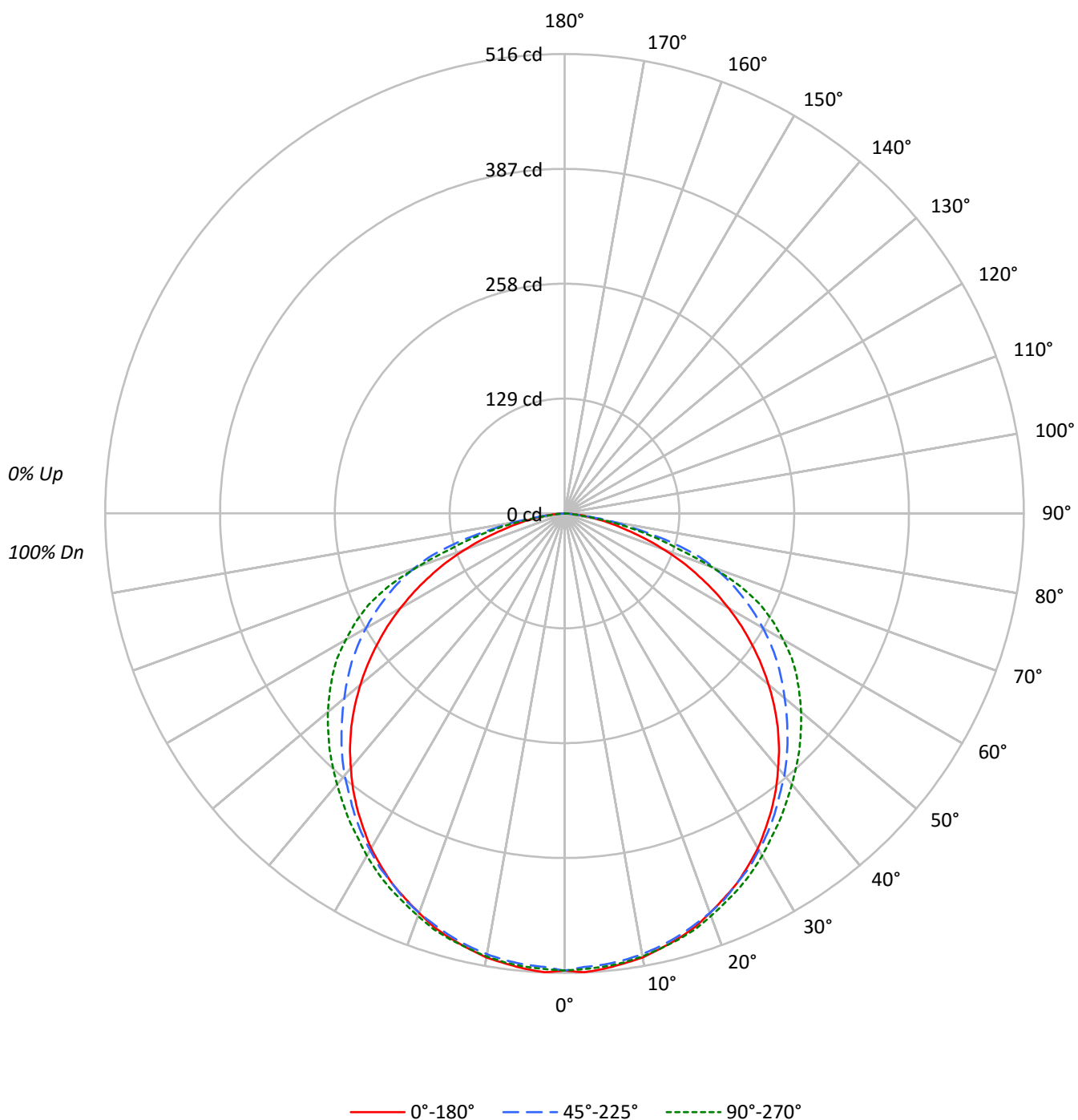
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1382	1382	1382
5°	1387	1374	1380
10°	1383	1374	1380
15°	1377	1370	1380
20°	1367	1367	1378
25°	1361	1361	1379
30°	1350	1357	1380
35°	1333	1352	1384
40°	1312	1350	1396
45°	1289	1348	1421
50°	1253	1353	1453
55°	1207	1370	1494
60°	1146	1385	1526
65°	1060	1402	1547
70°	942	1412	1384
75°	759	1269	1107
80°	594	890	724
85°	408	259	185



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.6	3.2
10°-20°	139.4	9.1
20°-30°	212.3	13.8
30°-40°	258.6	16.9
40°-50°	274.3	17.9
50°-60°	258.9	16.9
60°-70°	209.1	13.6
70°-80°	113.4	7.4
80°-90°	18.4	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°	400.3	26.1
0°-40°	658.9	43.0
0°-60°	1192.2	77.8
0°-90°	1533.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1533.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	513	513	513	513	513	
5°	513	512	509	512	511	49
15°	494	493	492	496	496	139
25°	458	457	458	463	464	211
35°	406	408	412	420	421	254
45°	339	344	354	367	373	261
55°	257	268	292	311	318	230
65°	166	187	220	238	243	165
75°	73	106	122	110	106	80
85°	13	14	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°	513.4	513.4	513.4	513.4	513.4
2.5°	515.8	513.4	509.9	513.4	512.2
5°	513.4	512.2	508.7	512.2	511.0
7.5°	509.9	509.9	506.3	508.7	508.7
10°	506.3	505.1	502.7	506.3	505.1
12.5°	500.3	499.1	497.9	501.5	500.3
15°	494.3	493.1	491.9	495.5	495.5
17.5°	487.1	485.9	484.7	489.5	489.5
20°	477.5	477.5	477.5	482.3	481.1
22.5°	468.0	468.0	469.2	473.9	472.7
25°	458.4	457.2	458.4	463.2	464.4
27.5°	446.4	447.6	448.8	453.6	454.8
30°	434.4	435.6	436.8	442.8	444.0
32.5°	420.1	422.5	424.9	432.1	432.1
35°	405.7	408.1	411.7	420.1	421.3
37.5°	390.2	392.6	397.3	406.9	409.3
40°	373.4	377.0	384.2	393.8	397.3
42.5°	356.7	361.4	369.8	380.6	385.4
45°	338.7	343.5	354.3	367.4	373.4
47.5°	319.6	325.5	338.7	355.5	360.2
50°	299.2	307.6	323.1	341.1	347.1
52.5°	278.9	288.4	307.6	326.7	332.7
55°	257.3	268.1	292.0	311.2	318.4
57.5°	235.8	247.7	275.3	295.6	302.8
60°	213.0	227.4	257.3	277.7	283.6
62.5°	190.3	207.1	239.4	259.7	264.5
65°	166.4	186.7	220.2	238.2	243.0
67.5°	143.6	167.6	201.1	214.2	214.2
70°	119.7	146.0	179.5	183.1	175.9
72.5°	95.7	125.7	155.6	142.4	136.4
75°	73.0	106.5	122.1	110.1	106.5
77.5°	55.1	86.2	86.2	79.0	76.6
80°	38.3	65.8	57.4	50.3	46.7
82.5°	25.1	37.1	29.9	23.9	20.3
85°	13.2	14.4	8.4	7.2	6.0
87.5°	4.8	2.4	1.2	2.4	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)