## FCC PART 15C TEST REPORT FOR CERTIFICATION On Behalf of

## HUIZHOU FORYOU GENERAL ELECTRONICS CO.,LTD.

Car Multimedia Player

Model Number: BVML9384

Additional Model: PLM9660B

FCC ID: 2AEIN-BVML9384

Prepared for: HUIZHOU FORYOU GENERAL ELECTRONICS CO.,LTD

North Shangxia Road, Dongjiang Hi-tech Industry Park, Huizhou,

Guangdong Province, 516005, PR China

Prepared By: EST Technology Co., Ltd.

Santun(guantai Road), Houjie Town, DongGuan City, GuangDong,

China.

Tel: 86-769-83081888-808

Report Number: ESTE-R1505001 Date of Test : April 15~30, 2015

Date of Report: May 06, 2015



# TABLE OF CONTENTS

Desc	cription	Page
TEST	REPORT VERIFICATION	3
1.	GENERAL INFORMATION	5
	1.1. Description of Device (EUT)	5
2.	SUMMARY OF TEST	6
	2.1. Summary of test result	
	2.2. Test Facilities	
	2.3. Measurement uncertainty	
	2.4. Assistant equipment used for test	8
	2.5. Block Diagram	8
	2.6. Test mode	9
	2.7. Channel List for Bluetooth	9
	2.8. Test Equipment	
3.	MAXIMUM PEAK OUTPUT POWER	11
	3.1. Limit	11
	3.2. Test Procedure	11
	3.3. Test Result	11
	3.4. Test Data	
4.	20 DB bandwidth	16
	4.1. Limit	
	4.2. Test Procedure	
	4.3. Test Result	
	4.4. Test Data	
5.	CARRIER FREQUENCY SEPARATION	21
	5.1. Limit	21
	5.2. Test Procedure	21
	5.3. Test Result	21
	5.4. Test Data	
6.	NUMBER OF HOPPING CHANNEL	26
	6.1. Limit	26
	6.2. Test Procedure	
	6.3. Test Result	26
	6.4. Test Data	
7.	DWELL TIME	29
	7.1. Limit	29
	7.2. Test Result	
	7.3. Test Data	30
8.	RADIATED EMISSIONS	36
	8.1. Limit	
	8.2. Block Diagram of Test setup	
	8.3. Test Procedure	
	8.4. Test Result	38

### FCC ID:2AEIN-BVML9384

	8.5.	Test Data	39
9.	BAN	D EDGE COMPLIANCE	76
	9.1.	Limit	76
	9.2.	Block Diagram of Test setup	76
	9.3.	Test Procedure	77
	9.4.	Test Result	77
	9.5.	Test Data	78
10.	ANT	ENNA REQUIREMENTS	94
	10.1.	Limit	94
	10.2.	Result	94
11.	TEST	「SETUP PHOTO	95
12	Рн∩	TOS OF FUT	96

**Test Report Verification** 

	1est Report V	el ilication					
Annligants	HUIZHOU FORYOU	GENERAL ELECT	RONICS CO.,LTD.				
Applicant:	North Shangxia Road	l, Dongjiang Hi-tech	Industry Park, Huizhou,				
Address:	Guangdong Province,	516005, P R China	-				
N. C. A	HUIZHOU FORYOU		RONICS CO.,LTD.				
Manufacturer	North Shangxia Road	l, Dongjiang Hi-tech	Industry Park, Huizhou,				
Address:	Guangdong Province,		,				
E.U.T:	Car Multimedia Playe						
<b>Model Number:</b>	BVML9384	BVML9384					
	PLM9660B						
	Note: The two models	have the same techn	ical construction				
			nponents and component				
Additional Madale	layout, all electrical co		_				
Additional Model:	•						
	except the different m						
		1 functions; "PLM966	50B" without Mini SD				
	function.						
Power Supply:	DC 12V						
Test Voltage:	DC 12V						
Trade Name:	BOSS AUDIO;	Serial No.:					
1144011411101	PLANET AUDIO	Serial 1 (o					
Date of Receipt:	April 08, 2015	Date of Test:	April 15~May 05,				
			2015				
<b>Test Specification:</b>	FCC Rules and Regul	ations Part 15 Subpar	t C:2014				
- Test specification.	ANSI C63.10:2013						
		•	T Technology Co., Ltd				
			this test report and EST				
Test Result:	Technology Co., Ltd.						
			rements. Also, this report				
			liance with the ETSLEN				
	FCC Rules and Regul	ations Part 15 Subpai	t & requirements.				
	TD1 ' 1'	1 1 1	5 ES 14				
	This report applies to	above tested sample	only and shall not be				
	reproduced in part wit	tnout written approva	1 of est Technology				
	Co., Ltd.						
D 11	T 11		Date: May 06, 2015				
Prepared by:	Tested b	y:	Approved by:				
/			<i>T</i> 11				
Ada	ton	u /	Trementh				
K							
Ada / Assistant	Tony.Tang	/ Engineer	IcemanHu / Manager				
Other Aspects:							
None.							
Abbreviations: OK/P=pas	sed fail/F=failed n.	a/N=not applicable I	E.U.T=equipment under tested				
This test report is based or	n a single evaluation of one so	ample of above mentioned	l products ,It is not permitted				
-	s without written approval of		•				
	*						



## 1. GENERAL INFORMATION

1.1. Description of Device (EUT)

**Product Name** : Car Multimedia Player

**Model Number** : BVML9384

FCC ID : 2AEIN-BVML9384

**Operation frequency** : 2402MHz~2480MHz

**Number of channel**: 79

Antenna : Integrated PCB antenna, 1 dBi gain

**Modulation** : FHSS (GFSK,  $\pi/4$ -DQPSK, 8-DPSK)

**Sample Type** : Prototype production

## 2. SUMMARY OF TEST

## 2.1. Summary of test result

Description of Test Item	Standard	Results
Maximum Peak Output Power	FCC Part 15: 15.247(b)(1) DA 00-705	PASS
20dB Bandwidth	FCC Part 15: 15.215 DA 00-705	PASS
Carrier Frequency Separation	FCC Part 15: 15.247(a)(1) DA 00-705	PASS
Number Of Hopping Channel	FCC Part 15: 15.247(a)(1)(iii) DA 00-705	PASS
Dwell Time	FCC Part 15: 15.247(a)(1)(iii) DA 00-705	PASS
Radiated Emission	FCC Part 15: 15.209 FCC Part 15: 15.247(d) ANSI C63.10: 2013 DA 00-705	PASS
Band Edge Compliance	FCC Part 15: 15.247(d) DA 00-705	PASS
Power Line Conducted Emissions	FCC Part 15: 15.207 ANSI C63.4: 2003 DA 00-705	N/A
Antenna requirement	FCC Part 15: 15.203	PASS

Note: 15.207 only signals conducted onto the AC power lines are required to be measured. The equipment is only DC power supply, so "Power Line Conducted Emissions" is not required.

EST

Page 6 of 105

#### 2.2. Test Facilities

EMC Lab : Certificated by CNAL, CHINA

Registration No.: L5288

Date of registration: November 13, 2014

Certificated by FCC, USA Registration No.: 989591

Date of registration: November 20, 2013

Certificated by Industry Canada Registration No.: 46405-9405 Test Side Number: 9405A-1

Date of registration: January 03, 2013

Certificated by VCCI, Japan

Registration No.: R-3663 & C-4103 Date of registration: July 25, 2011

Certificated by TUV Rheinland, Germany Registration No.: UA 50195514 0001 Date of registration: January 07, 2011

Certificated by TUV/PS, Shenzhen

Registration No.: SCN1017

Date of registration: January 27, 2011

Certificated by Intertek ETL SEMKO Registration No.: 2011-RTL-L1-18 Date of registration: April 28, 2011

Certificated by Siemic, Inc. Registration No.: SLCN021

Date of registration: November 8, 2011

Certificated by Nemko, Hong Kong

Registration No.: 175193

Date of registration: May 4, 2011

Name of Firm : EST Technology Co., Ltd.

Site Location : San Tun Management Zone, Houjie Town, Dongguan,

Guangdong, China



## 2.3. Measurement uncertainty

Test Item	Uncertainty
Uncertainty for Conduction emission test	2.54dB
Uncertainty for Radiation Emission test (30MHz-1GHz)	3.62
Uncertainty for Radiation Emission test (1GHz to 18GHz)	4.86
Uncertainty for radio frequency	7×10-8
Uncertainty for conducted RF Power	0.20dB
Uncertainty for Power density test	0.26dB

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

## 2.4. Assistant equipment used for test

### 2.4.1. N/A

## 2.5. Block Diagram

For radiated emissions test: EUT was placed on a turn table, which is 0.8 (or 1.5) meter high above ground. EUT was be set into BT test mode by software before test.



(EUT: Car Multimedia Player)

EST

EST Technology Co., Ltd Report No. ESTE-R1505001

## 2.6. Test mode

The test software was used to control EUT work in Continuous TX mode, and select test channel, wireless mode

Mode	Channel	Frequency
	Low	2402MHz
GFSK	Middle	2441MHz
	High	2480MHz
	Low	2402MHz
8-DPSK	Middle	2441MHz
	High	2480MHz

## 2.7. Channel List for Bluetooth

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency	
No.	(MHz)	No.	(MHz)	No.	(MHz)	No.	(MHz)	
1	2402	2	2403	3	2404	4	2405	
5	2406	6	2407	7	2408	8	2409	
9	2410	10	2411	11	2412	12	2413	
13	2414	14	2415	15	2416	16	2417	
17	2418	18	2419	19	2420	20	2421	
21	2422	22	2423	23	2424	24	2425	
25	2426	26	2427	27	2428	28	2429	
29	2430	30	2431	31	2432	32	2433	
33	2434	34	2435	35	2436	36	2437	
37	2438	38	2439	39	2440	40	2441	
41	2442	42	2443	43	2444	44	2445	
45	2446	46	2447	47	2448	48	2449	
49	2450	50	2451	51	2452	52	2453	
53	2454	54	2455	55	2456	56	2457	
57	2458	58	2459	59	2460	60	2461	
61	2462	62	2463	63	2464	64	2465	
65	2466	66	2467	67	2468	68	2469	
69	2470	70	2471	71	2472	72	2473	
73	2474	74	2475	75	2476	76	2477	
77	2478	78	2479	79	2480	-	-	



# 2.8. Test Equipment

## 2.8.1. For conducted emission test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESHS30	832354	June,28,14	1 Year
Artificial Mains Networ	Rohde & Schwarz	ENV216	101260	June,28,14	1 Year
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	101100	June,28,14	1 Year

## 2.8.2. For radiated emission test(30-1000MHz)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESVS10		June,28,14	
Spectrum Analyzer	Agilent	E4411B	MY5014069 7	June,28,14	1 Year
Bilog Antenna	Teseq	CBL 6111D	27090	June,28,14	1 Year
Signal Amplifier	Agilent	310N	187037	June,28,14	1 Year

## 2.8.3. For radiated emission test(above 1GHz)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Horn Antenna	SCHWARZBECK		BBHA9120D1 002	June,28,14	1 Year
Signal Amplifier	SCHWARZBECK	BBV9718	9718-212	June,28,14	1 Year
Spectrum Analyzer	Agilent	E4408B	MY44211139	June,28,14	1 Year

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## 3. MAXIMUM PEAK OUTPUT POWER

## 3.1. Limit

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts, the e.i.r.p shall not exceed 4W

## 3.2. Test Procedure

The transmitter output (antenna port) was connected to the spectrum analyzer

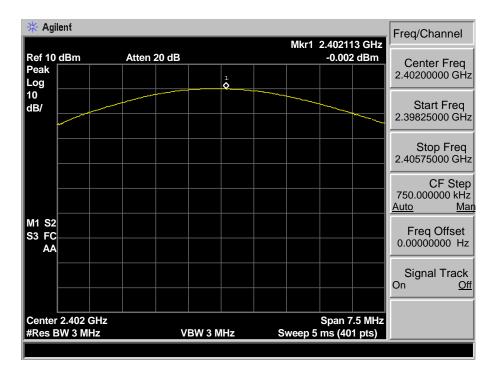
## 3.3. Test Result

EUT: Car Multimedia Player								
M/N: BVML	M/N: BVML9384							
Test date: 20	15-04-26	Test site: RF site	Tested b	y: Tony Tang	7			
Mode	Freq Result		L	Margin				
Wode	(MHz)	(dBm)	dBm	W	(dB)			
	2402	-0.002	30.00	1	30.002			
GFSK	2441	0.111	30.00	1	29.889			
	2480	-0.866	30.00	1	30.866			
	2402	0.303	21.00	0.125	20.697			
8-DPSK	2441	0.325	21.00	0.125	20.675			
	2480	-0.623	21.00	0.125	21.623			
Conclusion:	Conclusion: PASS							

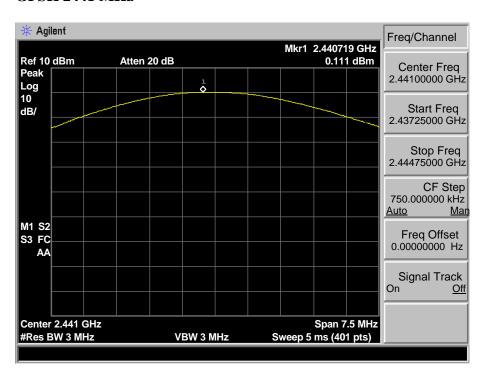


#### 3.4. Test Data

#### GFSK 2402 MHz

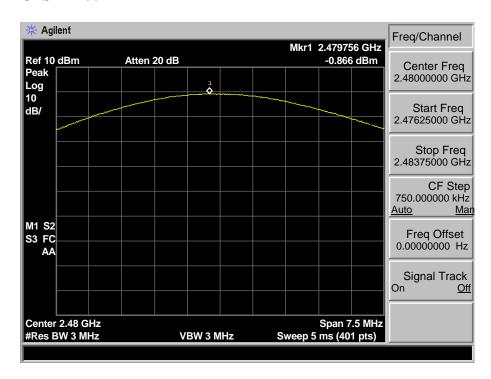


#### **GFSK 2441 MHz**



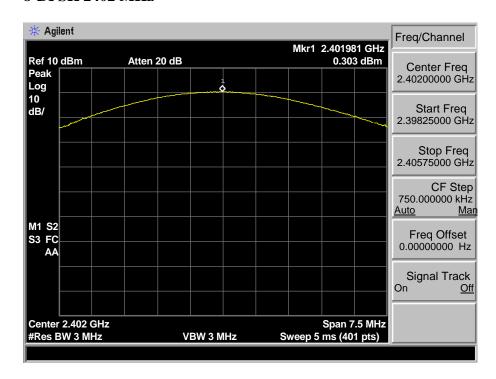


### GFSK 2480 MHz

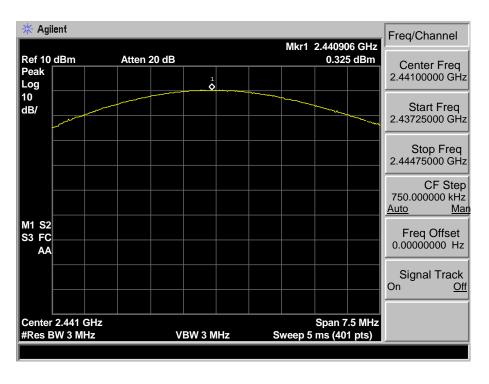




#### 8-DPSK 2402 MHz

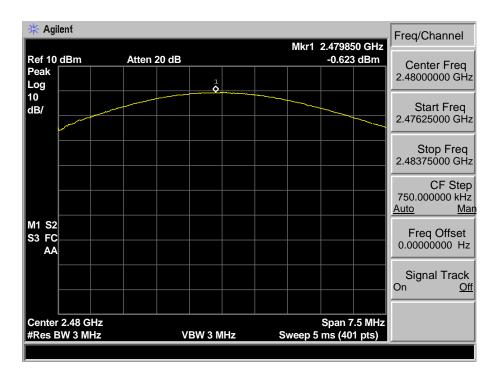


#### 8-DPSK 2441 MHz





### 8-DPSK 2480 MHz





### 4. 20 DB BANDWIDTH

### 4.1. Limit

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

#### 4.2. Test Procedure

The transmitter output was coupled to a spectrum analyzer via a antenna. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 30kHz RBW and 100kHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

