

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: P312065

Luminaire Tested: **14FCZ2-35-UNV-L83050-RDP-CA08-W2A-U-3000K**

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: P312065
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-CA08-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 3000K 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: 2043.0 lumens
Efficiency: N/A
Efficacy: 69.5 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

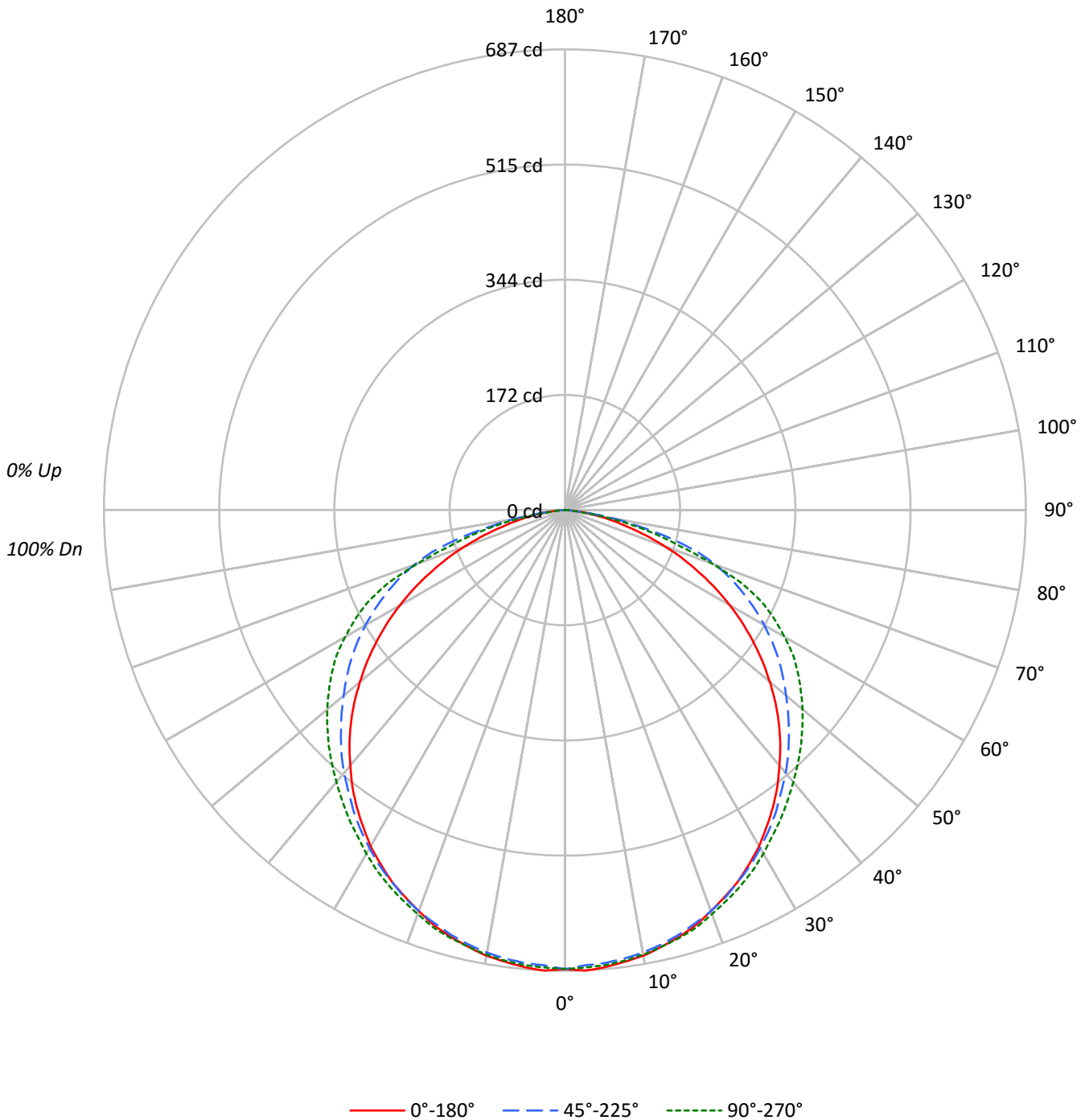
Input Watts (W): 29.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P312065

