

EMC - TEST REPORT

Report Number : **68.760.15.301.01** Date of Issue: 20 May 2015

Model : **KT720**

Product Type : Automotive Diagnostics Equipment

Applicant : Bosch Automotive Service Solutions (suzhou) Co., LTD Shenzhen Branch

Address : 501C/F, A Garden City Cyber Port, Nanhai NO.1079,
Nanshan District, 518067 Shenzhen,
PEOPLE'S REPUBLIC OF CHINA

Production Facility : Bosch Automotive Products (Nanjing) Co., Ltd.

Address : No.1 Runbo Road, East Zone of Nanjing Economic and Technology
Development Zone, 210034 Nanjing,
PEOPLE'S REPUBLIC OF CHINA

Test Result : ☒ **Positive** ☐ **Negative**

Total pages including Appendices : 34

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	System Measurement Uncertainty	

2 Details about the Test Laboratory

Details about the Test Laboratory

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Nantou Checkpoint Road 2, Nanshan District,
518052 Shenzhen, CHINA

Telephone: 86 755 8828 6998

Fax: 86 755 8828 5299

3 Description of the Equipment Under Test

Description of the Equipment Under Test

Product: Automotive Diagnostics Equipment

Model no.: KT720

Serial number: NIL

Options and accessories: Notebook, Micro SD Card, DC source cable, CAN Simulator(OBD)

Ratings: 7-32VDC
supplied by the external AC/DC adaptor (Model: GM50-120300-F)
with following ratings:
Input: 100-240VAC, 50/60Hz, 1.5A;
DC output: 12VDC, 3.0A
or supplied by Lead-acid battery used on vehicles

Description of the EUT: NIL

Remark: NIL

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
Notebook	ThinkPad	T410	N/A
Micro SD Card	Transcend	9181AA 16G 07DS2	N/A
Unshielded USB Communication cable(with ferrite cores)	N/A	N/A	1.5m
DC power extension cable	N/A	N/A	1.5m
Oscilloscope Probe	N/A	N/A	2.0m
Differential Probe	N/A	N/A	2.0m
Diagnostic extension cable for OBD	N/A	N/A	1.5m
CAN Simulator(OBD)	BOSCH	A51	N/A

4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart B, 10-1-2014 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart B - Unintentional Radiators

5 Summary of Test Results

Emission Tests				
FCC Part 15 Subpart B				
Test Condition Class B	Pages	Test Result		
		Pass	Fail	N/A
Radiated Emission (3 semi-anechoic chamber) 30MHz to 6000MHz	8	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conducted Emission on AC 150kHz to 30MHz	29	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: 2AFBG-KT720 complies with Section 15.107, 15.109 of the FCC Part 15, Subpart B Rules.

SUMMARY:

All tests according to the regulations cited on page 5 were

☒ - Performed

☐ - **Not** Performed

The Equipment Under Test

☒ - **Fulfills** the general approval requirements.

☐ - **Does not** fulfill the general approval requirements.

Sample Received Date: 05 May 2015

Testing Start Date: 12 May 2015

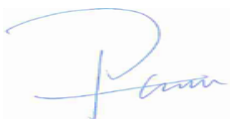
Testing End Date: 12 May 2015

- TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch-

Reviewed by:

Prepared by:

Tested by:



Phoebe Hu
EMC Project Manager



Trevor You
EMC Project Engineer



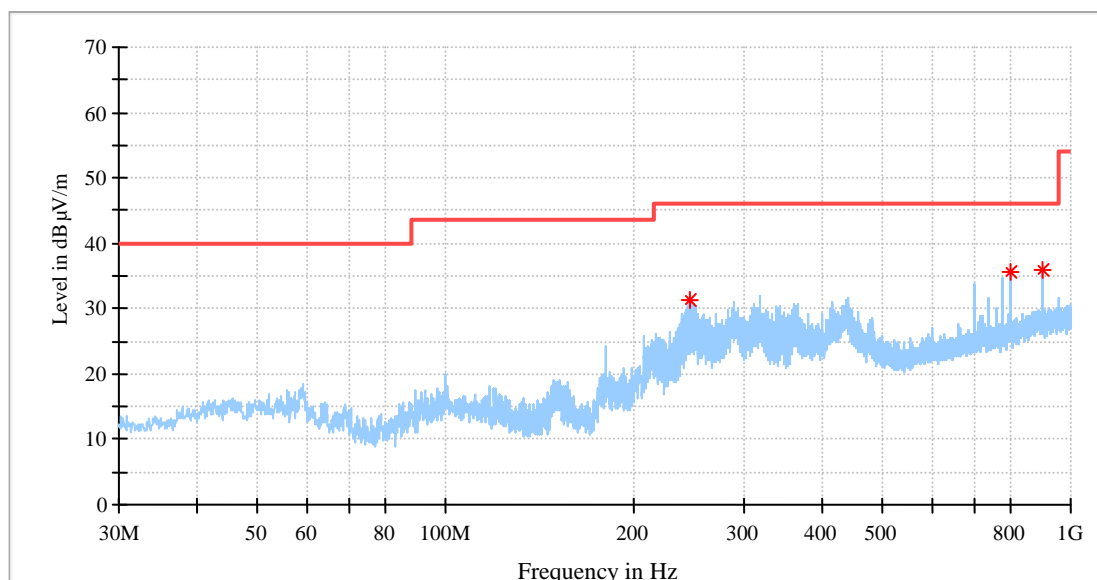
Louise Liu
Test Engineer

7 Emission Test Results

7.1 Radiated Emission Test 30MHz – 1000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope and data transmitting
 Tested on : Horizontal
 Comment : DC 12V (Supplied by DC Source)
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
245.764375	31.17	46.00	14.83	---	---	200.0	H	0.0	14.5
799.998125	35.55	46.00	10.45	---	---	100.0	H	345.0	24.3
900.029375	35.82	46.00	10.18	---	---	100.0	H	78.0	25.9

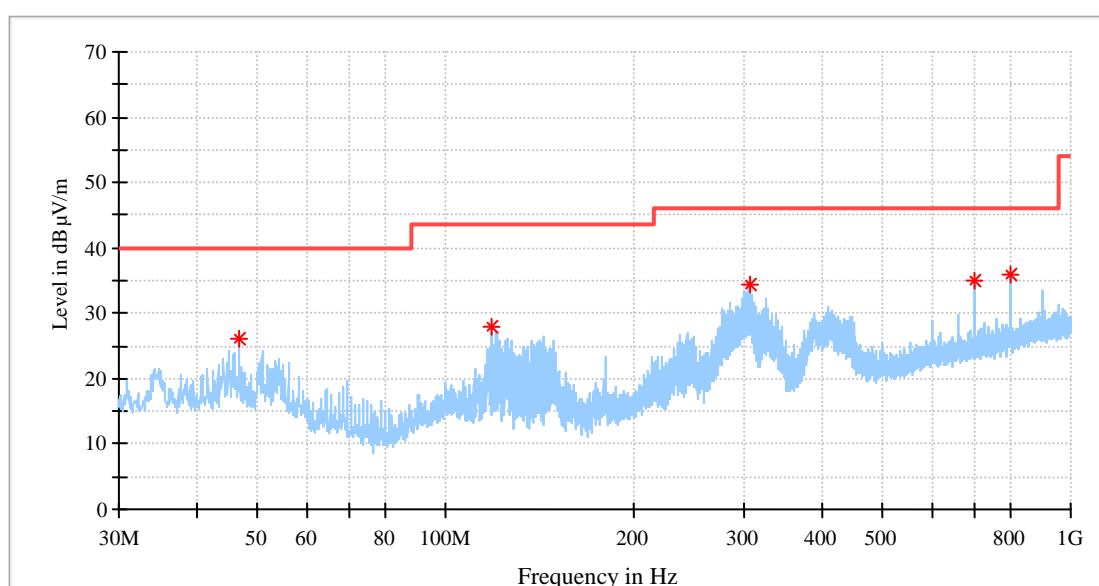
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---	---	---	---	---	---

Radiated Emission Test 30MHz – 1000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope and data transmitting
 Tested on : Vertical
 Comment : DC 12V (Supplied by DC Source)
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
46.732500	26.00	40.00	14.00	---	---	100.0	V	148.0	15.4
118.512500	27.85	43.50	15.65	---	---	100.0	V	0.0	12.4
306.753125	34.33	46.00	11.67	---	---	100.0	V	211.0	15.8
700.027500	34.97	46.00	11.03	---	---	100.0	V	200.0	22.5
799.998125	35.87	46.00	10.13	---	---	100.0	V	169.0	24.3

