

# FCC CERTIFICATION TEST REPORT

## FOR

<b>Applicant</b>	:	Yuhua Lighting Co., Ltd.
<b>Address</b>	:	Nanxing Street, Huangpu Town, Zhongshan, Guangdong, 528429, China
<b>Equipment under Test</b>	:	9 ft. Solar Lighted Speaker Umbrella with Olefin
<b>Model No</b>	:	90086,50400143, 50400143-WEB
<b>FCC ID</b>	:	2AC6LYH50400143

**Issued By: Dongguan Dongdian Testing Service Co., Ltd.**

**Add:** No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City,  
Guangdong Province, China, 523808

**Tel:** +86-0769-22891499 [Http://www.dgddt.com](http://www.dgddt.com)

# REPORT

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## TEST REPORT DECLARE

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**Test Standard Used:** FCC Rules and Regulations Part 15 Subpart C: 2012

**Test procedure used:** ANSI C63.10:2009, ANSI C63.4:2009


**We Declare:**

The equipment described above is tested by Dongguan Dongdian Testing Service Co., Ltd and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these tests.

**After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above FCC standards.**

<b>Report No:</b>	DDT-REL140200		
<b>Date of Test:</b>	Sept. 05, 2014	<b>Date of Report:</b>	Sept. 16, 2014

**Prepared By:**

  
Leo Liu/Engineer

**Approved By:**  
  
 Jamy Yu/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

**1. Summary of test results**

Description of Test Item	Standard	Results
Radiated Emission	FCC Part 15: 15.209 FCC Part 15: 15.247(d) ANSI C63.10 :2009 ANSI C63.4:2009	PASS
Band Edge Compliance	FCC Part 15: 15.247(d) ANSI C63.10 :2009 ANSI C63.4:2009	PASS

## 2. General test information

### 2.1. Description of EUT

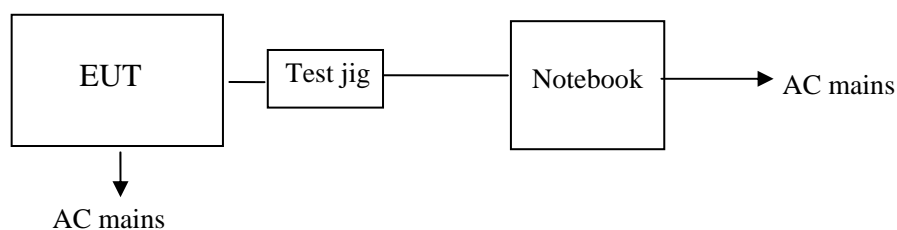
EUT* Name	:	9 ft. Solar Lighted Speaker Umbrella with Olefin
Model Number	:	90086,50400143, 50400143-WEB
EUT function description	:	Please reference user manual of this device
Power supply	:	3.7VDC,4000mAh(Li-ion battery package)
Radio Specification	:	Bluetooth V2.1+EDR
Operation frequency	:	2402MHz -2480MHz
Modulation	:	GFSK, $\pi/4$ QPSK, 8-DPSK
Data rate	:	3Mbps
Antenna Type	:	Integrated PCB antenna, Maximum Gain: 0dBi
Date of Receipt	:	2014/09/05
Sample Type	:	Series production

Note: EUT is the ab. of equipment under test.

### 2.2. Assistant equipment used for test

Description of Assistant equipment	Manufacturer	Model number or Type	EMC Compliance	SN
Notebook	DELL	Latitude D610	FCC	00045-534-136-300

### 2.3. Block diagram of EUT configuration for test



EUT's Bluetooth module was connected to a special test jig provided by manufacturer which has a standard USB connector to connect to control PC, and the control PC will run a special test software "RF Control Kit v1.0" provided by manufacturer to control EUT work in test mode as blow table.

Tested mode, channel, information		
Mode	Channel	Frequency (MHz)
GFSK hopping on Tx Mode	CH0 to CH78	2402 to 2480
$\pi/4$ QPSK Hopping on TX mode	CH0 to CH78	2402 to 2480
8-DPSK hopping on Tx Mode	CH0 to CH78	2402 to 2480
GFSK hopping off Tx Mode	CH0	2402
	CH39	2441
	CH78	2480
$\pi/4$ QPSK hopping off Tx Mode	CH0	2402
	CH39	2441
	CH78	2480
8-DPSK hopping off Tx Mode	CH0	2402
	CH39	2441
	CH78	2480

Note: For  $\pi/4$  QPSK its same modulation type with 8-DPSK, and based exploratory test, there is no significant difference of that two types test result, after the preliminary scan, 8-DPSK will have higher emission, so except output power, all other items final test were only performed with the worse case 8-DPSK and GFSK.

## 2.4. Test environment conditions

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

Temperature range:	21-25℃
Humidity range:	40-75%
Pressure range:	86-106kPa

## 2.5. Test laboratory

Dongguan Dongdian Testing Service Co., Ltd

Add: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808 Tel: +86-0769-22891499 <http://www.dgddt.com>

FCC Registration Number: 270092

## 2.6. Measurement uncertainty

Test Item	Uncertainty
Uncertainty for Radiation Emission test (1GHz to 25GHz)	2.08dB(Polarize: V)
	2.56dB (Polarize: H)

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

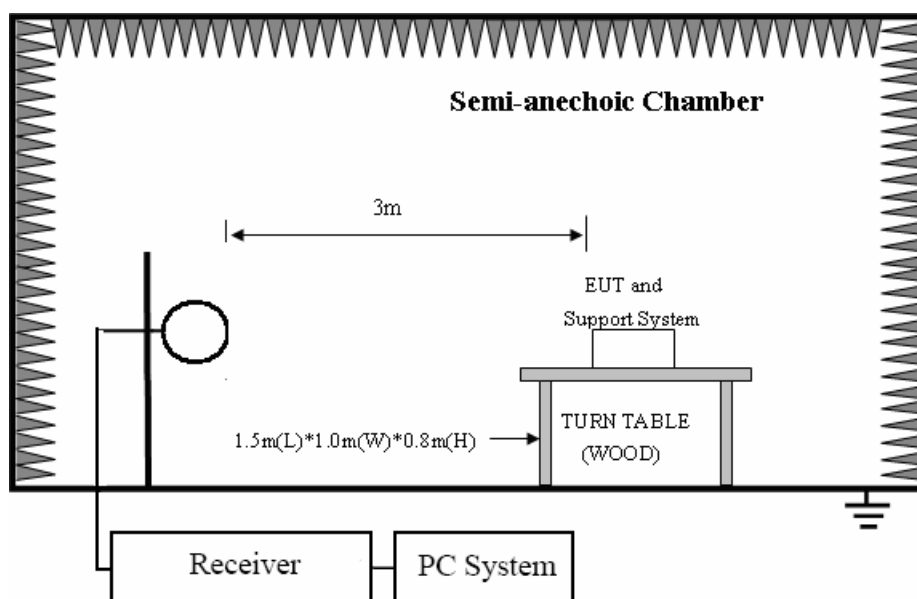
### 3. Radiated emission

#### 3.1. Test equipment

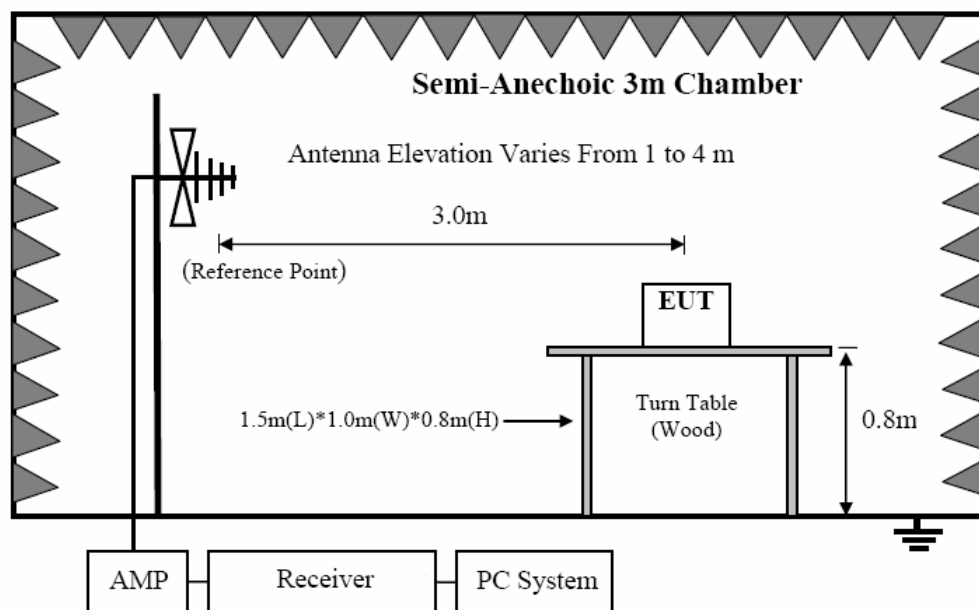
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	EMI Test Receiver	R&S	ESU8	100316	2013/11/13	1 Year
2	Spectrum analyzer	R&S	FSU	1166.1660.26	2013/11/13	1 Year
3	Loop antenna	TESEQ	HLA6120	20129	2013/11/16	1 Year
4	Trilog Broadband Antenna	Schwarzbeck	VULB9163	9163-462	2013/11/16	1 Year
5	Double Ridged Horn Antenna	R&S	HF907	100276	2013/11/16	1 Year
6	Horn Antenna	EMCO	3116	00060095	2013/11/16	1 Year
7	Pre-amplifier	A.H.	PAM-1840VH	562	2013/11/13	1 Year
8	RF Cable	R&S	R01	10403	2013/11/13	1 Year
9	RF Cable	R&S	R02	10512	2013/11/13	1 Year

#### 3.2. Block diagram of test setup

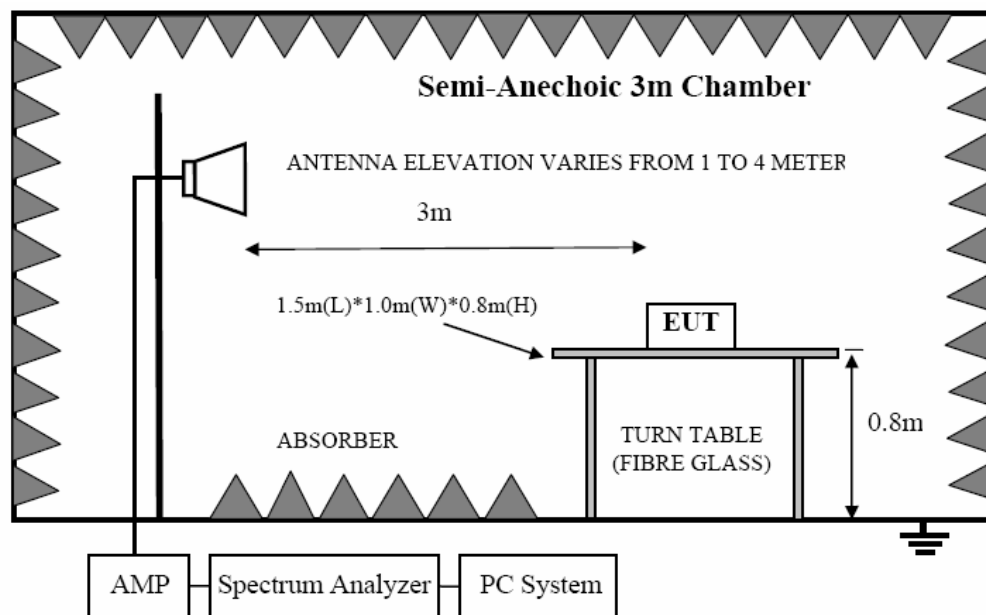
In 3m Anechoic Chamber Test Setup Diagram for 9KHz-30MHz



In 3m Anechoic Chamber Test Setup Diagram for below 1GHz



In 3m Anechoic Chamber Test Setup Diagram for frequency above 1GHz





Note: For harmonic emissions test a appropriate high pass filter was inserted in the input port of AMP.

### 3.3. Limit

#### 8.3.1 FCC 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 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	( <sup>2</sup> )

#### 8.3.2 FCC 15.209 Limit.

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
0.009 ~ 0.490	300	2400/F(KHz)	67.6-20log(F)
0.490 ~ 1.705	30	24000/F(KHz)	87.6-20log(F)
1.705 ~ 30.0	30	30	29.54
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Note: (1)The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9-90KHz, 110-490KHz and above 1000MHz. Radiated emissions limits in these three bands are based on measurements employing an average detector.

(2) At frequencies below 30MHz, measurement may be performed at a distance closer then that specified, and the limit at closer measurement distance can be extrapolated by below formula:

$$\text{Limit}_{3m}(\text{dBuV/m}) = \text{Limit}_{30m}(\text{dBuV/m}) + 40\text{Log}(30m/3m)$$

#### 8.3.3 Limit for this EUT

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

### 3.4. Test Procedure

- (1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber.
- (2) Setup EUT and assistant system according clause 2.3 and 8.2
- (3) Test antenna was located 3m from the EUT on an adjustable mast, and the antenna used as below table.

Test frequency range	Test antenna used
9KHz-30MHz	Active Loop antenna
30MHz-1GHz	Trilog Broadband Antenna
1GHz-18GHz	Double Ridged Horn Antenna(1GHz-18GHz)
18GHz-40GHz	Horn Antenna(18GHz-40GHz)

According ANSI C63.10:2009 clause 6.4.4.2 and 6.5.3, for measurements below 30 MHz, the loop antenna was positioned with its plane vertical from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. And the loop antenna also be positioned with its plane horizontal at the specified distance from the EUT. The center of the loop is 1 m above the ground. for measurement above 30MHz, the Trilog Broadband Antenna or Horn Antenna was located 3m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

- (4) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9KHz to 25GHz:

- (a) Scanning the peak frequency spectrum with the antenna specified in step (3), and the EUT was rotated 360 degree, the antenna height was varied from 1m to 4m(Except loop antenna, it's fixed 1m above ground.)

- (b) Change work frequency or channel of device if practicable.

- (c) Change modulation type of device if practicable.

- (d) Change power supply range from 85% to 115% of the rated supply voltage

- (e) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions.

Spectrum frequency from 9KHz to 25GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 18GHz to 25GHz, so below final test was performed with frequency range from 9KHz to 18GHz.

- (5) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10 2009 on Radiated Emission test.
- (6) The emissions from 9KHz to 1GHz were measured based on CISPR QP detector except for the

frequency bands 9-90KHz, 110-490KHz, for emissions from 9KHz-90KHz, 110KHz-490KHz and above 1GHz were measured based on average detector, for emissions above 1GHz, peak emissions also be measured and need comply with Peak limit.

- (7) The emissions from 9KHz to 1GHz, QP or average values were measured with EMI receiver with below RBW

Frequency band	RBW
9KHz-150KHz	200Hz
150KHz-30MHz	9KHz
30MHz-1GHz	120KHz

- (8) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1MHz, VBW is set at 3MHz for Peak measure; RBW is set at 1MHz, VBW is set at 10Hz for Average measure (according ANSI C63.10:2009 clause 4.2.3.2.3 procedure for average measure). Both PK and AV level test, PK detector is used.

### 3.5. Test result

#### **PASS. (See below detailed test result)**

All the emissions except fundamental emission from 9 KHz to 25GHz were comply with 8.3.2 limit.

Note1: According exploratory test no any obvious emission were detected from 9 KHz to 30MHz and 18GHz to 25GHz, so the final test was performed with frequency range from 30MHz to 18GHz and recorded in below.

