

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: P312051

Luminaire Tested: **14FCZ2-29-UNV-L83050-RDP-CP125-W2A-U-3500K**

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: P312051
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: 14FCZ2-29-UNV-L83050-RDP-CP125-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB SHEET
Light Source: (168) 3500K 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: 1757.0 lumens
Efficiency: N/A
Efficacy: 73.8 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

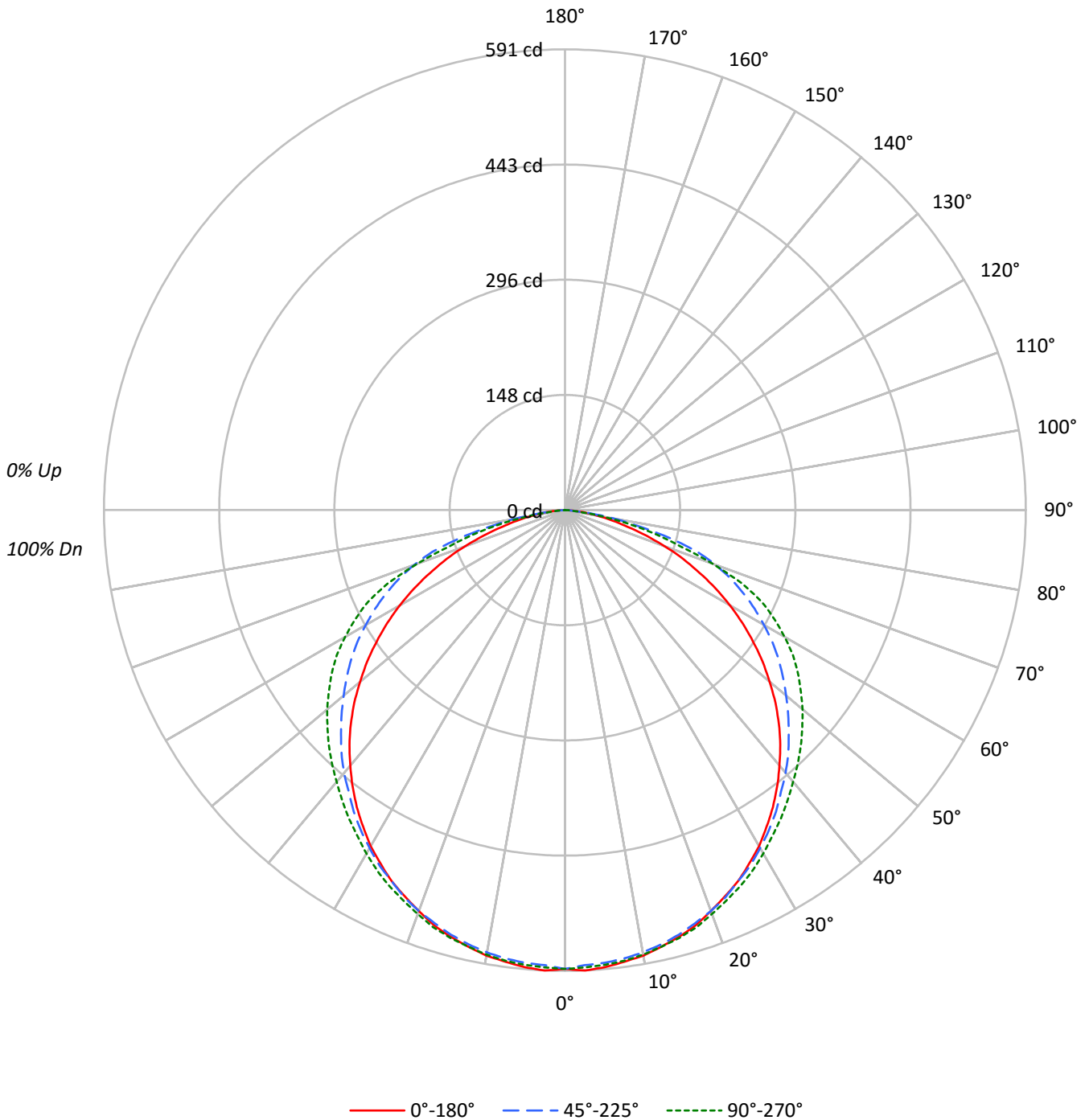
Input Watts (W): 23.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P312051

