Test Report

FCC Part15.249

Product Name	:	E-GO
Model No.	:	Cruiser
FCC ID	:	2ABB5YUNEECGSFKRX18
IC	:	11554A-Cruiser

Applicant	:	YUNEEC International (China) Co., Ltd.
Address	:	No.388, Zhengwei Road, Jinxi Town, Kunshan, Jiangsu

Date of Receipt	:	Sep. 23, 2013
Test Date	:	Sep. 23, 2013~Nov. 06, 2013
Issued Date	:	Dec. 18, 2013
Report No.	:	139S058R-RF-US-P06V01
Report Version	:	V1.0

Test Report Certification

Issued Date : Dec. 18, 2013
Report No. : 139S058R-RF-US-P06V01

Product Name	:	E-GO
Applicant	:	YUNEEC International (China) Co., Ltd.
Address	:	No.388, Zhengwei Road, Jinxi Town, Kunshan, Jiangsu
Manufacturer	:	YUNEEC International (China) Co., Ltd.
Address	:	No.388, Zhengwei Road, Jinxi Town, Kunshan, Jiangsu
Model No.	:	Cruiser
FCC ID	:	2ABB5YUNEECGSFKRX18
IC	:	11554A-Cruiser
Brand Name	:	YUNEEC
EUT Voltage	:	DC: 26.5V
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C: 2012 ANSI C63.4: 2009 Industry Canada RSS-Gen Issue 3/RSS-210 Issue 8
Test Result	:	Complied
Performed Location	:	Suzhou EMC Laboratory No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., Suzhou, China TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098 FCC Registration Number: 800392; IC Lab Code: 4075B

Documented By	:	Alice Ni
Reviewed By	:	Jamie Yuan
Approved By	:	Jeff Chen

Laboratory Information

We, **QuieTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C.	**:**	**BSMI, NCC, TAF**
Germany	**:**	**TUV Rheinland**
Norway	**:**	**Nemko, DNV**
USA	**:**	**FCC**
Japan	**:**	**VCCI**
China	**:**	**CNAS**

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site :http://www.quietek.com/tw/ctg/cts/accreditations.htm
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

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TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

LinKou Testing Laboratory :
No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

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No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., SuZhou, China
TEL : +86-512-6251-5088 / FAX : 86-512-6251-5098 E-Mail : service@quietek.com

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1. General Information

1.1. EUT Description

Product Name	E-GO
Model No.	Cruiser
Working Voltage	DC: 26.5V
Frequency Range	2402~2480 MHz
Channel Number	79
Type of Modulation	GFSK
Date Rate	256bps
Channel Control	Auto
Antenna Type	PCB Antenna
Antenna Gain	5.4dBi

Channel List

Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461	N/A	N/A

1.2. Mode of Operation

QuieTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Transmit

Note:

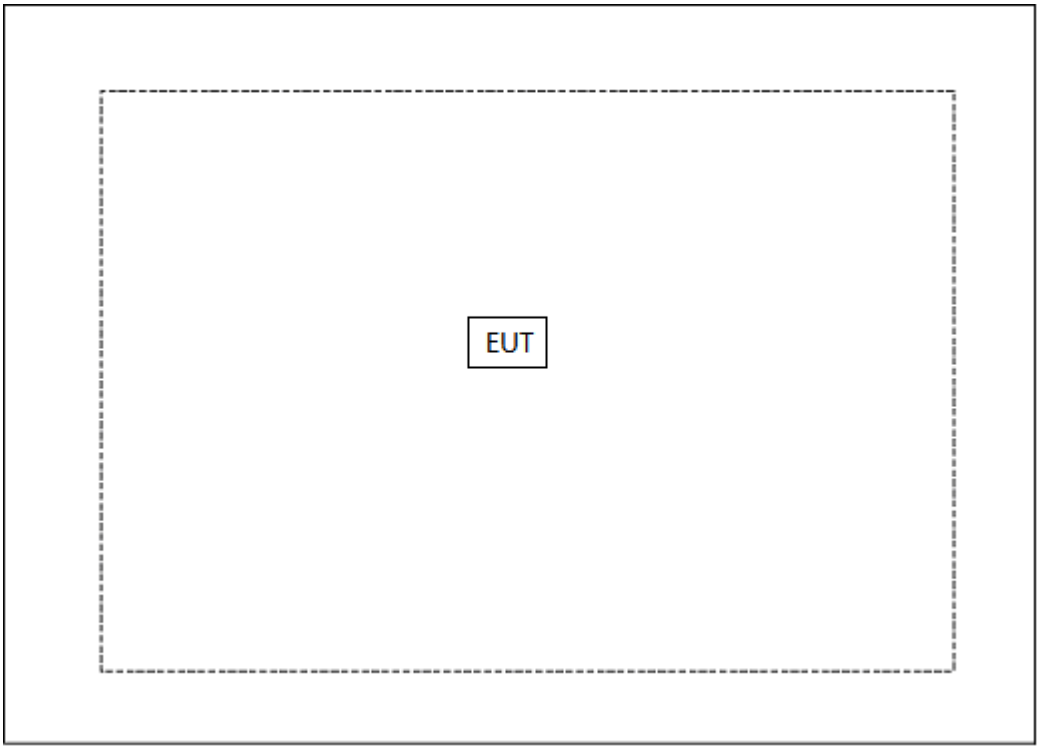
1. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	N/A	N/A	N/A	N/A	N/A

1.4. Configuration of Tested System

Connection Diagram


Signal Cable Type		Signal cable Description
A	N/A	N/A

1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of equipment.
3	Select the channel and start to test.

2. Technical Test

2.1. Summary of Test Result

☒ No deviations from the test standards

☐ Deviations from the test standards as below description:

Performed Test Item	Normative References	Test Performed	Deviation
Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: 2012 Section 15.207 RSS-Gen Issue 3 December 2010 Section 7.2.2	N/A	No
Radiated Emission	FCC CFR Title 47 Part 15 Subpart C: 2012 Section 15.209 and 15.249 RSS-210 Issue 8 December 2010 Section 2.7 Table 2 and Table 3	Yes	No
Band-edge Compliance of RF Conducted Emissions	FCC CFR Title 47 Part 15 Subpart C: 2012 Section 15.215(c)	Yes	No

