

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: P307804

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CA125-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: P307804
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-5000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC 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: 2083.0 lumens
Efficiency: N/A
Efficacy: 123.3 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

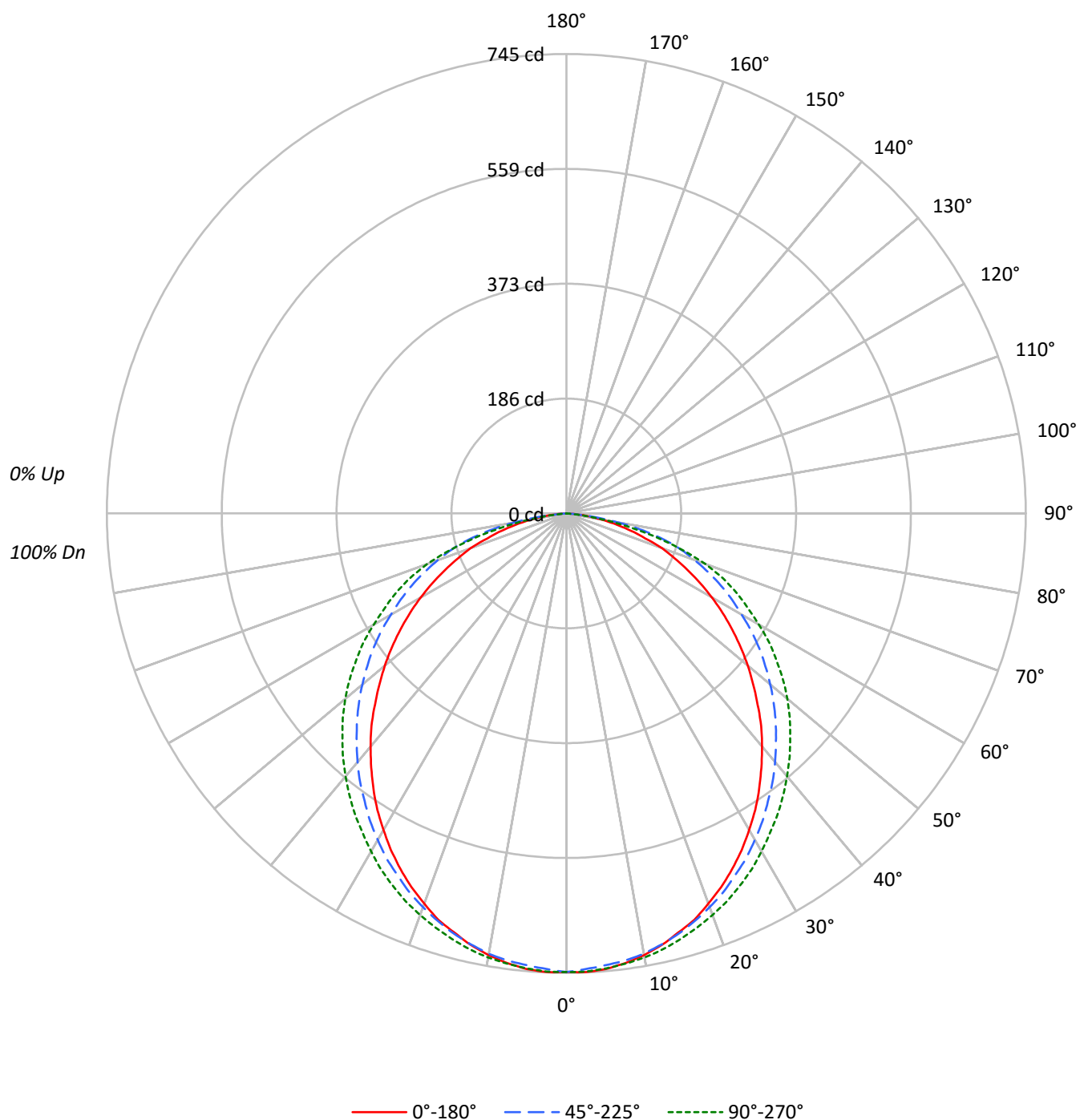
Input Watts (W): 16.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	2001	2001	2001
5°	2003	1986	2000
10°	1987	1981	1998
15°	1959	1965	1991
20°	1928	1946	1985
25°	1889	1923	1978
30°	1842	1900	1967
35°	1791	1873	1961
40°	1734	1850	1956
45°	1670	1827	1953
50°	1608	1807	1958
55°	1541	1793	1953
60°	1468	1767	1940
65°	1381	1762	1940
70°	1300	1747	1885
75°	1127	1707	1611
80°	913	1376	1072
85°	605	479	318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.2	3.4
10°-20°	199.8	9.6
20°-30°	299.7	14.4
30°-40°	357.5	17.2
40°-50°	369.6	17.7
50°-60°	337.5	16.2
60°-70°	265.6	12.7
70°-80°	154.6	7.4
80°-90°	28.5	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°	569.7	27.4
0°-40°	927.3	44.5
0°-60°	1634.4	78.5
0°-90°	2083.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2083.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	742	740	735	742	740	70
15°	703	704	705	715	715	198
25°	636	639	648	663	666	293
35°	545	552	570	592	597	341
45°	439	453	480	507	513	339
55°	328	346	382	410	416	294
65°	217	240	277	298	305	215
75°	108	134	164	161	155	115
85°	20	28	16	12	10	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	743.6	743.6	743.6	743.6	743.6
2.5°	744.6	742.6	739.5	744.6	743.6
5°	741.5	739.5	735.3	741.5	740.5
7.5°	735.3	733.3	731.2	737.4	736.4
10°	727.1	726.0	725.0	732.2	731.2
12.5°	716.7	716.7	715.7	724.0	724.0
15°	703.3	704.4	705.4	714.7	714.7
17.5°	690.9	689.9	693.0	703.3	704.4
20°	673.4	675.4	679.6	692.0	693.0
22.5°	655.8	657.9	665.1	677.5	680.6
25°	636.2	639.3	647.5	663.0	666.1
27.5°	615.5	619.7	631.0	647.5	650.6
30°	592.8	599.0	611.4	630.0	633.1
32.5°	570.1	576.3	591.8	610.4	614.5
35°	545.3	552.5	570.1	591.8	596.9
37.5°	519.5	528.8	549.4	571.1	577.3
40°	493.7	504.0	526.7	549.4	556.7
42.5°	467.8	478.2	503.0	528.8	536.0
45°	438.9	453.4	480.2	507.1	513.3
47.5°	411.0	426.5	456.5	483.3	491.6
50°	384.2	399.7	431.7	459.6	467.8
52.5°	356.3	372.8	406.9	435.8	443.1
55°	328.4	346.0	382.1	410.0	416.2
57.5°	300.5	319.1	356.3	383.2	390.4
60°	272.7	292.3	328.4	355.3	360.4
62.5°	244.8	265.4	302.6	326.4	331.5
65°	216.9	239.6	276.8	298.5	304.7
67.5°	190.0	212.8	248.9	269.6	274.7
70°	165.2	185.9	222.0	237.5	239.6
72.5°	134.3	160.1	195.2	203.5	198.3
75°	108.4	134.3	164.2	161.1	154.9
77.5°	82.6	108.4	128.1	117.7	109.5
80°	58.9	84.7	88.8	73.3	69.2
82.5°	38.2	58.9	49.6	38.2	31.0
85°	19.6	27.9	15.5	12.4	10.3
87.5°	6.2	4.1	2.1	2.1	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)