

Test Report

Report No. : MTi250319015-0110E1
Date of issue : 2025-05-13
Applicant : Shen Zhen Pu Yi International Trading Co., Ltd
Product : LuminoCore Magnetic wireless charging station
Model(s) : LC-1, 24719A
FCC ID : 2BPRM-LC-1

Shenzhen Microtest Co., Ltd.

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Test Result Certification		
Applicant	Shen Zhen Pu Yi International Trading Co., Ltd	
Applicant Address	Room 1306, Building T1, Haiyuan City, No. 8 Fuan Avenue Shenzhen City Longgang District Guangdong	
Manufacturer	Shen Zhen Pu Yi International Trading Co., Ltd	
Manufacturer Address	Room 1306, Building T1, Haiyuan City, No. 8 Fuan Avenue Shenzhen City Longgang District Guangdong	
Product description		
Product name	LuminoCore Magnetic wireless charging station	
Trademark	ZEEHOO	
Model name	LC-1	
Series Model(s)	24719A	
Standards	47 CFR Part 15C	
Test Method	ANSI C63.10-2013	
Testing Information		
Date of test	2025-04-08 to 2025-05-12	
Test result	Pass	
Prepared by:	Letter Lan	<i>Letter Lan.</i>
Reviewed by:	David Lee	<i>David. Lee</i>
Approved by:	Lewis Lian	<i>Lewis Lian</i>

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1 General Description

1.1 Description of the EUT

Product name:	LuminoCore Magnetic wireless charging station
Model name:	LC-1
Series Model(s):	24719A
Model difference:	All the models are the same circuit and module, except the model name.
Electrical rating:	Input: 12V= 2.5A, 9V=3A Phone Output: 5W, 7.5W, 10W, 15W Watch Output: 2.5W Earphone Output: 5W Night Light Power: 1.1W
Accessories:	N/A
Hardware version:	V1.1
Software version:	V1.0
Test sample(s) number:	MTi250319015-01-R001
RF specification	
Operating frequency range:	Phone: 115-205kHz (5W, 10W) Phone: 360kHz (15W) Apple Watch: 300-350kHz Sumang Watch: 115-205kHz Earphone: 115-205kHz
Modulation type:	ASK
Antenna(s) type:	Coil

1.2 Description of test modes

No.	Emission test modes
Mode1	Wireless Output(Phone(5W)+Earphone(5W)+Apple Watch(2.5W))
Mode2	Wireless Output(Phone(10W)+Earphone(5W)+Apple Watch(2.5W))
Mode3	Wireless Output(Phone(15W)+Earphone(5W)+Apple Watch(2.5W))
Mode4	Wireless Output(Phone(5W)+Earphone(5W)+Samsung Watch(2.5W))
Mode5	Wireless Output(Phone(10W)+Earphone(5W)+Samsung Watch(2.5W))
Mode6	Wireless Output(Phone(15W)+Earphone(5W)+Samsung Watch(2.5W))
Mode7	Wireless Output(Phone(5W)+Earphone(5W))
Mode8	Wireless Output(Phone(10W)+Earphone(5W))
Mode9	Wireless Output(Phone(15W)+Earphone(5W))
Mode10	Wireless Output(Phone(5W)+ Samsung Watch(2.5W))
Mode11	Wireless Output(Phone(10W)+ Samsung Watch(2.5W))

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Mode12	Wireless Output(Phone(15W)+ Samsung Watch(2.5W))
Mode13	Wireless Output(Phone(5W)+ Apple Watch(2.5W))
Mode14	Wireless Output(Phone(10W)+ Apple Watch(2.5W))
Mode15	Wireless Output(Phone(15W)+ Apple Watch(2.5W))
Mode16	Wireless Output(Phone(5W))
Mode17	Wireless Output(Phone(10W))
Mode18	Wireless Output(Phone(15W))
Mode19	Earphone(5W)+Samsung Watch(2.5W))
Mode20	Earphone(5W)+ Apple Watch(2.5W))
Mode21	Earphone(5W)
Mode22	Samsung Watch(2.5W)
Mode23	Apple Watch(2.5W)
Mode24	Stand by

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1.3 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15°C ~ 35°C
Humidity:	20% RH ~ 75% RH
Atmospheric pressure:	98 kPa ~ 101 kPa

1.4 Description of support units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Support equipment list			
Description	Model	Serial No.	Manufacturer
Lenovo USB-C adapter	C65B	1SGX21B35621Z13F1D4W	Lenovo
wireless charging load	YBZ1.1	/	YBZ
Apple Watch	Apple Watch SE	FH7PP6BAG91J6	Apple
Watch	Galaxy Watch 5	R32T5467890	Samsung
Support cable list			
Description	Length (m)	From	To
/	/	/	/