2.2. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

3. Conducted Emission

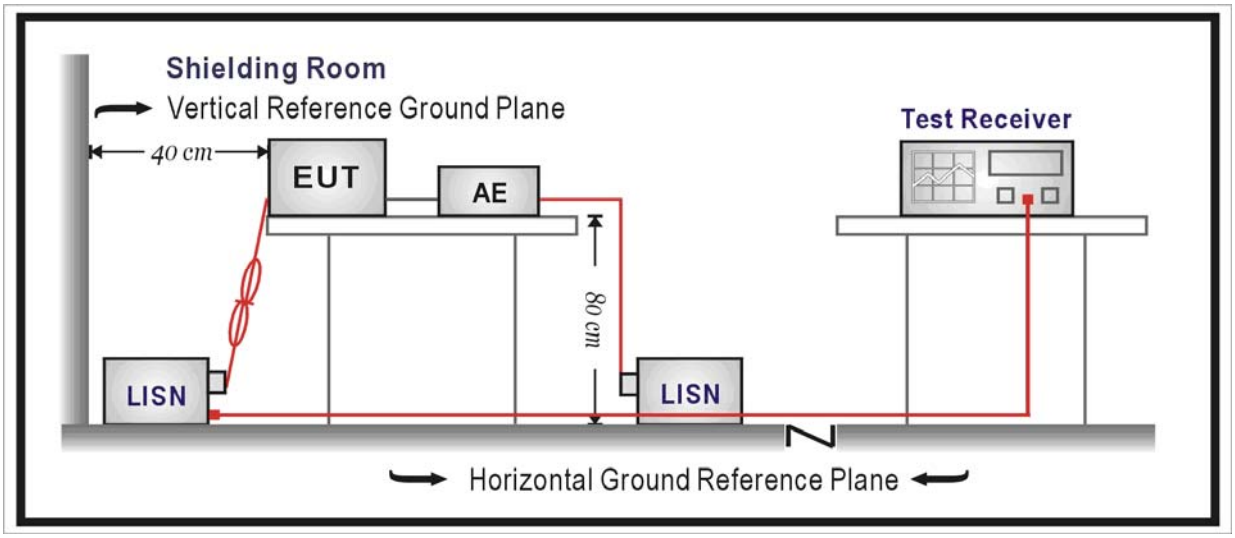
3.1. Test Equipment

Conducted Emission / TR-1

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
EMI Test Receiver	R&S	ESCI	100726	2014.03.30
Two-Line V-Network	R&S	ENV216	100043	2014.03.30
Two-Line V-Network	R&S	ENV216	100044	2014.09.16
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2014.03.01
50ohm Termination	SHX	TF2	07081401	2014.09.16
Temperature/Humidity Meter	zhicheng	ZC1-2	TR1-TH	2014.01.10

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

3.2. Test Setup



3.3. Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

3.4. Test Procedure

The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Uncertainty

The measurement uncertainty is defined as ± 2.02 dB

3.6. Test Result

Not applicable.

4. Radiated Emission

4.1. Test Equipment

Radiated Emission / AC-2

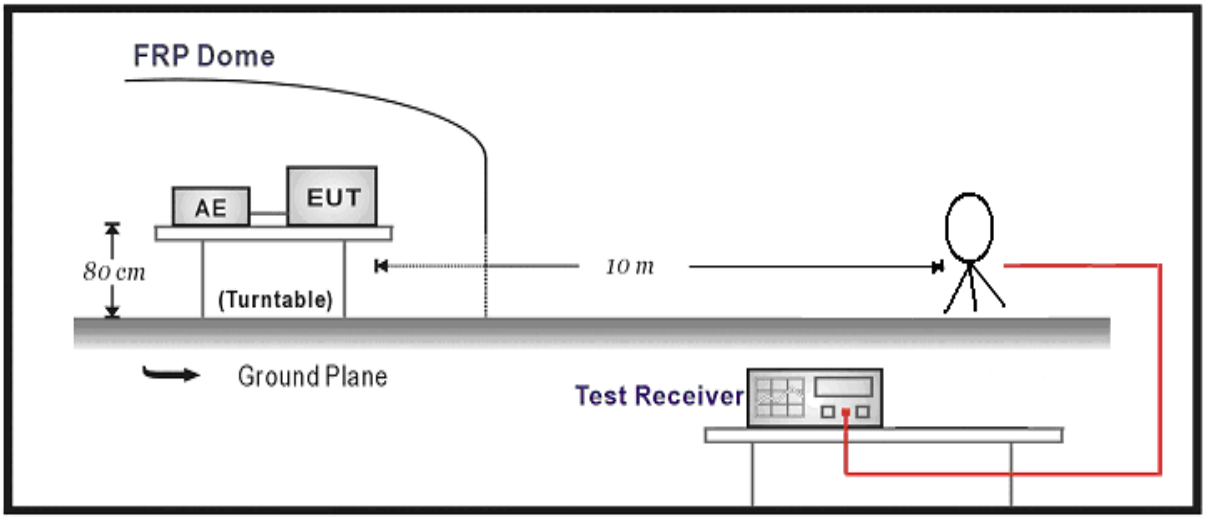
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
EMI Test Receiver	R&S	ESCI	100573	2014.04.30
Loop Antenna	R&S	HFH2-Z2	833799/003	2013.11.17
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2014.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2014.03.01
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC2-TH	2014.05.07

Radiated Emission / AC-5

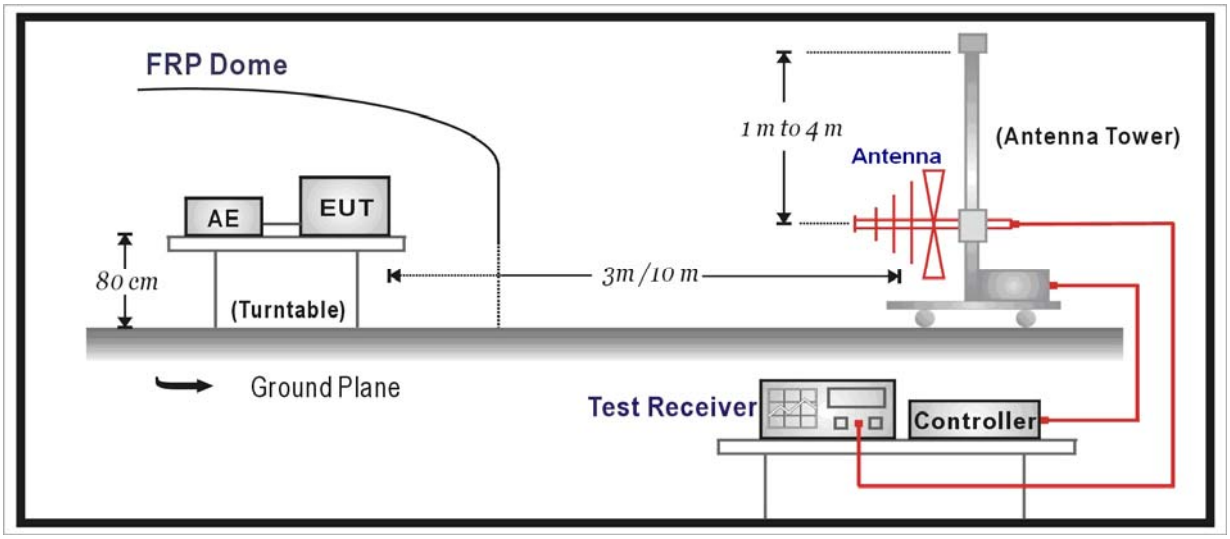
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2014.03.30
Preamplifier	QuieTek	AP-025C	CHM-0602008	2014.05.03
Preamplifier	Miteq	NSP1800-25	1364185	2014.05.03
Preamplifier	QuieTek	AP-040G	CHM-0906001	2014.05.03
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2014.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2014.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2014.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2014.03.01
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC5-TH	2014.01.11