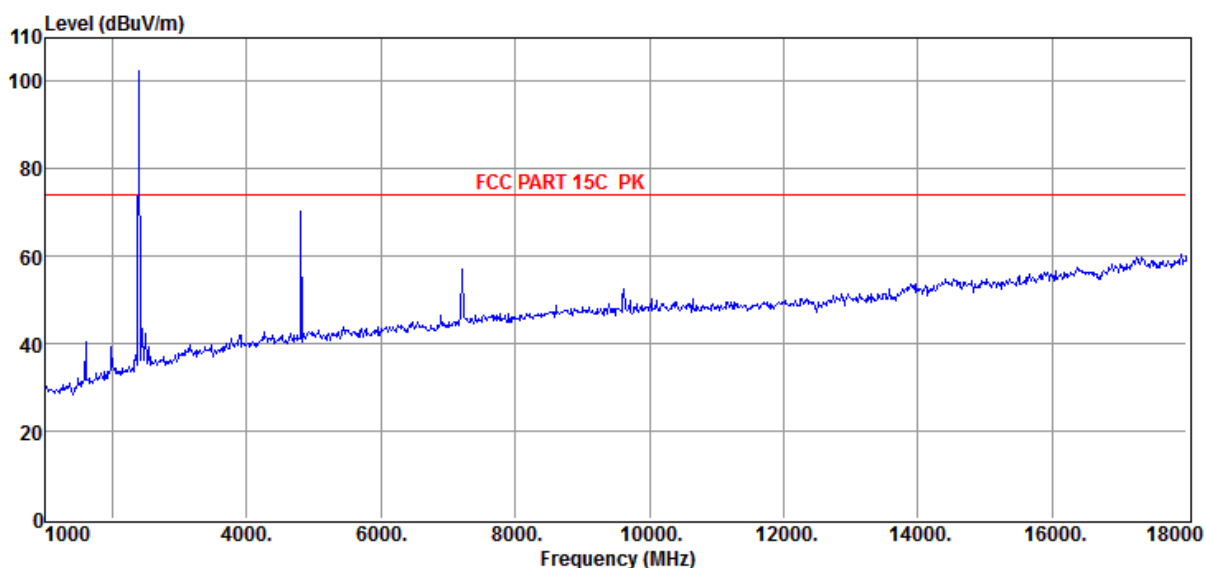
Note2: For emissions below 1GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1GHz, the final test was only performed with EUT working in GFSK, Tx 2441MHz mode.

Note3: For emissions above 1GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode GFSK CH0  
**Condition** : Temp:24.5'C,Humi:55%, **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Press:100.1kPa**  
**Memo** :

Data: 1



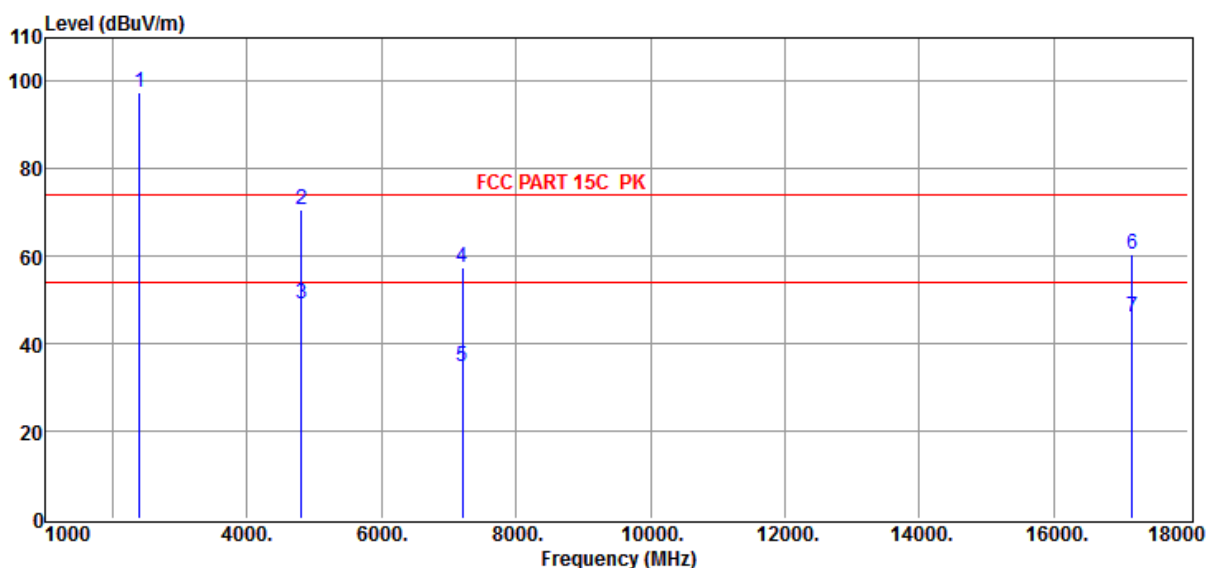
Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2014 Test Data\LC\20140905RF  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC, 4000mAh (Li-ion battery package) **Test Mode** : Tx Mode GFSK CH0  
**Condition** : Temp: 24.5°C, Humi: 55%, Press: 100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 2



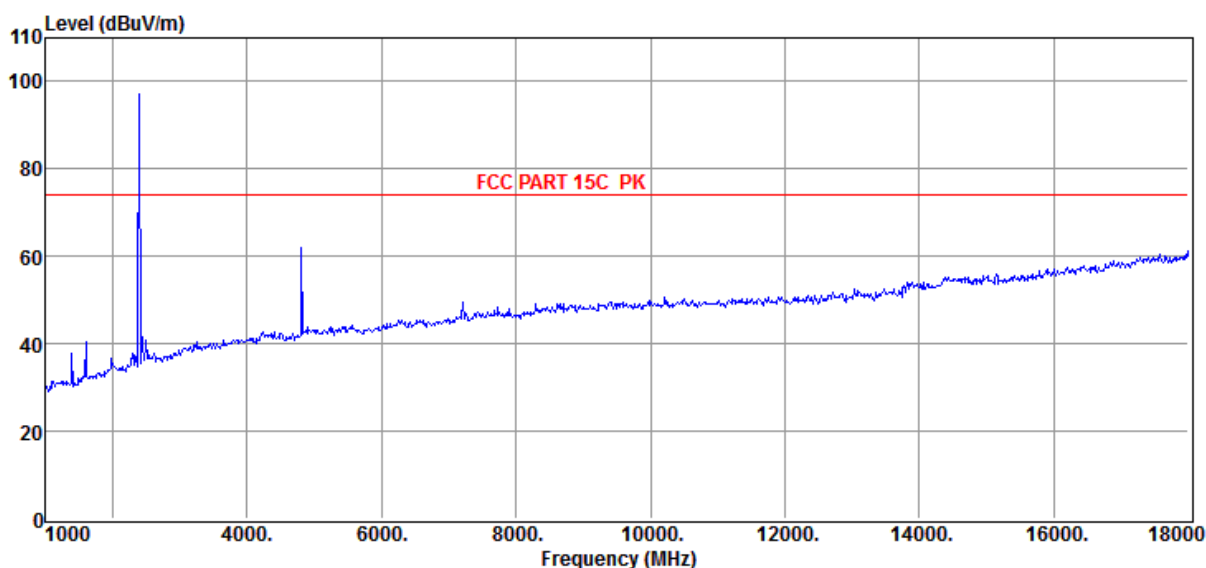
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2402.00	105.59	28.93	43.49	6.47	97.50	74.00	23.50	Peak	VERTICAL
2	4804.00	71.23	34.01	44.06	9.32	70.50	74.00	-3.50	Peak	VERTICAL
3	4804.00	50.01	34.01	44.06	9.32	49.28	54.00	-4.72	Average	VERTICAL
4	7206.00	53.90	35.72	43.62	11.48	57.48	74.00	-16.52	Peak	VERTICAL
5	7206.00	31.20	35.72	43.62	11.48	34.78	54.00	-19.22	Average	VERTICAL
6	17167.00	39.96	42.77	41.15	18.83	60.41	74.00	-13.59	Peak	VERTICAL
7	17167.00	25.61	42.77	41.15	18.83	46.06	54.00	-7.94	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode GFSK CH0  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 3



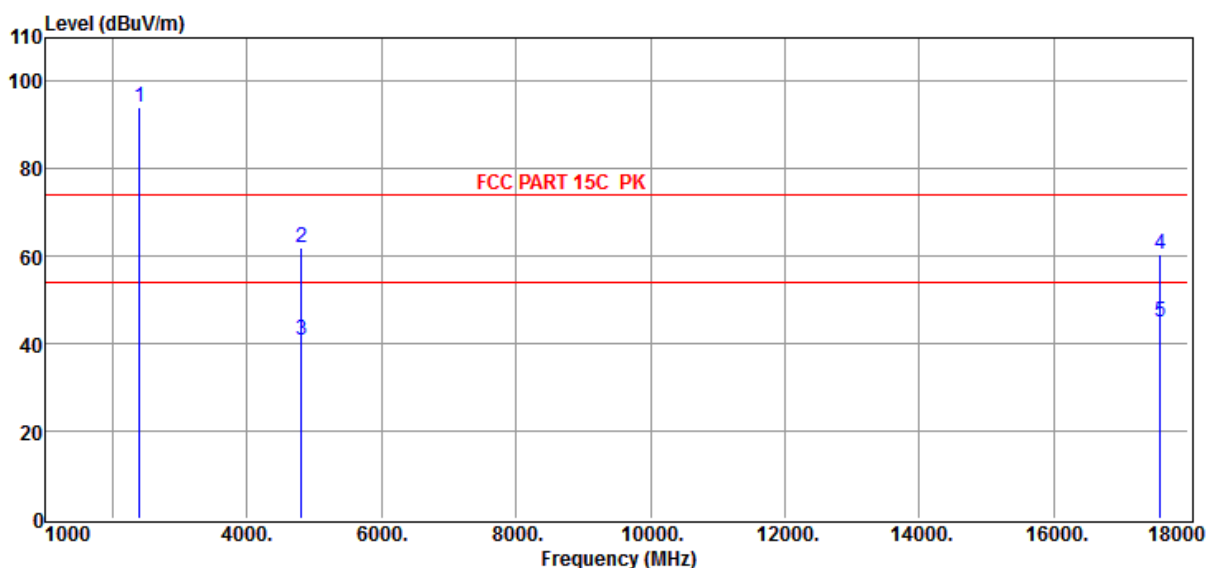
Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2014 Test Data\LC\20140905RF  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC, 4000mAh (Li-ion battery package) **Test Mode** : Tx Mode GFSK CH0  
**Condition** : Temp: 24.5°C, Humi: 55%, Press: 100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 4



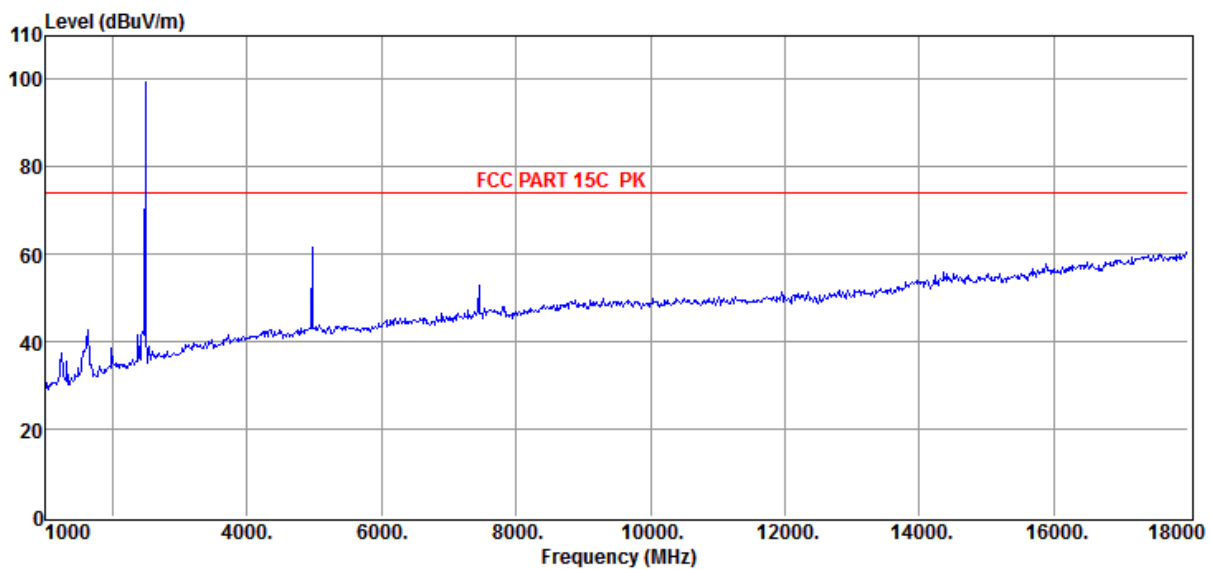
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2402.00	102.08	28.93	43.49	6.47	93.99	74.00	19.99	Peak	HORIZONTAL
2	4804.00	62.82	34.01	44.06	9.32	62.09	74.00	-11.91	Peak	HORIZONTAL
3	4804.00	41.37	34.01	44.06	9.32	40.64	54.00	-13.36	Average	HORIZONTAL
4	17575.00	39.13	43.41	40.93	18.93	60.54	74.00	-13.46	Peak	HORIZONTAL
5	17575.00	23.65	43.41	40.93	18.93	45.06	54.00	-8.94	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

<b>Test Site</b>	: DDT 3m Chamber	E:\2014 Test Data\LC\20140905RF
<b>Test Date</b>	: 2014-09-05	<b>Tested By</b> : Leo
<b>EUT</b>	: 9 ft. Solar Lighted Speaker Umbrella with Olefin	<b>Model Number</b> : 50400143
<b>Power Supply</b>	: 3.7VDC,4000mAh(Li-ion battery package)	<b>Test Mode</b> : Tx Mode GFSK CH4E
<b>Condition</b>	: Temp:24.5'C,Humi:55%, Press:100.1kPa	<b>Antenna/Distance</b> : HF907 SN100276/3m/HORIZONTAL
<b>Memo</b>	:	

Data: 9



Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

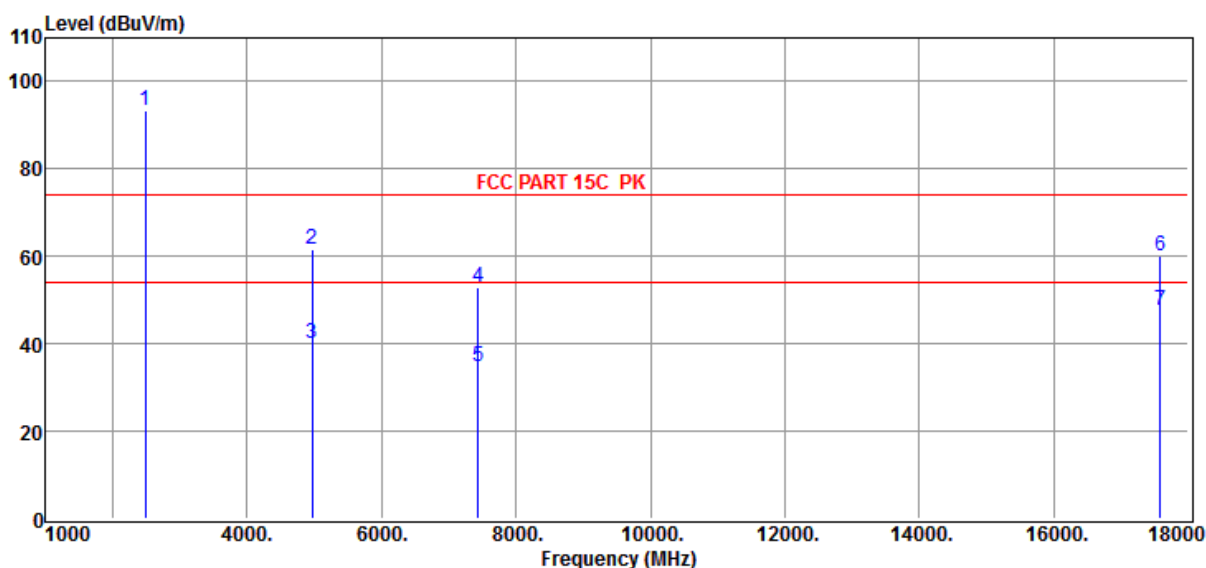
- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto



## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2014 Test Data\LC\20140905RF  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC, 4000mAh (Li-ion battery package) **Test Mode** : Tx Mode GFSK CH4E  
**Condition** : Temp: 24.5°C, Humi: 55%, Press: 100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 10



