

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: P307037

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CA125-W2A-U-4000K**

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: P307037
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-CA125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 4000K 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: 1769.0 lumens
Efficiency: N/A
Efficacy: 89.3 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

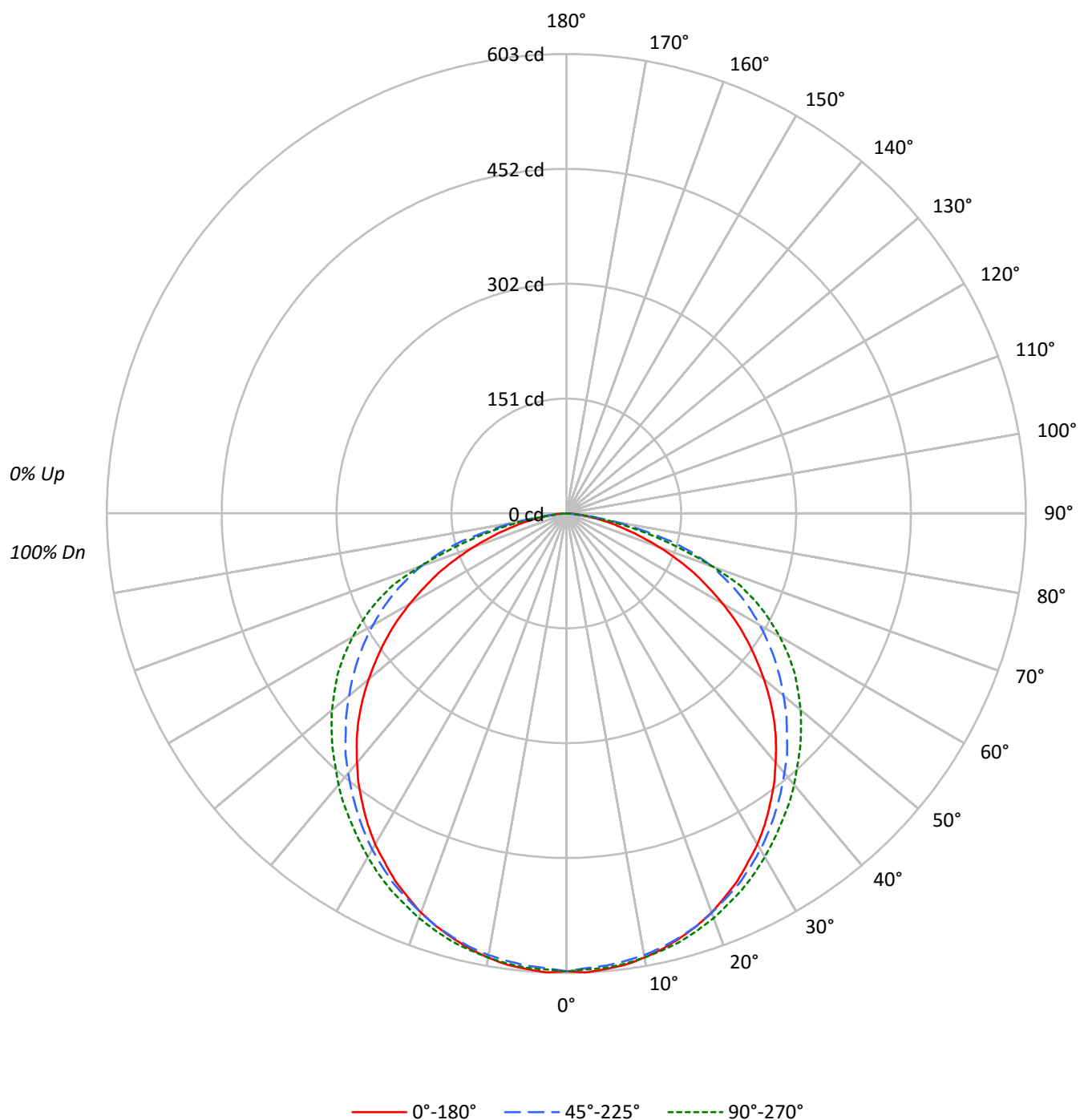
Input Watts (W): 19.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1617	1617	1617
5°	1621	1609	1617
10°	1617	1608	1617
15°	1607	1604	1619
20°	1596	1598	1619
25°	1579	1592	1618
30°	1559	1583	1618
35°	1531	1572	1621
40°	1501	1563	1633
45°	1469	1558	1651
50°	1418	1558	1681
55°	1357	1566	1717
60°	1276	1577	1739
65°	1176	1594	1750
70°	1024	1597	1611
75°	844	1487	1302
80°	663	1069	871
85°	516	414	207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.9	3.2
10°-20°	163.2	9.2
20°-30°	247.8	14.0
30°-40°	300.3	17.0
40°-50°	316.4	17.9
50°-60°	295.4	16.7
60°-70°	236.1	13.3
70°-80°	129.9	7.3
80°-90°	22.9	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°	467.9	26.5
0°-40°	768.2	43.4
0°-60°	1380.1	78.0
0°-90°	1769.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1769.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	601	601	601	601	601	
5°	600	598	596	600	598	57
15°	577	577	576	581	581	163
25°	532	533	536	544	545	245
35°	466	471	478	491	493	292
45°	386	393	409	428	434	297
55°	289	304	334	357	366	258
65°	185	208	250	271	275	182
75°	81	116	143	128	125	87
85°	17	21	13	8	7	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	600.8	600.8	600.8	600.8	600.8
2.5°	603.0	601.3	597.4	600.8	599.1
5°	600.2	598.5	595.8	599.6	598.5
7.5°	597.4	595.2	592.4	596.9	595.8
10°	591.9	590.2	588.5	592.4	591.9
12.5°	585.2	584.6	583.0	587.4	586.9
15°	576.8	576.8	575.7	581.3	581.3
17.5°	567.9	567.4	567.9	574.1	573.5
20°	557.4	557.4	557.9	565.2	565.2
22.5°	544.6	545.1	546.8	555.7	555.1
25°	531.8	532.9	536.2	544.0	545.1
27.5°	516.2	519.0	522.9	532.3	533.5
30°	501.7	503.4	509.5	518.4	520.7
32.5°	484.5	487.8	494.5	504.5	507.3
35°	466.1	470.6	478.4	490.6	493.4
37.5°	447.8	451.7	462.3	475.0	480.1
40°	427.2	433.9	445.0	459.5	465.0
42.5°	407.2	413.9	428.9	443.9	448.9
45°	386.0	393.3	409.4	427.8	433.9
47.5°	362.7	371.0	391.6	411.1	417.8
50°	338.8	349.3	372.1	393.8	401.6
52.5°	313.7	327.1	353.2	376.0	383.3
55°	289.3	303.7	333.8	357.1	366.0
57.5°	264.2	279.8	313.7	340.4	345.4
60°	237.0	255.9	293.1	316.5	323.2
62.5°	210.3	232.0	272.0	294.3	299.8
65°	184.7	208.0	250.3	270.9	274.8
67.5°	156.9	184.7	226.4	245.3	246.4
70°	130.2	162.4	203.0	211.9	204.7
72.5°	104.0	138.5	175.8	168.5	162.4
75°	81.2	116.3	143.0	128.5	125.2
77.5°	60.1	95.1	102.4	94.6	88.4
80°	42.8	75.1	69.0	59.0	56.2
82.5°	29.5	47.3	37.8	29.5	25.6
85°	16.7	21.1	13.4	8.3	6.7
87.5°	7.2	5.0	2.8	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)