

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: P307800

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CA125-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: P307800
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CA125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC 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: 1909.0 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

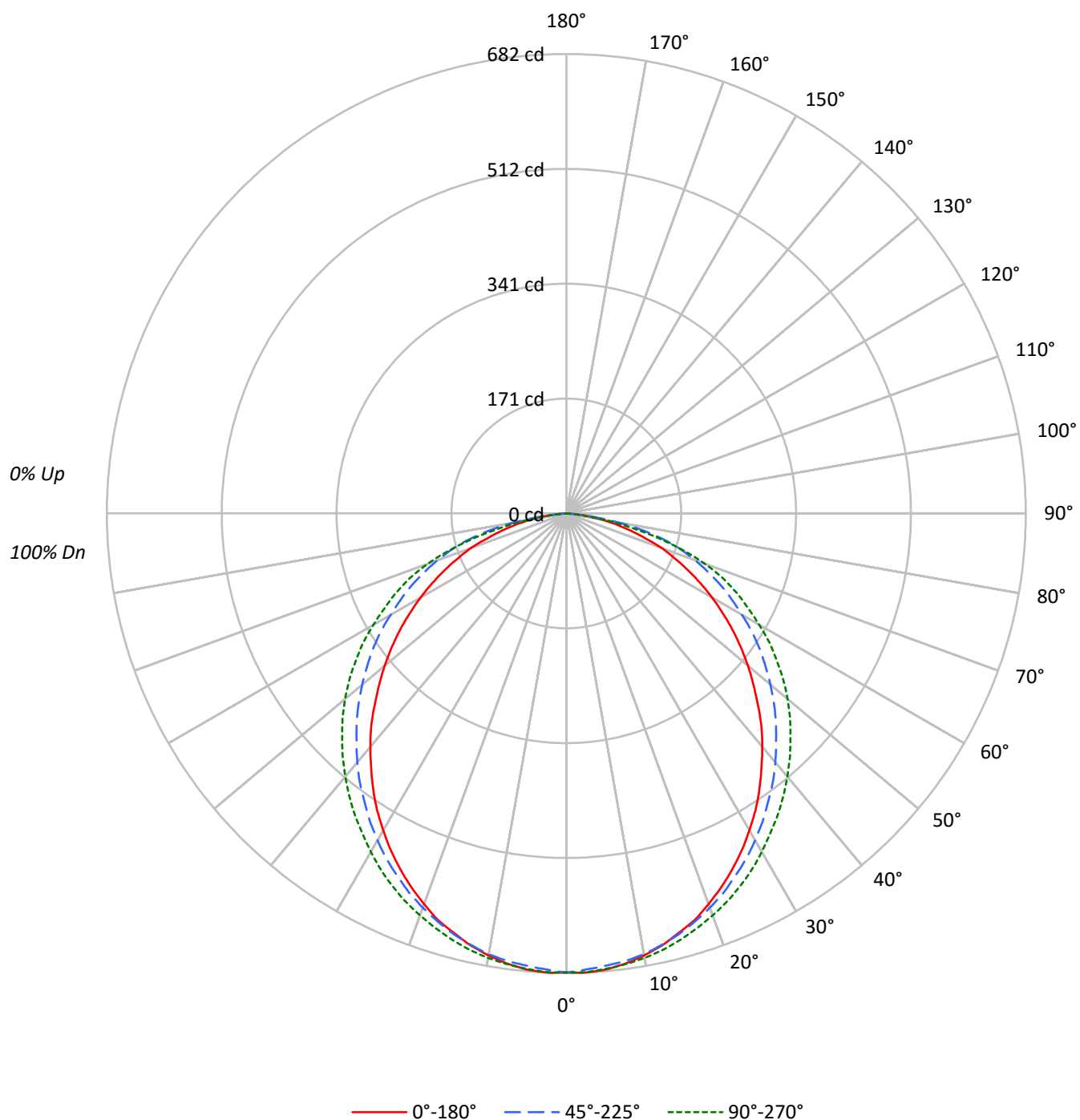
Input Watts (W): 16.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307800