4.2. Test Setup

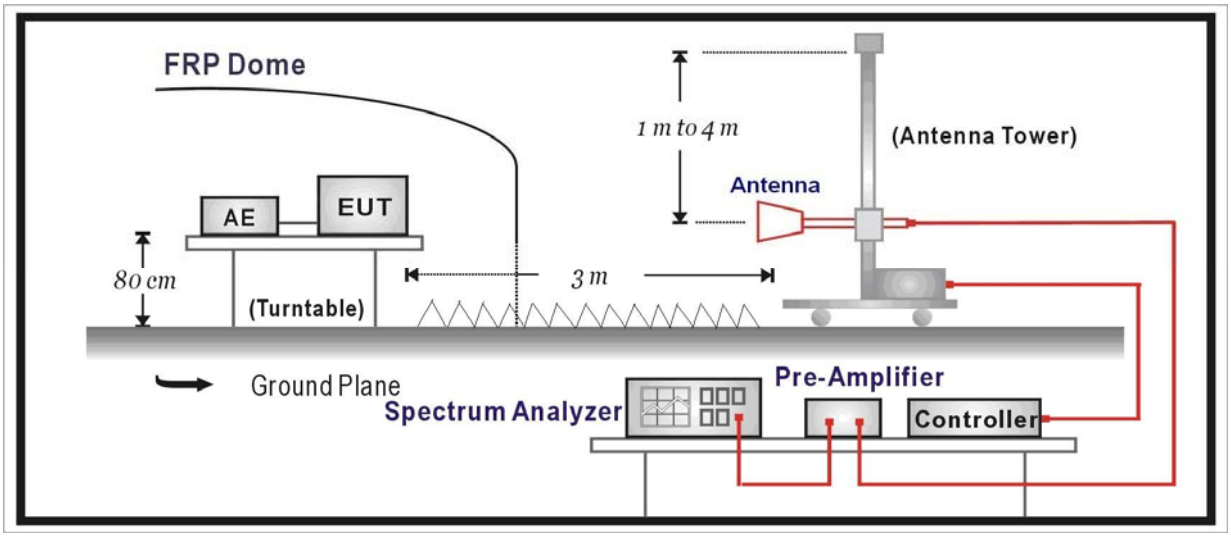
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

FCC Part 15 Subpart C Paragraph 15.209		
Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (uV/m)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-80	100**	3
80-216	150**	3
216-960	200**	3
Above 960	500	3

Note 1: The lower limit shall apply at the transition frequency.

Note 2: Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m).

FCC Part 15 Subpart C Paragraph 15.249		
Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of Harmonics (microvolts/meter)
902-928(MHz)	50	500
2400-2483.5(MHz)	50	500
5725-5875(MHz)	50	500
24.0-24.25(GHz)	250	2500

- FCC Part 15.249 (d), Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

4.4. Test Procedure

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2009 / ANSI C63.10: 2009 on radiated measurement.
The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.
The frequency range from 30MHz to 10th harmonic is checked.
Note: When doing emission measurement above 1GHz, the horn antenna will be bended down a little (as horn antenna has the narrow beamwidth) in order to keeping the antenna in the “cone of radiation” of EUT. The 3dB beamwidth is 60~10 degrees for H-plane and 90~10 degrees for E-plane.

4.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB
below 1G is defined as ± 3.8 dB

4.6. Test Result

All of the test result shown indicates the worst case, and spectrum analyzer parameters setting as shown below:
Peak detector: RBW = 1MHz, VBW = 3MHz, sweep time = 200ms;
Average detector = Peak detector - 20*Log(1/Duty Cycle)

Fundamental Radiated Emission

Product	:	E-GO
Test Item	:	Fundamental Radiated Emission
Test Site	:	AC-5
Test Mode	:	Mode 1: Transmit

Frequency (MHz)	Antenna	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
2402	H	58.1	37.8	95.9	114	-18.1	PK
	V	56.7	37.0	93.7	114	-20.3	PK
2440	H	55.8	38.4	94.2	114	-19.8	PK
	V	54.0	37.4	91.4	114	-22.6	PK
2480	H	58.8	38.1	96.9	114	-17.1	PK
	V	55.7	37.2	92.9	114	-21.1	PK

Note: Measure Level = Reading Level + Factor.

Frequency (MHz)	Antenna	Peak Measure (dBuV/m)	Duty Cycle Correct Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
2402	H	95.9	-20.0	75.9	94	-18.1	AV
	V	93.7	-20.0	73.7	94	-20.3	AV
2440	H	94.2	-20.0	74.2	94	-19.8	AV
	V	91.4	-20.0	71.4	94	-22.6	AV
2480	H	96.6	-20.0	76.6	94	-17.4	AV
	V	92.9	-20.0	72.9	94	-21.1	AV

Note:1. Measure Level = Peak Measure + Duty Cycle Correct Factor.
2. If Duty Cycle is smaller than -20dB, based on FCC part15 the duty cycle correction factor is -20dB for calculating average emission.

Harmonic Radiated Emission

Product	:	E-GO
Test Item	:	Harmonic Radiated Emission
Test Site	:	AC-5
Test Mode	:	Mode 1: Transmit at Low Channel

Frequency (MHz)	Antenna	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
4808.0	H	48.7	-6.2	42.5	74	-31.5	PK
4808.0	V	54.2	-6.3	47.9	74	-26.1	PK
7205.0	H	49.8	-1.7	48.1	74	-25.9	PK
7205.0	V	50.0	-1.7	48.3	74	-25.7	PK

Note: Measure Level = Reading Level + Factor.

Frequency (MHz)	Antenna	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
4808.1	H	30.2	-6.2	24.0	54	-30.0	AV
4808.1	V	34.5	-6.3	28.2	54	-25.8	AV
7205.3	H	30.2	-1.7	28.5	54	-25.5	AV
7206.0	V	31.6	-1.7	29.9	54	-24.1	AV

Note: Measure Level = Reading Level + Factor.

Product	:	E-GO
Test Item	:	Harmonic Radiated Emission
Test Site	:	AC-5
Test Mode	:	Mode 1: Transmit at Mid Channel

Frequency (MHz)	Antenna	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
4876.0	H	51.7	-6.2	45.5	74	-28.5	PK
4876.0	V	52.7	-6.2	46.5	74	-27.5	PK
7324.0	H	46.4	-1.4	45.0	74	-29.0	PK
7315.5	V	44.7	-1.4	43.3	74	-30.7	PK

Note: Measure Level = Reading Level + Factor.

Frequency (MHz)	Antenna	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
4876.3	H	32.2	-6.2	26.0	54	-28.0	AV
4876.0	V	33.2	-6.2	27.0	54	-27.0	AV
7315.3	H	30.2	-1.7	28.5	54	-25.5	AV
7315.3	V	25.5	-1.4	24.1	54	-29.9	AV

Note: Measure Level = Reading Level + Factor.

