TEST REPORT

of

FCC Part 2 Subpart J, Part 22 Subpart H, Part 24 Subpart E and Part 27 Subpart C/L/H,
IC RSS-130 Issue 2, RSS-132 Issue 3, RSS-133 Issue 6,
RSS-139 Issue 3, RSS-199 Issue 3 and RSS-Gen Issue 5

FCC ID: BEJTM05GAJN
IC Certification: 2703H-TM05GAJN

Equipment Under Test	:	Car AVN
Model Name	:	TM05GAJN
FCC Applicant	:	LG Electronics USA
IC Applicant	:	LG Electronics Inc.
Manufacturer	:	LG Electronics Inc.
Date of Receipt	:	2018.09.21
Date of Test(s)	:	2018.09.27 ~ 2019.05.23
Date of Issue	:	2019.06.04

In the configuration tested, the EUT complied with the standards specified above.

Tested By:  **Date:** **2019.06.04**

Nancy Park

Technical Manager:  **Date:** **2019.06.04**

Jungmin Yang

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1. General Information

1.1. Testing Laboratory

SGS Korea Co., Ltd. (Gunpo Laboratory)
- 10-2, LS-ro 182beon-gil, Gunpo-si, Gyeonggi-do, Korea, 15807
- 4, LS-ro 182beon-gil, Gunpo-si, Gyeonggi-do, Korea, 15807
- Designation number: KR0150

All SGS services are rendered in accordance with the applicable SGS conditions of service available on request and accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx.

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1.2. Details of Applicant

FCC Applicant	:	LG Electronics USA
FCC Address	:	1000 Sylvan Avenue, Englewood Cliffs, New Jersey, United States, 07632
IC Applicant		LG Electronics Inc.
IC Address		222, LG-ro, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea (Republic of)
Contact Person	:	Han, Kyung-su
Phone No.	:	+2 201 472 2623

1.3. Details of Manufacturer

Company	:	LG Electronics Inc.
Address	:	10, Magokjungang 10-ro, Gangseo-gu, Seoul, Korea, 07796

1.4. Description of EUT

Kind of Product	Car AVN
Model Name	TM05GAJN
Power Supply	DC 12 V
Rated Power	LTE Band 2, 4, 5, 7, 12, 26: 23 ㏈m
Frequency Range	LTE Band 2: 1 850 ㎒ ~ 1 910 ㎒ LTE Band 4: 1 710 ㎒ ~ 1 755 ㎒ LTE Band 5: 824 ㎒ ~ 849 ㎒ LTE Band 7: 2 500 ㎒ ~ 2 570 ㎒ LTE Band 12: 699 ㎒ ~ 716 ㎒ LTE Band 26: 824 ㎒ ~ 849 ㎒
Emission Designator	LTE Band 2 (1.4 ㎒): 1M10G7D (QPSK) / 1M10W7D (16QAM) LTE Band 2 (3 ㎒): 2M69G7D (QPSK) / 2M68W7D (16QAM) LTE Band 2 (5 ㎒): 4M53G7D (QPSK) / 4M53W7D (16QAM) LTE Band 2 (10 ㎒): 8M94G7D (QPSK) / 8M94W7D (16QAM) LTE Band 2 (15 ㎒): 13M5G7D (QPSK) / 13M5W7D (16QAM) LTE Band 2 (20 ㎒): 17M9G7D (QPSK) / 17M9W7D (16QAM) LTE Band 4 (1.4 ㎒): 1M10G7D (QPSK) / 1M10W7D (16QAM) LTE Band 4 (3 ㎒): 2M69G7D (QPSK) / 2M69W7D (16QAM) LTE Band 4 (5 ㎒): 4M52G7D (QPSK) / 4M53W7D (16QAM) LTE Band 4 (10 ㎒): 8M94G7D (QPSK) / 8M94W7D (16QAM) LTE Band 4 (15 ㎒): 13M5G7D (QPSK) / 13M5W7D (16QAM) LTE Band 4 (20 ㎒): 17M9G7D (QPSK) / 18M0W7D (16QAM) LTE Band 7 (5 ㎒): 4M52G7D (QPSK) / 4M53W7D (16QAM) LTE Band 7 (10 ㎒): 8M97G7D (QPSK) / 8M97W7D (16QAM) LTE Band 7 (15 ㎒): 13M5G7D (QPSK) / 13M5W7D (16QAM) LTE Band 7 (20 ㎒): 18M0G7D (QPSK) / 18M0W7D (16QAM) LTE Band 12 (1.4 ㎒): 1M10G7D (QPSK) / 1M10W7D (16QAM) LTE Band 12 (3 ㎒): 2M69G7D (QPSK) / 2M69W7D (16QAM) LTE Band 12 (5 ㎒): 4M53G7D (QPSK) / 4M53W7D (16QAM) LTE Band 12 (10 ㎒): 8M97G7D (QPSK) / 8M97W7D (16QAM) LTE Band 26/5 (1.4 ㎒): 1M10G7D (QPSK) / 1M10W7D (16QAM) LTE Band 26/5 (3 ㎒): 2M70G7D (QPSK) / 2M68W7D (16QAM) LTE Band 26/5 (5 ㎒): 4M52G7D (QPSK) / 4M52W7D (16QAM) LTE Band 26/5 (10 ㎒): 8M97G7D (QPSK) / 8M94W7D (16QAM) LTE Band 26 (15 ㎒): 13M5G7D (QPSK) / 13M5W7D (16QAM)
Modulation Technique	QPSK, 16QAM
Antenna Type	External antenna
Antenna gain	699 ㎒ ~ 716 ㎒: -0.98 ㏈i 824 ㎒ ~ 849 ㎒: -2.45 ㏈i 1 710 ㎒ ~ 1 755 ㎒: 1.45 ㏈i 1 850 ㎒ ~ 1 910 ㎒: 1.13 ㏈i 2 500 ㎒ ~ 2 570 ㎒: -0.63 ㏈i

