

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: P307068

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP250-W2A-U-5700K**

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: P307068
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-5700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
POLYCARB SHEET
Light Source: (168) 5700K 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: 1721.0 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

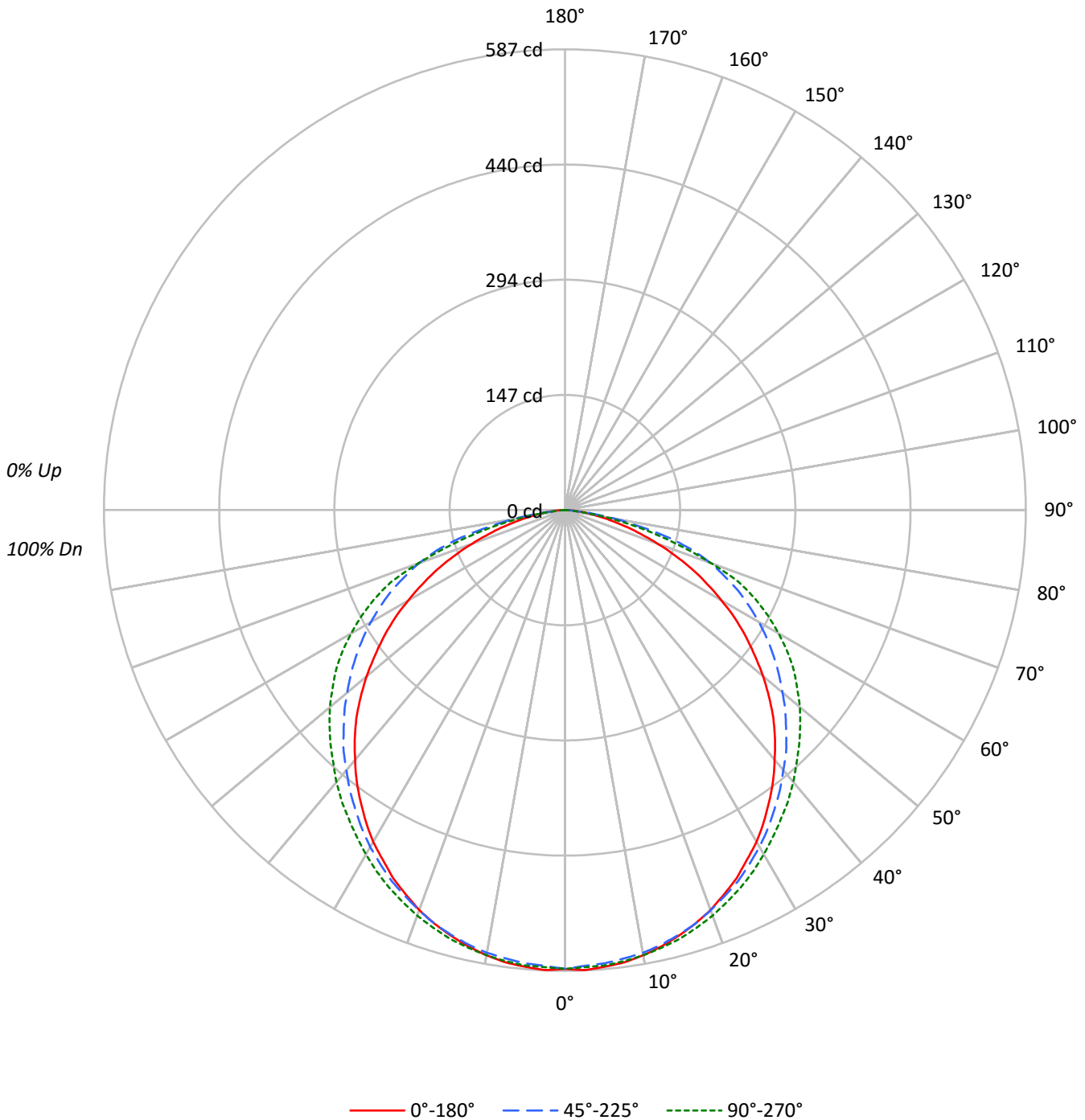
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P307068

CATALOG NUMBER: 14FC22-25-UNV-L82765-HRP-CP250-W2A-U-5700K

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°	1573	1573	1573
5°	1577	1566	1573
10°	1573	1565	1573
15°	1563	1560	1575
20°	1553	1554	1574
25°	1536	1549	1575
30°	1517	1540	1574
35°	1490	1529	1577
40°	1460	1521	1589
45°	1429	1516	1606
50°	1380	1515	1636
55°	1320	1523	1671
60°	1241	1535	1692
65°	1144	1550	1702
70°	996	1554	1566
75°	821	1446	1266
80°	646	1040	848
85°	500	401	201



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	3.2
10°-20°	158.8	9.2
20°-30°	241.1	14.0
30°-40°	292.1	17.0
40°-50°	307.9	17.9
50°-60°	287.4	16.7
60°-70°	229.7	13.3
70°-80°	126.4	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°	455.2	26.5
0°-40°	747.4	43.4
0°-60°	1342.6	78.0
0°-90°	1721.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1721.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	584	582	580	583	582	56
15°	561	561	560	566	566	158
25°	517	518	522	529	530	238
35°	454	458	465	477	480	284
45°	376	383	398	416	422	289
55°	281	296	325	347	356	251
65°	180	202	244	264	267	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°	584.5	584.5	584.5	584.5	584.5
2.5°	586.6	585.0	581.2	584.5	582.8
5°	583.9	582.3	579.6	583.4	582.3
7.5°	581.2	579.0	576.3	580.7	579.6
10°	575.8	574.2	572.6	576.3	575.8
12.5°	569.3	568.8	567.1	571.5	570.9
15°	561.2	561.2	560.1	565.5	565.5
17.5°	552.5	552.0	552.5	558.5	557.9
20°	542.2	542.2	542.8	549.8	549.8
22.5°	529.8	530.3	532.0	540.6	540.1
25°	517.4	518.4	521.7	529.3	530.3
27.5°	502.2	504.9	508.7	517.9	519.0
30°	488.1	489.8	495.7	504.4	506.5
32.5°	471.4	474.6	481.1	490.8	493.5
35°	453.5	457.8	465.4	477.3	480.0
37.5°	435.6	439.4	449.7	462.2	467.0
40°	415.6	422.1	432.9	447.0	452.4
42.5°	396.1	402.6	417.2	431.9	436.7
45°	375.6	382.6	398.3	416.2	422.1
47.5°	352.8	361.0	381.0	399.9	406.4
50°	329.6	339.9	362.0	383.1	390.7
52.5°	305.2	318.2	343.6	365.8	372.9
55°	281.4	295.5	324.7	347.4	356.1
57.5°	257.1	272.2	305.2	331.2	336.1
60°	230.5	248.9	285.2	307.9	314.4
62.5°	204.6	225.7	264.6	286.3	291.7
65°	179.7	202.4	243.5	263.5	267.3
67.5°	152.6	179.7	220.3	238.7	239.7
70°	126.6	158.0	197.5	206.2	199.1
72.5°	101.2	134.8	171.0	164.0	158.0
75°	79.0	113.1	139.1	125.0	121.8
77.5°	58.4	92.5	99.6	92.0	86.0
80°	41.7	73.1	67.1	57.4	54.7
82.5°	28.7	46.0	36.8	28.7	24.9
85°	16.2	20.6	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)