1.5 Measurement uncertainty

Measurement	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	±3.1dB
Occupied channel bandwidth	±3 %
Radiated spurious emissions (9kHz~30MHz)	±4.3dB
Radiated spurious emissions (30MHz~1GHz)	±4.7dB
Temperature	±1 °C
Humidity	± 5 %

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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2 Summary of Test Result

No.	Item	Standard	Requirement	Result
1	Antenna requirement	47 CFR Part 15C	47 CFR Part 15.203	Pass
2	Conducted Emission at AC power line	47 CFR Part 15C	47 CFR Part 15.207(a)	Pass
3	20dB Occupied Bandwidth	47 CFR Part 15C	47 CFR Part 15.215(c)	Pass
4	Emissions in frequency bands (below 30MHz)	47 CFR Part 15C	47 CFR Part 15.209	Pass
5	Emissions in frequency bands (30MHz - 1GHz)	47 CFR Part 15C	47 CFR Part 15.209	Pass

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3 Test Facilities and accreditations

3.1 Test laboratory

Test laboratory:	Shenzhen Microtest Co., Ltd.
Test site location:	101, No.7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Telephone:	(86-755)88850135
Fax:	(86-755)88850136
CNAS Registration No.:	CNAS L5868
FCC Registration No.:	448573
IC Registration No.:	21760
CABID:	CN0093

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4 List of test equipment

No.	Equipment	Manufacturer	Model	Serial No.	Cal. date	Cal. Due
Conducted Emission at AC power line						
1	EMI Test Receiver	Rohde&schwarz	ESCI3	101368	2025-03-13	2026-03-12
2	Artificial mains network	Schwarzbeck	NSLK 8127	183	2025-03-18	2026-03-17
3	Artificial Mains Network	Rohde & Schwarz	ESH2-Z5	100263	2025-03-18	2026-03-17
20dB Occupied Bandwidth						
1	Wideband Radio Communication Tester	Rohde&schwarz	CMW500	149155	2025-03-18	2026-03-17
2	ESG Series Analog Ssignal Generator	Agilent	E4421B	GB40051240	2025-03-14	2026-03-13
3	PXA Signal Analyzer	Agilent	N9030A	MY51350296	2025-03-14	2026-03-13
4	Synthesized Sweeper	Agilent	83752A	3610A01957	2025-03-18	2026-03-17
5	MXA Signal Analyzer	Agilent	N9020A	MY50143483	2025-03-18	2026-03-17
6	RF Control Unit	Tonscend	JS0806-1	19D8060152	2025-03-18	2026-03-17
7	Band Reject Filter Group	Tonscend	JS0806-F	19D8060160	2025-03-18	2026-03-17
8	ESG Vector Signal Generator	Agilent	N5182A	MY50143762	2025-03-14	2026-03-13
9	DC Power Supply	Agilent	E3632A	MY40027695	2025-03-18	2026-03-17
Emissions in frequency bands (below 30MHz)						
1	EMI Test Receiver	Rohde&schwarz	ESCI7	101166	2025-03-14	2026-03-13
2	Active Loop Antenna	Schwarzbeck	FMZB 1519 B	00066	2024-03-23	2026-03-22
3	Amplifier	Hewlett-Packard	8447F	3113A06184	2025-03-18	2026-03-17
Emissions in frequency bands (30MHz - 1GHz)						
1	EMI Test Receiver	Rohde&schwarz	ESCI7	101166	2025-03-14	2026-03-13
2	TRILOG Broadband Antenna	schwarabeck	VULB 9163	9163-1338	2023-06-11	2025-06-10
3	Active Loop Antenna	Schwarzbeck	FMZB 1519 B	00066	2024-03-23	2026-03-22
4	Amplifier	Hewlett-Packard	8447F	3113A06184	2025-03-18	2026-03-17

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5 Evaluation Results (Evaluation)

5.1 Antenna requirement

Test Requirement:	Refer to 47 CFR Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.
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5.1.1 Conclusion:

The antenna of the EUT is permanently attached.
The EUT complies with the requirement of FCC PART 15.203.