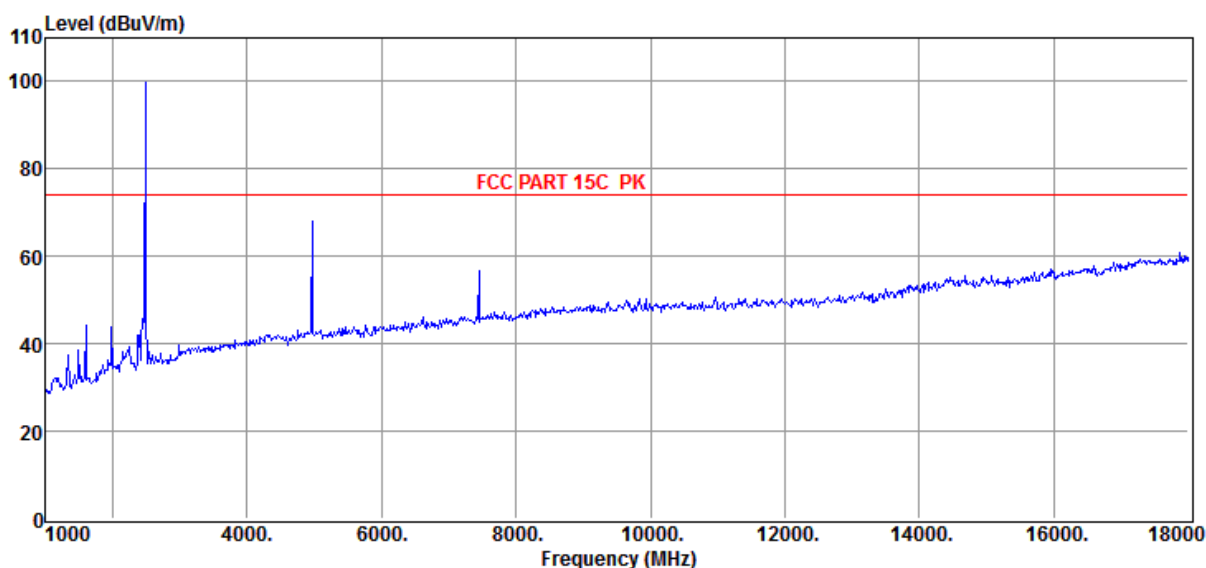
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2480.00	101.27	29.18	43.50	6.57	93.52	74.00	19.52	Peak	HORIZONTAL
2	4960.00	61.84	34.34	44.01	9.48	61.65	74.00	-12.35	Peak	HORIZONTAL
3	4960.00	40.32	34.34	44.01	9.48	40.13	54.00	-13.87	Average	HORIZONTAL
4	7440.00	48.42	35.84	43.07	11.70	52.89	74.00	-21.11	Peak	HORIZONTAL
5	7440.00	30.23	35.84	43.07	11.70	34.70	54.00	-19.30	Average	HORIZONTAL
6	17575.00	38.87	43.41	40.93	18.93	60.28	74.00	-13.72	Peak	HORIZONTAL
7	17575.00	26.35	43.41	40.93	18.93	47.76	54.00	-6.24	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode GFSK CH4E  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 11



Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber

E:\2014 Test Data\LC\20140905RF

**Test Date** : 2014-09-05

**Tested By** : Leo

**EUT** : 9 ft. Solar Lighted Speaker Umbrella  
with Olefin

**Model Number** : 50400143

**Power Supply** : 3.7VDC,4000mAh(Li-ion battery  
package)

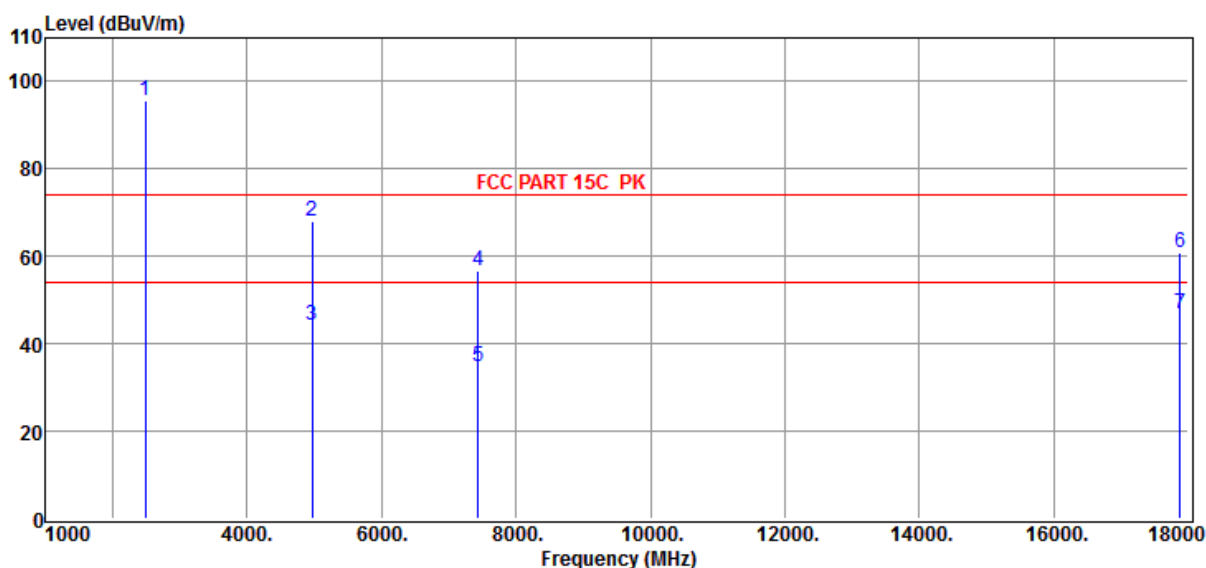
**Test Mode** : Tx Mode GFSK CH4E

**Condition** : Temp:24.5'C,Humi:55%,  
Press:100.1kPa

**Antenna/Distance** : HF907 SN100276/3m/VERTICAL

**Memo** :

Data: 12



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2480.00	103.51	29.18	43.50	6.57	95.76	74.00	21.76	Peak	VERTICAL
2	4960.00	68.30	34.34	44.01	9.48	68.11	74.00	-5.89	Peak	VERTICAL
3	4960.00	44.36	34.34	44.01	9.48	44.17	54.00	-9.83	Average	VERTICAL
4	7440.00	52.31	35.84	43.07	11.70	56.78	74.00	-17.22	Peak	VERTICAL
5	7440.00	30.23	35.84	43.07	11.70	34.70	54.00	-19.30	Average	VERTICAL
6	17881.00	39.54	43.97	41.63	19.04	60.92	74.00	-13.08	Peak	VERTICAL
7	17881.00	25.38	43.97	41.63	19.04	46.76	54.00	-7.24	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

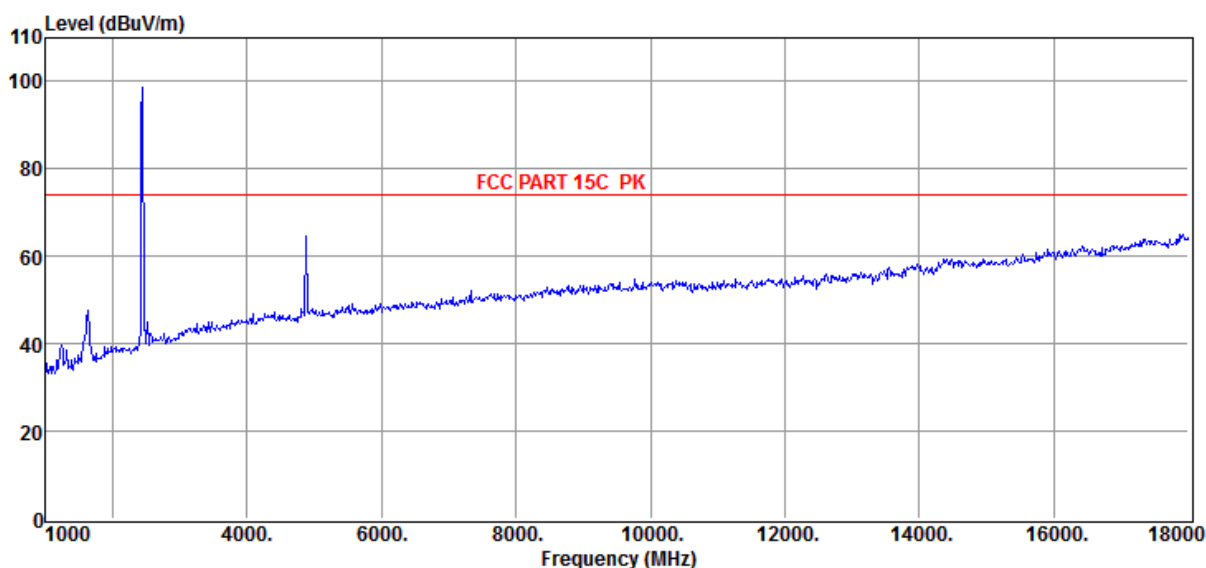
2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode GFSK CH27  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 13



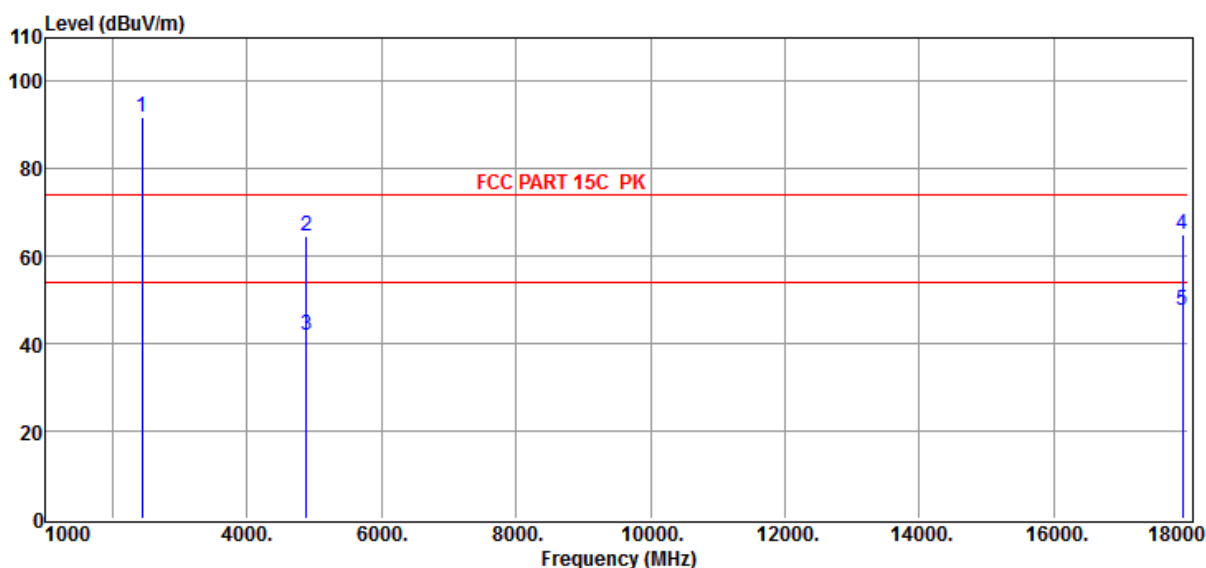
Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2014 Test Data\LC\20140905RF  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC, 4000mAh (Li-ion battery package) **Test Mode** : Tx Mode GFSK CH27  
**Condition** : Temp: 24.5°C, Humi: 55%, Press: 100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 14



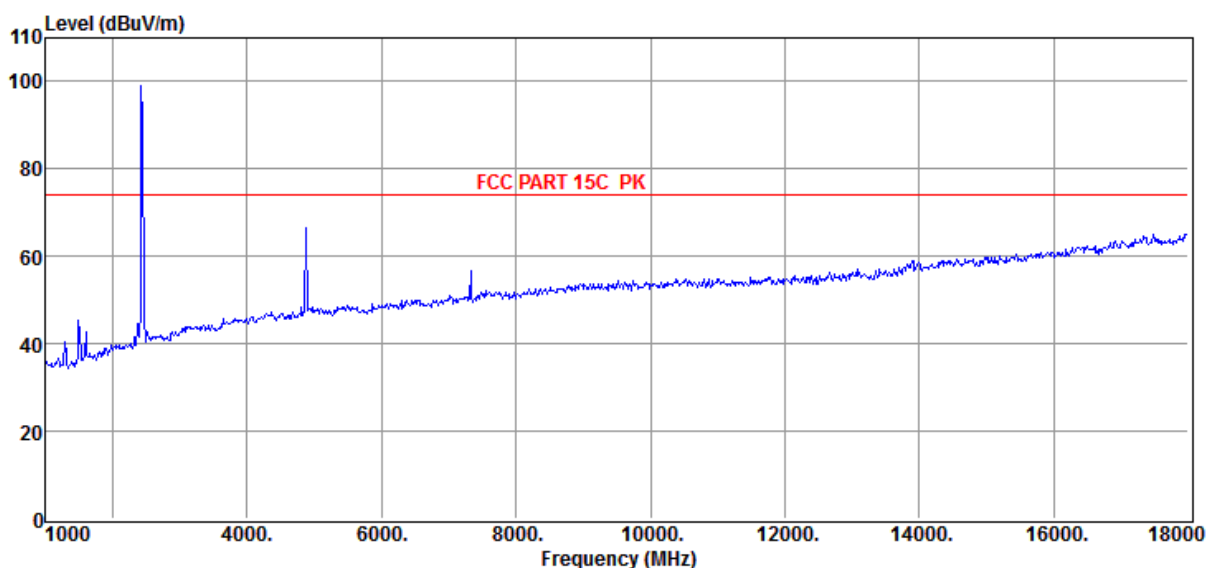
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2441.00	99.65	29.03	43.49	6.53	91.72	74.00	17.72	Peak	HORIZONTAL
2	4882.00	65.01	34.29	44.03	9.41	64.68	74.00	-9.32	Peak	HORIZONTAL
3	4882.00	42.35	34.29	44.03	9.41	42.02	54.00	-11.98	Average	HORIZONTAL
4	17915.00	43.68	44.09	41.72	19.05	65.10	74.00	-8.90	Peak	HORIZONTAL
5	17915.00	26.35	44.09	41.72	19.05	47.77	54.00	-6.23	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode GFSK CH27  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 15



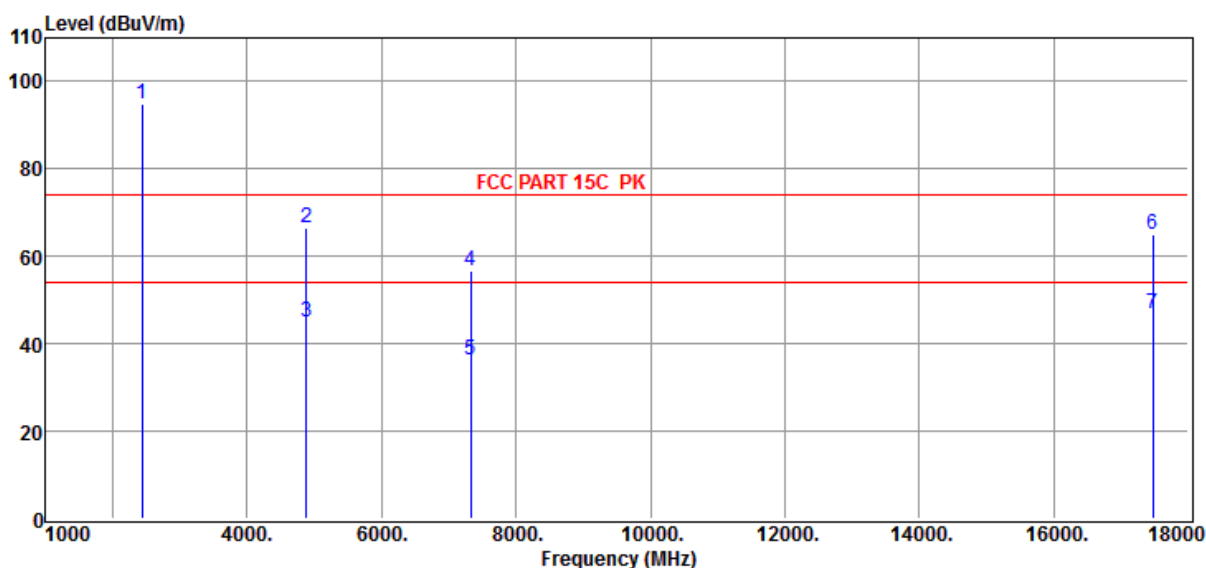
Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2014 Test Data\LC\20140905RF  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC, 4000mAh (Li-ion battery package) **Test Mode** : Tx Mode GFSK CH27  
**Condition** : Temp: 24.5°C, Humi: 55%, Press: 100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 16



