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APPLICATION CERTIFICATION FCC Part 15C On Behalf of OKIN Refined Electric Technology Co., Ltd

Remote Handset Model No.: JLDK.37.06

FCC ID: PCU-JLDK3706

Prepared for : OKIN Refined Electric Technology Co., Ltd

Address : Plant 4, No. 410 Xinyonglian Road, Wangjiangjing

Development Zone, Jiaxing, Zhejiang, China

Prepared by : ACCURATE TECHNOLOGY CO., LTD

Address : F1, Bldg. A, Chan Yuan New Material Port, Keyuan

Rd. Science & Industry Park, Nan Shan, Shenzhen,

Guangdong P.R. China

Tel: (0755) 26503290 Fax: (0755) 26503396

Report Number: ATE20162406

Date of Test : Nov 15, 2016—Dec 01, 2016

Date of Report : Dec 01, 2016



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Test Report Certification

Applicant : OKIN Refined Electric Technology Co., Ltd

Address : Plant 4, No. 410 Xinyonglian Road, Wangjiangjing

Development Zone, Jiaxing, Zhejiang, China

Manufacturer: OKIN Refined Electric Technology Co., Ltd

Address : Plant 4, No. 410 Xinyonglian Road, Wangjiangjing

Development Zone, Jiaxing, Zhejiang, China

Product : Remote Handset

Model No. : JLDK.37.06

Trade Name: OKIN REFINED

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.249 ANSI C63.10: 2013

The EUT was tested according to FCC 47CFR 15.249 for compliance to FCC 47CFR 15.249 requirements

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.249 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

Date of Test :	Nov 15, 2016—Dec 01, 2016
Date of Report :	Dec 01, 2016
Prepared by :	7 in Zhang
	(Tim.zhang, Engineer)
Approved & Authorized Signer :	Lemil
	(Sean Liu. Manager)



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1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT Remote Handset

Model Number : JLDK.37.06

Power Supply : 4.5V DC (batteries $3\times$)

Operate Frequency : 2403-2480MHz

Modulation mode : GFSK

Antenna Gain : 0dBi

Antenna type : PCB Antenna

Applicant : OKIN Refined Electric Technology Co., Ltd

Address : Plant 4, No. 410 Xinyonglian Road, Wangjiangjing

Development Zone, Jiaxing, Zhejiang, China

Manufacturer : OKIN Refined Electric Technology Co., Ltd

Address : Plant 4, No. 410 Xinyonglian Road, Wangjiangjing

Development Zone, Jiaxing, Zhejiang, China

Date of sample received: Nov 15, 2016

Date of Test : Nov 15, 2016—Dec 01, 2016

1.2.Special Accessory and Auxiliary Equipment N/A



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1.3.Description of Test Facility

EMC Lab : Accredited by TUV Rheinland Shenzhen

Listed by FCC

The Registration Number is 752051

Listed by Industry Canada

The Registration Number is 5077A-2

Accredited by China National Accreditation Committee

for Laboratories

The Certificate Registration Number is L3193

Name of Firm : ACCURATE TECHNOLOGY CO. LTD

Site Location : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd.

Science & Industry Park, Nanshan, Shenzhen, Guangdong

P.R. China

1.4. Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty = 3.08dB, k=2

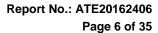
(9kHz-30MHz)

Radiated emission expanded uncertainty = 4.42dB, k=2

(30MHz-1000MHz)

Radiated emission expanded uncertainty = 4.06dB, k=2

(Above 1GHz)

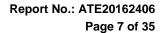




2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Туре	S/N	Calibrated dates	Cal. Interval
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 09, 2016	One Year
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 09, 2016	One Year
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 09, 2016	One Year
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 09, 2016	One Year
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 14, 2016	One Year
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 14, 2016	One Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 14, 2016	One Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1067	Jan. 14, 2016	One Year
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 09, 2016	One Year
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 09, 2016	One Year
Highpass Filter	Wainwright	WHKX3.6/18	N/A	Jan. 09, 2016	One Year
	Instruments	G-10SS			
Band Reject Filter	Wainwright	WRCG2400/2	N/A	Jan. 09, 2016	One Year
	Instruments	485-2375/2510			
		-60/11SS			





3. OPERATION OF EUT DURING TESTING

3.1. Operating Mode

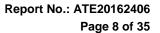
The mode is used: **Transmitting mode**

Low Channel: 2403MHz Middle Channel: 2442MHz High Channel: 2480MHz

3.2. Configuration and peripherals

EUT

Figure 1 Setup: Transmitting mode





4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.215(c)	20dB Bandwidth	Compliant
Section 15.249(d)	Band Edge Compliance Test	Compliant
Section 15.205(a), Section 15.209(a), Section 15.249, Section 15.35	Radiated Spurious Emission Test	Compliant
Section 15.207	AC Power Line Conducted Emission Test	N/A
Section 15.203	Antenna Requirement	Compliant

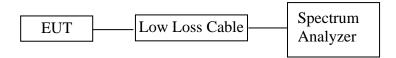
Note: The power supply mode of the EUT is DC 4.5V(Battery 3*), According to the FCC standard requirements, conducted emission is not applicable.