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6 Radio Spectrum Matter Test Results (RF)

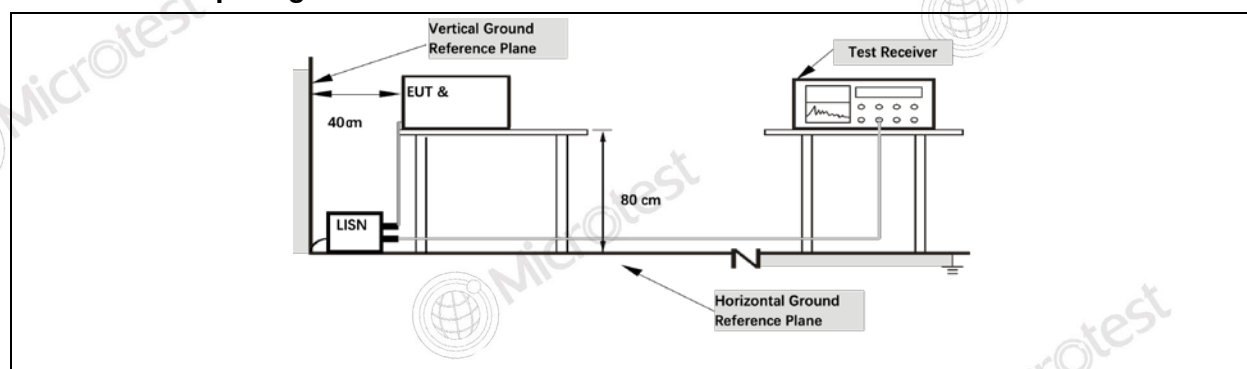
6.1 Conducted Emission at AC power line

Test Requirement:	Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN).		
Test Limit:	Frequency of emission (MHz)	Conducted limit (dB μ V)	
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
*Decreases with the logarithm of the frequency.			
Test Method:	ANSI C63.10-2013 section 6.2		
Procedure:	Refer to ANSI C63.10-2013 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices		

6.1.1 E.U.T. Operation:

Operating Environment:					
Temperature:	26.1 $^{\circ}$ C	Humidity:	61 %	Atmospheric Pressure:	100 kPa
Pre test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8, Mode9, Mode10, Mode11, Mode12, Mode13, Mode14, Mode15, Mode16, Mode17, Mode18, Mode19, Mode20, Mode21, Mode22, Mode23, Mode24				
Final test mode:	All of the listed pre-test mode were tested, only the data of the worst mode (Mode6) is recorded in the report				

6.1.2 Test Setup Diagram:

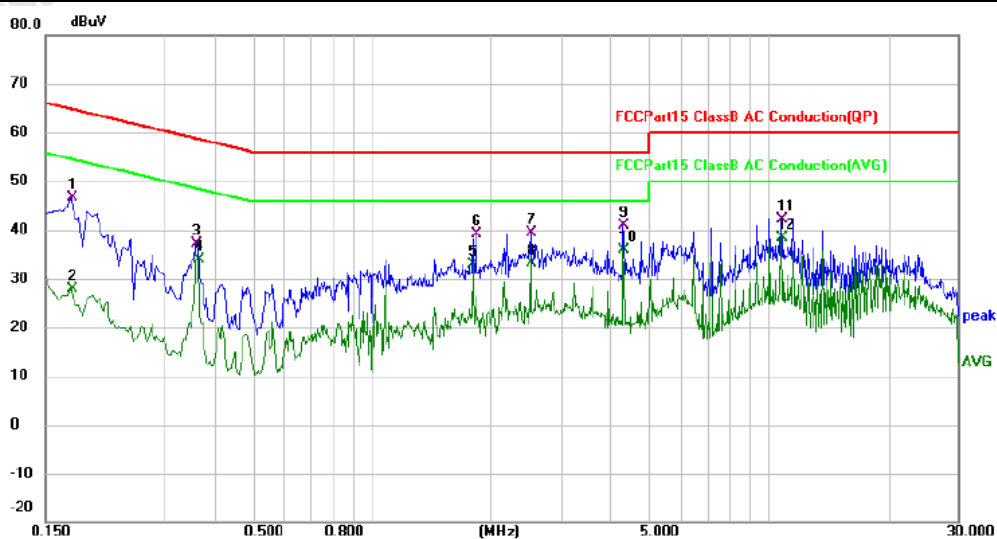


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6.1.3 Test Data:

Mode6 / Line: Line

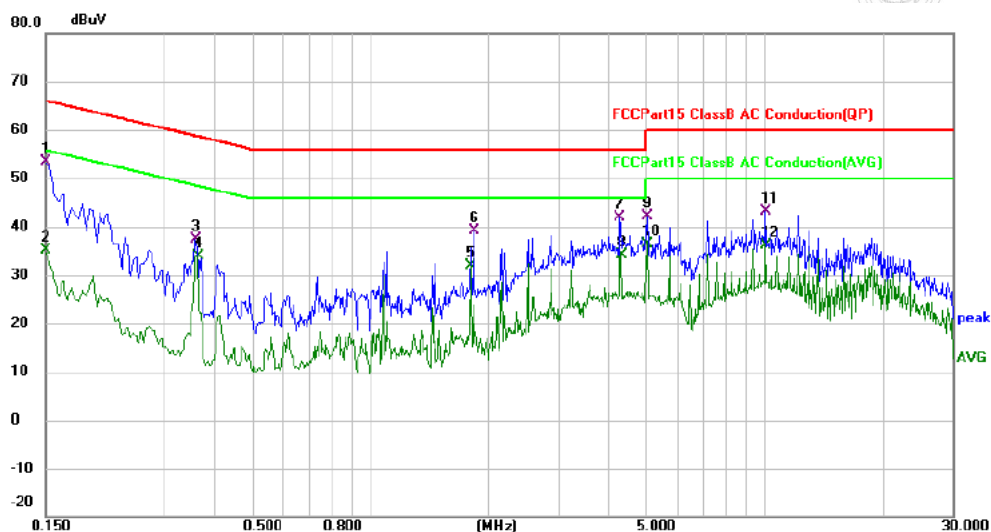


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1740	35.80	10.79	46.59	64.77	-18.18	QP	
2		0.1740	17.04	10.79	27.83	54.77	-26.94	AVG	
3		0.3580	26.35	10.77	37.12	58.77	-21.65	QP	
4		0.3620	23.07	10.77	33.84	48.68	-14.84	AVG	
5		1.7980	21.93	10.84	32.77	46.00	-13.23	AVG	
6		1.8340	28.30	10.84	39.14	56.00	-16.86	QP	
7		2.5180	28.51	10.88	39.39	56.00	-16.61	QP	
8		2.5180	22.24	10.88	33.12	46.00	-12.88	AVG	
9		4.3140	30.01	10.99	41.00	56.00	-15.00	QP	
10	*	4.3140	24.87	10.99	35.86	46.00	-10.14	AVG	
11		10.7860	30.72	11.49	42.21	60.00	-17.79	QP	
12		10.7860	26.83	11.49	38.32	50.00	-11.68	AVG	

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Mode6 / Line: Neutral



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	0.1500	42.69	10.69	53.38	66.00	-12.62	QP	
2	0.1500	24.42	10.69	35.11	56.00	-20.89	AVG	
3	0.3580	26.73	10.67	37.40	58.77	-21.37	QP	
4	0.3620	23.21	10.67	33.88	48.68	-14.80	AVG	
5	1.7980	21.20	10.73	31.93	46.00	-14.07	AVG	
6	1.8300	28.36	10.73	39.09	56.00	-16.91	QP	
7	4.3139	30.96	10.88	41.84	56.00	-14.16	QP	
8 *	4.3179	23.22	10.88	34.10	46.00	-11.90	AVG	
9	5.0339	31.21	10.92	42.13	60.00	-17.87	QP	
10	5.0339	25.34	10.92	36.26	50.00	-13.74	AVG	
11	10.0659	31.78	11.33	43.11	60.00	-16.89	QP	
12	10.0659	24.77	11.33	36.10	50.00	-13.90	AVG	

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6.2 20dB Occupied Bandwidth

Test Requirement:	47 CFR Part 15.215(c)
Test Limit:	Refer to 47 CFR 15.215(c), intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.
Test Method:	ANSI C63.10-2013, section 6.9.2
Procedure:	a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW. b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be approximately three times RBW, unless otherwise specified by the applicable requirement. c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW/RBW})]$ below the reference level. Specific guidance is given in 4.1.5.2. d) Steps a) through c) might require iteration to adjust within the specified tolerances. e) The dynamic range of the instrument at the selected RBW shall be more than 10 dB below the target “-xx dB down” requirement; that is, if the requirement calls for measuring the -20 dB OBW, the instrument noise floor at the selected RBW shall be at least 30 dB below the reference value. f) Set detection mode to peak and trace mode to max hold. g) Determine the reference value: Set the EUT to transmit an unmodulated carrier or modulated signal, as applicable. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value). h) Determine the “-xx dB down amplitude” using $[(\text{reference value}) - \text{xx}]$. Alternatively, this calculation may be made by using the marker-delta function of the instrument. i) If the reference value is determined by an unmodulated carrier, then turn the EUT modulation ON, and either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise, the trace from step g) shall be used for step j). j) Place two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-xx dB down amplitude” determined in step h). If a marker is below this “-xx dB down amplitude” value, then it shall be as close as possible to this value. The occupied bandwidth is the frequency difference between the two markers. Alternatively, set a marker at the lowest frequency of the envelope of the spectral display, such that the marker is at or slightly below the “-xx dB down amplitude” determined in step h). Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth.