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CA125-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P307800

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CA125-W2A-U-3000K

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		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1834	1834	1834
5°	1836	1820	1833
10°	1821	1815	1831
15°	1796	1801	1825
20°	1767	1783	1819
25°	1731	1762	1813
30°	1688	1741	1803
35°	1642	1716	1797
40°	1589	1696	1792
45°	1531	1675	1790
50°	1474	1656	1795
55°	1412	1643	1789
60°	1345	1620	1778
65°	1266	1615	1778
70°	1191	1601	1728
75°	1033	1565	1476
80°	837	1261	982
85°	556	438	293



TEST NUMBER: P307800

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CA125-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.4	3.4
10°-20°	183.1	9.6
20°-30°	274.7	14.4
30°-40°	327.7	17.2
40°-50°	338.7	17.7
50°-60°	309.3	16.2
60°-70°	243.4	12.7
70°-80°	141.7	7.4
80°-90°	26.1	1.4
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°	522.2	27.4
0°-40°	849.8	44.5
0°-60°	1497.8	78.5
0°-90°	1909.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1909.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	682	682	682	682	682	
5°	680	678	674	680	679	64
15°	645	646	646	655	655	182
25°	583	586	594	608	610	268
35°	500	506	522	542	547	312
45°	402	416	440	465	470	311
55°	301	317	350	376	381	269
65°	199	220	254	274	279	197
75°	99	123	150	148	142	106
85°	18	26	14	11	10	23
90°	0	0	0	0	0	



TEST NUMBER: P307800

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CA125-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	681.5	681.5	681.5	681.5	681.5
2.5°	682.4	680.5	677.7	682.4	681.5
5°	679.6	677.7	673.9	679.6	678.6
7.5°	673.9	672.0	670.1	675.8	674.9
10°	666.3	665.4	664.4	671.1	670.1
12.5°	656.9	656.9	655.9	663.5	663.5
15°	644.6	645.5	646.5	655.0	655.0
17.5°	633.2	632.3	635.1	644.6	645.5
20°	617.1	619.0	622.8	634.2	635.1
22.5°	601.0	602.9	609.5	620.9	623.7
25°	583.0	585.9	593.5	607.7	610.5
27.5°	564.1	567.9	578.3	593.5	596.3
30°	543.3	549.0	560.3	577.4	580.2
32.5°	522.5	528.1	542.3	559.4	563.2
35°	499.8	506.4	522.5	542.3	547.1
37.5°	476.1	484.6	503.5	523.4	529.1
40°	452.4	461.9	482.7	503.5	510.2
42.5°	428.8	438.2	460.9	484.6	491.2
45°	402.3	415.5	440.1	464.7	470.4
47.5°	376.7	390.9	418.4	443.0	450.5
50°	352.1	366.3	395.6	421.2	428.8
52.5°	326.5	341.7	372.9	399.4	406.0
55°	301.0	317.1	350.2	375.8	381.4
57.5°	275.4	292.5	326.5	351.2	357.8
60°	249.9	267.9	301.0	325.6	330.3
62.5°	224.3	243.3	277.3	299.1	303.8
65°	198.8	219.6	253.7	273.5	279.2
67.5°	174.2	195.0	228.1	247.0	251.8
70°	151.4	170.4	203.5	217.7	219.6
72.5°	123.0	146.7	178.9	186.5	181.7
75°	99.4	123.0	150.5	147.7	142.0
77.5°	75.7	99.4	117.4	107.9	100.3
80°	54.0	77.6	81.4	67.2	63.4
82.5°	35.0	54.0	45.4	35.0	28.4
85°	18.0	25.6	14.2	11.4	9.5
87.5°	5.7	3.8	1.9	1.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)