1.5. Test Equipment List

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Interval	Cal. Due
Signal Generator	Agilent	E8257D	MY51501169	Jul. 03, 2018	Annual	Jul. 03, 2019
Spectrum Analyzer	R&S	FSV30	103102	Jun. 11, 2018	Annual	Jun. 11, 2019
Mobile Test Unit	R&S	CMW500	144035	Feb. 19, 2019	Annual	Feb. 19, 2020
Power Meter	Anritsu	ML2495A	1223004	Jun. 12, 2018	Annual	Jun. 12, 2019
Power Sensor	Anritsu	MA2411B	1207272	Jun. 12, 2018	Annual	Jun. 12, 2019
Directional Coupler	KRYTAR	152613	140972	Jun. 14, 2018	Annual	Jun. 14, 2019
Temperature Chamber	ESPEC CORP.	PL-1J	15000793	Jun. 14, 2018	Annual	Jun. 14, 2019
High Pass Filter	Wainwright Instrument GmbH	WHKX10-900-1000-18000-40SS	7	Mar. 12, 2019	Annual	Mar. 12, 2020
High Pass Filter	Wainwright Instrument GmbH	WHK3.0/18G-10SS	344	May 27, 2018	Annual	May 27, 2019
High Pass Filter	Wainwright Instrument GmbH	WHKX2.2/12.75G-10SS	8	Mar. 12, 2019	Annual	Mar. 12, 2020
High Pass Filter	Wainwright Instrument GmbH	WHKX1.5/15G-6SS	4	Jun. 14, 2018	Annual	Jun. 14, 2019
DC Power Supply	R&S	HMP2020	019258024	Nov. 06, 2018	Annual	Nov. 06, 2019
Preamplifier	H.P.	8447F	2944A03909	Aug. 07, 2018	Annual	Aug. 07, 2019
Preamplifier	Agilent	8449B	3008A01932	Feb. 22, 2019	Annual	Feb. 22, 2020
Preamplifier	MITEQ Inc.	JS44-18004000-35-8P	1546891	May 13, 2019	Annual	May 13, 2020
Test Receiver	R&S	ESU26	100109	Jan. 31, 2019	Annual	Jan. 31, 2020
Loop Antenna	SCHWARZBECK MESSELEKTRONIK	FMZB 1519	1519-039	Aug. 23, 2017	Biennial	Aug. 23, 2019
Bilog Antenna	SCHWARZBECK MESSELEKTRONIK	VULB9163	01126	Mar. 26, 2018	Biennial	Mar. 26, 2020
Horn Antenna	R&S	HF906	100326	Feb. 14, 2018	Biennial	Feb. 14, 2020
Horn Antenna	SCHWARZBECK MESSELEKTRONIK	BBHA9170	BBHA9170223	Sep. 10, 2018	Biennial	Sep. 10, 2020
Antenna Master	Innco systems GmbH	MM4000	N/A	N.C.R.	N/A	N.C.R.
Turn Table	Innco systems GmbH	DS 1200S	N/A	N.C.R.	N/A	N.C.R.
Controller	Innco systems GmbH	CONTROLLER CO3000-4P	CO3000/963/38330516/L	N.C.R.	N/A	N.C.R.
Anechoic Chamber	SY Corporation	L × W × H (9.6 m × 6.4 m × 6.4 m)	N/A	N.C.R.	N/A	N.C.R.

▶ Support Equipment

Description	Manufacturer	Model	Serial Number
N/A	-	-	-

1.6. Summary of Test Results

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 2, 22, 24 and 27 / IC RSS-130 Issue 2, RSS-132 Issue 3, RSS-133 Issue 6, RSS-139 Issue 3, RSS-199 Issue 3 and RSS-Gen Issue 5			
Section in FCC	**Section in IC**	**Test Item**	**Result**
§2.1046 §22.913(a)(5) §24.232(c) §27.50(c)(10) §27.50(d)(4) §27.50(h)(2)	RSS-130 Issue 2 4.6 RSS-132 Issue 3 5.4 RSS-133 Issue 6 6.4 RSS-139 Issue 3 6.5 RSS-199 Issue 3 4.4	RF Radiated Output Power	Complied
§22.917(a) §24.238(a) §27.53(g) §27.53(h)(1) §27.53(m)(4)	RSS-130 Issue 2 4.7 RSS-132 Issue 3 5.5 RSS-133 Issue 6 6.5 RSS-139 Issue 3 6.6 RSS-199 Issue 3 4.5	Spurious Radiated Emission	Complied
§2.1046	RSS-Gen Issue 5 6.12	Conducted Output Power	Complied
§2.1049	RSS-Gen Issue 5 6.7	Occupied Bandwidth	Complied
§22.913(d) §24.232(d) §27.50(d)(5)	RSS-130 Issue 2 4.6 RSS-132 Issue 3 5.4 RSS-133 Issue 6 6.4 RSS-139 Issue 3 6.5 RSS-199 Issue 3 4.4	Peak-Average Ratio	Complied
§22.917(a) §24.238(a) §27.53(g) §27.53(h)(1) §27.53(m)(4)	RSS-130 Issue 2 4.7 RSS-132 Issue 3 5.5 RSS-133 Issue 6 6.5 RSS-139 Issue 3 6.6 RSS-199 Issue 3 4.5	Spurious Emission at Antenna Terminal	Complied
§22.917(a) §24.238(a) §27.53(g) §27.53(h)(1) §27.53(m)(4)	RSS-130 Issue 2 4.7 RSS-132 Issue 3 5.5 RSS-133 Issue 6 6.5 RSS-139 Issue 3 6.6 RSS-199 Issue 3 4.5	Band Edge	Complied
§2.1055 §22.355 §24.235 §27.54	RSS-Gen Issue 5 6.11 RSS-130 Issue 2 4.5 RSS-132 Issue 3 5.3 RSS-133 Issue 6 6.3 RSS-139 Issue 3 6.4 RSS-199 Issue 3 4.3	Frequency Stability	Complied

1.7. Test Report Revision

Revision	Report Number	Date of Issue	Description
0	F690501/RF-RTL013908	2019.06.04	Initial

1.8. Sample Calculation for Offset

Where relevant, the following sample calculation is provided:

1.8.1. Conducted Test

Offset value (㏈) = Directional Coupler (㏈) + Cable loss (㏈)

1.8.2. Radiation Test

E.R.P. & E.I.R.P. = [S.G level + Amp.] (㏈ m) - Cable loss (㏈) + Ant. gain (㏈ d/㏈ i)

1.9. Device Capabilities

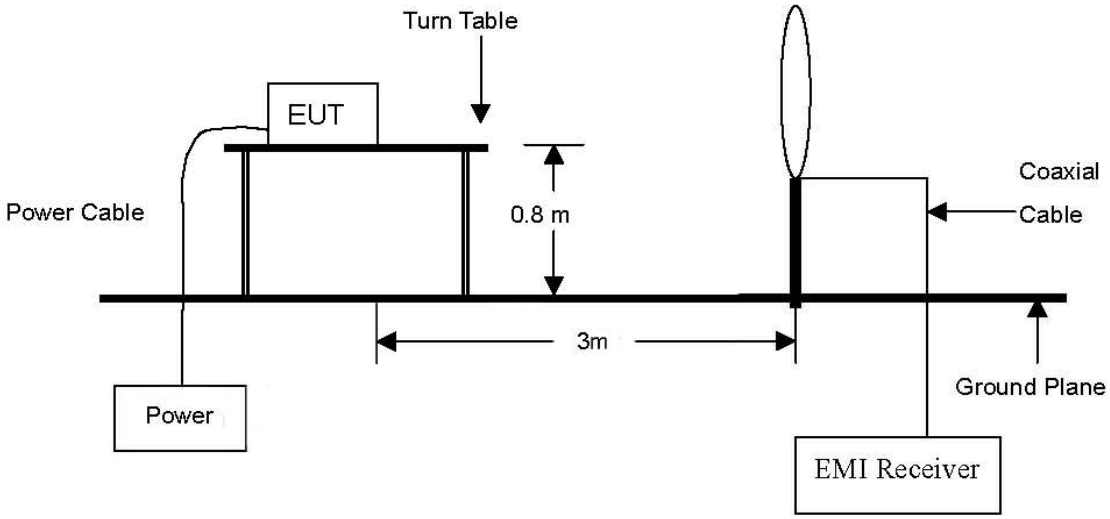
This device contains the following capabilities;

LTE Band 26 (814 ㎒ ~ 849 ㎒) overlaps the entire frequency range of LTE Band 5 (824 ㎒ ~ 849 ㎒). Therefore, test data provided in this report covers LTE Band 5 as well as Band 26.