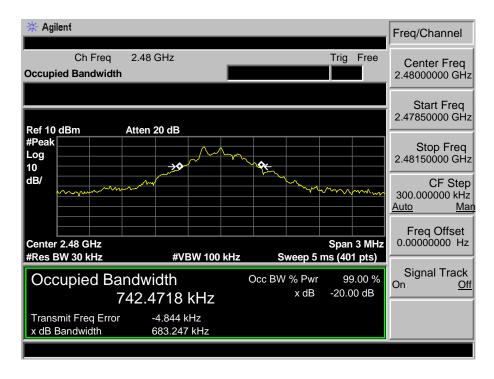
#### 4.3. Test Result

EUT: Car Multimedia Player M/N: BVML9384						
Test date: 2015-04-26 Test site: RF site Tested by: Tony Tang						
Mode	Freq (MHz)	20dB Bandwidth (MHz)	Limit (kHz)	Conclusion		
	2402	0.683	/	PASS		
GFSK	2441	0.663	/	PASS		
	2480	0.676	/	PASS		
	2402	1.211	/	PASS		
8-DPSK	2441	1.211	/	PASS		
	2480	1.206	/	PASS		

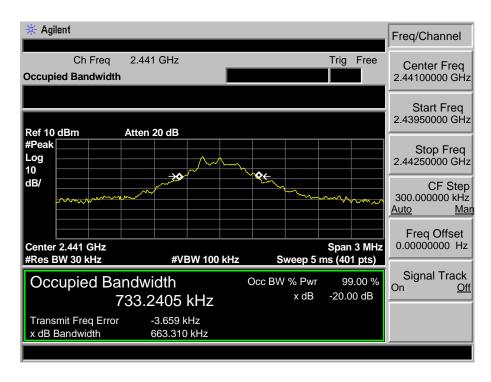


### 4.4. Test Data

#### GFSK 2402MHz

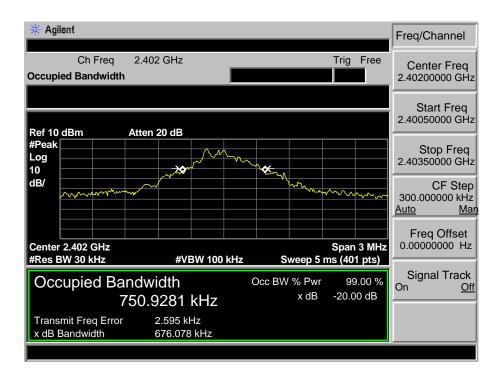


#### GFSK 2441MHz



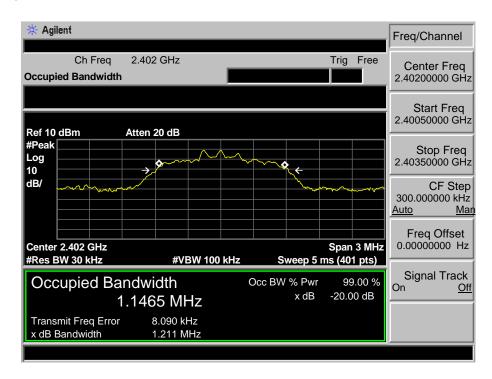


#### GFSK 2480MHz

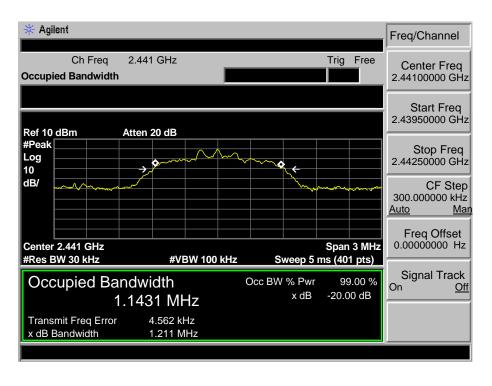




#### 8-DPSK 2402MHz

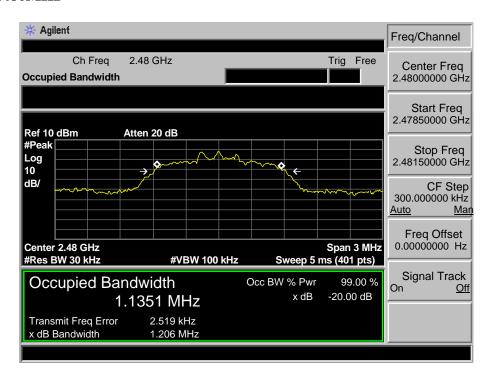


#### 8-DPSK 2441MHz





### 8-DPSK 2480MHz





## 5. CARRIER FREQUENCY SEPARATION

### 5.1. Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW

## 5.2. Test Procedure

The transmitter output was coupled to a spectrum analyzer via a antenna. The carrier frequency was measured by spectrum analyzer with 100kHz RBW and 100kHz VBW.

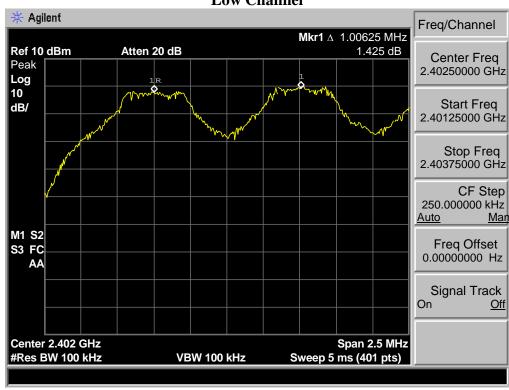
### 5.3. Test Result

EUT: Car Multimedia Player				
M/N: BVML9384				
Test date: 2015-04-26			Test site: RF site Tested by: Tony Tang	
Mode	Channel	Channel separation (MHz)	Limit	Conclusion
GFSK	Low CH	1.006	0.683 MHz	PASS
	Mid CH	1.000	0.663 MHz	PASS
	High CH	1.000	0.676 MHz	PASS
8-DPSK	Low CH	1.000	> 2/3 of the 20dB Bandwidth or 25[kHz]( whichever is greater)	PASS
	Mid CH	1.000		PASS
	High CH	1.013		PASS

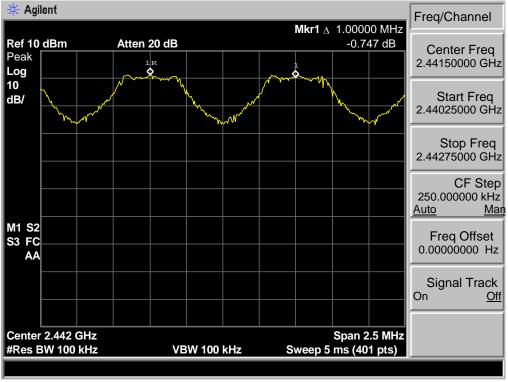


#### 5.4. Test Data

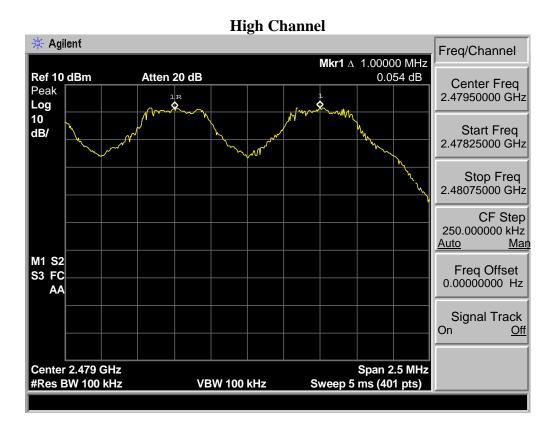
**GFSK**Low Channel



## **Mid Channel**

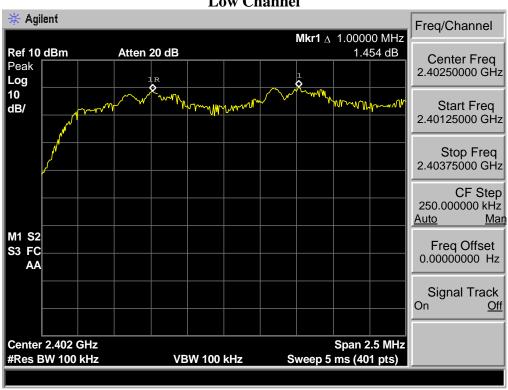




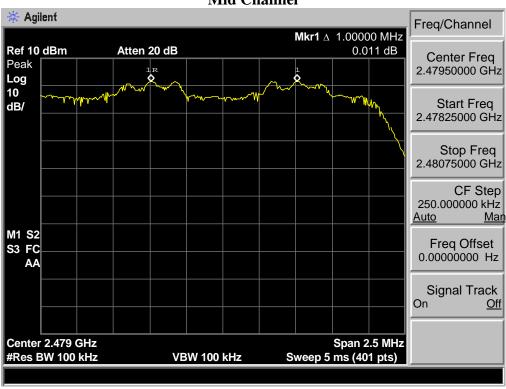




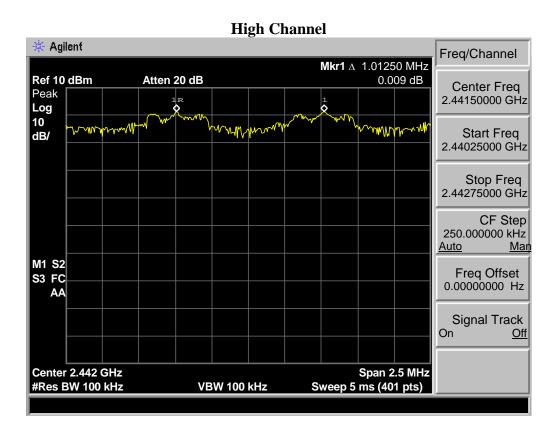
8-DPSK Low Channel



#### **Mid Channel**









## 6. NUMBER OF HOPPING CHANNEL

## 6.1. Limit

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels

## 6.2. Test Procedure

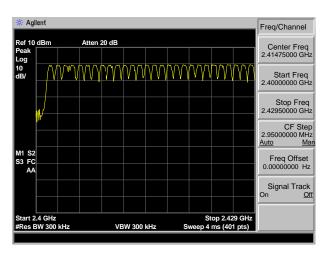
The transmitter output was coupled to a spectrum analyzer via a antenna. The number of hopping channel was measured by spectrum analyzer with 300kHz RBW and 300kHz VBW.

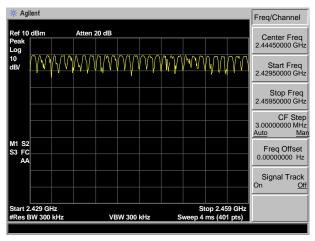
## 6.3. Test Result

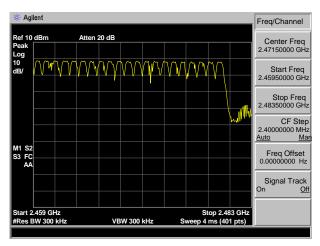
EUT: Car Multimedia Player					
M/N: BVML9384					
Test date: 2015-04-26 Test site: RF site Tested by: Tor				ony.Tang	
Mode	Number of hopping channel		Limit	Conclusion	
GFSK	79		>15	PASS	
8-DPSK	79		>15	PASS	

## 6.4. Test Data

#### **GFSK**

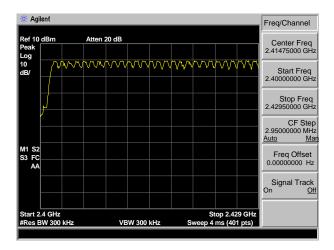


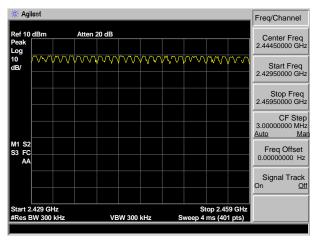


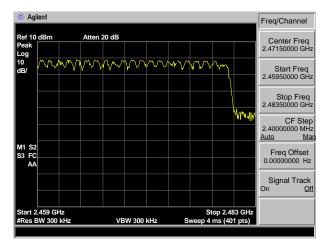




### 8-DPSK









## 7. DWELL TIME

## 7.1. Limit

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

## 7.2. Test Result

Test site: RF site	Tested by: To	ony Tang
Dwell time (ms)	Limit	Conclusion
137.60	<400ms	PASS
272.00	<400ms	PASS
314.67	<400ms	PASS
150.40	<400ms	PASS
275.20	<400ms	PASS
315.73	<400ms	PASS
	Dwell time (ms)  137.60  272.00  314.67  150.40  275.20  315.73	Dwell time (ms)     Limit       137.60     <400ms

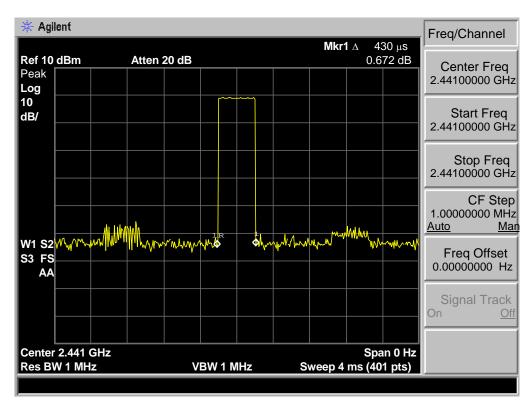
Note: DH1 Time Slot: Reading \* (1600/2)\*31.6/(channel number)

DH3 Time Slot: Reading \* (1600/4)\*31.6/(channel number)

DH5 Time Slot: Reading \* (1600/6)\*31.6/(channel number)

