

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: P311875

Luminaire Tested: **14FCZ2-25-UNV-L83050-HRP-CP125-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: P311875
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-L83050-HRP-CP125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB 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: 1642.0 lumens
Efficiency: N/A
Efficacy: 83.8 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

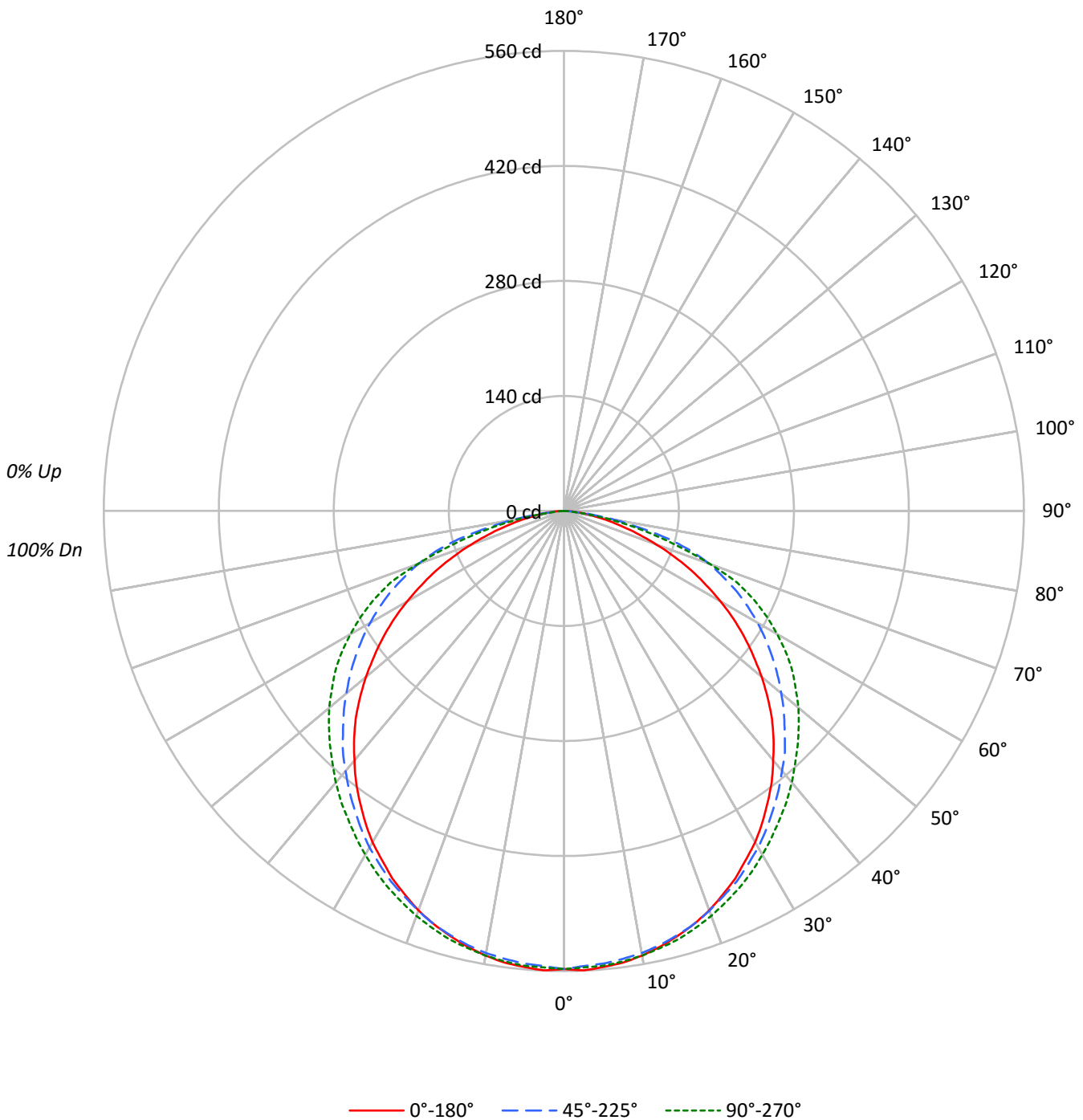
Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	1500	1500	1500
5°	1505	1494	1501
10°	1501	1493	1501
15°	1492	1489	1503
20°	1482	1483	1502
25°	1466	1478	1502
30°	1447	1470	1502
35°	1421	1459	1505
40°	1393	1451	1516
45°	1364	1446	1533
50°	1316	1446	1561
55°	1260	1453	1594
60°	1184	1464	1615
65°	1091	1479	1624
70°	950	1483	1495
75°	784	1380	1208
80°	617	992	807
85°	479	383	191



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.8	3.2
10°-20°	151.5	9.2
20°-30°	230.0	14.0
30°-40°	278.7	17.0
40°-50°	293.7	17.9
50°-60°	274.2	16.7
60°-70°	219.1	13.3
70°-80°	120.6	7.3
80°-90°	21.3	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°	434.3	26.5
0°-40°	713.1	43.4
0°-60°	1281.0	78.0
0°-90°	1642.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1642.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	557	556	553	557	556	53
15°	535	535	534	540	540	151
25°	494	495	498	505	506	227
35°	433	437	444	455	458	271
45°	358	365	380	397	403	276
55°	268	282	310	332	340	240
65°	171	193	232	252	255	169
75°	75	108	133	119	116	81
85°	16	20	12	8	6	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	557.6	557.6	557.6	557.6	557.6
2.5°	559.7	558.1	554.5	557.6	556.1
5°	557.1	555.6	553.0	556.6	555.6
7.5°	554.5	552.5	549.9	554.0	553.0
10°	549.4	547.8	546.3	549.9	549.4
12.5°	543.2	542.7	541.1	545.2	544.7
15°	535.4	535.4	534.4	539.6	539.6
17.5°	527.2	526.7	527.2	532.8	532.3
20°	517.4	517.4	517.9	524.6	524.6
22.5°	505.5	506.0	507.5	515.8	515.3
25°	493.6	494.6	497.7	505.0	506.0
27.5°	479.2	481.7	485.3	494.1	495.2
30°	465.7	467.3	473.0	481.2	483.3
32.5°	449.7	452.8	459.0	468.3	470.9
35°	432.7	436.8	444.0	455.4	458.0
37.5°	415.6	419.3	429.1	440.9	445.6
40°	396.5	402.7	413.1	426.5	431.6
42.5°	378.0	384.1	398.1	412.0	416.7
45°	358.3	365.0	380.0	397.1	402.7
47.5°	336.6	344.4	363.5	381.6	387.8
50°	314.4	324.3	345.4	365.6	372.8
52.5°	291.2	303.6	327.9	349.0	355.7
55°	268.5	281.9	309.8	331.5	339.7
57.5°	245.3	259.7	291.2	316.0	320.6
60°	220.0	237.5	272.1	293.8	300.0
62.5°	195.2	215.3	252.5	273.1	278.3
65°	171.4	193.1	232.3	251.5	255.1
67.5°	145.6	171.4	210.1	227.7	228.7
70°	120.8	150.8	188.5	196.7	190.0
72.5°	96.6	128.6	163.2	156.4	150.8
75°	75.4	107.9	132.7	119.3	116.2
77.5°	55.8	88.3	95.0	87.8	82.1
80°	39.8	69.7	64.0	54.7	52.1
82.5°	27.4	43.9	35.1	27.4	23.8
85°	15.5	19.6	12.4	7.7	6.2
87.5°	6.7	4.6	2.6	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)