



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)

1





3 Spectrum Plots

3.1 Orientation 1





Shenzhen CTL Testing Technology Co., Ltd

Radiation Emission Test EN 55032

TBCG1 EUT: Manufacturer: CTL Operating Condition: ON

Test Site: 3m Chamber Operator: XIANG Test Specification: DC 9V Comment: 1

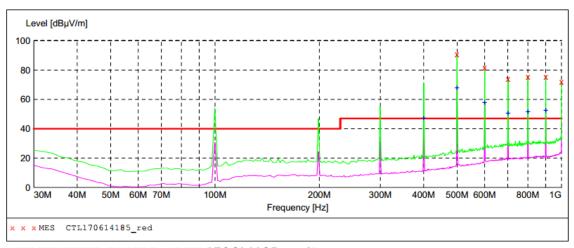
Start of Test: 6/15/2017 / 12:17:23AM

SWEEP TABLE: "test (30M-1G)"
Short Description: Fi Field Strength

Stop Start Detector Meas. IF Transducer

Frequency Frequency Time Bandw. 30.0 MHz 1.0 GHz 300.0 ms 120 kHz MaxPeak

Average



MEASUREMENT RESULT: "CTL170614185_red"

6/15/2017 12: Frequency MHz	17AM 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	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization	
MHz	dBμV/m	dB	dBμV/m	dB		cm	deg		
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	



Shenzhen CTL Testing Technology Co., Ltd

Radiation Emission Test EN 55022 B

EUT: TBCG1 Manufacturer: Operating Condition: ON

Test Site: 3m Chamber Operator: WZTest Specification: DC 9V Comment: 1

Start of Test: 6/15/2017 / 12:33:01AM

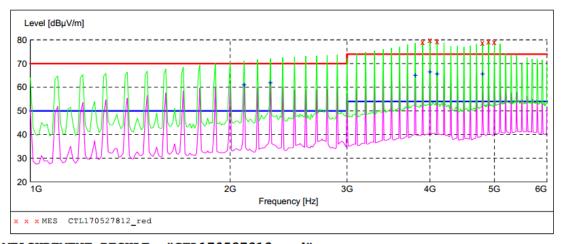
SWEEP TABLE: "test (1G-18G) P"
Short Description: EN 55022 Field Strength

Stop Detector Meas. IF Transducer Start

Frequency Frequency Time Bandw.

5.0 s 1 MHz 1.0 GHz 6.0 GHz MaxPeak DRH-118 Horizontal

Average



MEASUREMENT RESULT: "CTL170527812_red"

6/15/2017 12: Frequency MHz	139AM 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	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBµV/m	dB	dBμV/m	dB		cm	deg	
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





Shenzhen CTL Testing Technology Co., Ltd

Radiation Emission Test EN 55032

TBCG1 EUT: Manufacturer: CTLOperating Condition: ON

3m Chamber Test Site: Operator: XIANG Test Specification: DC 9V

Comment:

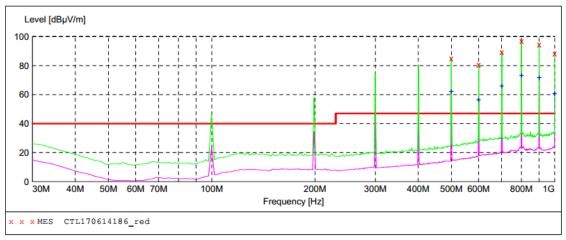
Start of Test: 6/15/2017 / 12:18:20AM

SWEEP TABLE: "test (30M-1G)"
Short Description: Fi Field Strength Start Detector Meas. TF

Transducer Stop Frequency Frequency Time Bandw.

