

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: P307088

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-CP125-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: P307088
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: 14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"
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: 1906.0 lumens
Efficiency: N/A
Efficacy: 80.1 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

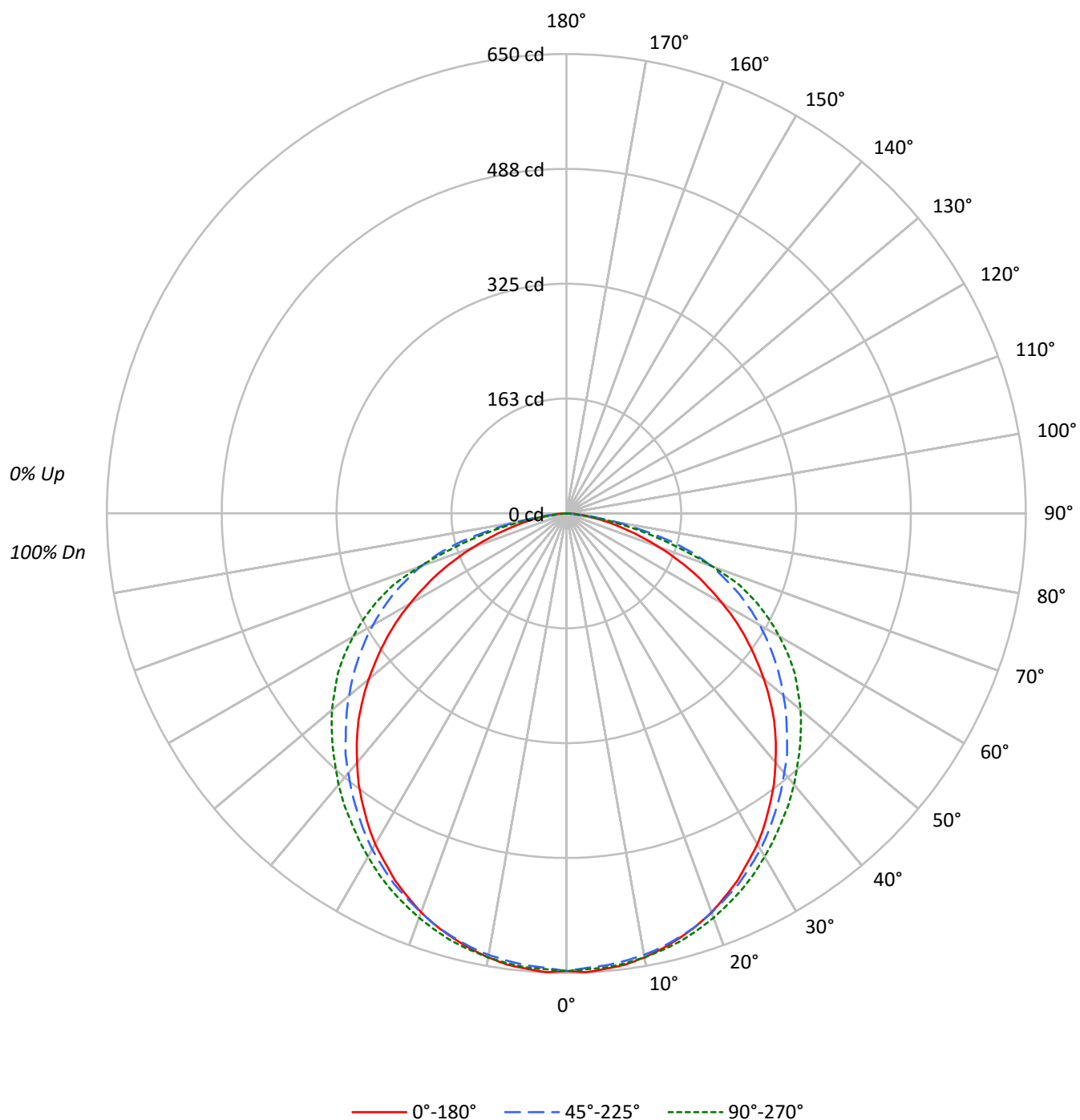
Input Watts (W): 23.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307088

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P307088

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-2700K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1742	1742	1742
5°	1747	1734	1742
10°	1743	1733	1743
15°	1731	1728	1745
20°	1720	1721	1744
25°	1701	1716	1744
30°	1680	1706	1743
35°	1650	1693	1746
40°	1617	1684	1760
45°	1583	1679	1779
50°	1528	1679	1811
55°	1462	1687	1850
60°	1374	1700	1874
65°	1267	1717	1885
70°	1103	1721	1736
75°	910	1601	1403
80°	714	1151	938
85°	556	445	222



TEST NUMBER: P307088

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.3	3.2
10°-20°	175.8	9.2
20°-30°	267.0	14.0
30°-40°	323.6	17.0
40°-50°	340.9	17.9
50°-60°	318.3	16.7
60°-70°	254.4	13.3
70°-80°	140.0	7.3
80°-90°	24.7	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°	504.2	26.5
0°-40°	827.7	43.4
0°-60°	1487.0	78.0
0°-90°	1906.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1906.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	647	647	647	647	647	
5°	647	645	642	646	645	61
15°	622	622	620	626	626	175
25°	573	574	578	586	587	264
35°	502	507	515	529	532	314
45°	416	424	441	461	468	320
55°	312	327	360	385	394	278
65°	199	224	270	292	296	196
75°	88	125	154	138	135	94
85°	18	23	14	9	7	22
90°	0	0	0	0	0	



TEST NUMBER: P307088

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	647.3	647.3	647.3	647.3	647.3
2.5°	649.7	647.9	643.7	647.3	645.5
5°	646.7	644.9	641.9	646.1	644.9
7.5°	643.7	641.3	638.3	643.1	641.9
10°	637.7	635.9	634.1	638.3	637.7
12.5°	630.5	629.9	628.1	632.9	632.3
15°	621.5	621.5	620.3	626.3	626.3
17.5°	611.9	611.3	611.9	618.5	617.9
20°	600.5	600.5	601.1	608.9	608.9
22.5°	586.8	587.4	589.2	598.7	598.1
25°	573.0	574.2	577.8	586.2	587.4
27.5°	556.2	559.2	563.4	573.6	574.8
30°	540.6	542.4	549.0	558.6	561.0
32.5°	522.0	525.6	532.8	543.6	546.6
35°	502.2	507.0	515.4	528.6	531.6
37.5°	482.5	486.7	498.1	511.8	517.2
40°	460.3	467.5	479.5	495.1	501.0
42.5°	438.7	445.9	462.1	478.3	483.7
45°	415.9	423.7	441.1	460.9	467.5
47.5°	390.8	399.8	421.9	442.9	450.1
50°	365.0	376.4	401.0	424.3	432.7
52.5°	338.0	352.4	380.6	405.2	412.9
55°	311.7	327.2	359.6	384.8	394.4
57.5°	284.7	301.5	338.0	366.8	372.2
60°	255.3	275.7	315.9	341.0	348.2
62.5°	226.6	249.9	293.1	317.1	323.0
65°	199.0	224.2	269.7	291.9	296.1
67.5°	169.0	199.0	243.9	264.3	265.5
70°	140.2	175.0	218.8	228.3	220.6
72.5°	112.1	149.2	189.4	181.6	175.0
75°	87.5	125.3	154.0	138.4	134.9
77.5°	64.7	102.5	110.3	101.9	95.3
80°	46.1	80.9	74.3	63.5	60.5
82.5°	31.8	50.9	40.8	31.8	27.6
85°	18.0	22.8	14.4	9.0	7.2
87.5°	7.8	5.4	3.0	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)