

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: P307825

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CP187-W2A-U-6500K**

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: P307825
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-CP187-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.187" POLYCARB SHEET
Light Source: (168) 6500K 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: 1985.0 lumens
Efficiency: N/A
Efficacy: 115.4 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

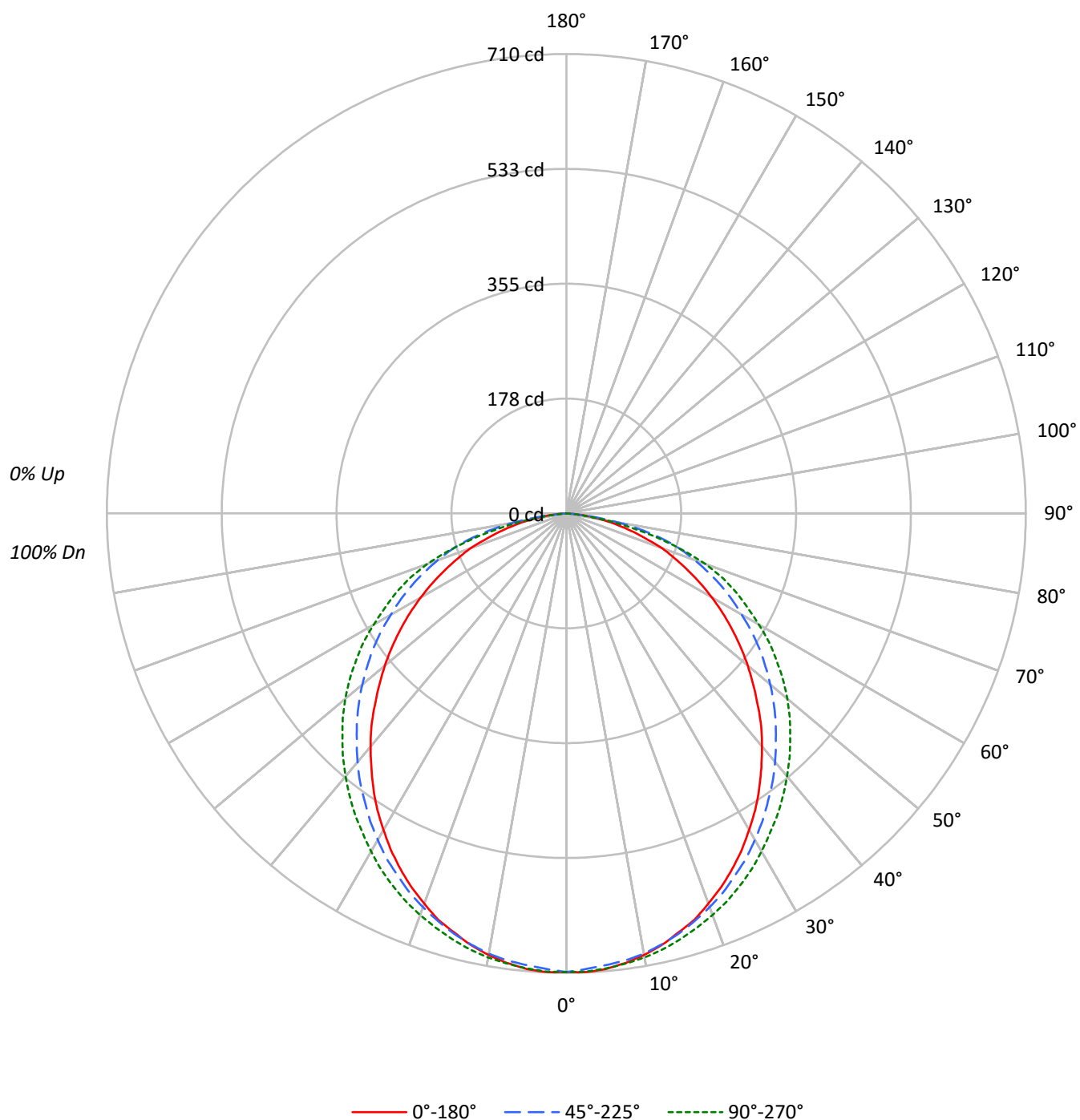
Input Watts (W): 17.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307825

