

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: P307422

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-CP250-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: P307422
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-L82765-RDP-CP250-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB 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: 1894.0 lumens
Efficiency: N/A
Efficacy: 64.6 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

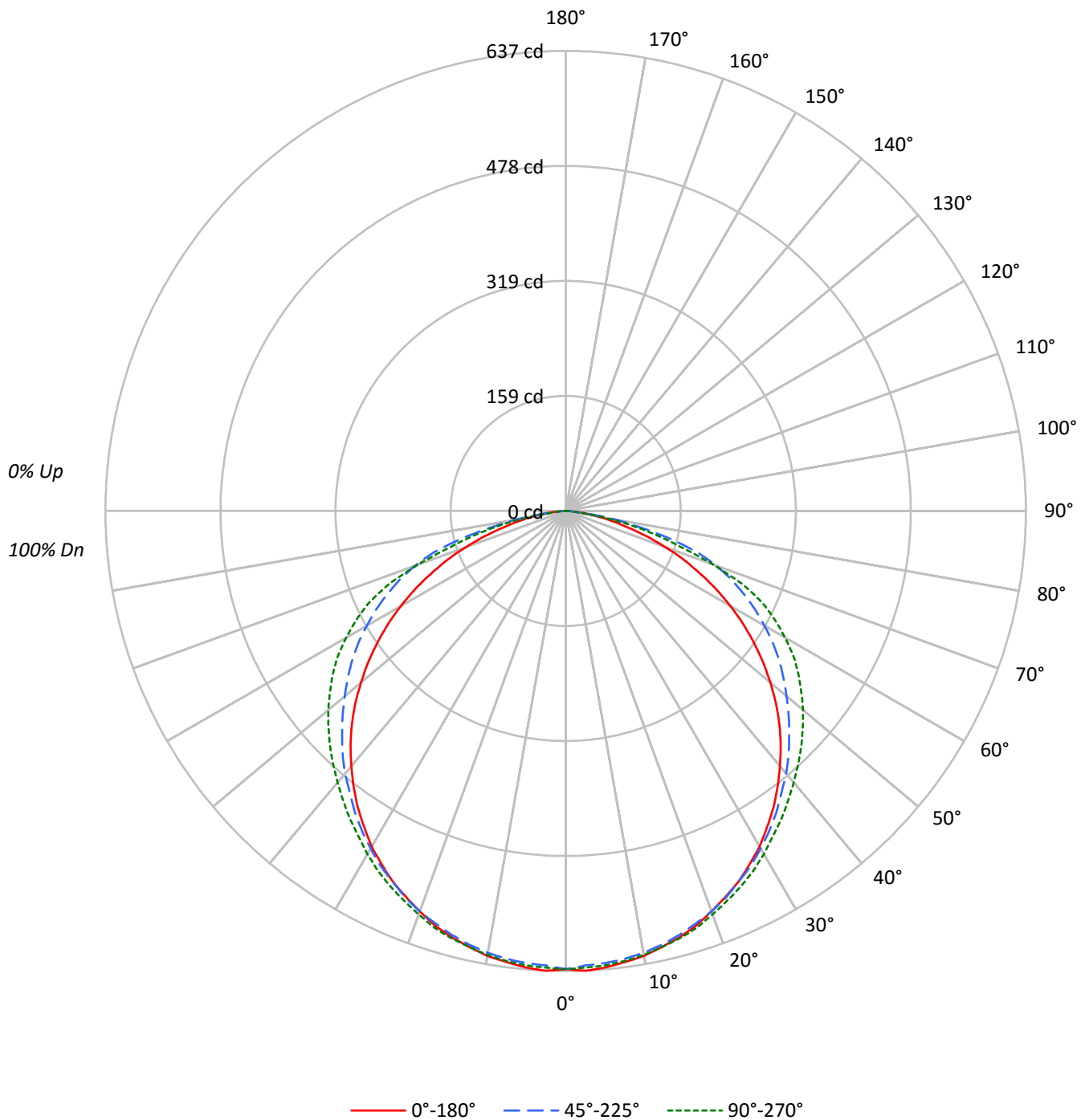
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307422

