

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: P307302

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CA08-W2A-U-5700K**

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: P307302
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: 14FCZ2-25-UNV-L82765-RDP-CA08-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 5700K 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

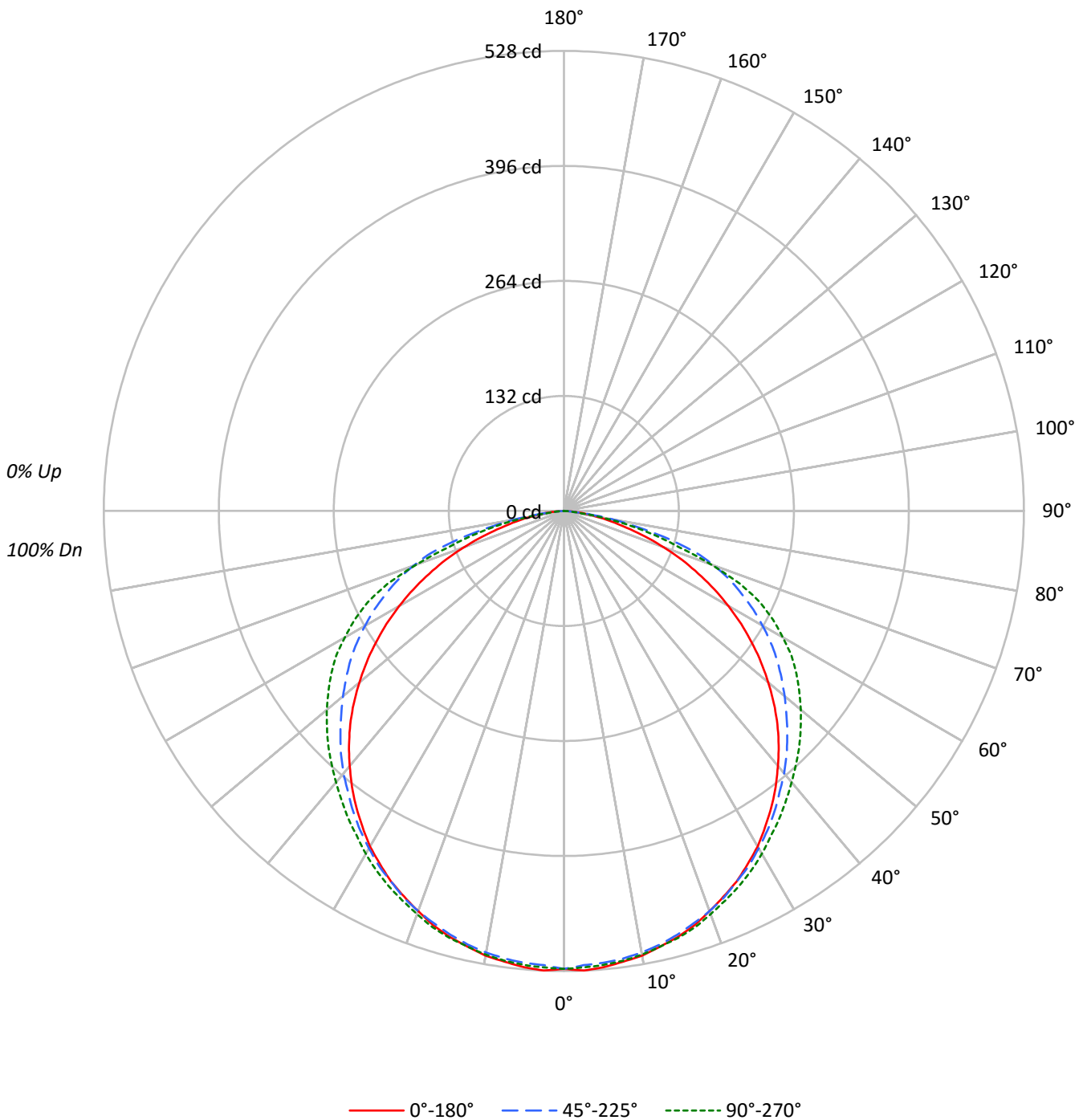
Lumens per Lamp: N/A
Luminaire Lumens: 1569.0 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 20.2
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: P307302
CATALOG NUMBER: 14FCZ2-25-UNV-L82765-RDP-CA08-W2A-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P307302