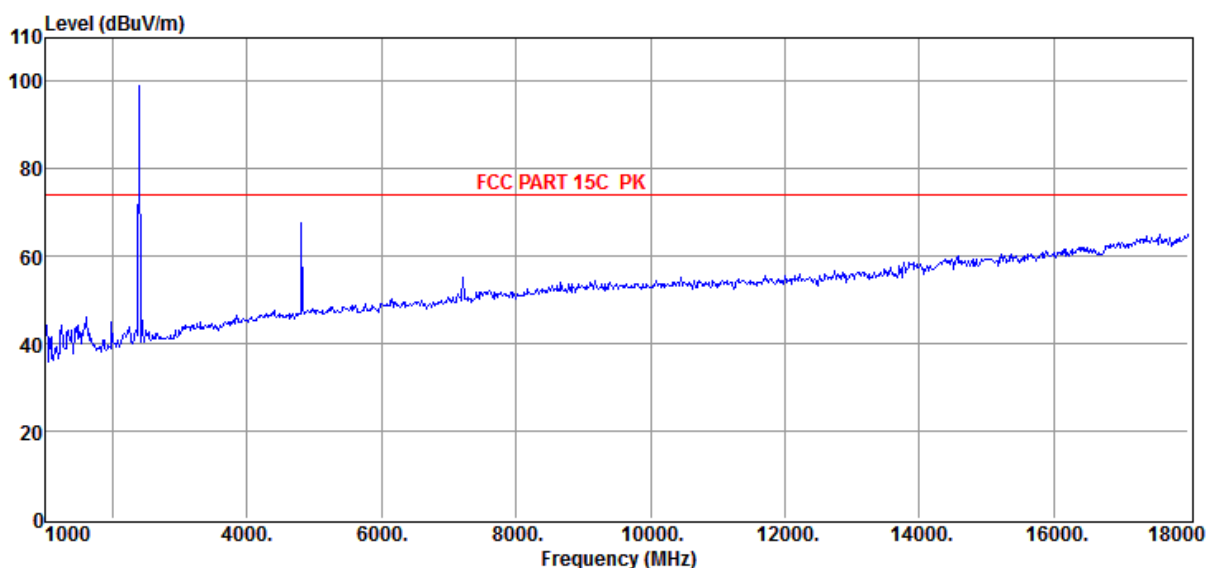
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2441.00	102.84	29.03	43.49	6.53	94.91	74.00	20.91	Peak	VERTICAL
2	4882.00	66.91	34.29	44.03	9.41	66.58	74.00	-7.42	Peak	VERTICAL
3	4882.00	45.22	34.29	44.03	9.41	44.89	54.00	-9.11	Average	VERTICAL
4	7323.00	52.76	35.63	43.32	11.62	56.69	74.00	-17.31	Peak	VERTICAL
5	7323.00	32.26	35.63	43.32	11.62	36.19	54.00	-17.81	Average	VERTICAL
6	17473.00	43.65	43.30	40.80	18.91	65.06	74.00	-8.94	Peak	VERTICAL
7	17473.00	25.34	43.30	40.80	18.91	46.75	54.00	-7.25	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH0  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 17



Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

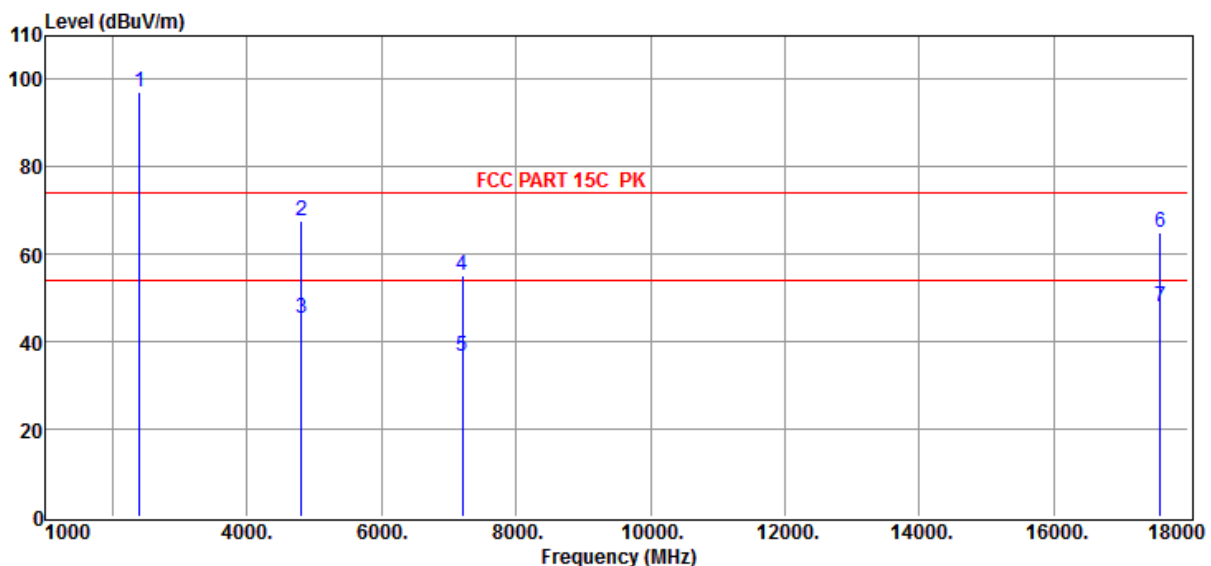
- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto



## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2014 Test Data\LC\20140905RF  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC, 4000mAh (Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH0  
**Condition** : Temp: 24.5°C, Humi: 55%, Press: 100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 18



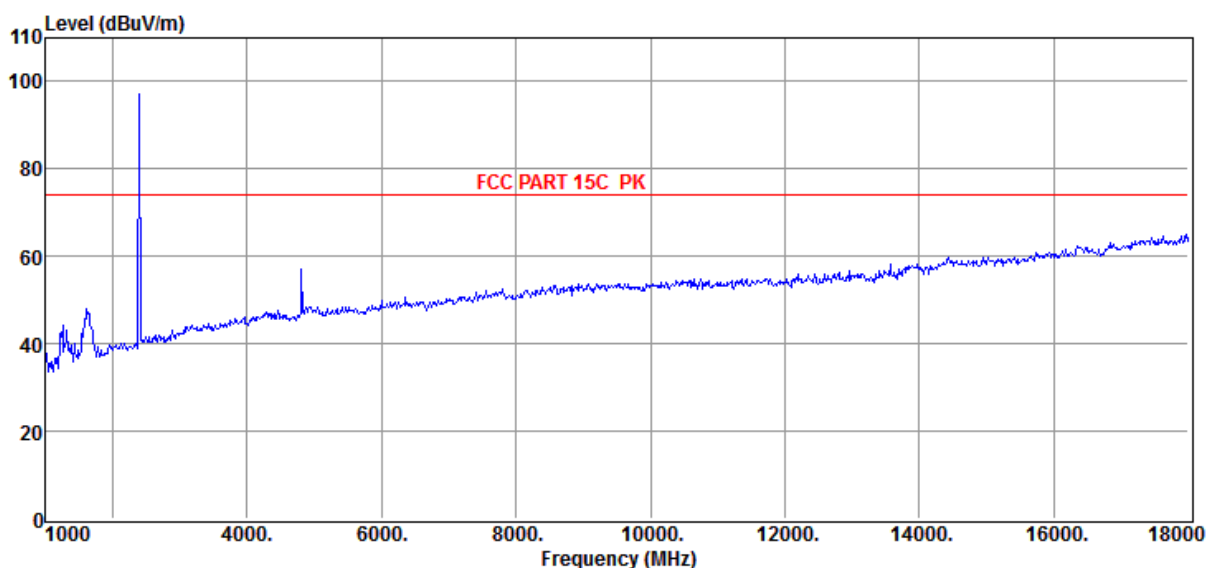
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2402.00	105.29	28.93	43.49	6.47	97.20	74.00	23.20	Peak	VERTICAL
2	4804.00	68.32	34.01	44.06	9.32	67.59	74.00	-6.41	Peak	VERTICAL
3	4804.00	46.24	34.01	44.06	9.32	45.51	54.00	-8.49	Average	VERTICAL
4	7206.00	51.48	35.72	43.62	11.48	55.06	74.00	-18.94	Peak	VERTICAL
5	7206.00	33.15	35.72	43.62	11.48	36.73	54.00	-17.27	Average	VERTICAL
6	17575.00	43.48	43.41	40.93	18.93	64.89	74.00	-9.11	Peak	VERTICAL
7	17575.00	26.78	43.41	40.93	18.93	48.19	54.00	-5.81	Average	VERTICAL

- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH0  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 19



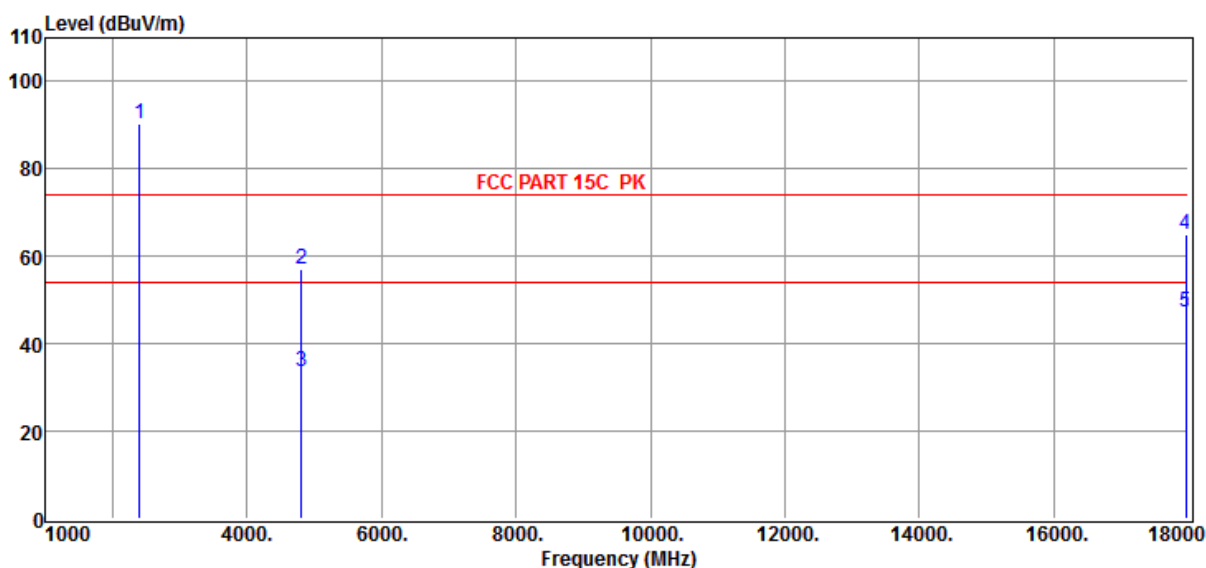
Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2014 Test Data\LC\20140905RF  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC, 4000mAh (Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH0  
**Condition** : Temp: 24.5°C, Humi: 55%, Press: 100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 20



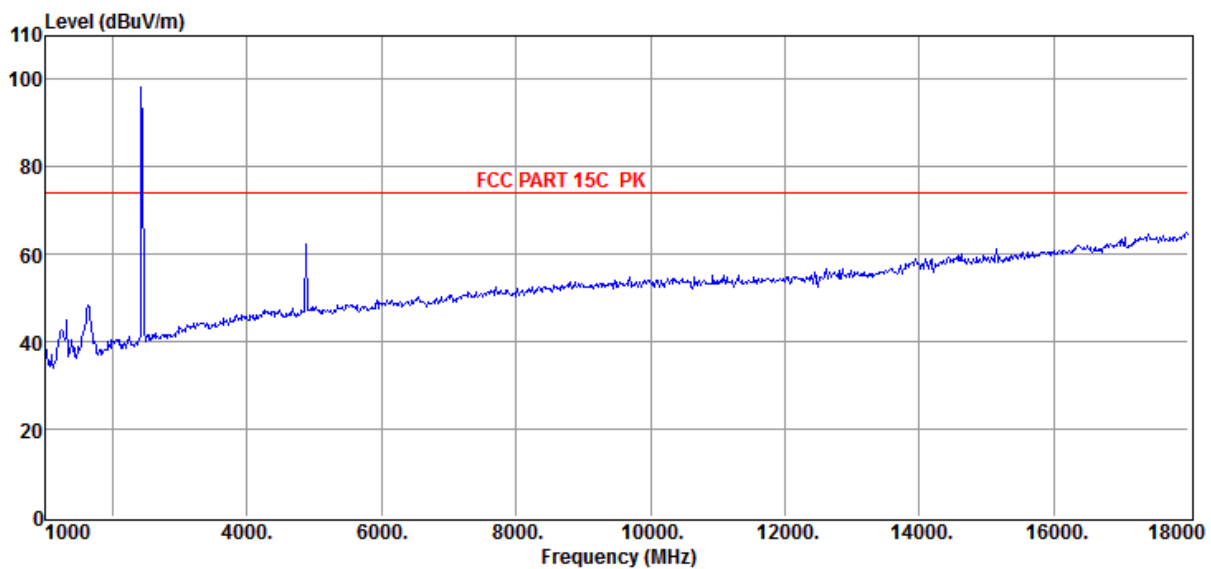
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2402.00	98.31	28.93	43.49	6.47	90.22	74.00	16.22	Peak	HORIZONTAL
2	4804.00	57.86	34.01	44.06	9.32	57.13	74.00	-16.87	Peak	HORIZONTAL
3	4804.00	34.26	34.01	44.06	9.32	33.53	54.00	-20.47	Average	HORIZONTAL
4	17966.00	43.39	44.27	41.80	19.06	64.92	74.00	-9.08	Peak	HORIZONTAL
5	17966.00	25.88	44.27	41.80	19.06	47.41	54.00	-6.59	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH27  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 21



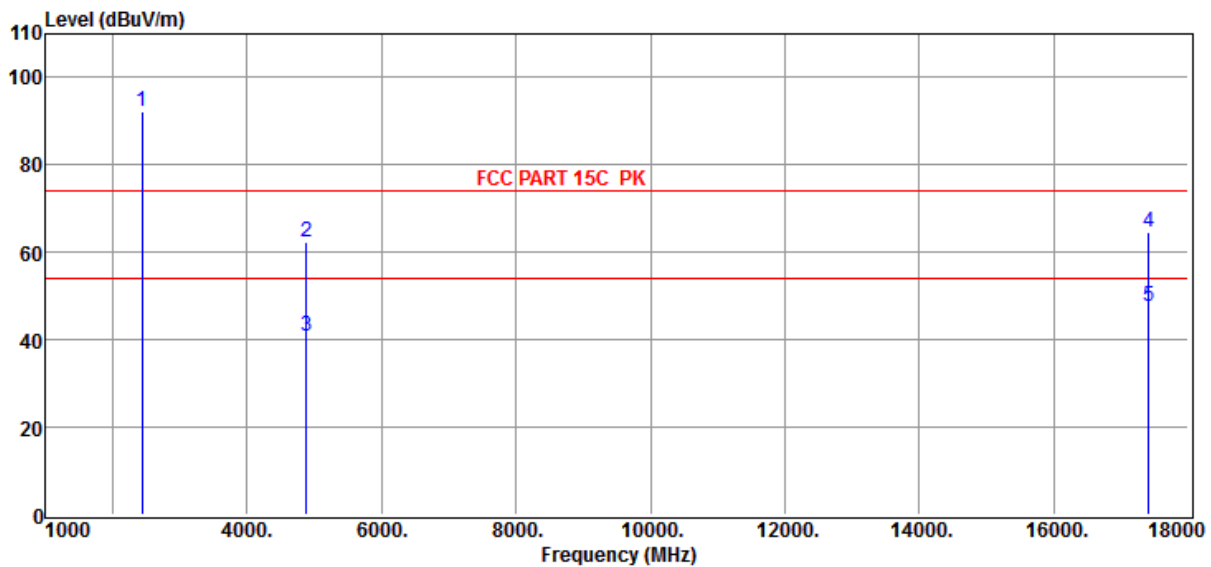
Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2014 Test Data\LC\20140905RF  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC, 4000mAh (Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH27  
**Condition** : Temp: 24.5°C, Humi: 55%, Press: 100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 22