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CP187-W2A-U-6500K

Luminous Intensity Polar Plot





TEST NUMBER: P307825

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CP187-W2A-U-6500K

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°	1907	1907	1907
5°	1909	1893	1906
10°	1893	1888	1904
15°	1867	1873	1897
20°	1838	1855	1891
25°	1800	1832	1885
30°	1755	1810	1875
35°	1707	1785	1869
40°	1652	1763	1864
45°	1592	1741	1861
50°	1533	1722	1866
55°	1468	1708	1861
60°	1398	1685	1849
65°	1316	1680	1848
70°	1239	1665	1796
75°	1074	1627	1535
80°	869	1311	1021
85°	577	457	303



TEST NUMBER: P307825

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CP187-W2A-U-6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.9	3.4
10°-20°	190.4	9.6
20°-30°	285.6	14.4
30°-40°	340.7	17.2
40°-50°	352.2	17.7
50°-60°	321.6	16.2
60°-70°	253.1	12.7
70°-80°	147.3	7.4
80°-90°	27.1	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°	542.9	27.4
0°-40°	883.7	44.5
0°-60°	1557.5	78.5
0°-90°	1985.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1985.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	709	709	709	709	709	
5°	707	705	701	707	706	67
15°	670	671	672	681	681	189
25°	606	609	617	632	635	279
35°	520	526	543	564	569	325
45°	418	432	458	483	489	323
55°	313	330	364	391	397	280
65°	207	228	264	284	290	205
75°	103	128	156	154	148	110
85°	19	27	15	12	10	24
90°	0	0	0	0	0	



TEST NUMBER: P307825

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CP187-W2A-U-6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	708.6	708.6	708.6	708.6	708.6
2.5°	709.6	707.6	704.7	709.6	708.6
5°	706.6	704.7	700.7	706.6	705.7
7.5°	700.7	698.8	696.8	702.7	701.7
10°	692.9	691.9	690.9	697.8	696.8
12.5°	683.0	683.0	682.0	689.9	689.9
15°	670.2	671.2	672.2	681.1	681.1
17.5°	658.4	657.4	660.4	670.2	671.2
20°	641.7	643.7	647.6	659.4	660.4
22.5°	625.0	626.9	633.8	645.6	648.6
25°	606.3	609.2	617.1	631.8	634.8
27.5°	586.6	590.5	601.3	617.1	620.0
30°	564.9	570.8	582.6	600.4	603.3
32.5°	543.3	549.2	563.9	581.7	585.6
35°	519.6	526.5	543.3	563.9	568.9
37.5°	495.0	503.9	523.6	544.3	550.2
40°	470.4	480.3	501.9	523.6	530.5
42.5°	445.8	455.7	479.3	503.9	510.8
45°	418.3	432.1	457.6	483.2	489.1
47.5°	391.7	406.5	435.0	460.6	468.5
50°	366.1	380.9	411.4	438.0	445.8
52.5°	339.5	355.3	387.8	415.3	422.2
55°	313.0	329.7	364.1	390.7	396.6
57.5°	286.4	304.1	339.5	365.1	372.0
60°	259.8	278.5	313.0	338.6	343.5
62.5°	233.3	252.9	288.4	311.0	315.9
65°	206.7	228.3	263.8	284.4	290.3
67.5°	181.1	202.7	237.2	256.9	261.8
70°	157.5	177.2	211.6	226.4	228.3
72.5°	127.9	152.5	186.0	193.9	189.0
75°	103.3	127.9	156.5	153.5	147.6
77.5°	78.7	103.3	122.0	112.2	104.3
80°	56.1	80.7	84.6	69.9	65.9
82.5°	36.4	56.1	47.2	36.4	29.5
85°	18.7	26.6	14.8	11.8	9.8
87.5°	5.9	3.9	2.0	2.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)