5. 20DB BANDWIDTH MEASUREMENT

5.1.Block Diagram of Test Setup



5.2. The Requirement For Section 15.215(c)

The bandwidth of a frequency hopping channel is the 20 dB emission bandwidth, measured with the hopping stopped. The system RF bandwidth is equal to the channel bandwidth multiplied by the number of channels in the hopset. The hopset shall be such that the near-term distribution of frequencies appears random, with sequential hops randomly distributed in both direction and magnitude of change in the hopset while the long-term distribution appears evenly distributed.

5.3. Operating Condition of EUT

- 5.3.1. Setup the EUT and simulator as shown as Section 5.1.
- 5.3.2. Turn on the power of all equipment.
- 5.3.3.Let the EUT work in TX modes measure it. The transmit frequency are 2403, 2442, 2480MHz.

5.4.Test Procedure

- 5.4.1. Place the EUT on the table and set it in transmitting mode.
- 5.4.2.Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 5.4.3.Set RBW of spectrum analyzer to 30 kHz and VBW to 100 kHz, Detector function=peak, Trace=max hold, Sweep=auto.
- 5.4.4.Set the measured low, middle and high frequency and test 20dB bandwidth with spectrum analyzer.

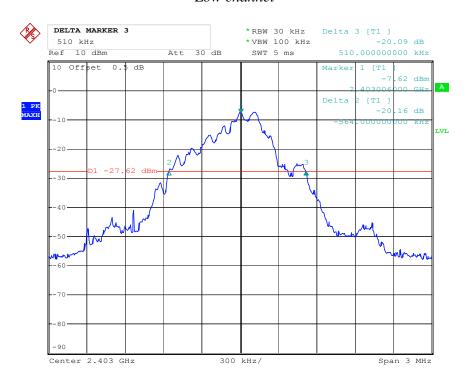


5.5.Test Result

Channel	Frequency(MHz)	20 dB Bandwidth(MHz)
Low	2403	1.074
Middle	2442	1.080
High	2480	1.074

The spectrum analyzer plots are attached as below.

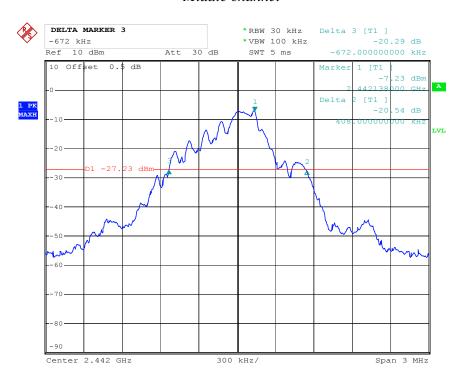
Low channel



Date: 1.DEC.2016 09:33:53

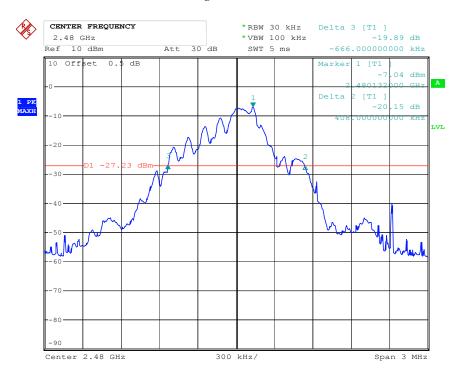


Middle channel

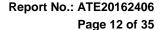


Date: 1.DEC.2016 10:50:54

High channel



Date: 1.DEC.2016 10:58:32

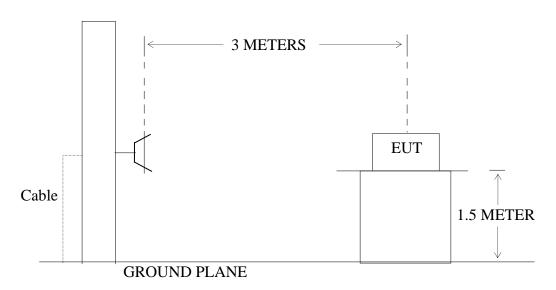




6. BAND EDGE COMPLIANCE TEST

6.1.Block Diagram of Test Setup

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



6.2. The Requirement For Section 15.249

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph A8.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

6.3.EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.



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6.4. Operating Condition of EUT

- 6.4.1. Setup the EUT and simulator as shown as Section 6.1.
- 6.4.2. Turn on the power of all equipment.
- 6.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2403, 2480MHz.

6.5. Test Procedure

Radiate Band Edge:

- 6.5.1. The EUT is placed on a turntable, which is 1.5m above the ground plane and worked at highest radiated power.
- 6.5.2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
- 6.5.3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 6.5.4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

RBW=1MHz, VBW=1MHz

6.5.5. The band edges was measured and recorded.

6.6.Test Result



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Report No.: ATE20162406

Polarization: Horizontal
Power Source: DC 4.5V

Date: 2016/11/22 Time: 17:16:44

Engineer Signature: DING

Distance: 3m

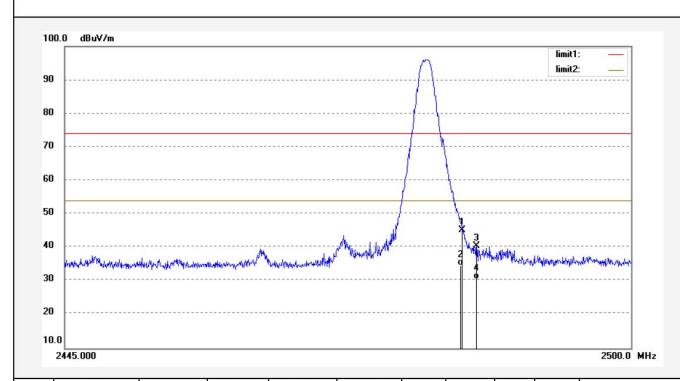
Job No.: DING1 #39
Standard: FCC part 15.249
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Remote Handset Mode: TX 2480MHz