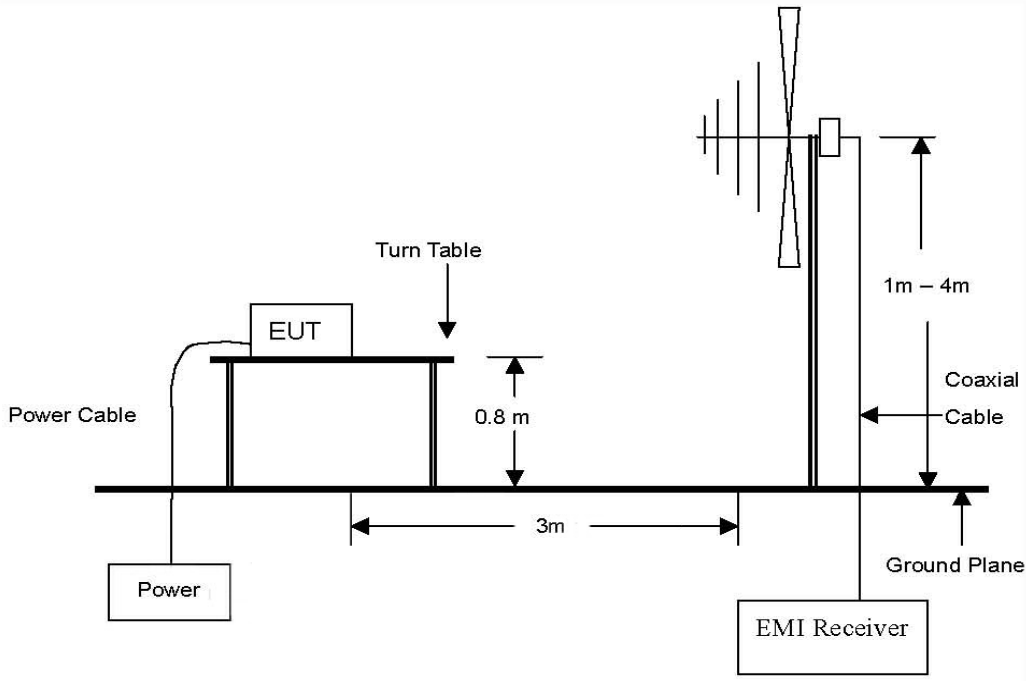
2. RF Radiated Output Power & Spurious Radiated Emission

2.1. Test Setup

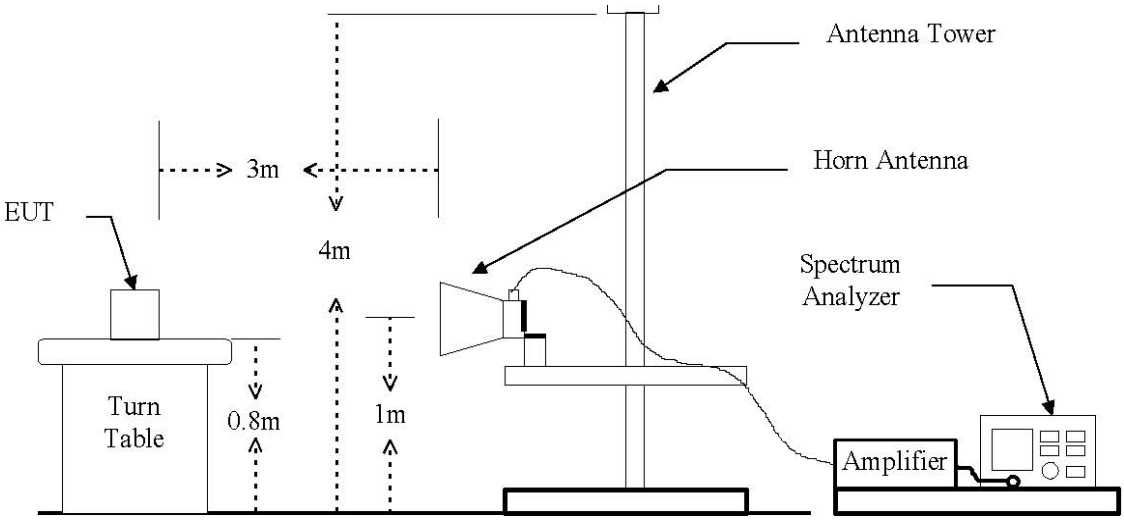
The diagram below shows the test setup that is utilized to make the measurements for emission from 9 ㎑ to 30 ㎒.



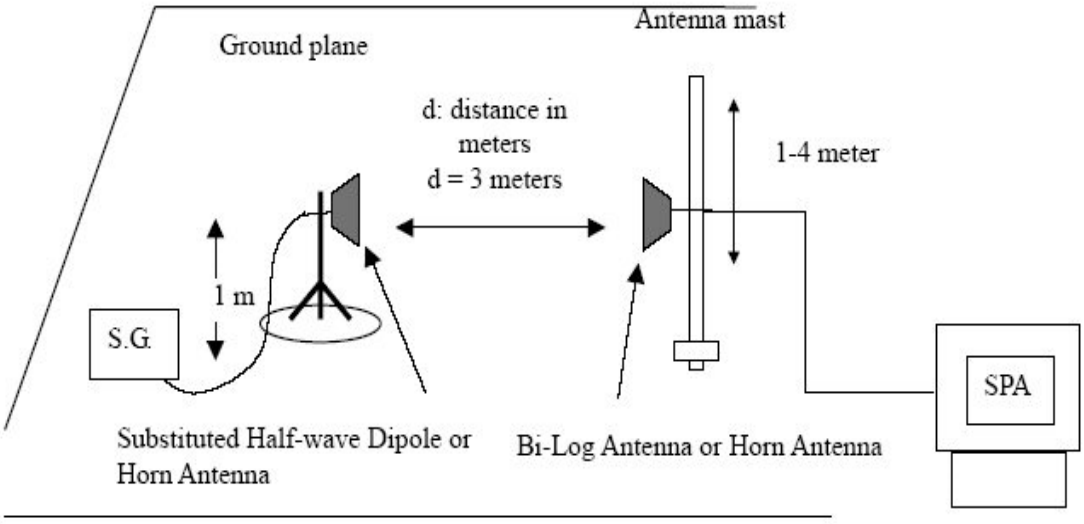
The diagram below shows the test setup that is utilized to make the measurements for emission from 30 ㎒ to 1 ㎓.



The diagram below shows the test setup that is utilized to make the measurements for emission from 1 ㎓ to 26 ㎓.



The diagram below shows the test setup for substituted method.



2.2. Limit

2.2.1. Limit of Radiated Output Power

FCC
- §22.913(a)(5), the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

- §24.232(c), mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means to limiting power to the minimum necessary for successful communications.

- §27.50(c)(10), Portable stations (hand-held devices) in the 600 ㎒ uplink band and the 698-746 ㎒ band, and fixed and mobile stations in the 600 ㎒ uplink band are limited to 3 watts ERP.

- §27.50(d)(4), fixed, mobile, and portable (hand-held) stations operating in the 1 710-1 755 ㎒ band and mobile and portable stations operating in the 1 695-1 710 ㎒ and 1 755-1 780 ㎒ bands are limited to 1 watt EIRP.

