

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: P307557

Luminaire Tested: **14FCZ2-20-UNV-L82765-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: P307557
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-20-UNV-L82765-CP250-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 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

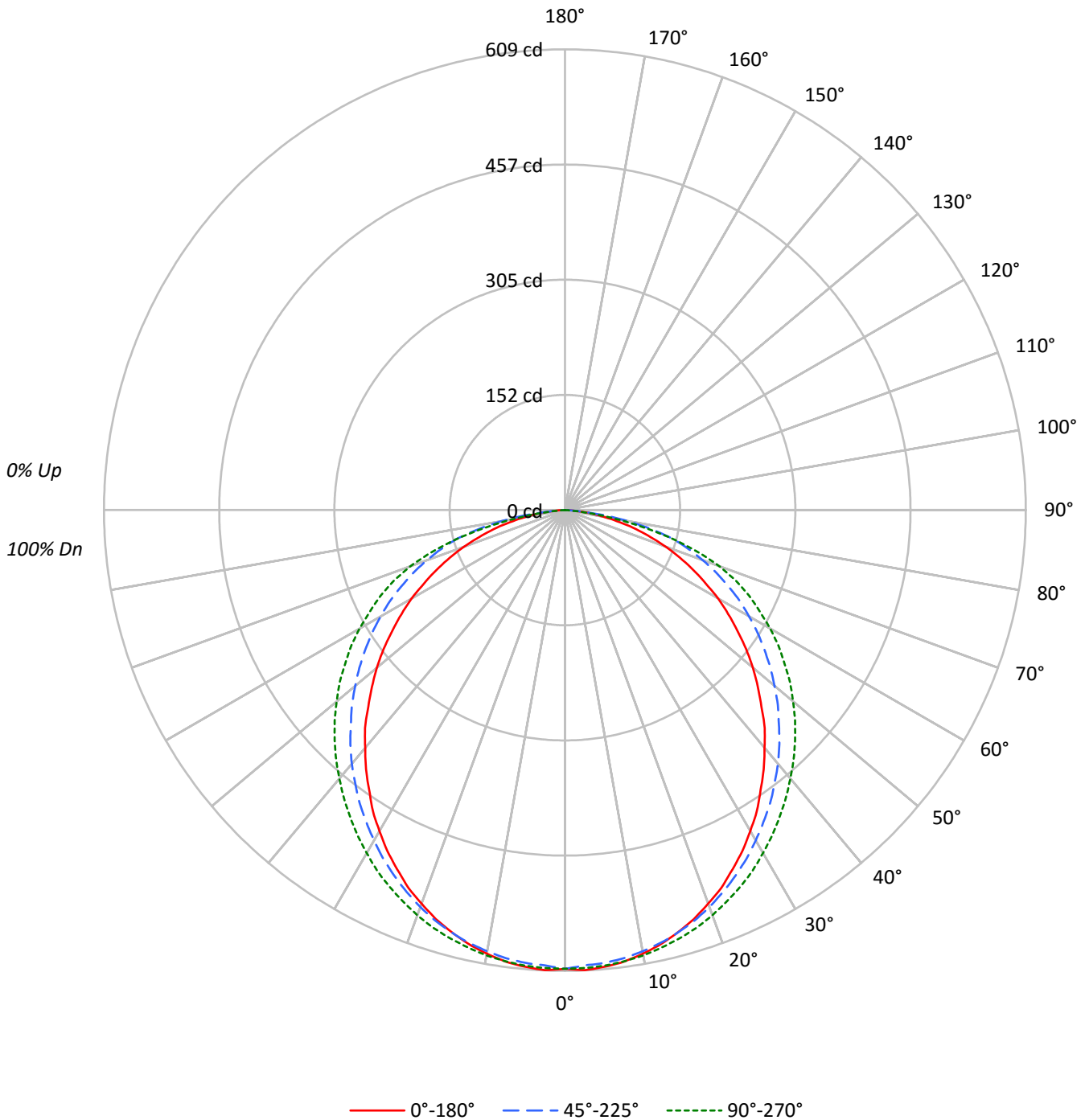
Lumens per Lamp: N/A
Luminaire Lumens: 1760.0 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.4
Input Voltage (V): NR
Input Current (A_{in}): 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: P307557
CATALOG NUMBER: 14FCZ2-20-UNV-L82765-CP250-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P307557

