

RF Exposure Report

Applicant	: Sariana LLC	
Address	: 7365 Mission Gorge Road, Suite G, San Diego , CA 92120, USA	
Equipment	: 3-in-1 Foldable Qi2 Wireless Charging Stand	
Model No	ST-Q31FM, ST-Q31FM-EA, ST-Q31FM-AP,	_
Model NO.	CT-Q31FM, CT-Q31FM-EA, CT-Q31FM-AP	
Trade Name	: S <mark>/</mark> T E C H I	
FCC ID	: ZE9-ST-Q31FM	-
Standard	FCC CFR 47 part1, 1.1310	_
Stanualu	. KDB680106 D01v04	

I HEREBY CERTIFY THAT :

The sample was received on Jan. 25, 2024 and the test items were conducted Feb. 08, 2024 at Cerpass Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of Cerpass Technology Corp., the test report shall not be reproduced except in full.

Approved by:

m.

Leevin Li / Supervisor

CERPASS TECHNOLOGY CORP.

CONTENTS

RF Exposure Report	1
1. Test Configuration of Equipment under Test	3
1.1. Feature of Equipment under Test	3
1.2. Test Mode and Test Software	3
1.3. Description of Test System	5
1.4. General Information of Test	6
1.5. Measurement Uncertainty	6
2 Summary Of Standards And Posults	7
2. Summary Or Standards And Results	
2.1. Measuring Standard	
2.1. Measuring Standard 2.2. Duty cycle	
2.1. Measuring Standard 2.2. Duty cycle 2.3. Typical test Setup	
 2.1. Measuring Standard	
 2.1. Measuring Standard	
 2.1. Measuring Standards And Results 2.2. Duty cycle	



1. Test Configuration of Equipment under Test

1.1. Feature of Equipment under Test

Product	3-in-1 Foldable Qi2 Wireless Charging Stand					
Test Model	ST-Q31FM, ST-Q31FM-EA, ST-Q31FM-AP,					
l'est Model	CT-Q31FM, CT-Q31FM-EA, CT-Q31FM-AP					
Model Discrepancy	All the models are identical except for model names, adapter plugs and sales companies. ST-Q31FM and CT-Q31FM are not equipped with adapter plugs. ST-Q31FM-EA and CT-Q31FM-EA are equipped with European and British adapter plugs. ST-Q31FM-AP and CT-Q31FM-AP are equipped with Korean and Australian adapter plugs. ST and CT represent different sales companies.					
	Output Wireless 1: MPP: 360KHz, BPP: 120~148.5KHz					
Frequency Range	Output Wireless 2: 110KHz~148KHz					
	Output Wireless 3 (Apple Watch): 326.5KHz and 1.778MHz					
Antenna Type	Coil Antenna					
	Output Wireless 1: ASK					
Modulation Type	Output Wireless 2: ASK					
	Output Wireless 3: ASK					
	Input: 9V 3A/12V 3A/15V 3A, 45W(Max)					
Dower Deting	Output Wireless 1: 15W(Max)/Qi MPP; 5W (Max)/Qi BPP					
Power Rating	Output Wireless 2: 5W(Max)/Qi BPP					
	Output Wireless 3(Apple Watch): 5W(Max)					
Tomporaturo	Operating Temp: 0°C~+35°C					
remperature	Storage Temp: -20℃~+60℃					

Note: For more details, please refer to the User's manual of the EUT.

1.2. Test Mode and Test Software

Test Mode	Operating Description
Mode 1	Wireless Charging for Wireless 1(Standby mode) +Wireless 2(Standby
	mode) + Wireless 3(Standby mode)
	Wireless Charging for Wireless 1(15W/7.5W for Wireless Load, Operating
Mode 2	@MPP 360KHz +Wireless 2(5W for AirPods) +Wireless 3(5W for Apple
	watch 3, Operating @326.5KHz)
	Wireless Charging for Wireless 1(5W/2.5W for Wireless Load, Operating @
Mode 3	BPP: 120~148.5KHz) +Wireless 2(5W for AirPods) +Wireless 3(5W for
	Apple watch 7, Operating @1.778MHz)
	Wireless Charging for Wireless 1(15W/7.5W for Wireless Load, Operating
Mode 4	@MPP 360KHz +Wireless 2(5W for AirPods) + Wireless 3(5W for Apple
	watch 7, Operating @1.778MHz)
	Wireless Charging for Wireless 1(5W/2.5W for Wireless Load, Operating @
Mode 5	BPP: 120~148.5KHz) +Wireless 2(5W for AirPods) +Wireless 3(5W for
	Apple watch 3, Operating @326.5KHz)
Worst test Mode	
Mode 1	Wireless Charging for Wireless 1(Standby mode) +Wireless 2(Standby
	mode) + Wireless 3(Standby mode)
	Wireless Charging for Wireless 1(15W/7.5W for Wireless Load, Operating
Mode 2	@MPP 360KHz +Wireless 2(5W for AirPods) +Wireless 3(5W for Apple
	watch 3, Operating @326.5KHz)
Mode 3	Wireless Charging for Wireless 1(5W/2.5W for Wireless Load, Operating @



