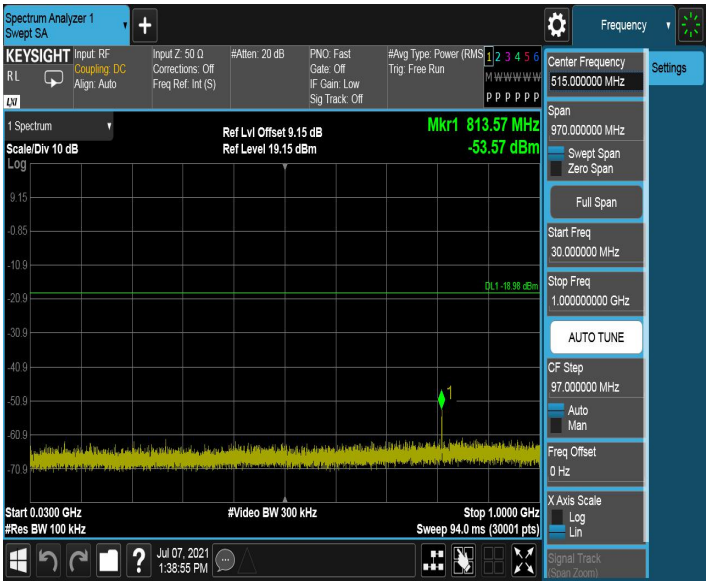
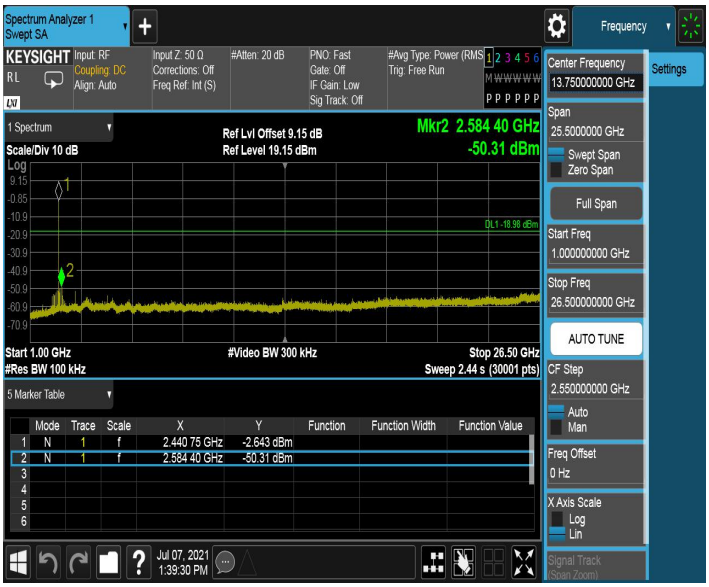
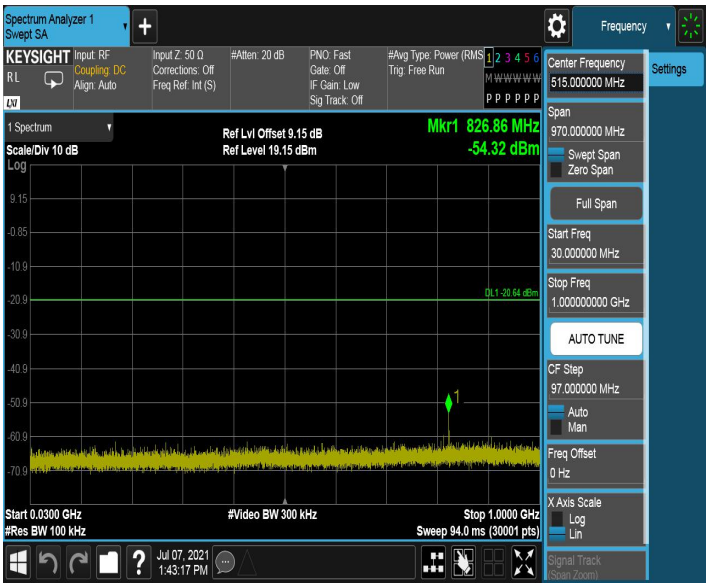
3DH5_Ant1_2441_30~1000

3DH5_Ant1_2441_1000~26500


3DH5_Ant1_2480_0~Reference


3DH5_Ant1_2480_30~1000


3DH5_Ant1_2480_1000~26500

8.9. Radiated Spurious Emission Measurement

8.9.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

8.9.2. Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

8.9.3. Test Setting

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Peak Measurements above 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

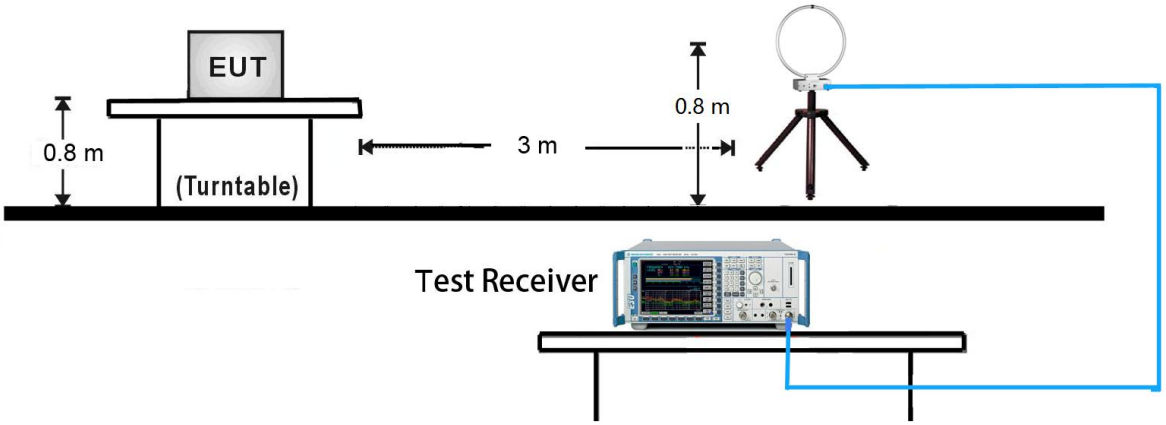
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle ≥ 98%, set VBW = 10 Hz.
   If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto

6. Trace mode = max hold

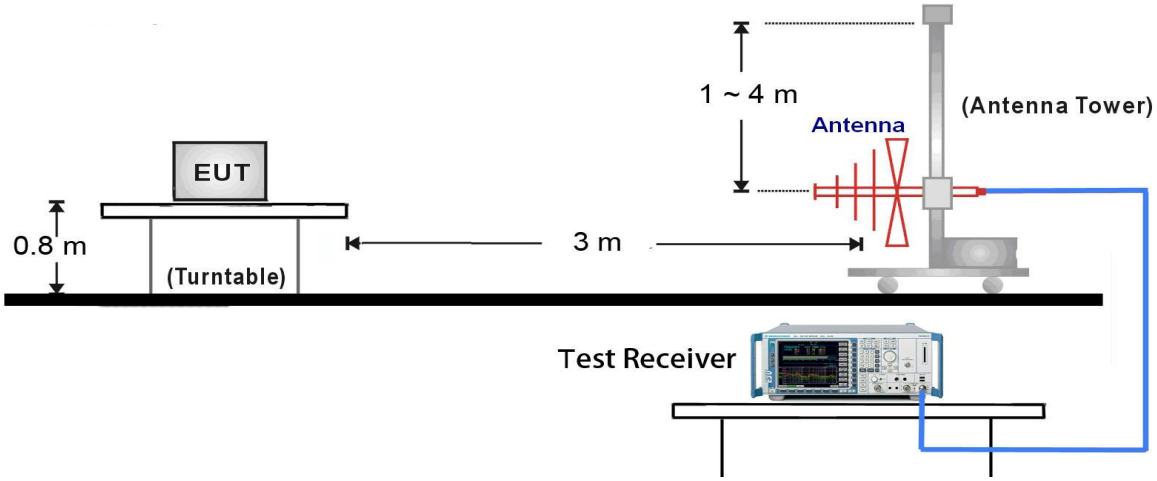
7. Trace was allowed to stabilize

8.9.4. Test Setup

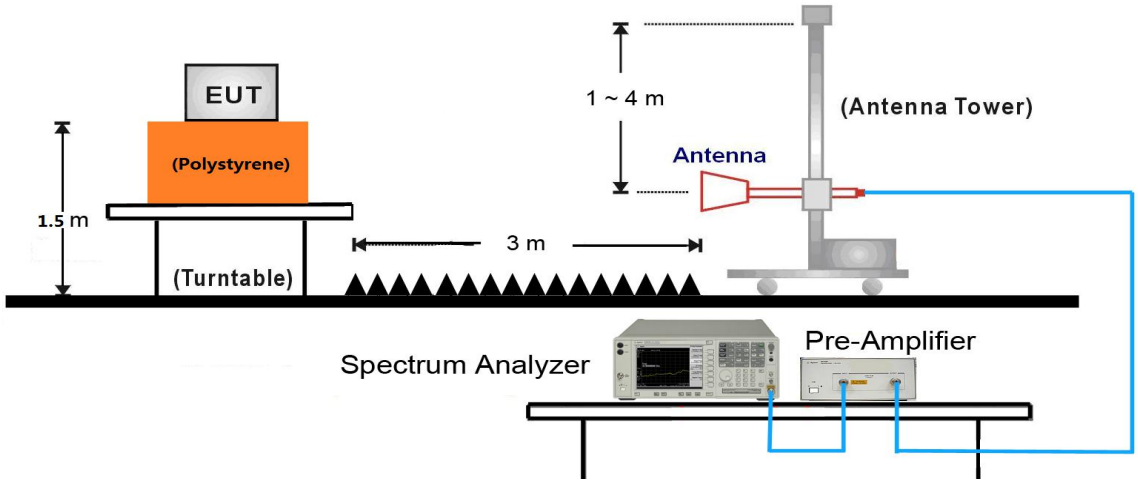
9kHz ~ 30MHz Test Setup:



30MHz ~ 1GHz Test Setup:



1GHz ~ 25GHz Test Setup:



8.9.5. Test Result

The Worst Case of Radiated Emission above 1GHz

Test Mode:	3DH5 - Ant 1	Test Date:	2021-06-26
Test Channel:	00	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Level (dBμV)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4800.0000	41.40	6.42	74.00	32.60	Peak	Horizontal
	5132.0000	42.70	6.97	74.00	31.30	Peak	Horizontal
*	6782.0000	45.91	12.72	74.00	28.09	Peak	Horizontal
*	7200.0000	48.77	13.56	74.00	25.23	Peak	Horizontal
	4800.0000	41.25	6.42	74.00	32.75	Peak	Vertical
	5423.0000	43.53	8.38	74.00	30.47	Peak	Vertical
*	6750.0000	46.53	12.56	74.00	27.47	Peak	Vertical
*	9872.0000	51.38	15.92	74.00	22.62	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (87.35dBμV/m) or 15.209 which is higher.

Test Mode:	3DH5 - Ant 1	Test Date:	2021-06-26
Test Channel:	39	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Level (dBμV)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4783.0000	43.13	6.35	74.00	30.87	Peak	Horizontal
	7620.0000	47.75	13.37	74.00	26.25	Peak	Horizontal
*	9578.0000	51.99	15.60	74.00	22.01	Peak	Horizontal
*	10253.0000	51.18	16.50	74.00	22.82	Peak	Horizontal
	4200.0000	39.95	5.07	74.00	34.05	Peak	Vertical
	4800.0000	41.59	6.42	74.00	32.41	Peak	Vertical
*	7120.0000	47.65	13.39	74.00	26.35	Peak	Vertical
*	8871.0000	49.16	14.21	74.00	24.84	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (85.34dBμV/m) or 15.209 which is higher.

