

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: P307601

Luminaire Tested: **14FCZ2-25-UNV-L82765-CP250-W2A-U-2700K**

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: P307601
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: 14FCZ2-25-UNV-L82765-CP250-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 2700K 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: 1996.0 lumens
Efficiency: N/A
Efficacy: 101.8 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

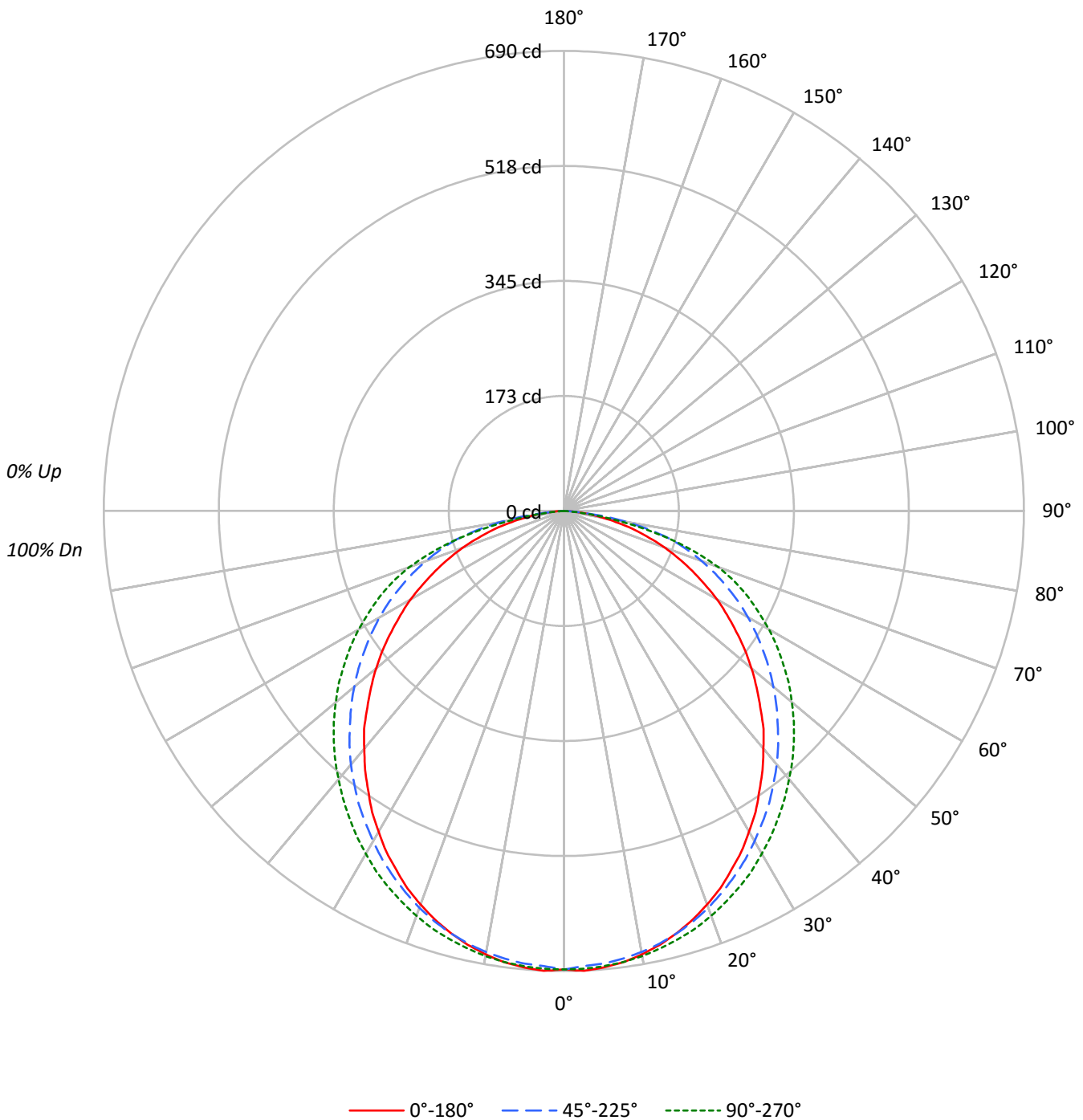
Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: 14FC22-25-UNV-L82765-CP250-W2A-U-2700K

