

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: P307552

Luminaire Tested: **14FCZ2-20-UNV-L82765-CP187-W2A-U-5000K**

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: P307552
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-CP187-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB SHEET
Light Source: (168) 5000K 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: 1936.0 lumens
Efficiency: N/A
Efficacy: 114.6 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

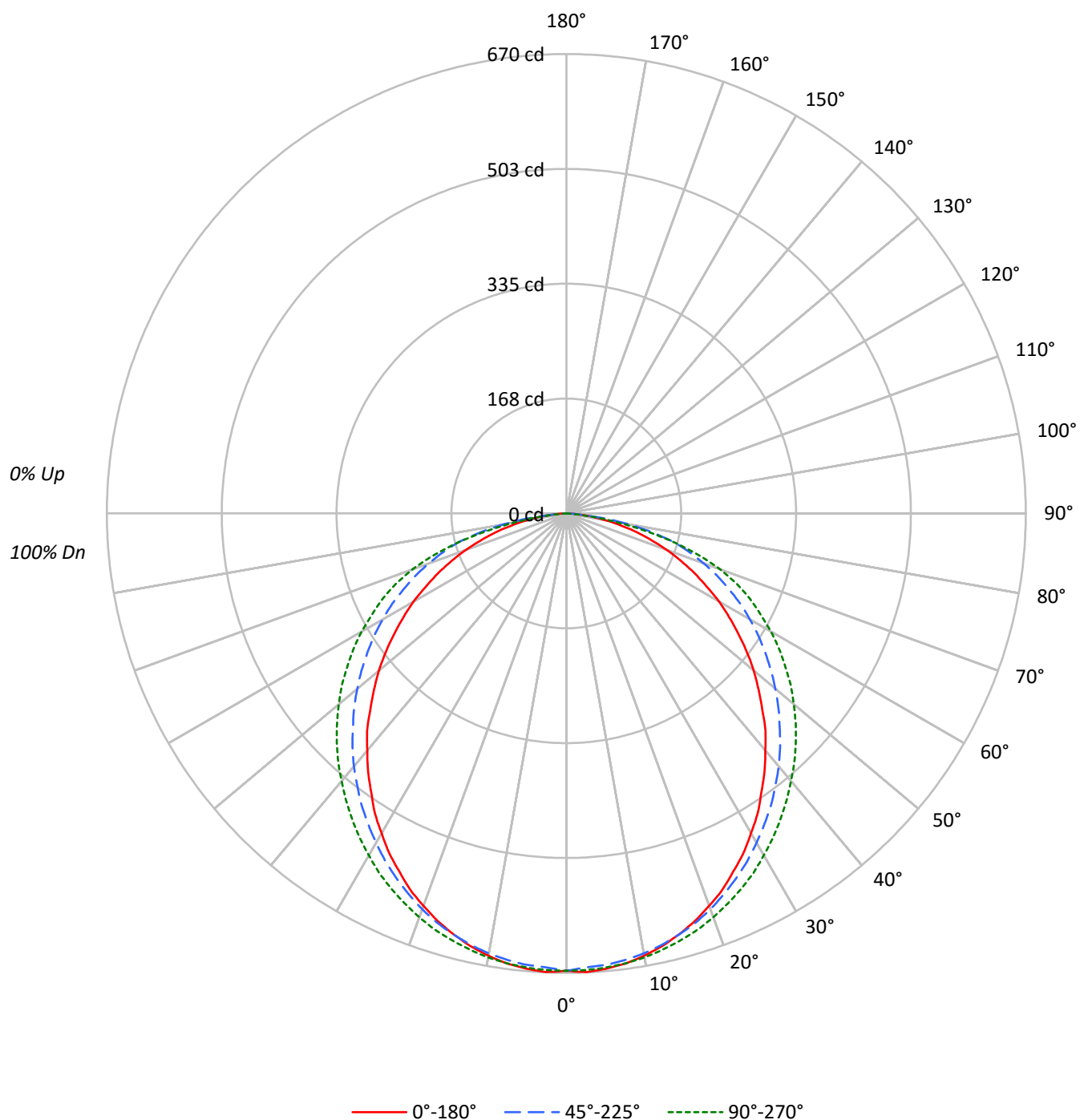
Input Watts (W): 16.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307552