Test Mode:	3DH5 - Ant 1	Test Date:	2021-06-26
Test Channel:	78	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

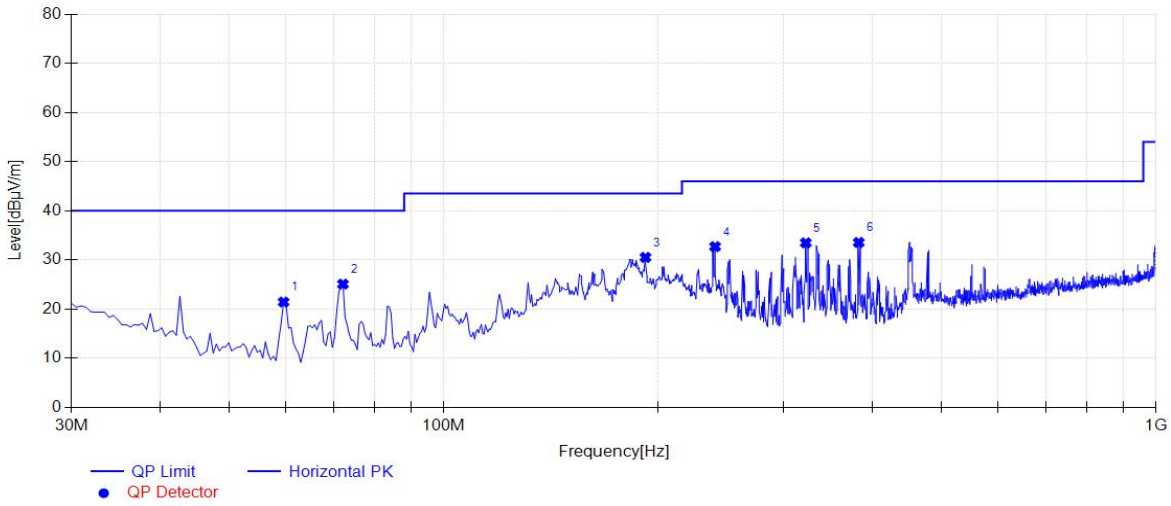
Mark	Frequency (MHz)	Level (dBμV)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4800.0000	42.18	6.42	74.00	31.82	Peak	Horizontal
	5132.0000	42.29	6.97	74.00	31.71	Peak	Horizontal
*	6782.0000	46.33	12.72	74.00	27.67	Peak	Horizontal
*	7200.0000	47.95	13.56	74.00	26.05	Peak	Horizontal
	4800.0000	42.25	6.42	74.00	31.75	Peak	Vertical
	5423.0000	42.71	8.38	74.00	31.29	Peak	Vertical
*	6750.0000	46.37	12.56	74.00	27.63	Peak	Vertical
*	9872.0000	50.89	15.92	74.00	23.11	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (84.74dBμV/m) or 15.209 which is higher.

The Worst Case of Radiated Emission below 1GHz:

EUT:	Car Audio	Polarity:	Horizontal
Model:	TD-68	SN:	N/A
Mode:	Transmit by DH5 at Channel 2480MHz	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia

Test Graph

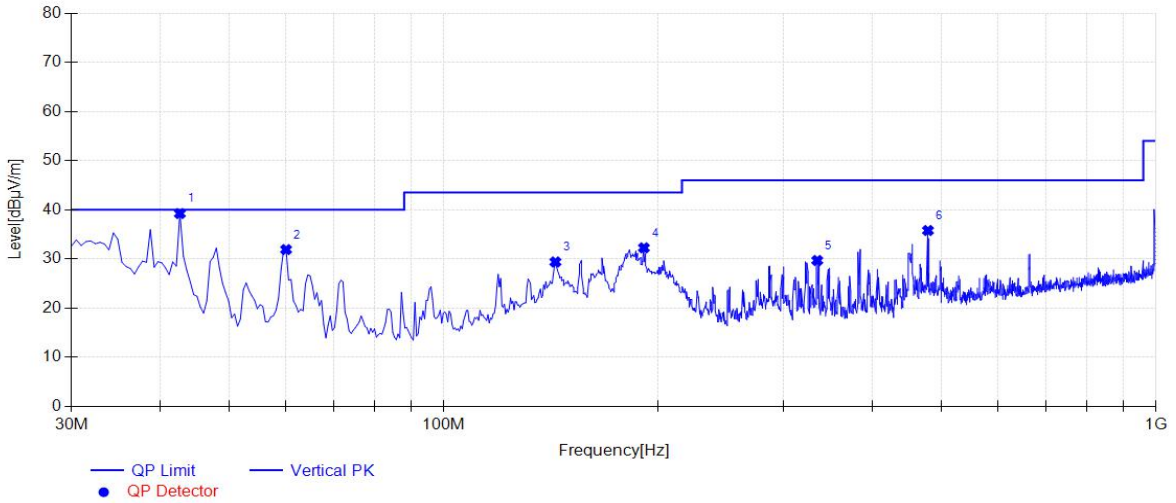


Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	59.5850	21.44	6.92	40.00	18.56	150	184	Horizontal
2	72.1950	25.08	8.81	40.00	14.92	150	169	Horizontal
3	191.990	30.52	10.11	43.50	12.98	150	60	Horizontal
4	240.490	32.71	11.22	46.00	13.29	150	4	Horizontal
5	322.455	33.48	14.27	46.00	12.52	150	1	Horizontal
6	382.595	33.56	15.47	46.00	12.44	150	44	Horizontal

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

EUT:	Car Audio	Polarity:	Vertical
Model:	TD-68	SN:	N/A
Mode:	Transmit by DH5 at Channel 2480MHz	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia

Test Graph



Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	42.6100	39.24	13.30	40.00	0.76	150	299	Vertical
2	60.0700	31.91	6.82	40.00	8.09	150	4	Vertical
3	143.490	29.39	11.17	43.50	14.11	150	241	Vertical
4	191.020	32.26	10.16	43.50	11.24	150	59	Vertical
5	334.580	29.69	14.55	46.00	16.31	150	24	Vertical
6	478.625	35.79	18.35	46.00	10.21	150	358	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

8.10. Radiated Restricted Band Edge Measurement

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1] 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.25 - 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 - 156.525	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	([2])
13.36 - 13.41	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

8.10.1. Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

8.10.2. Test Setting

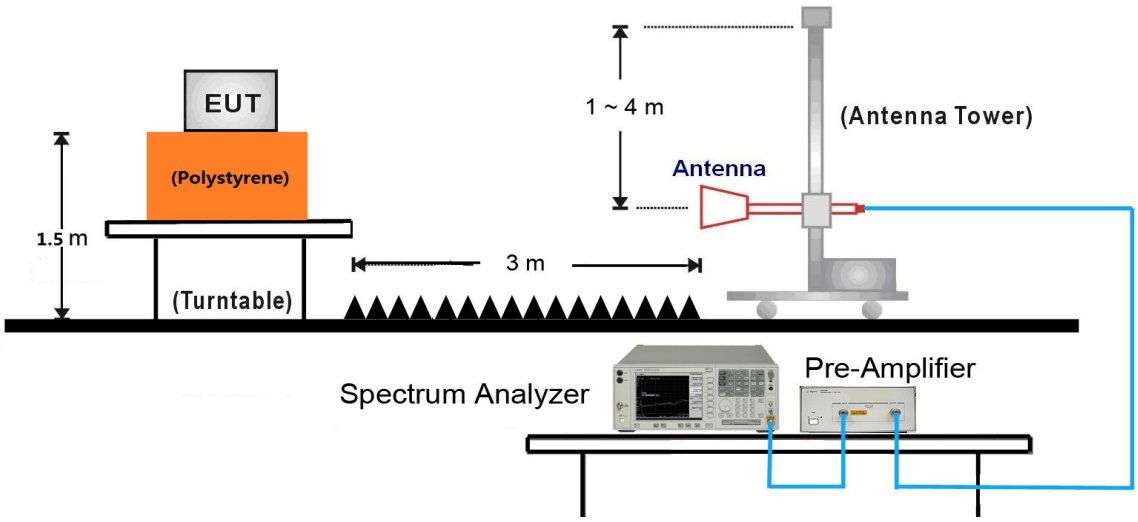
Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle ≥ 98%, set VBW = 10 Hz.
   If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

8.10.3. Test Setup

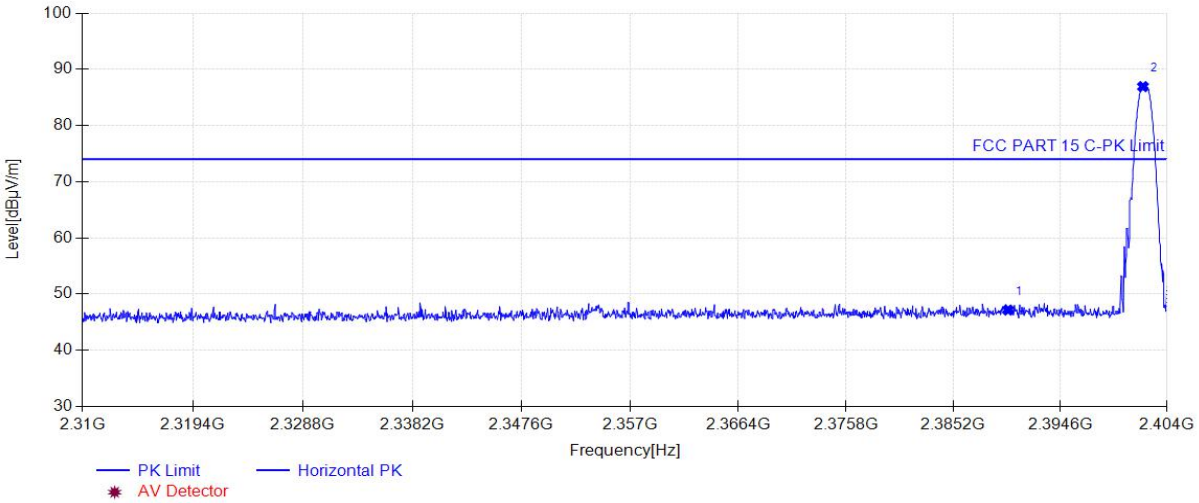


8.10.4. Test Result

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2402MHz		

Start of Test:2021-06-26 17:24:24

Test Graph

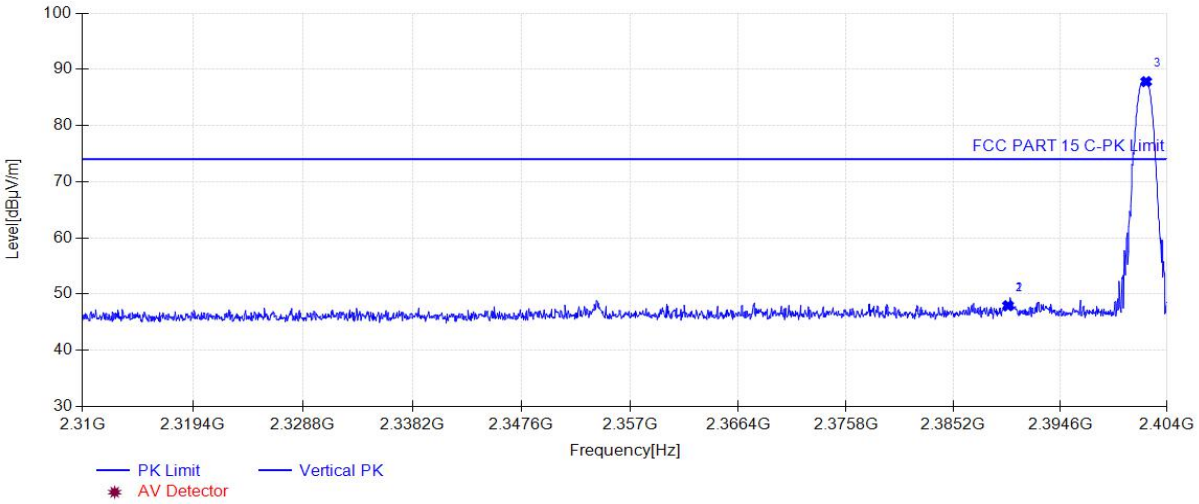


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	47.16	34.25	74.00	26.84	160	91	Horizontal
2	2401.88	86.92	34.31	74.00	-12.92	160	84	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2402MHz		

Start of Test:2021-06-26 17:25:16

Test Graph

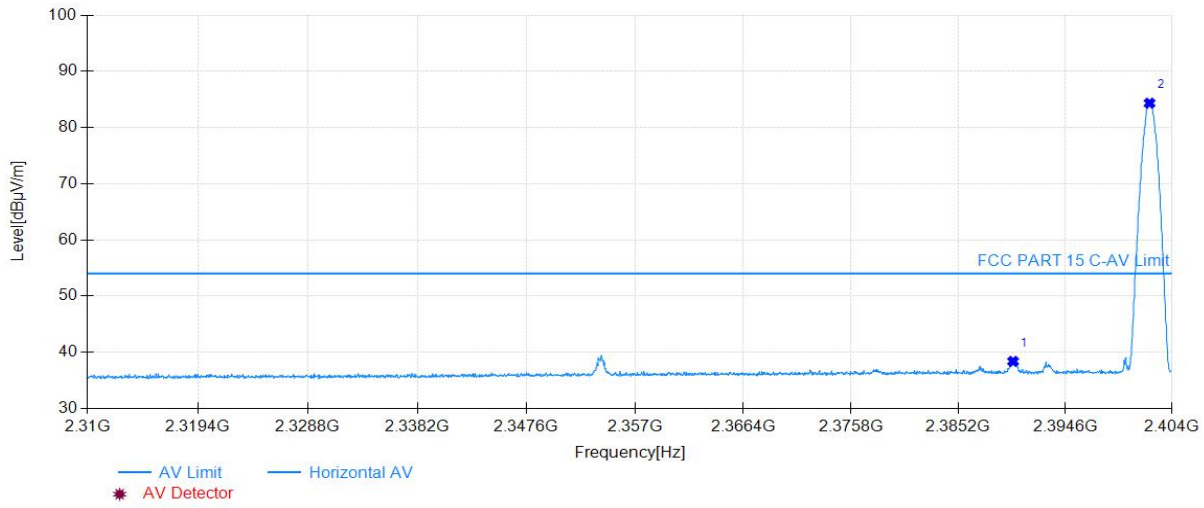


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	47.93	34.25	74.00	26.07	160	148	Vertical
2	2390.00	47.93	34.25	74.00	26.07	160	148	Vertical
3	2402.16	87.81	34.31	74.00	-13.81	160	148	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2402MHz		