30.0 MHz 1.0 GHz 300.0 ms 120 kHz MaxPeak JB1

Average



MEASUREMENT RESULT: "CTL170614186 red"

6/15/2017 12 Frequency MHz	:19AM 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: Frequency MHz	19AM 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



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"

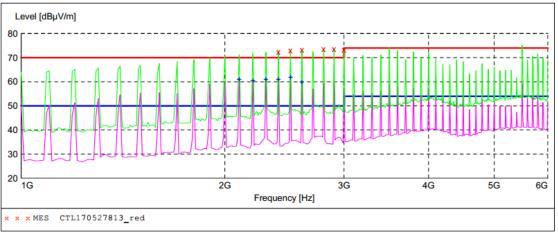
Short Description: EN 55022 Field Strength

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

1.0 GHz 6.0 GHz MaxPeak 5.0 s 1 MHz DRH-118 Horizontal

Average



MEASUREMENT RESULT: "CTL170527813_red"

6/15/2017 12:	41AM							
Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBμV/m	dB	dBμV/m	dB		cm	deg	
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 Frequency MHz	:41AM 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





3.2 Orientation 2

vertical polarisation





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

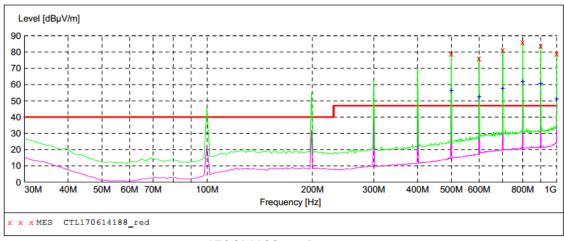
SWEEP TABLE: "test (30M-1G)"

Short Description: Field Strength

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw. 30.0 MHz 1.0 GHz MaxPeak 300.0 ms 120 kHz JB1

Average



MEASUREMENT RESULT: "CTL170614188 red"

6/15/2017 1	2:25AM							
Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBμV/m	dB	dΒμV/m	dB		cm	deg	
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: Frequency MHz	25AM 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



Shenzhen CTL Testing Technology Co., Ltd

Radiation Emission Test EN 55022 B

TBCG1 EUT: Manufacturer: Operating Condition: ON

Test Site: 3m Chamber Operator: WZ Test Specification: DC 9V Comment: 2

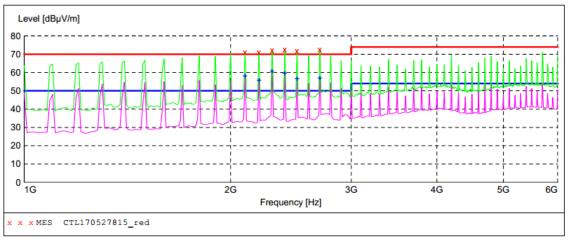
Start of Test: 6/15/2017 / 12:45:12AM

SWEEP TABLE: "test (1G-18G) P"
Short Description: EN 55 EN 55022 Field Strength

Start Detector Meas. IF Transducer Stop

Frequency Frequency Time Bandw. 1.0 GHz 6.0 GHz MaxPeak 5.0 s 1 MHz DRH-118 Horizontal

Average



MEASUREMENT RESULT: "CTL170527815 red"

6/15/2017 1	2:46AM							
Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBµV/m	dB	dBµV/m	dB		cm	deg	
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	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBuV/m	dB	dBuV/m	dB		cm	deg	
							_	
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





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

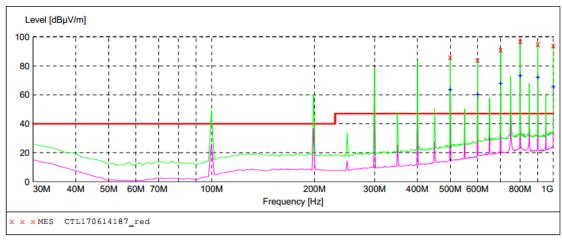
SWEEP TABLE: "test (30M-1G)"

Short Description: Field Strength
Start Stop Detector Meas. IF

Start Stop Detector Meas. IF Transducer Frequency Frequency Time Bandw.