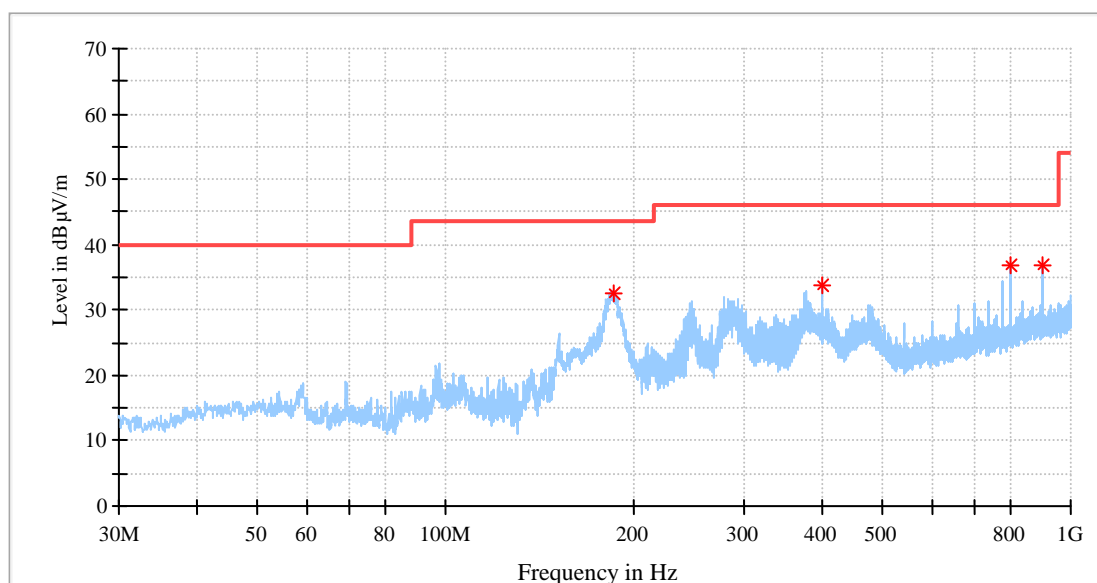
Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---	---	---	---	---	---

Radiated Emission Test 30MHz – 1000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope and data transmitting
 Tested on : Horizontal
 Comment : AC 120V/60Hz
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
186.109375	32.55	43.50	10.95	---	---	200.0	H	83.0	12.2
399.994375	33.73	46.00	12.27	---	---	100.0	H	337.0	18.0
800.058750	36.94	46.00	9.06	---	---	100.0	H	18.0	24.3
900.029375	36.81	46.00	9.19	---	---	100.0	H	337.0	25.9

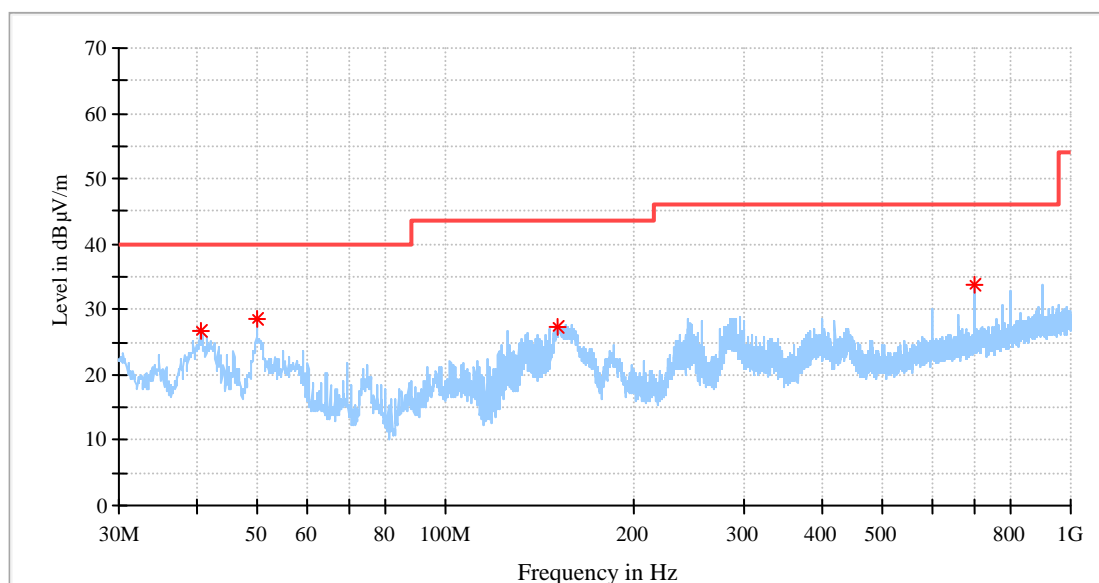
Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
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Radiated Emission Test 30MHz – 1000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope and data transmitting
 Tested on : Vertical
 Comment : AC 120V/60Hz
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
40.488125	26.61	40.00	13.39	---	---	100.0	V	0.0	14.5
49.885000	28.57	40.00	11.43	---	---	100.0	V	0.0	15.4
151.007500	27.22	43.50	16.28	---	---	100.0	V	337.0	10.3
700.088125	33.68	46.00	12.32	---	---	100.0	V	161.0	22.5

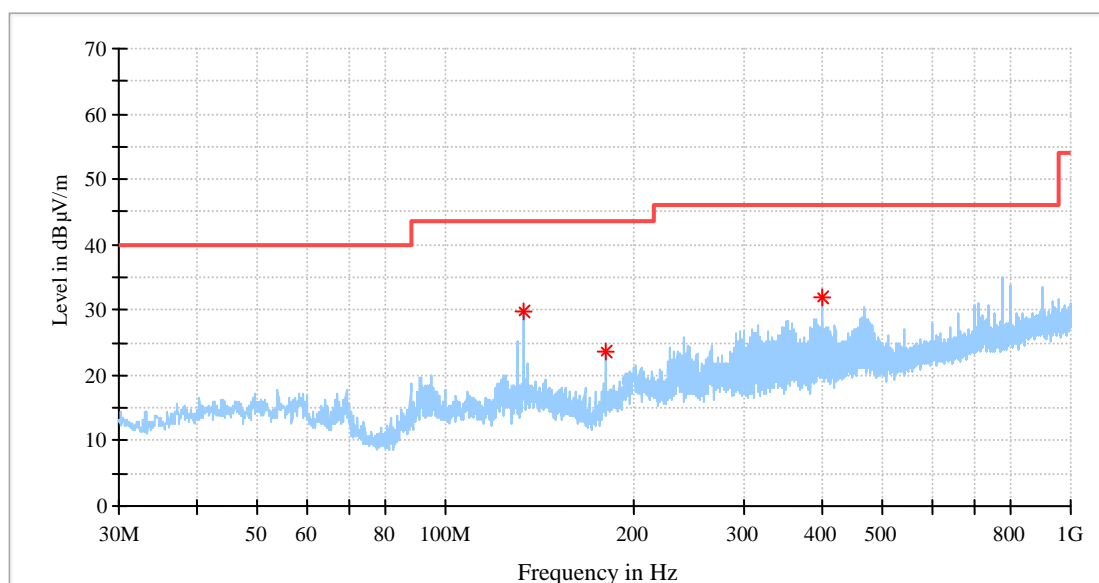
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---	---	---		---	---

Radiated Emission Test 30MHz – 1000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope, differential and data transmitting
 Tested on : Horizontal
 Comment : DC 12V (Supplied by DC Source)
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
133.001875	29.68	40.00	10.32	200.0	H	0.0	10.5
179.986250	23.67	40.00	16.33	100.0	H	316.0	11.5
399.994375	31.95	47.00	15.05	100.0	H	0.0	18.0

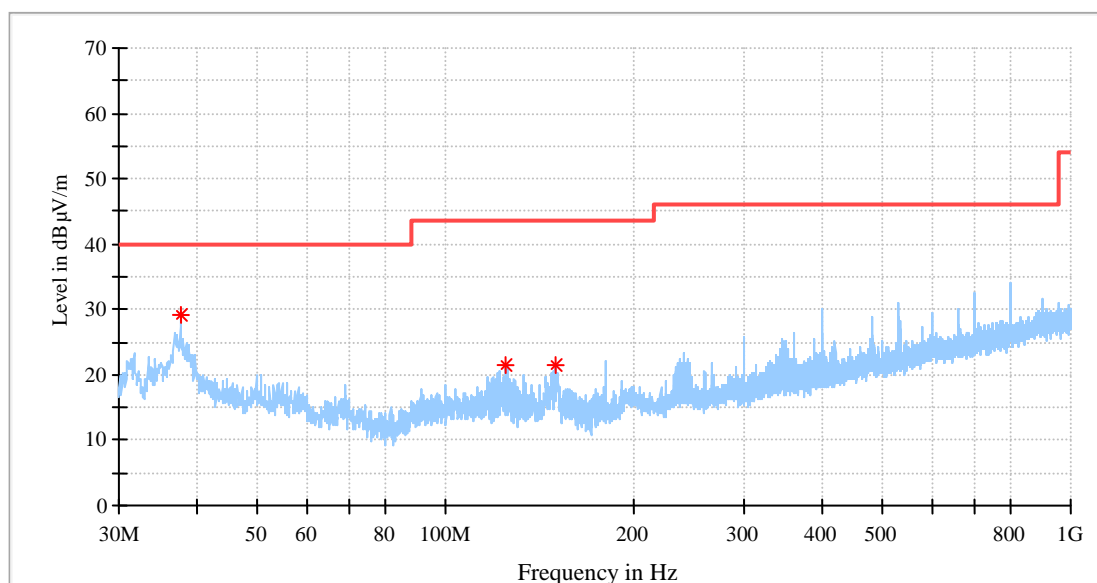
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---	---	---	---

