RADIATING COMB GENERATOR

1 Introduction

The TBCG1 is a radiating comb generator with an internal antenna and a base frequency of 100MHz. It radiates a comb spectrum characterized up to 6GHz. The comb generator is built and characterized to serve as a rough reference for testing radiated noise measurement set ups in anechoic chambers, TEM/GTEM cells, shielded chambers, etc.
It is a portable device, powered by a 9V alkaline cell.

2 Specification

Base frequency: 100MHz
Characterized comb spectrum: 30MHz - 6 GHz
Tolerance: +/- 2.5 dB
Power supply: 9V PP3 (E-block) alkaline battery
Current consumption: 175mA
Dimensions: 80mm x 61mm x 27mm
Weight including battery: 76g

Warning: the TBCG1 radiates across a wide spectrum, significantly exceeding radiating noise limits specified in any CISPR standard. Use it only in a shielded environment to avoid interference with other electronic products
Turn off the device after its use, to prevent battery drainage (ION = 175mA)

3 Spectrum Plots

3.1 Explanatory note

The following plots of the emissions generated by the radiating comb were carried out in a 3m anechoic chamber of an accredited test house.
The measured results are displayed with limit lines and peak tables according to the standard EN 55032. The limit lines are not chosen with any special intention in mind. They can be ignored, as they were simply generated because the testhouse used one of the available preconfigured programs to measure the radiated emissions of the TBCG1.
The essential information is the orientation of the TBCG1 with respect to the measurement antenna. It is shown at the beginning of each plot section. The other essential information is measurement graph itself.
In fact, each plot contains the results of two measurement runs – one curve measured with Max. Peak detector and the other curve measured with average detector:
Green graphs - Max. Peak detector measurements
Pink graphs - Average detector measurements
The peak table values below each plot simply show the six highest level peaks with respect to the irelevant limit lines. However they contain the information on the measurement antenna polarisation of the corresponding plot.

3.2 Orientation 1

RADIATING COMB GENERATOR

Shenzhen CTL Testing Technology Co.,Ltd

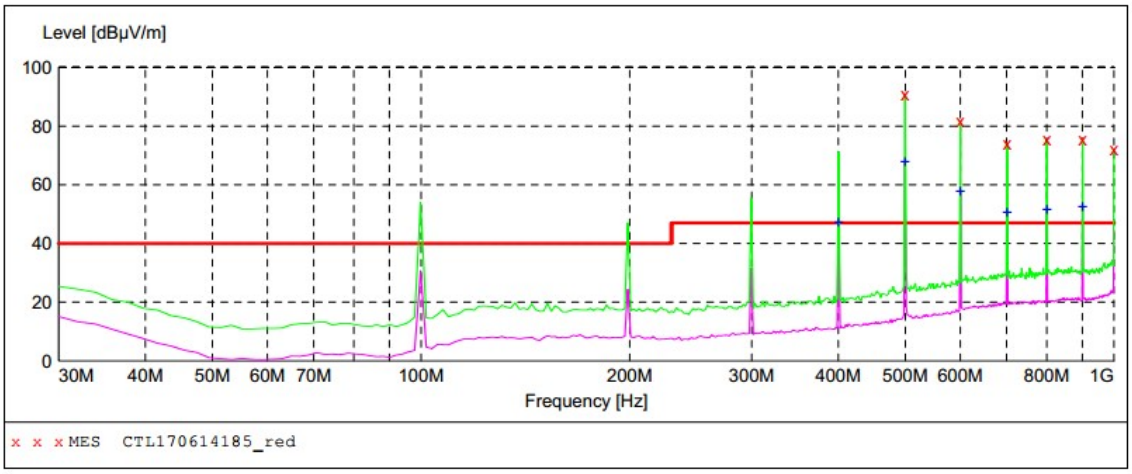
Radiation Emission Test EN 55032

EUT:	TBCG1
Manufacturer:	CTL
Operating Condition:	ON
Test Site:	3m Chamber
Operator:	XIANG
Test Specification:	DC 9V
Comment:	1
Start of Test:	6/15/2017 / 12:17:23AM

SWEEP TABLE: "test (30M-1G)"

Short Description: Field Strength

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak Average	300.0 ms	120 kHz	JB1



MEASUREMENT RESULT: "CTL170614185_red"

6/15/2017 12:17AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
499.480000	90.70	20.5	47.0	-43.7	---	0.0	0.00	VERTICAL
600.360000	81.70	23.0	47.0	-34.7	---	0.0	0.00	VERTICAL
701.240000	73.90	24.3	47.0	-26.9	---	0.0	0.00	VERTICAL
800.180000	75.40	25.6	47.0	-28.4	---	0.0	0.00	VERTICAL
901.060000	75.50	26.3	47.0	-28.5	---	0.0	0.00	VERTICAL
1000.000000	72.10	28.2	47.0	-25.1	---	0.0	0.00	VERTICAL

MEASUREMENT RESULT: "CTL170614185_red2"

6/15/2017 12:17AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
400.540000	47.30	18.2	1000.0	952.7	---	0.0	0.00	VERTICAL
499.480000	67.80	20.5	1000.0	932.2	---	0.0	0.00	VERTICAL
600.360000	57.90	23.0	1000.0	942.1	---	0.0	0.00	VERTICAL
701.240000	50.40	24.3	1000.0	949.6	---	0.0	0.00	VERTICAL
800.180000	51.70	25.6	1000.0	948.3	---	0.0	0.00	VERTICAL
901.060000	52.50	26.3	1000.0	947.5	---	0.0	0.00	VERTICAL