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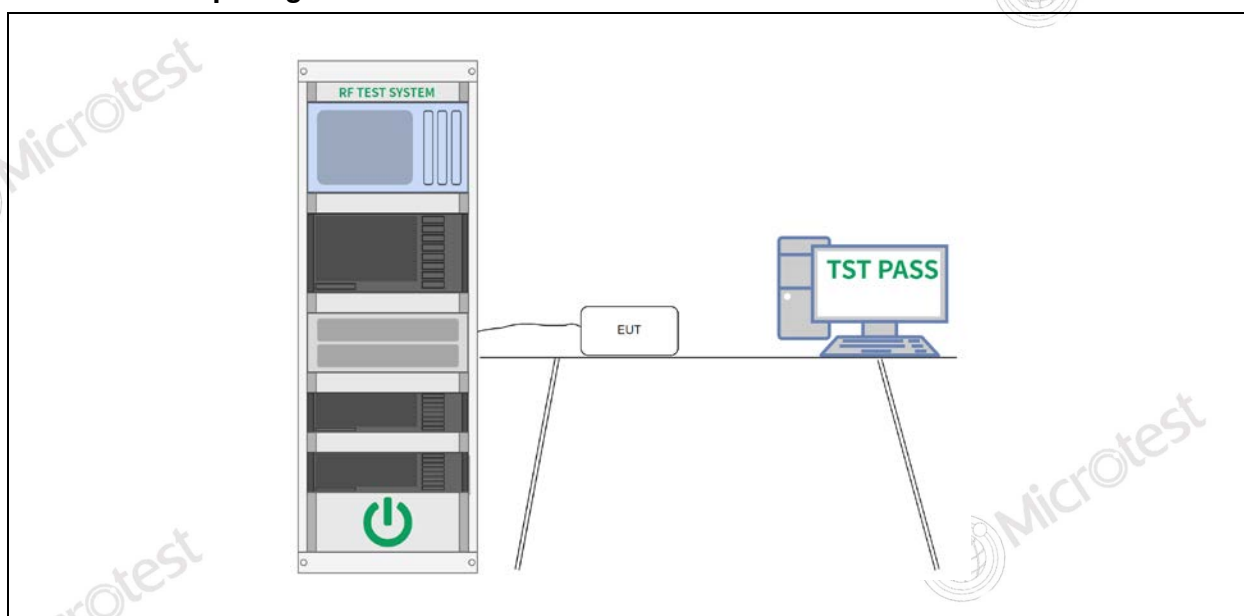
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	k) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).
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6.2.1 E.U.T. Operation:

Operating Environment:					
Temperature:	19.3 °C	Humidity:	45.2 %	Atmospheric Pressure:	98 kPa
Pre test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8, Mode9, Mode10, Mode11, Mode12, Mode13, Mode14, Mode15, Mode16, Mode17, Mode18, Mode19, Mode20, Mode21, Mode22, Mode23, Mode24				
Final test mode:	Mode17, Mode18, Mode21, Mode22, Mode23				