Start of Test:2021-06-28 10:43:18

Test Graph

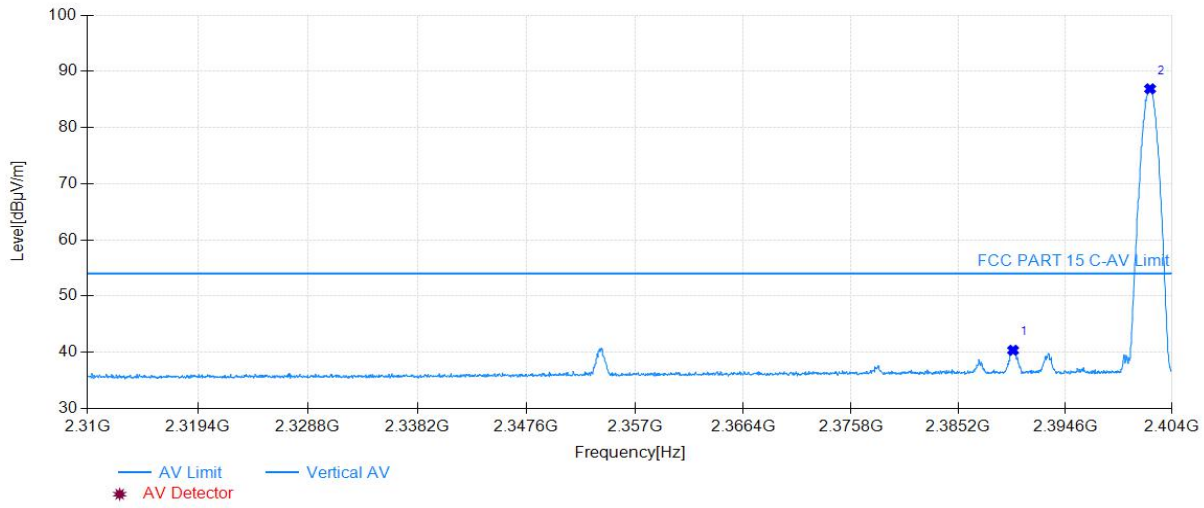


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	38.38	34.25	54.00	15.62	160	136	Horizontal
2	2402.02	84.33	34.31	54.00	-30.33	160	136	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2402MHz		

Start of Test:2021-06-28 10:44:27

Test Graph

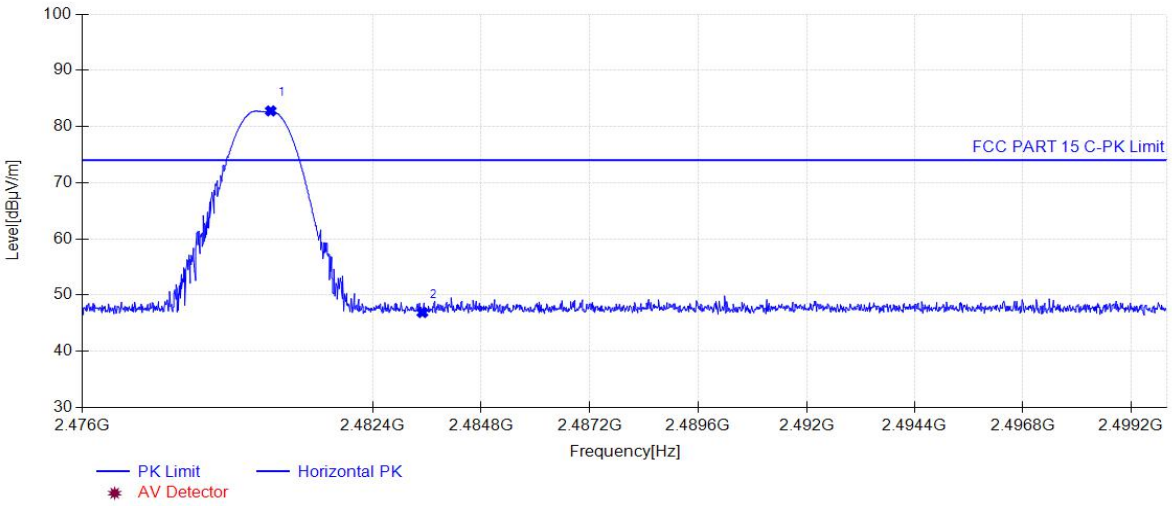


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	40.35	34.25	54.00	13.65	160	154	Vertical
2	2402.07	86.88	34.31	54.00	-32.88	160	147	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2480MHz		

Start of Test:2021-06-26 17:16:35

Test Graph

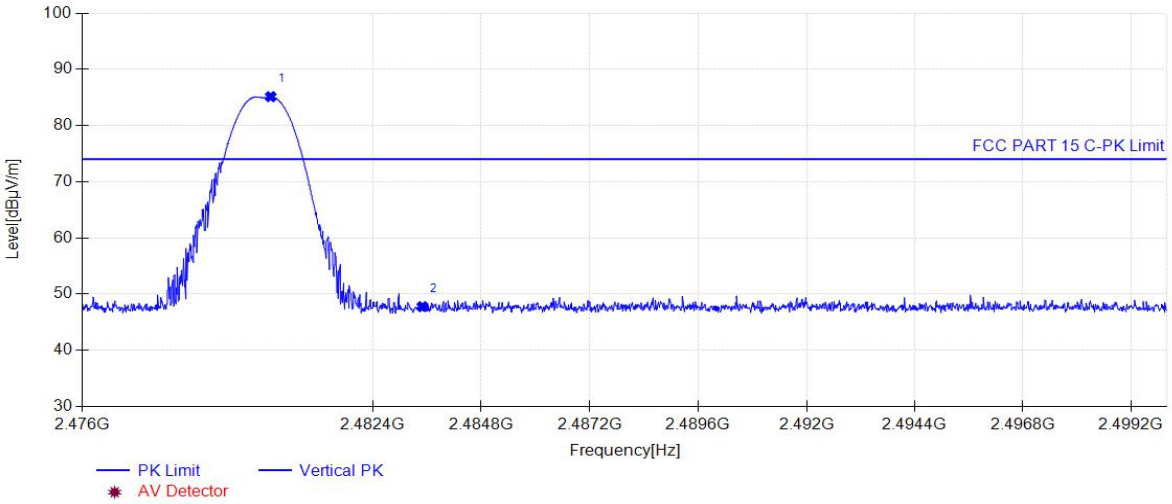


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.15	82.77	34.64	74.00	-8.77	160	279	Horizontal
2	2483.50	46.89	34.65	74.00	27.11	160	2	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2480MHz		

Start of Test:2021-06-26 17:17:28

Test Graph

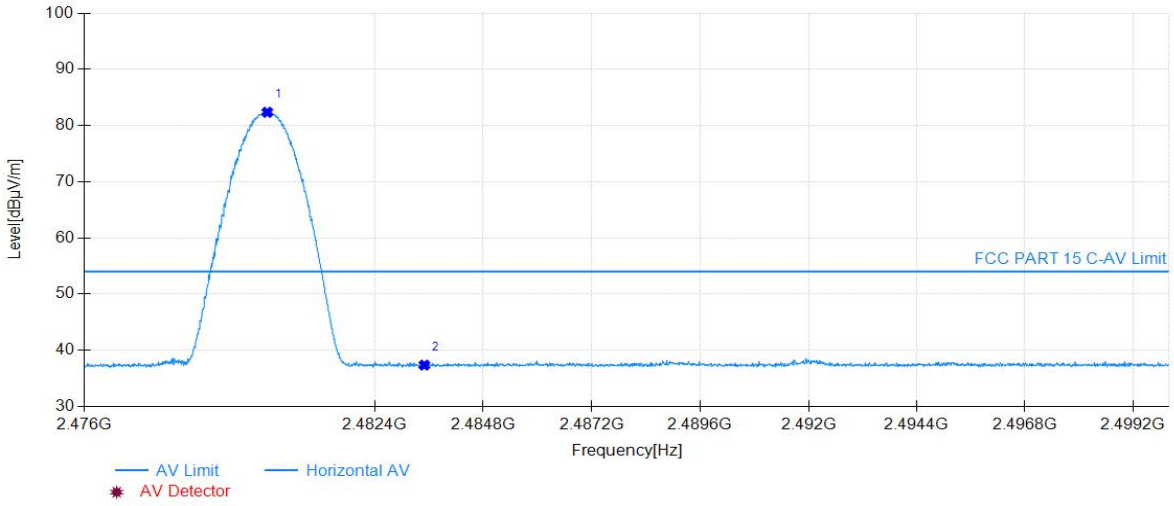


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.15	85.13	34.64	74.00	-11.13	160	32	Vertical
2	2483.50	47.76	34.65	74.00	26.24	160	276	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2480MHz		

Start of Test:2021-06-26 17:19:10

Test Graph

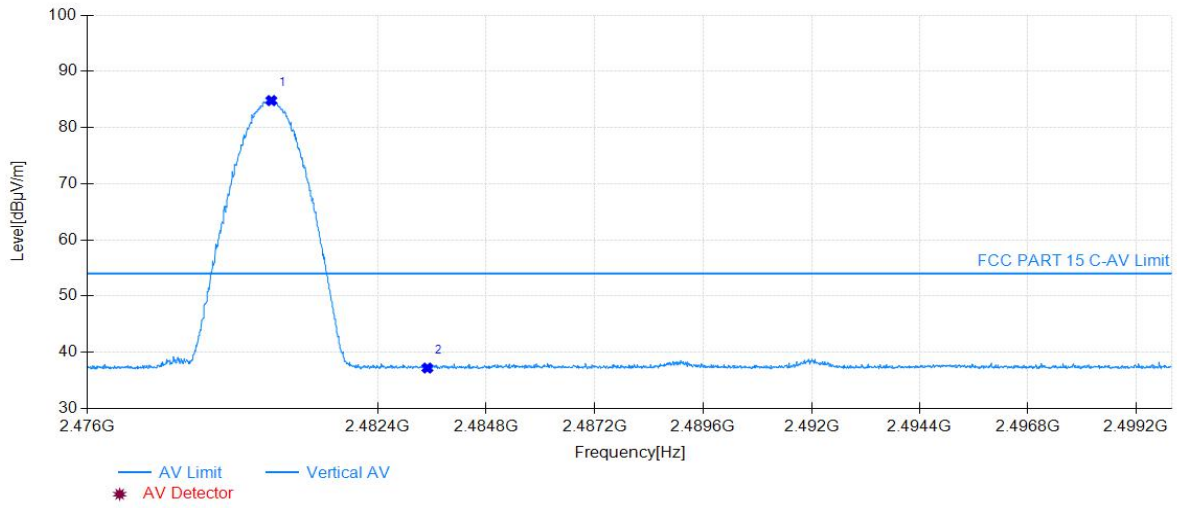


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.03	82.35	34.64	54.00	-28.35	160	285	Horizontal
2	2483.50	37.36	34.65	54.00	16.64	160	299	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2480MHz		

