

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: P307069

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP250-W2A-U-6500K**

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: P307069  
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-6500K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"  
POLYCARB SHEET  
Light Source: (168) 6500K 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: 1725.0 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

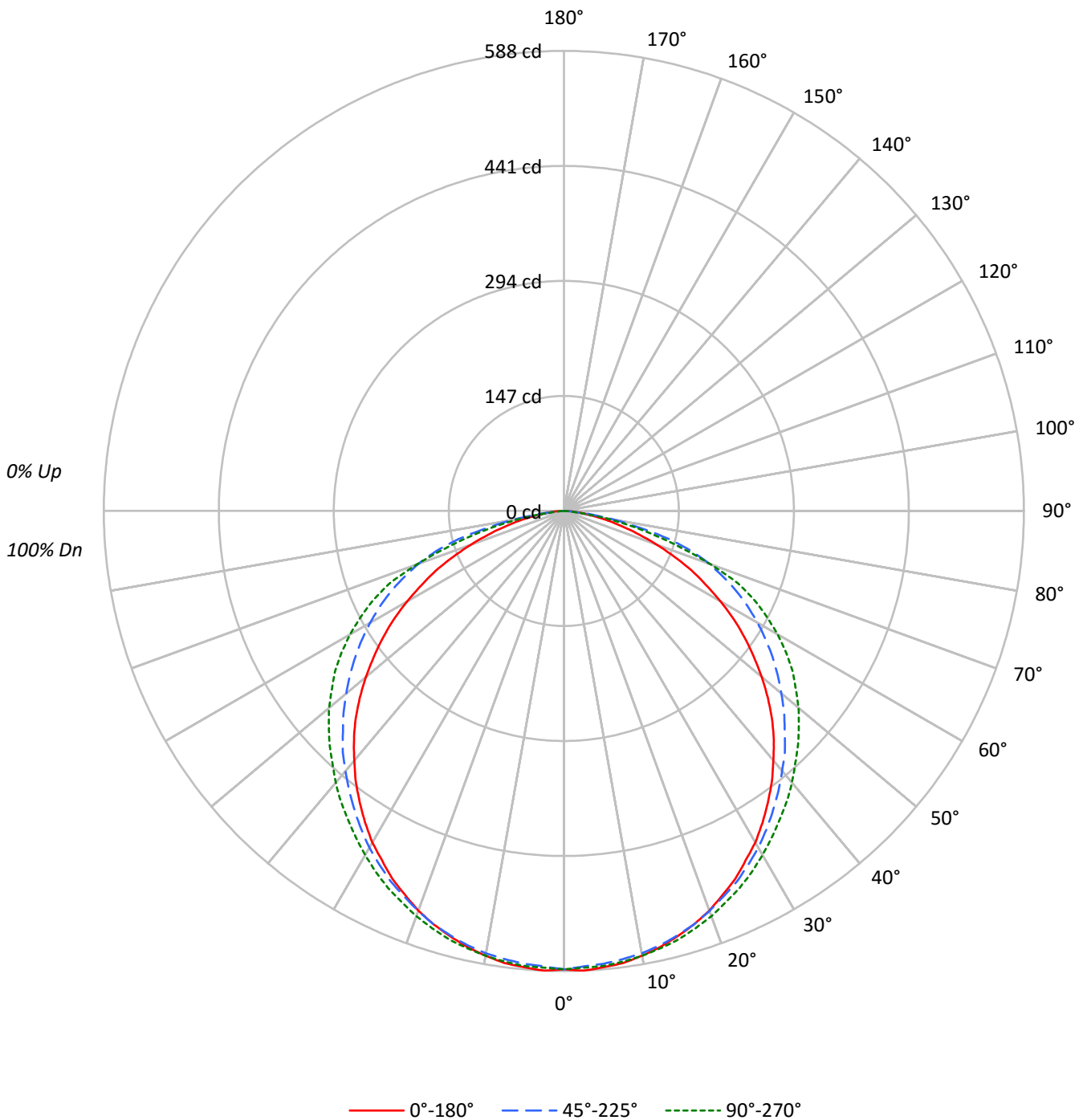
Input Watts (W): 20.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				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°	1576	1576	1576
5°	1581	1569	1576
10°	1577	1568	1577
15°	1567	1564	1579
20°	1556	1558	1578
25°	1540	1553	1578
30°	1520	1544	1578
35°	1493	1532	1580
40°	1463	1524	1593
45°	1432	1519	1610
50°	1383	1519	1639
55°	1323	1527	1674
60°	1244	1539	1696
65°	1147	1554	1706
70°	998	1558	1570
75°	823	1449	1268
80°	648	1043	849
85°	503	401	201



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.5	3.2
10°-20°	159.1	9.2
20°-30°	241.7	14.0
30°-40°	292.8	17.0
40°-50°	308.6	17.9
50°-60°	288.1	16.7
60°-70°	230.2	13.3
70°-80°	126.7	7.3
80°-90°	22.4	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°	456.3	26.5
0°-40°	749.1	43.4
0°-60°	1345.7	78.0
0°-90°	1725.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1725.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	586	586	586	586	586	
5°	585	584	581	585	584	56
15°	562	562	561	567	567	159
25°	519	520	523	530	532	239
35°	455	459	466	478	481	284
45°	376	384	399	417	423	290
55°	282	296	326	348	357	252
65°	180	203	244	264	268	177
75°	79	113	139	125	122	85
85°	16	21	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°	585.8	585.8	585.8	585.8	585.8
2.5°	588.0	586.4	582.6	585.8	584.2
5°	585.3	583.6	580.9	584.7	583.6
7.5°	582.6	580.4	577.7	582.0	580.9
10°	577.1	575.5	573.9	577.7	577.1
12.5°	570.6	570.1	568.5	572.8	572.3
15°	562.5	562.5	561.4	566.8	566.8
17.5°	553.8	553.3	553.8	559.8	559.2
20°	543.5	543.5	544.1	551.1	551.1
22.5°	531.0	531.6	533.2	541.9	541.3
25°	518.6	519.6	522.9	530.5	531.6
27.5°	503.4	506.1	509.9	519.1	520.2
30°	489.3	490.9	496.9	505.5	507.7
32.5°	472.5	475.7	482.2	492.0	494.7
35°	454.6	458.9	466.5	478.4	481.1
37.5°	436.7	440.4	450.8	463.2	468.1
40°	416.6	423.1	433.9	448.0	453.5
42.5°	397.1	403.6	418.2	432.9	437.7
45°	376.4	383.5	399.2	417.1	423.1
47.5°	353.7	361.8	381.9	400.9	407.4
50°	330.3	340.6	362.9	384.0	391.6
52.5°	305.9	318.9	344.4	366.7	373.7
55°	282.1	296.2	325.5	348.2	356.9
57.5°	257.7	272.8	305.9	332.0	336.8
60°	231.1	249.5	285.9	308.6	315.1
62.5°	205.0	226.2	265.2	286.9	292.4
65°	180.1	202.9	244.1	264.2	268.0
67.5°	153.0	180.1	220.8	239.2	240.3
70°	126.9	158.4	198.0	206.7	199.6
72.5°	101.4	135.1	171.4	164.4	158.4
75°	79.2	113.4	139.4	125.3	122.0
77.5°	58.6	92.8	99.8	92.2	86.2
80°	41.8	73.2	67.3	57.5	54.8
82.5°	28.7	46.1	36.9	28.7	25.0
85°	16.3	20.6	13.0	8.1	6.5
87.5°	7.1	4.9	2.7	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)