Product	:	E-GO
Test Item	:	Harmonic Radiated Emission
Test Site	:	AC-5
Test Mode	:	Mode 1: Transmit at High Channel

Frequency (MHz)	Antenna	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
4961.0	H	50.7	-6.3	44.4	74	-29.6	PK
4961.0	V	49.4	-6.1	43.3	74	-30.7	PK
7443.0	H	48.3	-0.8	47.5	74	-26.5	PK
7443.0	V	46.8	-0.8	46.0	74	-28.0	PK

Note: Measure Level = Reading Level + Factor.

Frequency (MHz)	Antenna	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
4961.1	H	27.7	-1.4	26.3	54	-27.7	AV
4961.1	V	30.3	-6.1	24.2	54	-29.8	AV
7443.1	H	29.5	-0.8	28.7	54	-25.3	AV
7443.1	V	27.7	-0.8	26.9	54	-27.1	AV

Note: Measure Level = Reading Level + Factor.

General Radiated Emission

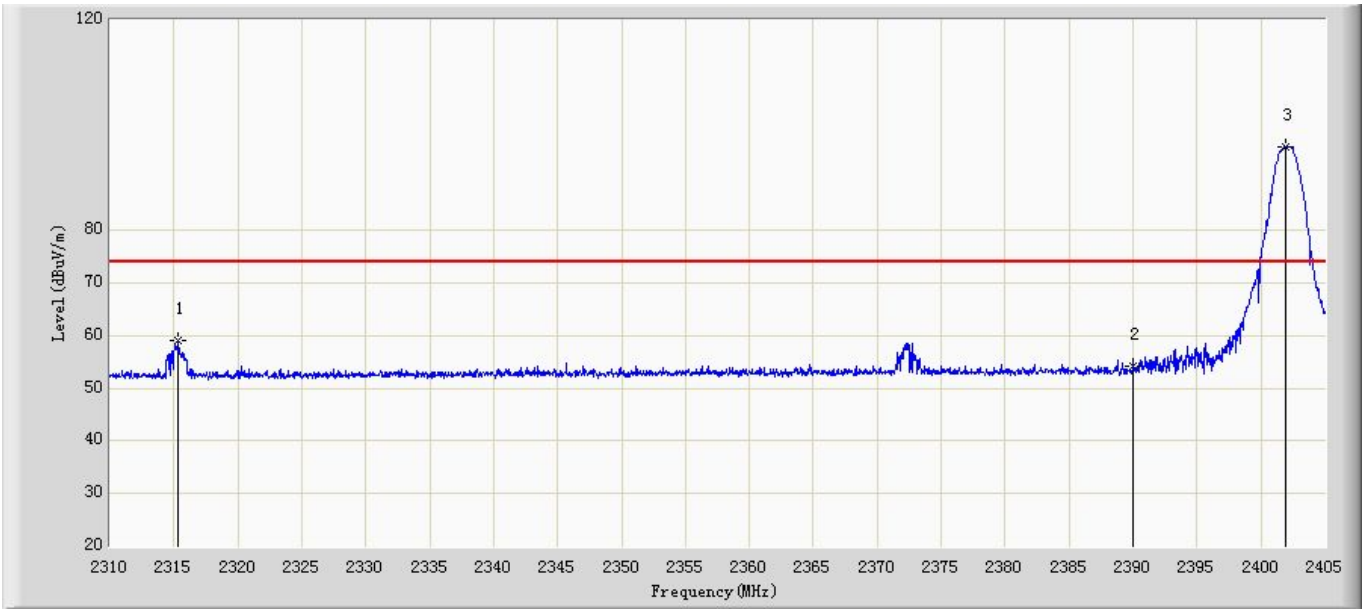
Product	:	E-GO
Test Item	:	General Radiated Emission
Test Mode	:	Mode 1: Transmit

Frequency (MHz)	Antenna	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
156.6	H	7.6	16.7	24.3	43.5	-19.2	QP
179.5	V	4.8	15.7	20.5	43.5	-23.0	QP
190.2	H	7.2	15.8	23.0	43.5	-20.5	QP
199.4	V	4.9	16.2	21.1	43.5	-22.4	QP
4961.0	H	50.7	-6.3	44.4	74	-29.6	PK
4961.0	V	49.4	-6.1	43.3	74	-30.7	PK
7443.0	H	48.3	-0.8	47.5	74	-26.5	PK
7443.0	V	46.8	-0.8	46.0	74	-28.0	PK

Note:

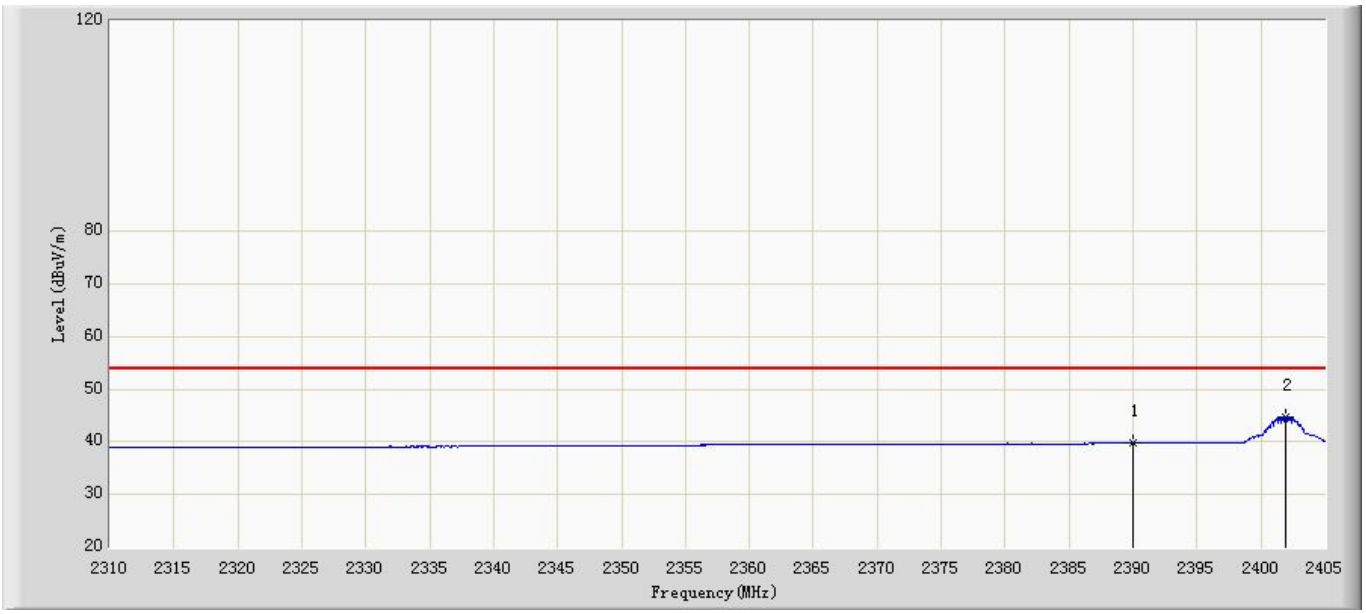
1. Measure Level = Reading Level + Factor.
2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