RADIATING COMB GENERATOR

Shenzhen CTL Testing Technology Co.,Ltd

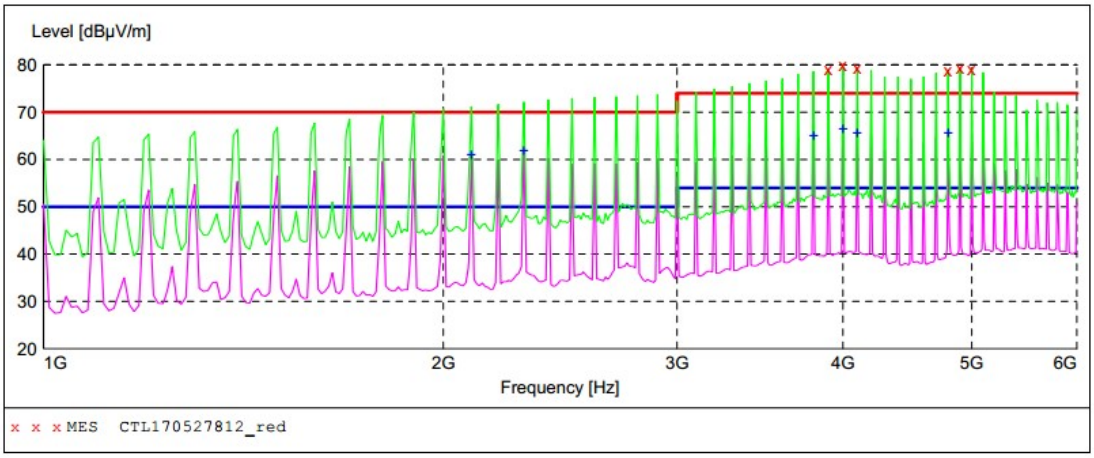
Radiation Emission Test EN 55022 B

EUT:	TBCG1
Manufacturer:	/
Operating Condition:	ON
Test Site:	3m Chamber
Operator:	WZ
Test Specification:	DC 9V
Comment:	1
Start of Test:	6/15/2017 / 12:33:01AM

SWEEP TABLE: "test (1G-18G) P"

Short Description: EN 55022 Field Strength

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	6.0 GHz	MaxPeak Average	5.0 s	1 MHz	DRH-118 Horizontal



MEASUREMENT RESULT: "CTL170527812_red"

6/15/2017 12:39AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
3900.000000	79.10	6.3	74.0	-5.1	---	0.0	0.00	VERTICAL
4000.000000	79.90	7.0	74.0	-5.9	---	0.0	0.00	VERTICAL
4100.000000	79.30	6.4	74.0	-5.3	---	0.0	0.00	VERTICAL
4800.000000	78.90	5.9	74.0	-4.9	---	0.0	0.00	VERTICAL
4900.000000	79.40	6.5	74.0	-5.4	---	0.0	0.00	VERTICAL
5000.000000	79.20	7.1	74.0	-5.2	---	0.0	0.00	VERTICAL

MEASUREMENT RESULT: "CTL170527812_red2"

6/15/2017 12:39AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
2100.000000	61.10	-1.9	50.0	-11.1	---	0.0	0.00	VERTICAL
2300.000000	61.90	-0.9	50.0	-11.9	---	0.0	0.00	VERTICAL
3800.000000	65.10	5.7	54.0	-11.1	---	0.0	0.00	VERTICAL
4000.000000	66.40	7.0	54.0	-12.4	---	0.0	0.00	VERTICAL
4100.000000	65.50	6.4	54.0	-11.5	---	0.0	0.00	VERTICAL
4800.000000	65.70	5.9	54.0	-11.7	---	0.0	0.00	VERTICAL

RADIATING COMB GENERATOR

Shenzhen CTL Testing Technology Co.,Ltd

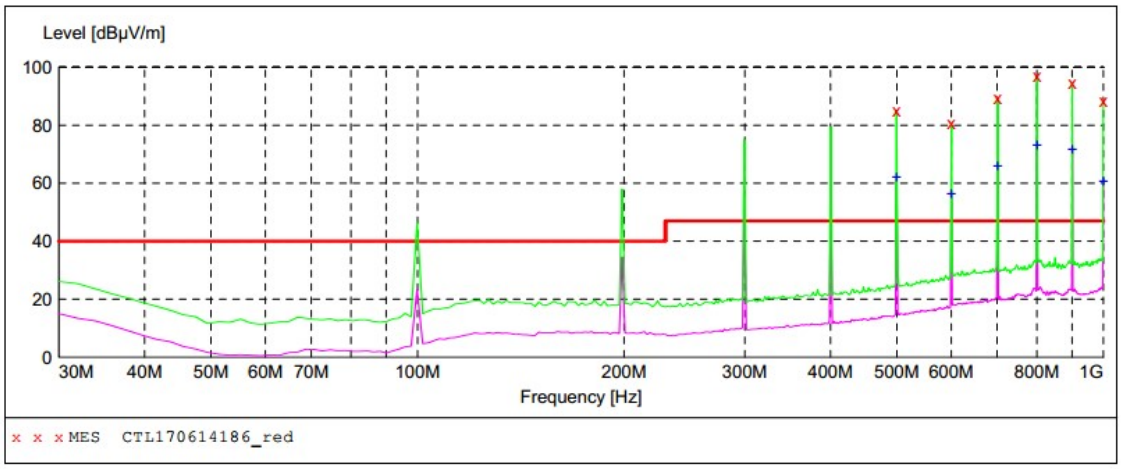
Radiation Emission Test EN 55032

EUT:	TBCG1
Manufacturer:	CTL
Operating Condition:	ON
Test Site:	3m Chamber
Operator:	XIANG
Test Specification:	DC 9V
Comment:	1
Start of Test:	6/15/2017 / 12:18:20AM

SWEEP TABLE: "test (30M-1G)"

Short Description:

Start Frequency	Stop Frequency	Detector	Field Strength Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak Average	300.0 ms	120 kHz	JB1



MEASUREMENT RESULT: "CTL170614186_red"

6/15/2017 12:19AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
499.480000	84.90	20.5	47.0	-37.9	---	0.0	0.00	HORIZONTAL
600.360000	80.60	23.0	47.0	-33.6	---	0.0	0.00	HORIZONTAL
701.240000	89.40	24.3	47.0	-42.4	---	0.0	0.00	HORIZONTAL
800.180000	97.00	25.6	47.0	-50.0	---	0.0	0.00	HORIZONTAL
901.060000	94.80	26.3	47.0	-47.8	---	0.0	0.00	HORIZONTAL
1000.000000	88.60	28.2	47.0	-41.6	---	0.0	0.00	HORIZONTAL