Radiated Emission Test 30MHz – 1000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope, differential and data transmitting
 Tested on : Vertical
 Comment : DC 12V (Supplied by DC Source)
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
37.638750	29.19	40.00	10.81	100.0	V	0.0	13.7
124.756875	21.49	40.00	18.51	100.0	V	323.0	11.4
149.855625	21.51	40.00	18.49	100.0	V	0.0	10.3

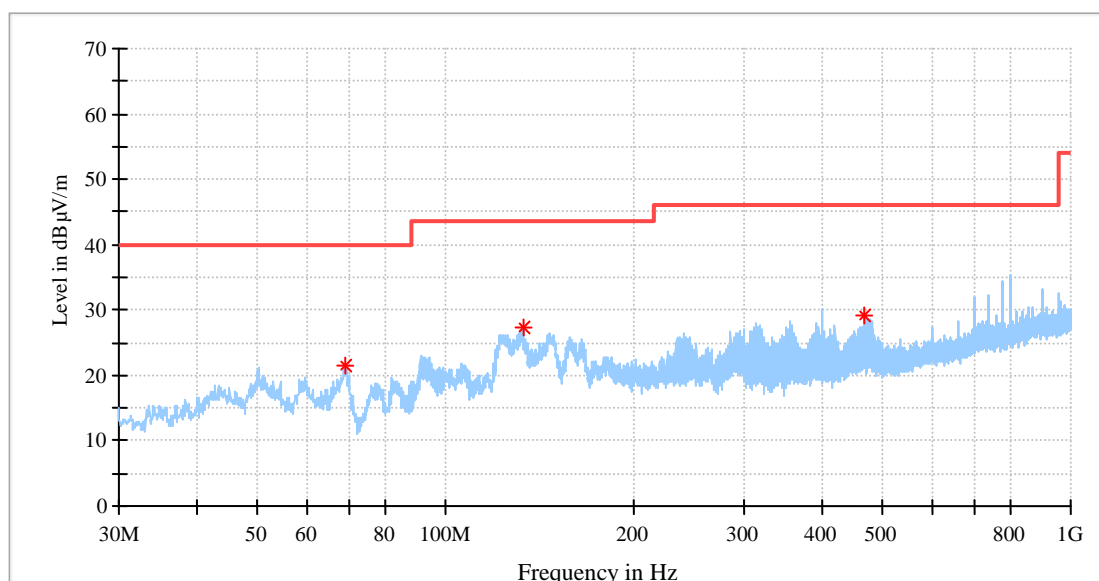
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---	---	---	---

Radiated Emission Test 30MHz – 1000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope, differential and data transmitting
 Tested on : Horizontal
 Comment : AC 120V/60Hz
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
69.163750	21.43	40.00	18.57	200.0	H	307.0	11.6
133.001875	27.33	43.50	16.17	100.0	H	0.0	10.5
468.076250	29.31	46.00	16.69	200.0	H	0.0	18.9

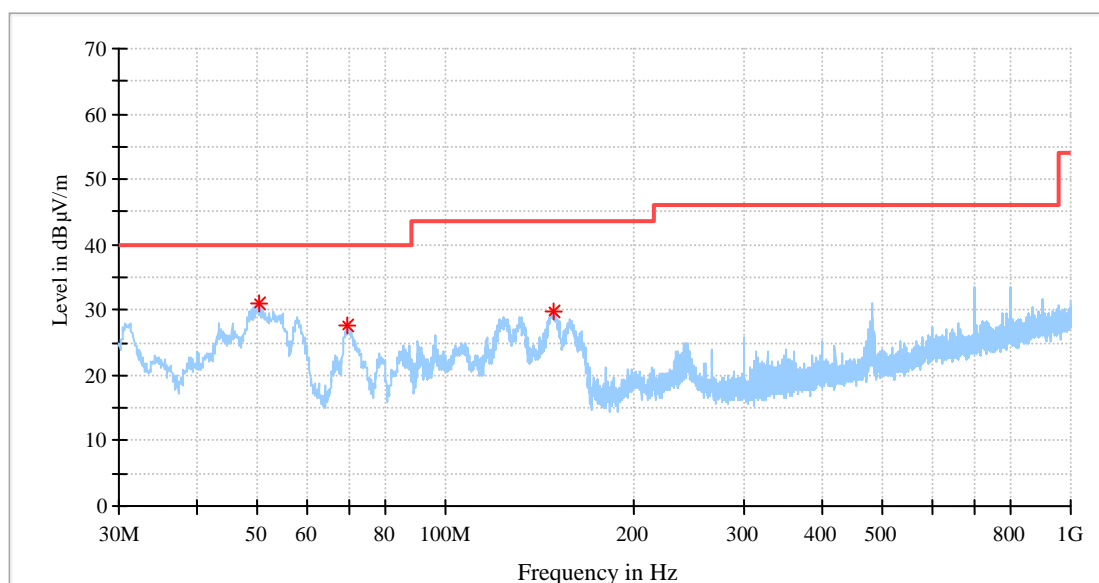
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---	---	---	---

Radiated Emission Test 30MHz – 1000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope, differential and data transmitting
 Tested on : Vertical
 Comment : AC 120V/60Hz
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
50.188125	31.00	40.00	9.00	100.0	V	177.0	15.4
69.830625	27.68	40.00	12.32	200.0	V	24.0	11.3
149.006875	29.78	43.50	13.72	100.0	V	353.0	10.2

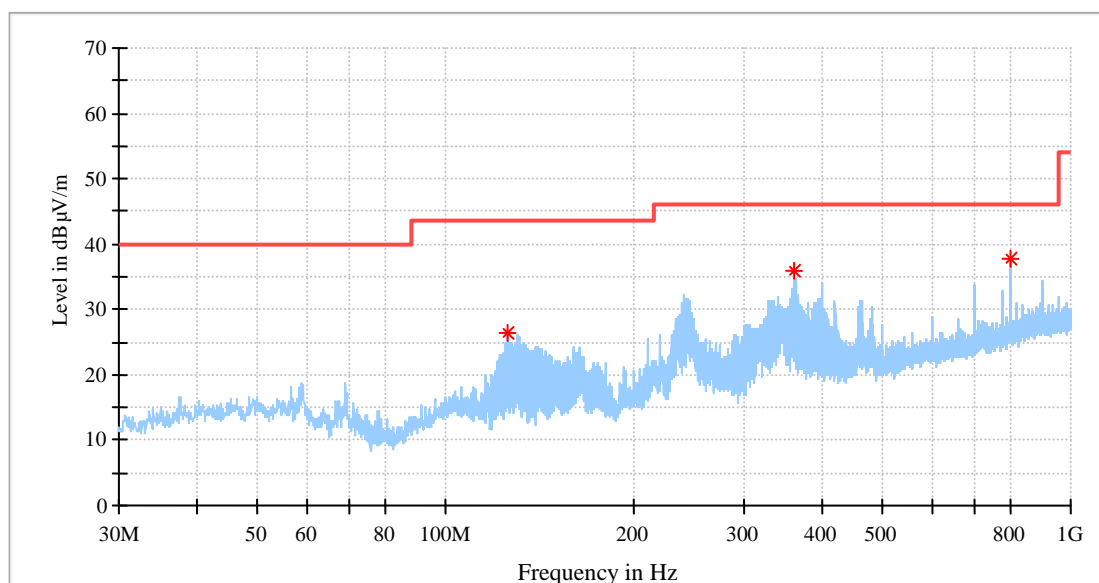
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---		---	---

Radiated Emission Test 30MHz – 1000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Diagnosing and data transmitting (OBD)
 Tested on : Horizontal
 Comment : DC 12V (Supplied by CAN Simulator)
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
125.787500	26.50	43.50	17.00	---	---	200.0	H	32.0	11.2
359.981875	35.91	46.00	10.09	---	---	100.0	H	42.0	17.1
799.998125	37.80	46.00	8.20	---	---	100.0	H	1.0	24.3