Model: JLDK.37.06

Manufacturer: OKIN REFINED

Note: Report NO:ATE20162406



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	50.81	-5.51	45.30	74.00	-28.70	peak			
2	2483.500	40.22	-5.51	34.71	54.00	-19.29	AVG			
3	2484.889	46.03	-5.52	40.51	74.00	-33.49	peak			
4	2484.889	36.15	-5.52	30.63	54.00	-23.37	AVG			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Report No.: ATE20162406

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Job No.: DING1 #40 Polarization: Power Source: DC 4.5V

Date: 2016/11/22 Time: 17:18:43

Engineer Signature: DING

Vertical

Distance: 3m

Standard: FCC part 15.249 Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 55 %

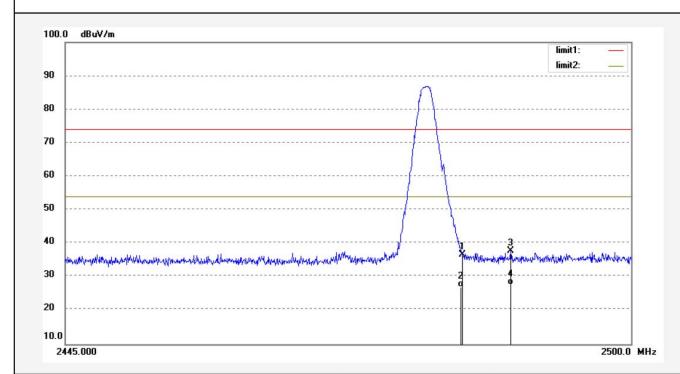
Remote Handset

Mode: TX 2480MHz Model: JLDK.37.06

EUT:

Manufacturer: OKIN REFINED

Note: Report NO:ATE20162406



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	42.22	-5.51	36.71	74.00	-37.29	peak			
2	2483.500	32.57	-5.51	27.06	54.00	-26.94	AVG			
3	2488.214	43.24	-5.51	37.73	74.00	-36.27	peak			
4	2488.214	33.16	-5.51	27.65	54.00	-26.35	AVG			





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Report No.: ATE20162406

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Job No.: DING1 #38 Polarization: Horizontal Standard: FCC part 15.249 Power Source: DC 4.5V

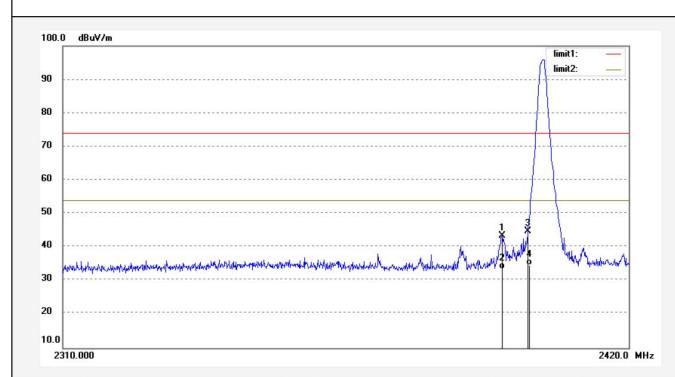
Test item: Radiation Test Date: 2016/11/22
Temp.(C)/Hum.(%) 25 C / 55 % Time: 17:14:13

EUT: Remote Handset Engineer Signature: DING

Mode: TX 2403MHz Distance: 3m Model: JLDK.37.06

Note: Report NO:ATE20162406

Manufacturer: OKIN REFINED



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2394.975	49.24	-5.84	43.40	74.00	-30.60	peak			
2	2394.975	39.37	-5.84	33.53	54.00	-20.47	AVG			
3	2400.000	50.48	-5.80	44.68	74.00	-29.32	peak			
4	2400.000	40.36	-5.80	34.56	54.00	-19.44	AVG	37		





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Report No.: ATE20162406

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Job No.: DING1 #37 Polarization: Vertical
Standard: FCC part 15.249 Power Source: DC 4.5V

 Test item:
 Radiation Test
 Date: 2016/11/22

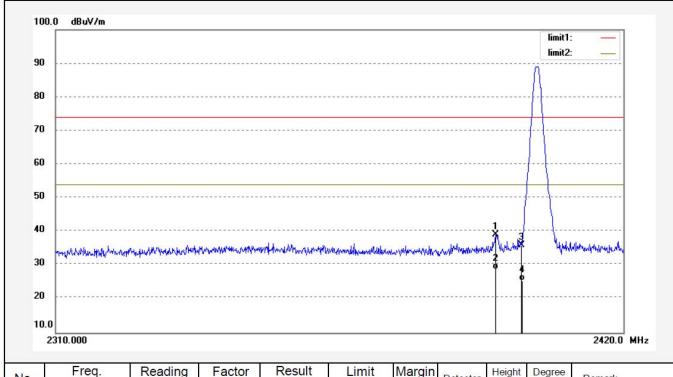
 Temp.(C)/Hum.(%) 25 C / 55 %
 Time: 17:10:27