MEASUREMENT RESULT: "CTL170614186_red2"

6/15/2017 12:19AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
499.480000	62.00	20.5	1000.0	938.0	---	0.0	0.00	HORIZONTAL
600.360000	56.50	23.0	1000.0	943.5	---	0.0	0.00	HORIZONTAL
701.240000	65.70	24.3	1000.0	934.3	---	0.0	0.00	HORIZONTAL
800.180000	73.20	25.6	1000.0	926.8	---	0.0	0.00	HORIZONTAL
901.060000	71.60	26.3	1000.0	928.4	---	0.0	0.00	HORIZONTAL
1000.000000	60.70	28.2	1000.0	939.3	---	0.0	0.00	HORIZONTAL

RADIATING COMB GENERATOR

Shenzhen CTL Testing Technology Co.,Ltd

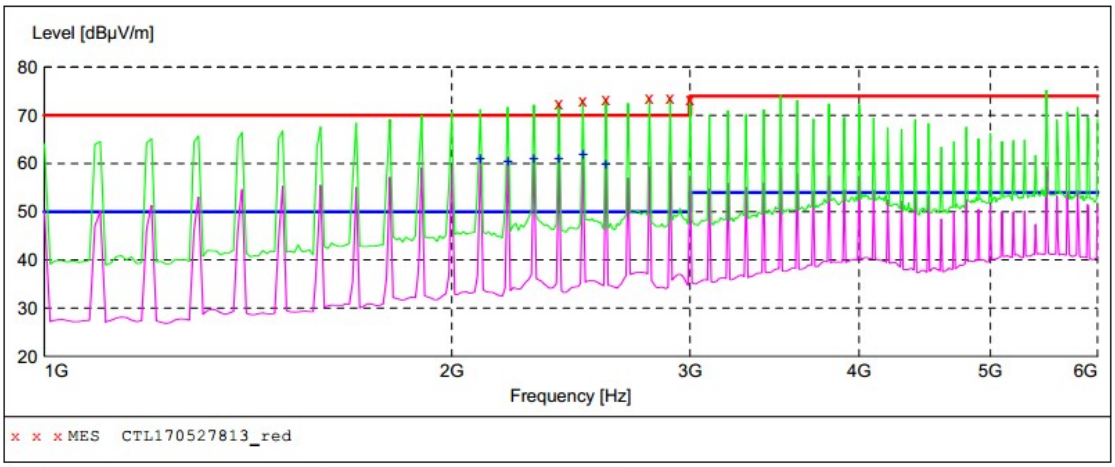
Radiation Emission Test EN 55022 B

EUT:	TBCG1
Manufacturer:	/
Operating Condition:	ON
Test Site:	3m Chamber
Operator:	WZ
Test Specification:	DC 9V
Comment:	1
Start of Test:	6/15/2017 / 12:40:03AM

SWEEP TABLE: "test (1G-18G) P"

Short Description: EN 55022 Field Strength

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	6.0 GHz	MaxPeak Average	5.0 s	1 MHz	DRH-118 Horizontal



MEASUREMENT RESULT: "CTL170527813_red"

6/15/2017 12:41AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
2400.000000	72.60	-0.5	70.0	-2.6	---	0.0	0.00	HORIZONTAL
2500.000000	73.00	0.0	70.0	-3.0	---	0.0	0.00	HORIZONTAL
2600.000000	73.20	0.2	70.0	-3.2	---	0.0	0.00	HORIZONTAL
2800.000000	73.50	0.6	70.0	-3.5	---	0.0	0.00	HORIZONTAL
2900.000000	73.70	0.8	70.0	-3.7	---	0.0	0.00	HORIZONTAL
3000.000000	73.40	1.0	70.0	-3.4	---	0.0	0.00	HORIZONTAL

MEASUREMENT RESULT: "CTL170527813_red2"

6/15/2017 12:41AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
2100.000000	61.00	-1.9	50.0	-11.0	---	0.0	0.00	HORIZONTAL
2200.000000	60.30	-1.4	50.0	-10.3	---	0.0	0.00	HORIZONTAL
2300.000000	61.10	-0.9	50.0	-11.1	---	0.0	0.00	HORIZONTAL
2400.000000	61.00	-0.5	50.0	-11.0	---	0.0	0.00	HORIZONTAL
2500.000000	61.80	0.0	50.0	-11.8	---	0.0	0.00	HORIZONTAL
2600.000000	59.90	0.2	50.0	-9.9	---	0.0	0.00	HORIZONTAL

RADIATING COMB GENERATOR

3.3 Orientation 2

RADIATING COMB GENERATOR

Shenzhen CTL Testing Technology Co.,Ltd

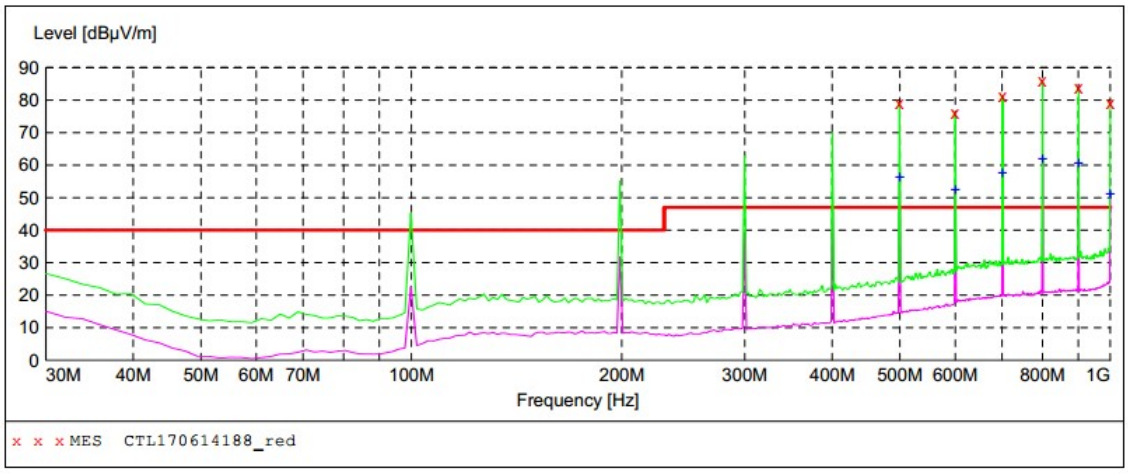
Radiation Emission Test EN 55032

EUT:	TBCG1
Manufacturer:	CTL
Operating Condition:	ON
Test Site:	3m Chamber
Operator:	XIANG
Test Specification:	DC 9V
Comment:	2
Start of Test:	6/15/2017 / 12:23:36AM