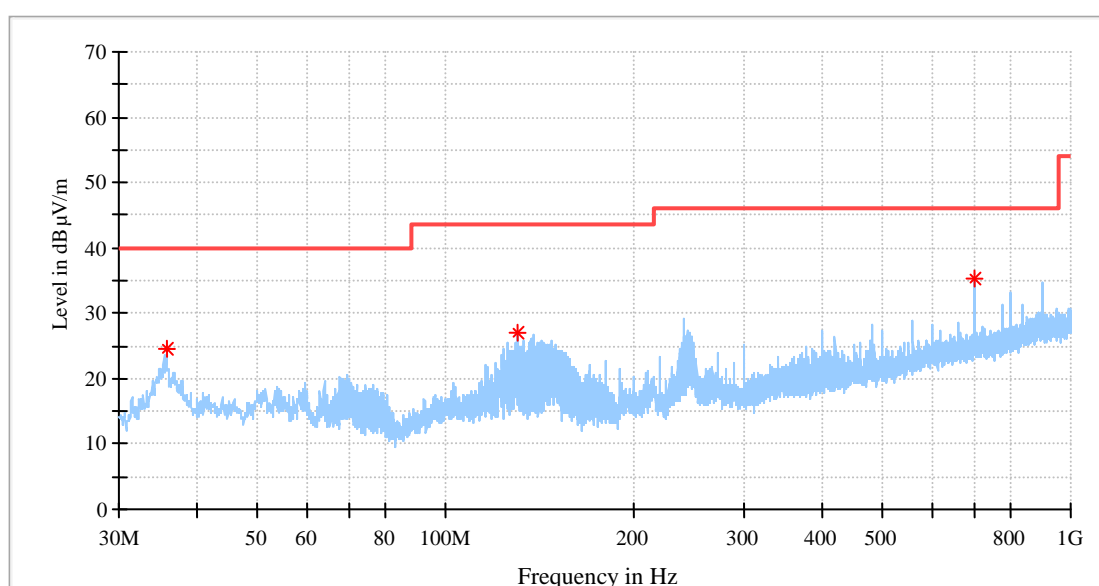
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---	---	---	---	---	---

Radiated Emission Test 30MHz – 1000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Diagnosing and data transmitting (OBD)
 Tested on : Vertical
 Comment : DC 12V (Supplied by CAN Simulator)
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
35.759375	24.53	40.00	15.47	---	---	100.0	V	0.0	13.0
129.970625	27.01	43.50	16.49	---	---	100.0	V	0.0	10.5
700.088125	35.29	46.00	10.71	---	---	100.0	V	159.0	22.5

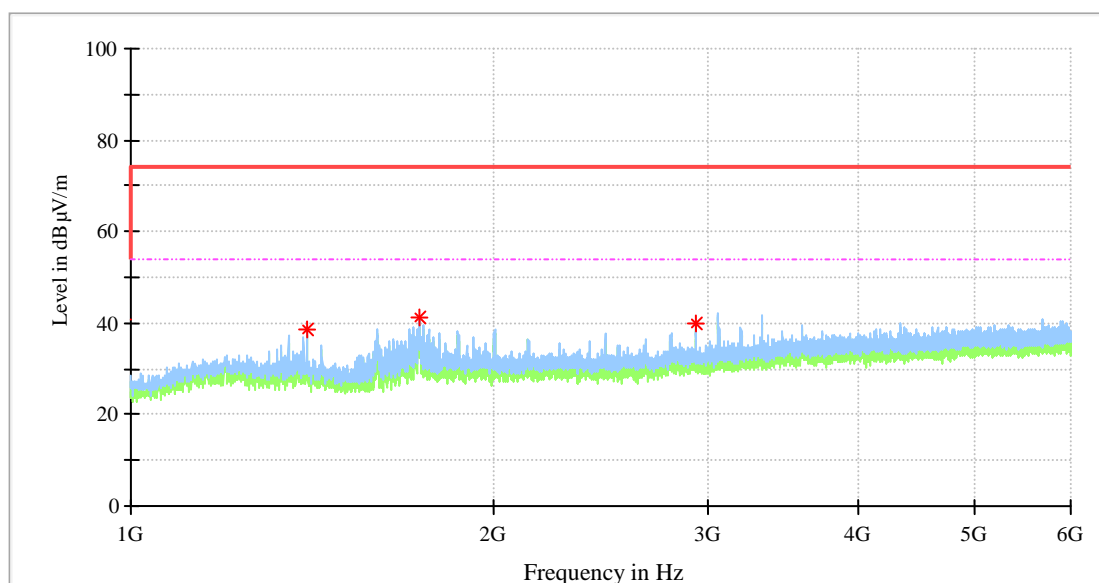
Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---	---	---	---	---	---

Radiated Emission Test 1000MHz – 6000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope and data transmitting
 Tested on : Horizontal
 Comment : DC 12V (Supplied by DC Source)
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
1401.000000	38.57	---	70.00	31.43	---	---	200.0	V	269.0
1733.000000	41.35	---	70.00	28.65	---	---	100.0	V	304.0
2933.000000	39.84	---	70.00	30.16	---	---	200.0	V	301.0

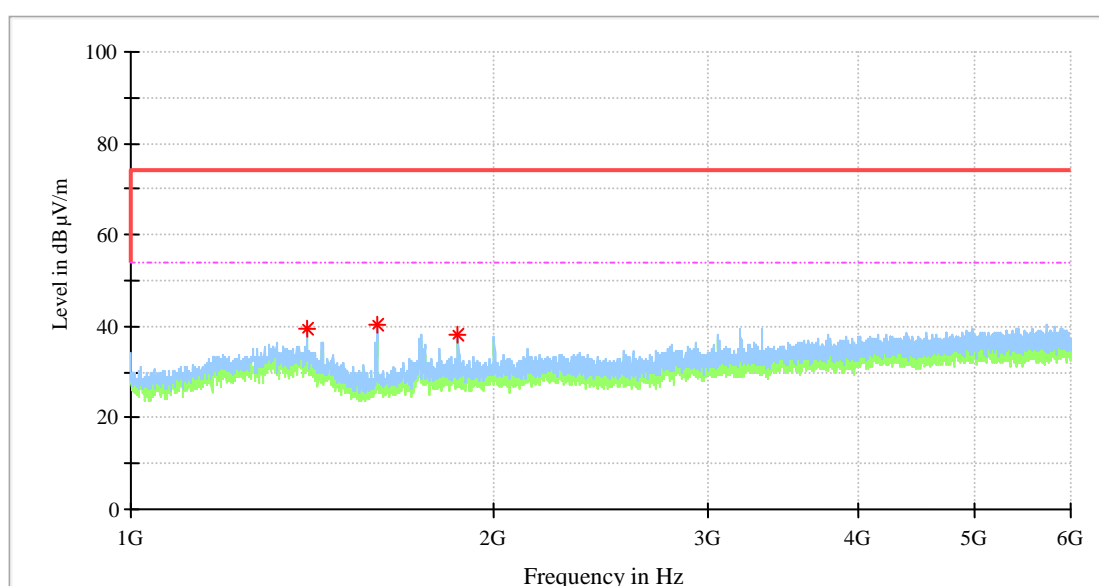
Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
---	---	---	---	---	---	---	---	---	---

Radiated Emission Test 1000MHz – 6000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope and data transmitting
 Tested on : Vertical
 Comment : DC 12V (Supplied by DC Source)
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
1400.500000	39.68	---	74.00	34.32	---	---	100.0	H	328.0
1601.500000	40.37	---	74.00	33.63	---	---	100.0	H	312.0
1867.000000	38.25	---	74.00	35.75	---	---	100.0	H	312.0

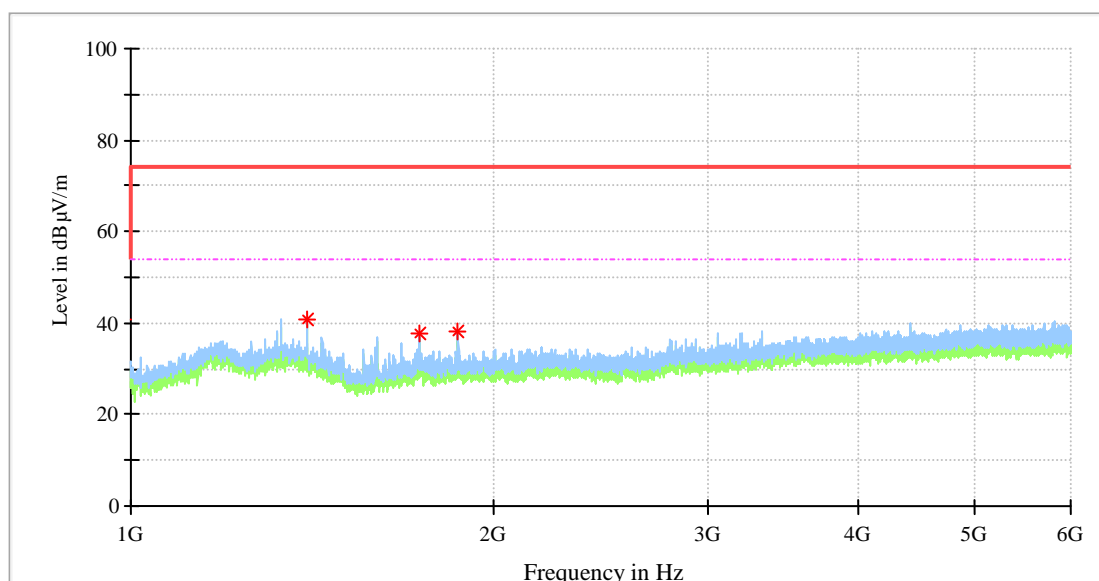
Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
---	---	---	---	---	---	---	---	---	---