6.2.2 Test Setup Diagram:



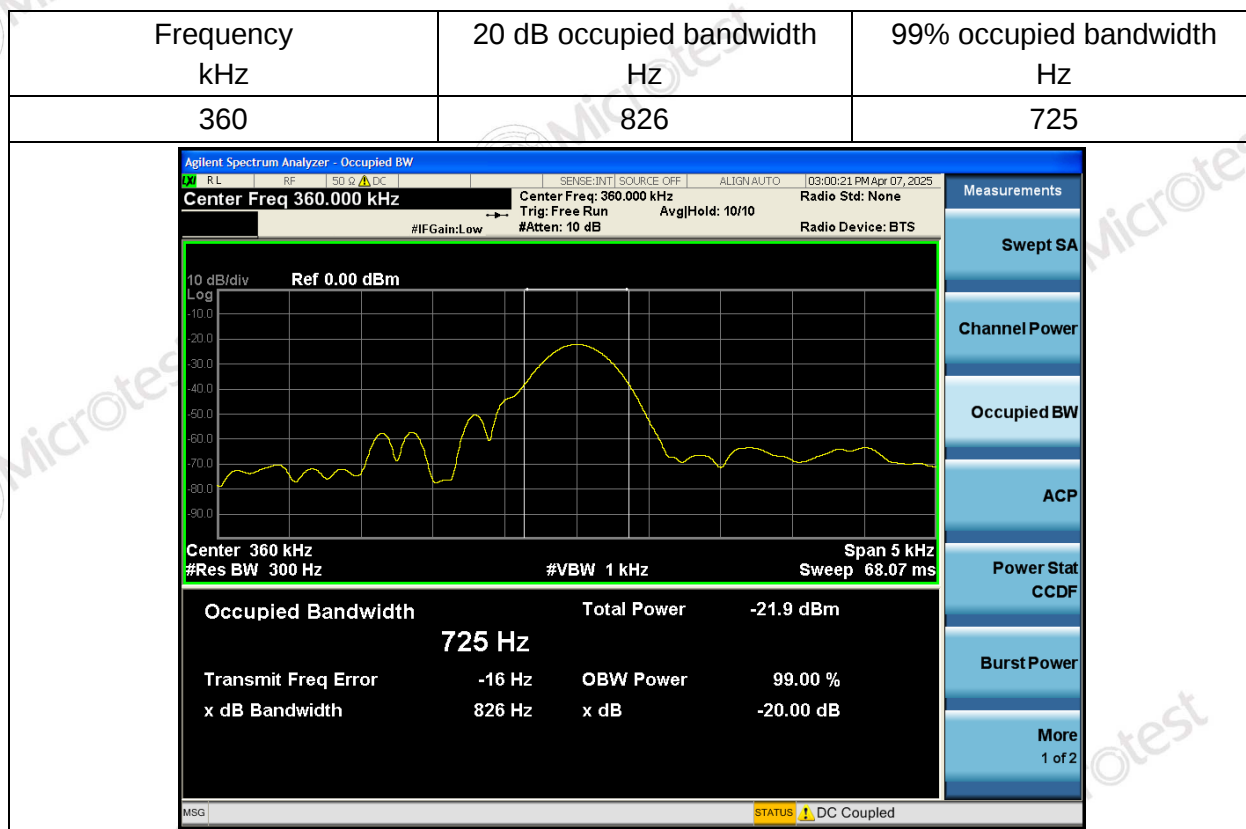
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6.2.3 Test Data:

Note: Because the measured signal is CW-like, adjusting the RBW per C63.10 would not be practical since measurement bandwidth will always follow the RBW. The RBW is set to 300 Hz to perform the occupied bandwidth test.