EUT: Remote Handset Engineer Signature: DING

Mode: TX 2403MHz Distance: 3m Model: JLDK.37.06

Manufacturer: OKIN REFINED

Note: Report NO:ATE20162406



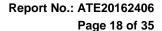
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2394.863	44.98	-5.84	39.14	74.00	-34.86	peak			
2	2394.863	34.62	-5.84	28.78	54.00	-25.22	AVG			
3	2400.000	41.73	-5.80	35.93	74.00	-38.07	peak			
4	2400.000	31.24	-5.80	25.44	54.00	-28.56	AVG			

Note:

- 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
- 2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

- 3. Display the measurement of peak values.
- 4. The average measurement was not performed when peak measured data under the limit of average detection.

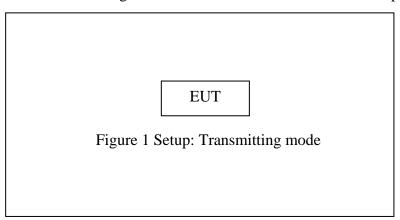




7. RADIATED SPURIOUS EMISSION TEST

7.1.Block Diagram of Test Setup

7.1.1.Block diagram of connection between the EUT and peripherals



7.1.2.Semi-Anechoic Chamber Test Setup Diagram

(A)Radiated Emission Test Set-Up, Frequency below 30MHz

Turntable EUT 1~4 m

Spectrum Analyzer

Ground Plane

Coaxial Cable

(B)Radiated Emission Test Set-Up, Frequency 30-1000MHz

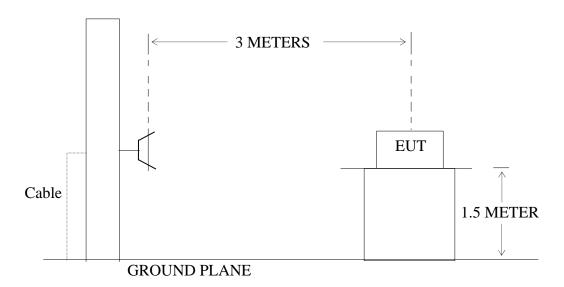
Turntable
Spectrum
Analyzer

Ground Plane

Coaxial Cable



(C) Radiated Emission Test Set-Up, Frequency above 1GHz



7.2. The Limit For Section 15.249

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph A8.4(4), the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).



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7.3. Restricted bands of operation

7.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz		
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15		
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46		
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75		
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5		
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2		
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5		
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7		
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4		
6.31175-6.31225	123-138	2200-2300	14.47-14.5		
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2		
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4		
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12		
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0		
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8		
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5		
12.57675-12.57725	322-335.4	3600-4400	$\binom{2}{}$		
13.36-13.41					

¹Until February 1, 1999, this restricted band shall be 0.490-0.510

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

7.4. Configuration of EUT on Measurement

The equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

²Above 38.6



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7.5. Operating Condition of EUT

- 7.5.1. Setup the EUT and simulator as shown as Section 7.1.
- 7.5.2. Turn on the power of all equipment.
- 7.5.3.Let the EUT work in TX modes and measure it. The transmit frequency are 2403, 2442, 2480MHz.

7.6.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter(Below 1GHz) and 1.5m(above 1GHz) high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 9 kHz in below 30MHz. and set at 120 kHz in 30-1000MHz, and 1MHz in above 1000MHz.

The frequency range from 9 kHz to 25GHz is checked.

The final measurement in band 9-90 kHz, 110-490 kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

RBW (120 kHz), VBW (300 kHz) for QP detector below 1GHz Peak detector above 1GHz RBW (1 MHz), VBW (3MHz) for Peak measurement RBW (1 MHz), VBW (10Hz) for AV measurement

The field strength is calculated by adding the antenna factor, and cable loss, and subtracting the amplifier gain from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain



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7.7. The Field Strength of Radiation Emission Measurement Results **PASS**.

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

- 2. *: Denotes restricted band of operation.
- 3. The EUT is tested radiation emission in three axes. The worst emissions are reported in all channels.
- 4. The radiation emissions from 9KHz-30MHz and 18GHz-25GHz are not reported, because the test values lower than the limits of 20dB.
- 5. The average measurement was not performed when peak measured data under the limit of average detection.



Site: 1# Chamber

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Below 1GHz



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Polarization: Horizontal
Power Source: DC 4.5V

Date: 16/11/21/ Time: 9/14/43

Engineer Signature: DING

Distance: 3m

Job No.: ding1 #14

Standard: FCC 15.249 3M Radiated

Test item: Radiation Test

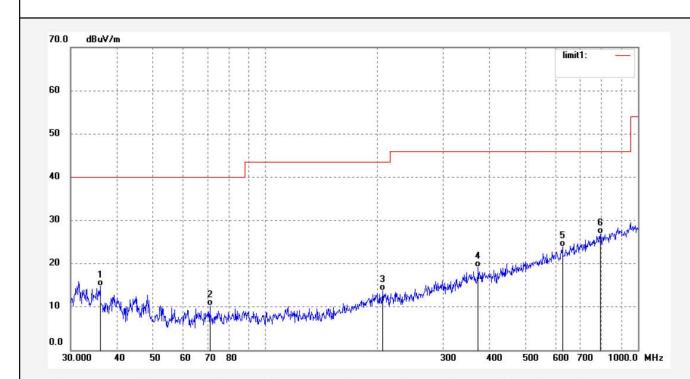
Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Remote Handset Mode: TX 2403MHz