Start of Test:2021-06-26 17:20:03

Test Graph

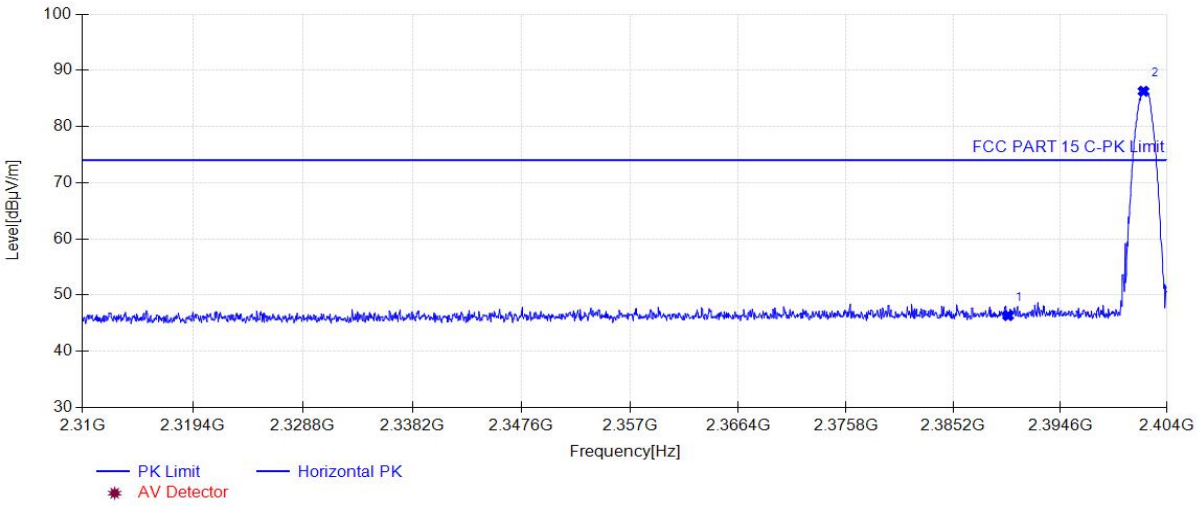


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.05	84.79	34.64	54.00	-30.79	160	32	Vertical
2	2483.50	37.19	34.65	54.00	16.81	160	134	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2402MHz		

Start of Test:2021-06-26 16:57:06

Test Graph

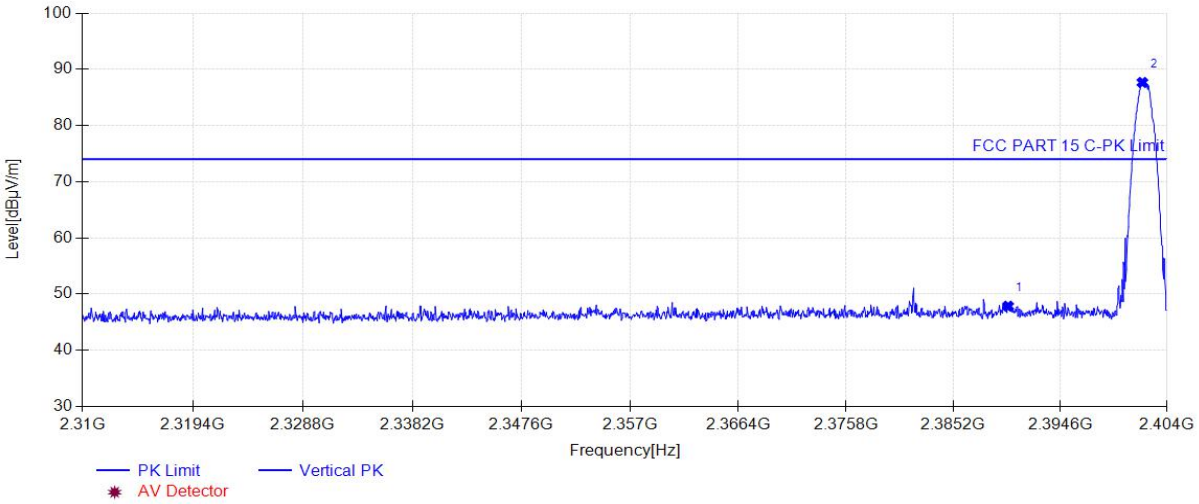


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	46.35	34.25	74.00	27.65	160	277	Horizontal
2	2401.93	86.28	34.31	74.00	-12.28	160	88	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2402MHz		

Start of Test:2021-06-26 16:58:14

Test Graph

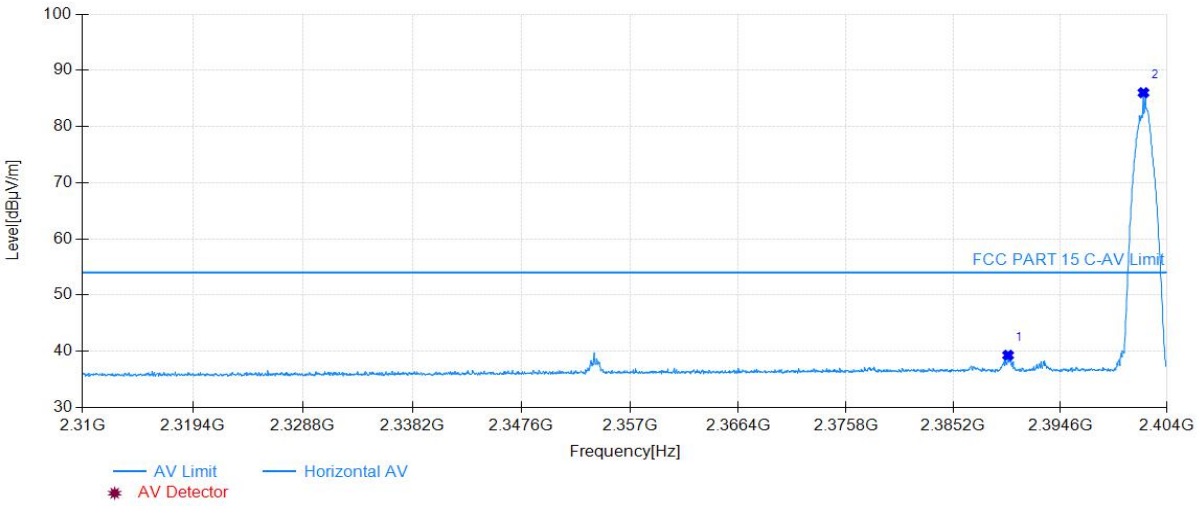


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	47.84	34.25	74.00	26.16	160	166	Vertical
2	2401.83	87.66	34.31	74.00	-13.66	160	153	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2402MHz		

Start of Test:2021-06-26 17:01:33

Test Graph

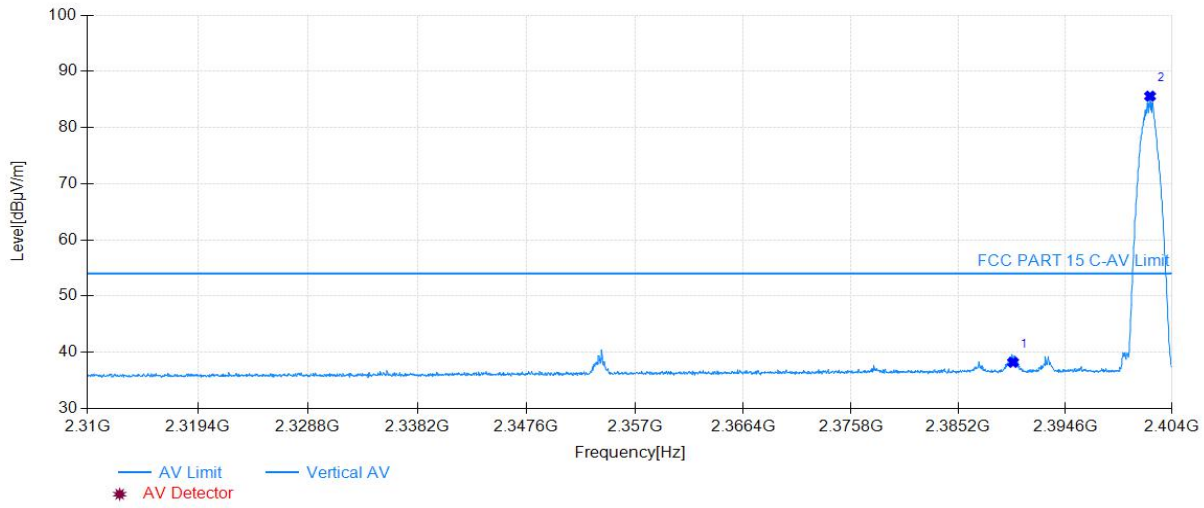


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	39.29	34.25	54.00	14.71	160	87	Horizontal
2	2401.93	86.01	34.31	54.00	-32.01	160	87	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2402MHz		

Start of Test:2021-06-26 17:02:41

Test Graph

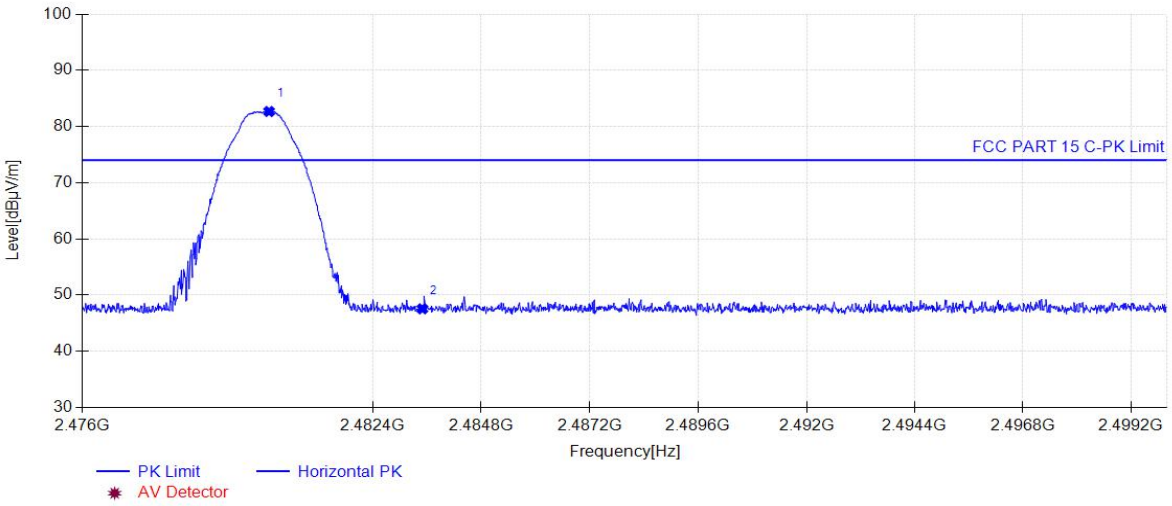


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	38.21	34.25	54.00	15.79	160	162	Vertical
2	2402.07	85.58	34.31	54.00	-31.58	160	162	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2480MHz		

Start of Test:2021-06-26 17:08:51

Test Graph

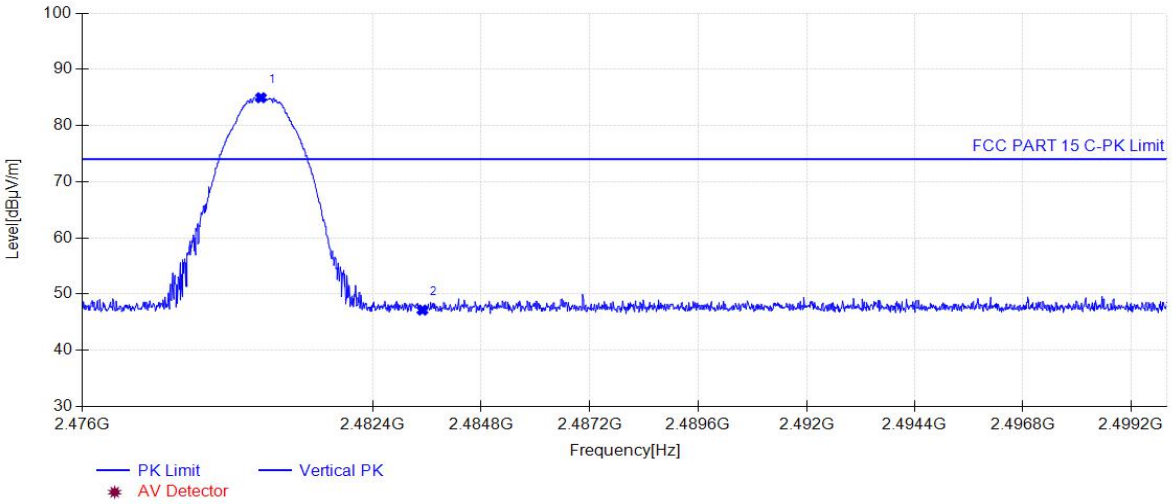


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.11	82.67	34.64	74.00	-8.67	160	279	Horizontal
2	2483.50	47.55	34.65	74.00	26.45	160	63	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2480MHz		