BPP: 120~148.5KHz) +Wireless 2(5W for AirPods) +Wireless 3(5W for Apple watch 7, Operating @1.778MHz)

Note: 1) For mode 2,3.The AirPods and Watchwere respectively evaluation Low, medium and high charge status evaluation.

2) The EUT Have three coils, the specific location is shown below:





1.3. Description of rest system	1.3.	Description	of Test S	System
---------------------------------	------	-------------	-----------	--------

Pr	oduct	Manufacturer	Model No.	Power Cord
1	Adapter	Xinspower	PN453I	N/A
2	Apple watch	Apple	Apple watch 7	N/A
3	Apple watch	Apple	Apple watch 3	N/A
4	Wireless Load	N/A	N/A	N/A
5	Air pods	Apple	A2190	N/A





1.4. General Information of Test

Test Site	Cerpass Technology Corporation(Cerpass Laboratory) Address: Room 102, No. 5, Xing'an Road, Chang'an Town, Dongguan City, Guangdong Province Tel: +86-769-8547-1212 Fax: +86-769-8547-1912
FCC Designation No.:	CN1288

Test Item	Test Site	Test period	Environmental Conditions	Tested By	
RF Exposure	3M01-DG	2024/02/08	24 ℃ / 54%	Amos Zhang	

1.5. Measurement Uncertainty

Measurement Item	Uncertainty
Magnetic Field measurements	±1.60
Electric Field measurements	±1.60



2. Summary Of Standards And Results

2.1. Measuring Standard

The EUT have been tested according to the applicable standards as referenced below:

Test Item	Normative References	Remarks
RF Exposure	FCC CFR 47 part1, 1.1310 KDB680106 D01v04	PASS

2.2. Duty cycle

<u>Limits</u>

None; for reporting purposes only.

Procedure

Duty cycle zero-span mode Method

<u>Result</u>

Mode	On Time (msec)	Period Time (msec)	Duty Cycle (%)
Wireless2, Standby @110KHz~148KHz	85.60	520	16.46%
Wireless 1, 15W/7.5W for Wireless Load, Operating @MPP 360KHz	100.00	100.00	100.00%
Wireless 1, 5W/2.5W for Wireless Load, Operating @ BPP: 120~148.5KHz)	100.00	100.00	100.00%
Wireless 2, 5W for AirPods Operating @ 110KHz~148KHz	100.00	100.00	100.00%
Wireless 3, 5W for Apple watch 3, Operating @326.5KHz	100.00	100.00	100.00%
Wireless 3, 5W for Apple watch 7, Operating @1.778MHz	100.00	100.00	100.00%



Wireless2, Standby @110KHz~148KHz

Keysight Spe	ctrum Ana	øyzer - Swept SA												
arker 3	Δ 4 34	50 Ω AC 4.400 ms	P	NO: V Gain:	Vide ++	Trig Att	g: Free ten: 24	Run dB	AL	Avg Ty Avg[Hol	be: Lo d: 1/1	og-Pwr	08:5	TRACE 1 2 3 4 TYPE MWWW DET P P P
dB/div	Ref	120.00 dB	μV										ΔMkr	3 434.4 n 5.045 c
10				-				-	_		+			
0		F	·											
0	_			-				-	-		+			
0				141									.∳ ^{3∆4}	
o naprodu	enginadrisen	www.marender	*	gh sulle	MUMAN	nyet w	an seally	nether sol	44-441	ANA CONTRACT		"HAN WAR	(Lene	200
0														
nter 14 s BW 3	6.169 .0 kHz	kHz !			#VB	W 10	kHz					Sweep	800.0	Span 0 ms (1001 p
MODE IN	CISCU	A)	85.60 mg	(A)	Y 0.20	1 dB	FUN	CTION	FUNCT	TION WIDTH		FL	INCTION VALU	E
F 1	t		145.6 ms		52.906	dBuV								
<u>4</u>	t (Δ)	434.4 ms	<u>(Δ)</u>	5.04	15 dB								
-			231.2 ms	-	52.005 (VUGL			-					
											_			
\vdash	++			-		_			-					
	+			-					-					
	+ +					-								
	_					_		_			_			

