

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: P307065

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP250-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: P307065
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-25-UNV-L82765-HRP-CP250-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
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: 1677.0 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

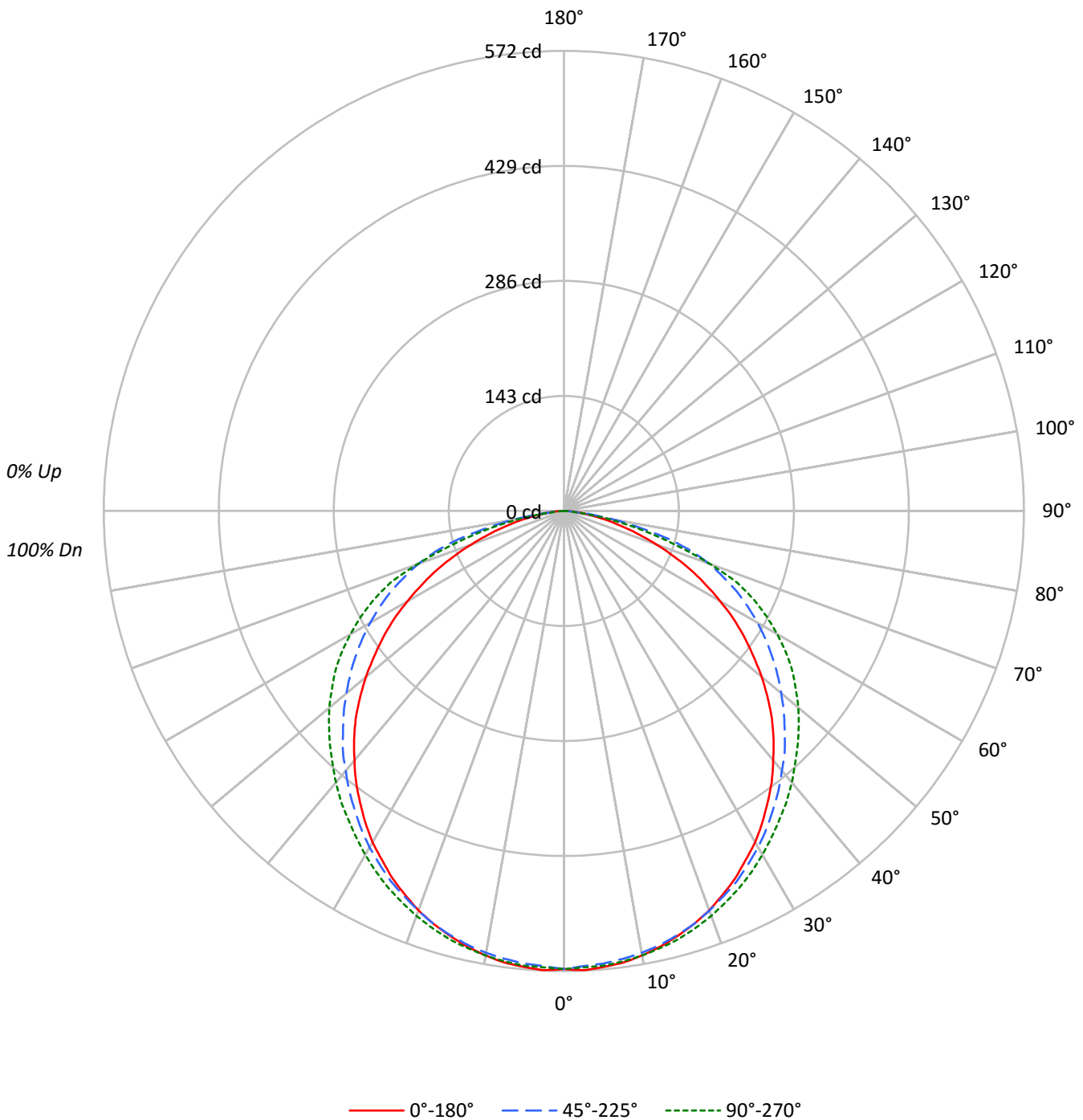
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307065