CATALOG NUMBER: 14FCZ2-29-UNV-L83050-RDP-CP125-W2A-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P312051

CATALOG NUMBER: 14FCZ2-29-UNV-L83050-RDP-CP125-W2A-U-3500K

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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1584	1584	1584
5°	1590	1575	1582
10°	1585	1574	1582
15°	1578	1571	1582
20°	1567	1567	1579
25°	1560	1560	1580
30°	1547	1556	1581
35°	1528	1550	1586
40°	1503	1547	1600
45°	1477	1545	1629
50°	1436	1551	1665
55°	1384	1570	1712
60°	1314	1587	1750
65°	1214	1607	1773
70°	1079	1619	1586
75°	870	1455	1269
80°	680	1020	829
85°	466	296	213



TEST NUMBER: P312051

CATALOG NUMBER: 14FCZ2-29-UNV-L83050-RDP-CP125-W2A-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.7	3.2
10°-20°	159.8	9.1
20°-30°	243.3	13.8
30°-40°	296.4	16.9
40°-50°	314.4	17.9
50°-60°	296.7	16.9
60°-70°	239.6	13.6
70°-80°	130.0	7.4
80°-90°	21.0	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°	458.8	26.1
0°-40°	755.2	43.0
0°-60°	1366.4	77.8
0°-90°	1757.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1757.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	588	588	588	588	588	
5°	588	587	583	587	586	56
15°	566	565	564	568	568	160
25°	525	524	525	531	532	242
35°	465	468	472	482	483	291
45°	388	394	406	421	428	299
55°	295	307	335	357	365	263
65°	191	214	252	273	278	189
75°	84	122	140	126	122	91
85°	15	16	10	8	7	19
90°	0	0	0	0	0	



TEST NUMBER: P312051

CATALOG NUMBER: 14FC22-29-UNV-L83050-RDP-CP125-W2A-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	588.5	588.5	588.5	588.5	588.5
2.5°	591.2	588.5	584.3	588.5	587.1
5°	588.5	587.1	583.0	587.1	585.7
7.5°	584.3	584.3	580.2	583.0	583.0
10°	580.2	578.9	576.1	580.2	578.9
12.5°	573.4	572.0	570.6	574.7	573.4
15°	566.5	565.1	563.8	567.9	567.9
17.5°	558.3	556.9	555.5	561.0	561.0
20°	547.3	547.3	547.3	552.8	551.4
22.5°	536.3	536.3	537.7	543.2	541.8
25°	525.4	524.0	525.4	530.9	532.2
27.5°	511.6	513.0	514.4	519.9	521.3
30°	497.9	499.3	500.7	507.5	508.9
32.5°	481.5	484.2	487.0	495.2	495.2
35°	465.0	467.8	471.9	481.5	482.8
37.5°	447.2	449.9	455.4	466.4	469.1
40°	428.0	432.1	440.3	451.3	455.4
42.5°	408.8	414.3	423.9	436.2	441.7
45°	388.2	393.7	406.0	421.1	428.0
47.5°	366.2	373.1	388.2	407.4	412.9
50°	342.9	352.5	370.4	390.9	397.8
52.5°	319.6	330.6	352.5	374.5	381.3
55°	294.9	307.3	334.7	356.6	364.9
57.5°	270.2	283.9	315.5	338.8	347.0
60°	244.2	260.6	294.9	318.2	325.1
62.5°	218.1	237.3	274.3	297.7	303.1
65°	190.7	214.0	252.4	273.0	278.5
67.5°	164.6	192.0	230.4	245.5	245.5
70°	137.2	167.3	205.8	209.9	201.6
72.5°	109.7	144.0	178.3	163.2	156.4
75°	83.7	122.1	139.9	126.2	122.1
77.5°	63.1	98.8	98.8	90.5	87.8
80°	43.9	75.4	65.8	57.6	53.5
82.5°	28.8	42.5	34.3	27.4	23.3
85°	15.1	16.5	9.6	8.2	6.9
87.5°	5.5	2.7	1.4	2.7	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)