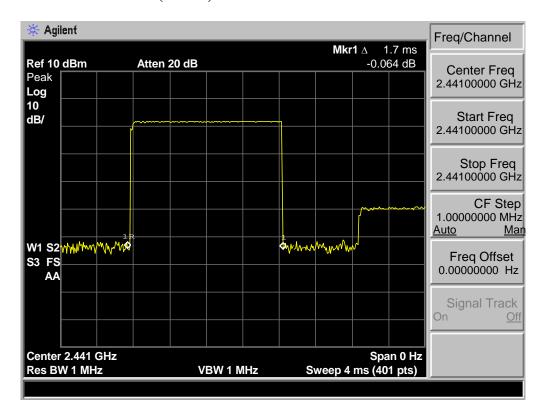
## 7.3. Test Data

## GFSK DH1: 0.43 \* (1600/2)\*31.6/79 = 137.60ms



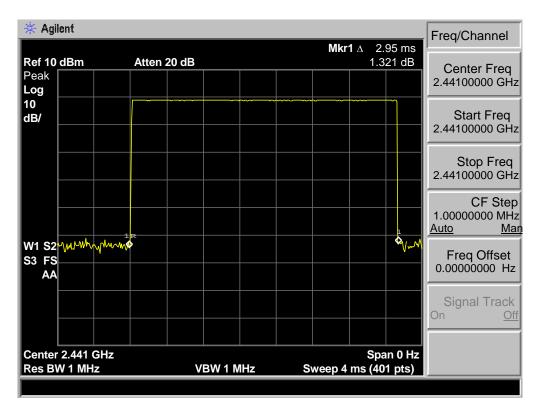


## GFSK DH3: 1.70 \* (1600/4)\*31.6/79= 272.00ms



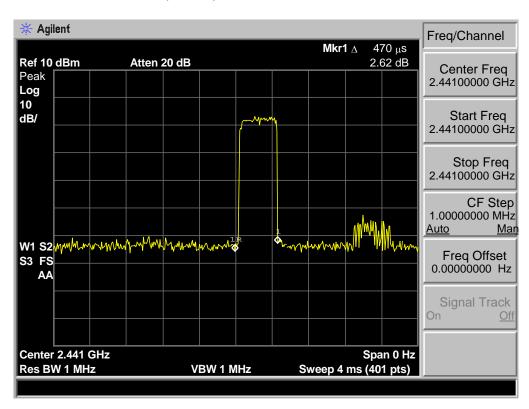


## **GSFK DH5**: 2.95 \* (1600/6)\*31.6/79 = 314.67ms



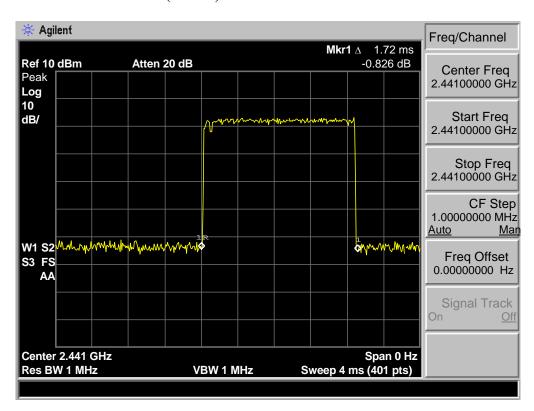


## 8-DPSK DH1: 0.47 \* (1600/2)\*31.6/79= 150.40ms



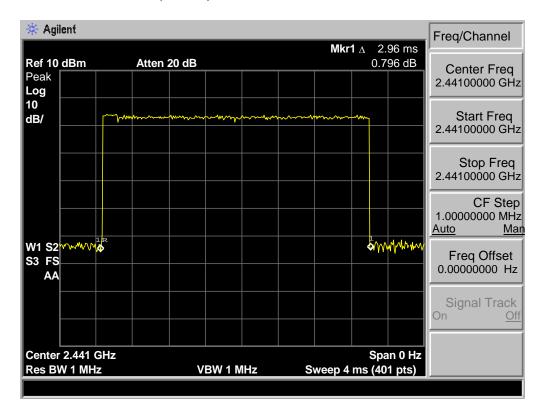


## 8-DPSK DH3: 1.72 \* (1600/4)\*31.6/79= 275.20ms





### GSFK DH5: 2.96 \* (1600/6)\*31.6/79 = 315.73ms





EST Technology Co., Ltd Report No. ESTE-R1505001 Page 35 of 105

# 8. RADIATED EMISSIONS

## 8.1. Limit

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.

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> )

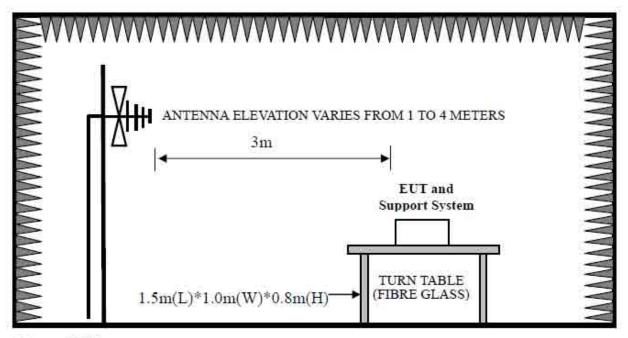
15.209 Limit

FREQUENCY MHz		DISTANCE	FIELD STRENGTHS LIMIT	
		Meters	μV/m	$dB(\mu V)/m$
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		/)/m (Peak)
1100 / 0	1000		54.0 dB(μV)/m (Average)	

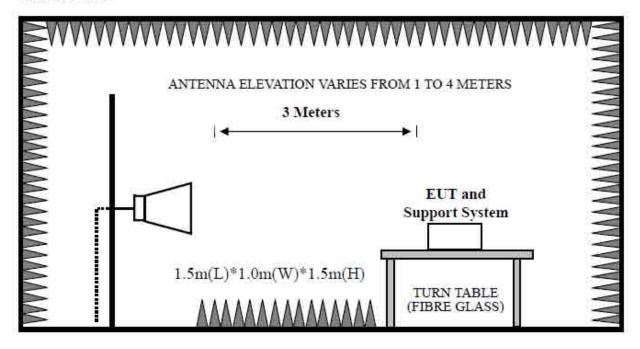
EST Technology Co., Ltd Report No. ESTE-R1505001 Page 36 of 105

# 8.2. Block Diagram of Test setup

30~1000MHz



Above 1GHz



EST Technology Co., Ltd Report No. ESTE-R1505001 Page 37 of 105

### 8.3. Test Procedure

EUT was placed on a turn table, which is 0.8 meter high above ground for 30~1000MHz test, and which is 1.5 meter high above ground for above 1GHz test. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 1MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

PEAK detector, 1MHz/1MHz for PAEK measurement, PEAK detector, 1MHz/10Hz for Average measurement

The frequency range from 30MHz to 10th harmonic (25GHz) are checked.

### 8.4. Test Result

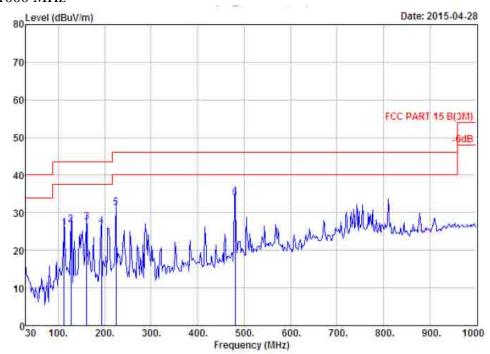
30MHz—25GHz Radiated emissison Test result									
EUT: Car Multimedia Player									
M/N: BVML9384									
Power: DC 12V									
Test date: 2015-04-28 Test site: 3m Chamber Tested by: Tony Tang									
Test mode: Tx Mode									
Pass									

- Note: 1. For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
  - 2. The frequency 2402MHz \ 2441MHz and 2480MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.

EST Technology Co., Ltd Report No. ESTE-R1505001 Page 38 of 105

### 8.5. Test Data

### 30 MHz - 1000 MHz



Data no. : 468 Ant. pol. : VERTICAL Site no. : 1# 966 chamber Dis. / Ant. : 3m 27137 Limit : FCC PARI 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

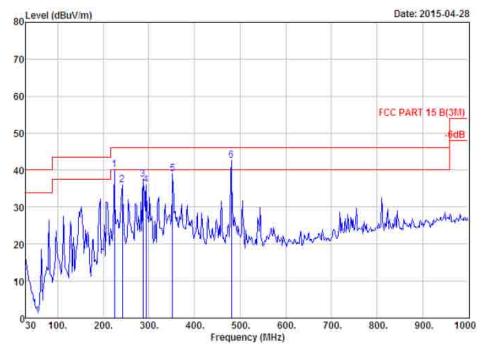
Engineer : Tony

EUI : Car Multimedia Player

Power : DC 12V : BVML9384 M/N : GFSK TX 2402MHz Test Mode

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
 1	112.45	10.68	1.43	13.86	25.97	43.50	17.53	QP
2	127.00	11.34	1.50	14.05	26.29	43.50	16.61	QF
3	160.95	10.24	1.70	15.58	27.52	43.50	15.98	QP
4	192.96	7.85	1.77	16.75	26.37	43.50	17.13	QP
5	224.00	9.42	2.01	19.93	31.36	46.00	14.64	QP
ő	481.05	17.49	3.09	13.31	33.89	46.00	12,11	QP.





: 1# 966 chamber : 3m 27137 : FCC PART 15 B(3M) Data no. : 469 Site no. Ant. pol. : HORIZONTAL Dis. / Ant.

Limit. Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

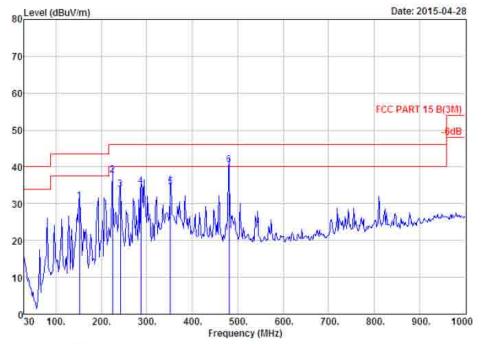
Engineer

: Tony : Car Multimedia Player EUT

Power : DC 12V : BVML9384 M/H : GFSK TX 2402MHz Test Mode

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	224.00	9.42	2.01	59.64	40.12	46.00	5.88	QE
2	241.46	10.50	2.14	54.50	36.14	46.00	9.86	QP
3	287.05	12.59	2.32	53.82	37.60	46.00	8.40	QF
4	293.84	12.92	2.33	51.97	36.02	46.00	9.98	QP
5	352.04	14.47	2.53	53.03	39.09	46.00	6.91	QP
6	481.05	17.49	3.09	53.03	42.69	46.00	3.31	QF





: 1# 966 chamber Data no. : 3m 27137 Ant. pol : FCC PART 15 B(3M) : Temp:23.6';Humi:56%;Press:101.52kPa Data no. : 470 Site no. Dis. / Ant. Ant. pol. : HORIZONTAL

Limit Env. / Ins.

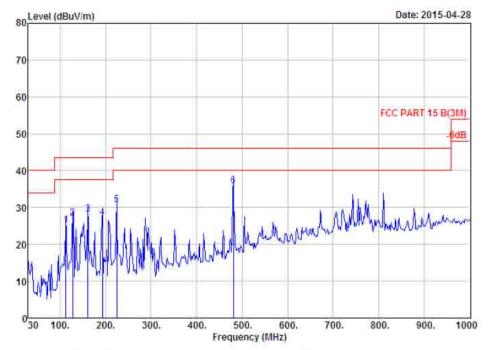
Engineer : Tony

EUI : Car Multimedia Player

: DC 12V : BVML9384 Power M/H Test Mode : GFSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	151.25	10.82	1.61	18.27	30.70	43.50	12.80	QP
2	224.00	9,42	2.01	26.28	37.71	46.00	8.29	QF
3	241.46	10.50	2.14	21.30	33.94	46.00	12.06	QP
4	287.05	12.59	2.32	19.90	34.81	46.00	11,19	QP
5	352.04	14.47	2.53	17.53	34.53	46.00	11,47	QP
6	481.05	17.49	3.09	19.93	40.51	46.00	5.49	OP





Data no. : 471 Ant. pol. : VERTICAL : 1# 966 chamber Site no. : 3m 27137 : FCC PART 15 B(3M) Dis. / Ant.

Limit

Env. / Ins. : Temp:23.6';Hum1:56%;Press:101.52kPa

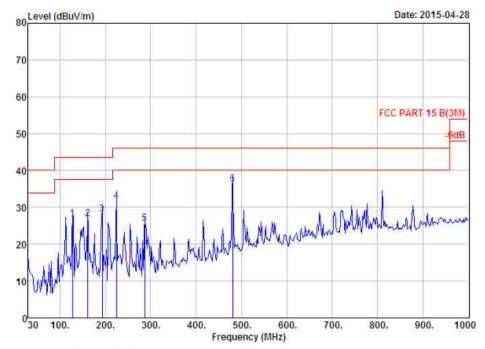
Engineer

: Iony : Car Multimedia Player EUI

: DC 12V : BVML9384 Power M/N Test Mode : GFSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	112.45	10.68	1.43	13.00	25.11	43.50	18.39	QP
2	127.00	11.34	1.50	14.17	27.01	43.50	16.49	QP
3	160.95	10.24	1.70	16.32	28.26	43.50	15.24	QF
4	192.96	7,85	1.77	17.77	27.39	43.50	16.11	QP
3	224.00	9.42	2.01	19.19	30.62	46.00	15.38	QP
6	481.05	17.49	3.09	15.30	35.88	46.00	10,12	QF





Site no. : 1# 966 chamber Data no. : 472 : 3m 27137 : FCC PART 15 B (3M) Dis. / Ant. Ant. pol. : VERTICAL

Limit.

: Temp:23.6'; Humi:56%; Press:101.52kPa : Tony : Car Multimedia Player Env. / Ins.

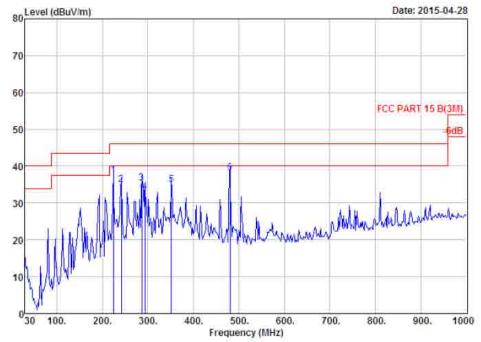
Engineer

EUT

: DC 12V Power : BVML9384 22/27 : GFSK TX 2480MHz Test Mode

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
 1.	127.00	11.34	1.50	14,05	26.89	43.50	16.61	QE.
2	160.95	10.24	1.70	14.87	26.81	43.50	16.69	QP
3	192.96	7,85	1.77	18.64	28,26	43.50	15.24	QP
4	224.00	9.42	2.01	20.26	31.69	46.00	14.31	QP
5	287.05	12.59	2.32	10.70	25.61	46.00	20.39	QP
6	481,05	17,49	3.09	15.74	36.32	46.00	9.68	QF





Data no. : 473 Ant. pol. : HORIZONTAL Site no. : 1# 966 chamber : 3m 27137 Ant. po: : FCC PARI 15 B(3M) : Iemp:23.6':Humi:56%:Fress:101.52kPa Dis. / Ant.

