

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: P312052

Luminaire Tested: **14FCZ2-29-UNV-L83050-RDP-CP125-W2A-U-4000K**

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: P312052
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-4000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB SHEET
Light Source: (168) 4000K 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: 1845.0 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

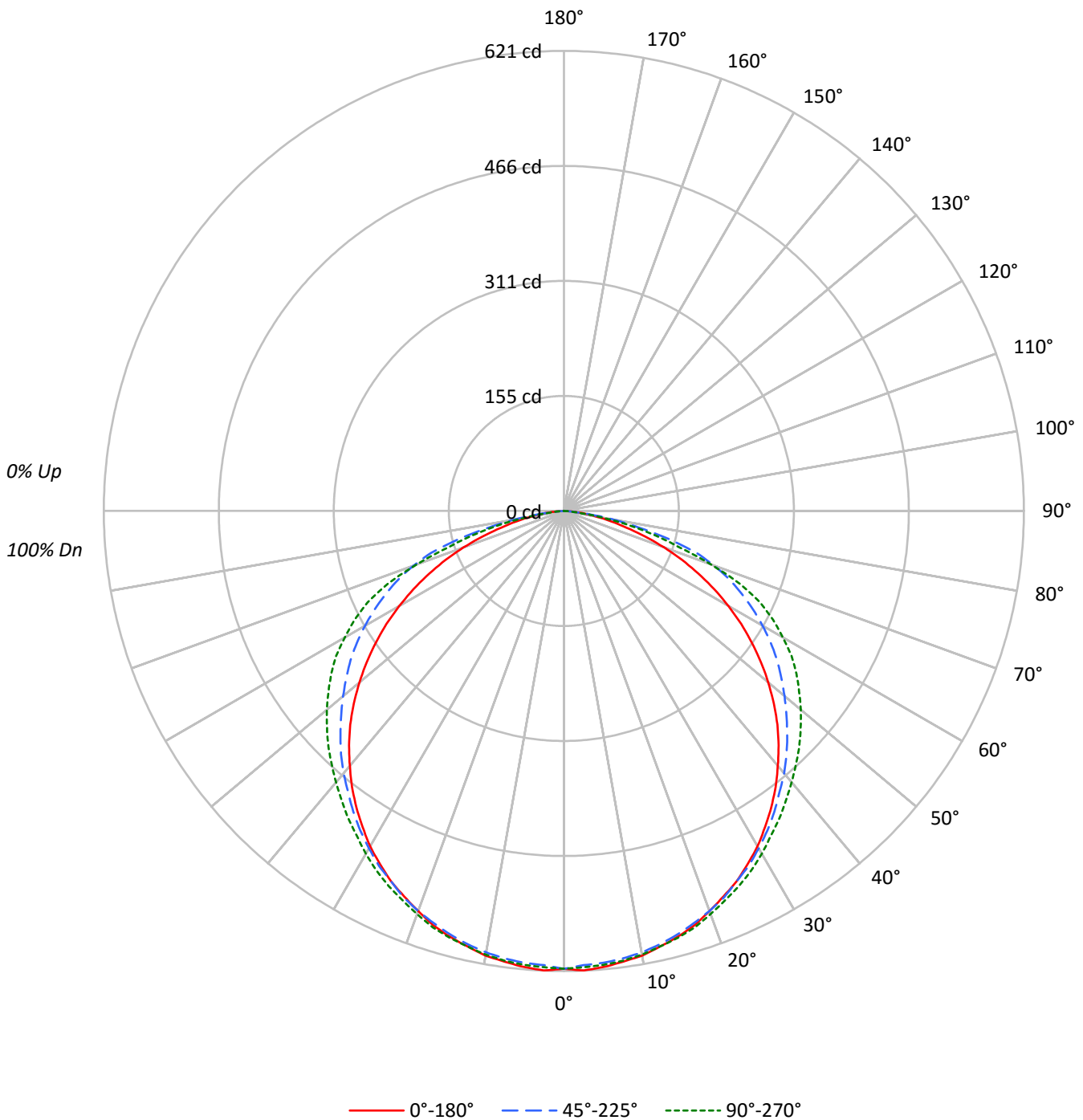
Input Watts (W): 24.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P312052