SWEEP TABLE: "test (30M-1G)"

Short Description: Field Strength

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak Average	300.0 ms	120 kHz	JB1



MEASUREMENT RESULT: "CTL170614188_red"

6/15/2017 12:25AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
499.480000	79.10	20.5	47.0	-32.1	---	0.0	0.00	VERTICAL
600.360000	76.30	23.0	47.0	-29.3	---	0.0	0.00	VERTICAL
701.240000	81.40	24.3	47.0	-34.4	---	0.0	0.00	VERTICAL
800.180000	85.90	25.6	47.0	-38.9	---	0.0	0.00	VERTICAL
901.060000	83.80	26.3	47.0	-36.8	---	0.0	0.00	VERTICAL
1000.000000	79.20	28.2	47.0	-32.2	---	0.0	0.00	VERTICAL

MEASUREMENT RESULT: "CTL170614188_red2"

6/15/2017 12:25AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
499.480000	56.20	20.5	1000.0	943.8	---	0.0	0.00	VERTICAL
600.360000	52.40	23.0	1000.0	947.6	---	0.0	0.00	VERTICAL
701.240000	57.80	24.3	1000.0	942.2	---	0.0	0.00	VERTICAL
800.180000	62.00	25.6	1000.0	938.0	---	0.0	0.00	VERTICAL
901.060000	60.60	26.3	1000.0	939.4	---	0.0	0.00	VERTICAL
1000.000000	51.10	28.2	1000.0	948.9	---	0.0	0.00	VERTICAL

RADIATING COMB GENERATOR

Shenzhen CTL Testing Technology Co.,Ltd

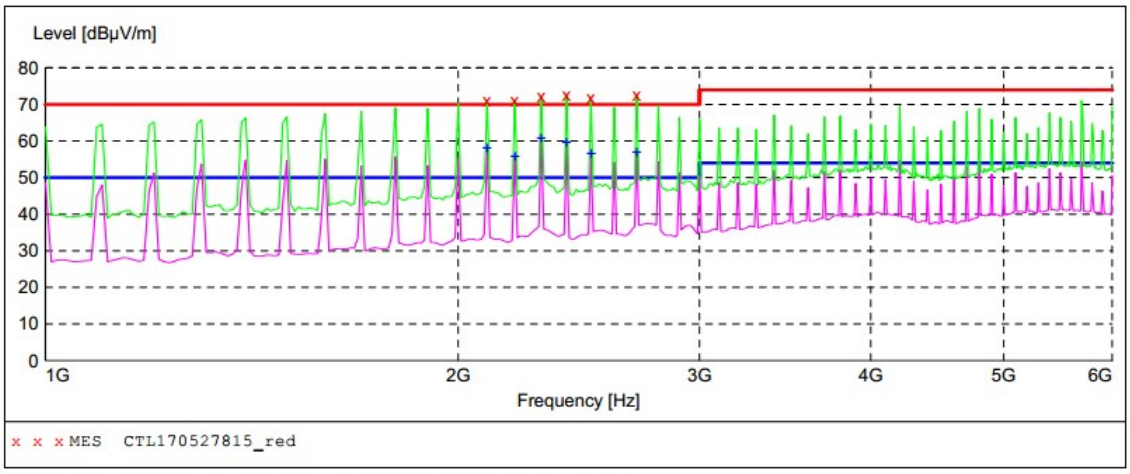
Radiation Emission Test EN 55022 B

EUT:	TBCG1
Manufacturer:	/
Operating Condition:	ON
Test Site:	3m Chamber
Operator:	WZ
Test Specification:	DC 9V
Comment:	2
Start of Test:	6/15/2017 / 12:45:12AM

SWEEP TABLE: "test (1G-18G) P"

Short Description: EN 55022 Field Strength

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	6.0 GHz	MaxPeak Average	5.0 s	1 MHz	DRH-118 Horizontal



MEASUREMENT RESULT: "CTL170527815_red"

6/15/2017 12:46AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
2100.000000	71.10	-1.9	70.0	-1.1	---	0.0	0.00	VERTICAL
2200.000000	71.00	-1.4	70.0	-1.0	---	0.0	0.00	VERTICAL
2300.000000	72.10	-0.9	70.0	-2.1	---	0.0	0.00	VERTICAL
2400.000000	72.60	-0.5	70.0	-2.6	---	0.0	0.00	VERTICAL
2500.000000	71.90	0.0	70.0	-1.9	---	0.0	0.00	VERTICAL
2700.000000	72.60	0.4	70.0	-2.6	---	0.0	0.00	VERTICAL

MEASUREMENT RESULT: "CTL170527815_red2"

6/15/2017 12:46AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
2100.000000	58.00	-1.9	50.0	-8.0	---	0.0	0.00	VERTICAL
2200.000000	55.80	-1.4	50.0	-5.8	---	0.0	0.00	VERTICAL
2300.000000	60.70	-0.9	50.0	-10.7	---	0.0	0.00	VERTICAL
2400.000000	59.50	-0.5	50.0	-9.5	---	0.0	0.00	VERTICAL
2500.000000	56.40	0.0	50.0	-6.4	---	0.0	0.00	VERTICAL
2700.000000	57.10	0.4	50.0	-7.1	---	0.0	0.00	VERTICAL