Engineer: Toms	
Site: AC5	Time: 2013/10/29 - 14:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: E-GO	Power: DC 26.5V
Note: Mode1: Transmit at low channel	



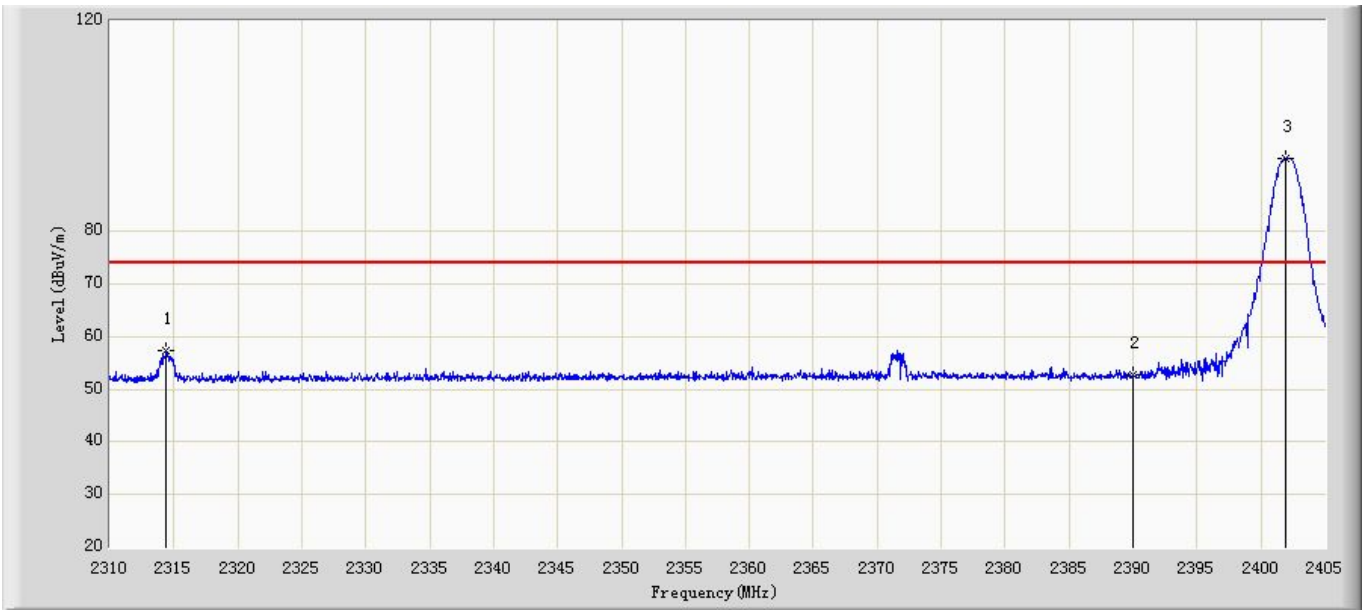
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2315.320	58.944	21.959	-15.056	74.000	36.984	PK
2		2390.000	54.267	16.620	-19.733	74.000	37.648	PK
3	*	2401.913	95.814	58.060	N/A	N/A	37.755	PK

Engineer: Toms	
Site: AC5	Time: 2013/10/29 - 15:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: E-GO	Power: DC 26.5V
Note: Mode1: Transmit at low channel	



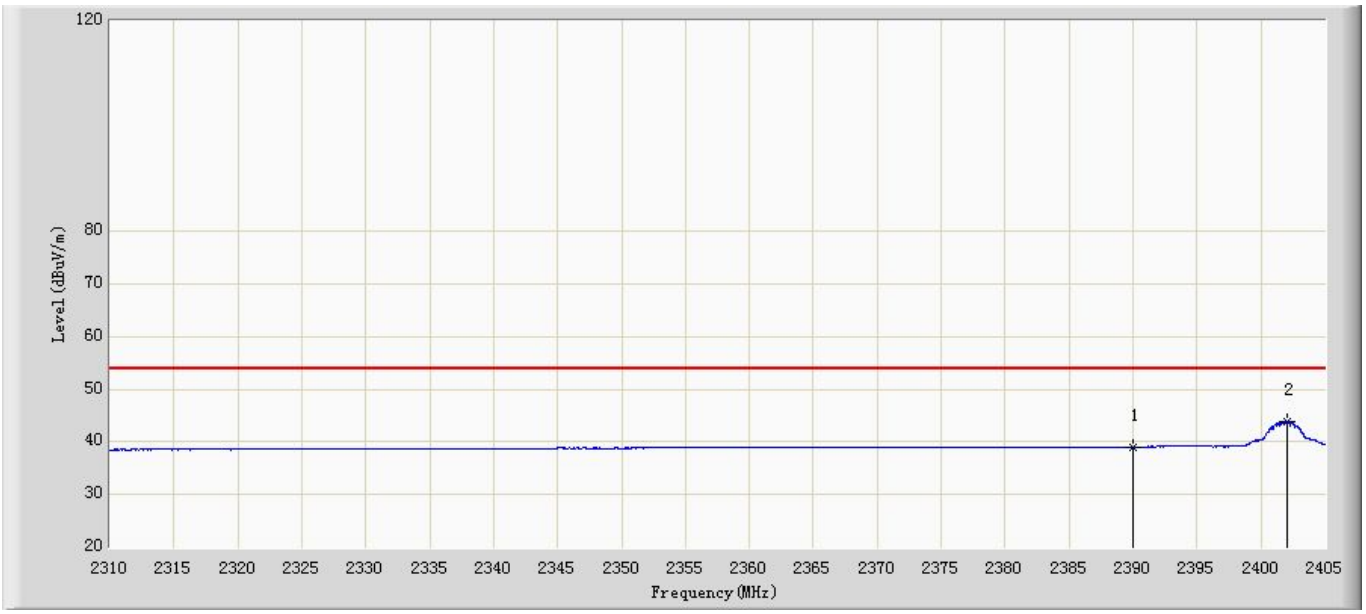
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	39.731	2.084	-14.269	54.000	37.648	AV
2	*	2401.913	44.734	6.980	N/A	N/A	37.755	AV

Engineer: Toms	
Site: AC5	Time: 2013/10/29 - 15:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: E-GO	Power: DC 26.5V
Note: Mode1: Transmit at low channel	