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-RDP-CA08-W2A-U-5700K

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°	1414	1414	1414
5°	1420	1406	1413
10°	1416	1406	1412
15°	1409	1402	1413
20°	1400	1400	1410
25°	1393	1393	1411
30°	1382	1389	1412
35°	1364	1384	1417
40°	1343	1381	1429
45°	1319	1380	1455
50°	1282	1384	1487
55°	1236	1402	1529
60°	1173	1418	1562
65°	1084	1435	1584
70°	964	1445	1417
75°	777	1299	1133
80°	607	911	741
85°	417	266	188



TEST NUMBER: P307302

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-RDP-CA08-W2A-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.7	3.2
10°-20°	142.7	9.1
20°-30°	217.3	13.8
30°-40°	264.7	16.9
40°-50°	280.8	17.9
50°-60°	265.0	16.9
60°-70°	214.0	13.6
70°-80°	116.1	7.4
80°-90°	18.8	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°	409.7	26.1
0°-40°	674.4	43.0
0°-60°	1220.2	77.8
0°-90°	1569.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1569.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	526	526	526	526	526	
5°	526	524	521	524	523	50
15°	506	505	503	507	507	143
25°	469	468	469	474	475	216
35°	415	418	421	430	431	260
45°	347	352	363	376	382	267
55°	263	274	299	318	326	235
65°	170	191	225	244	249	169
75°	75	109	125	113	109	82
85°	14	15	9	7	6	17
90°	0	0	0	0	0	



TEST NUMBER: P307302

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-RDP-CA08-W2A-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	525.5	525.5	525.5	525.5	525.5
2.5°	527.9	525.5	521.8	525.5	524.3
5°	525.5	524.3	520.6	524.3	523.0
7.5°	521.8	521.8	518.1	520.6	520.6
10°	518.1	516.9	514.5	518.1	516.9
12.5°	512.0	510.8	509.6	513.2	512.0
15°	505.9	504.7	503.4	507.1	507.1
17.5°	498.5	497.3	496.1	501.0	501.0
20°	488.8	488.8	488.8	493.6	492.4
22.5°	479.0	479.0	480.2	485.1	483.9
25°	469.2	467.9	469.2	474.1	475.3
27.5°	456.9	458.1	459.4	464.3	465.5
30°	444.7	445.9	447.1	453.2	454.5
32.5°	430.0	432.4	434.9	442.2	442.2
35°	415.3	417.7	421.4	430.0	431.2
37.5°	399.3	401.8	406.7	416.5	418.9
40°	382.2	385.9	393.2	403.0	406.7
42.5°	365.0	369.9	378.5	389.5	394.4
45°	346.7	351.6	362.6	376.1	382.2
47.5°	327.1	333.2	346.7	363.8	368.7
50°	306.2	314.8	330.7	349.1	355.2
52.5°	285.4	295.2	314.8	334.4	340.5
55°	263.4	274.4	298.9	318.5	325.8
57.5°	241.3	253.6	281.7	302.6	309.9
60°	218.0	232.7	263.4	284.2	290.3
62.5°	194.8	211.9	245.0	265.8	270.7
65°	170.3	191.1	225.4	243.8	248.7
67.5°	147.0	171.5	205.8	219.3	219.3
70°	122.5	149.4	183.7	187.4	180.1
72.5°	98.0	128.6	159.2	145.8	139.6
75°	74.7	109.0	124.9	112.7	109.0
77.5°	56.3	88.2	88.2	80.8	78.4
80°	39.2	67.4	58.8	51.4	47.8
82.5°	25.7	38.0	30.6	24.5	20.8
85°	13.5	14.7	8.6	7.3	6.1
87.5°	4.9	2.4	1.2	2.4	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)