

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: P307544

Luminaire Tested: **14FCZ2-20-UNV-L82765-CP125-W2A-U-5500K**

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: P307544
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-CP125-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB SHEET
Light Source: (168) 5500K 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: 2041.0 lumens
Efficiency: N/A
Efficacy: 120.1 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

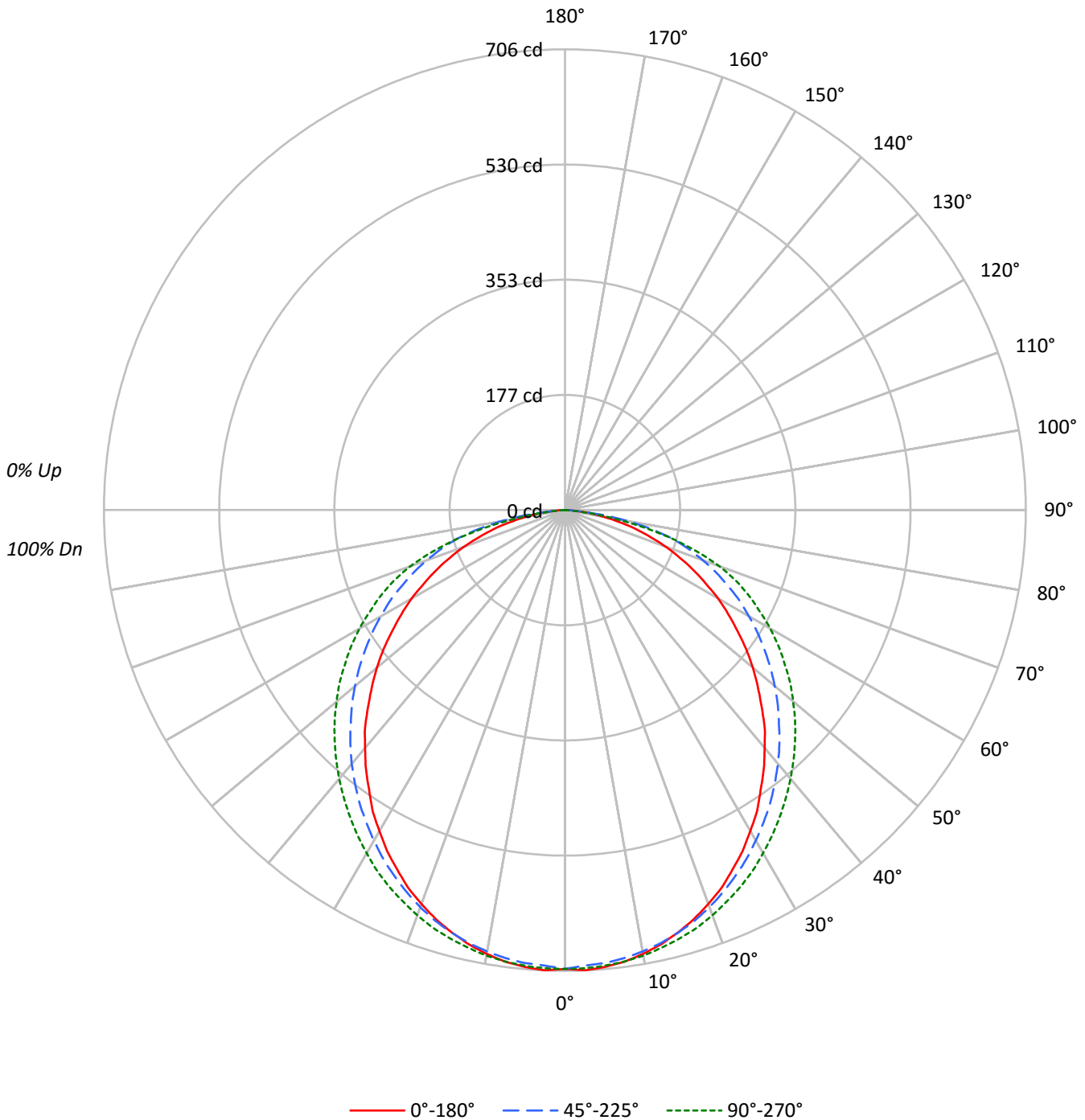
Input Watts (W): 17
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307544