RADIATING COMB GENERATOR

Shenzhen CTL Testing Technology Co.,Ltd

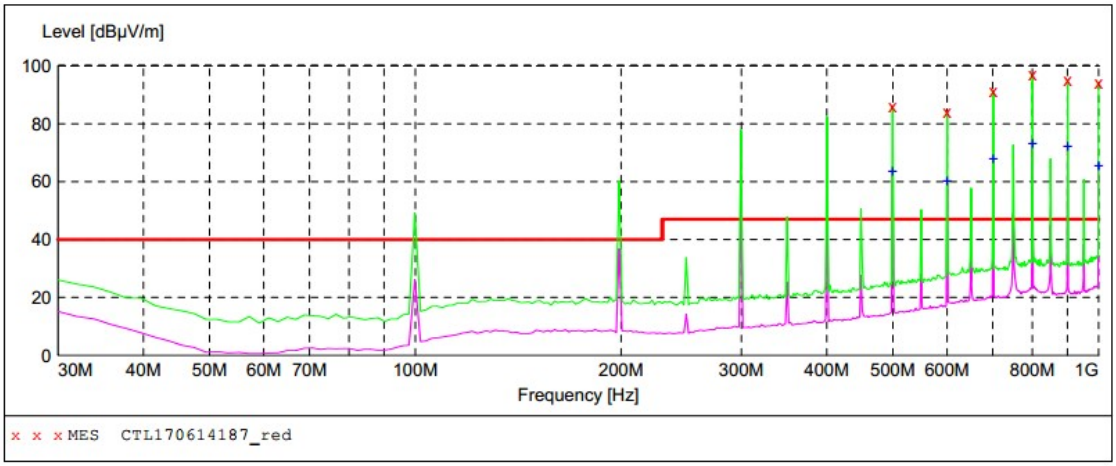
Radiation Emission Test EN 55032

EUT:	TBCG1
Manufacturer:	CTL
Operating Condition:	ON
Test Site:	3m Chamber
Operator:	XIANG
Test Specification:	DC 9V
Comment:	2
Start of Test:	6/15/2017 / 12:20:14AM

SWEEP TABLE: "test (30M-1G)"

Short Description: Field Strength

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak Average	300.0 ms	120 kHz	JB1



MEASUREMENT RESULT: "CTL170614187_red"

6/15/2017 12:23AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
499.480000	86.20	20.5	47.0	-39.2	---	0.0	0.00	HORIZONTAL
600.360000	83.90	23.0	47.0	-36.9	---	0.0	0.00	HORIZONTAL
701.240000	91.40	24.3	47.0	-44.4	---	0.0	0.00	HORIZONTAL
800.180000	96.90	25.6	47.0	-49.9	---	0.0	0.00	HORIZONTAL
901.060000	95.20	26.3	47.0	-48.2	---	0.0	0.00	HORIZONTAL
1000.000000	94.00	28.2	47.0	-47.0	---	0.0	0.00	HORIZONTAL

MEASUREMENT RESULT: "CTL170614187_red2"

6/15/2017 12:23AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
499.480000	63.30	20.5	1000.0	936.7	---	0.0	0.00	HORIZONTAL
600.360000	60.00	23.0	1000.0	940.0	---	0.0	0.00	HORIZONTAL
701.240000	67.70	24.3	1000.0	932.3	---	0.0	0.00	HORIZONTAL
800.180000	73.00	25.6	1000.0	927.0	---	0.0	0.00	HORIZONTAL
901.060000	72.00	26.3	1000.0	928.0	---	0.0	0.00	HORIZONTAL
1000.000000	65.60	28.2	1000.0	934.4	---	0.0	0.00	HORIZONTAL

RADIATING COMB GENERATOR

Shenzhen CTL Testing Technology Co.,Ltd

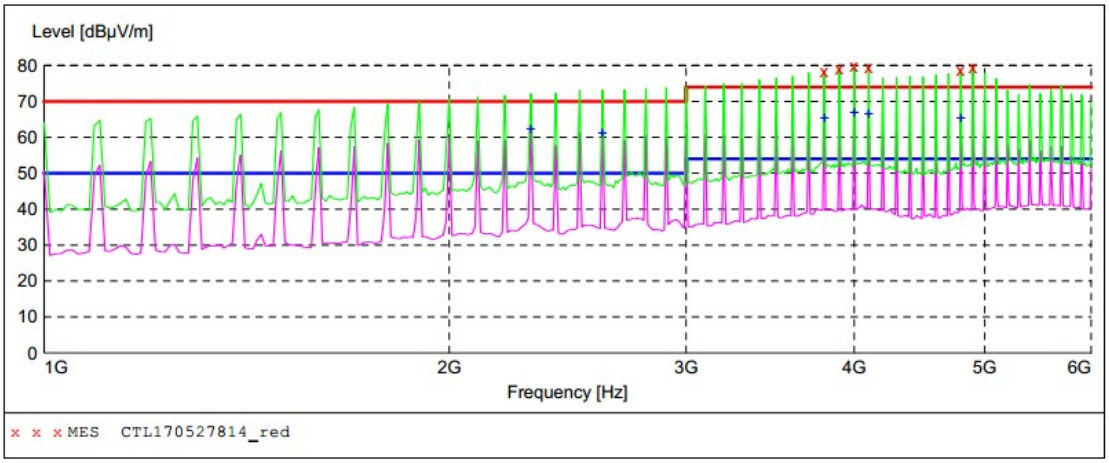
Radiation Emission Test EN 55022 B

EUT:	TBCG1
Manufacturer:	/
Operating Condition:	ON
Test Site:	3m Chamber
Operator:	WZ
Test Specification:	DC 9V
Comment:	2
Start of Test:	6/15/2017 / 12:42:05AM

SWEEP TABLE: "test (1G-18G) P"

Short Description: EN 55022 Field Strength

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	6.0 GHz	MaxPeak Average	5.0 s	1 MHz	DRH-118 Horizontal



MEASUREMENT RESULT: "CTL170527814_red"