Model: JLDK.37.06

Manufacturer: OKIN REFINED

Note: Report NO:ATE20162406



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	36.0138	31.23	-16.38	14.85	40.00	-25.15	QP			
2	70.9535	32.28	-22.12	10.16	40.00	-29.84	QP			
3	206.4701	32.29	-18.47	13.82	43.50	-29.68	QP			
4	372.5747	32.46	-13.32	19.14	46.00	-26.86	QP			
5	626.6878	31.68	-7.82	23.86	46.00	-22.14	QP			
6	793.0280	31.11	-4.27	26.84	46.00	-19.16	QP			



Site: 1# Chamber Tel:+86-0755-26503290

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Report No.: ATE20162406

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F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Polarization: Vertical ated Power Source: DC 4.5V

Date: 16/11/21/ Time: 9/14/12

Engineer Signature: DING

Distance: 3m

Job No.: ding1 #13 Standard: FCC 15.249 3M Radiated

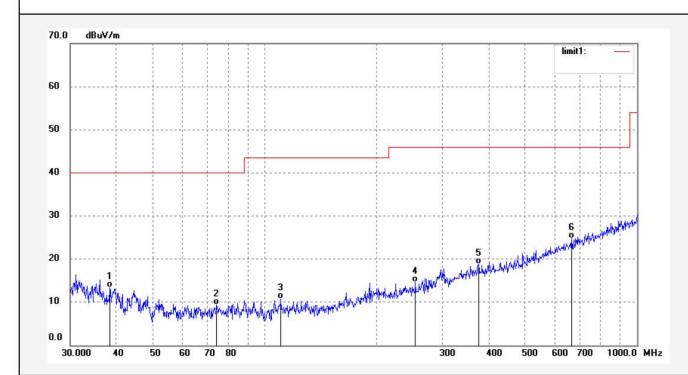
Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Remote Handset
Mode: TX 2403MHz
Model: JLDK.37.06

Manufacturer: OKIN REFINED

Note: Report NO:ATE20162406



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	38.3650	30.79	-17.39	13.40	40.00	-26.60	QP			
2	74.2695	31.54	-22.26	9.28	40.00	-30.72	QP			
3	110.4693	32.57	-21.82	10.75	43.50	-32.75	QP			
4	254.0312	32.57	-17.91	14.66	46.00	-31.34	QP			
5	375.2022	32.13	-13.29	18.84	46.00	-27.16	QP			
6	667.6024	31.82	-6.97	24.85	46.00	-21.15	QP			



Report No.: ATE20162406 Page 25 of 35

Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Polarization: Horizontal Power Source: DC 4.5V

Date: 16/11/21/ Time: 9/15/17

Engineer Signature: DING

Distance: 3m

Job No.: ding1 #15 Standard: FCC 15.249 3M Radiated

Mode: TX 2442MHz Model: JLDK.37.06

EUT:

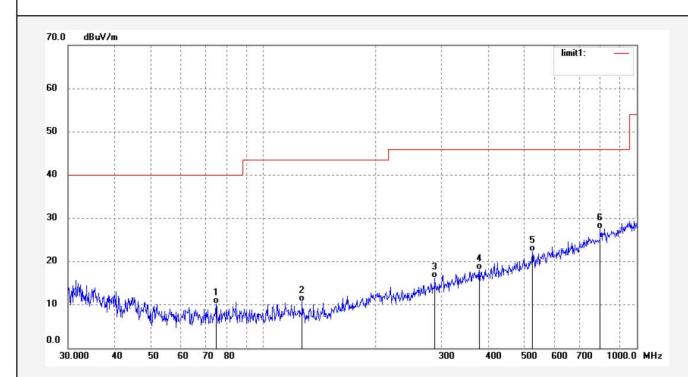
Test item: Radiation Test

Manufacturer: OKIN REFINED

Note: Report NO:ATE20162406

Temp.(C)/Hum.(%) 25 C / 55 %

Remote Handset



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	74.7934	32.51	-22.29	10.22	40.00	-29.78	QP			
2	127.1389	32.78	-22.08	10.70	43.50	-32.80	QP			
3	288.2839	32.38	-16.24	16.14	46.00	-29.86	QP			
4	379.1779	31.35	-13.24	18.11	46.00	-27.89	QP		,	
5	525.7201	32.65	-10.29	22.36	46.00	-23.64	QP			
6	798.6204	31.71	-4.19	27.52	46.00	-18.48	QP			



Report No.: ATE20162406 Page 26 of 35

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ding1 #16

Power Source: DC 4.5V

Date: 16/11/21/ Time: 9/16/04

Engineer Signature: DING

Distance:

Polarization: Vertical Standard: FCC 15.249 3M Radiated

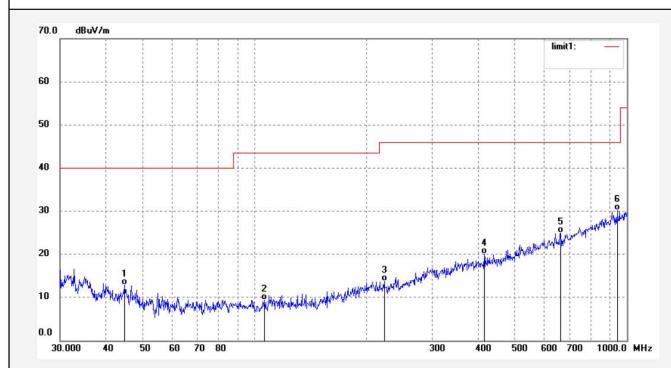
EUT: Remote Handset Mode: TX 2442MHz Model: JLDK.37.06

Test item: Radiation Test

Manufacturer: OKIN REFINED

Report NO:ATE20162406 Note:

Temp.(C)/Hum.(%) 25 C / 55 %



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	44.7792	31.78	-18.88	12.90	40.00	-27.10	QP			
2	106.2811	31.87	-22.49	9.38	43.50	-34.12	QP			
3	223.0629	32.03	-18.35	13.68	46.00	-32.32	QP			
4	413.9914	32.80	-12.74	20.06	46.00	-25.94	QP			
5	665.2609	31.95	-7.02	24.93	46.00	-21.07	QP			
6	942.0180	31.84	-1.61	30.23	46.00	-15.77	QP			





F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

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Job No.: ding1 #18 Polarization: Horizontal Power Source: DC 4.5V

> Date: 16/11/21/ Time: 9/16/45

Engineer Signature: DING

Distance: 3m

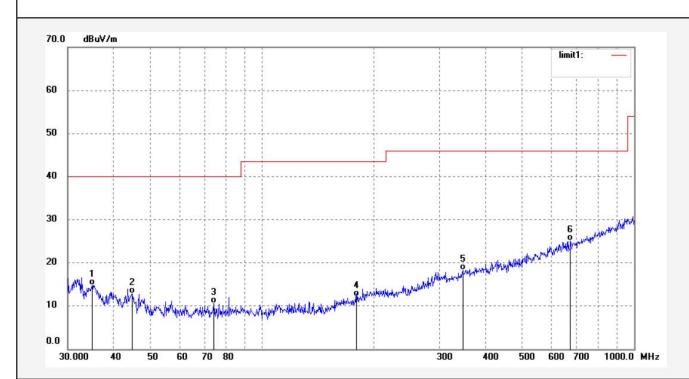
Standard: FCC 15.249 3M Radiated Test item: Radiation Test

EUT: Remote Handset Mode: TX 2480MHz Model: JLDK.37.06

Manufacturer: OKIN REFINED

Note: Report NO:ATE20162406

Temp.(C)/Hum.(%) 25 C / 55 %



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	34.8928	30.78	-15.92	14.86	40.00	-25.14	QP			,
2	44.7792	31.78	-18.88	12.90	40.00	-27.10	QP	i		
3	74.2695	32.81	-22.26	10.55	40.00	-29.45	QP			
4	178.1426	32.61	-20.51	12.10	43.50	-31.40	QP			
5	346.0740	32.29	-13.96	18.33	46.00	-27.67	QP			
6	674.6767	31.94	-6.84	25.10	46.00	-20.90	QP			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

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Report No.: ATE20162406

Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ding1 #17 Polarization: Vertical Standard: FCC 15.249 3M Radiated

Test item: Radiation Test Temp.(C)/Hum.(%) 25 C / 55 % Time: 9/16/20

EUT: Remote Handset Mode: TX 2480MHz Model: JLDK.37.06

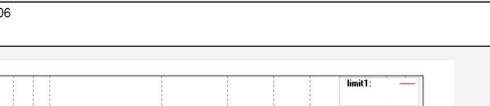
Manufacturer: OKIN REFINED

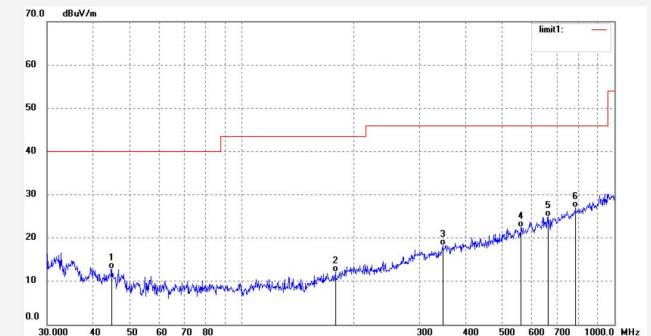
Note: Report NO:ATE20162406 Power Source: DC 4.5V

Date: 16/11/21/

Distance: 3m

Engineer Signature: DING





No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	44.7792	31.78	-18.88	12.90	40.00	-27.10	QP			
2	178.1426	32.61	-20.51	12.10	43.50	-31.40	QP			
3	346.0740	32.29	-13.96	18.33	46.00	-27.67	QP			
4	562.0143	31.86	-9.39	22.47	46.00	-23.53	QP			
5	665.2609	31.95	-7.02	24.93	46.00	-21.07	QP			
6	784.7128	31.44	-4.45	26.99	46.00	-19.01	QP			



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Above 1GHz



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Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ding1 #26 Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Remote Handset Mode: TX 2403MHz

Model: JLDK.37.06.