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°	1850	1850	1850
5°	1856	1841	1851
10°	1845	1835	1852
15°	1825	1826	1851
20°	1798	1814	1851
25°	1764	1796	1849
30°	1726	1777	1845
35°	1680	1762	1844
40°	1635	1745	1846
45°	1585	1726	1856
50°	1539	1718	1869
55°	1481	1712	1886
60°	1428	1715	1912
65°	1354	1720	1941
70°	1271	1733	1940
75°	1152	1749	1754
80°	945	1511	1249
85°	701	713	287



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.1	3.3
10°-20°	185.9	9.3
20°-30°	280.0	14.0
30°-40°	336.0	16.8
40°-50°	350.2	17.5
50°-60°	324.2	16.2
60°-70°	262.0	13.1
70°-80°	159.7	8.0
80°-90°	33.0	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°	530.9	26.6
0°-40°	866.9	43.4
0°-60°	1541.4	77.2
0°-90°	1996.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1996.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	687	685	681	686	685	65
15°	655	656	656	664	664	185
25°	594	598	605	620	623	274
35°	511	519	536	556	561	320
45°	417	429	454	479	488	322
55°	316	332	365	393	402	283
65°	213	234	270	297	305	210
75°	111	135	168	171	169	116
85°	23	34	23	13	9	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	687.6	687.6	687.6	687.6	687.6
2.5°	690.3	688.1	683.2	688.1	687.2
5°	687.2	685.4	681.4	686.3	685.4
7.5°	682.7	681.0	677.4	683.2	682.3
10°	675.2	674.3	671.6	678.3	677.8
12.5°	666.3	665.8	664.5	672.1	671.6
15°	655.1	655.6	655.6	664.5	664.5
17.5°	642.7	643.6	645.3	655.1	656.5
20°	628.0	629.8	633.3	644.5	646.2
22.5°	612.9	614.2	619.5	632.9	634.7
25°	594.2	597.7	604.8	620.0	622.6
27.5°	576.4	579.5	589.3	604.8	609.3
30°	555.4	560.3	571.9	588.8	593.7
32.5°	535.4	540.8	554.1	573.7	578.1
35°	511.4	519.4	536.3	555.9	561.2
37.5°	489.6	497.1	516.3	537.6	543.9
40°	465.5	474.9	496.7	519.4	525.6
42.5°	443.3	452.2	475.8	498.9	507.4
45°	416.6	429.0	453.5	478.9	487.8
47.5°	392.1	404.6	432.6	459.8	467.8
50°	367.6	381.0	410.4	438.4	446.4
52.5°	342.3	356.5	388.1	416.1	425.5
55°	315.6	332.0	365.0	393.4	401.9
57.5°	290.2	307.1	342.3	371.2	379.6
60°	265.3	282.6	318.7	346.3	355.2
62.5°	237.7	258.1	295.5	322.7	329.3
65°	212.7	233.7	270.2	297.3	304.9
67.5°	186.5	209.2	245.7	270.6	277.7
70°	161.6	185.1	220.3	243.5	246.6
72.5°	134.9	158.9	194.5	209.2	209.2
75°	110.8	135.3	168.2	170.9	168.7
77.5°	84.6	111.7	133.1	127.7	122.4
80°	61.0	87.7	97.5	87.7	80.6
82.5°	40.9	63.6	58.7	46.7	41.4
85°	22.7	33.8	23.1	12.9	9.3
87.5°	8.5	7.6	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)