

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: P312078

Luminaire Tested: **14FCZ2-35-UNV-L83050-RDP-CP125-W2A-U-4500K**

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: P312078
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: 14FCZ2-35-UNV-L83050-RDP-CP125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB SHEET
Light Source: (168) 4500K 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: 2239.0 lumens
Efficiency: N/A
Efficacy: 72.5 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

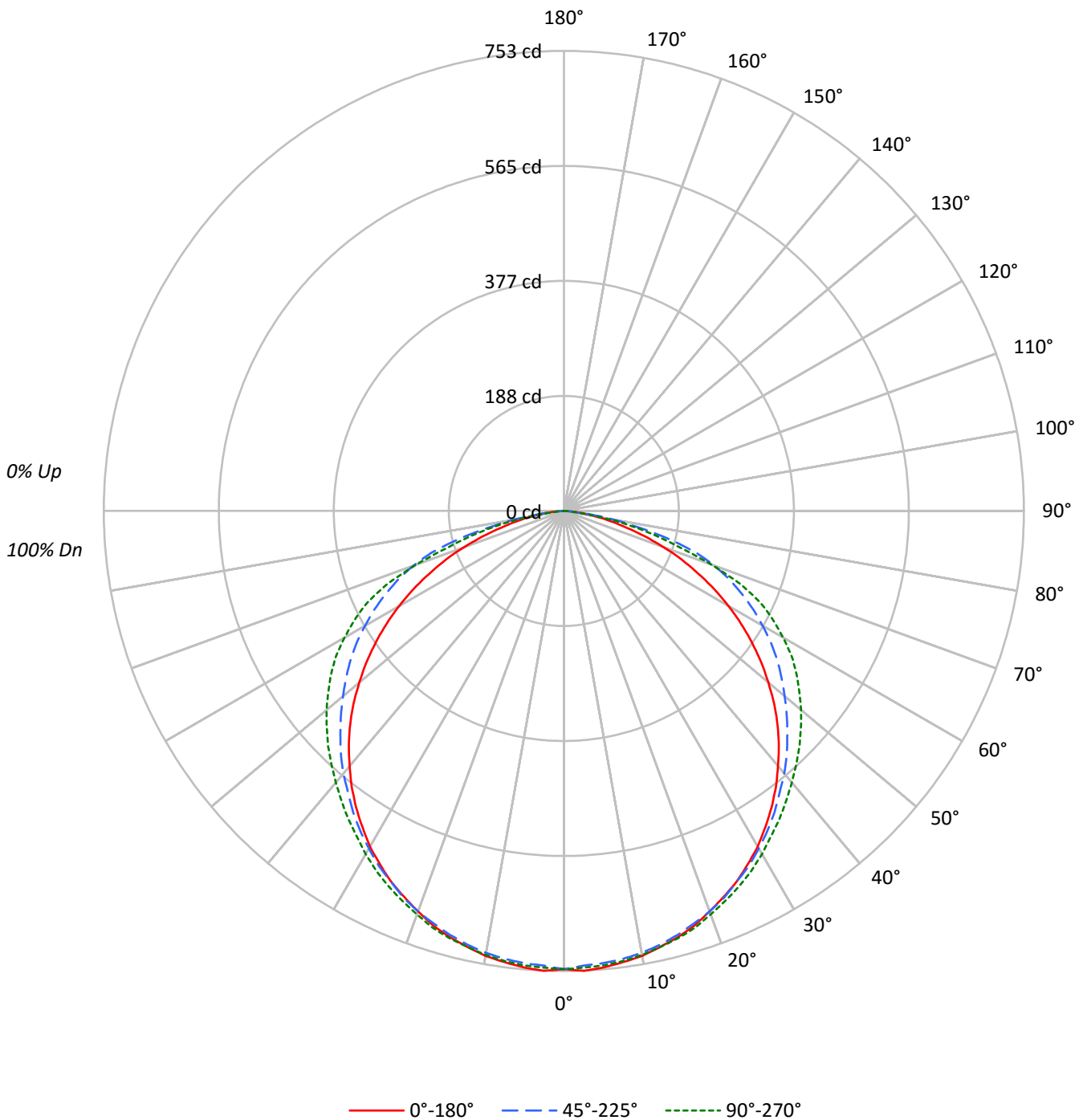
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P312078