Manufacturer: OKIN REFINED

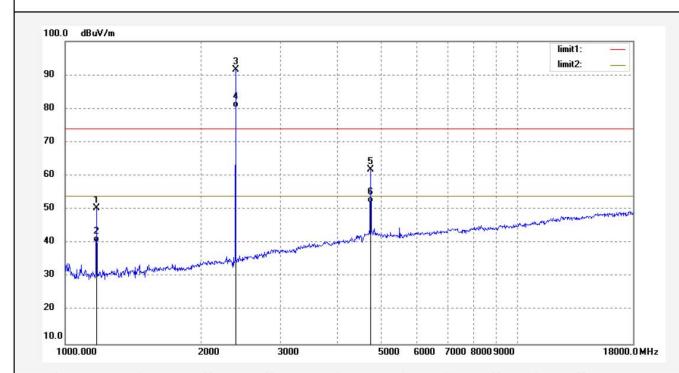
Note: Report NO:ATE20162406

Polarization: Horizontal Power Source: DC 4.5V

Date: 16/11/21/ Time: 8/56/13

Engineer Signature: DING

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1173.618	61.34	-10.97	50.37	74.00	-23.63	peak)	
2	1173.618	51.28	-10.97	40.31	54.00	-13.69	AVG			
3	2403.419	97.44	-5.98	91.46	114.00	-22.54	peak			
4	2403.419	87.35	-5.98	81.37	94.00	-12.63	AVG			
5	4807.957	58.68	3.15	61.83	74.00	-12.17	peak			
6	4807.957	48.72	3.15	51.87	54.00	-2.13	AVG			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Page 30 of 35

Site: 1# Chamber

Tel:+86-0755-26503290

Report No.: ATE20162406

Fax:+86-0755-26503396

Polarization: Vertical Power Source: DC 4.5V

Date: 16/11/21/ Time: 8/54/45

Engineer Signature: DING

Distance: 3m

Job No.: ding1 #25 Standard: FCC PK

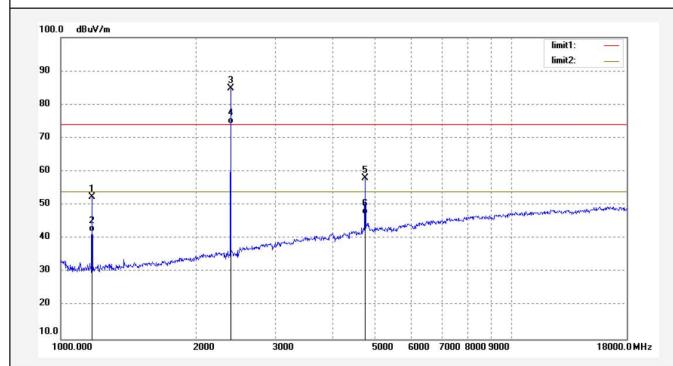
Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Remote Handset Mode: TX 2403MHz Model: JLDK.37.06

Manufacturer: OKIN REFINED

Note: Report NO:ATE20162406



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1173.618	63.32	-10.97	52.35	74.00	-21.65	peak			
2	1173.618	53.14	-10.97	42.17	54.00	-11.83	AVG			
3	2403.419	90.76	-5.98	84.78	114.00	-29.22	peak			
4	2403.419	80.16	-5.98	74.18	94.00	-15.72	AVG			
5	4807.957	54.78	3.15	57.93	74.00	-16.07	peak			
6	4807.957	44.13	3.15	47.28	54.00	-6.72	AVG			



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F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ding1 #27 Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Remote Handset Mode: TX 2442MHz

Model: JLDK.37.06

Manufacturer: OKIN REFINED

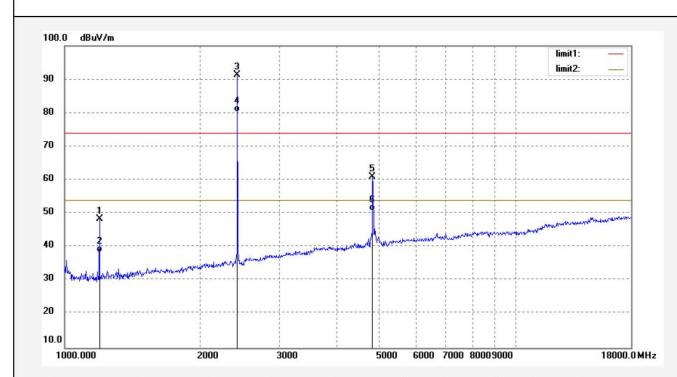
Note: Report NO:ATE20162406

Polarization: Horizontal Power Source: DC 4.5V

Date: 16/11/21/ Time: 9/03/47

Engineer Signature: DING

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1194.294	59.49	-11.03	48.46	74.00	-25.54	peak			
2	1194.294	49.57	-11.03	38.54	54.00	-15.46	AVG			
3	2442.621	96.95	-5.72	91.23	114.00	-22.77	peak			
4	2442.621	87.12	-5.72	81.40	94.00	-12.60	AVG			
5	4885.324	57.30	3.67	60.97	74.00	-13.03	peak			
6	4885.324	47.26	3.67	50.93	54.00	-3.07	AVG			



Report No.: ATE20162406 Page 32 of 35

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: ding1 #28 Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Remote Handset
Mode: TX 2442MHz
Model: JLDK.37.06