- §27.50(h)(2), Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

IC
- RSS-130 Issue 2
4.6.3, the e.r.p. shall not exceed 30 watts for mobile equipment and outdoor fixed subscriber equipment. The e.r.p. shall not exceed 3 watts for portable equipment and indoor fixed subscriber equipment.

For base and fixed equipment other than fixed subscriber equipment, refer to SRSP-518 for the e.i.r.p. limits.

- RSS-132 Issue 3
5.4, the transmitter output power shall be measured in terms of average power.
The equivalent isotropically radiated power (e.i.r.p.) for mobile equipment shall not exceed 11.5 watts.
Refer to SRSP-503 for base station e.i.r.p. limits.

- RSS-133 Issue 6
6.4, the equivalent isotropically radiated power (e.i.r.p.) for transmitters shall not exceed the limits given in SRSP-510. In addition, the transmitter's peak-to-average power ratio (PAPR) shall not exceed 13 ㏈ for more than 0.1% of the time using a signal corresponding to the highest PAPR during periods of continuous transmission.

- RSS-139 Issue 3
6.5, the equivalent isotropically radiated power (e.i.r.p.) for mobile and portable transmitters shall not exceed one watt. The e.i.r.p. for fixed and base stations in the band 1 710-1 780 ㎒ shall not exceed one watt.

- RSS-199 Issue 3
4.4, the transmitter output power shall be measured in terms of average value.
For base station equipment, refer to SRSP-517 for the maximum permissible e.i.r.p.
For mobile subscriber equipment, the e.i.r.p. shall not exceed 2 W. For fixed subscriber equipment, the transmitter output power shall not exceed 2 W and the e.i.r.p. shall be limited to 40 W.

2.2.2. Limit of Spurious Radiated Emission

FCC

- §22.917(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10log(P) ㏈.

- §24.238(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) ㏈.

- §27.53(g), the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) ㏈.

- §27.53(h)(1), for operations in the 1 695-1 710 ㎒, 1 710-1 755 ㎒, 1 755-1 780 ㎒, 1 915-1 920 ㎒, 1 995-2 000 ㎒, 2 000-2 020 ㎒, 2 110-2 155 ㎒, 2 155-2 180 ㎒, and 2 180-2 200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 $\log_{10}$ (P) ㏈.

- §27.53(m)(4), for mobile digital stations, the attenuation factor shall be not less than 40 + 10 $\log_{10}$ (P) ㏈ on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 $\log_{10}$ (P) ㏈ on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 $\log_{10}$ (P) ㏈ on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 $\log_{10}$ (P) ㏈ on all frequencies between 2490.5 ㎒ and 2496 ㎒ and 55 + 10 $\log_{10}$ (P) ㏈ at or below 2490.5 ㎒. Mobile Satellite Service licensees operating on frequencies below 2495 ㎒ may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

IC

- RSS-130 Issue 2

4.7.1, the unwanted emissions in any 100 ㎑ bandwidth on any frequency outside the low frequency edge and the high frequency edge of each frequency block range(s), shall be attenuated below the transmitter power, P (㏈ W), by at least 43 + 10 $\log_{10}$ p (watts), ㏈. However, in the 100 ㎑ band immediately outside of the equipment's frequency block range, a resolution bandwidth of 30 ㎑ may be employed.

- RSS-132 Issue 3

5.5, Mobile and base station equipment shall comply with the limits in (i) and (ii) below.
(i) In the first 1.0 ㎒ band immediately outside and adjacent to each of the sub-bands specified in Section 5.1, the power of emissions per any 1 % of the occupied bandwidth shall be attenuated (in ㏈) below the transmitter output power P (㏈ W) by at least 43 + 10 $\log_{10}$ p (watts).

(ii) After the first 1.0 ㎒ immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 ㎑ bandwidth shall be attenuated (in ㏈) below the transmitter output power P (㏈ W) by at least 43 + 10 $\log_{10}$ p (watts). If the measurement is performed using 1 % of the occupied bandwidth, power integration over 100 ㎑ is required.

- RSS-133 Issue 6
6.5, Equipment shall comply with the limits in (i) and (ii) below.
(i) In the 1.0 ㎒ bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1 % of the emission bandwidth shall be attenuated (in ㏈) below the transmitter output power P (㏈ W) by at least 43 + 10 $\log_{10}$ p(watts).

(ii) After the first 1.0 ㎒, the emission power in any 1 ㎒ bandwidth shall be attenuated (in ㏈) below the transmitter output power P (㏈ W) by at least 43 + 10 $\log_{10}$ p(watts). If the measurement is performed using 1 % of the emission bandwidth, power integration over 1.0 ㎒ is required.

- RSS-139 Issue 3
6.6, (i) In the first 1.0 ㎒ bands immediately outside and adjacent to the equipment's smallest operating frequency block, which can contain the equipment's occupied bandwidth, the emission power per any 1 % of the emission bandwidth shall be attenuated below the transmitter output power P (in ㏈ W) by at least 43 + 10 $\log_{10}$ p (watts) ㏈.

(ii) After the first 1.0 ㎒ outside the equipment's smallest operating frequency block, which can contain the equipment's occupied bandwidth, the emission power in any 1 ㎒ bandwidth shall be attenuated below the transmitter output power P (in ㏈ W) by at least 43 + 10 $\log_{10}$ p (watts) ㏈.

- RSS-199 Issue 3
4.5, In the 1 ㎒ band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment, and 2% for mobile subscriber equipment. Beyond the 1 ㎒ band, a resolution bandwidth of 1 ㎒ shall be used. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 ㎒, or 1% or 2% of the occupied bandwidth, as applicable.

Equipment shall comply with the following unwanted emission limits:

a. for base station and fixed subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in ㏈) below the transmitter power, P (㏈W), by at least 43 + 10 $\log_{10}$ p
b. for mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in ㏈) below the transmitter power, P (㏈W), by at least:

   i. 40 + 10 $\log_{10}$ p from the channel edges to 5 ㎒ away
   ii. 43 + 10 $\log_{10}$ p between 5 ㎒ and X ㎒ from the channel edges, and
   iii. 55 + 10 $\log_{10}$ p at X ㎒ and beyond from the channel edges

   In addition, the attenuation shall not be less than 43 + 10 $\log_{10}$ p on all frequencies between 2490.5 ㎒ and 2496 ㎒, and 55 + 10 $\log_{10}$ p at or below 2490.5 ㎒.

In (a) and (b), **p** is the transmitter power measured in watts and **X** is 6 ㎒ or the equipment occupied bandwidth, whichever is greater.