Radiated Emission Test 1000MHz – 6000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope and data transmitting
 Tested on : Horizontal
 Comment : AC 120V/60Hz
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
1401.000000	40.92	---	74.00	33.08	---	---	100.0	H	22.0
1733.500000	37.66	---	74.00	36.34	---	---	100.0	H	335.0
1867.000000	37.99	---	74.00	36.01	---	---	100.0	H	343.0

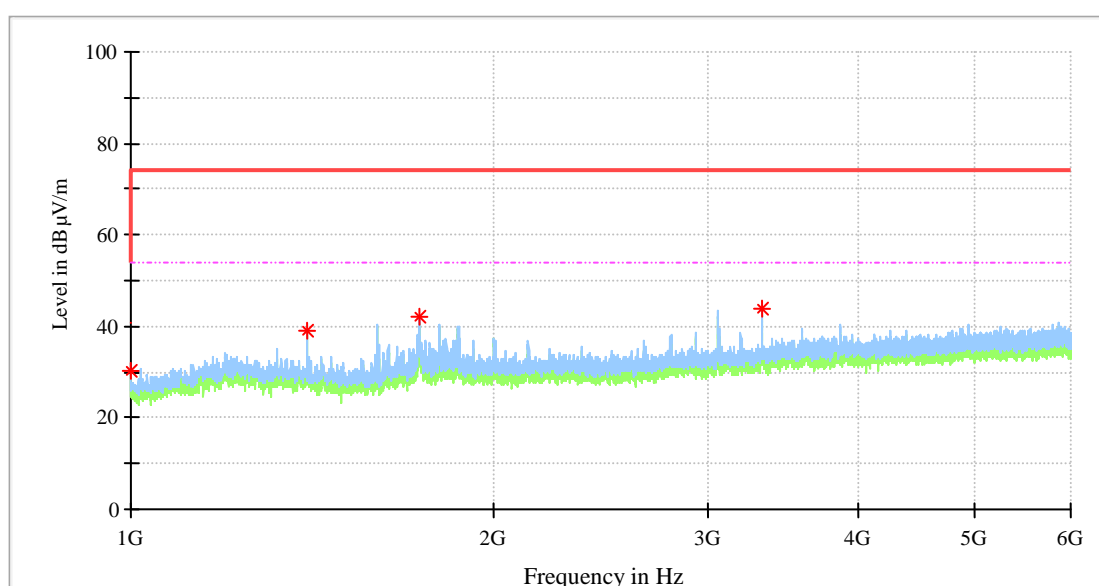
Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
---	---	---	---	---	---	---	---	---	---

Radiated Emission Test 1000MHz – 6000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope, differential and data transmitting
 Tested on : Vertical
 Comment : AC 120V/60Hz
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
1000.000000	30.07	---	54.00	23.93	---	---	200.0	V	79.0
1400.000000	39.20	---	74.00	34.80	---	---	200.0	V	264.0
1733.000000	42.17	---	74.00	31.83	---	---	100.0	V	320.0
3334.500000	43.88	---	74.00	30.12	---	---	100.0	V	142.0

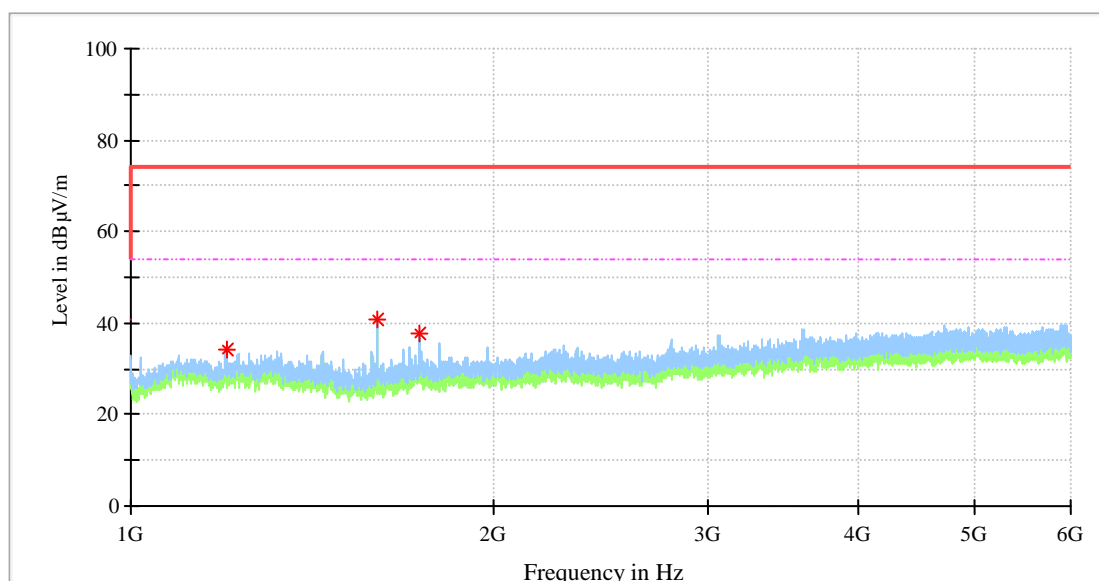
Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
---	---	---	---	---	---	---	---	---	---

Radiated Emission Test 1000MHz – 6000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope, differential and data transmitting
 Tested on : Horizontal
 Comment : DC 12V (Supplied by DC Source)
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1199.500000	34.12	---	74.00	39.88	100.0	H	198.0	-14.3
1600.000000	40.81	---	74.00	32.19	100.0	H	0.0	-12.6
1734.000000	37.54	---	74.00	36.46	100.0	H	315.0	-10.7

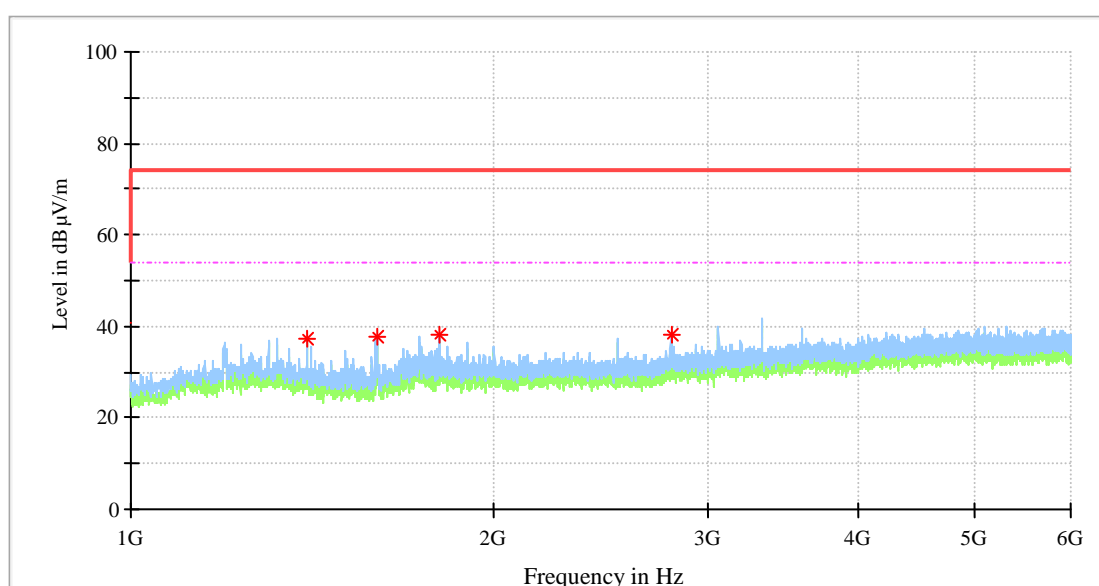
Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---	---	---	---

Radiated Emission Test 1000MHz – 6000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope, differential and data transmitting
 Tested on : Vertical
 Comment : DC 12V (Supplied by DC Source)
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1400.000000	37.45	---	74.00	36.55	100.0	V	265.0	-13.5
1600.500000	37.81	---	74.00	36.19	100.0	V	236.0	-12.6
1800.500000	37.98	---	74.00	36.02	100.0	V	295.0	-10.7
2800.000000	38.14	---	74.00	35.86	100.0	V	125.0	-7.1