Limit

Env. / Ins.

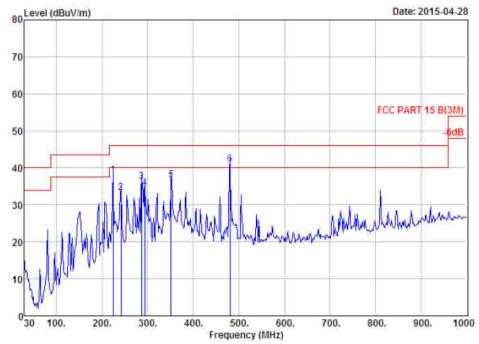
Engineer

: Tony : Car Multimedia Player EUT

; DC 12V Power M/N ; BVML9384 Test Mode : GESK TX 2480MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	224.00	9.42	2.01	26.03	37.46	46.00	8.54	QP
2	241,46	10.50	2.14	22,36	35,00	46,00	11.00	QF
3	287.05	12.59	2.32	20.58	35.49	46.00	10.51	QP
4	293.84	12.92	2.33	17.75	33.00	46.00	13.00	QP
5	352,04	14.47	2.53	17.97	34.97	46.00	11.03	QP
6	481.05	17.49	3.09	17.62	38.20	46.00	7.80	QP





: 1# 966 chamber : 3m 27137 : FCC PART 15 B(3M) Data no. : 474 Site no. Ant. pol. : HORIZONTAL Dis. / Ant.

Limit

: Temp:23.6';Humi:56%;Press:101.52kPa Env. / Ins.

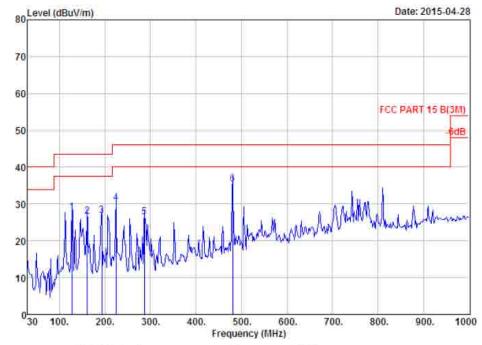
Engineer

EUT

: Tony : Car Multimedia Player : DC 12V Power : BVML9384 25/N Test Mode : 8-DPSK TX 2402MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	224,00	9,42	2,01	26.58	38.01	46,00	7,99	QP
2	241.46	10.50	2.14	20.64	33.28	46.00	12.72	QP
3	287.05	12.59	2.32	21.37	36.28	46.00	9.72	QP
4	293.84	12.92	2.33	19.21	34.46	46.00	11.54	QP
5	352.04	14.47	2.53	19.76	36.76	46,00	9,24	QP
6	481,05	17,49	3,09	20.35	40.93	46.00	5.87	QP





Site no. : 1# 966 chamber Data no. : 475 Dis. / Ant. Limit : 3m 27137 : FCC PART 15 B(3M) Ant. pol. : VERIICAL

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer : Tony

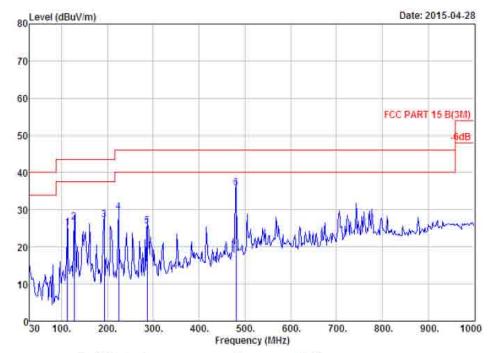
EUT : Car Multimedia Player

Power : DC 12V M/II : BVML9384 Test Mode : 8-DPSK TX 2402MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
 1	127,00	11.34	1.50	14.87	27,71	43.50	15.79	QP
2	160,95	10.24	1.70	14.66	26.60	43.50	16.90	QP
3	192.96	7.85	1.77	17.23	26.85	43.50	16.65	QP
4	224.00	9.42	2.01	18.95	30.38	46.00	15.62	QP
5	287.05	12,59	2.32	11.52	26.43	46.00	19.57	QF
6	481.05	17.49	3.09	14.88	35.46	46.00	10.54	OP



EST Technology Co., Ltd



Site no. : 1# 966 chamber Data no. : 476
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Iony

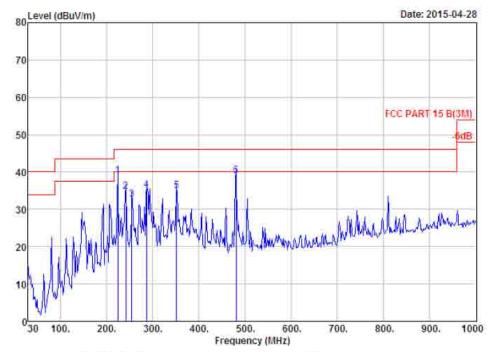
EUT : Car Multimedia Player

Power : DC 12V M/N : BVML9384

Test Mode : 8-DPSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	112,45	10.68	1.43	13.16	25,27	43,50	18,23	QP.
2	127.00	11.34	1,50	13.72	26.56	43.50	16.94	QP
3	192.96	7.85	1.77	17.61	27.23	43.50	16.27	QP
4	224.00	9.42	2.01	18.01	29.44	46.00	16.56	QF
5	287.05	12.59	2.32	10.75	25.66	46.00	20,34	QP
6	491 05	17 49	9 00	15 30	25 00	46 00	10 12	O.D.





: 1# 966 chamber : 3m 27137 : FCC PART 15 B(3M) Data no. : 477 Ant. pol. : HORIZONTAL Site no. Dis. / Ant.

Limit

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer

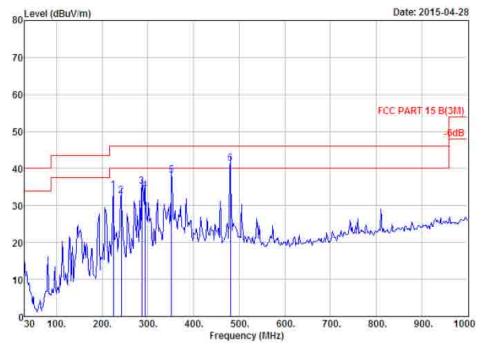
: Tony : Car Multimedia Flayer : DC 12V EUI

Fower M/M : BVML9384

Test Mode : 6-DPSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	224.00	9.42	2.01	27.53	38.96	46.00	7.04	QP
2	241.46	10.50	2.14	22.12	34.76	46.00	11.24	QP
13	255.04	12.41	2.13	18.13	32.67	46.00	13,33	QP
4	287.05	12.59	2,32	20.36	35.27	46.00	10.73	QP
	352.04	14.47	2.53	17.94	34.94	46,00	11,06	QP
6	481.05	17.49	3.09	18.46	39.04	46.00	6.96	Q₽





Data no. : 478 Ant. pol. : HORIZONTAL Site no. : 1# 966 chamber : 3m 27137 Ant. pol : FCC PART 15 B(3M) : Temp:23.6'; Eumi:56%; Press:101.52kPa Dis. / Ant.

Limit

Env. / Ins.

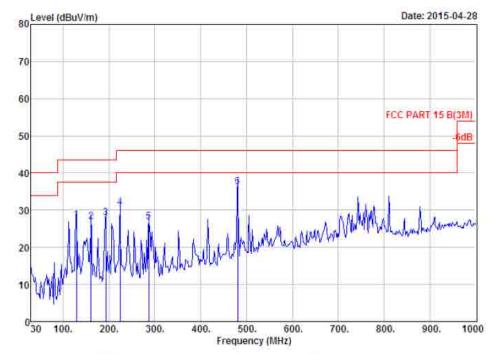
: Tony Engineer

EUI : Car Multimedia Player

Power : DC 12V M/N : BVML9384 : 8-DPSK IX 2480MHz Test Mode

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	224.00	9,42	2.01	22.61	34.04	46,00	11.96	QP
2	241.46	10.50	2.14	19.95	32.59	46.00	13.41	QP
3	287.05	12.59	2.32	20.28	35.19	46.00	10.81	QF
4	293.84	12.92	2.33	18.95	34.20	46.00	11.80	QP
5	352.04	14.47	2.53	21,12	38.12	46.00	7.88	QF
6	481.05	17.49	3.09	20.82	41.40	46.00	4,60	QP
	4	(MHz)  1 224.00 2 241.46 3 287.05 4 293.84 5 352.04	Freq. Factor (MHz) (dB/m)  1 224.00 9.42 2 241.46 10.50 3 287.05 12.59 4 293.84 12.92 5 352.04 14.47	Freq. Factor Loss (MHz) (dB/m) (dB) 1 224.00 9.42 2.01 2 241.46 10.50 2.14 3 287.05 12.59 2.32 4 293.84 12.92 2.33 5 352.04 14.47 2.53	Freq. Factor Loss Reading (MHz) (dB/m) (dB) (dBuV)  1 224.00 9.42 2.01 22.61 2 241.46 10.50 2.14 19.95 3 287.05 12.59 2.32 20.28 4 293.84 12.92 2.33 18.95 5 352.04 14.47 2.53 21.12	Freq. Factor Loss Reading Level (MHz) (dB/m) (dB) (dBuV) (dBuV/m)  1 224.00 9.42 2.01 22.61 34.04 2 241.46 10.50 2.14 19.95 32.59 3 287.05 12.59 2.32 20.28 35.19 4 293.84 12.92 2.33 18.95 34.20 5 352.04 14.47 2.53 21.12 38.12	Freq. Factor Loss Reading Level Limits (MHz) (dB/m) (dB) (dBuV) (dBuV/m) (dBuV/m)  1 224.00 9.42 2.01 22.61 34.04 46.00 2 241.46 10.50 2.14 19.95 32.59 46.00 3 287.05 12.59 2.32 20.28 35.19 46.00 4 293.84 12.92 2.33 18.95 34.20 46.00 5 352.04 14.47 2.53 21.12 38.12 46.00	Freq. Factor Loss Reading Level Limits Margin (MHz) (dB/m) (dB) (dBuV) (dBuV/m) (dBuV/m) (dB)  1 224.00 9.42 2.01 22.61 34.04 46.00 11.96 2 241.46 10.50 2.14 19.95 32.59 46.00 13.41 3 287.05 12.59 2.32 20.28 35.19 46.00 10.81 4 293.84 12.92 2.33 18.95 34.20 46.00 11.80 5 352.04 14.47 2.53 21.12 38.12 46.00 7.88





: 1# 966 chamber : 3m 27137 : FCC PARI 15 B(3M) Data no. : 479 Ant. pol. : VERIICAL Site no. Dis. / Ant.

Limit Env. / Ina. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer : Tony

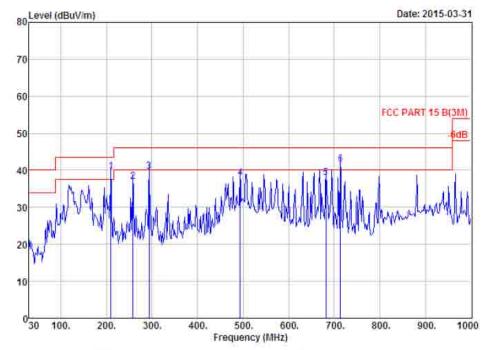
EUT : Car Multimedia Flayer : DC 12V Power

: BVML9384 M/N

: 9-DPSM TX 2480MHz Test Mode

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	128.94	11.33	1,47	14.42	27.22	43.50	16.28	QF
2	160.95	10.24	1,70	14.92	26.86	43.50	16.64	QP
3	192.96	7.85	1.77	18,23	27.85	43,50	15.65	QF
4	224.00	9,42	2.01	19.30	30.73	46.00	15,27	QP
5	287.05	12.59	2.32	11.87	26.78	46.00	19.22	QP
6	481,05	17,49	3.09	15.75	36.33	46.00	9,67	QP





Data no. : 346 Ant. pol. : VERTICAL : 1# 966 chamber Dis. / Ant. : 3m 27137

Limit

: FCC PART 15 B(3M) : Temp:23.6';Humi:56%;Fress:101.52kPa : Tony Env. / Ins.

Engineer

EUI : Car Multimedia Player

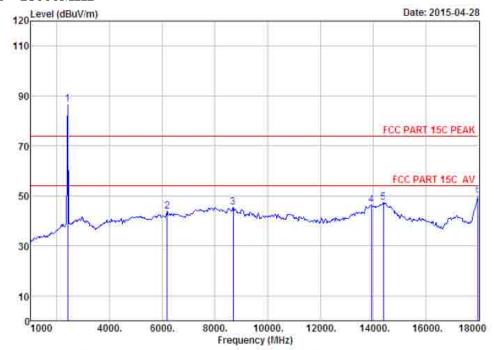
Power : DC 12V M/II : VX7022

Test Mode : 8-DPSK IX 2480MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	209.45	8,37	1.91	29.43	39.71	43.50	3,79	QP
2	257.95	12.75	2.19	21.97	36.91	46.00	9.09	QF
3	293,84	12.92	2.33	24.52	39.77	46.00	6.23	QP
4	493.66	17,84	3.14	16.91	37.89	46.00	9,11	QP
5	681.84	20.30	3.67	14.07	38.04	46.00	7.96	QP
	713.85	21.20	3.78	16.70	41.68	46.00	4.32	OF.



### 1000 MHz - 18000MHz



Data no. : 403 Ant. pol. : VERTICAL Site no. : 1# 966 chamber Dis. / Ant. : 3m ANT 1-18G Ant. pc: Limit : FCC PART 15C PEAK Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer ; Iony

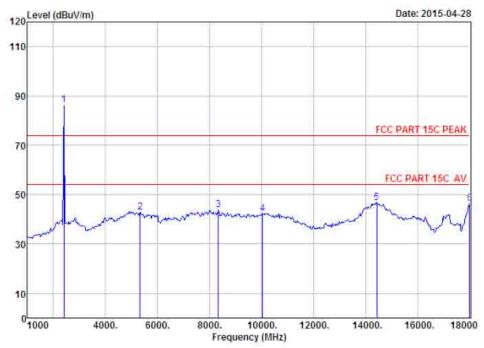
EUI : Car Multimedia Player

: DC 12V Power ; BVML9384 M/N ; GFSK IX 2402MHz Test Mode

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.61	6.62	34.18	86.73	86.78	74.00	-12.78	Peak
2:	6185.00	33.19	12.16	32.03	30.54	43.86	74.00	30.14	Peak
3	8684.00	37.32	11,45	32,43	29.13	45,47	74.00	28.53	Peak
4	13937.00	41.31	10.98	34.19	28.42	46.52	74.00	27.48	Peak
5	14396.00	41.79	10.92	32.83	27.34	47.22	74.00	26.78	Peak
6	18000.00	46,45	11.38	27.85	20.26	50.24	74.00	23,76	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Data no. : 404 Ant. pol. : HORIZONTAL Site no. : 1# 966 chamber : 3m ANT 1-18G : FCC PART 15C PEAK Dis. / Ant.