2.3. Test Procedure: Based on ANSI/TIA 603E: 2016 and ANSI C63.26-2015

1. On a test site, the EUT shall be placed at 80 cm height on a turn table, and in the position close to normal use as declared by the applicant.
2. The test antenna shall be oriented initially for vertical polarization located 3 m from EUT to correspond to the fundamental frequency of the transmitter.
3. The output of the test antenna shall be connected to the measuring receiver and the peak detector is used for the measurement.
4. The maximized power level is recorded using the spectrum analyzer “Channel Power” function with the integration band set to the emissions occupied bandwidth, RBW = 1-5 % of the OBW (not to exceed 1 ㎒), VBW ≥ 3 x RBW, Detector = power averaging (rms), sweep time = auto, trace average at least 100 traces in power averaging (rms) mode, per the guidelines of KDB 971168 D01 Power Meas License Digital Systems v03r01.
5. Radiated spurious emissions measurement method was set as follows:
   RBW = 100 ㎑ for emissions below 1 ㎓ and 1 ㎒ for emissions above 1 ㎓, VBW ≥ 3 x RBW,
   Detector = Peak, trace mode = max hold, per the guidelines of KDB 971168 D01 Power Meas License Digital Systems v03r01.
6. The transmitter shall be switched on, the measuring receiver shall be tuned to the frequency of the transmitter under test.
7. The test antenna shall be raised and lowered through the specified range of height until the maximum signal level is detected by the measuring receiver.
8. The transmitter shall be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
9. The test antenna shall be raised and lowered again through the specified range of height until the maximum signal level is detected by the measuring receiver.
10. The maximum signal level detected by the measuring receiver shall be noted.
11. The EUT was replaced by half-wave dipole (1 ㎓ below) or horn antenna (1 ㎓ above) connected to a signal generator.
12. In necessary, the input attenuator setting on the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
13. The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
14. The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring received, which is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
15. The input level to the substitution antenna shall be recorded as power level in ㏈m, corrected for any change of input attenuator setting of the measuring receiver.
16. The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.

2.4. Test Result for RF Radiated Output Power

Ambient temperature : (23 ± 1) ℃
Relative humidity : 47 % R.H.

LTE band 2 (1.4 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 850.7	H	12.96	4.33	8.53	17.16	52.00
1 850.7	V	17.77	4.33	8.53	21.97	157.40
1 880.0	H	14.66	4.34	8.63	18.95	78.52
1 880.0	V	18.31	4.34	8.63	22.60	181.97
1 909.3	H	14.00	4.36	8.60	18.24	66.68
1 909.3	V	17.71	4.36	8.60	21.95	156.68

* 1.4 BW 1 RB size / 0 Offset for B2

LTE band 2 (1.4 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 850.7	H	11.73	4.33	8.53	15.93	39.17
1 850.7	V	16.89	4.33	8.53	21.09	128.53
1 880.0	H	13.32	4.34	8.63	17.61	57.68
1 880.0	V	17.11	4.34	8.63	21.40	138.04
1 909.3	H	13.23	4.36	8.60	17.47	55.85
1 909.3	V	16.89	4.36	8.60	21.13	129.72

* 1.4 BW 1 RB size / 0 Offset for B2

LTE band 2 (3 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 851.5	H	13.10	4.33	8.54	17.31	53.83
1 851.5	V	17.71	4.33	8.54	21.92	155.60
1 880.0	H	14.45	4.34	8.63	18.74	74.82
1 880.0	V	17.87	4.34	8.63	22.16	164.44
1 908.5	H	14.09	4.36	8.61	18.34	68.23
1 908.5	V	18.03	4.36	8.61	22.28	169.04

* 3 BW 1 RB size / 0 Offset for B2

LTE band 2 (3 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 851.5	H	12.01	4.33	8.54	16.22	41.88
1 851.5	V	16.84	4.33	8.54	21.05	127.35
1 880.0	H	13.51	4.34	8.63	17.80	60.26
1 880.0	V	16.98	4.34	8.63	21.27	133.97
1 908.5	H	13.41	4.36	8.61	17.66	58.34
1 908.5	V	17.27	4.36	8.61	21.52	141.91

* 3 BW 1 RB size / 0 Offset for B2

LTE band 2 (5 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 852.5	H	13.34	4.33	8.54	17.55	56.89
1 852.5	V	17.84	4.33	8.54	22.05	160.32
1 880.0	H	14.54	4.34	8.63	18.83	76.38
1 880.0	V	17.71	4.34	8.63	22.00	158.49
1 907.5	H	14.51	4.36	8.62	18.77	75.34
1 907.5	V	18.42	4.36	8.62	22.68	185.35

* 5 BW 1 RB size / 0 Offset for B2

LTE band 2 (5 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 852.5	H	12.08	4.33	8.54	16.29	42.56
1 852.5	V	16.86	4.33	8.54	21.07	127.94
1 880.0	H	13.66	4.34	8.63	17.95	62.37
1 880.0	V	16.71	4.34	8.63	21.00	125.89
1 907.5	H	13.53	4.36	8.62	17.79	60.12
1 907.5	V	17.44	4.36	8.62	21.70	147.91

* 5 BW 1 RB size / 0 Offset for B2

LTE band 2 (10 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 855.0	H	13.55	4.33	8.55	17.77	59.84
1 855.0	V	17.68	4.33	8.55	21.90	154.88
1 880.0	H	14.47	4.34	8.63	18.76	75.16
1 880.0	V	17.92	4.34	8.63	22.21	166.34
1 905.0	H	14.32	4.36	8.64	18.60	72.44
1 905.0	V	19.03	4.36	8.64	23.31	214.29

* 10 BW 1 RB size / 0 Offset for B2

LTE band 2 (10 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 855.0	H	11.98	4.33	8.55	16.20	41.69
1 855.0	V	17.02	4.33	8.55	21.24	133.05
1 880.0	H	13.92	4.34	8.63	18.21	66.22
1 880.0	V	16.72	4.34	8.63	21.01	126.18
1 905.0	H	13.56	4.36	8.64	17.84	60.81
1 905.0	V	18.31	4.36	8.64	22.59	181.55

* 10 BW 1 RB size / 0 Offset for B2

LTE band 2 (15 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 857.5	H	14.77	4.33	8.55	18.99	79.25
1 857.5	V	18.91	4.33	8.55	23.13	205.59
1 880.0	H	15.79	4.34	8.63	20.08	101.86
1 880.0	V	18.25	4.34	8.63	22.54	179.47
1 902.5	H	15.65	4.35	8.67	19.97	99.31
1 902.5	V	20.13	4.35	8.67	24.45	278.61

* 15 BW 1 RB size / 0 Offset for B2

LTE band 2 (15 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 857.5	H	13.57	4.33	8.55	17.79	60.12
1 857.5	V	17.99	4.33	8.55	22.21	166.34
1 880.0	H	14.47	4.34	8.63	18.76	75.16
1 880.0	V	17.35	4.34	8.63	21.64	145.88
1 902.5	H	14.77	4.35	8.67	19.09	81.10
1 902.5	V	19.36	4.35	8.67	23.68	233.35

* 15 BW 1 RB size / 0 Offset for B2

LTE band 2 (20 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 860.0	H	15.08	4.33	8.56	19.31	85.31
1 860.0	V	19.11	4.33	8.56	23.34	215.77
1 880.0	H	15.93	4.34	8.63	20.22	105.20
1 880.0	V	18.68	4.34	8.63	22.97	198.15
1 900.0	H	16.18	4.35	8.70	20.53	112.98
1 900.0	V	20.54	4.35	8.70	24.89	308.32

* 20 BW 1 RB size / 0 Offset for B2

LTE band 2 (20 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 860.0	H	14.22	4.33	8.56	18.45	69.98
1 860.0	V	18.26	4.33	8.56	22.49	177.42
1 880.0	H	15.19	4.34	8.63	19.48	88.72
1 880.0	V	18.04	4.34	8.63	22.33	171.00
1 900.0	H	15.35	4.35	8.70	19.70	93.33
1 900.0	V	19.55	4.35	8.70	23.90	245.47