CATALOG NUMBER: 14FCZ2-29-UNV-L83050-RDP-CP125-W2A-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P312052

CATALOG NUMBER: 14FCZ2-29-UNV-L83050-RDP-CP125-W2A-U-4000K

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°	1663	1663	1663
5°	1669	1654	1662
10°	1665	1653	1661
15°	1657	1649	1661
20°	1646	1646	1658
25°	1638	1638	1659
30°	1625	1634	1661
35°	1604	1628	1666
40°	1579	1624	1680
45°	1551	1623	1710
50°	1508	1628	1749
55°	1453	1649	1798
60°	1380	1667	1837
65°	1275	1687	1862
70°	1133	1700	1666
75°	914	1527	1333
80°	714	1071	871
85°	488	312	222



TEST NUMBER: P312052

CATALOG NUMBER: 14FCZ2-29-UNV-L83050-RDP-CP125-W2A-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.5	3.2
10°-20°	167.8	9.1
20°-30°	255.5	13.8
30°-40°	311.2	16.9
40°-50°	330.2	17.9
50°-60°	311.6	16.9
60°-70°	251.6	13.6
70°-80°	136.5	7.4
80°-90°	22.1	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°	481.8	26.1
0°-40°	793.0	43.0
0°-60°	1434.8	77.8
0°-90°	1845.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1845.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	618	616	612	616	615	59
15°	595	594	592	596	596	168
25°	552	550	552	557	559	254
35°	488	491	496	506	507	305
45°	408	413	426	442	449	314
55°	310	323	352	374	383	277
65°	200	225	265	287	292	198
75°	88	128	147	132	128	96
85°	16	17	10	9	7	20
90°	0	0	0	0	0	



TEST NUMBER: P312052

CATALOG NUMBER: 14FC22-29-UNV-L83050-RDP-CP125-W2A-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	617.9	617.9	617.9	617.9	617.9
2.5°	620.8	617.9	613.6	617.9	616.5
5°	617.9	616.5	612.2	616.5	615.1
7.5°	613.6	613.6	609.3	612.2	612.2
10°	609.3	607.9	605.0	609.3	607.9
12.5°	602.1	600.7	599.2	603.5	602.1
15°	594.9	593.5	592.0	596.3	596.3
17.5°	586.2	584.8	583.4	589.1	589.1
20°	574.7	574.7	574.7	580.5	579.0
22.5°	563.2	563.2	564.6	570.4	569.0
25°	551.7	550.2	551.7	557.4	558.9
27.5°	537.3	538.7	540.2	545.9	547.4
30°	522.9	524.3	525.8	533.0	534.4
32.5°	505.6	508.5	511.3	520.0	520.0
35°	488.3	491.2	495.5	505.6	507.0
37.5°	469.6	472.5	478.2	489.7	492.6
40°	449.4	453.7	462.4	473.9	478.2
42.5°	429.2	435.0	445.1	458.1	463.8
45°	407.6	413.4	426.4	442.2	449.4
47.5°	384.6	391.8	407.6	427.8	433.6
50°	360.1	370.2	388.9	410.5	417.7
52.5°	335.6	347.1	370.2	393.2	400.4
55°	309.7	322.7	351.5	374.5	383.2
57.5°	283.8	298.2	331.3	355.8	364.4
60°	256.4	273.7	309.7	334.2	341.4
62.5°	229.0	249.2	288.1	312.6	318.3
65°	200.2	224.7	265.0	286.6	292.4
67.5°	172.8	201.7	242.0	257.8	257.8
70°	144.0	175.7	216.1	220.4	211.7
72.5°	115.2	151.2	187.3	171.4	164.2
75°	87.9	128.2	146.9	132.5	128.2
77.5°	66.3	103.7	103.7	95.1	92.2
80°	46.1	79.2	69.1	60.5	56.2
82.5°	30.2	44.7	36.0	28.8	24.5
85°	15.8	17.3	10.1	8.6	7.2
87.5°	5.8	2.9	1.4	2.9	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)