

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: P307067

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP250-W2A-U-5500K**

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: P307067
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-CP250-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
POLYCARB SHEET
Light Source: (168) 5500K 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: 1716.0 lumens
Efficiency: N/A
Efficacy: 85.0 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

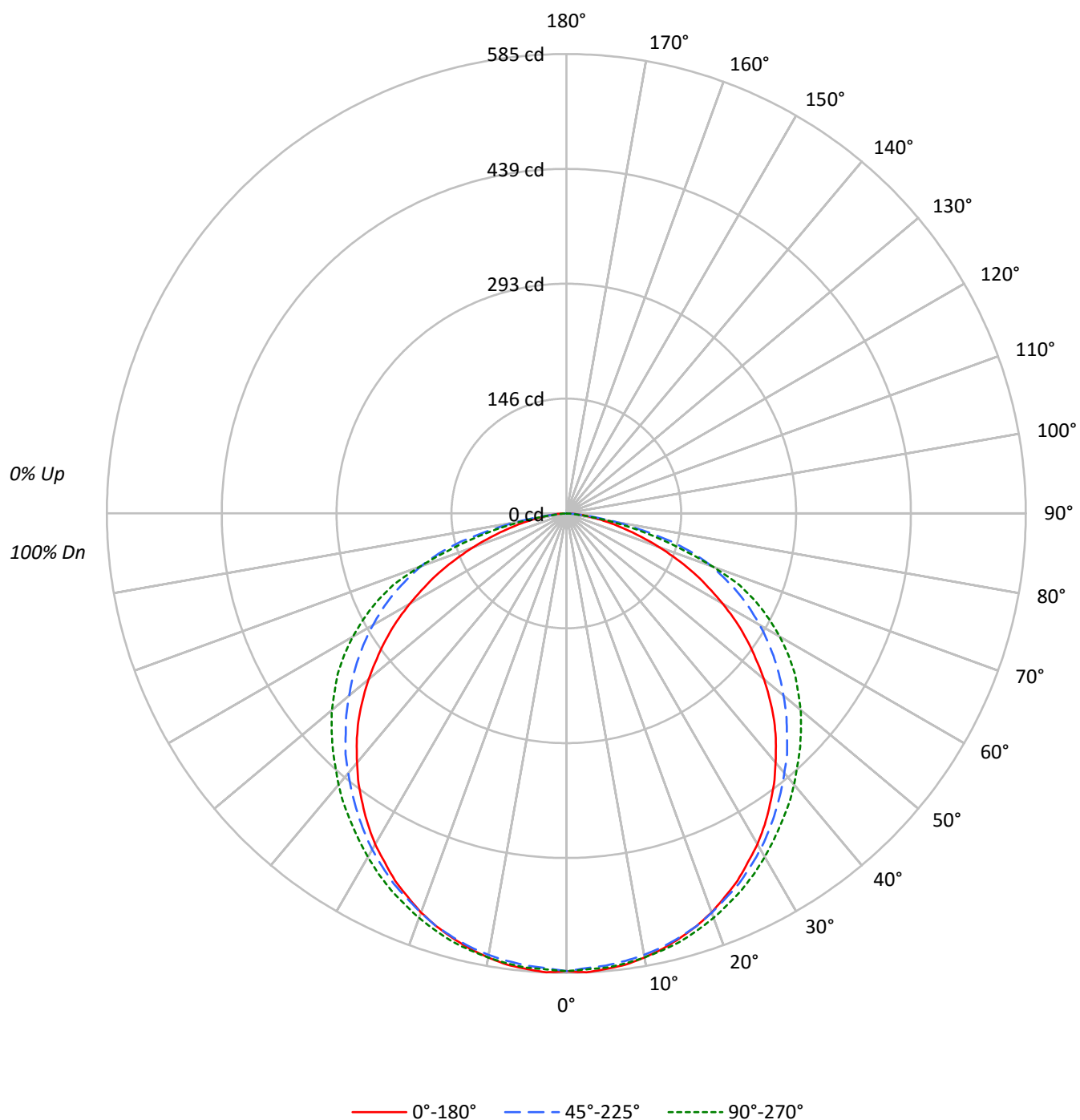
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1568	1568	1568
5°	1573	1561	1568
10°	1569	1560	1569
15°	1559	1556	1571
20°	1548	1550	1570
25°	1532	1545	1570
30°	1512	1536	1569
35°	1486	1525	1572
40°	1456	1516	1585
45°	1425	1511	1602
50°	1376	1511	1631
55°	1316	1519	1666
60°	1237	1531	1687
65°	1140	1546	1698
70°	994	1550	1563
75°	819	1442	1262
80°	643	1037	845
85°	500	401	201



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.2	3.2
10°-20°	158.3	9.2
20°-30°	240.4	14.0
30°-40°	291.3	17.0
40°-50°	307.0	17.9
50°-60°	286.6	16.7
60°-70°	229.0	13.3
70°-80°	126.0	7.3
80°-90°	22.3	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°	453.9	26.5
0°-40°	745.2	43.4
0°-60°	1338.7	78.0
0°-90°	1716.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1716.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	583	583	583	583	583	
5°	582	581	578	582	581	55
15°	560	560	558	564	564	158
25°	516	517	520	528	529	237
35°	452	456	464	476	479	283
45°	374	382	397	415	421	288
55°	281	295	324	346	355	250
65°	179	202	243	263	267	176
75°	79	113	139	125	121	85
85°	16	20	13	8	6	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	582.8	582.8	582.8	582.8	582.8
2.5°	584.9	583.3	579.5	582.8	581.1
5°	582.2	580.6	577.9	581.7	580.6
7.5°	579.5	577.4	574.7	579.0	577.9
10°	574.1	572.5	570.9	574.7	574.1
12.5°	567.7	567.1	565.5	569.8	569.3
15°	559.6	559.6	558.5	563.9	563.9
17.5°	550.9	550.4	550.9	556.9	556.3
20°	540.7	540.7	541.2	548.2	548.2
22.5°	528.3	528.8	530.4	539.1	538.5
25°	515.9	516.9	520.2	527.7	528.8
27.5°	500.7	503.4	507.2	516.4	517.5
30°	486.7	488.3	494.3	502.9	505.1
32.5°	470.0	473.2	479.7	489.4	492.1
35°	452.2	456.5	464.1	475.9	478.6
37.5°	434.4	438.2	448.4	460.8	465.7
40°	414.4	420.9	431.7	445.7	451.1
42.5°	395.0	401.5	416.0	430.6	435.5
45°	374.5	381.5	397.1	414.9	420.9
47.5°	351.8	359.9	379.9	398.8	405.2
50°	328.6	338.9	361.0	382.0	389.6
52.5°	304.3	317.3	342.6	364.8	371.8
55°	280.6	294.6	323.8	346.4	355.1
57.5°	256.3	271.4	304.3	330.2	335.1
60°	229.9	248.2	284.4	307.0	313.5
62.5°	204.0	225.0	263.9	285.4	290.8
65°	179.1	201.8	242.8	262.8	266.6
67.5°	152.2	179.1	219.6	238.0	239.0
70°	126.3	157.6	197.0	205.6	198.6
72.5°	100.9	134.4	170.5	163.5	157.6
75°	78.8	112.8	138.7	124.6	121.4
77.5°	58.3	92.3	99.3	91.7	85.8
80°	41.5	72.8	66.9	57.2	54.5
82.5°	28.6	45.9	36.7	28.6	24.8
85°	16.2	20.5	13.0	8.1	6.5
87.5°	7.0	4.9	2.7	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)