

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: P307530

Luminaire Tested: **14FCZ2-20-UNV-L82765-CA125-W2A-U-3000K**

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: P307530
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-CA125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 3000K 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: 1890.0 lumens
Efficiency: N/A
Efficacy: 115.2 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

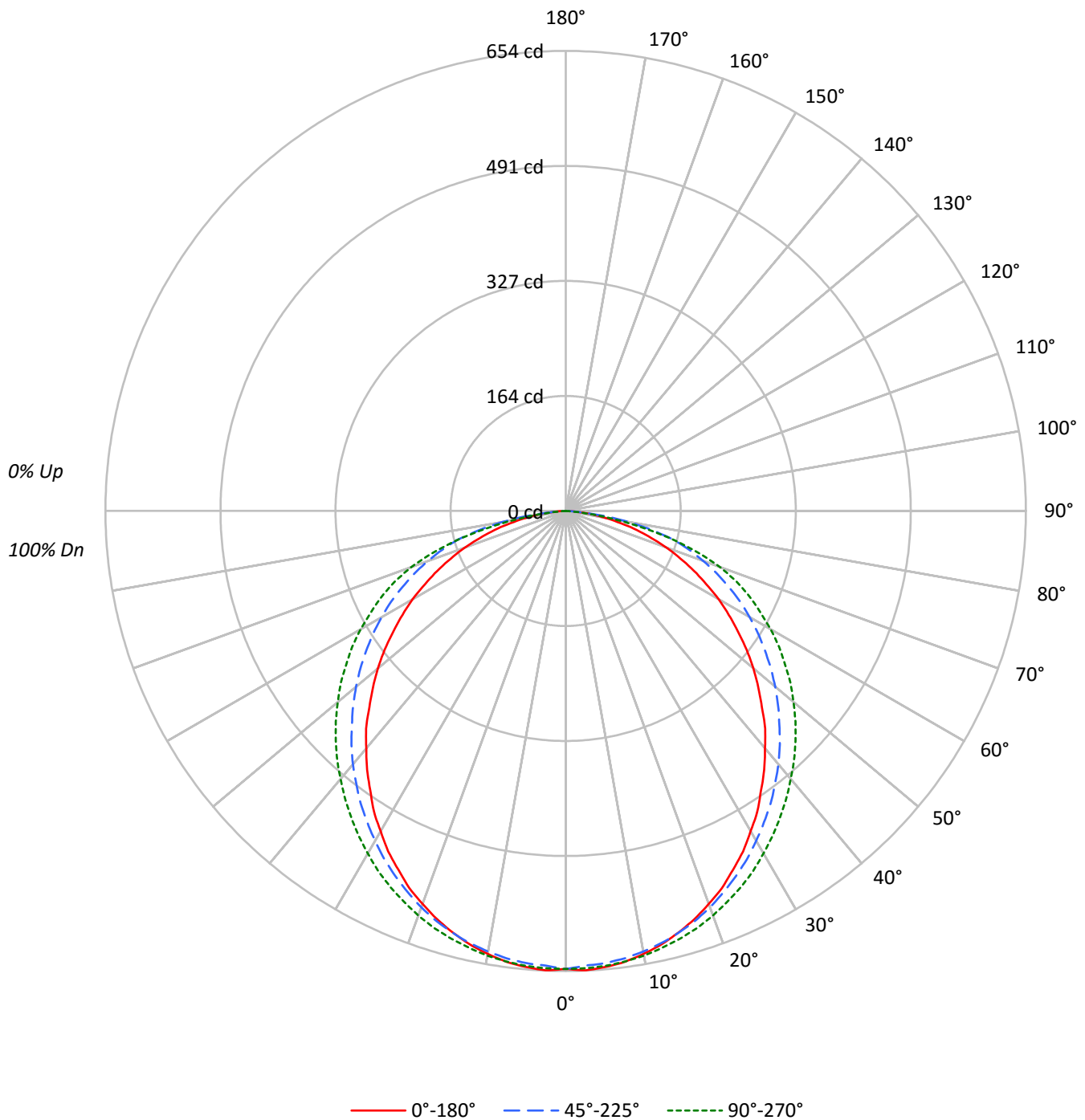
Input Watts (W): 16.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1752	1752	1752
5°	1758	1743	1753
10°	1747	1738	1754
15°	1728	1729	1753
20°	1703	1717	1752
25°	1670	1700	1751
30°	1634	1683	1747
35°	1591	1668	1746
40°	1548	1652	1748
45°	1501	1634	1758
50°	1457	1627	1770
55°	1402	1621	1786
60°	1352	1624	1810
65°	1282	1629	1838
70°	1204	1641	1837
75°	1091	1656	1660
80°	894	1430	1182
85°	664	676	275



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.6	3.3
10°-20°	176.0	9.3
20°-30°	265.1	14.0
30°-40°	318.2	16.8
40°-50°	331.6	17.5
50°-60°	307.0	16.2
60°-70°	248.0	13.1
70°-80°	151.2	8.0
80°-90°	31.2	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°	502.7	26.6
0°-40°	820.9	43.4
0°-60°	1459.5	77.2
0°-90°	1890.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1890.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	651	651	651	651	651	
5°	651	649	645	650	649	62
15°	620	621	621	629	629	175
25°	563	566	573	587	590	259
35°	484	492	508	526	531	303
45°	394	406	429	454	462	305
55°	299	314	346	372	381	268
65°	201	221	256	282	289	199
75°	105	128	159	162	160	110
85°	22	32	22	12	9	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	651.1	651.1	651.1	651.1	651.1
2.5°	653.6	651.5	646.9	651.5	650.7
5°	650.7	649.0	645.2	649.8	649.0
7.5°	646.5	644.8	641.4	646.9	646.1
10°	639.3	638.5	635.9	642.3	641.8
12.5°	630.9	630.5	629.2	636.4	635.9
15°	620.3	620.8	620.8	629.2	629.2
17.5°	608.5	609.4	611.1	620.3	621.6
20°	594.6	596.3	599.7	610.2	611.9
22.5°	580.3	581.6	586.6	599.3	601.0
25°	562.6	566.0	572.7	587.1	589.6
27.5°	545.8	548.7	558.0	572.7	576.9
30°	525.9	530.6	541.5	557.6	562.2
32.5°	507.0	512.0	524.7	543.2	547.4
35°	484.2	491.8	507.8	526.4	531.4
37.5°	463.6	470.7	488.9	509.1	515.0
40°	440.8	449.7	470.3	491.8	497.7
42.5°	419.7	428.2	450.5	472.4	480.4
45°	394.5	406.3	429.4	453.5	461.9
47.5°	371.3	383.1	409.6	435.3	442.9
50°	348.1	360.7	388.6	415.1	422.7
52.5°	324.1	337.6	367.5	394.0	402.9
55°	298.8	314.4	345.6	372.5	380.6
57.5°	274.8	290.8	324.1	351.5	359.5
60°	251.2	267.6	301.7	327.9	336.3
62.5°	225.0	244.4	279.8	305.5	311.9
65°	201.4	221.3	255.8	281.5	288.7
67.5°	176.6	198.1	232.6	256.2	263.0
70°	153.0	175.3	208.6	230.5	233.5
72.5°	127.7	150.5	184.2	198.1	198.1
75°	104.9	128.1	159.3	161.8	159.7
77.5°	80.1	105.8	126.0	121.0	115.9
80°	57.7	83.0	92.3	83.0	76.3
82.5°	38.8	60.3	55.6	44.3	39.2
85°	21.5	32.0	21.9	12.2	8.9
87.5°	8.0	7.2	2.1	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)