30.0 MHz 1.0 GHz MaxPeak 300.0 ms 120 kHz JB1

Average



MEASUREMENT RESULT: "CTL170614187 red"

6/15/2017 12: Frequency MHz	23AM 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							
Frequen	-		Limit		Det.	Height		Polarization
M	Hz dBµV/m	ı dB	dBµV/m	dB		cm	deg	
499.4800	00 63.30	20.5	1000.0	936.7		0.0	0.00	HORIZONTAL
600.3600	00 60.00	23.0	1000.0	940.0		0.0	0.00	HORIZONTAL
701.2400	00 67.70	24.3	1000.0	932.3		0.0	0.00	HORIZONTAL
800.1800	73.00	25.6	1000.0	927.0		0.0	0.00	HORIZONTAL
901.0600	72.00	26.3	1000.0	928.0		0.0	0.00	HORIZONTAL
1000.0000	00 65.60	28.2	1000.0	934.4		0.0	0.00	HORIZONTAL



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"

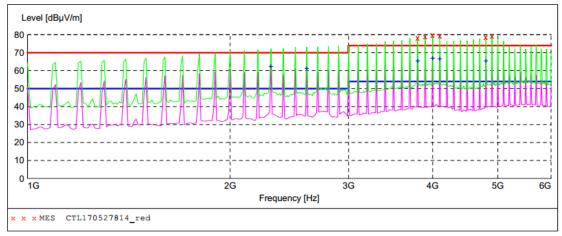
Short Description: EN 55022 Field Strength

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

1.0 GHz 6.0 GHz MaxPeak 5.0 s 1 MHz DRH-118 Horizontal

Average



MEASUREMENT RESULT: "CTL170527814_red"

6/15/2017 1	2:44AM							
Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBµV/m	dB	dBµV/m	dB		cm	deg	
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

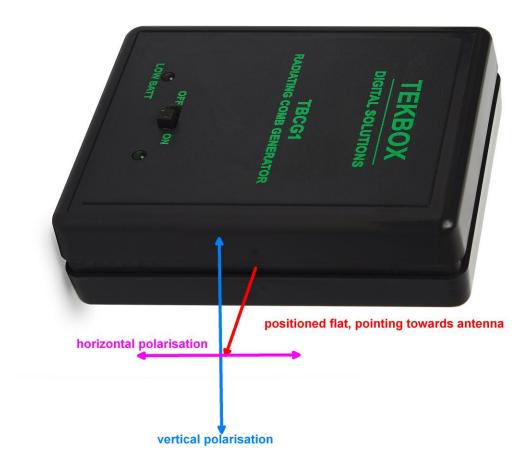
MEASUREMENT RESULT: "CTL170527814 red2"

6/15/2017 12:	:44AM							
Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dΒμV/m	dB	dΒμV/m	dB		cm	deg	
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





3.3 Orientation 3





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:

6/15/2017 / 12:25:43AM Start of Test:

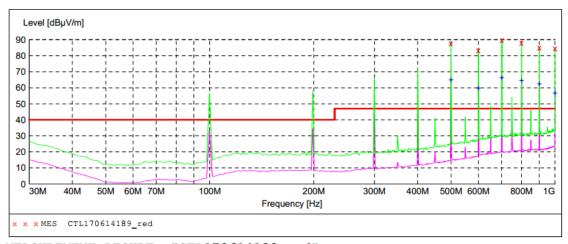
SWEEP TABLE: "test (30M-1G)"
Short Description: Fi Field Strength

Start Detector Meas. ĪF Transducer Stop

Frequency Frequency Time Bandw.

30.0 MHz 1.0 GHz MaxPeak 300.0 ms 120 kHz

Average



MEASUREMENT RESULT: "CTL170614189_red"

6/15/2017 12: Frequency MHz	:29AM 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: Frequency MHz	29AM 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



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

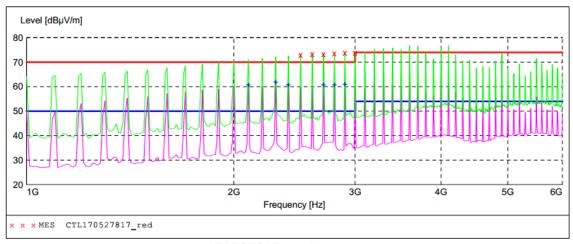
SWEEP TABLE: "test (1G-18G) P"

Short Description: EN 55022 Field Strength

Start Stop Detector Meas. IF Transducer Frequency Frequency Time Bandw.