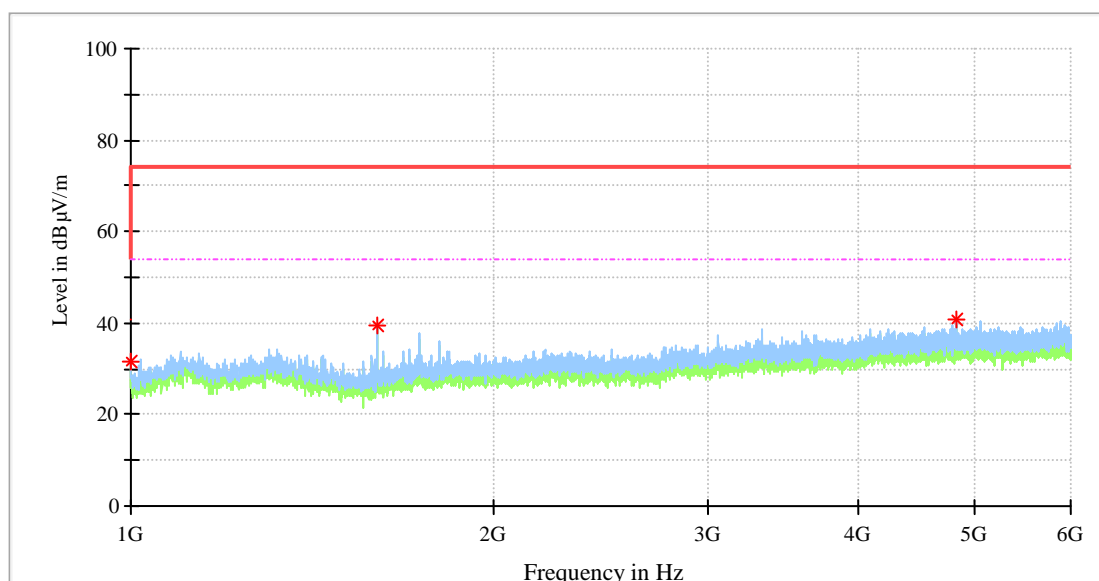
Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---		---	---

Radiated Emission Test 1000MHz – 6000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope, differential and data transmitting
 Tested on : Horizontal
 Comment : AC 120V/60Hz
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1000.000000	31.77	---	54.00	22.23	100.0	H	0.0	-15.1
1600.000000	39.42	---	74.00	34.58	100.0	H	337.0	-12.6
4818.500000	40.64	---	74.00	33.36	100.0	H	109.0	-0.7

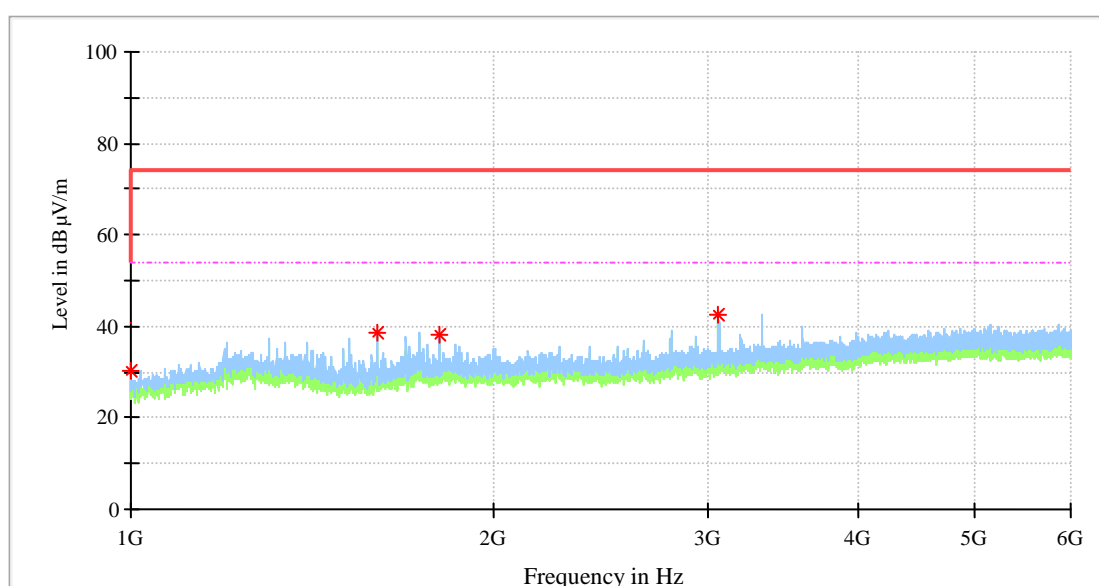
Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---	---	---	---

Radiated Emission Test 1000MHz – 6000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope, differential and data transmitting
 Tested on : Vertical
 Comment : AC 120V/60Hz
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1000.000000	30.10	---	54.00	23.90	200.0	V	110.0	-15.1
1600.000000	38.74	---	74.00	35.26	100.0	V	257.0	-12.6
1800.500000	38.29	---	74.00	35.71	100.0	V	316.0	-10.7
3068.000000	42.64	---	74.00	31.36	200.0	V	242.0	-6.2

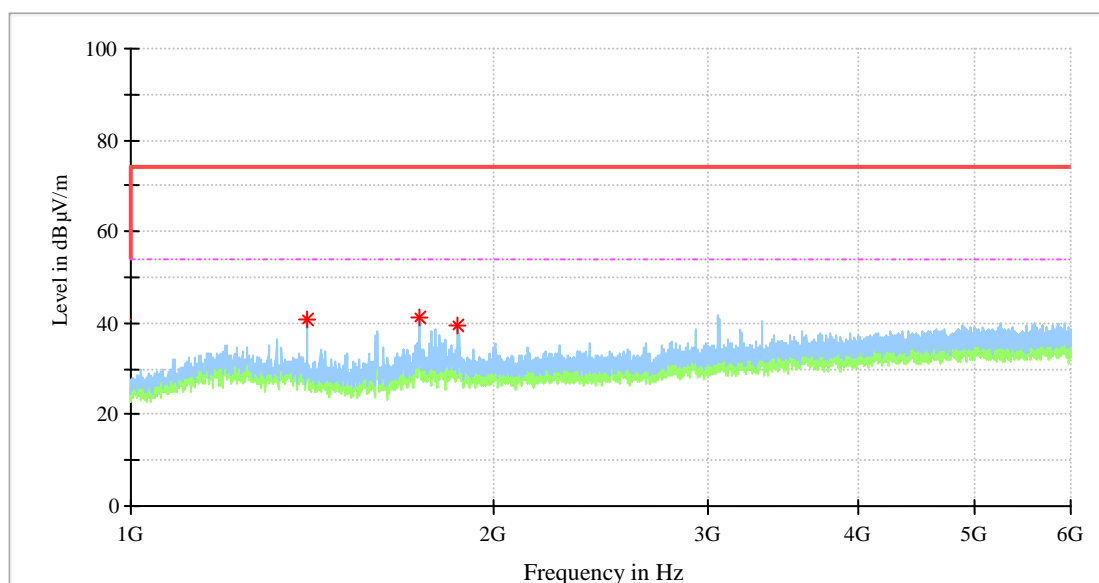
Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---	---	---	---

Radiated Emission Test 1000MHz – 6000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Diagnosing and data transmitting (OBD)
 Tested on : Horizontal
 Comment : DC 12V (Supplied by CAN Simulator)
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
1400.500000	40.87	---	74.00	32.13	---	---	100.0	V	218.0
1733.500000	41.12	---	74.00	32.88	---	---	100.0	V	284.0
1866.500000	39.66	---	74.00	34.34	---	---	100.0	V	255.0

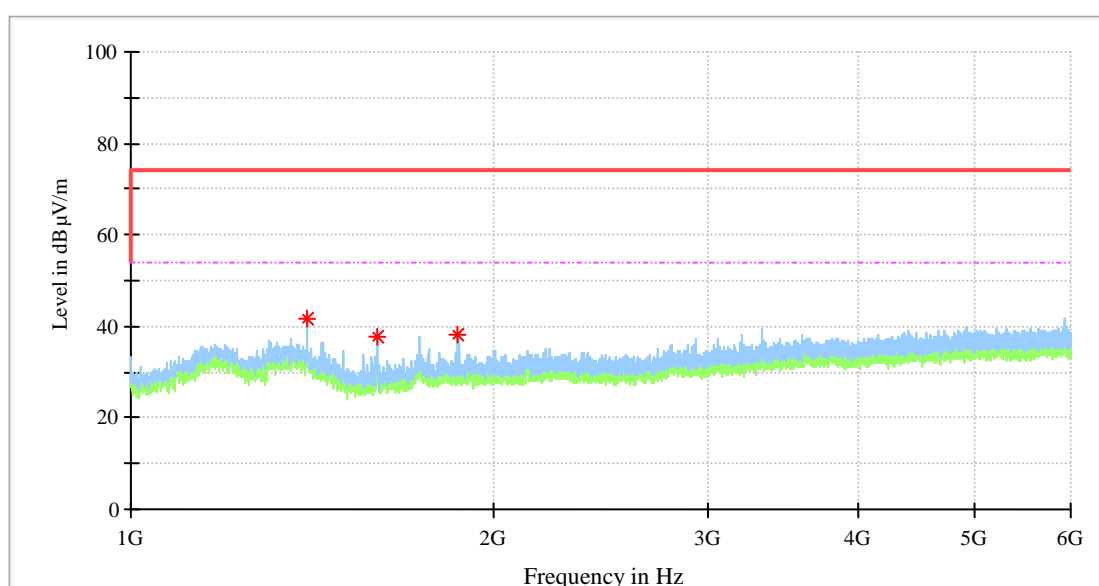
Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
---	---	---	---	---	---	---	---	---	---