Phone 15W

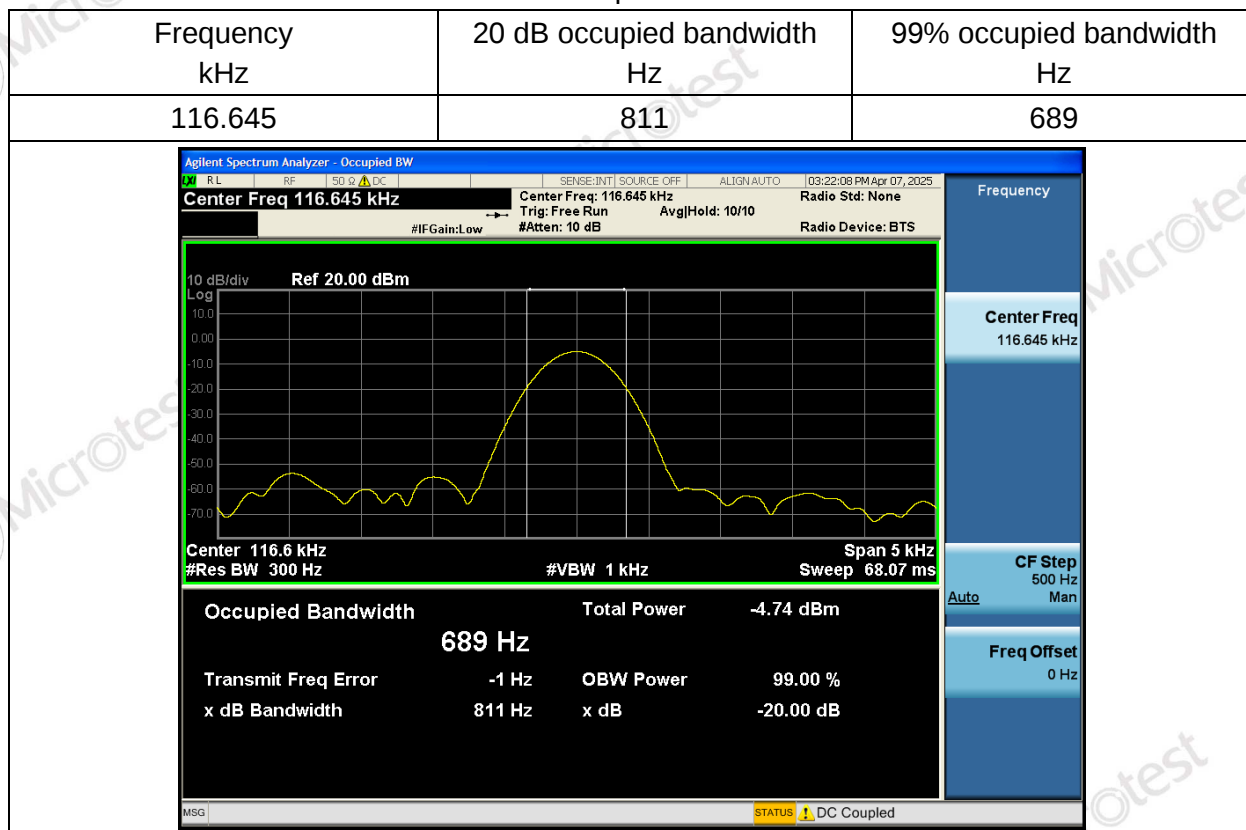


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Note: Because the measured signal is CW-like, adjusting the RBW per C63.10 would not be practical since measurement bandwidth will always follow the RBW. The RBW is set to 300 Hz to perform the occupied bandwidth test.