Start of Test:2021-06-26 17:09:44

Test Graph

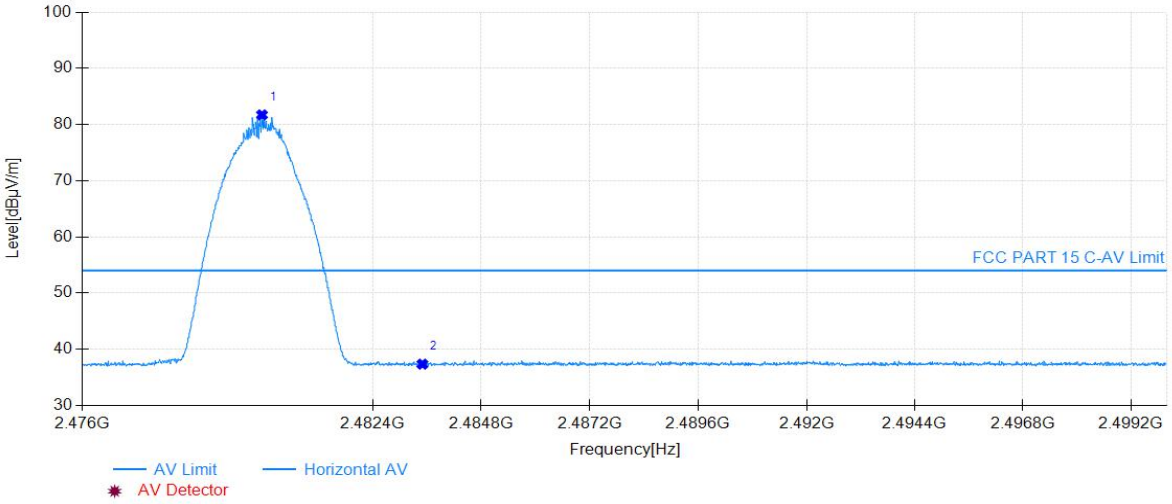


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.93	84.94	34.64	74.00	-10.94	160	32	Vertical
2	2483.50	47.15	34.65	74.00	26.85	160	358	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2480MHz		

Start of Test:2021-06-26 17:10:53

Test Graph

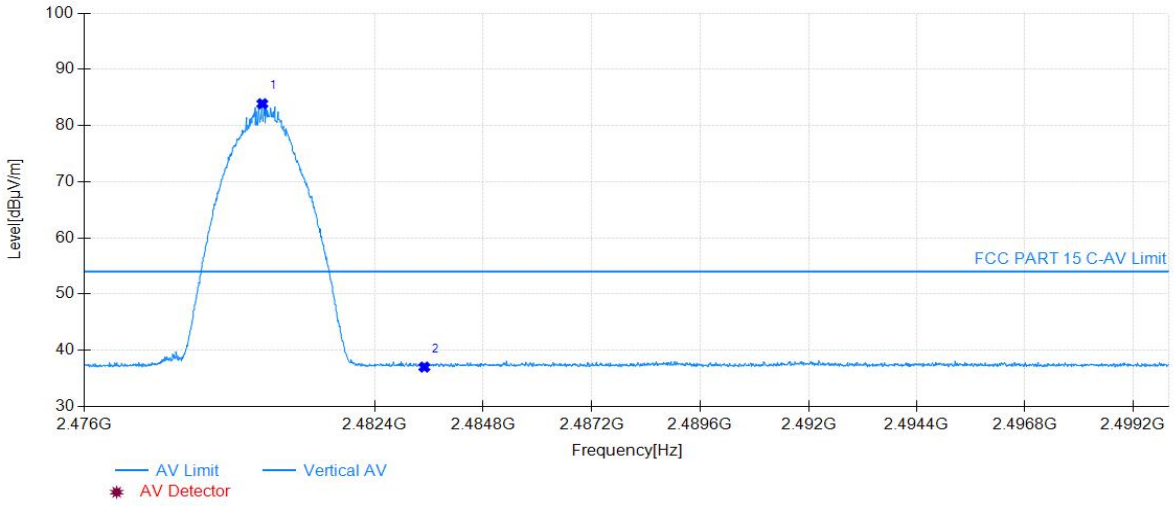


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.96	81.71	34.64	54.00	-27.71	160	96	Horizontal
2	2483.50	37.35	34.65	54.00	16.65	160	155	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2480MHz		

Start of Test:2021-06-26 17:11:46

Test Graph

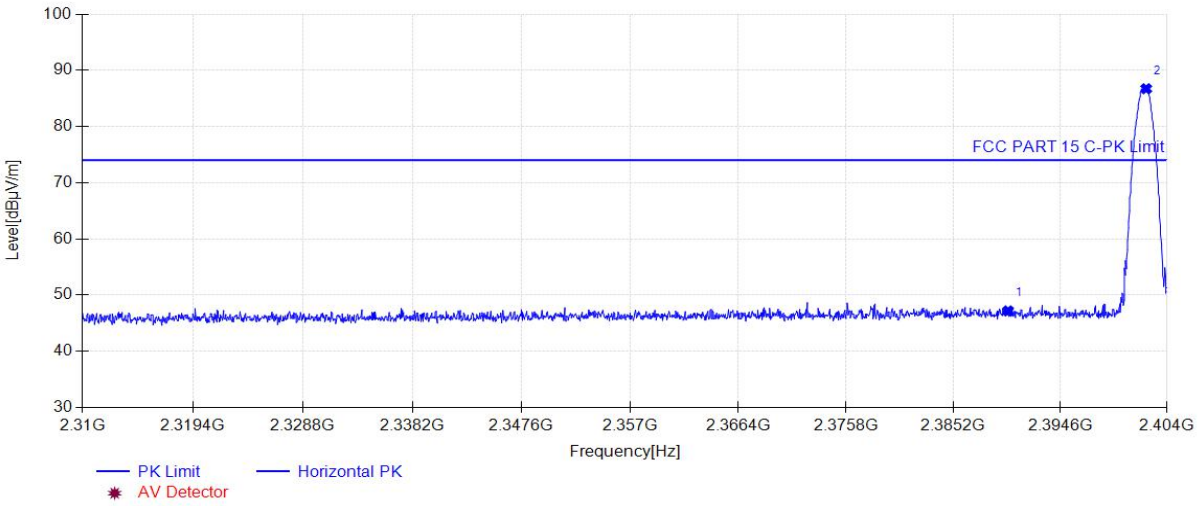


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.92	83.87	34.64	54.00	-29.87	160	155	Vertical
2	2483.50	37.01	34.65	54.00	16.99	160	75	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2402MHz		

Start of Test:2021-06-26 16:50:33

Test Graph

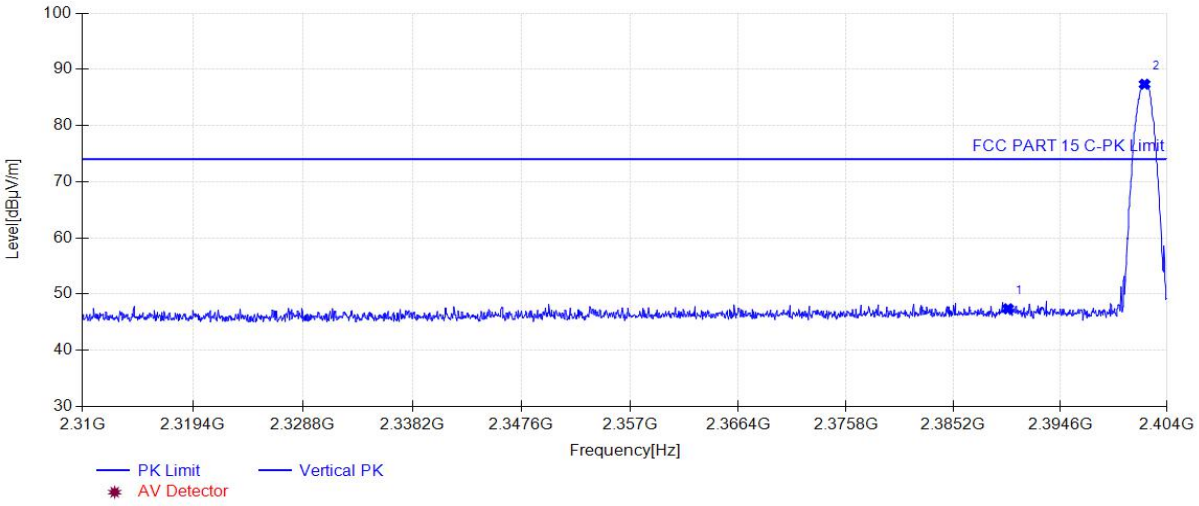


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	47.18	34.25	74.00	26.82	160	206	Horizontal
2	2402.16	86.72	34.31	74.00	-12.72	160	87	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2402MHz		

Start of Test:2021-06-26 16:51:25

Test Graph

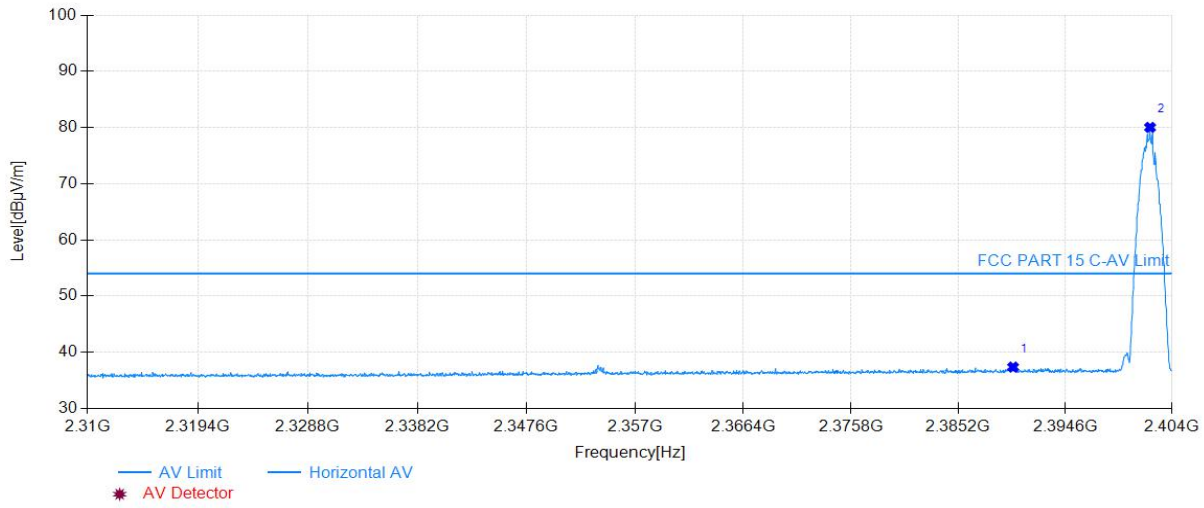


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	47.39	34.25	74.00	26.61	160	142	Vertical
2	2402.02	87.35	34.31	74.00	-13.35	160	149	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2402MHz		

Start of Test:2021-06-26 16:53:18

Test Graph

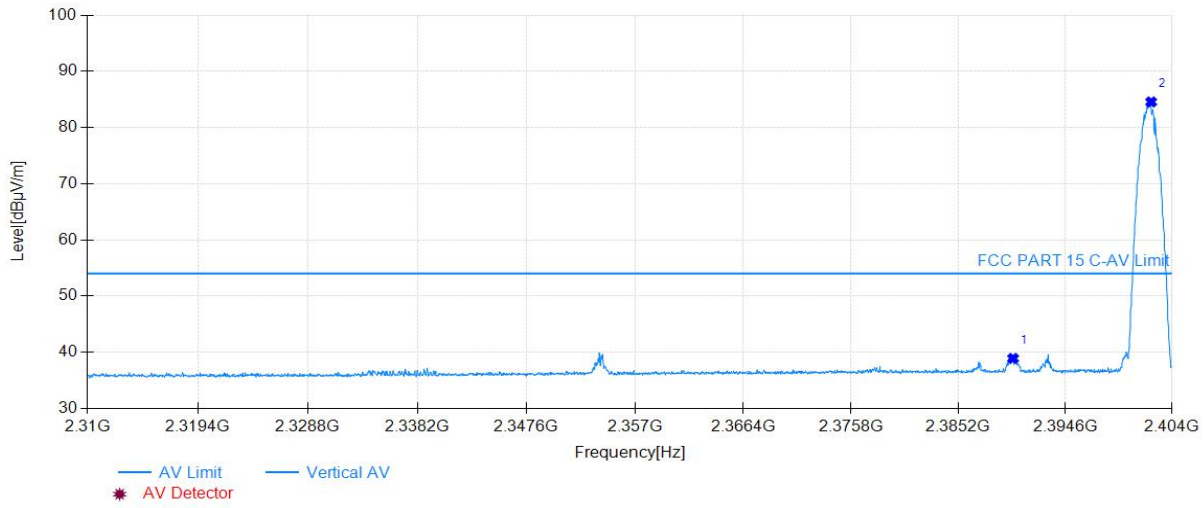


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	37.36	34.25	54.00	16.64	160	234	Horizontal
2	2402.07	80.02	34.31	54.00	-26.02	160	270	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2402MHz		