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-RDP-CP250-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P307422

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-RDP-CP250-W2A-U-3000K

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°	1707	1707	1707
5°	1713	1697	1706
10°	1709	1697	1705
15°	1701	1693	1706
20°	1690	1690	1702
25°	1681	1681	1703
30°	1668	1677	1705
35°	1647	1671	1710
40°	1620	1668	1724
45°	1593	1666	1756
50°	1548	1671	1795
55°	1491	1693	1845
60°	1417	1711	1886
65°	1309	1733	1911
70°	1164	1745	1710
75°	938	1568	1368
80°	733	1100	894
85°	503	321	228



TEST NUMBER: P307422

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-RDP-CP250-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.0	3.2
10°-20°	172.3	9.1
20°-30°	262.3	13.8
30°-40°	319.5	16.9
40°-50°	339.0	17.9
50°-60°	319.9	16.9
60°-70°	258.3	13.6
70°-80°	140.1	7.4
80°-90°	22.7	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°	494.6	26.1
0°-40°	814.1	43.0
0°-60°	1472.9	77.8
0°-90°	1894.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1894.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	634	634	634	634	634	
5°	634	633	628	633	631	60
15°	611	609	608	612	612	172
25°	566	565	566	572	574	261
35°	501	504	509	519	520	313
45°	418	424	438	454	461	322
55°	318	331	361	384	393	284
65°	206	231	272	294	300	204
75°	90	132	151	136	132	99
85°	16	18	10	9	7	21
90°	0	0	0	0	0	



TEST NUMBER: P307422

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-RDP-CP250-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	634.3	634.3	634.3	634.3	634.3
2.5°	637.3	634.3	629.9	634.3	632.9
5°	634.3	632.9	628.4	632.9	631.4
7.5°	629.9	629.9	625.5	628.4	628.4
10°	625.5	624.0	621.0	625.5	624.0
12.5°	618.1	616.6	615.1	619.6	618.1
15°	610.7	609.2	607.7	612.2	612.2
17.5°	601.8	600.3	598.9	604.8	604.8
20°	590.0	590.0	590.0	595.9	594.4
22.5°	578.2	578.2	579.6	585.6	584.1
25°	566.3	564.9	566.3	572.2	573.7
27.5°	551.5	553.0	554.5	560.4	561.9
30°	536.8	538.2	539.7	547.1	548.6
32.5°	519.0	522.0	524.9	533.8	533.8
35°	501.3	504.2	508.7	519.0	520.5
37.5°	482.0	485.0	490.9	502.7	505.7
40°	461.3	465.8	474.7	486.5	490.9
42.5°	440.6	446.6	456.9	470.2	476.1
45°	418.5	424.4	437.7	454.0	461.3
47.5°	394.8	402.2	418.5	439.2	445.1
50°	369.7	380.0	399.2	421.4	428.8
52.5°	344.5	356.4	380.0	403.7	411.1
55°	317.9	331.2	360.8	384.5	393.3
57.5°	291.3	306.1	340.1	365.2	374.1
60°	263.2	280.9	317.9	343.1	350.4
62.5°	235.1	255.8	295.7	320.9	326.8
65°	205.5	230.7	272.1	294.3	300.2
67.5°	177.4	207.0	248.4	264.7	264.7
70°	147.9	180.4	221.8	226.2	217.4
72.5°	118.3	155.3	192.2	176.0	168.6
75°	90.2	131.6	150.8	136.0	131.6
77.5°	68.0	106.5	106.5	97.6	94.6
80°	47.3	81.3	71.0	62.1	57.7
82.5°	31.1	45.8	37.0	29.6	25.1
85°	16.3	17.7	10.4	8.9	7.4
87.5°	5.9	3.0	1.5	3.0	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)