* 20 BW 1 RB size / 0 Offset for B2

LTE band 4 (1.4 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 710.7	H	12.02	4.14	8.51	16.39	43.55
1 710.7	V	17.00	4.14	8.51	21.37	137.09
1 732.5	H	11.38	4.18	8.48	15.68	36.98
1 732.5	V	18.78	4.18	8.48	23.08	203.24
1 754.3	H	11.30	4.22	8.44	15.52	35.65
1 754.3	V	19.20	4.22	8.44	23.42	219.79

* 1.4 BW 1 RB size / 0 Offset for B4

LTE band 4 (1.4 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 710.7	H	11.25	4.14	8.51	15.62	36.48
1 710.7	V	16.16	4.14	8.51	20.53	112.98
1 732.5	H	10.65	4.18	8.48	14.95	31.26
1 732.5	V	17.55	4.18	8.48	21.85	153.11
1 754.3	H	10.49	4.22	8.44	14.71	29.58
1 754.3	V	18.71	4.22	8.44	22.93	196.34

* 1.4 BW 1 RB size / 0 Offset for B4

LTE band 4 (3 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 711.5	H	12.74	4.14	8.51	17.11	51.40
1 711.5	V	16.88	4.14	8.51	21.25	133.35
1 732.5	H	11.93	4.18	8.48	16.23	41.98
1 732.5	V	18.92	4.18	8.48	23.22	209.89
1 753.5	H	11.67	4.22	8.44	15.89	38.82
1 753.5	V	19.13	4.22	8.44	23.35	216.27

* 3 BW 1 RB size / 0 Offset for B4

LTE band 4 (3 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 711.5	H	11.52	4.14	8.51	15.89	38.82
1 711.5	V	16.13	4.14	8.51	20.50	112.20
1 732.5	H	10.92	4.18	8.48	15.22	33.27
1 732.5	V	17.75	4.18	8.48	22.05	160.32
1 753.5	H	10.95	4.22	8.44	15.17	32.89
1 753.5	V	18.58	4.22	8.44	22.80	190.55

* 3 BW 1 RB size / 0 Offset for B4

LTE band 4 (5 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 712.5	H	12.73	4.14	8.51	17.10	51.29
1 712.5	V	17.14	4.14	8.51	21.51	141.58
1 732.5	H	11.96	4.18	8.48	16.26	42.27
1 732.5	V	19.05	4.18	8.48	23.35	216.27
1 752.5	H	12.13	4.21	8.44	16.36	43.25
1 752.5	V	19.39	4.21	8.44	23.62	230.14

* 5 BW 1 RB size / 0 Offset for B4

LTE band 4 (5 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 712.5	H	12.06	4.14	8.51	16.43	43.95
1 712.5	V	16.45	4.14	8.51	20.82	120.78
1 732.5	H	11.31	4.18	8.48	15.61	36.39
1 732.5	V	17.84	4.18	8.48	22.14	163.68
1 752.5	H	11.34	4.21	8.44	15.57	36.06
1 752.5	V	18.45	4.21	8.44	22.68	185.35

* 5 BW 1 RB size / 0 Offset for B4

LTE band 4 (10 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 715.0	H	13.04	4.15	8.50	17.39	54.83
1 715.0	V	17.57	4.15	8.50	21.92	155.60
1 732.5	H	12.30	4.18	8.48	16.60	45.71
1 732.5	V	18.84	4.18	8.48	23.14	206.06
1 750.0	H	12.42	4.21	8.45	16.66	46.34
1 750.0	V	19.48	4.21	8.45	23.72	235.50

* 10 BW 1 RB size / 0 Offset for B4

LTE band 4 (10 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 715.0	H	12.05	4.15	8.50	16.40	43.65
1 715.0	V	17.09	4.15	8.50	21.44	139.32
1 732.5	H	11.37	4.18	8.48	15.67	36.90
1 732.5	V	18.39	4.18	8.48	22.69	185.78
1 750.0	H	11.63	4.21	8.45	15.87	38.64
1 750.0	V	18.77	4.21	8.45	23.01	199.99

* 10 BW 1 RB size / 0 Offset for B4

LTE band 4 (15 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 717.5	H	13.86	4.15	8.50	18.21	66.22
1 717.5	V	18.57	4.15	8.50	22.92	195.88
1 732.5	H	13.24	4.18	8.48	17.54	56.75
1 732.5	V	19.89	4.18	8.48	24.19	262.42
1 747.5	H	13.42	4.21	8.45	17.66	58.34
1 747.5	V	20.29	4.21	8.45	24.53	283.79

* 15 BW 1 RB size / 0 Offset for B4

LTE band 4 (15 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 717.5	H	12.62	4.15	8.50	16.97	49.77
1 717.5	V	17.83	4.15	8.50	22.18	165.20
1 732.5	H	12.04	4.18	8.48	16.34	43.05
1 732.5	V	18.65	4.18	8.48	22.95	197.24
1 747.5	H	12.21	4.21	8.45	16.45	44.16
1 747.5	V	19.20	4.21	8.45	23.44	220.80

* 15 BW 1 RB size / 0 Offset for B4

LTE band 4 (20 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 720.0	H	14.31	4.16	8.50	18.65	73.28
1 720.0	V	18.13	4.16	8.50	22.47	176.60
1 732.5	H	13.75	4.18	8.48	18.05	63.83
1 732.5	V	19.29	4.18	8.48	23.59	228.56
1 745.0	H	13.54	4.20	8.46	17.80	60.26
1 745.0	V	19.69	4.20	8.46	23.95	248.31

* 20 BW 1 RB size / 0 Offset for B4

LTE band 4 (20 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
1 720.0	H	13.65	4.16	8.50	17.99	62.95
1 720.0	V	17.47	4.16	8.50	21.81	151.71
1 732.5	H	12.85	4.18	8.48	17.15	51.88
1 732.5	V	18.20	4.18	8.48	22.50	177.83
1 745.0	H	12.51	4.20	8.46	16.77	47.53
1 745.0	V	18.72	4.20	8.46	22.98	198.61

* 20 BW 1 RB size / 0 Offset for B4

LTE band 7 (5 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
2 502.5	H	12.71	4.81	9.13	17.03	50.47
2 502.5	V	10.60	4.81	9.13	14.92	31.05
2 535.0	H	14.69	4.86	9.06	18.89	77.45
2 535.0	V	12.22	4.86	9.06	16.42	43.85
2 567.5	H	15.11	4.90	8.98	19.19	82.99
2 567.5	V	12.15	4.90	8.98	16.23	41.98

* 5 BW 1 RB size / 0 Offset

LTE band 7 (5 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
2 502.5	H	11.70	4.81	9.13	16.02	39.99
2 502.5	V	9.62	4.81	9.13	13.94	24.77
2 535.0	H	13.53	4.86	9.06	17.73	59.29
2 535.0	V	11.05	4.86	9.06	15.25	33.50
2 567.5	H	14.11	4.90	8.98	18.19	65.92
2 567.5	V	11.13	4.90	8.98	15.21	33.19