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-CP187-W2A-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P307552

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-CP187-W2A-U-5000K

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	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	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	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1795	1795	1795
5°	1800	1785	1796
10°	1790	1780	1797
15°	1770	1772	1796
20°	1744	1759	1795
25°	1711	1742	1793
30°	1674	1724	1789
35°	1629	1709	1788
40°	1586	1692	1791
45°	1538	1674	1800
50°	1493	1666	1813
55°	1436	1661	1829
60°	1385	1664	1854
65°	1314	1668	1883
70°	1233	1681	1882
75°	1118	1697	1701
80°	916	1464	1210
85°	679	692	281



TEST NUMBER: P307552

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-CP187-W2A-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	3.3
10°-20°	180.3	9.3
20°-30°	271.6	14.0
30°-40°	325.9	16.8
40°-50°	339.7	17.5
50°-60°	314.5	16.2
60°-70°	254.1	13.1
70°-80°	154.9	8.0
80°-90°	32.0	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°	515.0	26.6
0°-40°	840.9	43.4
0°-60°	1495.0	77.2
0°-90°	1936.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1936.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	666	665	661	666	665	63
15°	635	636	636	644	644	179
25°	576	580	587	601	604	266
35°	496	504	520	539	544	311
45°	404	416	440	464	473	312
55°	306	322	354	382	390	274
65°	206	227	262	288	296	204
75°	108	131	163	166	164	113
85°	22	33	22	12	9	27
90°	0	0	0	0	0	



TEST NUMBER: P307552

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-CP187-W2A-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	667.0	667.0	667.0	667.0	667.0
2.5°	669.5	667.4	662.6	667.4	666.5
5°	666.5	664.8	660.9	665.7	664.8
7.5°	662.2	660.5	657.0	662.6	661.8
10°	654.9	654.0	651.4	657.9	657.5
12.5°	646.2	645.8	644.5	651.8	651.4
15°	635.4	635.9	635.9	644.5	644.5
17.5°	623.4	624.2	625.9	635.4	636.7
20°	609.1	610.8	614.3	625.1	626.8
22.5°	594.4	595.7	600.9	613.9	615.6
25°	576.3	579.8	586.7	601.3	603.9
27.5°	559.0	562.1	571.6	586.7	591.0
30°	538.7	543.5	554.7	571.1	575.9
32.5°	519.3	524.5	537.5	556.4	560.8
35°	496.0	503.8	520.2	539.2	544.4
37.5°	474.9	482.2	500.8	521.5	527.5
40°	451.5	460.6	481.8	503.8	509.8
42.5°	430.0	438.6	461.5	483.9	492.1
45°	404.1	416.1	439.9	464.5	473.1
47.5°	380.3	392.4	419.6	445.9	453.7
50°	356.6	369.5	398.0	425.2	433.0
52.5°	332.0	345.8	376.4	403.6	412.7
55°	306.1	322.0	354.0	381.6	389.8
57.5°	281.5	297.9	332.0	360.0	368.2
60°	257.3	274.1	309.1	335.9	344.5
62.5°	230.5	250.4	286.6	313.0	319.4
65°	206.3	226.6	262.0	288.4	295.7
67.5°	180.9	202.9	238.3	262.5	269.4
70°	156.7	179.6	213.7	236.1	239.2
72.5°	130.8	154.1	188.6	202.9	202.9
75°	107.5	131.2	163.2	165.8	163.6
77.5°	82.0	108.4	129.1	123.9	118.7
80°	59.1	85.0	94.5	85.0	78.1
82.5°	39.7	61.7	57.0	45.3	40.1
85°	22.0	32.8	22.4	12.5	9.1
87.5°	8.2	7.3	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)