Limit Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

: Tony Engineer

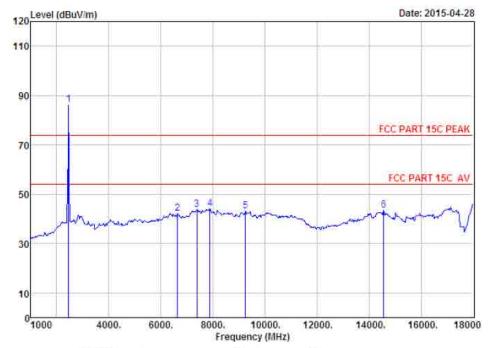
: Car Multimedia Player EUT

Power 1 DC 12V M/N : BVML9384 Test Mode : GFSK IX 2402MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
i	2402.00	27.61	6.62	34.18	86.48	86.53	74.00	-12.53	Peak
2	5335.00	31.71	12.19	32.31	31.34	42.93	74.00	31.07	Peak
3	8344.00	36,67	11,43	31.67	27.31	43.74	74.00	30.26	Peak
4	10044.00	38.18	11.56	31.85	24.44	42.33	74.00	31.67	Peak
5	14430.00	41,82	10,93	32.84	26.73	46.64	74.00	27.36	Peak
6	18000.00	46.45	11.38	27.85	16.45	46.43	74.00	27.57	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Data no. : 407 Site no. : 1# 966 chamber Dis. / Ant. : 3m ANT 1-18G Limit : FCC PART 15C PEAK Ant. pol. : VERTICAL

: Temp:23.6'; Humi:56%; Press:101.52kPa : Tony : Car Multimedia Flayer : DC 12V Env. / Ins.

Engineer

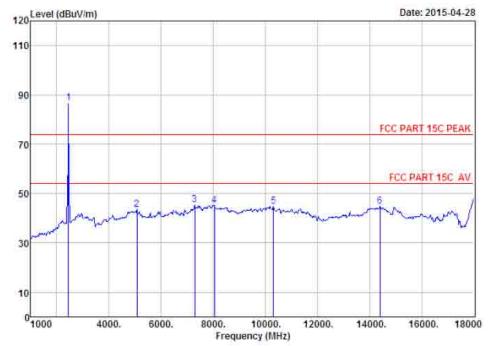
EUT

Power : BVML9384 M/H Test Mode : GFSK IX 2441MH2

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1.	2441.00	27.60	6.67	34,12	86.21	86.36	74.00	-12.36	Peak
2	6644.00	34.48	12.02	32.20	27.98	42.28	74.00	31.72	Feak
3	7375.00	36.57	11.59	31.98	27.79	43.97	74.00	30.03	Peak
4	7885.00	36,78	11.45	31.33	27.30	44.20	74.00	29.80	Feak
5	9245.00	37.83	11.58	32.26	26.01	43.16	74.00	30.84	Peak
6	14566.00	41.71	10.92	33.32	24.12	43.43	74.00	30,57	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 1# 966 chamber : 3m ANT 1-18G : FCC PART 15C PEAK Data no. : 408 Ant. pol. : HORIZONTAL Site no. Dis. / Ant.

Limit

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

: Tony Engineer

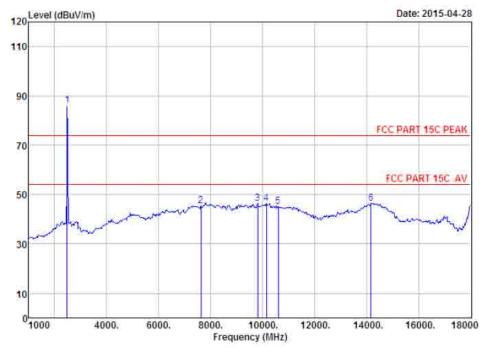
: Car Multimedia Player EUT

Power : DC 12V M/N : BVML9384 Test Mode : GFSK IX 2441MHz

	Freq. (MHz)	Ant, Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
Ī	2441.00	27.60	6.67	34.12	86.48	86.63	74.00	-12.63	Peak
2	5080.00	31.59	12.49	32.14	31.82	43,56	74.00	30.44	Peak
3	7290.00	36,54	11.56	32.02	29.27	45.35	74.00	28.65	Feak
4	8055.00	36.91	11.41	31.31	28.17	45.18	74.00	28.82	Peak
5	10316.00	38.65	11,41	32.37	27.14	44.83	74.00	29.17	Peak
6	14396.00	41.79	10.92	32.83	25.00	44.88	74.00	29.12	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Data no. : 409 Ant. pol. : HORIZONTAL Site no. : 1# 966 chamber : 3m ANT 1-18G Ant. pol : FCC PART 15C PEAK : Temp:23.6';Humi:56%;Press:101.52kPa Dis. / Ant.

Limit

Env. / Ins.

: Tony Engineer

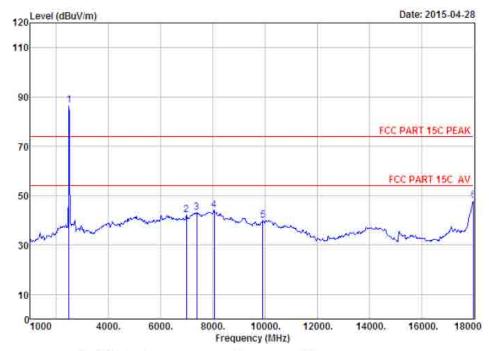
: Car Multimedia Player EUT

Power : DC 12V : BVML9384 : GFSK TX 2480MHz M/N Test Mode

	Freq. (MHz)	Ant, Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	34.03	85.70	85.96	74.00	-11.96	Peak
2	7630.00	36,41	11.56	31.68	29.31	45.60	74.00	28.40	Peak
3	9806.00	38,17	11.64	31.84	28.30	46.27	74.00	27,73	Feak
4	10146.00	38.36	11.51	32.05	28.57	46.39	74.00	27.61	Peak
5	10605.00	39.09	11,31	32,91	27.54	45.03	74.00	28.97	Peak
6	14175.00	41.61	10.91	33.44	27.47	46.55	74.00	27.45	Feak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 1# 966 chamber Data no. : 410 Site no. : 3m ANT 1-18G : FCC PART 15C PEAK Dis. / Ant. Ant. pol. : VERTICAL

Limit

Env. / Ins. : Temp:23.6';Hum1:56%;Press:101.52kPa

Engineer

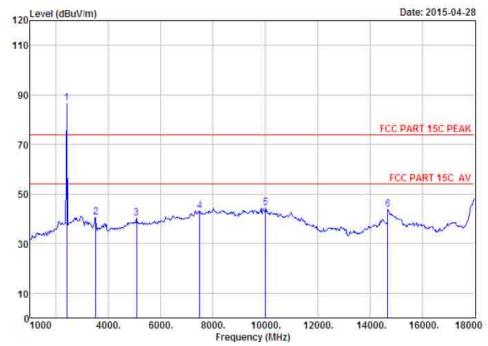
: Tony : Car Multimedia Player EUI

: DC 12V Power : BVML9384 M/N : GFSK IX 2480MHz Test Mode

	Freq.	Ant. Factor (dB/m)		Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480,00	27,58	6.71	34.03	86,52	86.78	74.00	-12,78	Peak
2	6984.00	35,46	11.51	32,47	27.77	42.27	74.00	31.73	Peak
3	7375.00	36.57	11.59	31.98	26.93	43.11	74.00	30.89	Peak
4	8055.00	36.91	11.41	31.31	27.08	44.09	74.00	29.91	Feak
5	9925.00	38,14	11:61	31.76	22.15	40.14	74.00	33.86	Peak
6	18000,00	46,45	11,38	27,85	18,10	48,08	74.00	25,92	Peak
3 4 5	6984.00 7375.00 8055.00 9925.00	35,46 36,57 36,91 38,14	11.51 11.59 11.41 11.61	32,47 31,98 31,31 31,76	27.77 26.93 27.08 22.15	42.27 43.11 44.09 40.14	74.00 74.00 74.00 74.00	31.73 30.89 29.91 33.86	Pr Pr Pr

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Data no. : 425 Ant. pol. : HORIZONTAL Site no. : 1# 966 chamber Dis. / Ant. ; 3m ANT 1-18G Limit ; FCC PARI 15C FEAK

Limit Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

: Iony Engineer

EUT : Car Multimedia Player

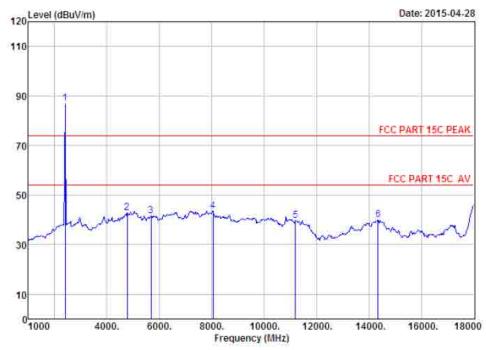
Power : DC 12V : BVML9384 M/H

: 8-DPSK TX 2402MHz Test Mode

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.61	6.62	34.18	86.58	86,63	74.00	-12.63	Peak
2	3516.00	28.54	8.77	32.90	36.08	40.49	74.00	33.51	Feak
3	5080.00	31.59	12.49	32.14	28.30	40.24	74.00	33.76	Peak
4	7494.00	36.48	11,62	31,87	26,97	43.20	74.00	30,80	Peak
5	10010.00	38.12	11.58	31,79	26.54	44.45	74.00	29.55	Peak
6	14685.00	41.30	10,90	33,74	25.45	43.91	74.00	30.09	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 1# 966 chamber : 3m ANT 1-18G : FCC PART 15C PEAK Data no. : 426 Ant. pol. : VERTICAL Site no. Dis. / Ant.

Limit

Env. / Ins. : Temp:23.61; Humi:56%; Press:101.52kPa

: Tony Engineer

: Car Multimedia Player : DC 12V EUI

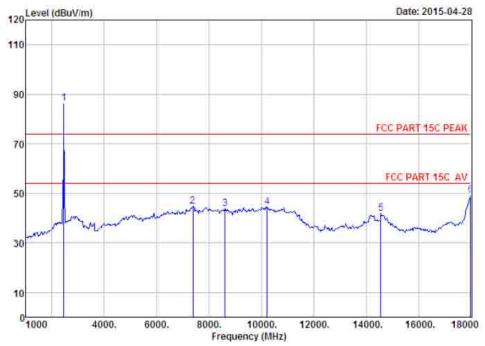
Power 36/33 : BVML9384

Test Mode : 8-DPSK IX 2402MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (GB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.61	6.62	34.18	87.02	87.07	74.00	-13.07	Peak
2	4774.00	31,20	11.62	31.79	31.78	42.81	74.00	31.19	Peak
3	5675.00	32.14	12.03	32.52	30.12	41.67	74.00	32.33	Peak
4	8055.00	36.91	11.41	31.31	26.64	43.65	74.00	30.35	Peak
5	11200.00	39.39	11.14	34.03	23.34	39.84	74.00	34.16	Peak
6	14345.00	41,76	10,92	32.93	20.22	39.97	74.00	34,03	Feak

Remarks: I. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 429
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Car Multimedia Player

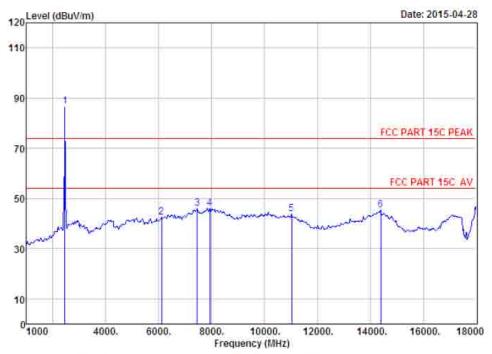
Power : DC 12V M/N : BVML9384

Test Mode : 8-DFSK TX 2441MHz

<u> </u>	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	2441.00	27,60	6,67	34.12	86.26	86.41	74,00	-12.41	Peak
2	7375.00	36.57	11.59	31,98	28,58	44.76	74.00	29.24	Feak
3	8616.00	37.22	11.45	32.27	27.34	43.74	74.00	30.26	Peak
- 4	10214.00	38.48	11.47	32.17	26.79	44.57	74.00	29.43	Peak
5	14566.00	41,71	10.92	33.32	22.52	41.83	74.00	32,17	Peak
6	18000.00	46,45	11.38	27.85	19,17	49.15	74.00	24.85	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber
Dis. / Ant. : 3m ANT 1-18G
Limit : FCC PART 15C PEAK Data no. : 430 Ant. pol. : VERTICAL

Limit Env. / Ins. : Temp:23.6'; Hum1:56%; Press:101.52kPa

Engineer : Tony

: Car Multimedia Player EUI

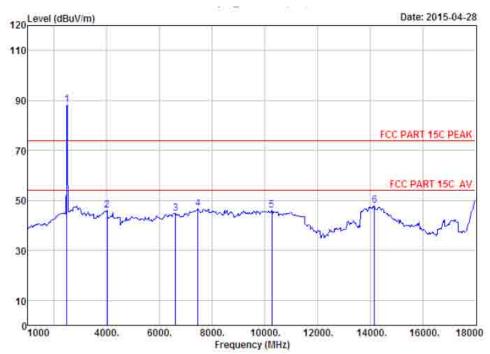
Power : DC 12V : BVML9384 M/H

Test Mode : 8-DPSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.00	27.60	6.67	34,12	86.41	86.56	74,00	-12,56	Peak
2	6100.00	33.00	12.14	32.19	29.56	42.51	74.00	31.49	Feak
3	7460.00	36.52	11.61	31.91	29.81	46.03	74.00	27.97	Peak
4	7936.00	36.88	11.43	31.28	29.07	46.10	74,00	27.90	Peak
5	11030.00	39,50	11.27	33.71	26.68	43.74	74,00	30.26	Peak
6	14396.00	41.79	10.92	32,83	25.51	45.39	74.00	28.61	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Amp Factor + Reading.