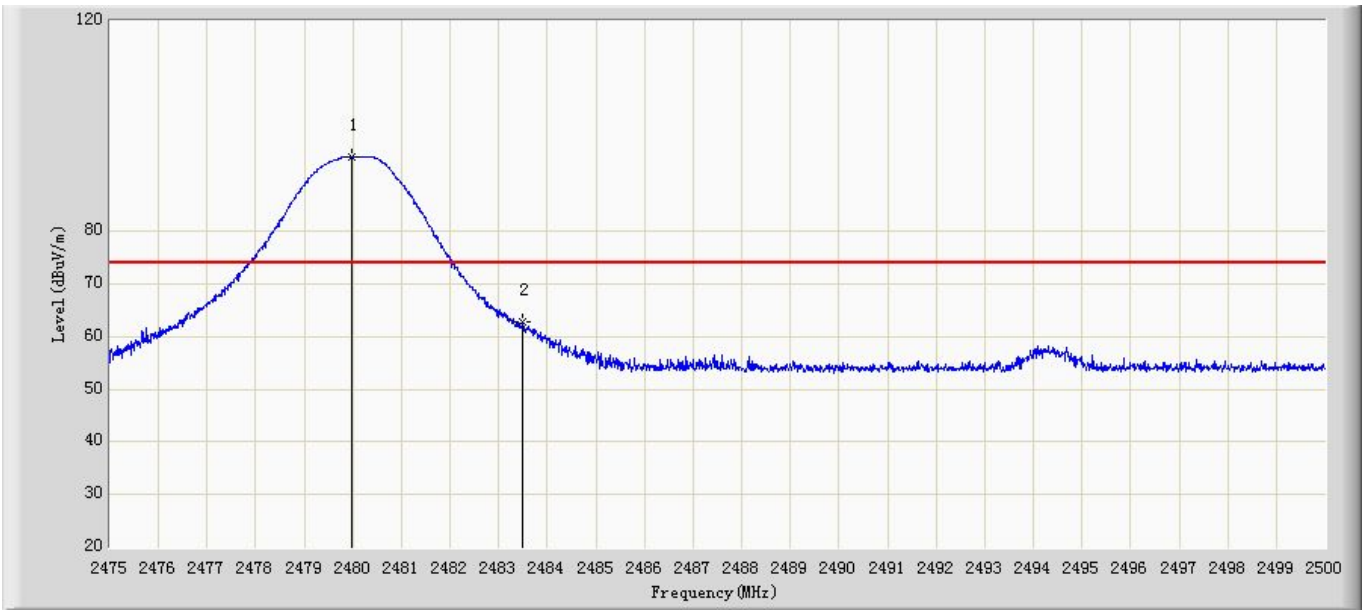
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2314.370	57.291	20.672	-16.709	74.000	36.619	PK
2		2390.000	52.704	15.717	-21.296	74.000	36.988	PK
3	*	2401.913	93.760	56.713	N/A	N/A	37.047	PK

Engineer: Toms	
Site: AC5	Time: 2013/10/29 - 15:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: E-GO	Power: DC 26.5V
Note: Mode1: Transmit at low channel	



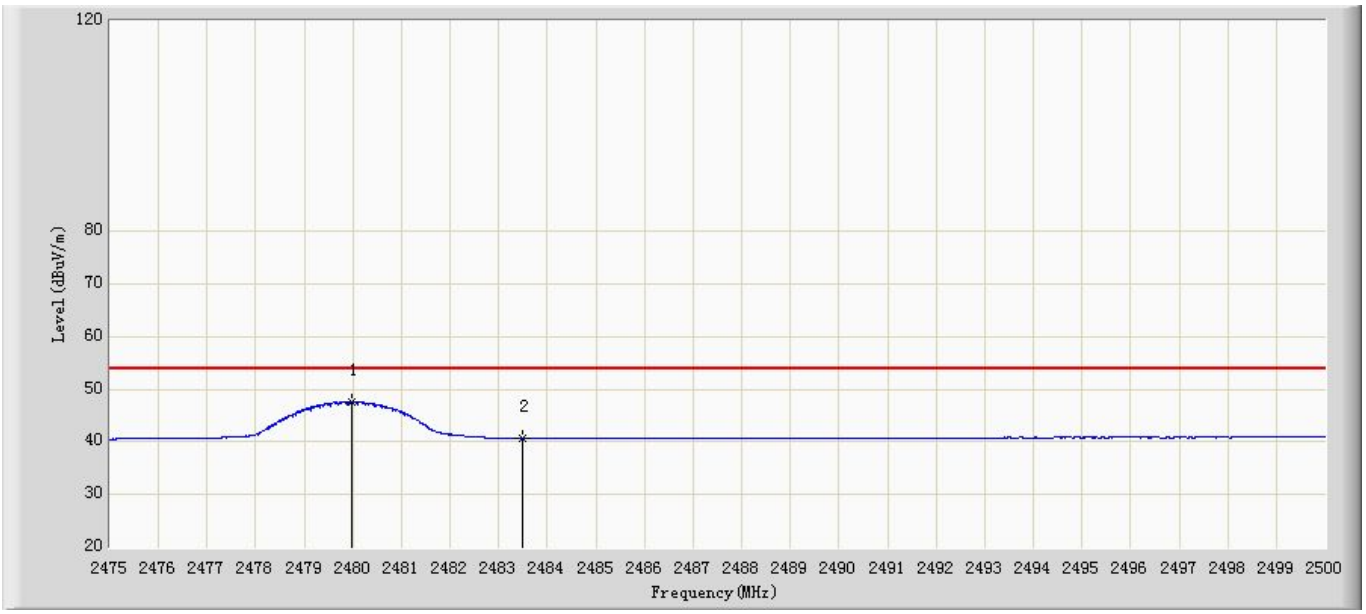
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	39.079	2.092	-14.921	54.000	36.988	AV
2	*	2402.055	43.904	6.857	N/A	N/A	37.047	AV

Engineer: Toms	
Site: AC5	Time: 2013/10/29 - 15:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: E-GO	Power: DC 26.5V
Note: Mode1: Transmit at high channel	