CATALOG NUMBER: 14FCZ2-35-UNV-L83050-RDP-CA08-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P312065

CATALOG NUMBER: 14FCZ2-35-UNV-L83050-RDP-CA08-W2A-U-3000K

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°	1841	1841	1841
5°	1848	1831	1840
10°	1844	1830	1839
15°	1835	1826	1840
20°	1822	1822	1836
25°	1814	1814	1838
30°	1799	1809	1839
35°	1776	1803	1844
40°	1748	1799	1860
45°	1718	1797	1894
50°	1669	1803	1936
55°	1609	1826	1991
60°	1528	1845	2034
65°	1412	1869	2062
70°	1255	1882	1845
75°	1012	1692	1476
80°	790	1187	964
85°	540	346	247



TEST NUMBER: P312065

CATALOG NUMBER: 14FCZ2-35-UNV-L83050-RDP-CA08-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.8	3.2
10°-20°	185.8	9.1
20°-30°	282.9	13.8
30°-40°	344.6	16.9
40°-50°	365.6	17.9
50°-60°	345.1	16.9
60°-70°	278.6	13.6
70°-80°	151.1	7.4
80°-90°	24.5	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°	533.5	26.1
0°-40°	878.1	43.0
0°-60°	1588.8	77.8
0°-90°	2043.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2043.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	684	684	684	684	684	
5°	684	683	678	683	681	65
15°	659	657	656	660	660	186
25°	611	609	611	617	619	281
35°	541	544	549	560	561	338
45°	451	458	472	490	498	348
55°	343	357	389	415	424	306
65°	222	249	294	317	324	220
75°	97	142	163	147	142	106
85°	18	19	11	10	8	23
90°	0	0	0	0	0	



TEST NUMBER: P312065

CATALOG NUMBER: 14FCZ2-35-UNV-L83050-RDP-CA08-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	684.3	684.3	684.3	684.3	684.3
2.5°	687.4	684.3	679.5	684.3	682.7
5°	684.3	682.7	677.9	682.7	681.1
7.5°	679.5	679.5	674.7	677.9	677.9
10°	674.7	673.1	669.9	674.7	673.1
12.5°	666.7	665.1	663.5	668.3	666.7
15°	658.7	657.1	655.5	660.3	660.3
17.5°	649.2	647.6	646.0	652.4	652.4
20°	636.4	636.4	636.4	642.8	641.2
22.5°	623.6	623.6	625.2	631.6	630.0
25°	610.9	609.3	610.9	617.3	618.9
27.5°	594.9	596.5	598.1	604.5	606.1
30°	579.0	580.6	582.2	590.1	591.7
32.5°	559.8	563.0	566.2	575.8	575.8
35°	540.7	543.9	548.7	559.8	561.4
37.5°	520.0	523.2	529.5	542.3	545.5
40°	497.6	502.4	512.0	524.8	529.5
42.5°	475.3	481.7	492.9	507.2	513.6
45°	451.4	457.8	472.1	489.7	497.6
47.5°	425.9	433.8	451.4	473.7	480.1
50°	398.7	409.9	430.6	454.6	462.5
52.5°	371.6	384.4	409.9	435.4	443.4
55°	342.9	357.3	389.2	414.7	424.3
57.5°	314.2	330.2	366.8	394.0	403.5
60°	283.9	303.0	342.9	370.0	378.0
62.5°	253.6	275.9	319.0	346.1	352.5
65°	221.7	248.8	293.5	317.4	323.8
67.5°	191.4	223.3	268.0	285.5	285.5
70°	159.5	194.6	239.2	244.0	234.5
72.5°	127.6	167.5	207.3	189.8	181.8
75°	97.3	142.0	162.7	146.7	142.0
77.5°	73.4	114.8	114.8	105.3	102.1
80°	51.0	87.7	76.6	67.0	62.2
82.5°	33.5	49.4	39.9	31.9	27.1
85°	17.5	19.1	11.2	9.6	8.0
87.5°	6.4	3.2	1.6	3.2	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)