

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: P307044

Luminaire Tested: **14FCZ2-25-UNV-L82765-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: P307044
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-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: 1640.0 lumens
Efficiency: N/A
Efficacy: 84.1 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

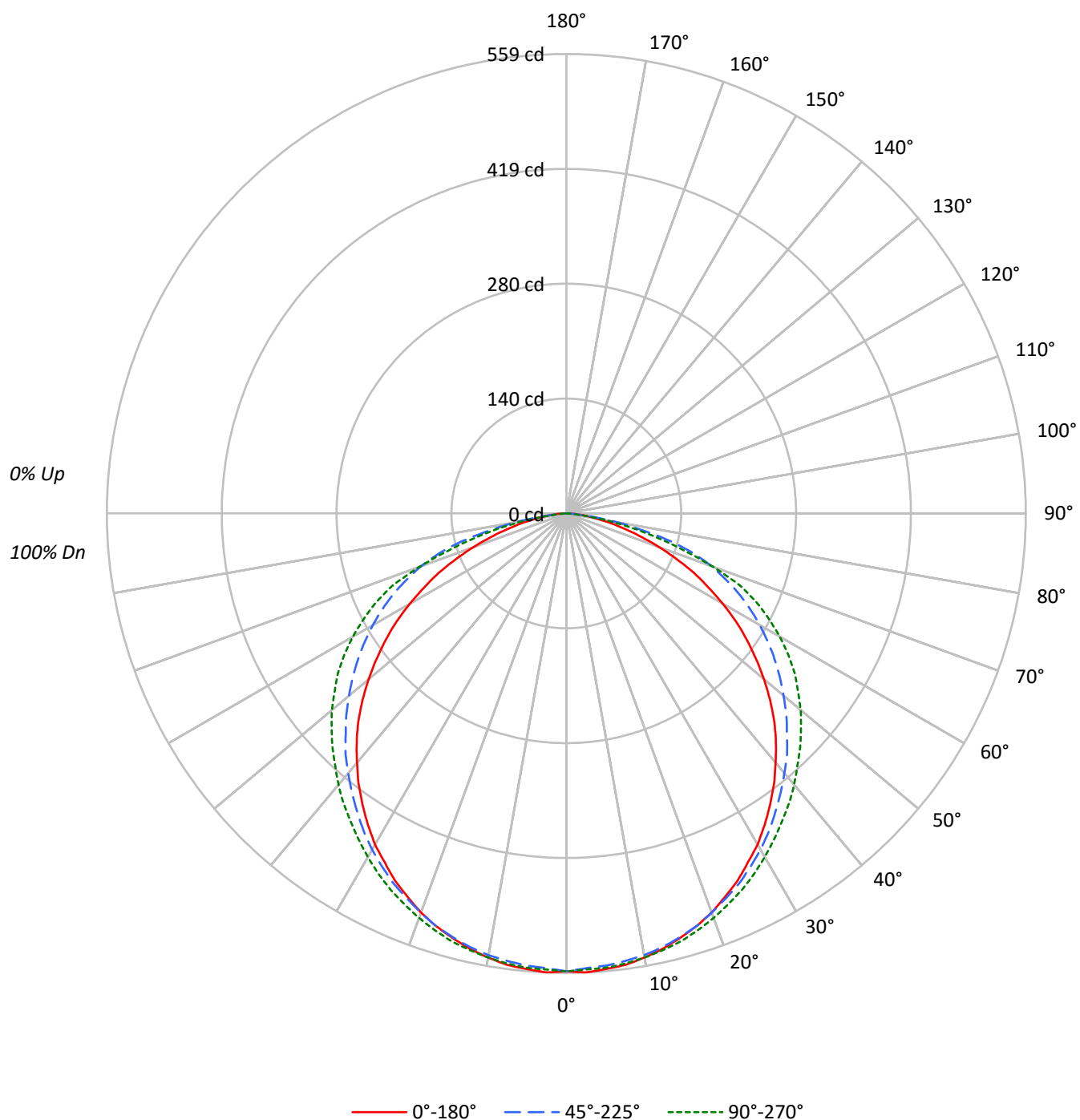
Input Watts (W): 19.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1499	1499	1499
5°	1503	1492	1499
10°	1499	1491	1499
15°	1490	1487	1501
20°	1480	1481	1500
25°	1464	1476	1501
30°	1446	1468	1500
35°	1420	1457	1503
40°	1391	1449	1514
45°	1362	1445	1531
50°	1315	1444	1559
55°	1258	1452	1592
60°	1182	1463	1612
65°	1090	1478	1622
70°	950	1481	1493
75°	783	1378	1206
80°	615	990	807
85°	479	383	191



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.7	3.2
10°-20°	151.3	9.2
20°-30°	229.8	14.0
30°-40°	278.4	17.0
40°-50°	293.4	17.9
50°-60°	273.9	16.7
60°-70°	218.9	13.3
70°-80°	120.4	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°	433.8	26.5
0°-40°	712.2	43.4
0°-60°	1279.4	78.0
0°-90°	1640.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1640.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	557	557	557	557	557	
5°	556	555	552	556	555	53
15°	535	535	534	539	539	151
25°	493	494	497	504	505	227
35°	432	436	444	455	457	270
45°	358	365	380	397	402	275
55°	268	282	309	331	339	239
65°	171	193	232	251	255	169
75°	75	108	132	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°	557.0	557.0	557.0	557.0	557.0
2.5°	559.0	557.5	553.9	557.0	555.4
5°	556.4	554.9	552.3	555.9	554.9
7.5°	553.9	551.8	549.2	553.3	552.3
10°	548.7	547.2	545.6	549.2	548.7
12.5°	542.5	542.0	540.5	544.6	544.1
15°	534.8	534.8	533.7	538.9	538.9
17.5°	526.5	526.0	526.5	532.2	531.7
20°	516.7	516.7	517.2	523.9	523.9
22.5°	504.9	505.4	506.9	515.2	514.7
25°	493.0	494.0	497.1	504.4	505.4
27.5°	478.6	481.1	484.8	493.5	494.6
30°	465.2	466.7	472.4	480.6	482.7
32.5°	449.2	452.3	458.5	467.7	470.3
35°	432.2	436.3	443.5	454.8	457.4
37.5°	415.1	418.7	428.5	440.4	445.0
40°	396.1	402.2	412.6	426.0	431.1
42.5°	377.5	383.7	397.6	411.5	416.2
45°	357.9	364.6	379.6	396.6	402.2
47.5°	336.2	344.0	363.1	381.1	387.3
50°	314.1	323.9	345.0	365.1	372.3
52.5°	290.9	303.2	327.5	348.6	355.3
55°	268.2	281.6	309.4	331.1	339.3
57.5°	245.0	259.4	290.9	315.6	320.2
60°	219.7	237.2	271.8	293.4	299.6
62.5°	194.9	215.0	252.2	272.8	278.0
65°	171.2	192.9	232.1	251.1	254.8
67.5°	145.4	171.2	209.9	227.4	228.5
70°	120.7	150.6	188.2	196.5	189.8
72.5°	96.4	128.4	163.0	156.3	150.6
75°	75.3	107.8	132.5	119.1	116.0
77.5°	55.7	88.2	94.9	87.7	82.0
80°	39.7	69.6	63.9	54.7	52.1
82.5°	27.3	43.8	35.1	27.3	23.7
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)