6/15/2017 12:44AM

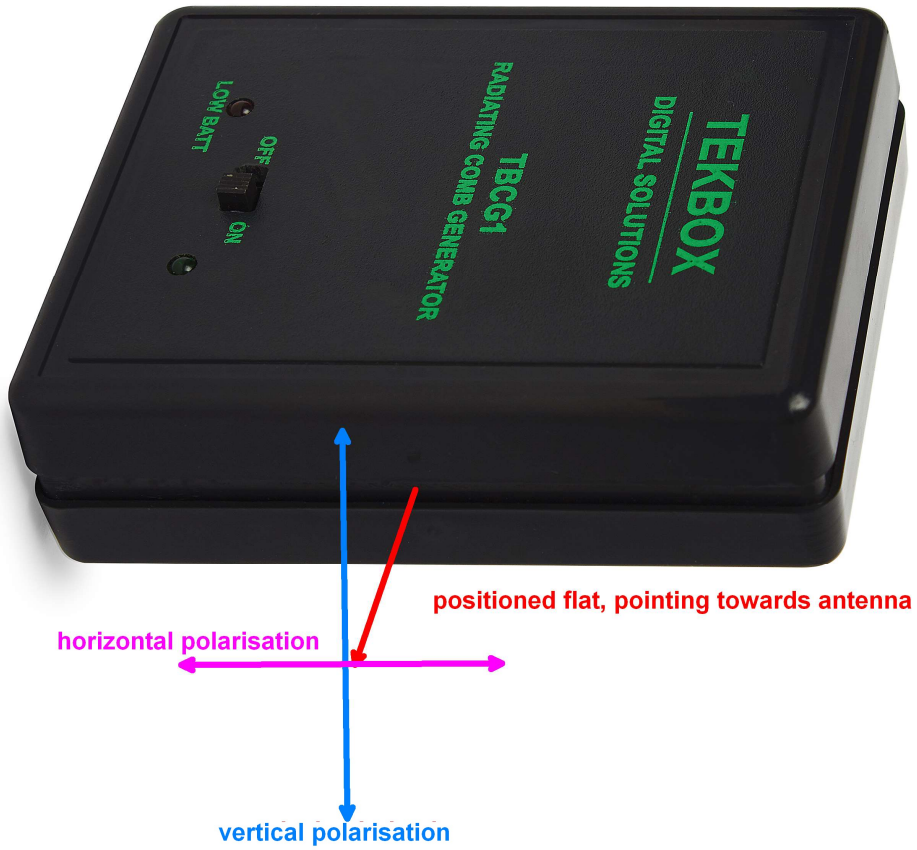
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
3800.000000	78.60	5.7	74.0	-4.6	---	0.0	0.00	HORIZONTAL
3900.000000	79.10	6.3	74.0	-5.1	---	0.0	0.00	HORIZONTAL
4000.000000	80.00	7.0	74.0	-6.0	---	0.0	0.00	HORIZONTAL
4100.000000	79.40	6.4	74.0	-5.4	---	0.0	0.00	HORIZONTAL
4800.000000	78.90	5.9	74.0	-4.9	---	0.0	0.00	HORIZONTAL
4900.000000	79.50	6.5	74.0	-5.5	---	0.0	0.00	HORIZONTAL

MEASUREMENT RESULT: "CTL170527814_red2"

6/15/2017 12:44AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
2300.000000	62.20	-0.9	50.0	-12.2	---	0.0	0.00	HORIZONTAL
2600.000000	61.30	0.2	50.0	-11.3	---	0.0	0.00	HORIZONTAL
3800.000000	65.30	5.7	54.0	-11.3	---	0.0	0.00	HORIZONTAL
4000.000000	66.90	7.0	54.0	-12.9	---	0.0	0.00	HORIZONTAL
4100.000000	66.40	6.4	54.0	-12.4	---	0.0	0.00	HORIZONTAL
4800.000000	65.40	5.9	54.0	-11.4	---	0.0	0.00	HORIZONTAL

3.4 Orientation 3



RADIATING COMB GENERATOR

Shenzhen CTL Testing Technology Co.,Ltd

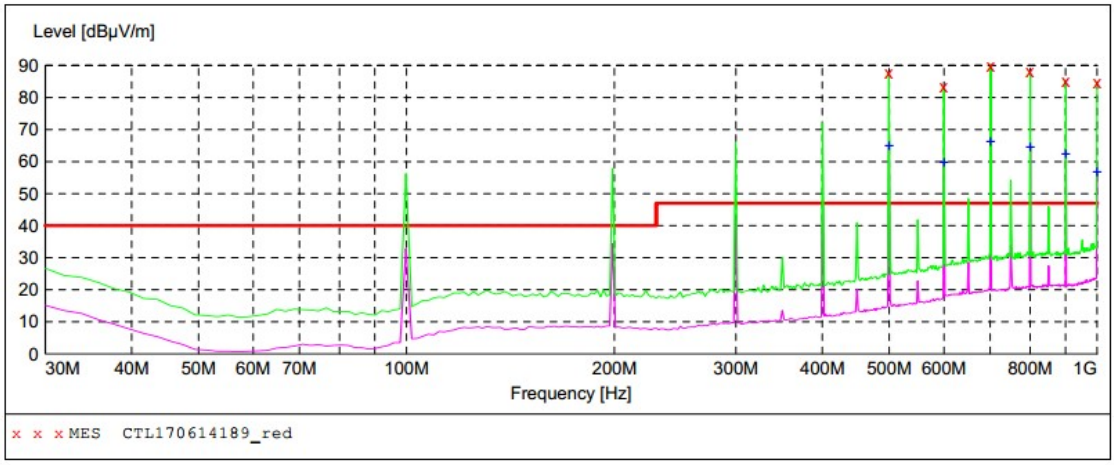
Radiation Emission Test EN 55032

EUT:	TBCG1
Manufacturer:	CTL
Operating Condition:	ON
Test Site:	3m Chamber
Operator:	XIANG
Test Specification:	DC 9V
Comment:	3
Start of Test:	6/15/2017 / 12:25:43AM

SWEEP TABLE: "test (30M-1G)"

Short Description: Field Strength

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak Average	300.0 ms	120 kHz	JB1



MEASUREMENT RESULT: "CTL170614189_red"

6/15/2017 12:29AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
499.480000	87.90	20.5	47.0	-40.9	---	0.0	0.00	VERTICAL
600.360000	83.60	23.0	47.0	-36.6	---	0.0	0.00	VERTICAL
701.240000	89.80	24.3	47.0	-42.8	---	0.0	0.00	VERTICAL
800.180000	88.30	25.6	47.0	-41.3	---	0.0	0.00	VERTICAL
901.060000	85.40	26.3	47.0	-38.4	---	0.0	0.00	VERTICAL
1000.000000	84.90	28.2	47.0	-37.9	---	0.0	0.00	VERTICAL

