

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: P307799

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CA125-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: P307799
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-2700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC 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: 1856.0 lumens
Efficiency: N/A
Efficacy: 112.5 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

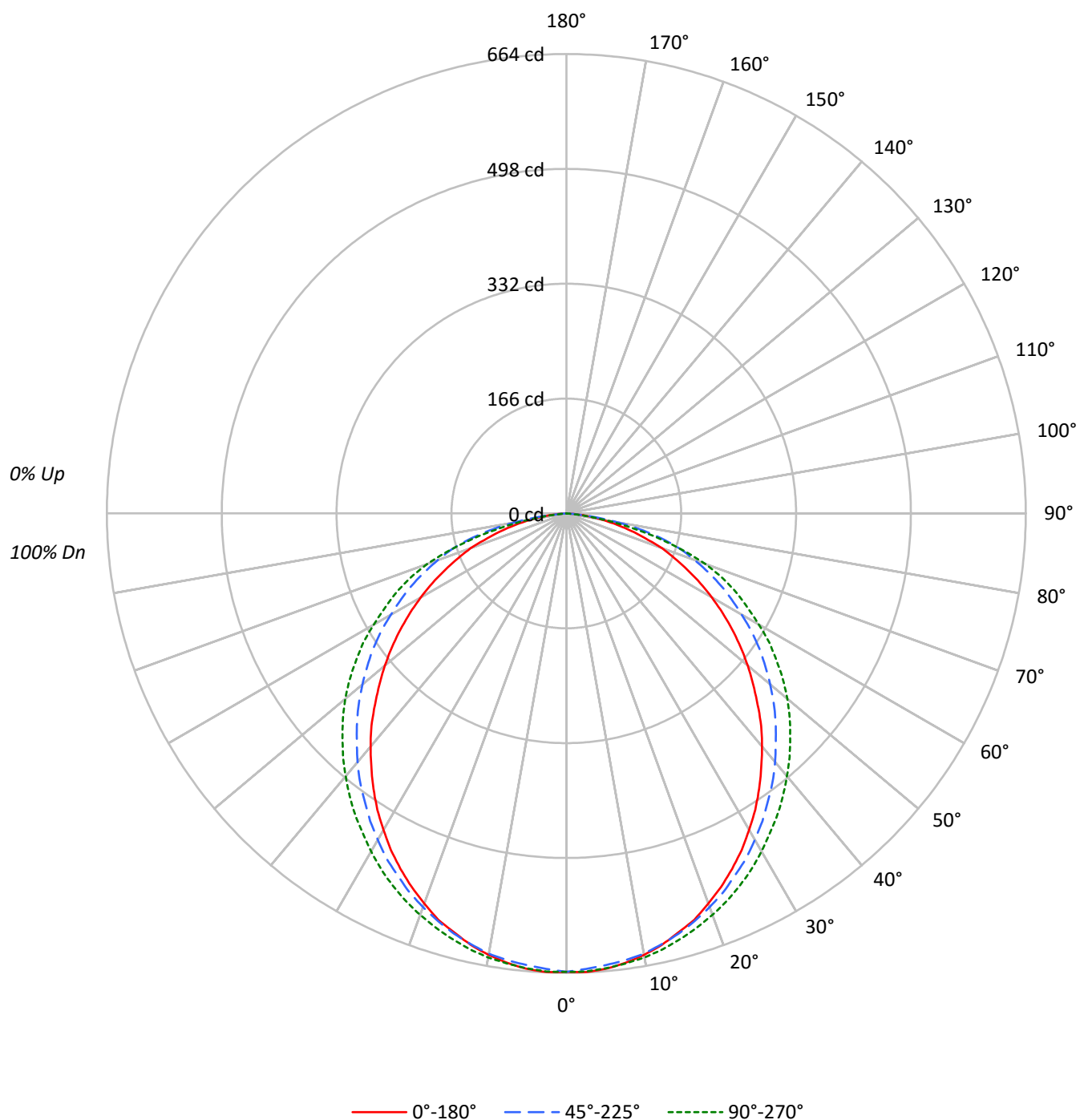
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307799