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-CP125-W2A-U-5500K

Luminous Intensity Polar Plot





TEST NUMBER: P307544

CATALOG NUMBER: 14FC22-20-UNV-L82765-CP125-W2A-U-5500K

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°	1892	1892	1892
5°	1898	1882	1893
10°	1887	1876	1894
15°	1866	1868	1893
20°	1839	1855	1892
25°	1804	1836	1890
30°	1765	1817	1886
35°	1718	1802	1885
40°	1672	1784	1888
45°	1621	1765	1898
50°	1574	1757	1911
55°	1514	1751	1928
60°	1460	1754	1955
65°	1385	1759	1985
70°	1300	1773	1983
75°	1178	1788	1794
80°	965	1545	1277
85°	716	732	296



TEST NUMBER: P307544

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-CP125-W2A-U-5500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.5	3.3
10°-20°	190.1	9.3
20°-30°	286.3	14.0
30°-40°	343.6	16.8
40°-50°	358.1	17.5
50°-60°	331.5	16.2
60°-70°	267.9	13.1
70°-80°	163.3	8.0
80°-90°	33.7	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°	542.9	26.6
0°-40°	886.5	43.4
0°-60°	1576.1	77.2
0°-90°	2041.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2041.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	703	701	697	702	701	67
15°	670	670	670	680	680	189
25°	608	611	618	634	637	280
35°	523	531	548	568	574	328
45°	426	439	464	490	499	329
55°	323	340	373	402	411	289
65°	218	239	276	304	312	215
75°	113	138	172	175	172	119
85°	23	35	24	13	10	29
90°	0	0	0	0	0	



TEST NUMBER: P307544

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-CP125-W2A-U-5500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	703.1	703.1	703.1	703.1	703.1
2.5°	705.9	703.6	698.6	703.6	702.7
5°	702.7	700.9	696.8	701.8	700.9
7.5°	698.1	696.3	692.7	698.6	697.7
10°	690.4	689.5	686.7	693.6	693.1
12.5°	681.3	680.8	679.5	687.2	686.7
15°	669.9	670.4	670.4	679.5	679.5
17.5°	657.2	658.1	659.9	669.9	671.3
20°	642.1	644.0	647.6	659.0	660.8
22.5°	626.7	628.0	633.5	647.2	649.0
25°	607.6	611.2	618.5	634.0	636.7
27.5°	589.4	592.5	602.6	618.5	623.0
30°	568.0	573.0	584.8	602.1	607.1
32.5°	547.5	552.9	566.6	586.6	591.2
35°	522.9	531.1	548.4	568.4	573.9
37.5°	500.6	508.3	527.9	549.8	556.1
40°	476.0	485.6	507.9	531.1	537.5
42.5°	453.3	462.4	486.5	510.2	518.8
45°	426.0	438.7	463.7	489.7	498.8
47.5°	400.9	413.7	442.4	470.1	478.3
50°	375.9	389.6	419.6	448.3	456.5
52.5°	350.0	364.5	396.8	425.5	435.1
55°	322.7	339.5	373.2	402.3	411.0
57.5°	296.7	314.0	350.0	379.6	388.2
60°	271.2	289.0	325.9	354.1	363.2
62.5°	243.0	264.0	302.2	329.9	336.8
65°	217.5	238.9	276.2	304.0	311.7
67.5°	190.7	213.9	251.2	276.7	284.0
70°	165.2	189.3	225.3	248.9	252.1
72.5°	137.9	162.5	198.9	213.9	213.9
75°	113.3	138.4	172.0	174.8	172.5
77.5°	86.5	114.2	136.1	130.6	125.2
80°	62.3	89.7	99.7	89.7	82.4
82.5°	41.9	65.1	60.1	47.8	42.3
85°	23.2	34.6	23.7	13.2	9.6
87.5°	8.6	7.7	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)