* 5 BW 1 RB size / 0 Offset

LTE band 7 (10 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
2 505.0	H	13.54	4.82	9.13	17.85	60.95
2 505.0	V	10.96	4.82	9.13	15.27	33.65
2 535.0	H	14.81	4.86	9.06	19.01	79.62
2 535.0	V	11.88	4.86	9.06	16.08	40.55
2 565.0	H	15.41	4.90	8.99	19.50	89.13
2 565.0	V	11.59	4.90	8.99	15.68	36.98

* 10 BW 1 RB size / 0 Offset

LTE band 7 (10 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
2 505.0	H	12.25	4.82	9.13	16.56	45.29
2 505.0	V	9.94	4.82	9.13	14.25	26.61
2 535.0	H	13.44	4.86	9.06	17.64	58.08
2 535.0	V	10.80	4.86	9.06	15.00	31.62
2 565.0	H	14.14	4.90	8.99	18.23	66.53
2 565.0	V	10.92	4.90	8.99	15.01	31.70

* 10 BW 1 RB size / 0 Offset

LTE band 7 (15 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
2 507.5	H	14.06	4.82	9.12	18.36	68.55
2 507.5	V	11.61	4.82	9.12	15.91	38.99
2 535.0	H	15.52	4.86	9.06	19.72	93.76
2 535.0	V	12.81	4.86	9.06	17.01	50.23
2 562.5	H	16.20	4.90	9.00	20.30	107.15
2 562.5	V	12.77	4.90	9.00	16.87	48.64

* 15 BW 1 RB size / 0 Offset

LTE band 7 (15 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
2 507.5	H	12.83	4.82	9.12	17.13	51.64
2 507.5	V	10.55	4.82	9.12	14.85	30.55
2 535.0	H	14.35	4.86	9.06	18.55	71.61
2 535.0	V	11.44	4.86	9.06	15.64	36.64
2 562.5	H	15.37	4.90	9.00	19.47	88.51
2 562.5	V	11.73	4.90	9.00	15.83	38.28

* 15 BW 1 RB size / 0 Offset

LTE band 7 (20 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
2 510.0	H	14.47	4.82	9.12	18.77	75.34
2 510.0	V	11.88	4.82	9.12	16.18	41.50
2 535.0	H	15.92	4.86	9.06	20.12	102.80
2 535.0	V	13.07	4.86	9.06	17.27	53.33
2 560.0	H	16.98	4.89	9.00	21.09	128.53
2 560.0	V	13.49	4.89	9.00	17.60	57.54

* 20 BW 1 RB size / 0 Offset

LTE band 7 (20 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(㎽)
2 510.0	H	13.62	4.82	9.12	17.92	61.94
2 510.0	V	10.76	4.82	9.12	15.06	32.06
2 535.0	H	15.20	4.86	9.06	19.40	87.10
2 535.0	V	12.47	4.86	9.06	16.67	46.45
2 560.0	H	16.09	4.89	9.00	20.20	104.71
2 560.0	V	12.37	4.89	9.00	16.48	44.46

* 20 BW 1 RB size / 0 Offset

LTE band 12 (1.4 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
699.7	H	18.20	2.86	-4.00	11.34	13.61
699.7	V	23.84	2.86	-4.00	16.98	49.89
707.5	H	22.80	3.06	-4.53	15.21	33.19
707.5	V	23.67	3.06	-4.53	16.08	40.55
715.3	H	24.07	3.04	-4.31	16.72	46.99
715.3	V	22.58	3.04	-4.31	15.23	33.34

* 1.4 BW 1 RB size / 0 Offset for B12

LTE band 12 (1.4 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
699.7	H	17.40	2.86	-4.00	10.54	11.32
699.7	V	23.13	2.86	-4.00	16.27	42.36
707.5	H	21.99	3.06	-4.53	14.40	27.54
707.5	V	22.70	3.06	-4.53	15.11	32.43
715.3	H	23.34	3.04	-4.31	15.99	39.72
715.3	V	21.46	3.04	-4.31	14.11	25.76

* 1.4 BW 1 RB size / 0 Offset for B12

LTE band 12 (3 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
700.5	H	18.47	2.87	-4.05	11.55	14.29
700.5	V	24.04	2.87	-4.05	17.12	51.52
707.5	H	22.82	3.06	-4.53	15.23	33.34
707.5	V	24.04	3.06	-4.53	16.45	44.16
714.5	H	24.37	3.05	-4.37	16.95	49.55
714.5	V	22.85	3.05	-4.37	15.43	34.91

* 3 BW 1 RB size / 0 Offset for B12

LTE band 12 (3 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
700.5	H	17.94	2.87	-4.05	11.02	12.65
700.5	V	22.86	2.87	-4.05	15.94	39.26
707.5	H	22.05	3.06	-4.53	14.46	27.93
707.5	V	22.96	3.06	-4.53	15.37	34.43
714.5	H	23.33	3.05	-4.37	15.91	38.99
714.5	V	21.85	3.05	-4.37	14.43	27.73

* 3 BW 1 RB size / 0 Offset for B12

LTE band 12 (5 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
701.5	H	19.28	2.90	-4.12	12.26	16.83
701.5	V	23.94	2.90	-4.12	16.92	49.20
707.5	H	22.84	3.06	-4.53	15.25	33.50
707.5	V	23.66	3.06	-4.53	16.07	40.46
713.5	H	24.40	3.06	-4.44	16.90	48.98
713.5	V	23.53	3.06	-4.44	16.03	40.09

* 5 BW 1 RB size / 0 Offset for B12

LTE band 12 (5 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
701.5	H	18.10	2.90	-4.12	11.08	12.82
701.5	V	23.06	2.90	-4.12	16.04	40.18
707.5	H	21.86	3.06	-4.53	14.27	26.73
707.5	V	22.53	3.06	-4.53	14.94	31.19
713.5	H	23.10	3.06	-4.44	15.60	36.31
713.5	V	22.21	3.06	-4.44	14.71	29.58

* 5 BW 1 RB size / 0 Offset for B12

LTE band 12 (10 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
704.0	H	20.34	2.96	-4.29	13.09	20.37
704.0	V	23.49	2.96	-4.29	16.24	42.07
707.5	H	22.46	3.06	-4.53	14.87	30.69
707.5	V	23.82	3.06	-4.53	16.23	41.98
711.0	H	24.02	3.10	-4.63	16.29	42.56
711.0	V	23.44	3.10	-4.63	15.71	37.24

* 10 BW 1 RB size / 0 Offset for B12

LTE band 12 (10 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
704.0	H	19.56	2.96	-4.29	12.31	17.02
704.0	V	22.53	2.96	-4.29	15.28	33.73
707.5	H	21.44	3.06	-4.53	13.85	24.27
707.5	V	22.49	3.06	-4.53	14.90	30.90
711.0	H	23.10	3.10	-4.63	15.37	34.43
711.0	V	22.37	3.10	-4.63	14.64	29.11

* 10 BW 1 RB size / 0 Offset for B12

LTE band 26/5 (1.4 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
824.70	H	24.11	3.26	-4.93	15.92	39.08
824.70	V	25.00	3.26	-4.93	16.81	47.97
836.50	H	25.49	3.45	-5.15	16.89	48.87
836.50	V	25.75	3.45	-5.15	17.15	51.88
848.30	H	25.85	3.52	-4.09	18.24	66.68
848.30	V	24.89	3.52	-4.09	17.28	53.46