Wireless 1, 5W/2.5W for Wireless Load, Wireless 2, 5W for AirPods Operating @ Operating @ BPP: 120~148.5KHz)

🚺 Keysight Spe	ectrum Analyzer - S	ivept SA					- # -
Marker 1	326.400 n	Ω AC	SENSE:	NT	ALIGN AUTO Avg Ty	pe: Log-Pwr	12:40:45 PM Feb 08, 2024 TRACE 1 2 3 4 5
	010110011	PN	O:Wide Tri	g: Free Run ten: 14 dB			DET P P P P P
							Mkr1 326 4 ms
10 dB/div	Ref 110.0	0 dBuV					85.35 dBµV
Log		- u2 i i					
100				-	1		
90.0							
80.0							
70.0							
60.0							
50.0							
40.0							
30.0							
20.0							
Start 120	046 1117						Stop 120 045 kHz
Res BW 3	.0 kHz		#VBW 10	kHz		Sweep	600.0 ms (1001 pts)
MAR MODE TO	IC SCL	×	Y	FUNCTION	FUNCTION WIDTH	FU	NCTION VALUE
1 N 1	t	326.4 ms	85.35 dBµV				
3							
4							
6							
8							
9							
11							
<						1	,
MSG					STATUS		

Wireless 3, 5W for Apple watch 3, Operating Wireless 3, 5W for Apple watch 7, Operating @326.5KHz

Keysight Spectrum Analyzer - Sir RL RF 50 S	vept SA 2 AC	SENSE:1	NTI	ALIGN AUTO		01:09:27 PM Feb 08, 2024
Marker 1 448.200 m	IS PNC IFGa	:Wide → Trig	g: Free Run ien: 6 dB	Avg Ty	pe: Log-Pwr	TYPE WWWWWW DET P P P P P
10 dB/div Ref 90.00	dBµV					Mkr1 448.2 ms 68.09 dBµV
80.0					1	
70.0					!	
60.0						
50.0	_				-	
40.0						
30.0						
20.0						
10.0					-	
0.00						
Center 326.500 kHz Res BW 3.0 kHz		#VBW 10	kHz		Swee	Span 0 Hz 600.0 ms (1001 pts)
MOR MODE TRC SCL	× 448.2 ms	68.09 dBµV	FUNCTION	FUNCTION WIDTH	F	UNCTION VALUE
3						
5						
6						
8						
10						
1						
isa				STATUS		

Wireless 1, Wireless 1, 15W/7.5W for Wireless Load, Operating @MPP 360KHz

Keysight Spe	ctrum A	nalyzer - Swept SA								
Marker 1	RF 48.6	50 Ω AC		SEN	ISE:INT		ALIGN AUTO Avg T	/pe: Log-Pwr	12:38:0 T	PM Feb 08, 2024 RACE 1 2 3 4 5 6
			P	NO: Wide	Trig: Free I #Atten: 20	Run dB				DET P P P P P
	_								Mkr1	48.60 ms
10 dB/div	Ref	110.00 dB	μν						81	.88 dBµV
100										
90.0		▲ 1						_		
80.0		Y	v							
70.0								_		
60.0								_		
50.0						-		_		
40.0						-	_	_		
30.0						-				
20.0						-	_			
Center 36	0.00	0 kHz								Span 0 Hz
Res BW 3	.0 kH	z		#VBW	10 kHz			Swe	ep 300.0 ms	; (1001 pts)
MAR MODE TR	C SCL	,	40.00 mg	Y 04 00 dD	FUN	CTION	FUNCTION WIDTH		FUNCTION VALUE	^
2			48.00 ms	61.00 GD	μv					
3 4					_					
6										
7					_					_
9					_					
11					_					
*										· ·