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2441.00	100.20	29.03	43.49	6.53	92.27	74.00	18.27	Peak	HORIZONTAL
2	4882.00	62.54	34.29	44.03	9.41	62.21	74.00	-11.79	Peak	HORIZONTAL
3	4882.00	41.20	34.29	44.03	9.41	40.87	54.00	-13.13	Average	HORIZONTAL
4	17405.00	43.20	43.23	40.87	18.90	64.46	74.00	-9.54	Peak	HORIZONTAL
5	17405.00	26.34	43.23	40.87	18.90	47.60	54.00	-6.40	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor

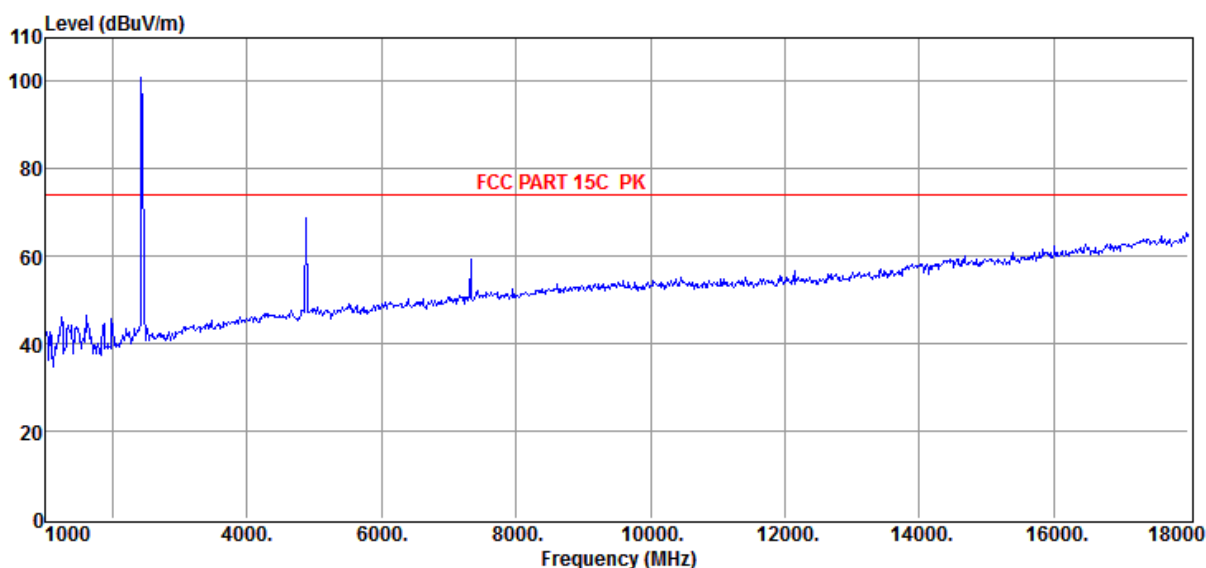
2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit

3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH27  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 23



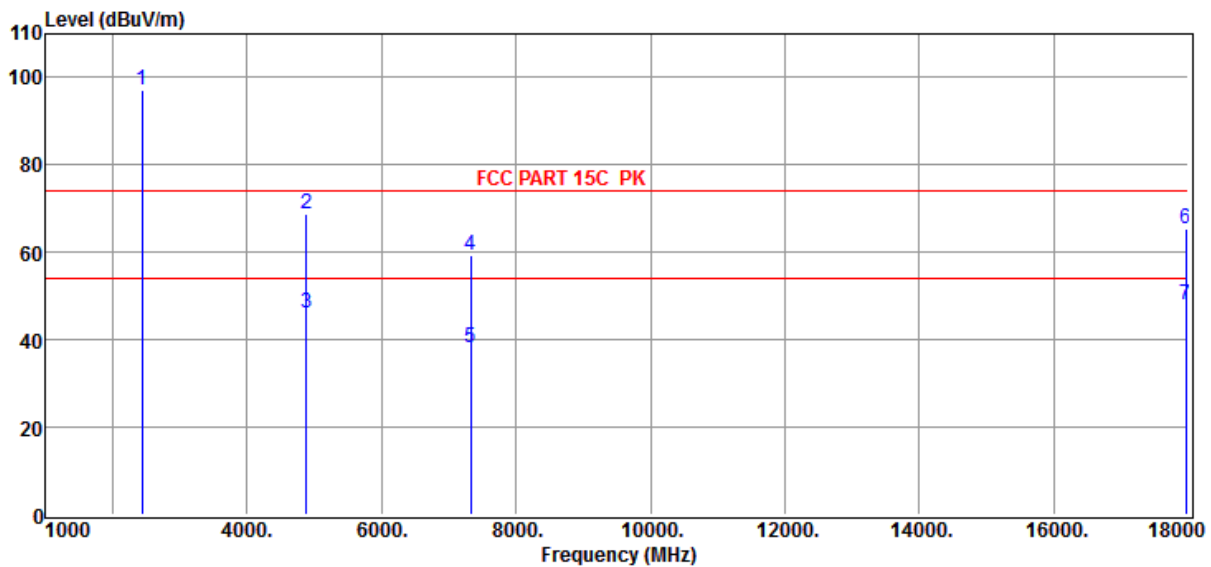
Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2014 Test Data\LC\20140905RF  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC, 4000mAh (Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH27  
**Condition** : Temp: 24.5°C, Humi: 55%, Press: 100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 24



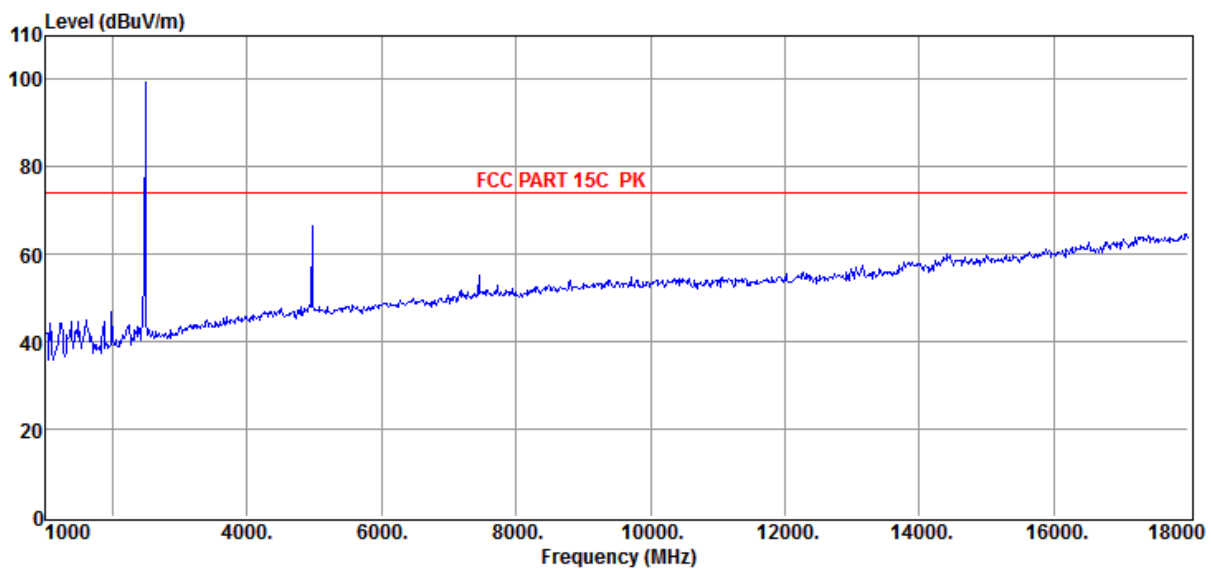
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2441.00	105.00	29.03	43.49	6.53	97.07	74.00	23.07	Peak	VERTICAL
2	4882.00	69.25	34.29	44.03	9.41	68.92	74.00	-5.08	Peak	VERTICAL
3	4882.00	46.31	34.29	44.03	9.41	45.98	54.00	-8.02	Average	VERTICAL
4	7323.00	55.50	35.63	43.32	11.62	59.43	74.00	-14.57	Peak	VERTICAL
5	7323.00	34.25	35.63	43.32	11.62	38.18	54.00	-15.82	Average	VERTICAL
6	17966.00	43.83	44.27	41.80	19.06	65.36	74.00	-8.64	Peak	VERTICAL
7	17966.00	26.36	44.27	41.80	19.06	47.89	54.00	-6.11	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH4E  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 25



Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

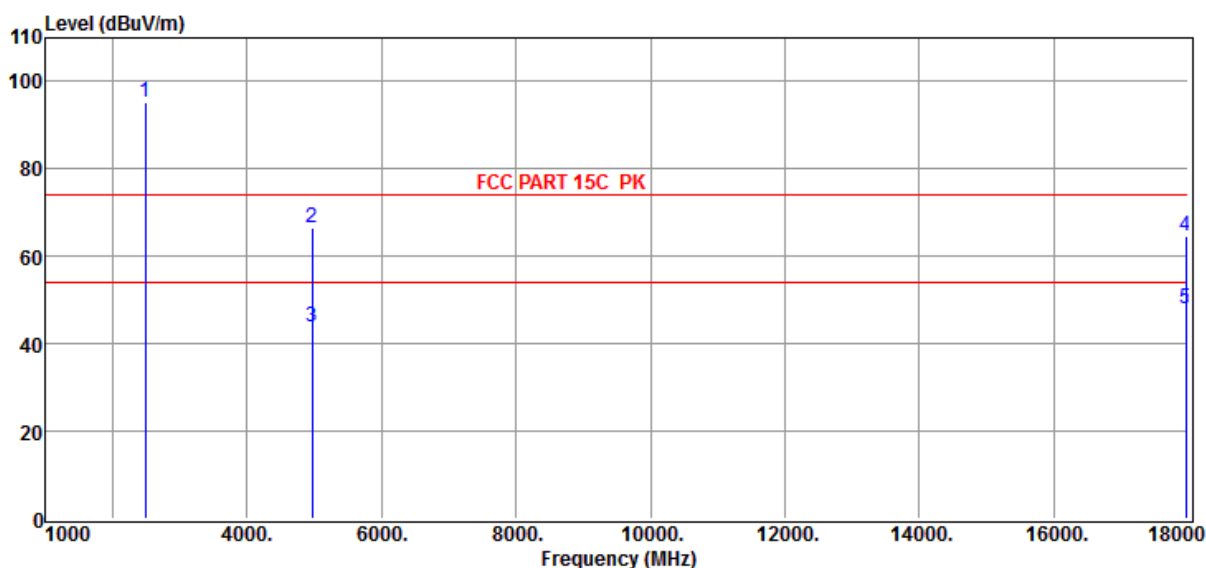
- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto



## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2014 Test Data\LC\20140905RF  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC, 4000mAh (Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH4E  
**Condition** : Temp: 24.5°C, Humi: 55%, Press: 100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 26



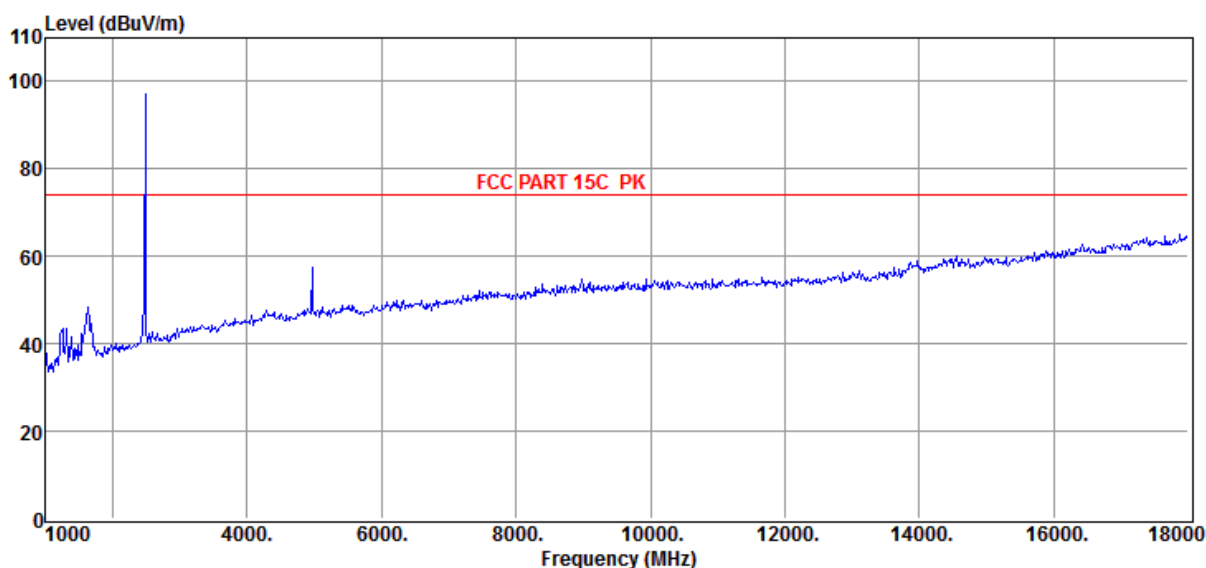
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2480.00	103.10	29.18	43.50	6.57	95.35	74.00	21.35	Peak	VERTICAL
2	4960.00	66.76	34.34	44.01	9.48	66.57	74.00	-7.43	Peak	VERTICAL
3	4960.00	43.98	34.34	44.01	9.48	43.79	54.00	-10.21	Average	VERTICAL
4	17966.00	43.18	44.27	41.80	19.06	64.71	74.00	-9.29	Peak	VERTICAL
5	17966.00	26.36	44.27	41.80	19.06	47.89	54.00	-6.11	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

<b>Test Site</b>	: DDT 3m Chamber	E:\2014 Test Data\LC\20140905RF
<b>Test Date</b>	: 2014-09-05	<b>Tested By</b> : Leo
<b>EUT</b>	: 9 ft. Solar Lighted Speaker Umbrella with Olefin	<b>Model Number</b> : 50400143
<b>Power Supply</b>	: 3.7VDC,4000mAh(Li-ion battery package)	<b>Test Mode</b> : Tx Mode 8-DPSK CH4E
<b>Condition</b>	: Temp:24.5'C,Humi:55%, Press:100.1kPa	<b>Antenna/Distance</b> : HF907 SN100276/3m/HORIZONTAL
<b>Memo</b>	:	

Data: 27



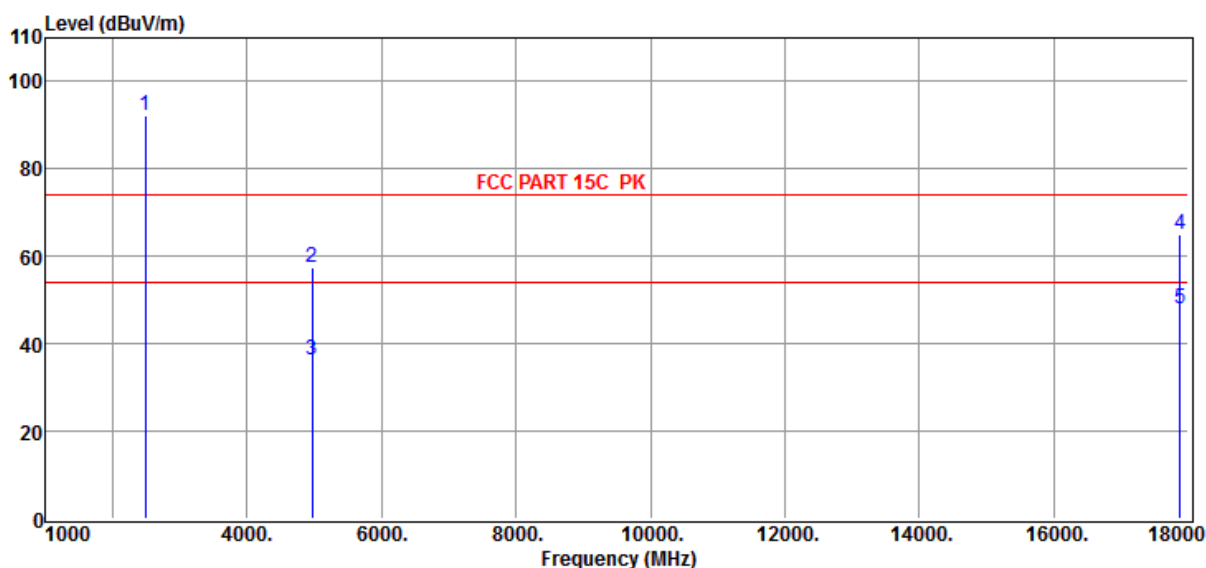
Item	Freq	Read Level	Antenna Factor	PRM Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dB/m)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)		

- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2014 Test Data\LC\20140905RF  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC, 4000mAh (Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH4E  
**Condition** : Temp: 24.5°C, Humi: 55%, Press: 100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 28



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2480.00	99.87	29.18	43.50	6.57	92.12	74.00	18.12	Peak	HORIZONTAL
2	4960.00	57.63	34.34	44.01	9.48	57.44	74.00	-16.56	Peak	HORIZONTAL
3	4960.00	36.54	34.34	44.01	9.48	36.35	54.00	-17.65	Average	HORIZONTAL
4	17881.00	43.56	43.97	41.63	19.04	64.94	74.00	-9.06	Peak	HORIZONTAL
5	17881.00	26.77	43.97	41.63	19.04	48.15	54.00	-5.85	Average	HORIZONTAL

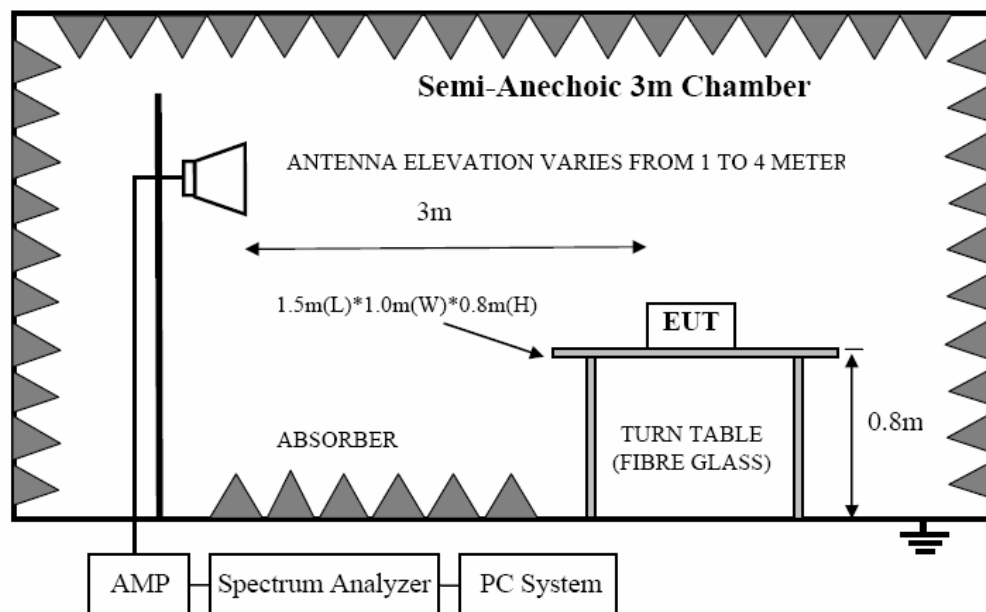
Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## 4. Band Edge Compliance

### 4.1. Test equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	EMI Test Receiver	R&S	ESU8	100316	2013/11/13	1 Year
2	Spectrum analyzer	R&S	FSU	1166.1660.26	2013/11/13	1 Year
3	Trilog Broadband Antenna	Schwarzbeck	VULB9163	9163-462	2013/11/16	1 Year
4	Double Ridged Horn Antenna	R&S	HF907	100276	2013/11/16	1 Year
5	Pre-amplifier	A.H.	PAM0-0118	360	2013/11/13	1 Year
6	RF Cable	R&S	R01	10403	2013/11/13	1 Year
7	RF Cable	R&S	R02	10512	2013/11/13	1 Year

### 4.2. Block diagram of test setup



### 4.3. Limit

All the lower and upper band-edges emissions appearing within all restriction band for example 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions.

#### **4.4. Test Procedure**

Same with clause 8.4 except change investigated frequency range from 2310MHz to 2415MHz and 2475MHz to 2500MHz.

Remark: All restriction band have been tested, and only the worse case is shown in report.

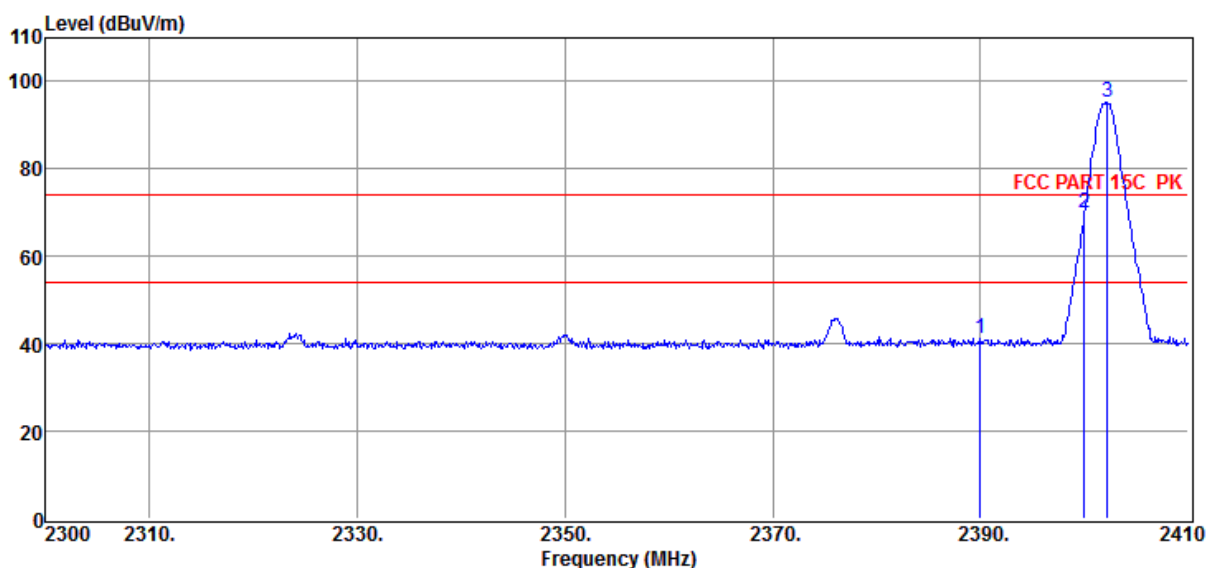
#### **4.5. Test result**

**PASS.** (See below detailed test result)

## Radiated Emission Test Result

<b>Test Site</b>	: DDT 3m Chamber	E:\2014 Test Data\LC\20140905RF
<b>Test Date</b>	: 2014-09-05	<b>Tested By</b> : Leo
<b>EUT</b>	: 9 ft. Solar Lighted Speaker Umbrella with Olefin	<b>Model Number</b> : 50400143
<b>Power Supply</b>	: 3.7VDC,4000mAh(Li-ion battery package)	<b>Test Mode</b> : Tx Mode GFSK CH0
<b>Condition</b>	: Temp:24.5'C,Humi:55%, Press:100.1kPa	<b>Antenna/Distance</b> : HF907 SN100276/3m/HORIZONTAL
<b>Memo</b>	:	

Data: 5



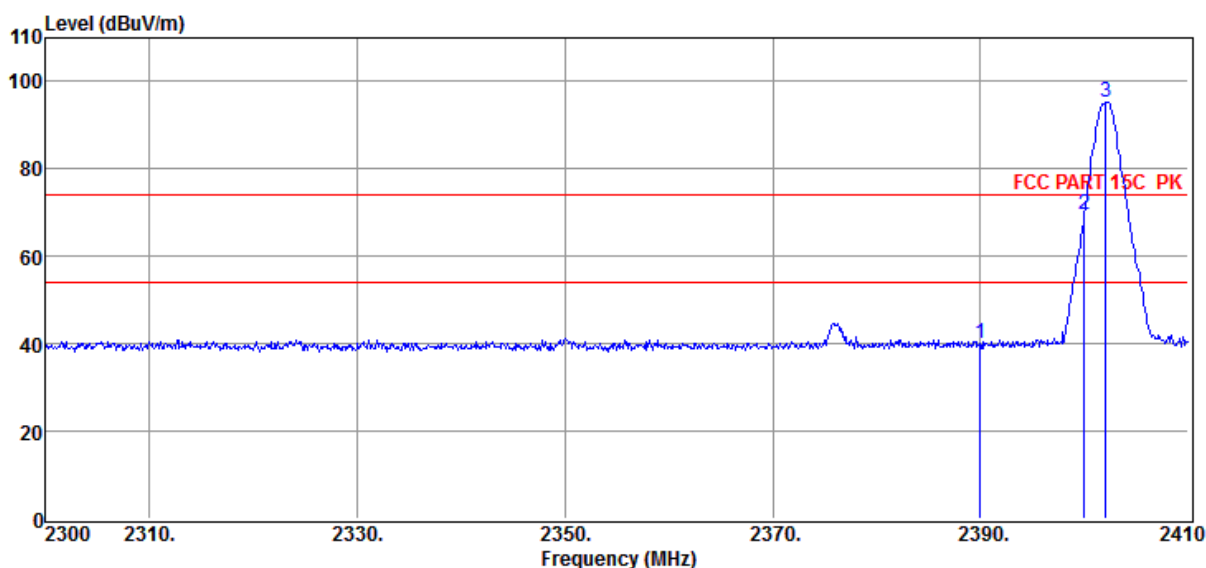
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2390.00	49.63	28.70	43.48	6.47	41.32	74.00	-32.68	Peak	HORIZONTAL
2	2400.00	77.84	28.93	43.49	6.47	69.75	74.00	-4.25	Peak	HORIZONTAL
3	2402.19	103.23	28.93	43.49	6.47	95.14	74.00	21.14	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode GFSK CH0  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 6



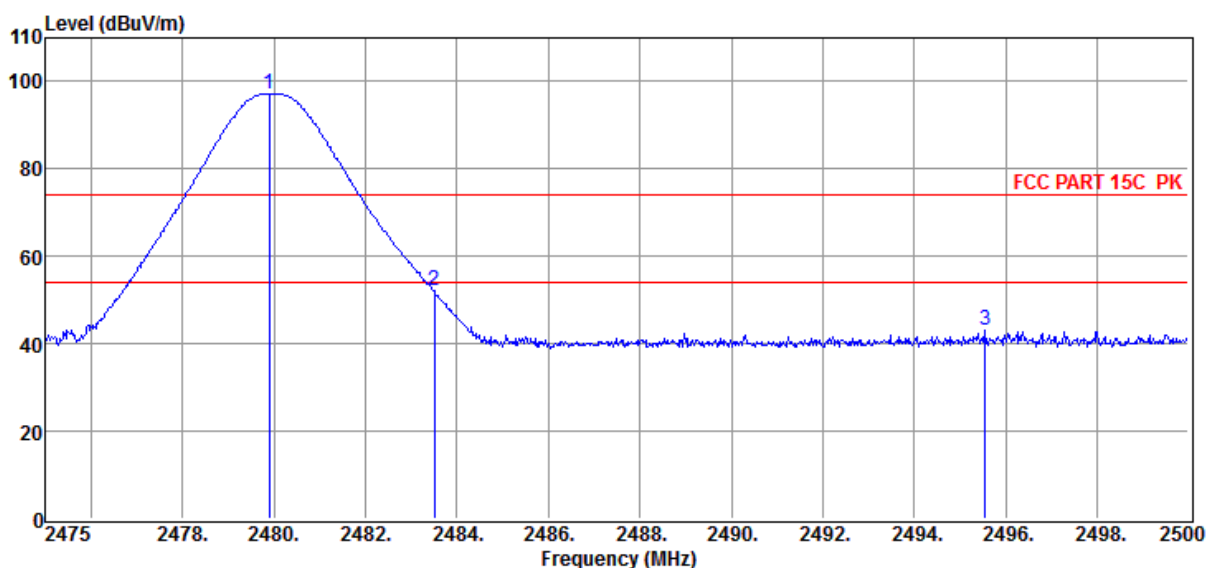
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2390.00	48.32	28.70	43.48	6.47	40.01	74.00	-33.99	Peak	VERTICAL
2	2400.00	77.78	28.93	43.49	6.47	69.69	74.00	-4.31	Peak	VERTICAL
3	2402.08	103.30	28.93	43.49	6.47	95.21	74.00	21.21	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode GFSK CH4E  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 7



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2479.90	105.02	29.18	43.50	6.57	97.27	74.00	23.27	Peak	VERTICAL
2	2483.50	59.78	29.18	43.50	6.57	52.03	74.00	-21.97	Peak	VERTICAL
3	2495.55	50.83	29.25	43.50	6.59	43.17	74.00	-30.83	Peak	VERTICAL

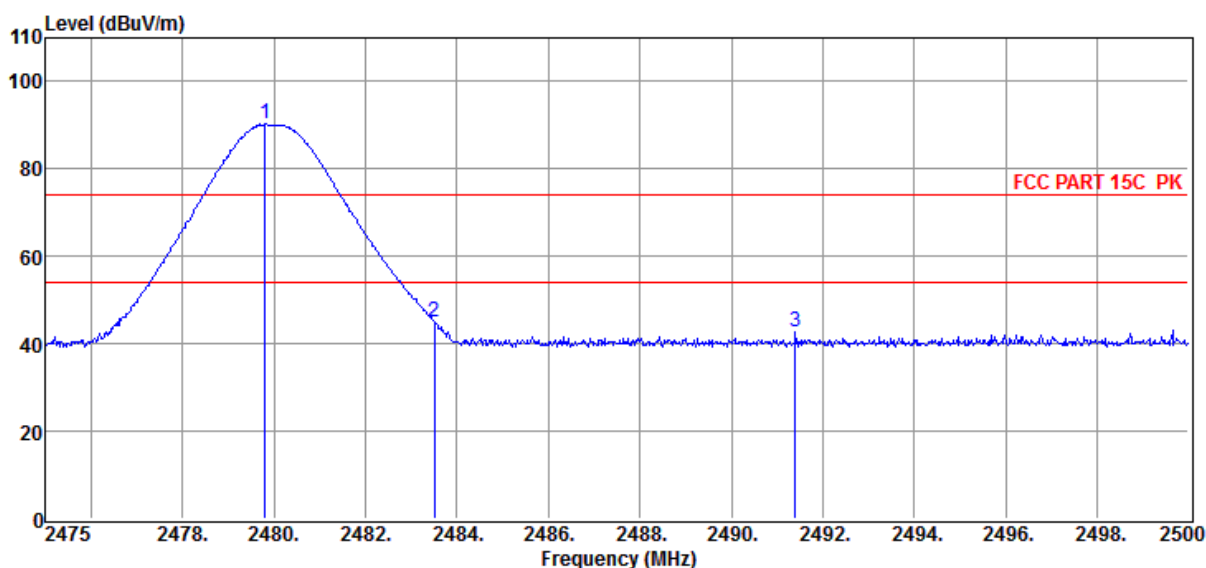
Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto



## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2014 Test Data\LC\20140905RF  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC, 4000mAh (Li-ion battery package) **Test Mode** : Tx Mode GFSK CH4E  
**Condition** : Temp: 24.5°C, Humi: 55%, Press: 100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 8