Data no. : 431 Ant. pol. : VERTICAL : 1# 966 chamber Site no. Dis. / Ant. : 3m ANT 1-18G Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Teny

: Car Multimedia Flayer EUI

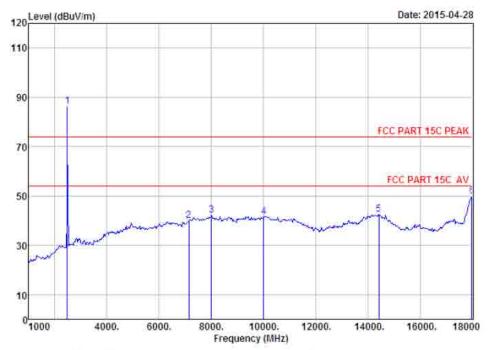
: DC 12V Power M/H : BVML9384

Test Mode : 8-DPSK TX 2480MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	34.03	87.99	88.25	74.00	-14.25	Feak
2	4009.00	29,68	10.27	32.34	37.79	46.00	74.00	28.00	Peak
3	6610.00	34.47	12,07	32.18	30.58	44.94	74.00	29,06	Peak
4	7460.00	36.52	11.61	31.91	30.51	46.73	74.00	27.27	Feak
5	10265.00	38.56	11.44	32.27	28.45	46.18	74.00	27.82	Feak
6	14175.00	41.61	10.91	33.44	29.08	48.16	74.00	25.84	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 432
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer : Tony

EUT : Car Multimedia Player

Power : DC 12V M/N : BVML9384

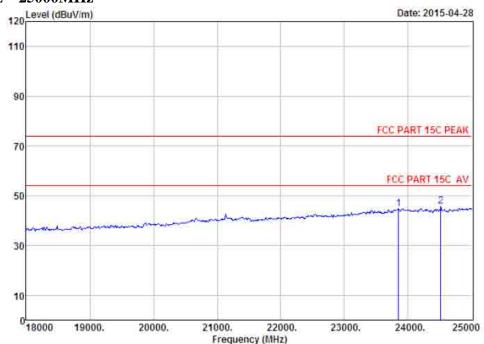
Test Mode : 3-DPSK TX 2480MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	34.03	86,28	86.54	74,00	-12.54	Feak
2	7137.00	36.17	11.52	32.24	24.48	39.93	74.00	34.07	Feak
3	8004.00	37.01	11.40	31.22	25.00	42.19	74.00	31.81	Peak
4	10010.00	38.12	11,58	31.79	23.84	41,75	74.00	32.25	Peak
5	14430.00	41.32	10.93	32.84	22.53	42,44	74.00	31.56	Peak
6	18000.00	46.45	11.38	27,85	19.97	49.95	74,00	24.05	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.



## 18000MHz - 25000MHz



Site no. : 1# 966 chamber
Dis. / Ant. : 3m ANT ABVOE 18G
Limit : FCC PART 15C PEAK Data no. : 413 Ant. pol. : HORIZONTAL

Limit Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer : Tony

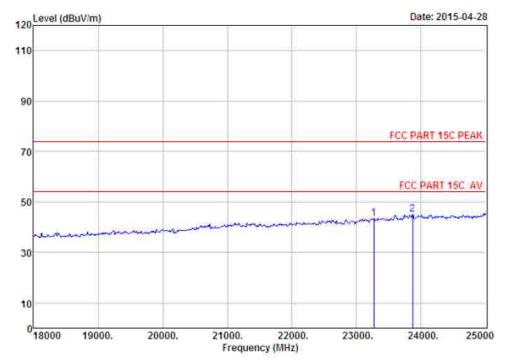
EUT : Car Multimedia Player

: DC 12V : BVML9384 Power 14/17 Test Mode : GESK TX 2402MBz

	Freq. (MHz)			-	Reading (dBuV)	Lmission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
	23845.00				10.28	44,85	74,00	29,15	Peak
2	24510.00	45.72	22.32	33.58	11,31	45.77	74.00	28.23	Feak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Data no. : 414 Ant. pol. : VERTICAL : 1# 966 chamber Site no. Dis. / Ant. : 3m ANT ABOVE 18G

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6':Humi:56%;Press:101.52kPa

Engineer : Tony

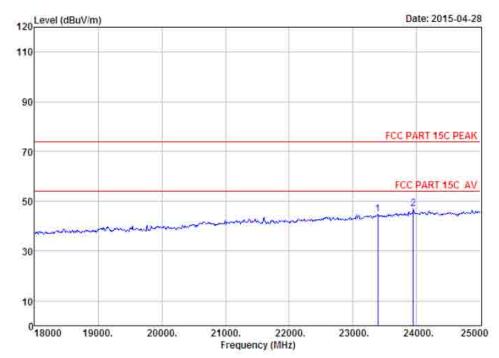
EUI

: Car Multimedia Player : DC 12V Power ; BVML9384 M/N Test Mode : GFSK TX 2402MHz

	Freq.				Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	23264.00	45.65	21.39	33.56	10.10	43.58	74.00	30.42	Peak
2	23866,00	45.63	21.93	32,93	10.36	44.99	74.00	29.01	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 1# 966 chamber : 3m ANT ABOVE 18G : FCC PART 15C PEAK Data no. : 415 Ant. pol. : VERTICAL Dis. / Ant.

Limit

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

: Tony Engineer

: Car Multimedia Player EUT

Power ; DC 12V ; BVML9384

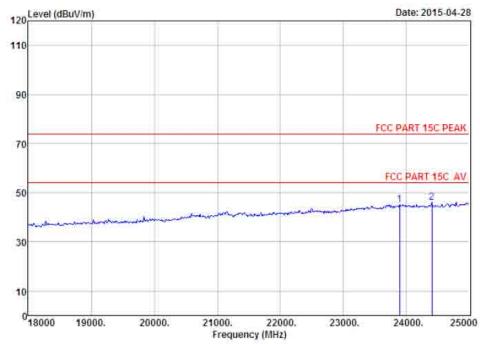
M/H : GFSK TX 2441MHz Test Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
ĩ	23390.00	45.68	21.50	33.43	11.06	44.81	74.00	29.19	Peak
2	23950,00	45.61	22.00	32.85	12,13	46.89	74.00	27.11	Pesk

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading. 2. The emission levels that are 20dB below the official

limit are not reported.





Data no. : 416 Site no. : 1# 966 chamber : 3m ANT ABVOE 18G : FCC PART 15C PEAK Dis. / Ant. Ant. pol. : HORIZONTAL

Limit

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer

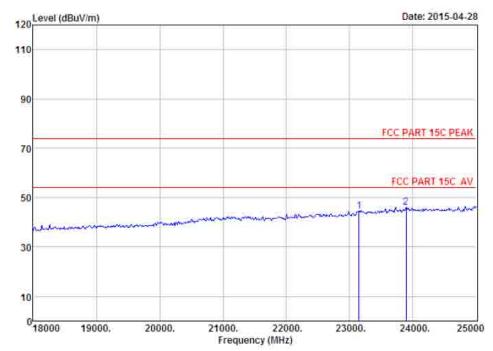
: Tony : Car Multimedia Player EUT

: DC 127 Power M/N : BVML9384 Test Mode : GFSK TX 2441MHz

	Freq.	Ant, Factor (dB/m)			Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
Ì	23894.00	45,62	21.95	32.90	10.36	45.03	74.00	28.97	Peak
2	24405.00	45,68	22.27	33,42	11.40	45,93	74.00	28.07	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Data no. : 417 Ant. pol. : HORIZONTAL Site no. : 1# 966 chamber Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol Limit : FCC PARI 15C PEAK Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

: Tony Engineer

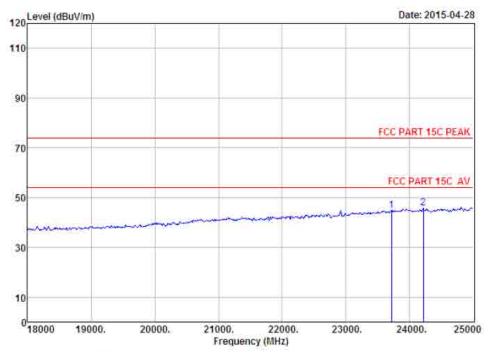
: Car Multimedia Player EUT

Power 1 DC 12V : BVML9384 : GFSK TX 2480MHz M/N Test Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	23145.00	45.63	21.28	33.69	11.38	44.60	74.00	29.40	Peak
2	23894,00	45.62	21.95	32.90	11.43	46.10	74.00	27.90	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 1# 966 chamber : 3m ANT ABOVE 18G : FCC PART 15C PEAK Data no. : 418 Ant. pol. : VERTICAL Site no. Dis. / Ant.

Limit

: Temp:23.6';Huml:56%;Press:101.52kPa : Tony Env. / Ins.

Engineer

EUT : Car Multimedia Player

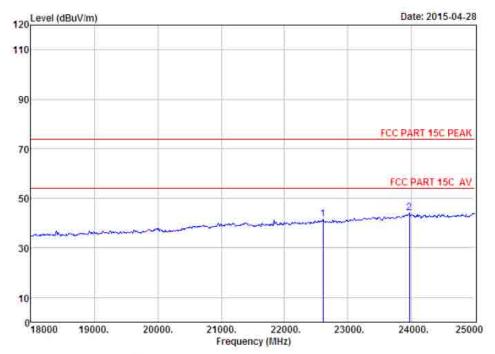
: DC 12V Power M/N : BVML9384

Test Mode ; GFSK TX 2480MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1 2	23719,00		21,79	33.09 33.15	10.44	44.80 45.76	74.00 74.00	29,20 28,24	Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 419
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Tony

EUT : Car Multimedia Player Fower : DC 12V

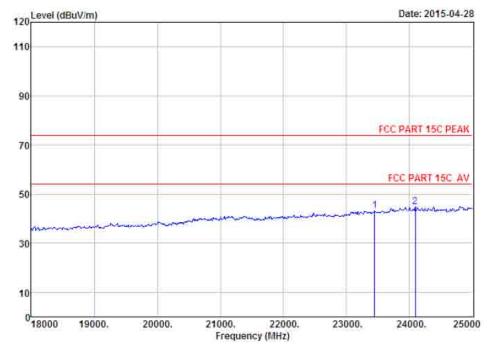
Fower : DC 12V M/W : BVML9384

Test Mode : 8-DPSK TX 2402MHz

(MHz) (dB/m) (dB) (dBuV) (dBuV/	ion Limits Margin Rema (m) (dBuV/m) (dB)	rk
1 22606.00 45.76 20.92 34.27 9.11 41.52	2 74.00 32.48 Pea	k
2 23964.00 45.61 22.02 32.83 9.22 44.02	2 74.00 29.98 Pea	ik

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 420 : 3m ANT ABVOE 18G : FCC PARI 15C PEAK Dis. / Ant. Ant. pol. : HORIZONTAL

Limit

: Temp:23.6';Humi:56%;Press:101.52kPa Env. / Ins.

: Tony Engineer

EUT : Car Multimedia Player

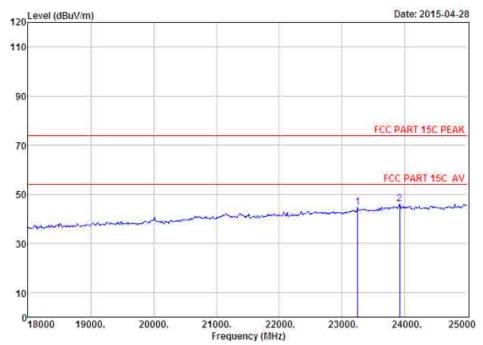
: DC 12V Power M/N : BVML9384

Test Mode : 8-DPSK TX 2402MHz

Freq.		 Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
23446.00		9.30	43.16 44.86	74.00 74.00	30.84	Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 1# 966 chamber Data no. : 421 Site no. : 3m ANI ABVOE 18G : FCC PARI 15C PEAK Dis. / Ant. Ant. pcl. : HORIZONTAL

Limit Env. / Ina. : Temp:23.6'; Hum1:56%; Press:101.52kPa

Engineer : Tony

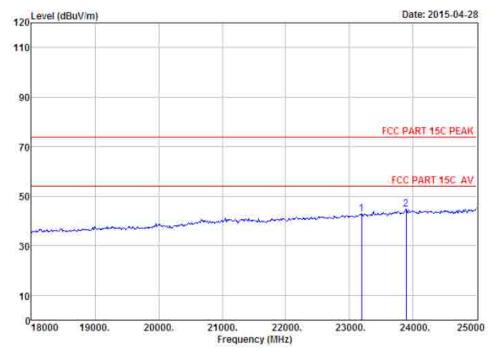
EUI : Car Multimedia Player

Power : DC 12V : BVML9384 M/H : 8-DPSK TX 2441MHz Test Mode

	Freq.	Factor	Cable Loss (dB)	Factor	Reading (dBuV)	Level (dBuV/m)	Limite (dBuV/m)	Margin (dB)	Remark
1	23250.00	45.65	21.37	33.59	11.27	44.70	74,00	29.30	Peak
2	23915.00	45.62	21.97	32.88	11.41	46.12	74.00	27.88	Feak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Data no. : 422 Ant. pol. : VERTICAL Site no. : 1# 966 chamber Dis. / Ant. : 3m ANT ABOVE 18G Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

: Teny Engineer

: Car Multimedia Player : DC 12V EUI

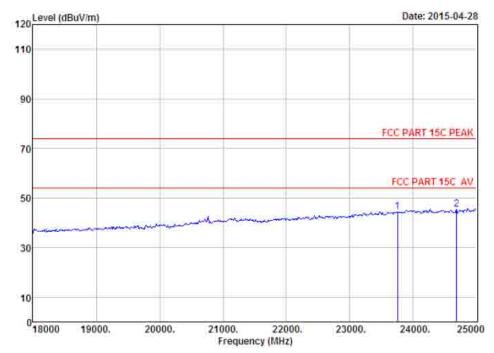
Power : BVML9384 M/H

Test Mode : 8-DPSK TX 2441MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	23194.00	45,64	21.32	33.64	9.66	42.98	74.00	31.02	Feak
2	23894.00	45.62	21.95	32.90	10.02	44.69	74.00	29.31	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 1# 966 chamber Data no. : 423 Site no. Dis. / Ant. : 3m ANT ABOVE 18G Limit : FCC PART 15C PEAK Ant. pol. : VERTICAL

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

: Tony Engineer

: Car Multimedia Player : DC 12V EUT

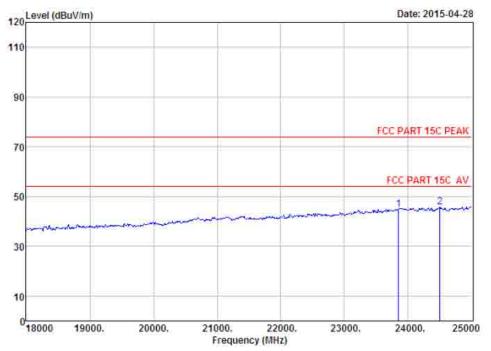
Power : BVML9384 M/N

Test Mode : 8-DPSK TX 2480MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	23754,00	45,65	21,82	33,06	10.13	44.54	74.00	29.46	Peak
2	24685.00	45.86	22,42	33.85	11.00	45.43	74.00	28,57	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading,





Data no. : 424 Ant. pol. : HORIZONTAL Site no. : 1# 966 chamber Dis. / Ant. : 3m ANT ABVOE 18G Limit : FCC PARI 15C PEAK

Limit Env. / Ins.