Radiated Emission Test 1000MHz – 6000MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Diagnosing and data transmitting (OBD)
 Tested on : Vertical
 Comment : DC 12V (Supplied by CAN Simulator)
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.2 Atmospheric Pressure(mbar) : 1014



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
1400.000000	41.58	---	70.00	28.42	---	---	100.0	H	15.0
1600.500000	37.80	---	70.00	32.20	---	---	200.0	H	313.0
1867.500000	38.29	---	70.00	31.71	---	---	100.0	H	333.0

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
---	---	---	---	---	---	---	---	---	---

Test Equipment List

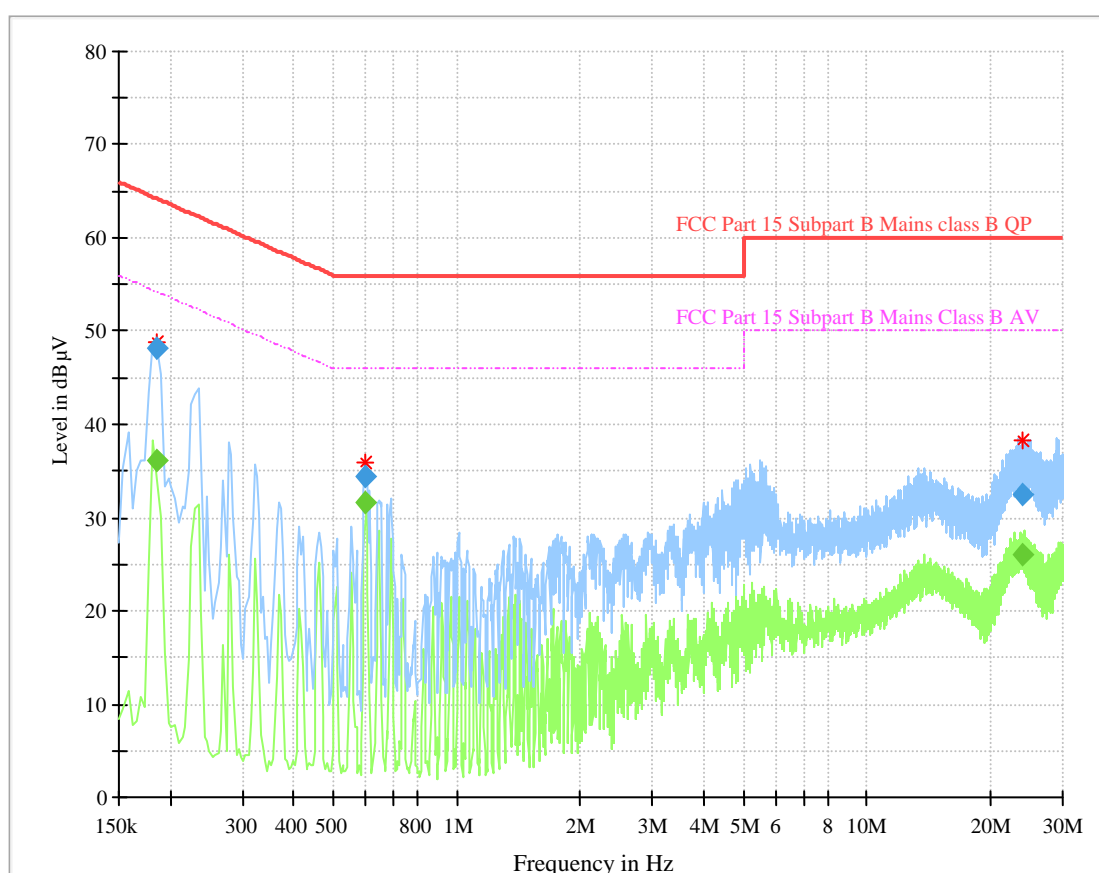
Radiated Emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	101269	2015-8-17
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9163	707	2017-8-17
Horn Antenna	Rohde & Schwarz	HF907	102294	2017-8-17
Pre-amplifier	Rohde & Schwarz	SCU 18	102230	2015-8-17
3m Semi-anechoic chamber	TDK	9X6X6	----	2019-5-29

7.2 Conducted Emission Test 150kHz – 30MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope and data transmitting
 Tested on : Power Line, Live
 Comment : AC 120V/60Hz
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.1 Atmospheric Pressure(mbar) : 1010



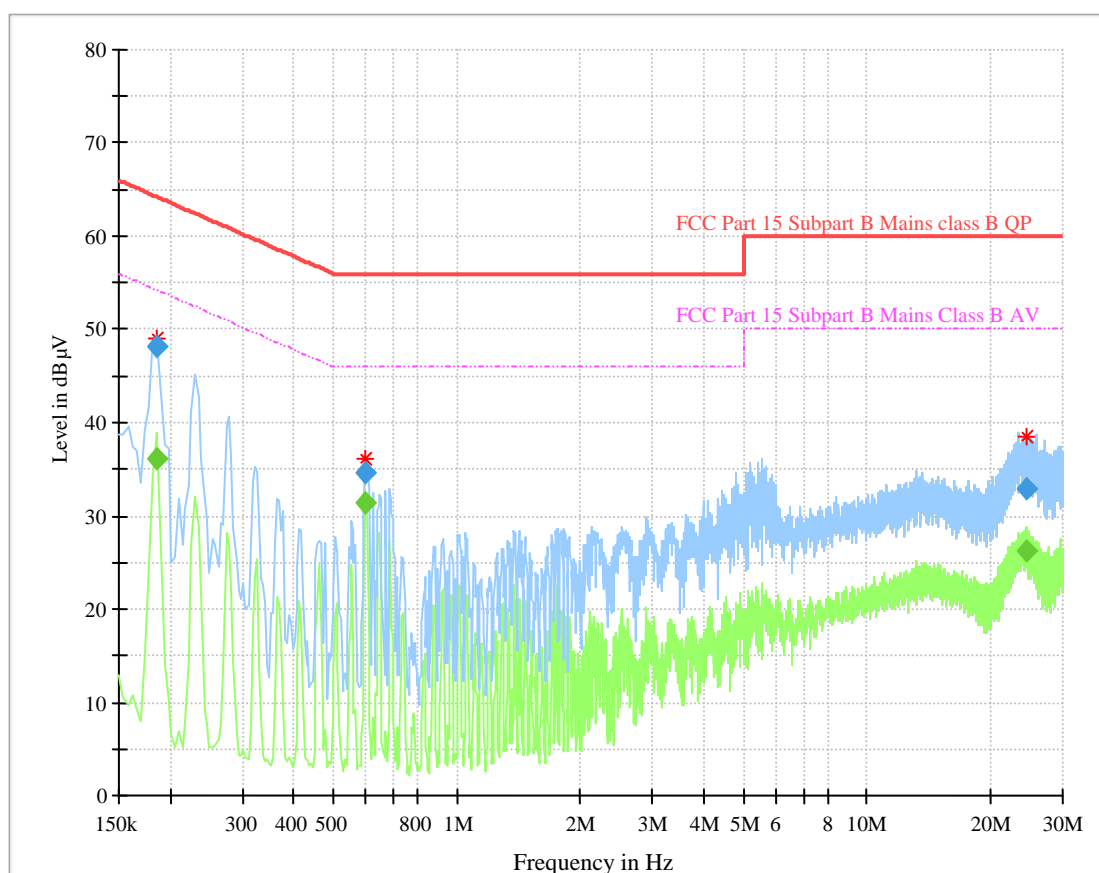
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.185500	---	36.05	54.24	18.19	L1	9.7
0.185500	48.13	---	64.24	16.11	L1	9.7
0.601500	---	31.69	46.00	14.31	L1	10.0
0.601500	34.48	---	56.00	21.52	L1	10.0
23.981500	---	26.04	50.00	23.96	L1	10.2
23.981500	32.54	---	60.00	27.46	L1	10.2

Conducted Emission Test 150kHz – 30MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope and data transmitting
 Tested on : Power Line, Neutral
 Comment : AC 120V/60Hz
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.1 Atmospheric Pressure(mbar) : 1010