Start of Test:2021-06-26 16:54:26

Test Graph

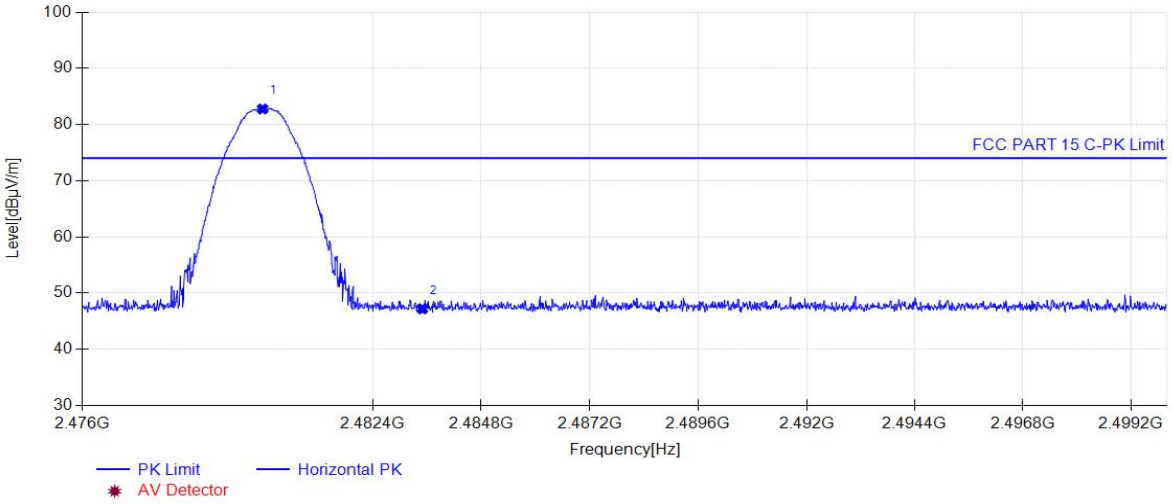


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	38.90	34.25	54.00	15.10	160	155	Vertical
2	2402.16	84.55	34.31	54.00	-30.55	160	162	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2480MHz		

Start of Test:2021-06-26 16:36:09

Test Graph

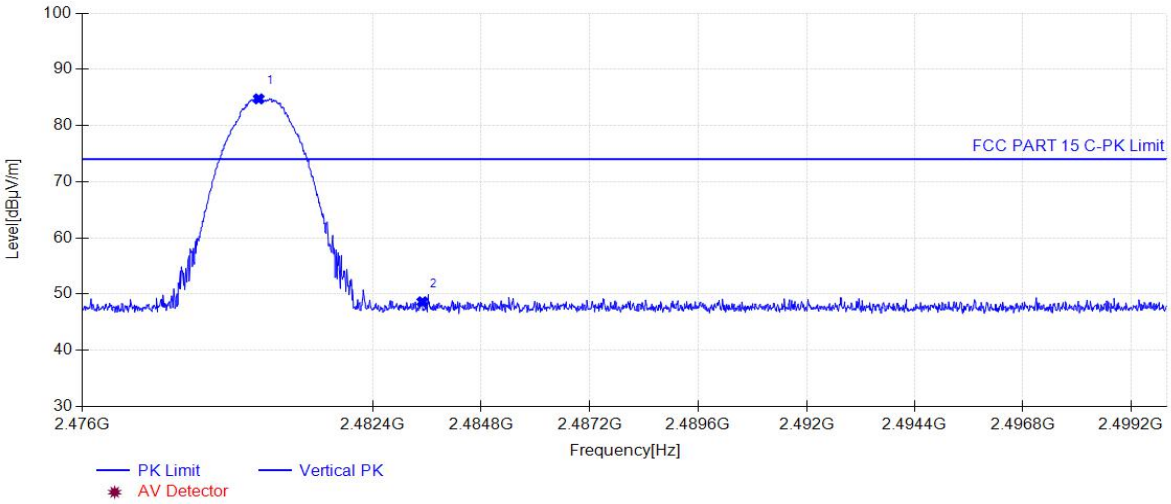


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.97	82.76	34.64	74.00	-8.76	160	92	Horizontal
2	2483.50	47.20	34.65	74.00	26.80	160	9	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2480MHz		

Start of Test:2021-06-26 16:37:01

Test Graph

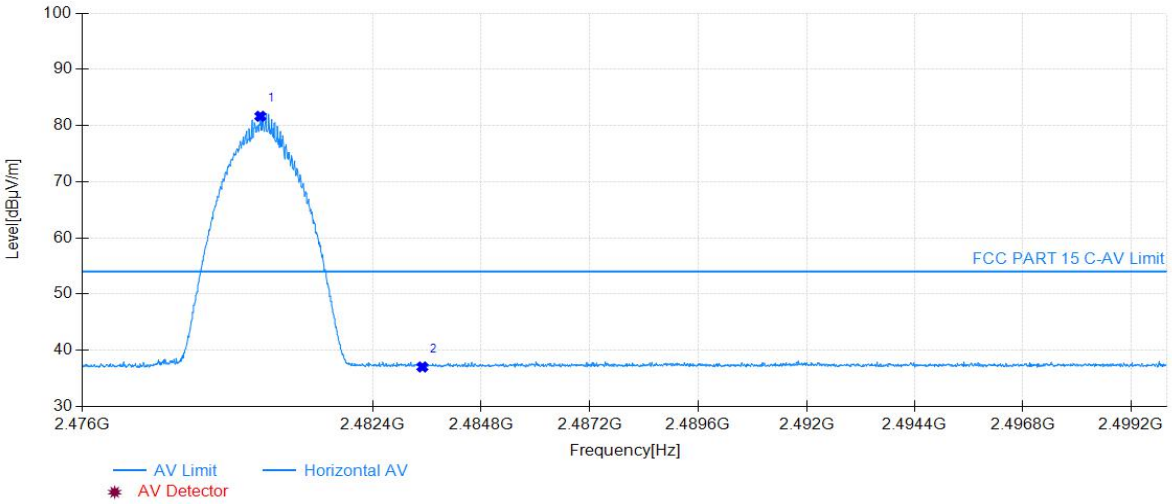


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.88	84.74	34.64	74.00	-10.74	160	32	Vertical
2	2483.50	48.62	34.65	74.00	25.38	160	4	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2480MHz		

Start of Test:2021-06-26 16:38:31

Test Graph

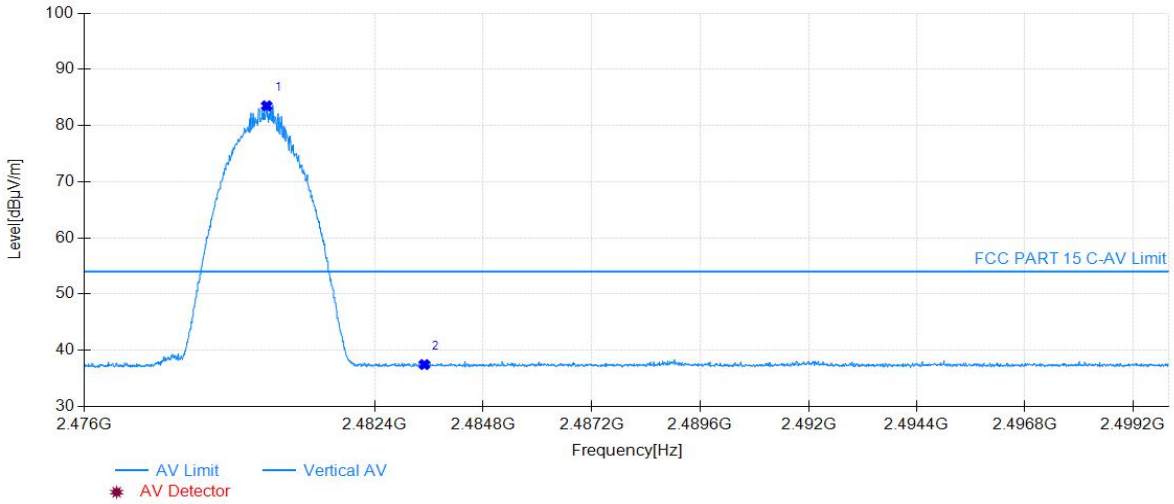


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.92	81.64	34.64	54.00	-27.64	160	97	Horizontal
2	2483.50	37.03	34.65	54.00	16.97	160	47	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2480MHz		

Start of Test:2021-06-26 16:39:39

Test Graph

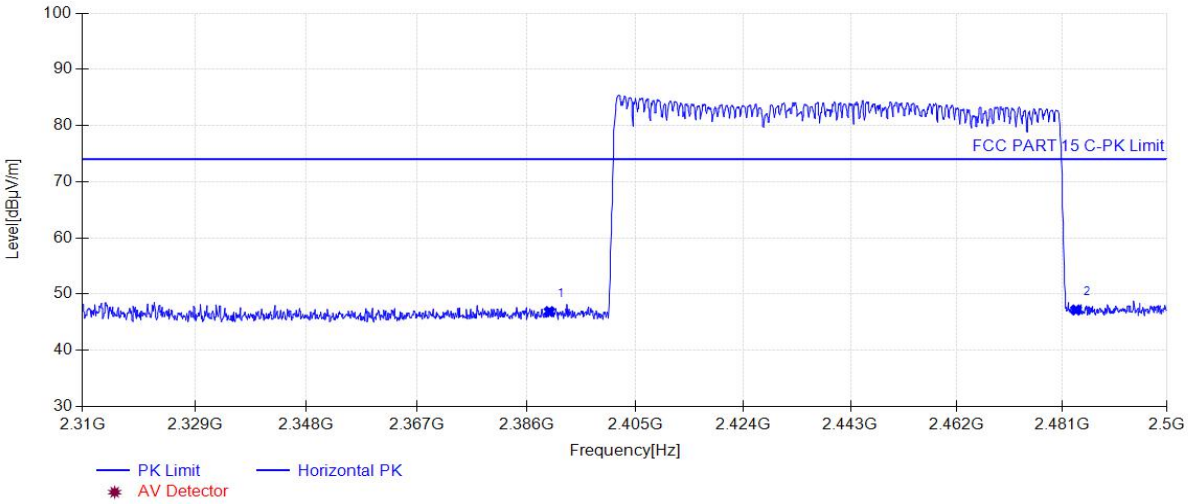


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.02	83.49	34.64	54.00	-29.49	160	120	Vertical
2	2483.50	37.45	34.65	54.00	16.55	160	238	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Hopping mode		

Start of Test:2021-06-28 11:16:03

Test Graph

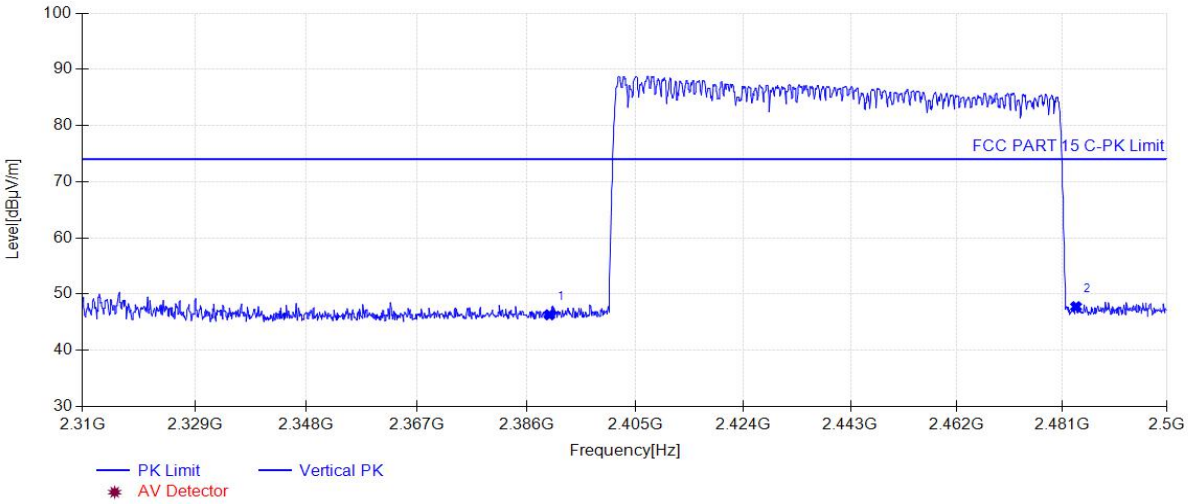


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	46.88	34.25	74.00	27.12	160	18	Horizontal
2	2483.50	47.17	34.65	74.00	26.83	160	0	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Hopping mode		