Earphone

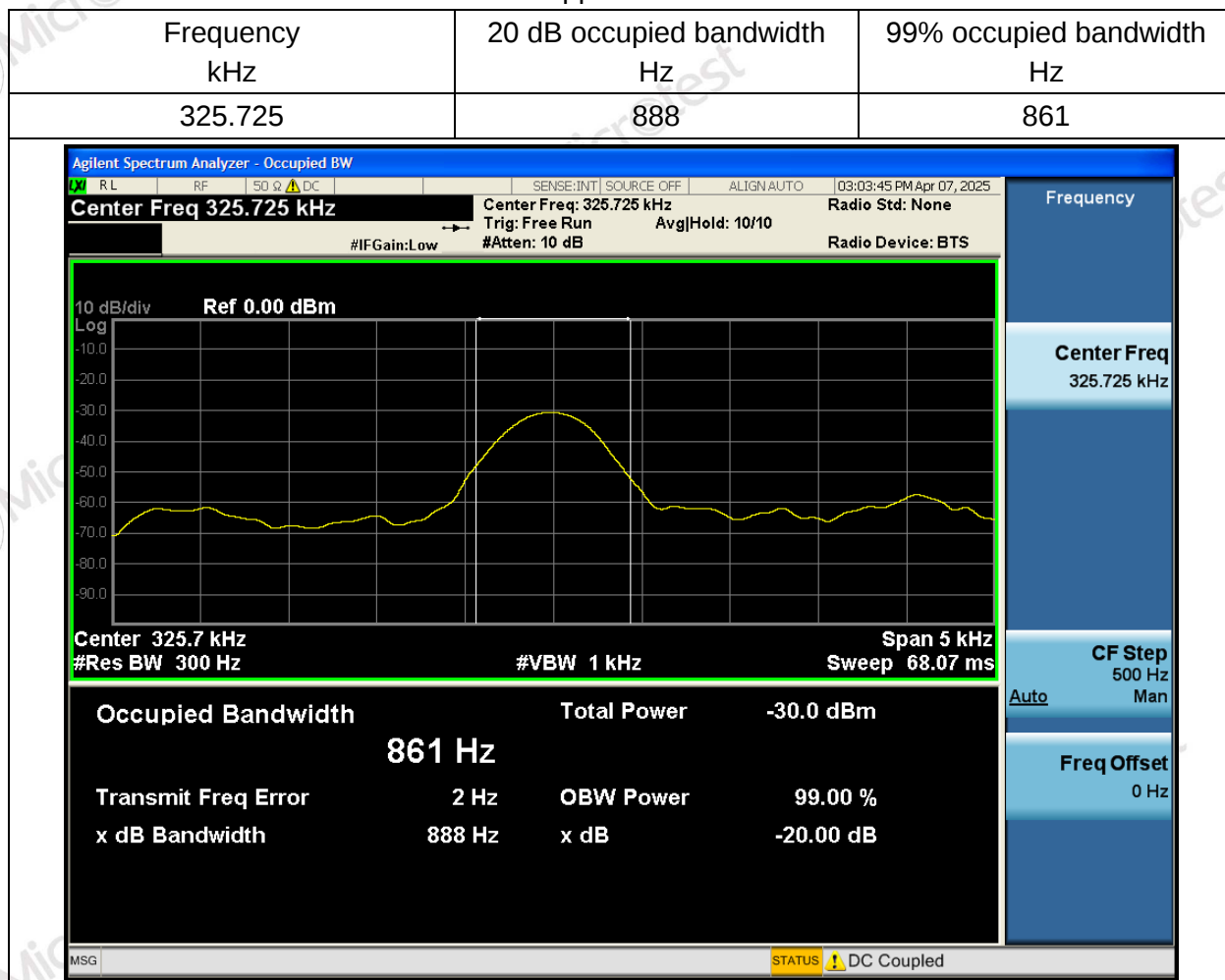


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Note: Because the measured signal is CW-like, adjusting the RBW per C63.10 would not be practical since measurement bandwidth will always follow the RBW. The RBW is set to 300 Hz to perform the occupied bandwidth test.

Apple watch

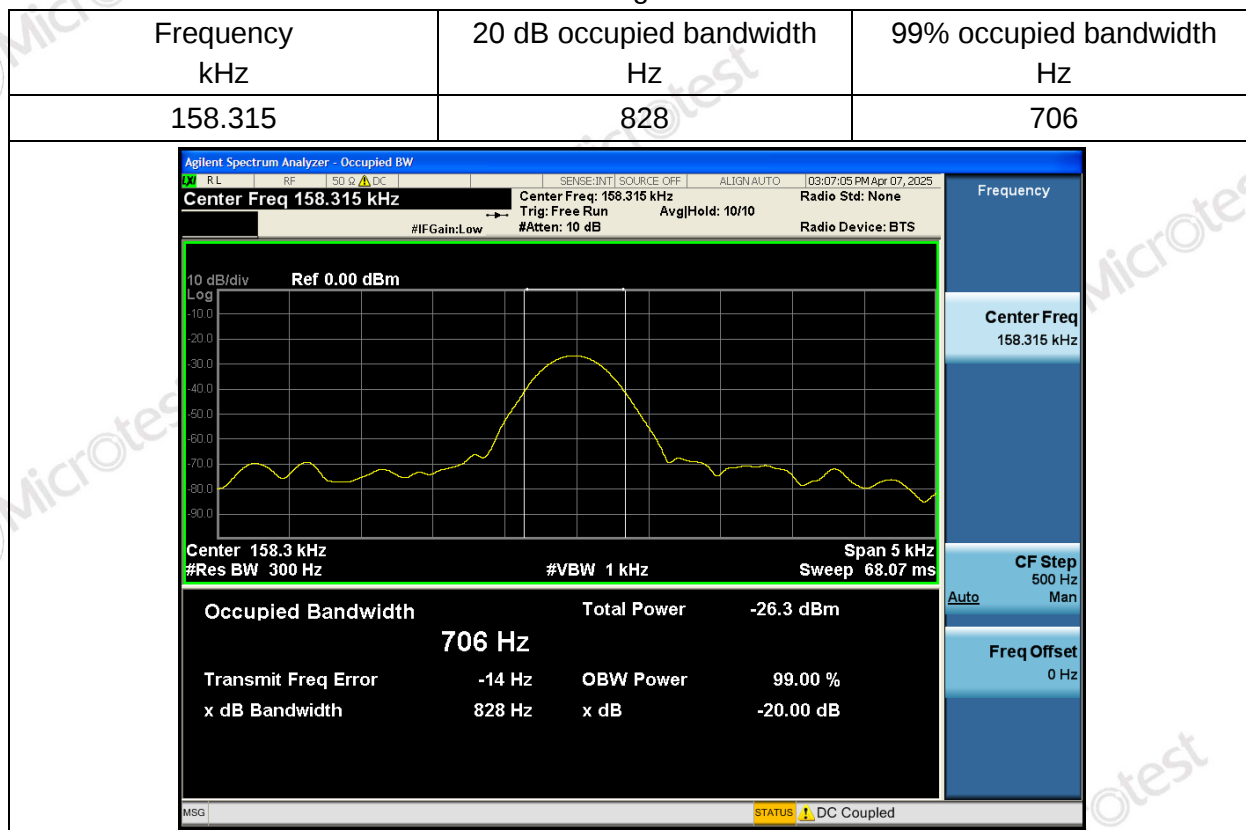


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Note: Because the measured signal is CW-like, adjusting the RBW per C63.10 would not be practical since measurement bandwidth will always follow the RBW. The RBW is set to 300 Hz to perform the occupied bandwidth test.

Samsung Watch



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Note: Because the measured signal is CW-like, adjusting the RBW per C63.10 would not be practical since measurement bandwidth will always follow the RBW. The RBW is set to 300 Hz to perform the occupied bandwidth test.

Phone 10W