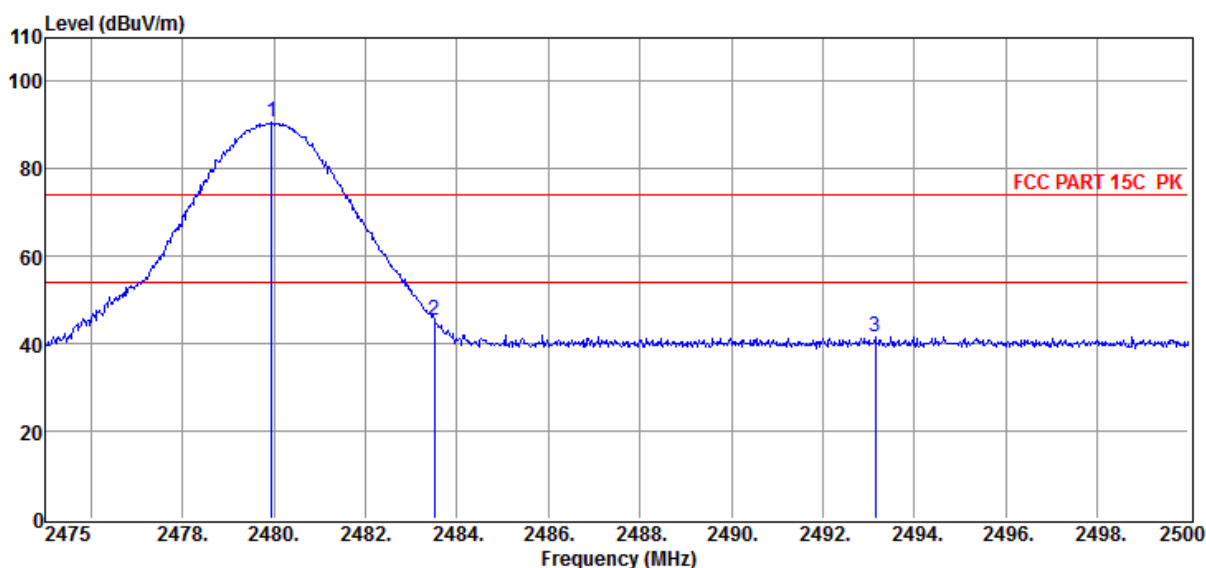
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2479.80	97.95	29.18	43.50	6.57	90.20	74.00	16.20	Peak	HORIZONTAL
2	2483.50	52.73	29.18	43.50	6.57	44.98	74.00	-29.02	Peak	HORIZONTAL
3	2491.40	50.49	29.18	43.50	6.57	42.74	74.00	-31.26	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH4E  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 29



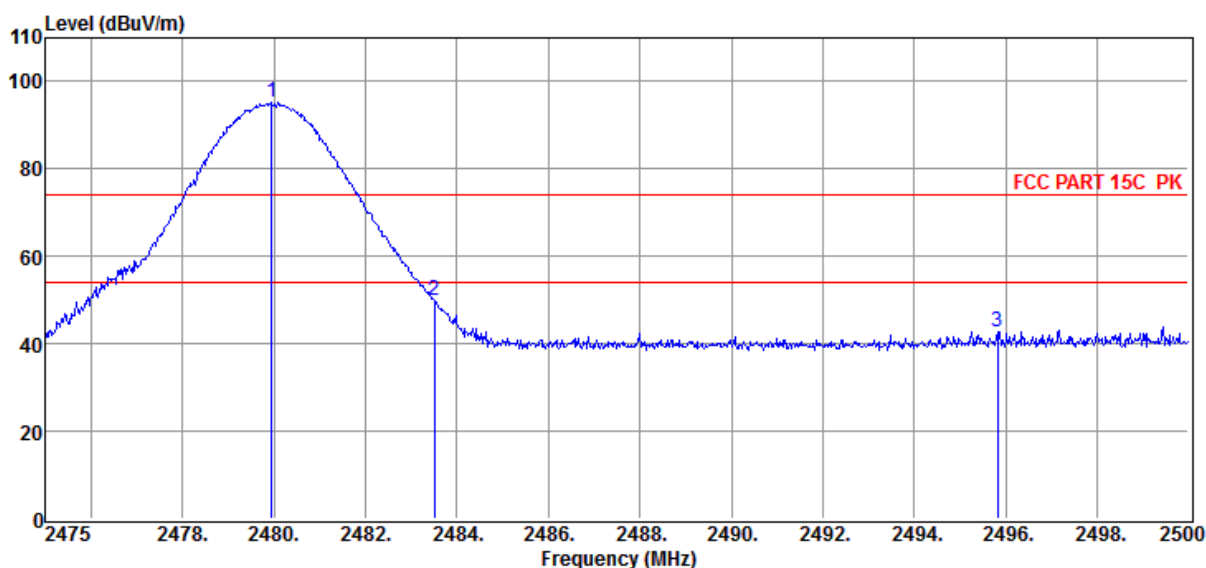
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2479.95	98.31	29.18	43.50	6.57	90.56	74.00	16.56	Peak	HORIZONTAL
2	2483.50	53.27	29.18	43.50	6.57	45.52	74.00	-28.48	Peak	HORIZONTAL
3	2493.15	49.26	29.18	43.50	6.59	41.53	74.00	-32.47	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH4E  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 30



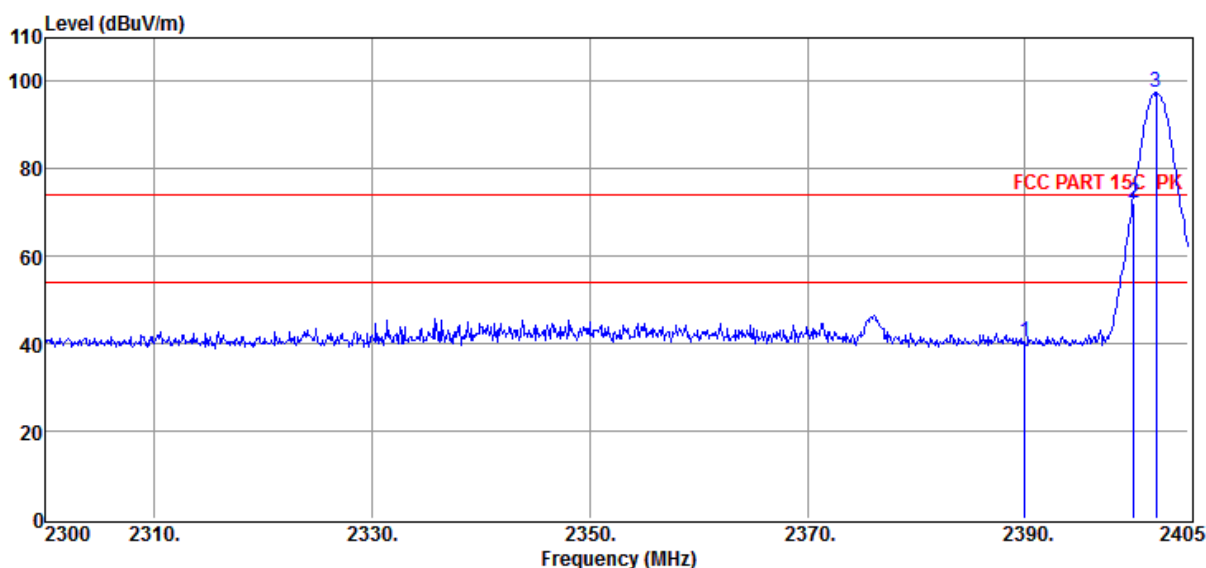
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2479.95	102.93	29.18	43.50	6.57	95.18	74.00	21.18	Peak	VERTICAL
2	2483.50	57.51	29.18	43.50	6.57	49.76	74.00	-24.24	Peak	VERTICAL
3	2495.83	50.56	29.25	43.50	6.59	42.90	74.00	-31.10	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:** \2014 Test Data\LC\20140905RF  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC, 4000mAh (Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH0  
**Condition** : Temp: 24.5°C, Humi: 55%, Press: 100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 31



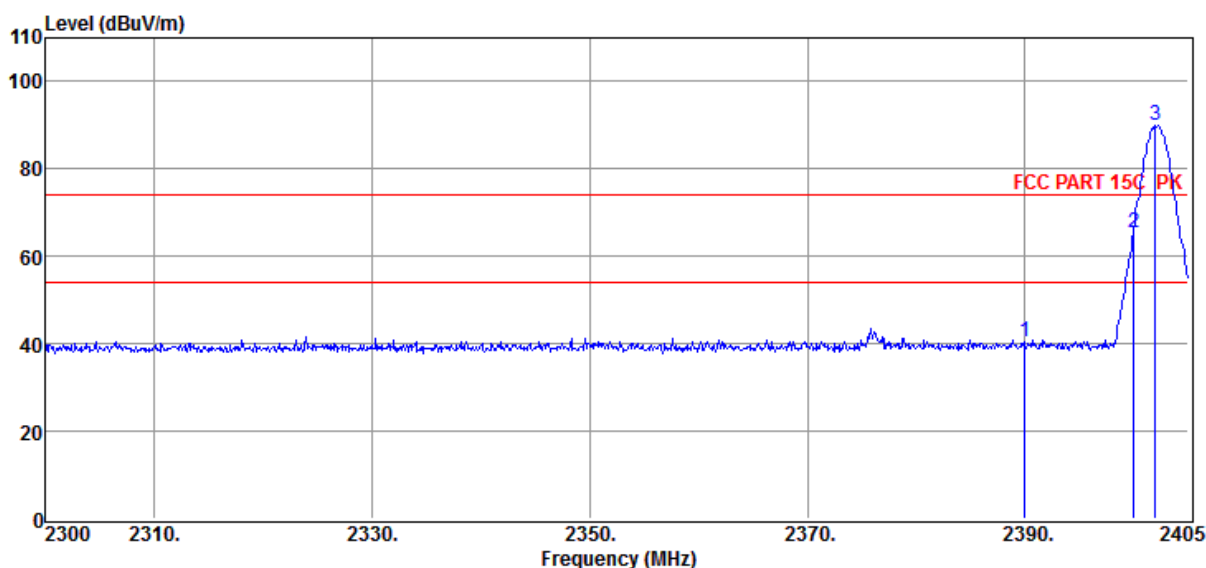
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2390.00	48.62	28.70	43.48	6.47	40.31	74.00	-33.69	Peak	VERTICAL
2	2400.00	80.26	28.93	43.49	6.47	72.17	74.00	-1.83	Peak	VERTICAL
3	2402.06	105.46	28.93	43.49	6.47	97.37	74.00	23.37	Peak	VERTICAL

- Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

# Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : Tx Mode 8-DPSK CH0  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 32



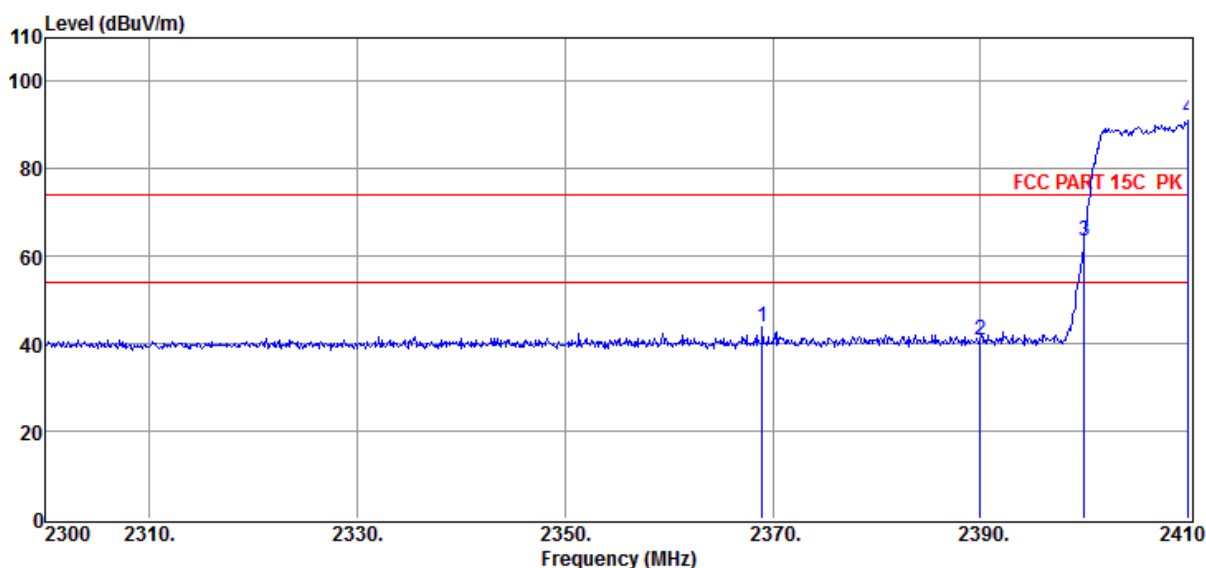
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2390.00	48.58	28.70	43.48	6.47	40.27	74.00	-33.73	Peak	HORIZONTAL
2	2400.00	73.64	28.93	43.49	6.47	65.55	74.00	-8.45	Peak	HORIZONTAL
3	2401.96	98.05	28.93	43.49	6.47	89.96	74.00	15.96	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : 8-DPSK Hopping on  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 33



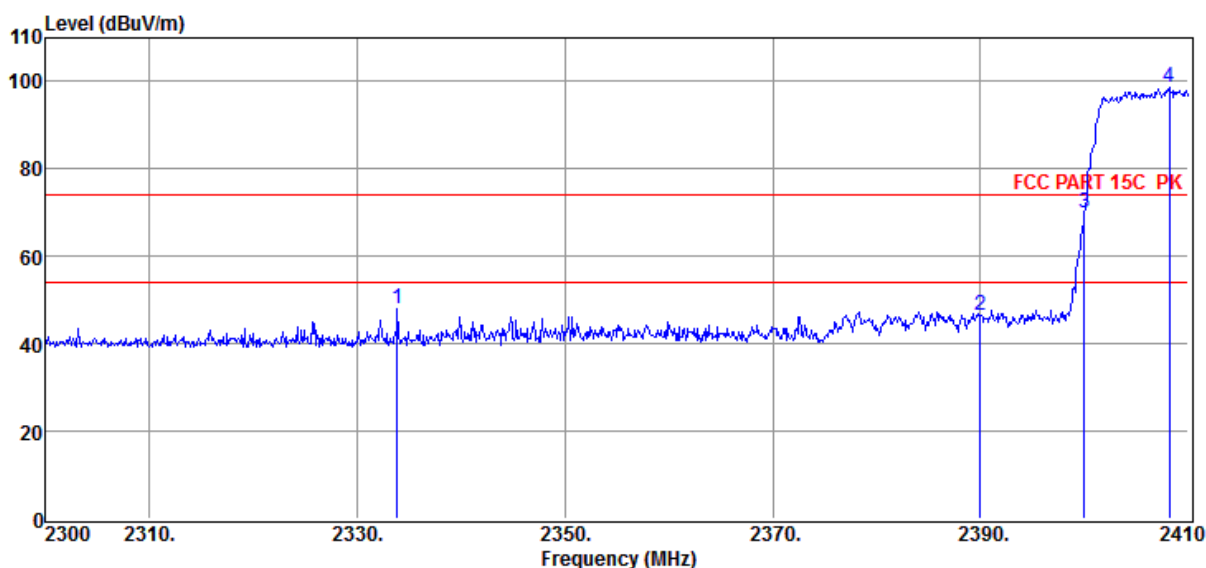
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2368.97	52.31	28.48	43.48	6.45	43.76	74.00	-30.24	Peak	HORIZONTAL
2	2390.00	49.20	28.70	43.48	6.47	40.89	74.00	-33.11	Peak	HORIZONTAL
3	2400.00	71.55	28.93	43.49	6.47	63.46	74.00	-10.54	Peak	HORIZONTAL
4	2410.00	99.42	28.98	43.49	6.49	91.40	74.00	17.40	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : 8-DPSK Hopping on  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 34