110KHz~148KHz

🚺 Key	sight S	Spectr	am Ar	alyzer - Swept !	SA					_								
Mari	ker	11	51.:	200 ms	AC	PNO: Wi	ide 🔸	Tri At	g: Free ten: 6 d	Run B	A	Avg T	ype: F	EM S		08:45:2 T	RACE 1 2 3 TYPE WWW DET A P F	2024 3 4 5 9 P P P
10 dE	3/div		Ref	100.00 d	Βμ∨										l	Mkr1 88	151.2 .69 dE	m: 3µ\
90.0									/	≬ 1			_					
80.0			_			-		-		-			-		_			
70.0			_			-		-		-			-		-			
60.0																		_
40.0																		
30.0																		
20.0			_		_			_		-			_		_			
10.0			_					-		-			-		_			
Cen Res	ter 1 BW	146. 3.0	005 kH	kHz z			#VB	W 10	kHz*					Swe	ep 30	0.0 m	Span s (1001	0 H pts
4000 U 1 2	N	1	scu t		× 151.2 n	ns	88.69	dBµV	FUN	CTION	FUNC	TION WIDTH			FUNCTIO	ON VALUE		-
3	-	-	-			_					-		-					_
5	-	-	-			-					-		-					_
7		-																_
9	-	-	-			-												-
11		1	1	_		-	_			_				_	_	_	_	-
<																		

@1.778MHz

🚺 Keysigh	t Spectrum Ar	nalyzer - Swept SA							S .
Marker	n 1 229 .	50 Ω AC 200 ms	PN	IO: Close +++ Gain:Low	E:INT] Frig: Free Run Atten: 6 dB	ALIGN AUTO	Type: Log-Pwr	01:07:21 PM Fel TRACE 1 TVPE V DET P	2 3 4 5 P P P P P
10 dB/di	v Ref	90.00 dBµ\	,					Mkr1 229 75.22	.2 ms dBµV
B0.0				1					
70.0					-				
60.0									
50.0									
40.0									
30.0									
20.0									
10.0									
0.00									
Center Res BV	1.77800 V 3.0 kH	0 MHz z		#VBW	10 kHz		Swe	Spa ep 600.0 ms (100	n 0 H: 01 pts
MAR MOD	TRC SCL	>	229.2 ms	75.22 dBj	FUNCTION	FUNCTION WIDT	1	FUNCTION VALUE	
3									_
5									_
7									_
9									_
10									-
< [- F
MSG						STAT	US		



2.3. Typical test Setup



Note: Position A: Front of EUT; Position B: Left of EUT; Position C: back of EUT; Position D: Right of EUT; Position E: Top of EUT(20 cm measure distance);

2.4. Specification Limits

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b) Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric field strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm2)	Averaging time (minutes)
	(A) Limits for C)ccupational/Controlle	d Exposure	
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f2	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
	(B) Limits for Gene	ral Population/Uncont	rolled Exposure	-
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f2	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

Note 1: f = frequency in MHz ; *Plane-wave equivalent power density Note 2: For the applicable limit, see FCC 1.1310



Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
Electric and Magnetic field probe-analyzer	Narda	EHP-200AC	180ZX00632	2023/08/03	2024/08/02
MXA Signal Analyzer	KEYSIGHT	N9020A	US46220290	2023/05/06	2024/05/05

2.5. Test Equipment List and Details

2.6. Test Result

Mode 1: Wireless Charging for Wireless 1(Standby mode) + Wireless 2(Standby mode) + Wireless 3(Standby mode) Wireless 2, Standby @110KHz~148KHz

a) Electric Field Strength Measurement

Measured	Distance	Me	asured Value (V/	50% of Limit	Limit (V/m)		
Side	(cm)	Peak	Duty Cycle %	AVG	(V/m)		
А	20	0.48	16.46	0.19	307.00	614.00	
В	20	0.4	16.46	0.16	307.00	614.00	
С	20	0.36	16.46	0.15	307.00	614.00	
D	20	0.39	16.46	0.16	307.00	614.00	
E	20	0.35	16.46	0.14	307.00	614.00	
F	20	0.48	16.46	0.19	307.00	614.00	

b) Magnetic Field Strength Measurement

Measured	Distance	Me	asured Value (A/	50% of Limit	Limit (A/m)		
Side	(cm)	Peak	Duty Cycle %	AVG	(A/m)		
А	20	0.019	16.46	0.008	0.815	1.63	
В	20	0.017	16.46	0.007	0.815	1.63	
С	20	0.018	16.46	0.007	0.815	1.63	
D	20	0.016	16.46	0.006	0.815	1.63	
E	20	0.019	16.46	0.008	0.815	1.63	
F	20	0.023	16.46	0.009	0.815	1.63	

Note: 1: Peak measurements were performed. RMS values were calculated from the peak measurement. Please refer to the formula for calculating the RMS values: [Filed Strength*√Duty cycle]

2: These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis. Test results for the worst position (20cm) are reported.