Start of Test:2021-06-28 11:16:55

Test Graph

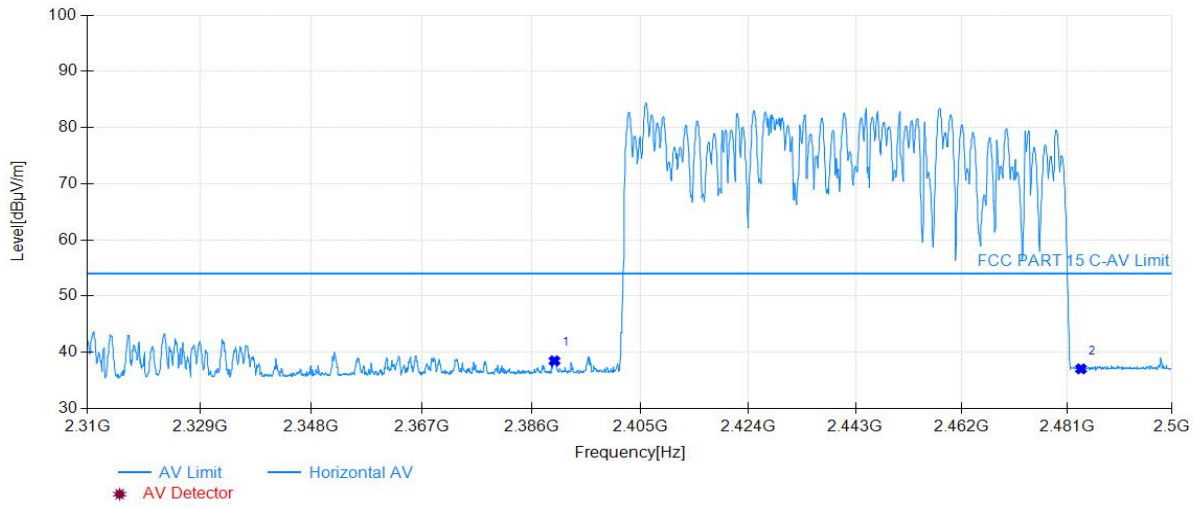


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	46.31	34.25	74.00	27.69	160	159	Vertical
2	2483.50	47.76	34.65	74.00	26.24	160	116	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Hopping mode		

Start of Test:2021-06-28 11:18:01

Test Graph

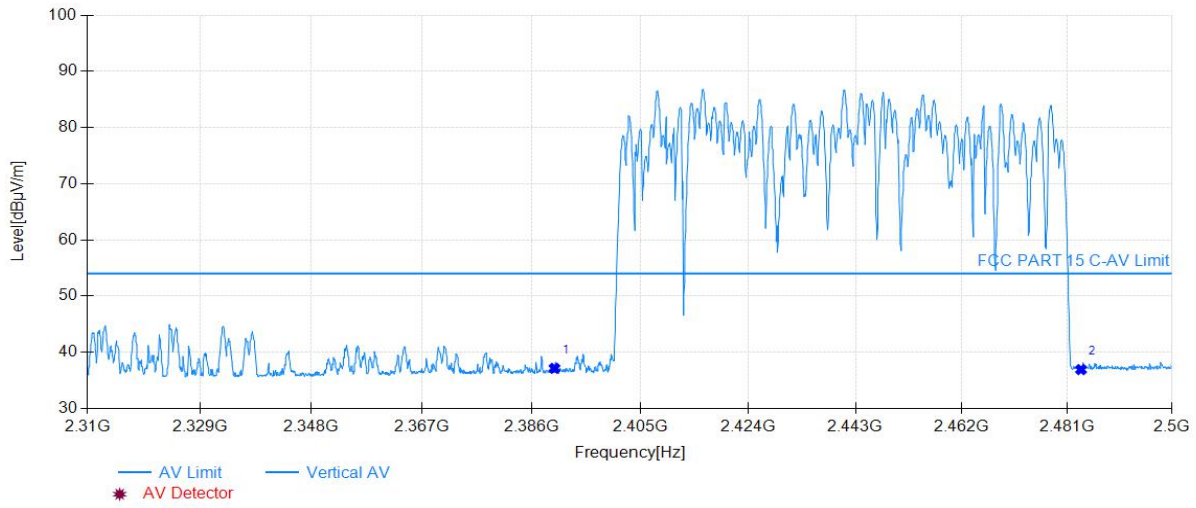


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	38.46	34.25	54.00	15.54	160	138	Horizontal
2	2483.50	37.04	34.65	54.00	16.96	160	0	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Hopping mode		

Start of Test:2021-06-28 11:20:32

Test Graph

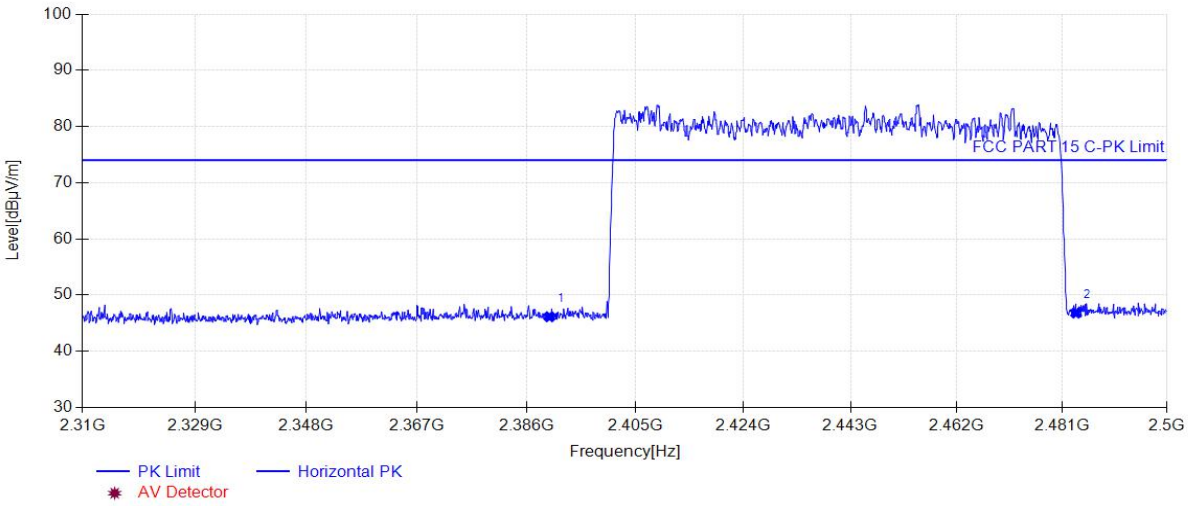


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	37.14	34.25	54.00	16.86	160	26	Vertical
2	2483.50	36.91	34.65	54.00	17.09	160	199	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Hopping mode		

Start of Test:2021-06-28 11:10:31

Test Graph

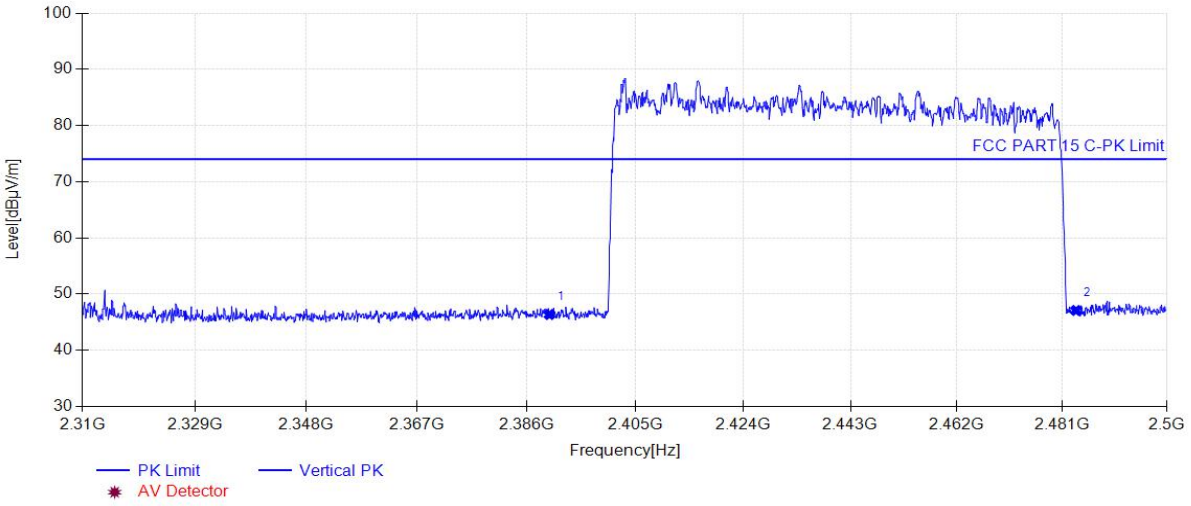


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	46.14	34.25	74.00	27.86	160	207	Horizontal
2	2483.50	46.80	34.65	74.00	27.20	160	0	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Hopping mode		

Start of Test:2021-06-28 11:11:24

Test Graph

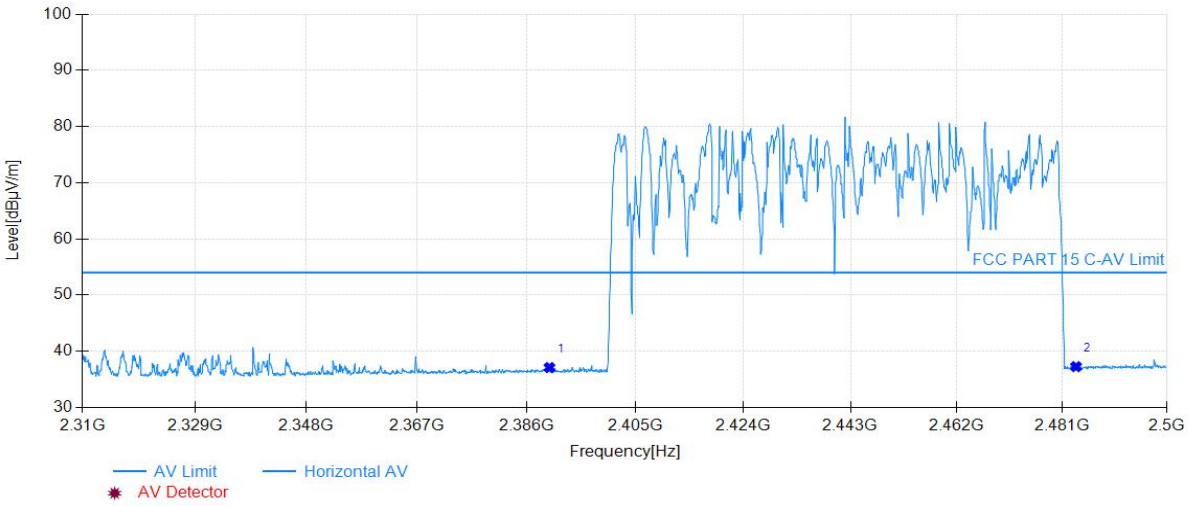


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	46.37	34.25	74.00	27.63	160	16	Vertical
2	2483.50	47.08	34.65	74.00	26.92	160	124	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Hopping mode		

Start of Test:2021-06-28 11:12:46

Test Graph

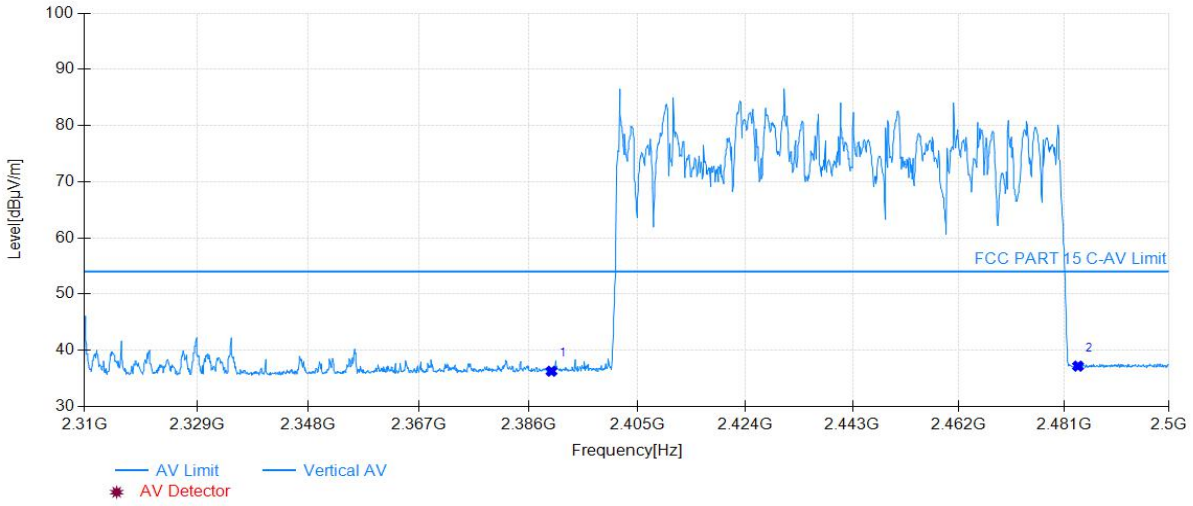


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	37.10	34.25	54.00	16.90	160	143	Horizontal
2	2483.50	37.26	34.65	54.00	16.74	160	201	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Hopping mode		