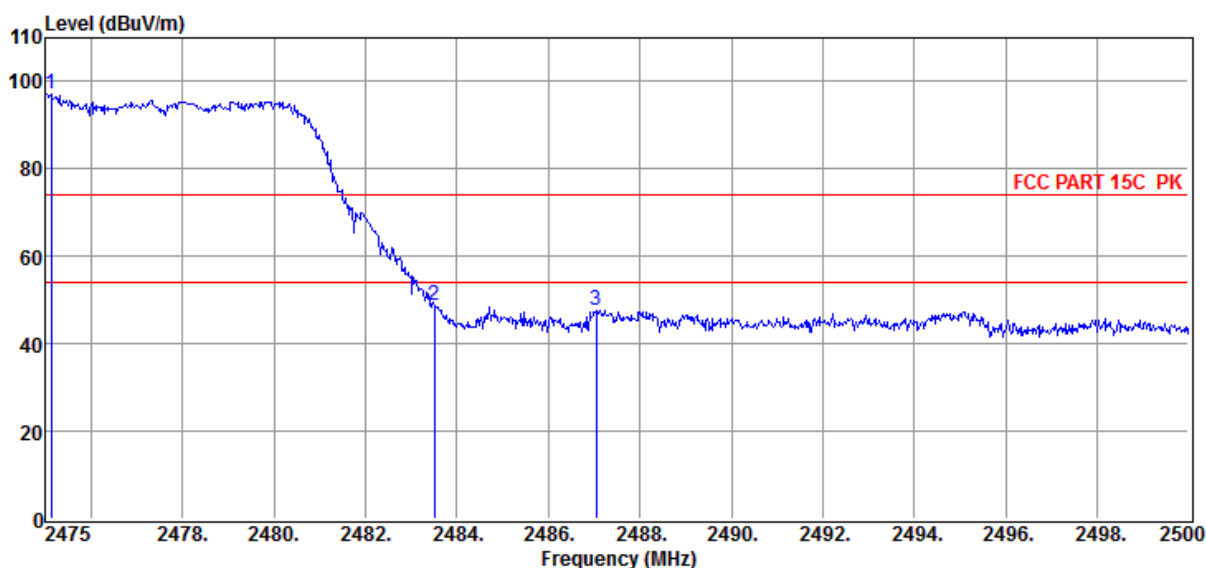
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2333.88	56.70	28.41	43.47	6.39	48.03	74.00	-25.97	Peak	VERTICAL
2	2390.00	54.96	28.70	43.48	6.47	46.65	74.00	-27.35	Peak	VERTICAL
3	2400.00	77.85	28.93	43.49	6.47	69.76	74.00	-4.24	Peak	VERTICAL
4	2408.13	106.89	28.93	43.49	6.49	98.82	74.00	24.82	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : 8-DPSK Hopping on  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 35



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2475.13	104.98	29.13	43.49	6.57	97.19	74.00	23.19	Peak	VERTICAL
2	2483.50	56.59	29.18	43.50	6.57	48.84	74.00	-25.16	Peak	VERTICAL
3	2487.05	55.47	29.18	43.50	6.57	47.72	74.00	-26.28	Peak	VERTICAL

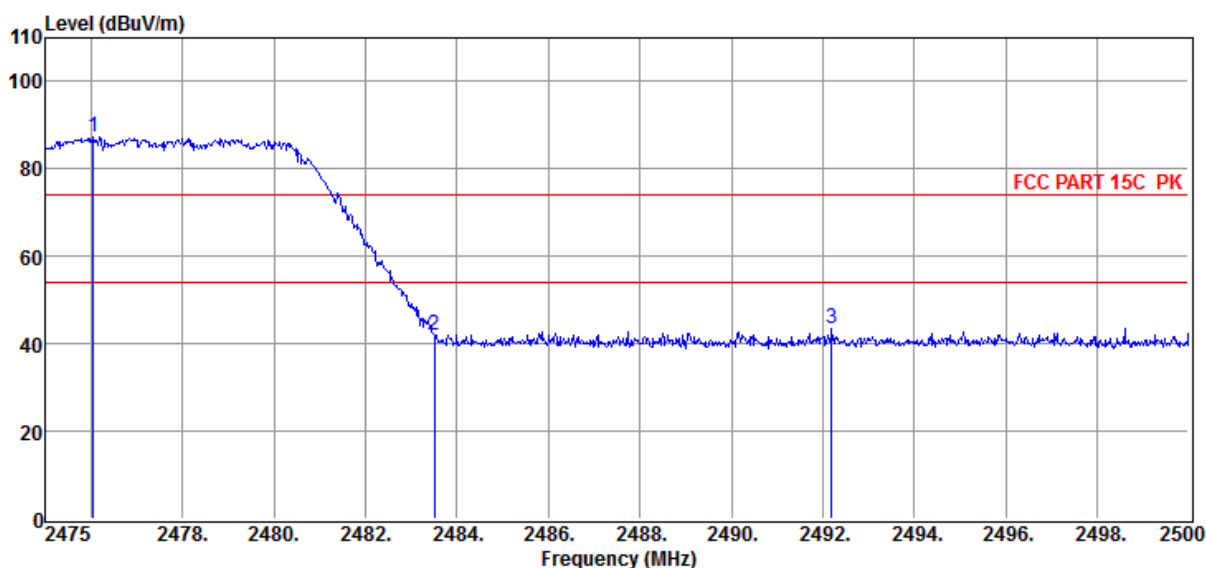
Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto



## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : 8-DPSK Hopping on  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 36



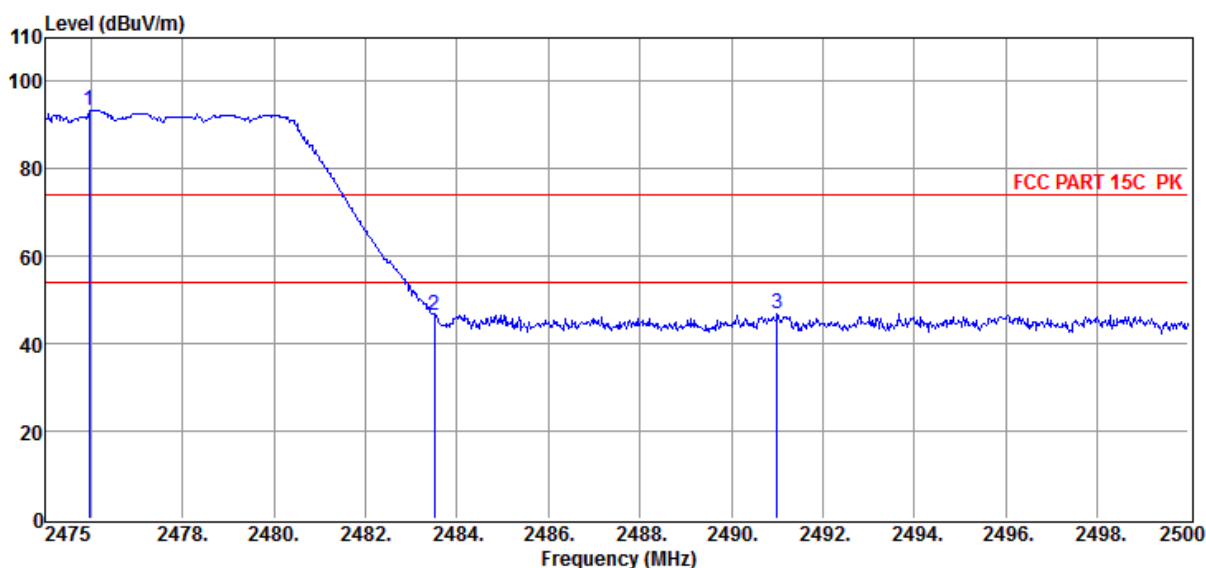
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2476.05	95.22	29.13	43.49	6.57	87.43	74.00	13.43	Peak	HORIZONTAL
2	2483.50	49.66	29.18	43.50	6.57	41.91	74.00	-32.09	Peak	HORIZONTAL
3	2492.20	51.13	29.18	43.50	6.57	43.38	74.00	-30.62	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : GFSK Hopping on  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 37



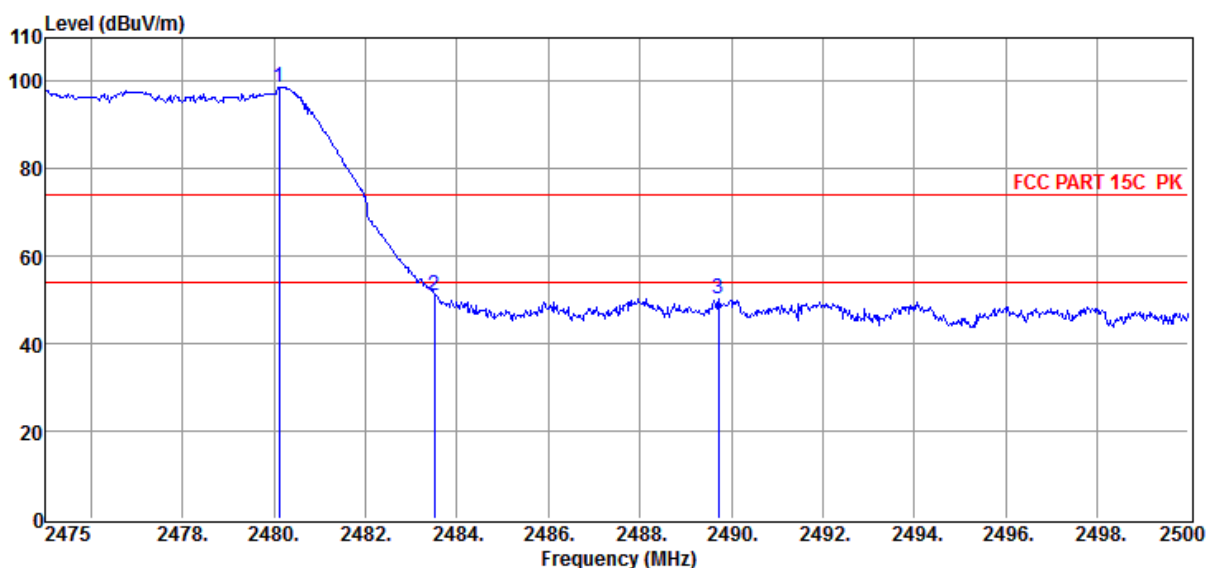
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2475.95	101.08	29.13	43.49	6.57	93.29	74.00	19.29	Peak	HORIZONTAL
2	2483.50	54.29	29.18	43.50	6.57	46.54	74.00	-27.46	Peak	HORIZONTAL
3	2491.00	54.55	29.18	43.50	6.57	46.80	74.00	-27.20	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : GFSK Hopping on  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 38



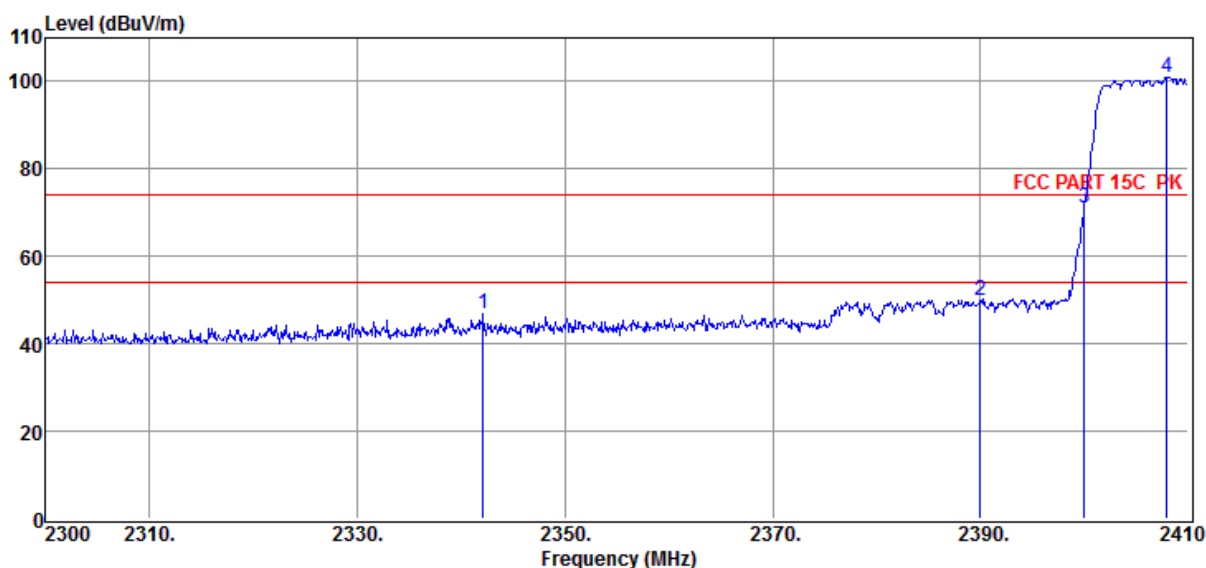
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2480.10	106.57	29.18	43.50	6.57	98.82	74.00	24.82	Peak	VERTICAL
2	2483.50	58.72	29.18	43.50	6.57	50.97	74.00	-23.03	Peak	VERTICAL
3	2489.73	57.94	29.18	43.50	6.57	50.19	74.00	-23.81	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : GFSK Hopping on  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/VERTICAL  
**Memo** :

Data: 39



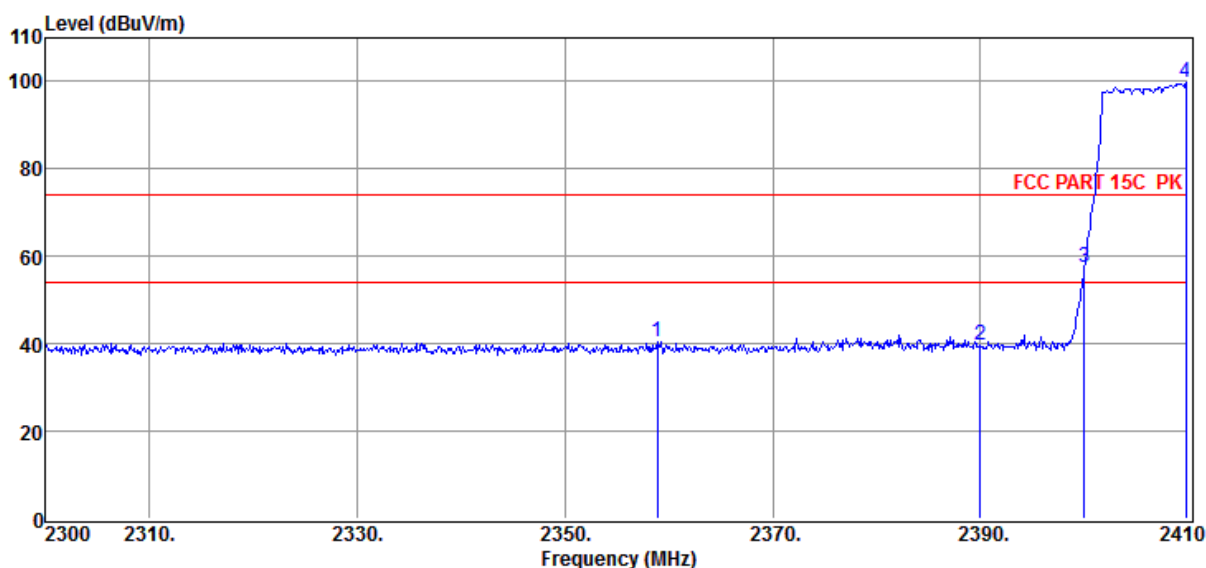
Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2342.13	55.41	28.44	43.47	6.39	46.77	74.00	-27.23	Peak	VERTICAL
2	2390.00	58.35	28.70	43.48	6.47	50.04	74.00	-23.96	Peak	VERTICAL
3	2400.00	79.30	28.93	43.49	6.47	71.21	74.00	-2.79	Peak	VERTICAL
4	2407.91	109.00	28.93	43.49	6.49	100.93	74.00	26.93	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

## Radiated Emission Test Result

**Test Site** : DDT 3m Chamber **E:\2014 Test Data\LC\20140905RF**  
**Test Date** : 2014-09-05 **Tested By** : Leo  
**EUT** : 9 ft. Solar Lighted Speaker Umbrella with Olefin **Model Number** : 50400143  
**Power Supply** : 3.7VDC,4000mAh(Li-ion battery package) **Test Mode** : GFSK Hopping on  
**Condition** : Temp:24.5'C,Humi:55%, Press:100.1kPa **Antenna/Distance** : HF907 SN100276/3m/HORIZONTAL  
**Memo** :

Data: 40



Item (Mark)	Freq (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2358.85	49.11	28.48	43.48	6.42	40.53	74.00	-33.47	Peak	HORIZONTAL
2	2390.00	47.96	28.70	43.48	6.47	39.65	74.00	-34.35	Peak	HORIZONTAL
3	2400.00	65.37	28.93	43.49	6.47	57.28	74.00	-16.72	Peak	HORIZONTAL
4	2409.78	107.73	28.98	43.49	6.49	99.71	74.00	25.71	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor  
 2. If Peak Result comply with AV limit, AV Result is deemed to comply with AV limit  
 3. Test setup: RBW: 1MHz, VBW: 3MHz, Sweep time:auto

### END OF REPORT