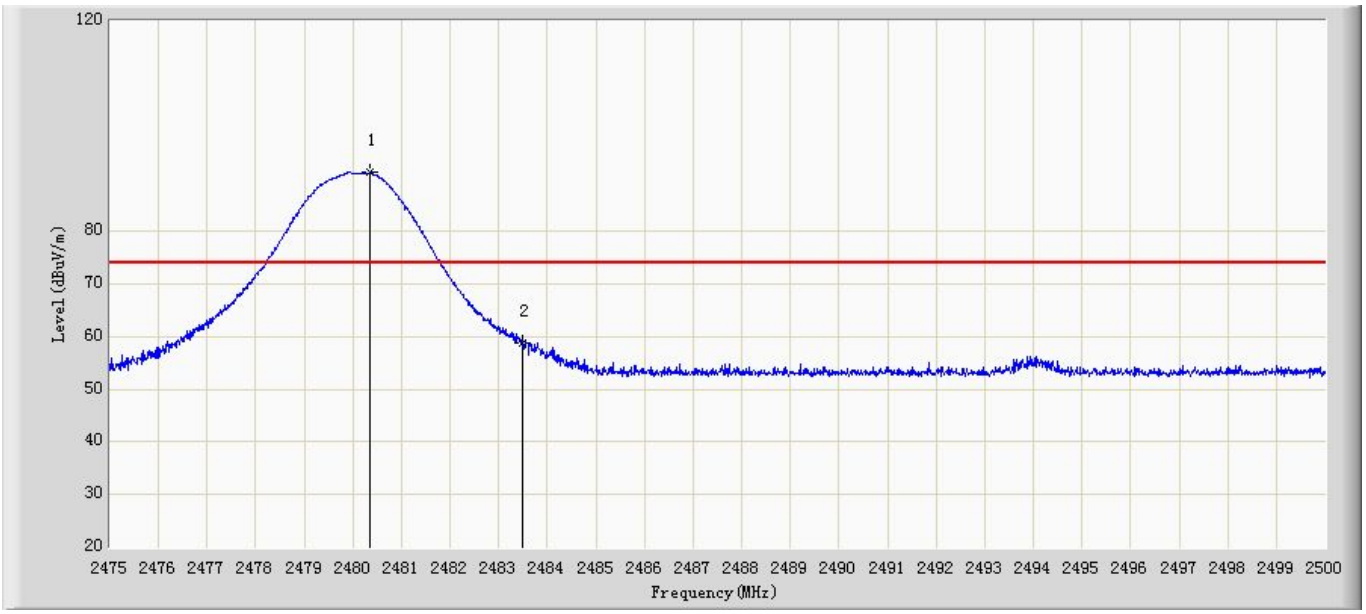
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.962	94.259	55.815	N/A	N/A	38.443	PK
2		2483.500	62.678	24.203	-11.322	74.000	38.475	PK

Engineer: Toms	
Site: AC5	Time: 2013/10/29 - 15:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: E-GO	Power: DC 26.5V
Note: Mode1: Transmit at high channel	



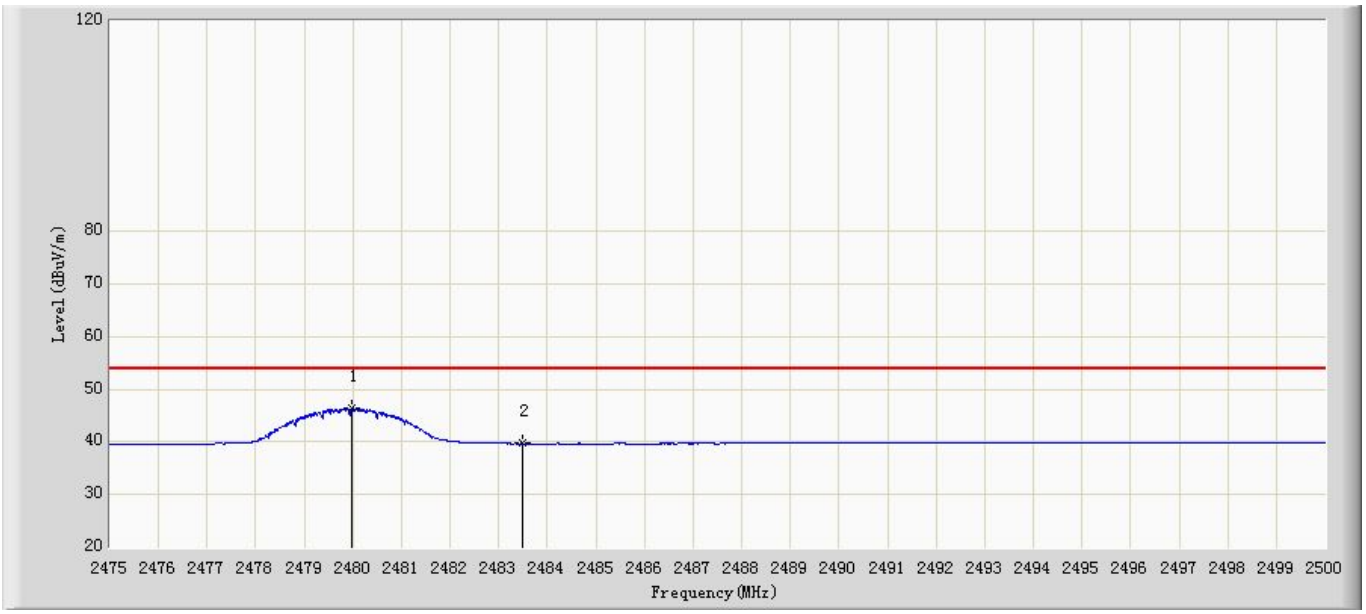
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.962	47.649	9.205	N/A	N/A	38.443	AV
2		2483.500	40.719	2.244	-13.281	54.000	38.475	AV

Engineer: Toms	
Site: AC5	Time: 2013/10/29 - 15:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: E-GO	Power: DC 26.5V
Note: Mode1: Transmit at high channel	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2480.350	91.391	53.965	N/A	N/A	37.426	PK
2		2483.500	58.781	21.340	-15.219	74.000	37.441	PK

Engineer: Toms	
Site: AC5	Time: 2013/10/29 - 15:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: E-GO	Power: DC 26.5V
Note: Mode1: Transmit at high channel	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2479.988	46.299	8.875	N/A	N/A	37.424	AV
2		2483.500	39.690	2.249	-14.310	54.000	37.441	AV

5. Band-edge Compliance of RF Conducted Emissions

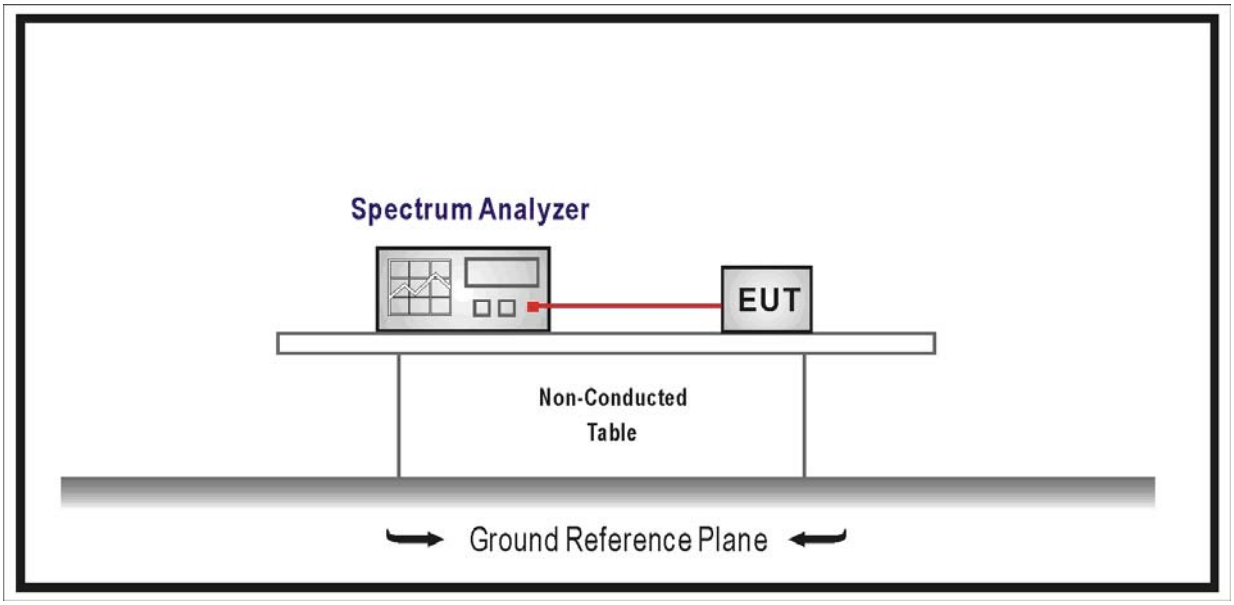
5.1. Test Equipment

Band-edge Compliance of RF Conducted Emissions / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2014.01.21
Temperature/Humidity Meter	Zhicheng	ZC1-2	TR8-TH	2014.05.07

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

5.2. Test Setup



5.3. Limit

- FCC Part 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 FCC part 15, must be designed to ensure that 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.