: Temp;23.6';Humi:56%;Press:101.52kPa

Engineer : Tony

EUI : Car Multimedia Player

Power : DC 12V M/N : BVML9384

: 8-DPSK TX 2480MHz Test Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	23845.00	45.63	21.90	32,96	10.37	44.94	74.00	29.06	Peak
2	24496.00	45.70	22.32	33.58	11,26	45.70	74.00	28.30	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.



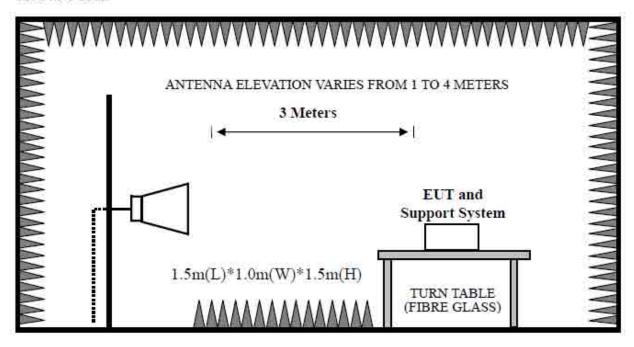
### 9. BAND EDGE COMPLIANCE

#### 9.1. Limit

All the lower and upper band-edges emissions appearing within 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, or comply with 15.209 limits.

## 9.2. Block Diagram of Test setup

Above 1GHz



EST Technology Co., Ltd Report No. ESTE-R1505001 Page 76 of 105



#### 9.3. Test Procedure

EUT was placed on a turn table, which is 1.5 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of emissions

(a) Peak: RBW = 1MHz, VBW = 1MHz, Detector=PEAK detector, Sweep time = auto

(b) AV: RBW = 1MHz, VBW = 10Hz, Detector=PEAK detector, Sweep time = auto.

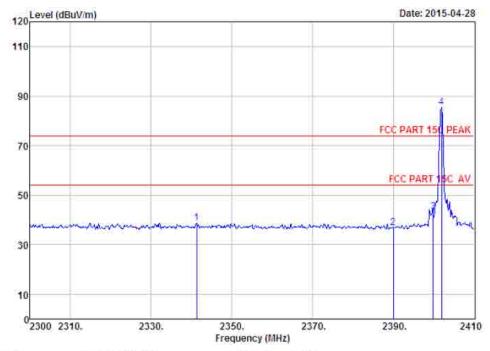
#### 9.4. Test Result

EUT: Car Multimedia Player								
M/N: BVML9384								
Power: DC 12V								
Test date: 2015-04-28 Test site: 3m Chamber Tested by: Tony Tang								
Test mode: Tx Mode (Hopping On & No Hopping)								
Pass								

- Note: 1. For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
  - 2. The frequency 2402MHz \ 2441MHz and 2480MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.

EST Technology Co., Ltd Report No. ESTE-R1505001 Page 77 of 105

#### 9.5. Test Data



Data no. : 405 Ant. pol. : HORIZONTAL Site no. : 1# 966 chamber Dis. / Ant. : 3m ANT 1-18G Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer : Teny

EUT : Car Multimedia Player

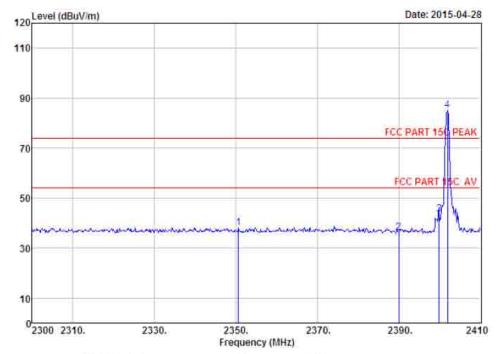
: DC 12V Power : BVML9384 M/N

Test Mode : GFSK TX 2402MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	2341.25	27.70	6.56	34.22	38.59	38.63	74.00	35.37	Peak
2	2389.98	27.64	6.62	34.19	36.62	36.69	74.00	37.31	Peak
3	2399.99	27.61	6.62	34.18	43.01	43.06	74.00	30.94	Peak
4	2402.00	27.61	6.62	34.18	85.38	85.43	74.00	-11.43	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Dis. / Ant. : 3m ANT 1-18G Data no. : 406 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

: Temp:23.6';Humi:56%;Press:101.52kPa : Tony Env. / Ins.

Engineer

EUI : Car Multimedia Player

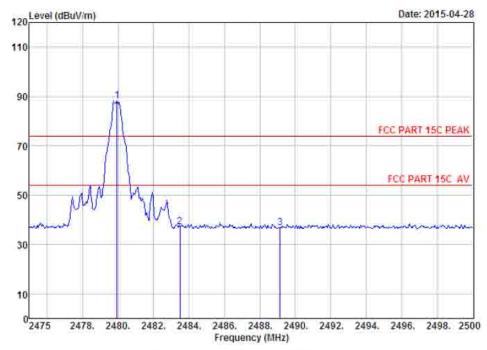
Power : DC 12V M/N : BVML9384

: GFSK TX 2402MHz (No Hopping) Test Mode

	Freq.				Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2350.60	27.70	6.56	34,22	37.96	38,00	74.00	36.00	Feak
2	2389.98	27.54	6.62	34.19	36.19	36.26	74,00	37.74	Peak
3	2399.99	27.61	6.62	34.18	43.48	43.53	74.00	30,47	Peak
4	2402.00	27.61	6.62	34.18	85.16	85.21	74.00	-11.21	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading,





Data no. : 411 Ant. pol. : VERTICAL : 1# 966 chamber Site no. : 3m ANT 1-18G : FCC PART 15C FEAK Dis. / Ant.

Limit

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

: Tony Engineer

EUI : Car Multimedia Player

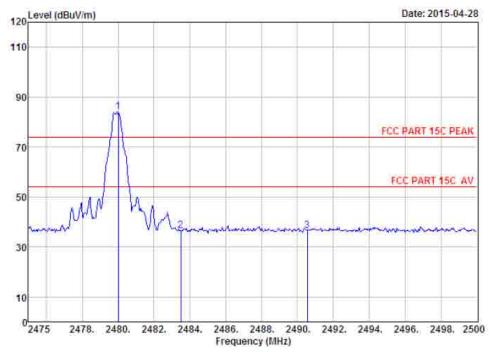
Power : DC 12V M/H : BVML9384

Test Mode : GFSK TX 2480MHz (No Hopping)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	2479,95	27,58	6.71	34.03	89.21	88,47	74.00	-14.47	Peak
2	2483.50	27.58	6.71	34,03	36.95	37.21	74.00	36.79	Peak
3	2489.15	27.58	6.73	34.03	36.43	36.71	74.00	37.29	Feak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Data no. : 412 Ant. pol. : HORIZONTAL Site no. : 1# 966 chamber : 3m ANT 1-18G Dis. / Ant.

Limit : FCC PART 15C PEAK

: Temp:23.6';Humi:56%;Press:101.52kPa : Tony Env. / Ins.

Engineer

: Car Multimedia Flayer EUI

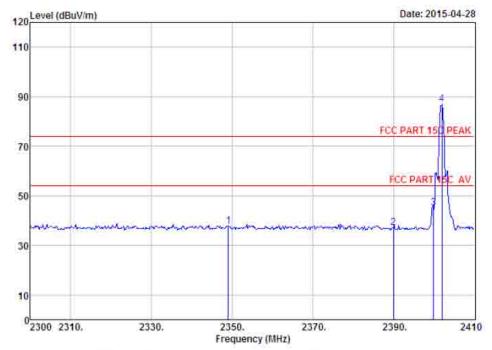
Power : DC 12V M/M : BVML9384

Test Mode : GFSK TX 2480MHz (No Hopping)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	34,03	83,95	84.21	74.00	-10,21	Peak
2	2483.50	27.58	6.71	34.03	36.26	36.52	74.00	37.48	Peak
3	2490.55	27.58	6.73	34.03	36.28	36.56	74.00	37.44	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 1# 966 chamber : 3m ANT 1-18G : FCC PART 15C PEAK Data no. : 427 Ant. pol. : YERIICAL Site no. Dis. / Ant.

Limit Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52%Pa

Engineer : Tony

: Car Multimedia Player : DC 12V EUT

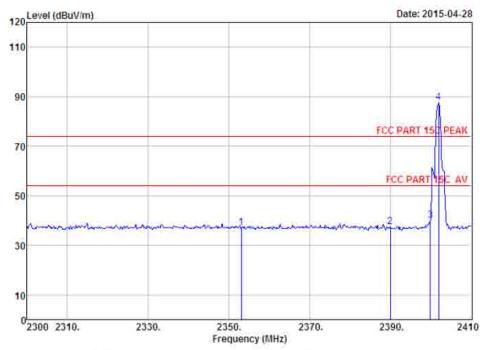
Power M/N

: BVML9384 : B-DPSK TX 2402MHz (No Hopping) Test Mode

	Freq. (MHz)	Factor (dB/m)	Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2349.06	27.70	6,56	34.22	37.66	37.70	74,00	36,30	Peak
2	2389.98	27.64	6,62	34,19	37.01	37.08	74.00	36.92	Peak
- 3	2399.99	27.61	6,62	34,18	45.15	45.20	74.00	28.80	Peak
4	2402,00	27.61	6.62	34.18	87.03	87.08	74.00	-13.08	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 1# 966 chamber : 3m ANT 1-18G : FCC PART 15C PEAK Data no. : 428 Ant. pol. : HORIZONTAL Site no. Dis. / Ant.

Limit Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer : Tony

: Car Multimedia Player : DC 12V EUT

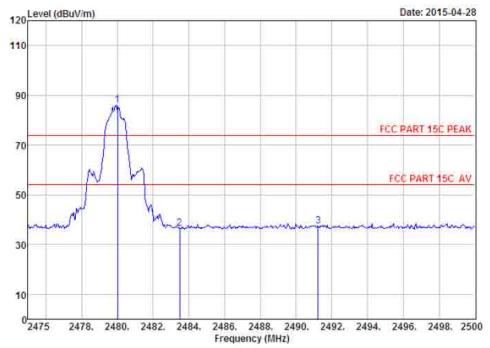
Power M/N

: BVML9384 : 8-DPSW TX 2402MHz (No Hopping) Test Mode

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Factor	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	2353.13	27,70	6.58	34.22	37.07	37,13	74.00	36.87	Feak
2	2389.98	27.64	6.62	34.19	37.33	37.40	74.00	36.60	Peak
3	2399.99	27.61	6.62	34.18	40.02	40.07	74.00	33.93	Peak
4	2402.00	27.61	6.62	34.18	87.57	87.62	74.00	+13.62	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 1# 966 chamber : 3m ANT 1-18G : FCC PART 15C FEAK Site no. Data no. : 433 Dis. / Ant. Ant. pel. : HORIZONTAL

Limit

Env. / Ins. : Temp:23.6'; Hum1:56%; Press:101.52kPa

: Tony Engineer

: Car Multimedia Player : DC 12V EUI

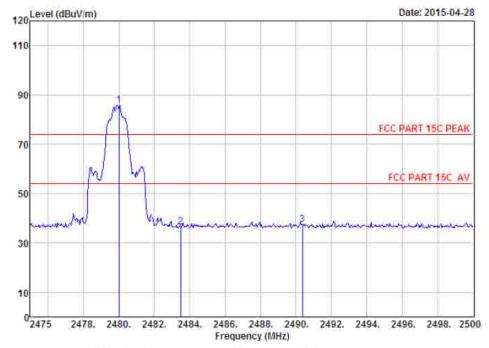
Power M/M : BVML9384

Test Mode : 8-DPSK TX 2480MHz (No Hopping)

	Freq.		Cable Loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	5.71	34.03	85.80	86.06	74,00	-12.06	Peak
2	2483.50	27.58	6.71	34,03	36.23	36.49	74.00	37.51	Feak
3	2491.25	27.58	6.73	34.03	37.05	37.33	74.00	36.67	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Amp Factor + Reading.





: 1# 966 chamber Site no. Data no. : 434 Dis. / Ant. : 3m ANT 1-18G Limit : FCC PART 15C PEAK Ant. pol. : VERTICAL

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer

: Tony : Car Multimedia Player EUI

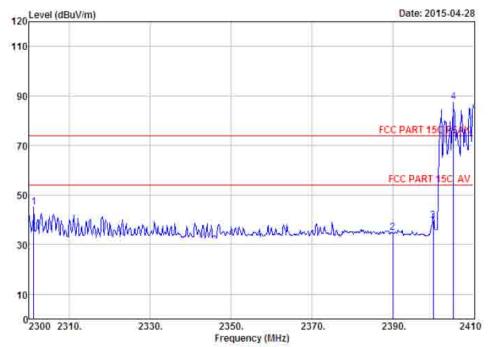
: DC 12V Power : BVML9384 M/H

: 8-DPSK IX 2480MHz (No Hopping) Test Mode

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27,58	6.71	34.03	85,53	85,79	74.00	-11.79	Peak
2	2483.50	27.58	6.71	34.03	36.13	36.39	74.00	37.61	Peak
3	2490.38	27.58	6.73	34.03	37.20	37.48	74.00	36.52	Peak

Remarks: 1, Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 1# 966 chamber : 3m ANT 1-18G : FCC PART 15C PEAK Data no. : 492 Ant. pol. : HORIZONTAL Site no. Dis. / Ant.

Limit

Env. / Ins. : Temp:23.61; Humi:56%; Press:101.52kPa

: Tony Engineer

EUI : Car Multimedia Flayer

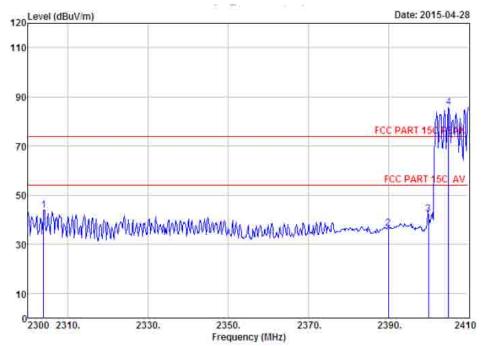
: DC 12V Power 36/33 : BVML9384

Test Mode ; GFSK TX 2402MHz (Hopping On)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	2301.10	27.79	6.53	34.25	44.94	45.01	74.00	28.99	Peak
2	2390.00	27,64	6.62	34.19	34.79	34.86	74.00	39.14	Feak
3	2400.00	27.61	6.62	34.18	39.60	39.65	74.00	34.35	Peak
4	2405.05	27.61	6.64	34.18	87.75	87.82	74.00	-13.82	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 493 : 3m ANT 1-18G : FCC PART 15C PEAK Dis. / Ant. Ant. pol. : VERTICAL

Limit

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

: Tony Engineer

: Car Multimedia Player EUI

Power : DC 12V

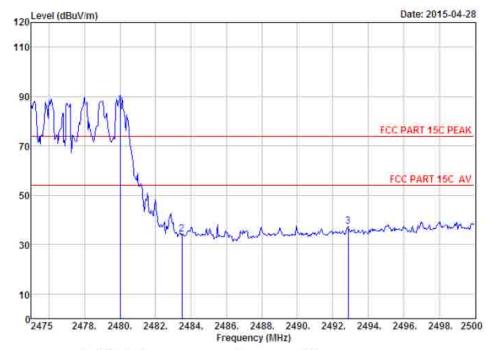
M/N : BVML9384

Test Mode : GFSK TX 2402MHz (Hopping On)

	Fre (MH		Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
	2303	.85 27.79	6.53	34.25	43.85	43.92	74.00	30.08	Peak
1	2 2390	.00 27.64	€.62	34.19	36.49	36.56	74.00	37.44	Peak
- 3	3 2400	.00 27.61	6.62	34.18	42.09	42.14	74.00	31.86	Peak
ų.	4 2405	.05 27.61	6.64	34.18	85.82	85.89	74,00	-11.89	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Amp Factor + Reading.