MEASUREMENT RESULT: "CTL170614189_red2"

6/15/2017 12:29AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
499.480000	65.00	20.5	1000.0	935.0	---	0.0	0.00	VERTICAL
600.360000	59.70	23.0	1000.0	940.3	---	0.0	0.00	VERTICAL
701.240000	66.20	24.3	1000.0	933.8	---	0.0	0.00	VERTICAL
800.180000	64.40	25.6	1000.0	935.6	---	0.0	0.00	VERTICAL
901.060000	62.30	26.3	1000.0	937.7	---	0.0	0.00	VERTICAL
1000.000000	56.80	28.2	1000.0	943.2	---	0.0	0.00	VERTICAL

RADIATING COMB GENERATOR

Shenzhen CTL Testing Technology Co.,Ltd

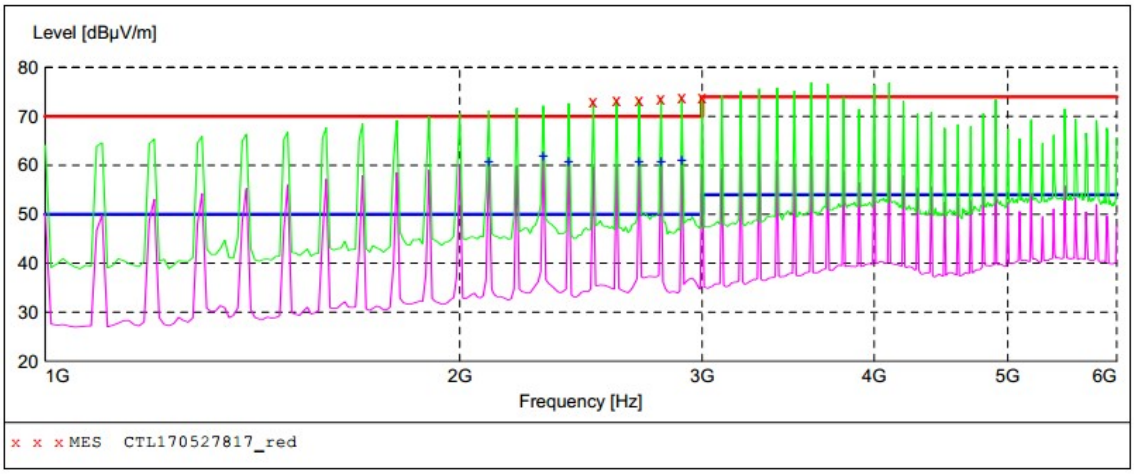
Radiation Emission Test EN 55022 B

```
EUT:                    TBCG1
Manufacturer:           /
Operating Condition:    ON
Test Site:              3m Chamber
Operator:               WZ
Test Specification:     DC 9V
Comment:                3
Start of Test:          6/15/2017 / 6:40:02PM
```

SWEEP TABLE: "test (1G-18G) P"

Short Description: EN 55022 Field Strength

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	6.0 GHz	MaxPeak Average	5.0 s	1 MHz	DRH-118 Horizontal



MEASUREMENT RESULT: "CTL170527817_red"

6/15/2017 6:46PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
2500.000000	73.00	0.0	70.0	-3.0	---	0.0	0.00	VERTICAL
2600.000000	73.20	0.2	70.0	-3.2	---	0.0	0.00	VERTICAL
2700.000000	73.40	0.4	70.0	-3.4	---	0.0	0.00	VERTICAL
2700.000000	73.40	0.4	70.0	-3.4	---	0.0	0.00	VERTICAL
2800.000000	73.60	0.6	70.0	-3.6	---	0.0	0.00	VERTICAL
2900.000000	73.80	0.8	70.0	-3.8	---	0.0	0.00	VERTICAL
3000.000000	73.90	1.0	70.0	-3.9	---	0.0	0.00	VERTICAL

MEASUREMENT RESULT: "CTL170527817_red2"

6/15/2017 6:46PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
2100.000000	60.80	-1.9	50.0	-10.8	---	0.0	0.00	VERTICAL
2300.000000	61.80	-0.9	50.0	-11.8	---	0.0	0.00	VERTICAL
2400.000000	60.80	-0.5	50.0	-10.8	---	0.0	0.00	VERTICAL
2700.000000	60.70	0.4	50.0	-10.7	---	0.0	0.00	VERTICAL

RADIATING COMB GENERATOR

Shenzhen CTL Testing Technology Co.,Ltd

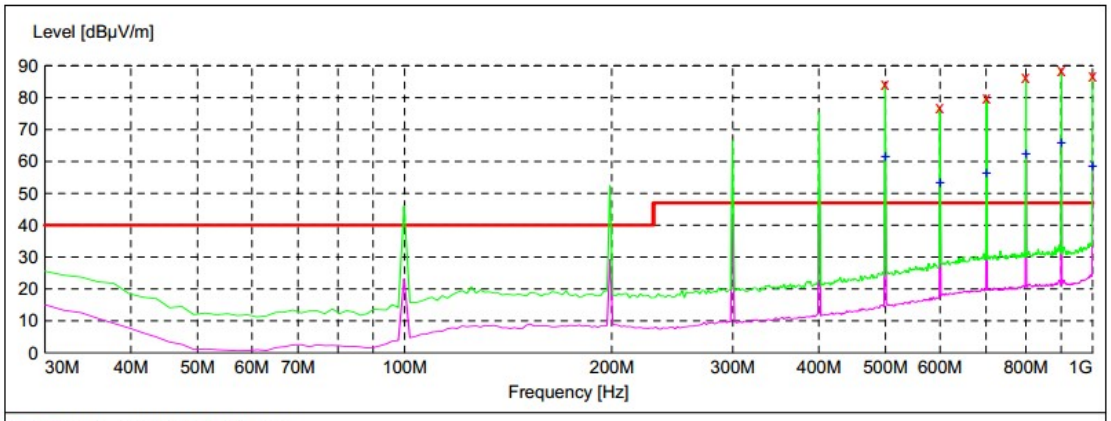
Radiation Emission Test EN 55032

EUT:	TBCG1
Manufacturer:	CTL
Operating Condition:	ON
Test Site:	3m Chamber
Operator:	XIANG
Test Specification:	DC 9V
Comment:	3
Start of Test:	6/15/2017 / 12:30:03AM