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-HRP-CP250-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P307065

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-HRP-CP250-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	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1533	1533	1533
5°	1537	1526	1533
10°	1533	1524	1533
15°	1523	1521	1535
20°	1513	1515	1534
25°	1497	1509	1534
30°	1478	1501	1534
35°	1452	1490	1536
40°	1423	1482	1548
45°	1393	1477	1565
50°	1344	1477	1594
55°	1286	1484	1628
60°	1209	1496	1649
65°	1115	1511	1659
70°	971	1515	1527
75°	801	1409	1233
80°	629	1013	826
85°	488	392	195



TEST NUMBER: P307065

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-HRP-CP250-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	3.2
10°-20°	154.7	9.2
20°-30°	235.0	14.0
30°-40°	284.7	17.0
40°-50°	300.0	17.9
50°-60°	280.1	16.7
60°-70°	223.8	13.3
70°-80°	123.1	7.3
80°-90°	21.7	1.3
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°	443.6	26.5
0°-40°	728.3	43.4
0°-60°	1308.3	78.0
0°-90°	1677.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1677.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	569	567	565	568	567	54
15°	547	547	546	551	551	154
25°	504	505	508	516	517	232
35°	442	446	454	465	468	276
45°	366	373	388	406	411	282
55°	274	288	316	338	347	245
65°	175	197	237	257	260	172
75°	77	110	136	122	119	83
85°	16	20	13	8	6	19
90°	0	0	0	0	0	



TEST NUMBER: P307065

CATALOG NUMBER: 14FC22-25-UNV-L82765-HRP-CP250-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	569.5	569.5	569.5	569.5	569.5
2.5°	571.6	570.0	566.4	569.5	567.9
5°	569.0	567.4	564.8	568.5	567.4
7.5°	566.4	564.2	561.6	565.8	564.8
10°	561.1	559.5	557.9	561.6	561.1
12.5°	554.8	554.2	552.6	556.9	556.3
15°	546.8	546.8	545.8	551.1	551.1
17.5°	538.4	537.9	538.4	544.2	543.7
20°	528.4	528.4	528.9	535.8	535.8
22.5°	516.3	516.8	518.4	526.8	526.3
25°	504.1	505.2	508.3	515.7	516.8
27.5°	489.4	492.0	495.7	504.7	505.7
30°	475.7	477.2	483.0	491.5	493.6
32.5°	459.3	462.5	468.8	478.3	480.9
35°	441.9	446.1	453.5	465.1	467.7
37.5°	424.5	428.2	438.2	450.3	455.1
40°	405.0	411.3	421.9	435.6	440.8
42.5°	386.0	392.3	406.6	420.8	425.6
45°	366.0	372.8	388.1	405.5	411.3
47.5°	343.8	351.7	371.2	389.7	396.0
50°	321.1	331.2	352.8	373.4	380.7
52.5°	297.4	310.1	334.9	356.5	363.3
55°	274.2	287.9	316.4	338.5	347.0
57.5°	250.5	265.2	297.4	322.7	327.5
60°	224.6	242.6	277.9	300.1	306.4
62.5°	199.3	219.9	257.9	279.0	284.2
65°	175.1	197.2	237.3	256.8	260.5
67.5°	148.7	175.1	214.6	232.6	233.6
70°	123.4	154.0	192.5	200.9	194.1
72.5°	98.6	131.3	166.6	159.8	154.0
75°	77.0	110.2	135.5	121.8	118.6
77.5°	57.0	90.2	97.0	89.6	83.8
80°	40.6	71.2	65.4	55.9	53.3
82.5°	27.9	44.8	35.9	27.9	24.3
85°	15.8	20.0	12.7	7.9	6.3
87.5°	6.9	4.7	2.6	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)