: 1# 966 chamber Data no. : 494 Site no. Dis. / Ant. : 3m ANT 1-18G Limit : FCC PART 15C PEAK Ant. pol. : VERTICAL

: Temp:23.6';Humi:56%;Press:101.52kPa : Tony : Car Multimedia Player : DC 12V Env. / Ins.

Engineer

EUI

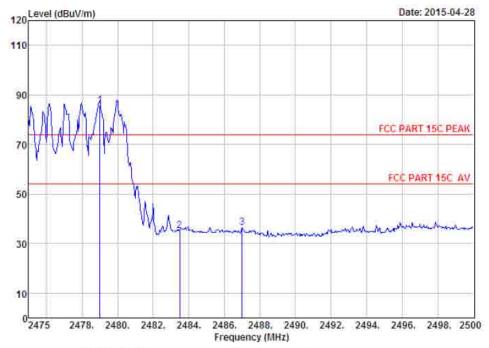
Power : BVML9384 M/N

Test Mode : GFSK TX 2480MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	34.03	86.46	86.72	74.00	-12.72	Peak
2	2483.50	27,58	6.71	34.03	34.01	34.27	74.00	39.73	Peak
3	2492.88	27.58	6.73	34.03	37.25	37.53	74.00	36.47	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Data no. : 495 Ant. pol. : HORIZONTAL Site no. : 1# 966 chamber : 3m ANT 1-18G : FCC PART 15C PEAK Dis. / Ant.

Limit Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer : Tony

EUI : Car Multimedia Flayer

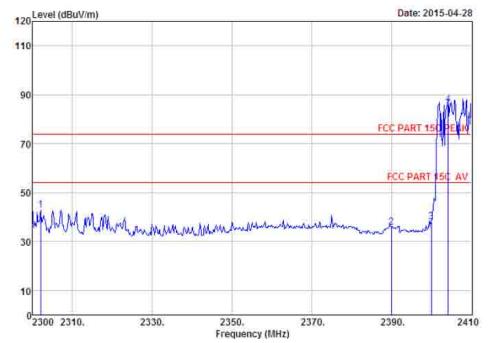
Fower : DC 12V : BVML9384 M/N

Test Mode : GFSK TX 2480MHz(Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.00	27.58	6.71	34.03	85.56	85.82	74.00	-11.82	Peak
2	2483.50	27.58	6.71	34.03	35.06	35.32	74.00	38.68	Peak
3	2487.00	27.58	6.71	34.03	36.06	36.32	74.00	37.68	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 498 : 3m ANT 1-18G : FCC PART 15C PEAK Dis. / Ant. Ant. pol. : VERTICAL

Limit

: Temp:23.6';Humi:56%;Press:101.52kPa : Tony Env. / Ins.

Engineer EUI

: Car Multimedia Flayer : DC 12V Fower

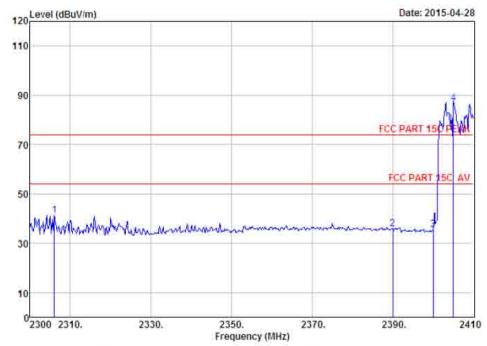
: BVML9384 M/N

: 8-DFSK TX 2402MHz (Hopping On) Test Mode

Freq.	Ant. Factor (dB/m)	Cable Loss (dB)		Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
2301.98	27.79	6.53	34.25	42.72	42.79	74.00	31,21	Peak
2390,00	27.64	6.62	34.19	35.87	35.94	74.00	38.06	Peak
2400.00	27.61	6.62	34.18	38.05	38.10	74.00	35.90	Peak
2404.28	27.61	6.64	34.18	86.10	86.17	74.00	-12.17	Peak
	(MHz) 2301.98 2390.00 2400.00	(MHz) (dB/m) 2301.98 27.79 2390.00 27.64 2400.00 27.61	Freq. Factor Loss (MHz) (dB/m) (dB) 2301.98 27.79 6.53 2390.00 27.64 6.62 2400.00 27.61 6.62	Freq. Factor Loss Factor (MHz) (dB/m) (dB) (dB)  2301.98 27.79 6.53 34.25 2390.00 27.64 6.62 34.19 2400.00 27.61 6.62 34.18	Freq. Factor Loss Factor Reading (MHz) (dB/m) (dB) (dB) (dBuV)  2301.98 27.79 6.53 34.25 42.72 2390.00 27.64 6.62 34.19 35.87 2400.00 27.61 6.62 34.18 38.05	Freq. Factor Loss Factor Reading Level (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m)  2301.98 27.79 6.53 34.25 42.72 42.79 2390.00 27.64 6.62 34.19 35.87 35.94 2400.00 27.61 6.62 34.18 38.05 38.10	Freq. Factor Loss Factor Reading Level Limits (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) (dBuV/m)   2301.98 27.79 6.53 34.25 42.72 42.79 74.00 2390.00 27.64 6.62 34.19 35.87 35.94 74.00 2400.00 27.61 6.62 34.18 38.05 38.10 74.00	Freq. Factor Loss Factor Reading Level Limits Margin (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) (dB)  2301.98 27.79 6.53 34.25 42.72 42.79 74.00 31.21 2390.00 27.64 6.62 34.19 35.87 35.94 74.00 38.06 2400.00 27.61 6.62 34.18 38.05 38.10 74.00 35.90

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 1# 966 chamber Data no. : 499 : 3m ANT 1-18G : FCC PART 15C PEAK Dis. / Ant. Ant. pel. : HORIZONTAL

Limit

Env. / Ins. : Temp:23.6';Humi:56%;Fress:101.52kPa

: Tony Engineer

: Car Multimedia Player EUI

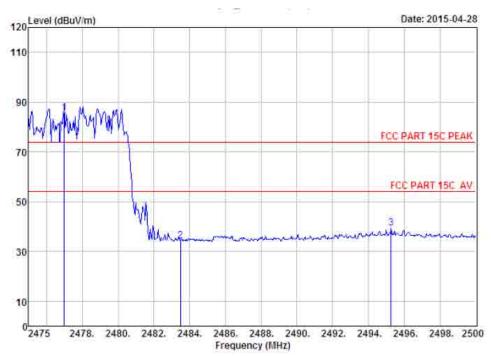
Power : DC 12V M/N : BVML9384

Test Mode ; 8-DPSK TX 2402MHz (Hopping On)

	Freq.	Ant. Factor (dB/m)		Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limita (dBuV/m)	Margin (dB)	Remark
1	2306.05	27,76	6.53	34.24	41.32	41.37	74.00	32.63	Feak
2	2390.00	27.64	6.62	34.19	35.73	35.80	74.00	38.20	Peak
3	2400.00	27.61	6.62	34.18	35.56	35.61	74.00	38.39	Peak
4	2405.05	27.61	6.64	34.18	86.64	86.71	74.00	+12.71	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Dis. / Ant. : 3m ANT 1-18G Limit : FCC PARI 15C PEAK Data no. : 496 Ant. pol. : HORIZONTAL

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer : Tony

EUT : Car Multimedia Player

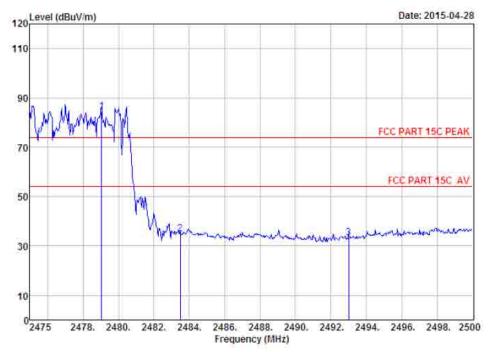
: DC 12V : BVML9384 Power M/N

Test Mode : 8-DPSK TX 2480MHz(Hopping On)

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2477.00	27.58	6,71	34.03	85.48	85.74	74.00	-11.74	Peak
2	2493.50	27.58	6.71	34.03	33.96	34.22	74.00	39.78	Peak
3	2495.25	27.57	6,73	34,00	38.94	39.24	74.00	34.76	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Data no. : 497 Ant. pol. : VERTICAL Site no. : 1# 966 chamber : 3m ANT 1-18G : FCC PART 15C PEAK Dis. / Ant.

Limit Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

: Tony Engineer

EUT : Car Multimedia Player

Power : DC 12V M/N

: BVML9384 : E-DPSW TX 2480MHz(Hopping On) Test Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
ĭ	2479.05	27.58	6.71	34.03	84.29	84.55	74.00	-10.55	Peak
2	2483.50	27.58	6.71	34:03	34.65	34.91	74.00	39,09	Peak
3	2493,00	27,58	6.73	34.03	33.12	33.40	74.00	40.60	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.



# 10. ANTENNA REQUIREMENTS

#### 10.1.Limit

For intentional device, according to FCC 47 CFR 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. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

#### 10.2.Result

The antennas used for this product are integrated PCB antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 1 dBi.

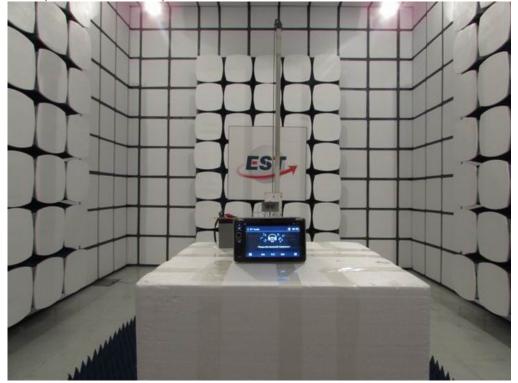
EST Technology Co., Ltd Report No. ESTE-R1505001 Page 94 of 105

# 11. TEST SETUP PHOTO

Radiated Test (30-1000 MHz)



Radiated Test (1000-25000 MHz)



Page 95 of 105

EST Technology Co., Ltd Report No. ESTE-R1505001

# 12.PHOTOS OF EUT

**External Photos** M/N: BVML9384

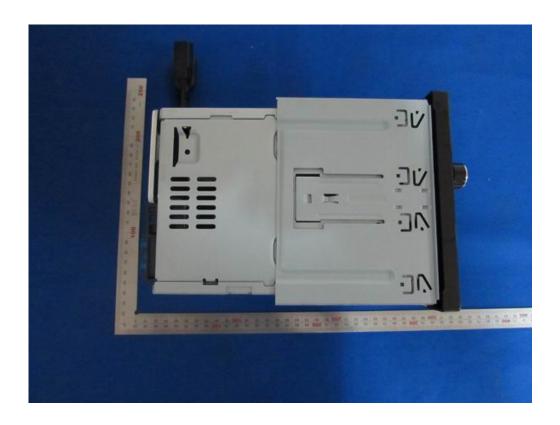




EST Technology Co., Ltd Report No. ESTE-R1505001 Page 96 of 105

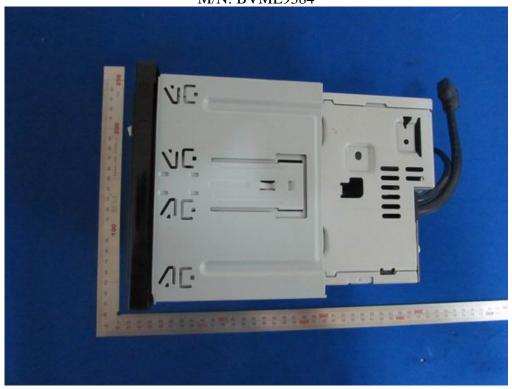
External Photos M/N: BVML9384





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**External Photos** M/N: BVML9384





# External Photos M/N: BVML9384





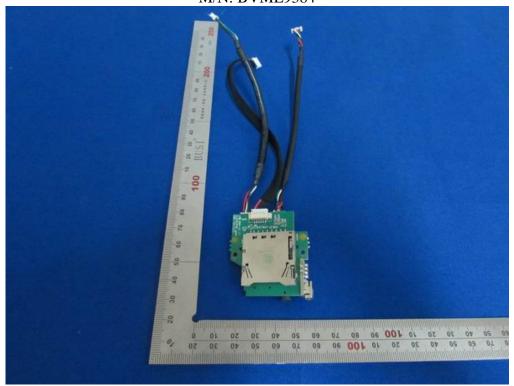
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**Internal Photos** M/N: BVML9384



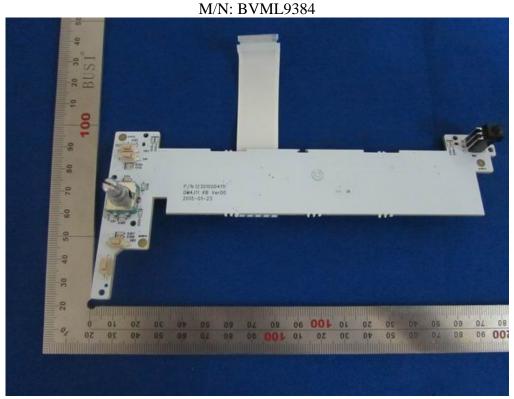








Internal Photos











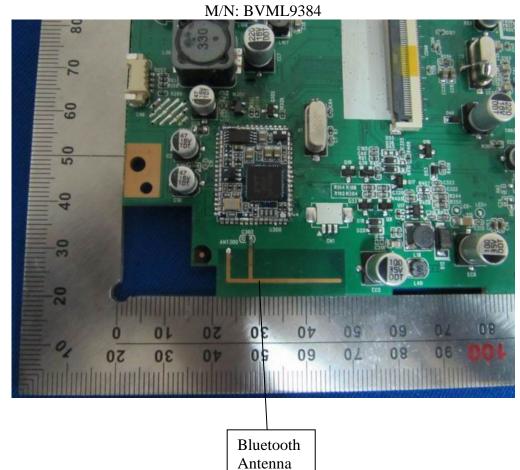
# **Internal Photos** M/N: BVML9384







# Internal Photos



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