Manufacturer: OKIN REFINED

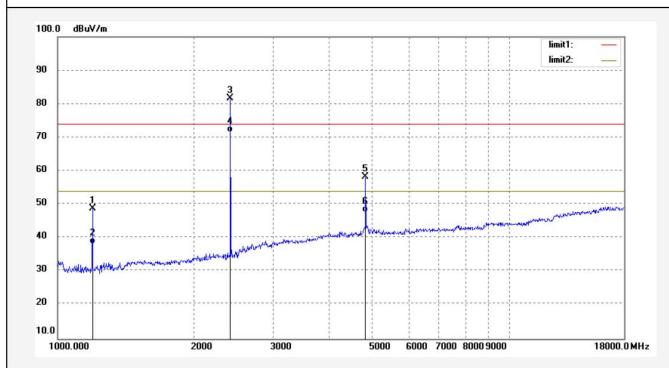
Note: Report NO:ATE20162406

Polarization: Vertical Power Source: DC 4.5V

Date: 16/11/21/ Time: 9/05/28

Engineer Signature: DING

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1194.294	59.92	-11.03	48.89	74.00	-25.11	peak			
2	1194.294	49.37	-11.03	38.34	54.00	-15.66	AVG			
3	2442.621	87.34	-5.72	81.62	114.00	-32.38	peak			
4	2442.621	77.28	-5.72	71.56	94.00	-22.44	AVG			
5	4885.324	54.63	3.67	58.30	74.00	-15.70	peak			
6	4885.324	44.01	3.67	47.68	54.00	-6.32	AVG			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

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Site: 1# Chamber

Tel:+86-0755-26503290

Report No.: ATE20162406

Fax:+86-0755-26503396

Polarization: Horizontal Power Source: DC 4.5V

Date: 16/11/21/ Time: 9/10/04

Engineer Signature: DING

Distance: 3m

Job No.: ding1 #30 Standard: FCC PK

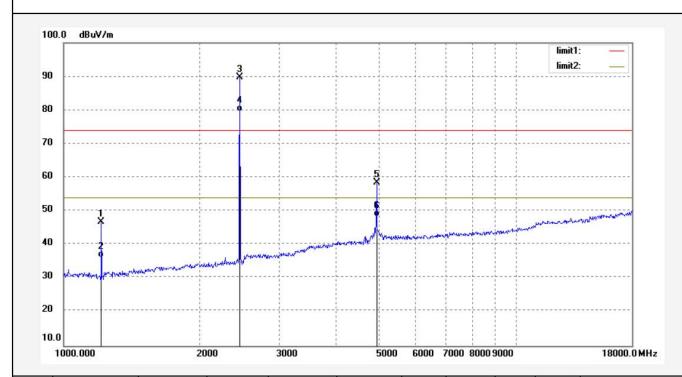
Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Remote Handset
Mode: TX 2480MHz
Model: JLDK.37.06

Manufacturer: OKIN REFINED

Note: Report NO:ATE20162406



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1211.803	57.80	-11.00	46.80	74.00	-27.20	peak			
2	1211.803	47.29	-11.00	36.29	54.00	-17.71	AVG			
3	2480.034	95.40	-5.55	89.85	114.00	-24.15	peak			
4	2480.034	85.10	-5.55	79.55	94.00	-14.45	AVG			
5	4960.444	54.05	4.54	58.59	74.00	-15.41	peak			
6	4960.444	43.82	4.54	48.36	54.00	-5.64	AVG			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

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Job No.: ding1 #29 Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Remote Handset

Mode: TX 2480MHz

Model: JLDK.37.06

Manufacturer: OKIN REFINED

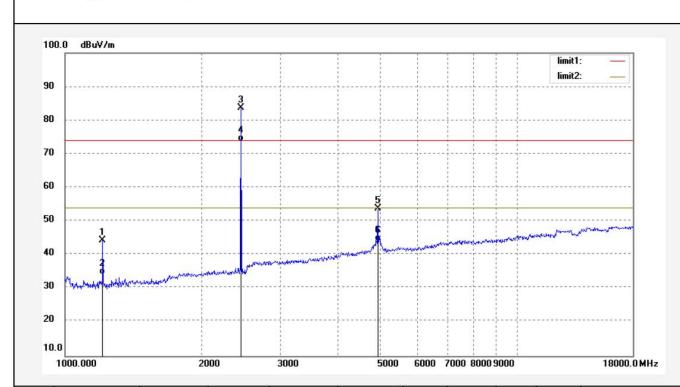
Note: Report NO:ATE20162406

Polarization: Vertical Power Source: DC 4.5V

Date: 16/11/21/ Time: 9/08/47

Engineer Signature: DING

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1211.803	55.35	-11.00	44.35	74.00	-29.65	peak			
2	1211.803	45.27	-11.00	34.27	54.00	-19.73	AVG			
3	2480.034	89.16	-5.55	83.61	114.00	-30.39	peak			
4	2480.034	79.34	-5.55	73.79	94.00	-20.21	AVG			
5	4960.444	49.21	4.54	53.75	74.00	-20.25	peak			
6	4960.444	39.46	4.54	44.00	54.00	-10.00	AVG			



8. ANTENNA REQUIREMENT

8.1. The Requirement

According to Section 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.

8.2. Antenna Construction

Device is equipped with permanent attached antenna, which isn't displaced by other antenna. The Antenna gain of EUT is 0dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.