Mode 2: Wireless Charging for Wireless 1(15W/7.5W for Wireless Load, Operating @MPP 360KHz +Wireless 2(5W

for AirPods) +Wireless 3(5W for Apple watch 3, Operating @326.5KHz)

Mode 3: Wireless Charging for Wireless 1(5W/2.5W for Wireless Load, Operating @ BPP: 120~148.5KHz) +Wireless

2(5W for AirPods) +Wireless 3(5W for Apple watch 7, Operating @1.778MHz)

Wireless2-Operating @ 110KHz~148KHz

a) Electric Field Strength Measurement

Power <10%	Charging						
Measured	Distance	Me	asured Value (V/	′m)	50% of Limit	Limit (V/m)	
Side	(cm)	Peak	Duty Cycle %	AVG	(V/m)		
A	20	0.52	100	0.52	307	614.00	
В	20	0.43	100	0.43	307	614.00	
С	20	0.38	100	0.38	307	614.00	
D	20	0.44	100	0.44	307	614.00	
E	20	0.41	100	0.41	307	614.00	
Power 20%~	60% Charging						
Measured	Distance	Me	asured Value (V/	50% of Limit	Limit (V/m)		
Side	(cm)	Peak	Duty Cycle %	AVG	(V/m)		
A	20	0.5	100	0.5	307.00	614.00	
В	20	0.42	100	0.42	307.00	614.00	
С	20	0.37	100	0.37	307.00	614.00	
D	20	0.42	100	0.42	307.00	614.00	
E	20	0.39	100	0.39	307.00	614.00	
Power >75%	Charging						
Measured	Distance	Me	asured Value (V/	′m)	50% of Limit	Limit (V/m)	
Side	(cm)	Peak	Duty Cycle %	AVG	(V/m)	, , , , , , , , , , , , , , , , , , ,	
A	20	0.48	100	0.48	307.00	614.00	
В	20	0.4	100	0.4	307.00	614.00	
С	20	0.34	100	0.34	307.00	614.00	
D	20	0.4	100	0.4	307.00	614.00	
E	20	0.36	100	0.36	307.00	614.00	

1: Peak measurements were performed. RMS values were calculated from the peak measurement.

Please refer to the formula for calculating the RMS values: [Filed Strength*\/Duty cycle]

2: These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis. Test



results for the worst position (20cm) are reported.

b) Magnetic Field Strength Measurement

Power <10%	Charging						
Measured	Distance	Me	asured Value (A	/m)	50% of Limit	Limit (A/m)	
Side	(cm)	Peak	Duty Cycle %	AVG	(A/m)		
A	20	0.021	100	0.021	0.815	1.63	
В	20	0.018	100	0.018	0.815	1.63	
С	20	0.019	100	0.019	0.815	1.63	
D	20	0.017	100	0.017	0.815	1.63	
E	20	0.02	100	0.020	0.815	1.63	
Power 20%~	60% Charging						
Measured	Distance	Ме	asured Value (A	50% of Limit	Limit (A/m)		
Side	(cm)	Peak	Duty Cycle %	AVG	(A/m)		
A	20	0.02	100	0.02	0.815	1.63	
В	20	0.016	100	0.016	0.815	1.63	
С	20	0.017	100	0.017	0.815	1.63	
D	20	0.014	100	0.014	0.815	1.63	
E	20	0.018	100	0.018	0.815	1.63	
Power >75%	Charging						
Measured	Distance	Ме	asured Value (A	′m)	50% of Limit	Limit (A/m)	
Side	(cm)	Peak	Duty Cycle %	AVG	(A/m)		
A	20	0.019	100	0.019	0.815	1.63	
В	20	0.015	100	0.015	0.815	1.63	
С	20	0.014	100	0.014	0.815	1.63	
D	20	0.012	100	0.012	0.815	1.63	
E	20	0.017	100	0.017	0.815	1.63	

 Peak measurements were performed. RMS values were calculated from the peak measurement. Please refer to the formula for calculating the RMS values: [Filed Strength*√Duty cycle]

2: These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis. Test results for the worst position (20cm) are reported.



2.7. Photographs of test setup



-----THE END OF REPORT------