

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: P307050

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP125-W2A-U-5700K**

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: P307050
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-25-UNV-L82765-HRP-CP125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB SHEET
Light Source: (168) 5700K 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: 1812.0 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

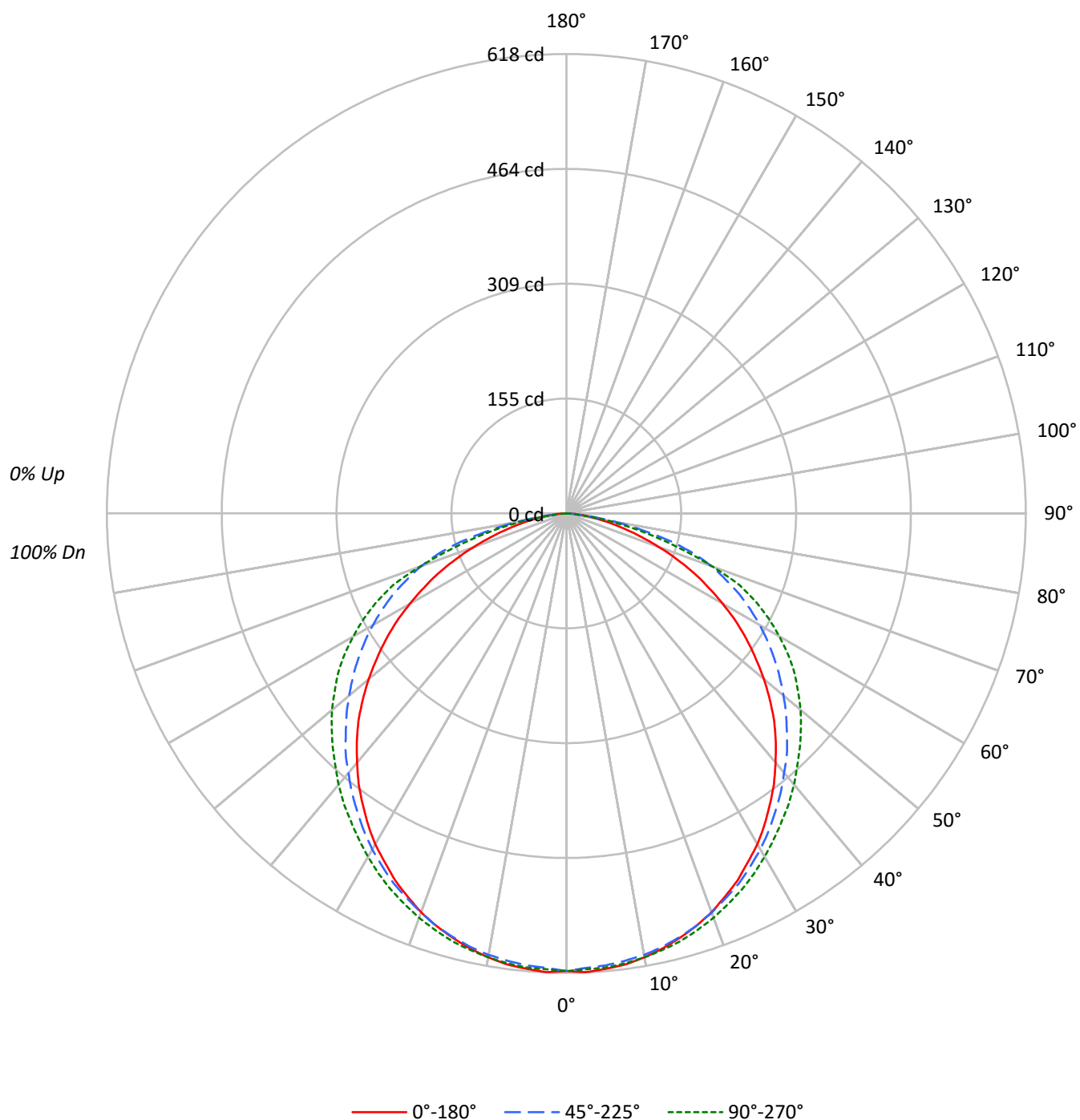
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	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	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1656	1656	1656
5°	1661	1648	1656
10°	1656	1647	1656
15°	1646	1643	1659
20°	1635	1637	1658
25°	1617	1631	1658
30°	1597	1622	1657
35°	1569	1610	1660
40°	1537	1601	1673
45°	1505	1596	1691
50°	1453	1596	1722
55°	1390	1604	1759
60°	1306	1616	1781
65°	1205	1633	1792
70°	1049	1637	1650
75°	865	1522	1333
80°	680	1096	891
85°	528	423	210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.3	3.2
10°-20°	167.2	9.2
20°-30°	253.9	14.0
30°-40°	307.6	17.0
40°-50°	324.1	17.9
50°-60°	302.6	16.7
60°-70°	241.8	13.3
70°-80°	133.1	7.3
80°-90°	23.5	1.3
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°	479.3	26.5
0°-40°	786.9	43.4
0°-60°	1413.6	78.0
0°-90°	1812.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1812.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	615	615	615	615	615	
5°	615	613	610	614	613	58
15°	591	591	590	595	595	167
25°	545	546	549	557	558	251
35°	478	482	490	502	505	299
45°	395	403	419	438	444	304
55°	296	311	342	366	375	264
65°	189	213	256	278	282	186
75°	83	119	146	132	128	90
85°	17	22	14	8	7	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	615.4	615.4	615.4	615.4	615.4
2.5°	617.6	615.9	611.9	615.4	613.7
5°	614.8	613.1	610.2	614.2	613.1
7.5°	611.9	609.7	606.8	611.4	610.2
10°	606.2	604.5	602.8	606.8	606.2
12.5°	599.4	598.8	597.1	601.7	601.1
15°	590.9	590.9	589.7	595.4	595.4
17.5°	581.7	581.2	581.7	588.0	587.4
20°	570.9	570.9	571.5	578.9	578.9
22.5°	557.8	558.4	560.1	569.2	568.6
25°	544.7	545.9	549.3	557.2	558.4
27.5°	528.8	531.6	535.6	545.3	546.4
30°	513.9	515.7	521.9	531.0	533.3
32.5°	496.3	499.7	506.5	516.8	519.6
35°	477.5	482.0	490.0	502.5	505.4
37.5°	458.7	462.7	473.5	486.6	491.7
40°	437.6	444.4	455.8	470.6	476.3
42.5°	417.1	423.9	439.3	454.7	459.8
45°	395.4	402.8	419.4	438.2	444.4
47.5°	371.5	380.0	401.1	421.1	427.9
50°	347.0	357.8	381.2	403.4	411.4
52.5°	321.4	335.0	361.8	385.2	392.6
55°	296.3	311.1	341.9	365.8	374.9
57.5°	270.6	286.6	321.4	348.7	353.8
60°	242.7	262.1	300.3	324.2	331.0
62.5°	215.4	237.6	278.6	301.4	307.1
65°	189.2	213.1	256.4	277.5	281.5
67.5°	160.7	189.2	231.9	251.3	252.4
70°	133.3	166.4	208.0	217.1	209.7
72.5°	106.5	141.9	180.1	172.6	166.4
75°	83.2	119.1	146.4	131.6	128.2
77.5°	61.5	97.4	104.8	96.9	90.6
80°	43.9	76.9	70.7	60.4	57.5
82.5°	30.2	48.4	38.7	30.2	26.2
85°	17.1	21.7	13.7	8.5	6.8
87.5°	7.4	5.1	2.8	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)