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CA125-W2A-U-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P307799

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CA125-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		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°	1783	1783	1783
5°	1785	1770	1782
10°	1770	1765	1780
15°	1746	1751	1774
20°	1718	1734	1768
25°	1683	1713	1762
30°	1641	1693	1753
35°	1596	1669	1747
40°	1545	1649	1742
45°	1488	1628	1741
50°	1433	1611	1745
55°	1373	1597	1740
60°	1307	1575	1729
65°	1230	1570	1729
70°	1158	1556	1680
75°	1004	1521	1435
80°	814	1226	956
85°	540	426	284



TEST NUMBER: P307799

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CA125-W2A-U-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	3.4
10°-20°	178.0	9.6
20°-30°	267.1	14.4
30°-40°	318.6	17.2
40°-50°	329.3	17.7
50°-60°	300.7	16.2
60°-70°	236.6	12.7
70°-80°	137.7	7.4
80°-90°	25.4	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°	507.7	27.4
0°-40°	826.2	44.5
0°-60°	1456.3	78.5
0°-90°	1856.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1856.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	663	663	663	663	663	
5°	661	659	655	661	660	63
15°	627	628	628	637	637	177
25°	567	570	577	591	594	261
35°	486	492	508	527	532	304
45°	391	404	428	452	457	302
55°	293	308	340	365	371	262
65°	193	214	247	266	272	192
75°	97	120	146	144	138	103
85°	18	25	14	11	9	23
90°	0	0	0	0	0	



TEST NUMBER: P307799

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-S-CA125-W2A-U-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	662.6	662.6	662.6	662.6	662.6
2.5°	663.5	661.6	658.9	663.5	662.6
5°	660.7	658.9	655.2	660.7	659.8
7.5°	655.2	653.4	651.5	657.0	656.1
10°	647.8	646.9	646.0	652.4	651.5
12.5°	638.6	638.6	637.7	645.1	645.1
15°	626.7	627.6	628.5	636.8	636.8
17.5°	615.6	614.7	617.5	626.7	627.6
20°	600.0	601.8	605.5	616.6	617.5
22.5°	584.3	586.2	592.6	603.7	606.4
25°	566.9	569.6	577.0	590.8	593.5
27.5°	548.5	552.1	562.3	577.0	579.7
30°	528.2	533.7	544.8	561.3	564.1
32.5°	508.0	513.5	527.3	543.9	547.5
35°	485.9	492.3	508.0	527.3	531.9
37.5°	462.9	471.2	489.6	508.9	514.4
40°	439.9	449.1	469.3	489.6	496.0
42.5°	416.9	426.1	448.1	471.2	477.6
45°	391.1	404.0	427.9	451.8	457.4
47.5°	366.2	380.1	406.7	430.7	438.0
50°	342.3	356.1	384.7	409.5	416.9
52.5°	317.5	332.2	362.6	388.3	394.8
55°	292.6	308.3	340.5	365.3	370.9
57.5°	267.8	284.3	317.5	341.4	347.8
60°	242.9	260.4	292.6	316.6	321.2
62.5°	218.1	236.5	269.6	290.8	295.4
65°	193.2	213.5	246.6	265.9	271.5
67.5°	169.3	189.6	221.8	240.2	244.8
70°	147.2	165.6	197.8	211.7	213.5
72.5°	119.6	142.6	173.9	181.3	176.7
75°	96.6	119.6	146.3	143.6	138.0
77.5°	73.6	96.6	114.1	104.9	97.5
80°	52.5	75.5	79.1	65.3	61.7
82.5°	34.0	52.5	44.2	34.0	27.6
85°	17.5	24.8	13.8	11.0	9.2
87.5°	5.5	3.7	1.8	1.8	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)