CATALOG NUMBER: 14FCZ2-35-UNV-L83050-RDP-CP125-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P312078

CATALOG NUMBER: 14FCZ2-35-UNV-L83050-RDP-CP125-W2A-U-4500K

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°	2018	2018	2018
5°	2026	2007	2016
10°	2020	2006	2016
15°	2011	2001	2016
20°	1997	1997	2012
25°	1988	1988	2014
30°	1972	1982	2015
35°	1947	1975	2021
40°	1916	1971	2038
45°	1883	1969	2076
50°	1829	1976	2122
55°	1763	2001	2182
60°	1674	2023	2230
65°	1547	2048	2259
70°	1375	2063	2022
75°	1108	1854	1618
80°	866	1300	1057
85°	593	377	269



TEST NUMBER: P312078

CATALOG NUMBER: 14FCZ2-35-UNV-L83050-RDP-CP125-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	3.2
10°-20°	203.6	9.1
20°-30°	310.1	13.8
30°-40°	377.7	16.9
40°-50°	400.7	17.9
50°-60°	378.2	16.9
60°-70°	305.3	13.6
70°-80°	165.6	7.4
80°-90°	26.8	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°	584.7	26.1
0°-40°	962.4	43.0
0°-60°	1741.2	77.8
0°-90°	2239.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2239.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	750	750	750	750	750	
5°	750	748	743	748	746	71
15°	722	720	718	724	724	204
25°	670	668	670	676	678	308
35°	593	596	601	614	615	371
45°	495	502	517	537	545	381
55°	376	392	426	454	465	336
65°	243	273	322	348	355	241
75°	107	156	178	161	156	116
85°	19	21	12	10	9	25
90°	0	0	0	0	0	



TEST NUMBER: P312078

CATALOG NUMBER: 14FC22-35-UNV-L83050-RDP-CP125-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	749.9	749.9	749.9	749.9	749.9
2.5°	753.4	749.9	744.7	749.9	748.2
5°	749.9	748.2	742.9	748.2	746.4
7.5°	744.7	744.7	739.4	742.9	742.9
10°	739.4	737.7	734.2	739.4	737.7
12.5°	730.7	728.9	727.2	732.4	730.7
15°	721.9	720.2	718.4	723.7	723.7
17.5°	711.4	709.7	707.9	714.9	714.9
20°	697.5	697.5	697.5	704.4	702.7
22.5°	683.5	683.5	685.2	692.2	690.5
25°	669.5	667.7	669.5	676.5	678.2
27.5°	652.0	653.8	655.5	662.5	664.2
30°	634.5	636.3	638.0	646.8	648.5
32.5°	613.6	617.0	620.5	631.0	631.0
35°	592.6	596.1	601.3	613.6	615.3
37.5°	569.9	573.3	580.3	594.3	597.8
40°	545.4	550.6	561.1	575.1	580.3
42.5°	520.9	527.9	540.1	555.9	562.9
45°	494.7	501.7	517.4	536.6	545.4
47.5°	466.7	475.5	494.7	519.2	526.2
50°	437.0	449.2	472.0	498.2	506.9
52.5°	407.3	421.3	449.2	477.2	485.9
55°	375.8	391.6	426.5	454.5	465.0
57.5°	344.4	361.8	402.0	431.8	442.2
60°	311.1	332.1	375.8	405.5	414.3
62.5°	277.9	302.4	349.6	379.3	386.3
65°	243.0	272.7	321.6	347.9	354.8
67.5°	209.8	244.7	293.7	312.9	312.9
70°	174.8	213.3	262.2	267.4	257.0
72.5°	139.8	183.5	227.2	208.0	199.3
75°	106.6	155.6	178.3	160.8	155.6
77.5°	80.4	125.9	125.9	115.4	111.9
80°	55.9	96.1	83.9	73.4	68.2
82.5°	36.7	54.2	43.7	35.0	29.7
85°	19.2	21.0	12.2	10.5	8.7
87.5°	7.0	3.5	1.7	3.5	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)