Start of Test:2021-06-28 11:13:38

Test Graph

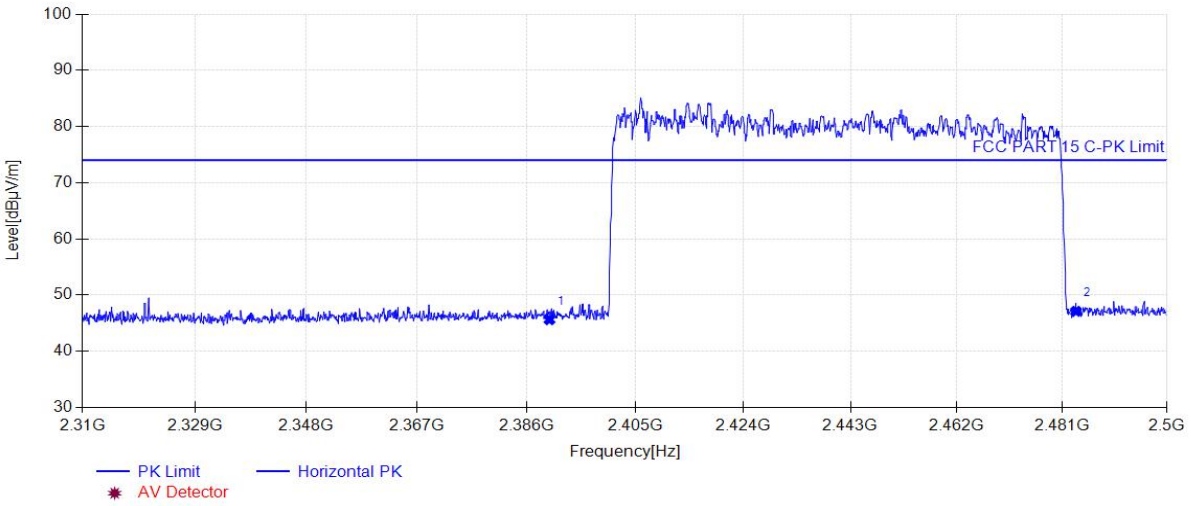


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	36.27	34.25	54.00	17.73	160	46	Vertical
2	2483.50	37.17	34.65	54.00	16.83	160	301	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Hopping mode		

Start of Test:2021-06-28 11:00:56

Test Graph

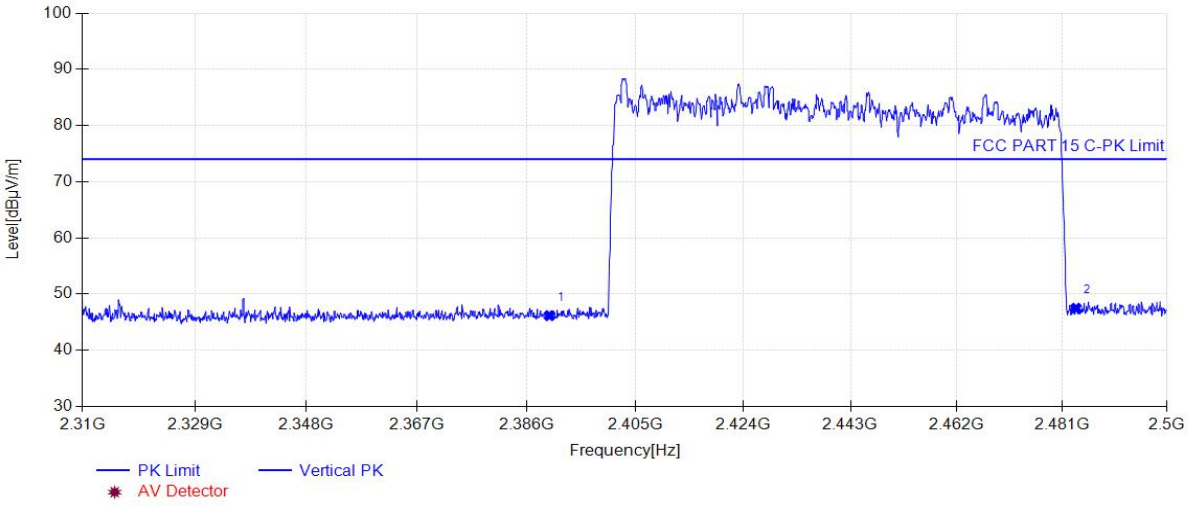


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	45.62	34.25	74.00	28.38	160	276	Horizontal
2	2483.50	47.11	34.65	74.00	26.89	160	81	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Hopping mode		

Start of Test:2021-06-28 11:01:48

Test Graph

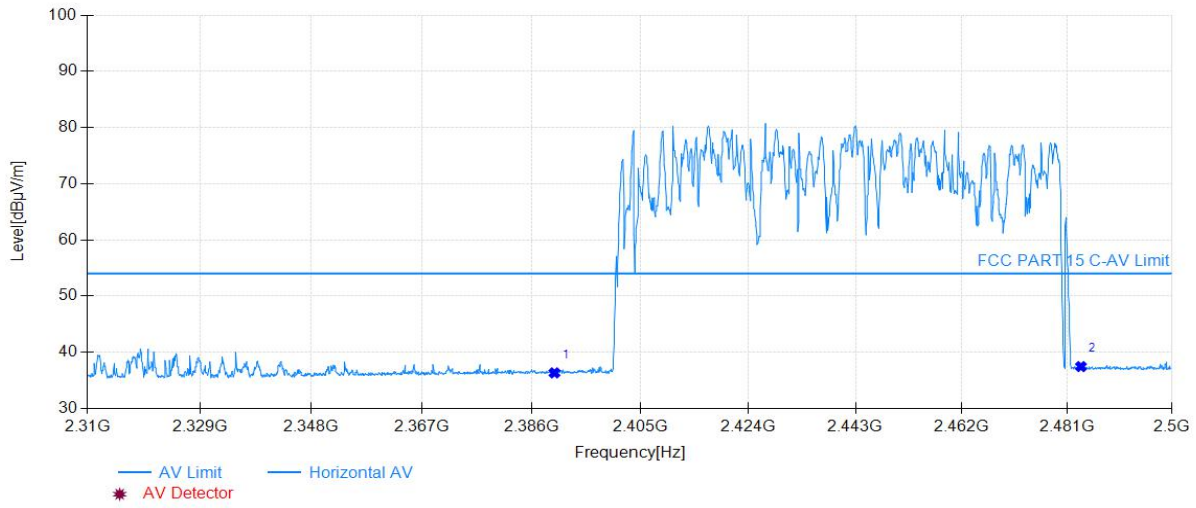


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	46.16	34.25	74.00	27.84	160	3	Vertical
2	2483.50	47.48	34.65	74.00	26.52	160	44	Vertical

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Hopping mode		

Start of Test:2021-06-28 11:04:06

Test Graph

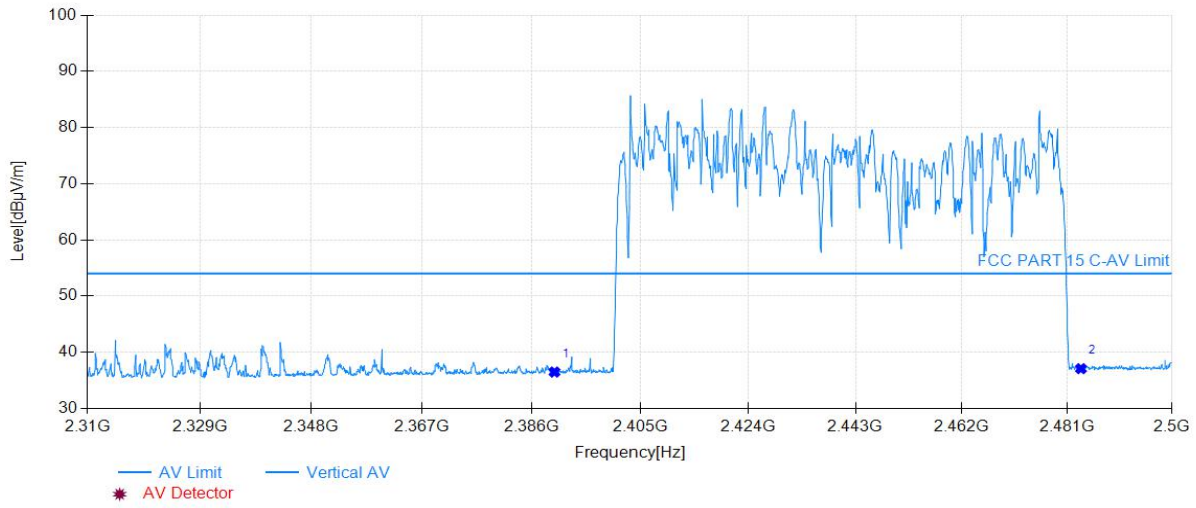


Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	36.33	34.25	54.00	17.67	160	0	Horizontal
2	2483.50	37.45	34.65	54.00	16.55	160	133	Horizontal

Project Information			
EUT:	Car Audio	Model:	TD-68
SN:	N/A	Voltage:	DC 12V
Environment:	Temp: 25℃; Humi:60%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Hopping mode		

Start of Test:2021-06-28 11:04:59

Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	36.48	34.25	54.00	17.52	160	360	Vertical
2	2483.50	37.08	34.65	54.00	16.92	160	213	Vertical

8.11. AC Conducted Emissions Measurement

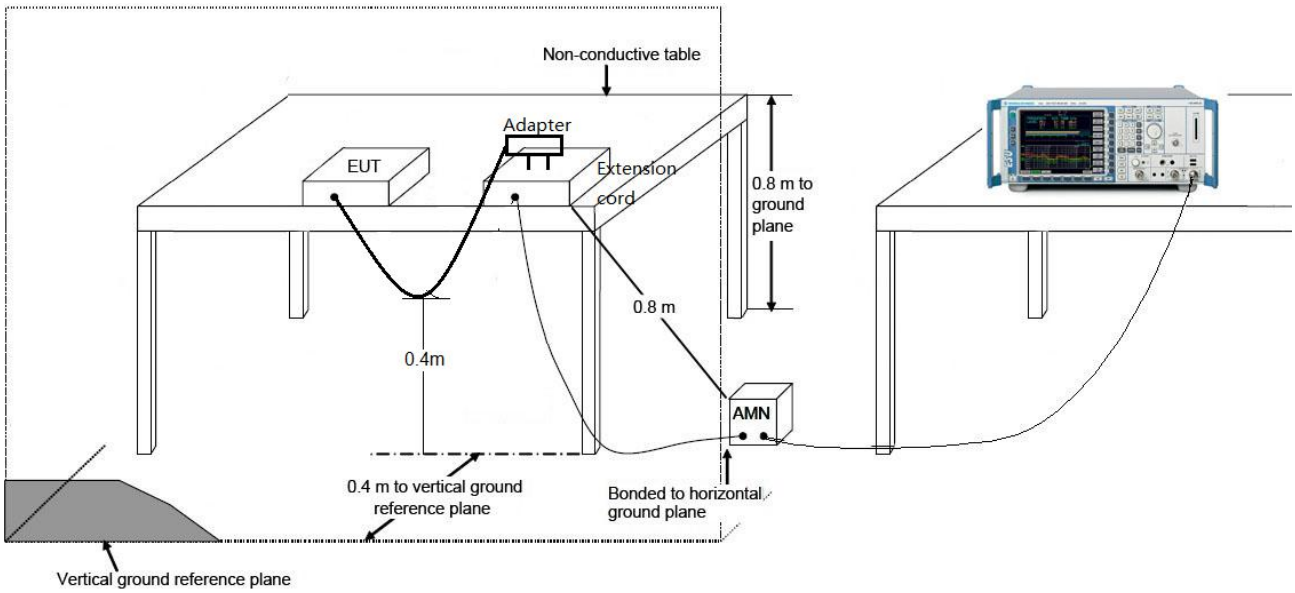
8.11.1. Test Limit

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

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

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

8.11.2. Test Setup



8.11.3. Test Result

This EUT is battery powered, not applicable.

9. CONCLUSION

The data collected relate only the item(s) tested and show that the **Car Audio** is in compliance with Part 15C of the FCC Rules.

The End