1.0 GHz 6.0 GHz MaxPeak 5.0 s 1 MHz DRH-118 Horizontal

Average



MEASUREMENT RESULT: "CTL170527817 red"

6/15/2017 6	:46PM							
Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBµV/m	dB	dBµV/m	dB		cm	deg	
2500 000000	72.00	0.0	70.0	2.0		0.0	0.00	IMPORTORI
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	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBuV/m	dB	dBuV/m	dB		cm	dea	
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



Shenzhen CTL Testing Technology Co., Ltd

Radiation Emission Test EN 55032

TBCG1 EUT: Manufacturer: CTL Operating Condition: ON

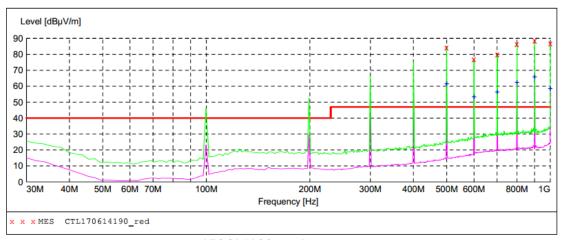
Test Site: 3m Chamber Operator: XIANG Test Specification: DC 9V Comment: 3

Start of Test: 6/15/2017 / 12:30:03AM

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

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

MaxPeak Average



MEASUREMENT RESULT: "CTL170614190 red"

6/15/2017	12:31AM							
Frequenc	y Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MH	z dBµV/m	dB	dBµV/m	dB		cm	deg	
			•				_	
499.48000	0 84.50	20.5	47.0	-37.5		0.0	0.00	HORIZONTAL
600.36000	0 77.10	23.0	47.0	-30.1		0.0	0.00	HORIZONTAL
701.24000	0 80.00	24.3	47.0	-33.0		0.0	0.00	HORIZONTAL
800.18000	0 86.30	25.6	47.0	-39.3		0.0	0.00	HORIZONTAL
901.06000	0 88.80	26.3	47.0	-41.8		0.0	0.00	HORIZONTAL
1000.00000	0 86.80	28.2	47.0	-39.8		0.0	0.00	HORIZONTAL

MEASUREMENT RESULT: "CTL170614190_red2"

6/15/2017	12:31AM							
Frequenc	cy Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
M	łz dBμV/m	dB	dBμV/m	dB		cm	deg	
499.48000	00 61.60	20.5	1000.0	938.4		0.0	0.00	HORIZONTAL
600.36000	00 53.20	23.0	1000.0	946.8		0.0	0.00	HORIZONTAL
701.24000	56.40	24.3	1000.0	943.6		0.0	0.00	HORIZONTAL
800.18000	00 62.40	25.6	1000.0	937.6		0.0	0.00	HORIZONTAL
901.06000	00 65.60	26.3	1000.0	934.4		0.0	0.00	HORIZONTAL
1000.00000	00 58.60	28.2	1000.0	941.4		0.0	0.00	HORIZONTAL



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"

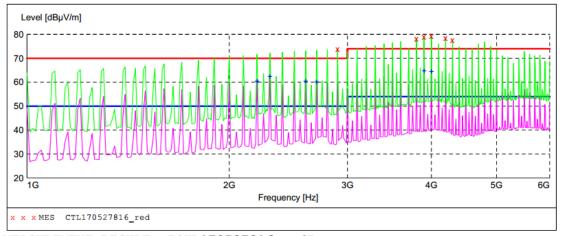
Short Description: EN 55022 Field Strength

Start Stop Detector Meas. IF Transducer

Frequency Frequency Time Bandw.

1.0 GHz 6.0 GHz MaxPeak 5.0 s 1 MHz DRH-118 Horizontal

Average



MEASUREMENT RESULT: "CTL170527816 red"

6/15/2017	5:44PM							
Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MH2	z dBµV/m	dB	dBµV/m	dB		cm	deg	
							_	
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 6:4 Frequency MHz	15PM 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