

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: P307057

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP187-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: P307057
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-CP187-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"
POLYCARB 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: 1713.0 lumens
Efficiency: N/A
Efficacy: 85.2 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

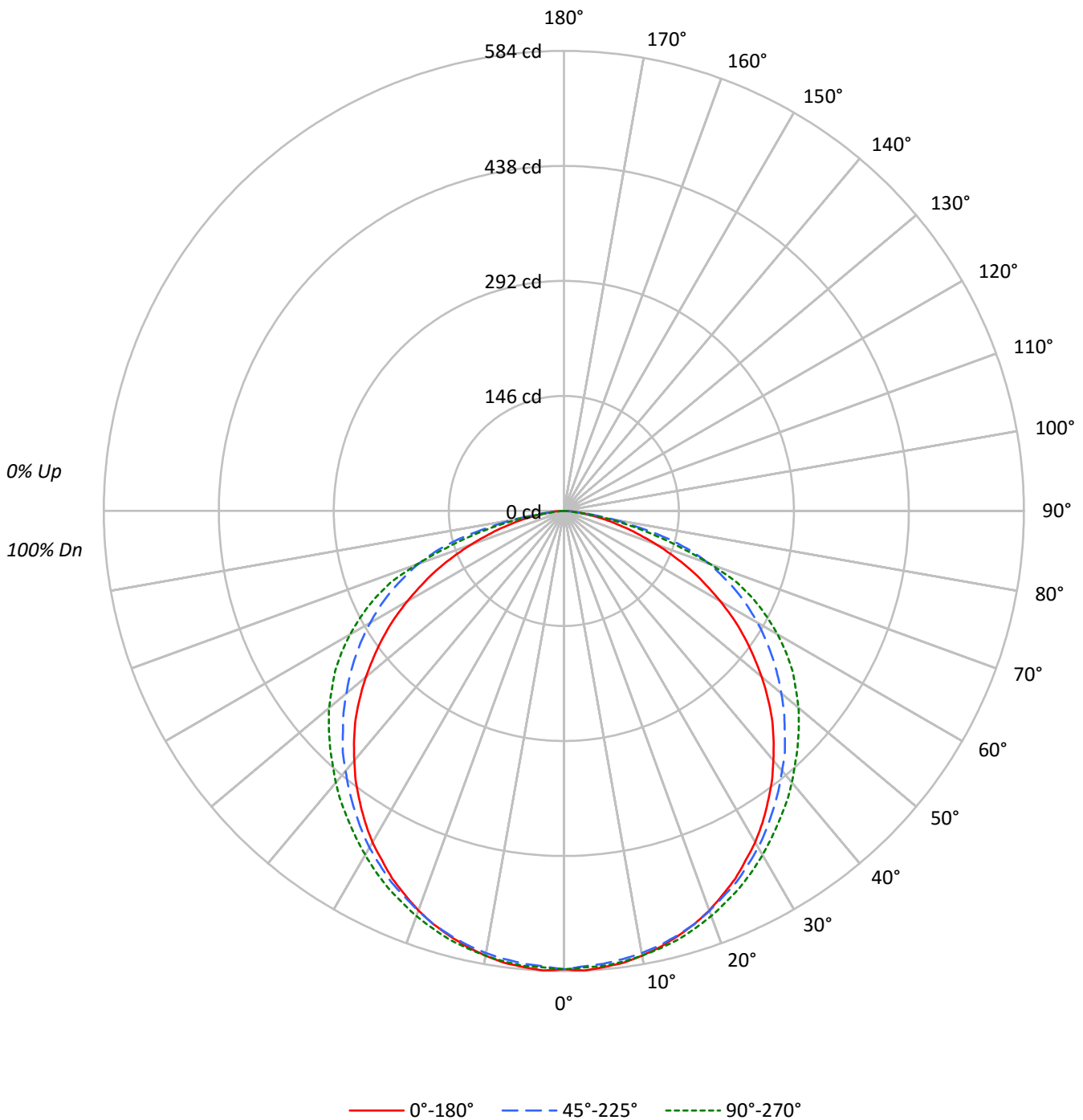
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1565	1565	1565
5°	1570	1558	1566
10°	1566	1557	1566
15°	1556	1553	1568
20°	1546	1547	1567
25°	1529	1542	1567
30°	1510	1533	1567
35°	1483	1522	1570
40°	1453	1514	1582
45°	1423	1509	1599
50°	1373	1509	1628
55°	1314	1516	1663
60°	1235	1528	1685
65°	1138	1543	1694
70°	991	1547	1559
75°	817	1439	1260
80°	643	1035	843
85°	500	398	201



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	3.2
10°-20°	158.0	9.2
20°-30°	240.0	14.0
30°-40°	290.8	17.0
40°-50°	306.4	17.9
50°-60°	286.1	16.7
60°-70°	228.6	13.3
70°-80°	125.8	7.3
80°-90°	22.2	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°	453.1	26.5
0°-40°	743.9	43.4
0°-60°	1336.4	78.0
0°-90°	1713.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1713.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	582	582	582	582	582	
5°	581	580	577	581	580	55
15°	559	559	558	563	563	158
25°	515	516	519	527	528	237
35°	451	456	463	475	478	282
45°	374	381	396	414	420	288
55°	280	294	323	346	354	250
65°	179	202	242	262	266	176
75°	79	113	138	124	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°	581.7	581.7	581.7	581.7	581.7
2.5°	583.9	582.3	578.5	581.7	580.1
5°	581.2	579.6	576.9	580.7	579.6
7.5°	578.5	576.4	573.7	578.0	576.9
10°	573.1	571.5	569.9	573.7	573.1
12.5°	566.7	566.1	564.5	568.8	568.3
15°	558.6	558.6	557.5	562.9	562.9
17.5°	550.0	549.4	550.0	555.9	555.3
20°	539.7	539.7	540.3	547.3	547.3
22.5°	527.3	527.9	529.5	538.1	537.6
25°	515.0	516.0	519.3	526.8	527.9
27.5°	499.9	502.6	506.3	515.5	516.6
30°	485.9	487.5	493.4	502.0	504.2
32.5°	469.2	472.4	478.9	488.6	491.3
35°	451.4	455.7	463.2	475.1	477.8
37.5°	433.6	437.4	447.6	460.0	464.9
40°	413.7	420.1	430.9	444.9	450.3
42.5°	394.3	400.8	415.3	429.8	434.7
45°	373.8	380.8	396.4	414.2	420.1
47.5°	351.2	359.3	379.2	398.1	404.5
50°	328.0	338.3	360.4	381.4	388.9
52.5°	303.8	316.7	342.0	364.1	371.1
55°	280.1	294.1	323.2	345.8	354.4
57.5°	255.9	270.9	303.8	329.7	334.5
60°	229.5	247.8	283.9	306.5	313.0
62.5°	203.6	224.6	263.4	284.9	290.3
65°	178.8	201.5	242.4	262.3	266.1
67.5°	151.9	178.8	219.2	237.5	238.6
70°	126.0	157.3	196.6	205.2	198.2
72.5°	100.7	134.1	170.2	163.2	157.3
75°	78.6	112.6	138.4	124.4	121.2
77.5°	58.2	92.1	99.1	91.6	85.6
80°	41.5	72.7	66.8	57.1	54.4
82.5°	28.5	45.8	36.6	28.5	24.8
85°	16.2	20.5	12.9	8.1	6.5
87.5°	7.0	4.8	2.7	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)