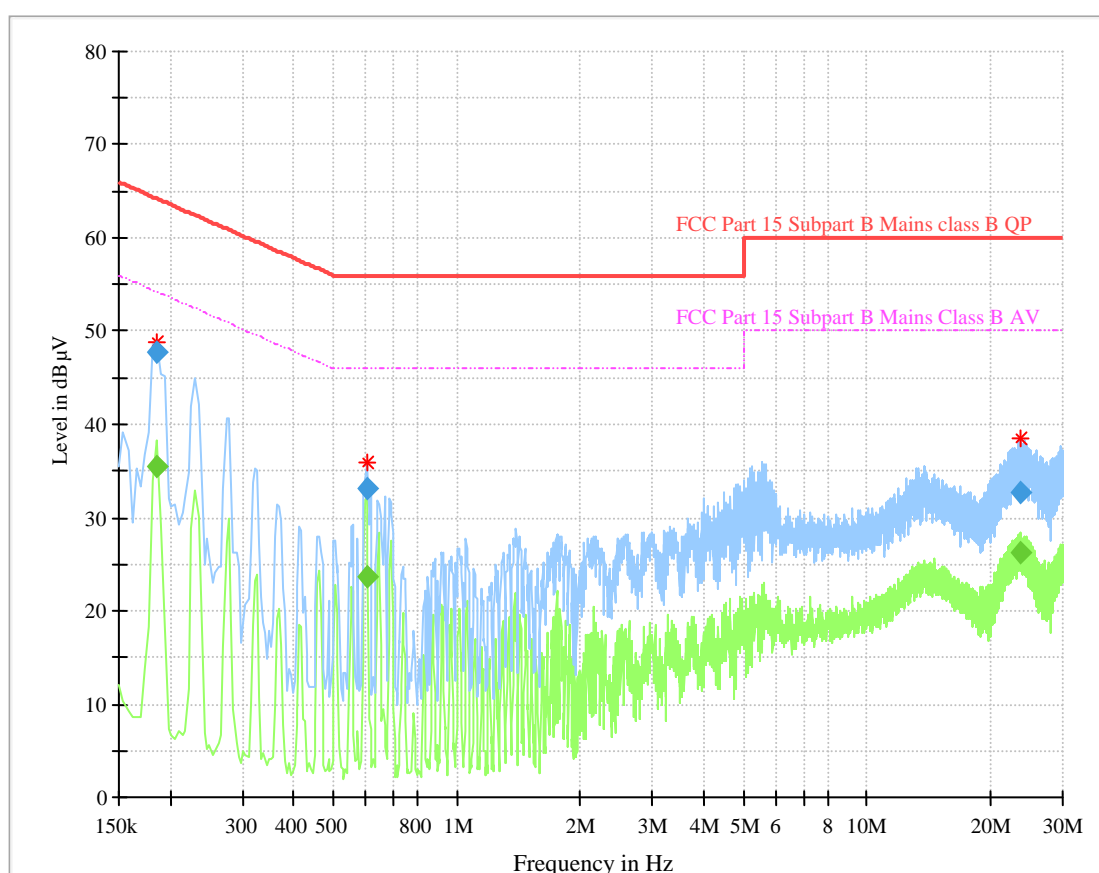
Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.185500	---	36.16	54.24	18.08	N	9.7
0.185500	48.23	---	64.24	16.01	N	9.7
0.601500	---	31.35	46.00	14.65	N	10.0
0.601500	34.56	---	56.00	21.44	N	10.0
24.526500	---	26.13	50.00	23.87	N	10.2
24.526500	32.85	---	60.00	27.15	N	10.2

Conducted Emission Test 150kHz – 30MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope, differential and data transmitting
 Tested on : Power Line, Live
 Comment : AC 120V/60Hz
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.1 Atmospheric Pressure(mbar) : 1010



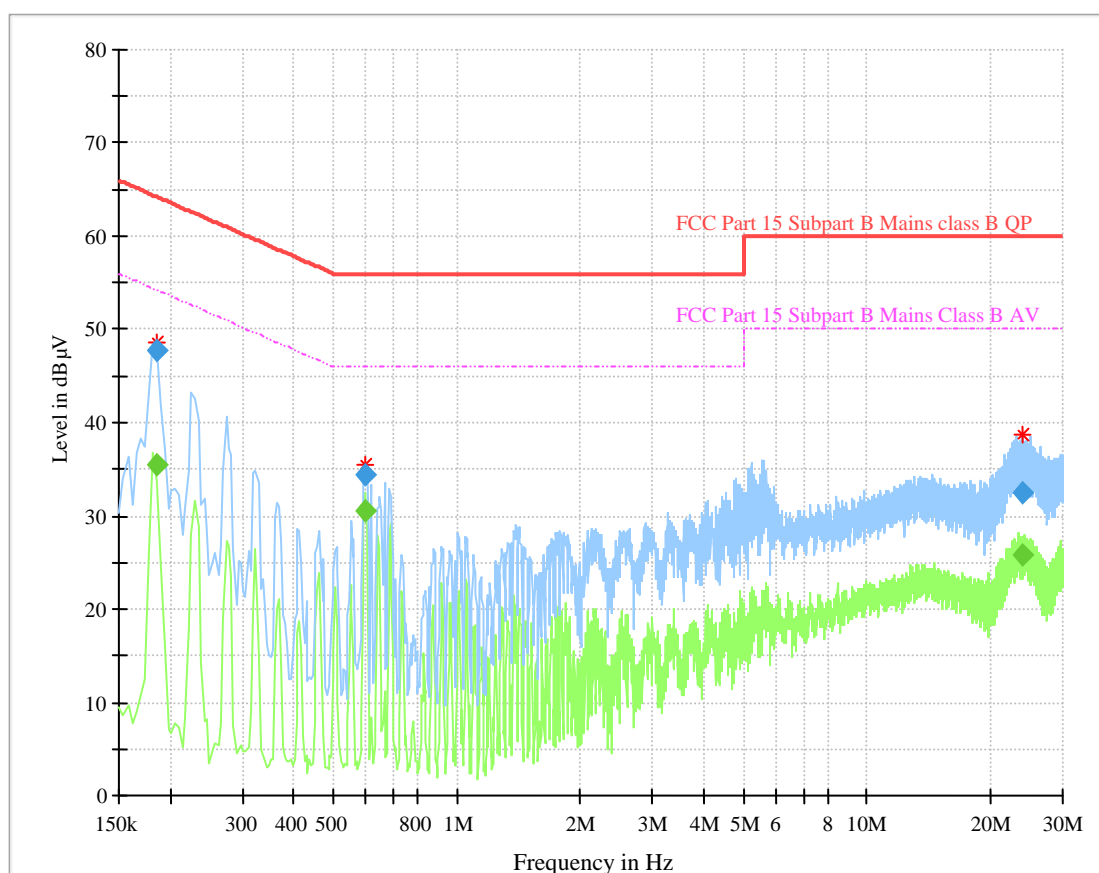
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.185500	---	35.58	54.24	18.66	L1	9.7
0.185500	47.84	---	64.24	16.40	L1	9.7
0.605500	---	23.72	46.00	22.28	L1	10.0
0.605500	33.14	---	56.00	22.86	L1	10.0
23.817500	---	26.21	50.00	23.79	L1	10.2
23.817500	32.61	---	60.00	27.39	L1	10.2

Conducted Emission Test 150kHz – 30MHz

Model No. : KT720
 Test requirement : FCC Part 15 Subpart B
 Test method : FCC Part 15 Subpart B
 Operating mode : Oscilloscope, differential and data transmitting
 Tested on : Power Line, Neutral
 Comment : AC 120V/60Hz
 Date of test : 12 May 2015

Temperature (°C): 24.0 Relative Humidity (%): 65.1 Atmospheric Pressure(mbar) : 1010



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.185500	---	35.52	54.24	18.72	N	9.7
0.185500	47.66	---	64.24	16.58	N	9.7
0.601500	---	30.52	46.00	15.48	N	10.0
0.601500	34.42	---	56.00	21.58	N	10.0
24.041500	---	25.85	50.00	24.15	N	10.2
24.041500	32.57	---	60.00	27.43	N	10.2

Test Equipment List

Conducted Emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 3	101782	2015-8-17
LISN	Rohde & Schwarz	ENV4200	100249	2015-8-17
LISN	Rohde & Schwarz	ENV216	100326	2015-8-17
ISN	Rohde & Schwarz	ENY81	100177	2015-8-17
ISN	Rohde & Schwarz	ENY81-CAT6	101664	2015-8-17
High Voltage Probe	Rohde & Schwarz	TK9420(VT9420)	9420-58	2015-8-17
RF Current probe	Rohde & Schwarz	EZ-17	100816	2015-8-17

8 Appendix A

System Measurement Uncertainty	
Test Items	Extended Uncertainty
Uncertainty for Radiated Emission in 3m chamber 30MHz-1000MHz	Horizontal: 4.83dB Vertical: 4.91dB
Uncertainty for Radiated Emission in 3m chamber 1000MHz-6000MHz	Horizontal: 4.89dB; Vertical: 4.88dB;
Uncertainty for Conducted Emission 150kHz-30MHz (for test using AMN ENV216 or ENV4200)	3.50dB