SWEEP TABLE: "test (30M-1G)"

Short Description:

Start Frequency	Stop Frequency	Detector	Field Strength Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak Average	300.0 ms	120 kHz	JB1



MEASUREMENT RESULT: "CTL170614190_red"

6/15/2017 12:31AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
499.480000	84.50	20.5	47.0	-37.5	---	0.0	0.00	HORIZONTAL
600.360000	77.10	23.0	47.0	-30.1	---	0.0	0.00	HORIZONTAL
701.240000	80.00	24.3	47.0	-33.0	---	0.0	0.00	HORIZONTAL
800.180000	86.30	25.6	47.0	-39.3	---	0.0	0.00	HORIZONTAL
901.060000	88.80	26.3	47.0	-41.8	---	0.0	0.00	HORIZONTAL
1000.000000	86.80	28.2	47.0	-39.8	---	0.0	0.00	HORIZONTAL

MEASUREMENT RESULT: "CTL170614190_red2"

6/15/2017 12:31AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
499.480000	61.60	20.5	1000.0	938.4	---	0.0	0.00	HORIZONTAL
600.360000	53.20	23.0	1000.0	946.8	---	0.0	0.00	HORIZONTAL
701.240000	56.40	24.3	1000.0	943.6	---	0.0	0.00	HORIZONTAL
800.180000	62.40	25.6	1000.0	937.6	---	0.0	0.00	HORIZONTAL
901.060000	65.60	26.3	1000.0	934.4	---	0.0	0.00	HORIZONTAL
1000.000000	58.60	28.2	1000.0	941.4	---	0.0	0.00	HORIZONTAL

RADIATING COMB GENERATOR

Shenzhen CTL Testing Technology Co.,Ltd

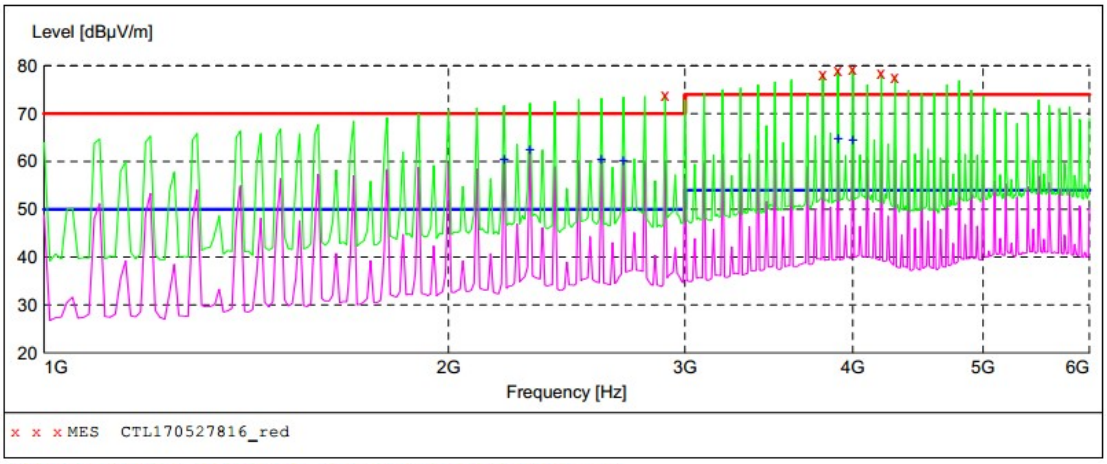
Radiation Emission Test EN 55022 B

EUT:	TBCG1
Manufacturer:	/
Operating Condition:	ON
Test Site:	3m Chamber
Operator:	WZ
Test Specification:	DC 9V
Comment:	3
Start of Test:	6/15/2017 / 6:13:20PM

SWEEP TABLE: "test (1G-18G) P"

Short Description: EN 55022 Field Strength

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	6.0 GHz	MaxPeak Average	5.0 s	1 MHz	DRH-118 Horizontal



MEASUREMENT RESULT: "CTL170527816_red"

6/15/2017 6:44PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
2900.000000	73.80	0.8	70.0	-3.8	---	0.0	0.00	HORIZONTAL
3800.000000	78.30	5.7	74.0	-4.3	---	0.0	0.00	HORIZONTAL
3900.000000	79.20	6.3	74.0	-5.2	---	0.0	0.00	HORIZONTAL
4000.000000	79.50	7.0	74.0	-5.5	---	0.0	0.00	HORIZONTAL
4200.000000	78.40	5.7	74.0	-4.4	---	0.0	0.00	HORIZONTAL
4300.000000	77.70	5.1	74.0	-3.7	---	0.0	0.00	HORIZONTAL

MEASUREMENT RESULT: "CTL170527816_red2"

6/15/2017 6:45PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
2200.000000	60.50	-1.4	50.0	-10.5	---	0.0	0.00	HORIZONTAL
2300.000000	62.50	-0.9	50.0	-12.5	---	0.0	0.00	HORIZONTAL
2600.000000	60.40	0.2	50.0	-10.4	---	0.0	0.00	HORIZONTAL
2700.000000	60.20	0.4	50.0	-10.2	---	0.0	0.00	HORIZONTAL
3900.000000	64.60	6.3	54.0	-10.6	---	0.0	0.00	HORIZONTAL
4000.000000	64.30	7.0	54.0	-10.3	---	0.0	0.00	HORIZONTAL

4 Ordering Information

Part Number	Description
TBCG1	Radiating comb generator, 9V battery not included

5 History

Version	Date	Author	Changes
V 1.0	22.06.2017	Mayerhofer	Creation of the document
V 1.1	17.04.2018	Mayerhofer	Chapter 3.1 added