CATALOG NUMBER: 14FC22-20-UNV-L82765-CP250-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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1632	1632	1632
5°	1637	1623	1633
10°	1627	1618	1633
15°	1609	1611	1632
20°	1586	1599	1632
25°	1556	1583	1630
30°	1522	1567	1627
35°	1481	1554	1626
40°	1442	1539	1628
45°	1398	1522	1637
50°	1357	1515	1648
55°	1305	1510	1663
60°	1259	1512	1686
65°	1195	1517	1712
70°	1121	1529	1710
75°	1016	1542	1546
80°	834	1331	1100
85°	618	630	253



TEST NUMBER: P307557

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-CP250-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	3.3
10°-20°	163.9	9.3
20°-30°	246.9	14.0
30°-40°	296.3	16.8
40°-50°	308.8	17.5
50°-60°	285.9	16.2
60°-70°	231.0	13.1
70°-80°	140.8	8.0
80°-90°	29.1	1.7
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°	468.2	26.6
0°-40°	764.4	43.4
0°-60°	1359.1	77.2
0°-90°	1760.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1760.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	606	606	606	606	606	
5°	606	604	601	605	604	58
15°	578	578	578	586	586	163
25°	524	527	533	547	549	241
35°	451	458	473	490	495	282
45°	367	378	400	422	430	284
55°	278	293	322	347	354	249
65°	188	206	238	262	269	185
75°	98	119	148	151	149	103
85°	20	30	20	11	8	25
90°	0	0	0	0	0	



TEST NUMBER: P307557

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-CP250-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	606.3	606.3	606.3	606.3	606.3
2.5°	608.7	606.7	602.4	606.7	605.9
5°	605.9	604.4	600.8	605.1	604.4
7.5°	602.0	600.4	597.3	602.4	601.6
10°	595.3	594.6	592.2	598.1	597.7
12.5°	587.5	587.1	585.9	592.6	592.2
15°	577.7	578.1	578.1	585.9	585.9
17.5°	566.7	567.5	569.0	577.7	578.9
20°	553.7	555.3	558.4	568.3	569.8
22.5°	540.4	541.6	546.3	558.1	559.6
25°	523.9	527.1	533.3	546.7	549.0
27.5°	508.2	511.0	519.6	533.3	537.3
30°	489.8	494.1	504.3	519.2	523.5
32.5°	472.1	476.8	488.6	505.9	509.8
35°	450.9	458.0	472.9	490.2	494.9
37.5°	431.7	438.4	455.2	474.1	479.6
40°	410.5	418.7	438.0	458.0	463.5
42.5°	390.9	398.7	419.5	439.9	447.4
45°	367.3	378.3	399.9	422.3	430.1
47.5°	345.7	356.7	381.5	405.4	412.5
50°	324.2	335.9	361.8	386.6	393.6
52.5°	301.8	314.3	342.2	366.9	375.2
55°	278.2	292.8	321.8	346.9	354.4
57.5°	255.9	270.8	301.8	327.3	334.8
60°	233.9	249.2	281.0	305.3	313.2
62.5°	209.6	227.6	260.6	284.5	290.4
65°	187.6	206.0	238.2	262.2	268.8
67.5°	164.4	184.4	216.6	238.6	244.9
70°	142.5	163.3	194.3	214.7	217.4
72.5°	118.9	140.1	171.5	184.4	184.4
75°	97.7	119.3	148.3	150.7	148.7
77.5°	74.6	98.5	117.3	112.6	107.9
80°	53.8	77.3	85.9	77.3	71.0
82.5°	36.1	56.1	51.8	41.2	36.5
85°	20.0	29.8	20.4	11.4	8.2
87.5°	7.5	6.7	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)