5.4. Test Procedure

Use the following spectrum analyzer settings:
Span = wide enough to capture the peak level of the emission operating on the channel closest to the bandedge, as well as any modulation products which fall outside of the authorized band of operation.
RBW ≧ 1% of the span
VBW ≧ RBW
Sweep = auto
Detector function = peak
Trace = max hold
Allow the trace to stabilize. Set the marker on the emission at the bandedge, or on the highest modulation prouduct outside of the band, if this level is greater than that at the bandedge.
Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission. The marker-delta value now displayed must comply with the limit specified in this Section.
Now, using the same instrument settings, enable the hopping function of the EUT. Allow the trace to stabilize. Follow the same procedure listed above to determine if any spurious emissions caused by the hopping function also comply with the specified limit.

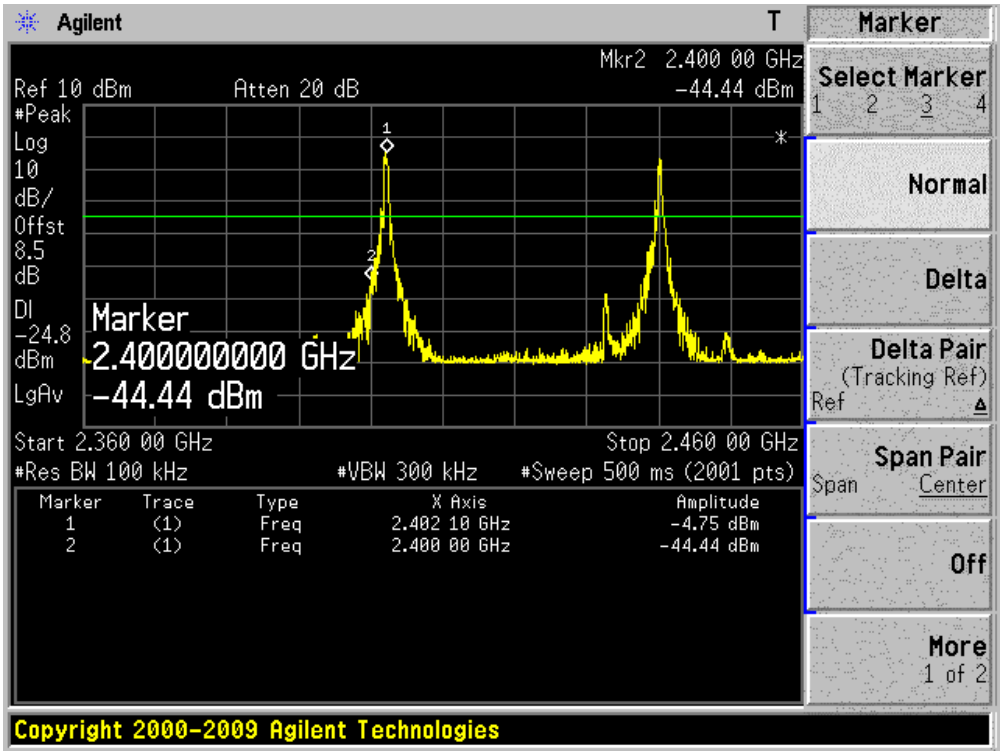
5.5. Uncertainty

The measurement uncertainty is defined as ± 1.0 dB

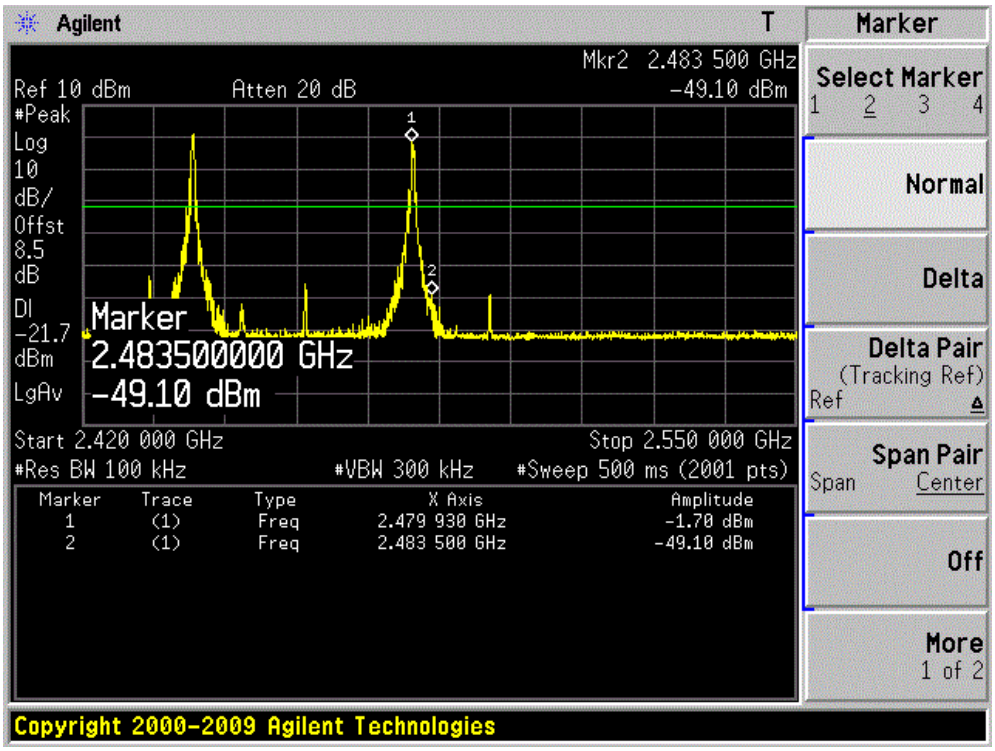
5.6. Test Result

Product	:	E-GO
Test Item	:	Band-edge Compliance of RF Conducted Emissions for FCC Part15.215
Test Mode	:	Mode 1: Transmit

Channel 00 (2402MHz)



Channel 78 (2480MHz)



The End