* 1.4 BW 1 RB size / 0 Offset for B26

LTE band 26/5 (1.4 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
824.70	H	22.66	3.26	-4.93	14.47	27.99
824.70	V	24.16	3.26	-4.93	15.97	39.54
836.50	H	24.13	3.45	-5.15	15.53	35.73
836.50	V	24.81	3.45	-5.15	16.21	41.78
848.30	H	24.68	3.52	-4.09	17.07	50.93
848.30	V	24.01	3.52	-4.09	16.40	43.65

* 1.4 BW 1 RB size / 0 Offset for B26

LTE band 26/5 (3 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
825.50	H	24.03	3.28	-5.05	15.70	37.15
825.50	V	25.10	3.28	-5.05	16.77	47.53
836.50	H	25.02	3.45	-5.15	16.42	43.85
836.50	V	25.70	3.45	-5.15	17.10	51.29
847.50	H	25.75	3.52	-4.16	18.07	64.12
847.50	V	25.06	3.52	-4.16	17.38	54.70

* 3 BW 1 RB size / 0 Offset for B26

LTE band 26/5 (3 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
825.50	H	23.47	3.28	-5.05	15.14	32.66
825.50	V	24.39	3.28	-5.05	16.06	40.36
836.50	H	24.01	3.45	-5.15	15.41	34.75
836.50	V	24.82	3.45	-5.15	16.22	41.88
847.50	H	24.84	3.52	-4.16	17.16	52.00
847.50	V	24.47	3.52	-4.16	16.79	47.75

* 3 BW 1 RB size / 0 Offset for B26

LTE band 26/5 (5 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
826.50	H	24.39	3.31	-5.20	15.88	38.73
826.50	V	25.92	3.31	-5.20	17.41	55.08
836.50	H	25.17	3.45	-5.15	16.57	45.39
836.50	V	26.00	3.45	-5.15	17.40	54.95
846.50	H	25.63	3.51	-4.25	17.87	61.24
846.50	V	25.29	3.51	-4.25	17.53	56.62

* 5 BW 1 RB size / 0 Offset for B26

LTE band 26/5 (5 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
826.50	H	23.57	3.31	-5.20	15.06	32.06
826.50	V	24.60	3.31	-5.20	16.09	40.64
836.50	H	23.88	3.45	-5.15	15.28	33.73
836.50	V	25.02	3.45	-5.15	16.42	43.85
846.50	H	24.37	3.51	-4.25	16.61	45.81
846.50	V	24.15	3.51	-4.25	16.39	43.55

* 5 BW 1 RB size / 0 Offset for B26

LTE band 26/5 (10 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
829.00	H	24.59	3.38	-5.58	15.63	36.56
829.00	V	26.62	3.38	-5.58	17.66	58.34
836.50	H	24.70	3.45	-5.15	16.10	40.74
836.50	V	25.86	3.45	-5.15	17.26	53.21
844.00	H	24.95	3.49	-4.48	16.98	49.89
844.00	V	25.34	3.49	-4.48	17.37	54.58

* 10 BW 1 RB size / 0 Offset for B26

LTE band 26/5 (10 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
829.00	H	23.76	3.38	-5.58	14.80	30.20
829.00	V	26.18	3.38	-5.58	17.22	52.72
836.50	H	23.41	3.45	-5.15	14.81	30.27
836.50	V	25.53	3.45	-5.15	16.93	49.32
844.00	H	23.72	3.49	-4.48	15.75	37.58
844.00	V	24.25	3.49	-4.48	16.28	42.46

* 10 BW 1 RB size / 0 Offset for B26

LTE band 26 (15 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
831.50	H	25.19	3.42	-5.59	16.18	41.50
831.50	V	27.33	3.42	-5.59	18.32	67.92
841.50	H	24.45	3.48	-4.70	16.27	42.36
841.50	V	25.65	3.48	-4.70	17.47	55.85

* 15 BW 1 RB size / 0 Offset for B26

LTE band 26 (15 ㎒ – 16QAM)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(㎽)
831.50	H	23.95	3.42	-5.59	14.94	31.19
831.50	V	26.31	3.42	-5.59	17.30	53.70
841.50	H	23.68	3.48	-4.70	15.50	35.48
841.50	V	24.79	3.48	-4.70	16.61	45.81

* 15 BW 1 RB size / 0 Offset for B26

Remark;

1. E.R.P. & E.I.R.P. = [S.G level + Amp.] (dB m) - Cable loss (dB) + Ant. gain (dB d/dB i)
2. This device was tested under all bandwidths, RB configurations and modulations.
3. The data reported in the table above was measured in worst case.

2.5. Spurious Radiated Emission

LTE band 2 (1.4 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 850.7 ㎒)							
2 999.96	H	-54.09	5.36	9.42	-50.03	-13	37.03
2 999.90	V	-57.45	5.36	9.42	-53.39	-13	40.39
Middle Channel (1 880.0 ㎒)							
2 999.98	H	-54.36	5.36	9.42	-50.30	-13	37.30
3 000.04	V	-57.22	5.36	9.42	-53.16	-13	40.16
High Channel (1 909.3 ㎒)							
3 000.01	H	-54.63	5.36	9.42	-50.57	-13	37.57
3 000.05	V	-58.00	5.36	9.42	-53.94	-13	40.94

* 1.4 BW 1 RB size / 0 Offset for B2

LTE band 2 (3 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 851.5 ㎒)							
3 000.11	H	-54.74	5.36	9.42	-50.68	-13	37.68
3 000.01	V	-57.60	5.36	9.42	-53.54	-13	40.54
Middle Channel (1 880.0 ㎒)							
3 000.15	H	-54.23	5.36	9.42	-50.17	-13	37.17
3 000.10	V	-57.61	5.36	9.42	-53.55	-13	40.55
High Channel (1 908.5 ㎒)							
3 000.18	H	-54.62	5.36	9.42	-50.56	-13	37.56
3 000.02	V	-58.19	5.36	9.42	-54.13	-13	41.13

* 3 BW 1 RB size / 0 Offset for B2

LTE band 2 (5 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 852.5 ㎒)							
3 000.05	H	-54.67	5.36	9.42	-50.61	-13	37.61
2 999.98	V	-57.91	5.36	9.42	-53.85	-13	40.85
Middle Channel (1 880.0 ㎒)							
3 000.18	H	-54.88	5.36	9.42	-50.82	-13	37.82
3 000.05	V	-57.38	5.36	9.42	-53.32	-13	40.32
High Channel (1 907.5 ㎒)							
3 000.01	H	-54.69	5.36	9.42	-50.63	-13	37.63
3 000.11	V	-57.49	5.36	9.42	-53.43	-13	40.43

* 5 BW 1 RB size / 0 Offset for B2

LTE band 2 (10 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 855.0 ㎒)							
3 000.09	H	-54.34	5.36	9.42	-50.28	-13	37.28
2 999.98	V	-57.62	5.36	9.42	-53.56	-13	40.56
Middle Channel (1 880.0 ㎒)							
3 000.11	H	-54.52	5.36	9.42	-50.46	-13	37.46
3 000.01	V	-57.91	5.36	9.42	-53.85	-13	40.85
High Channel (1 905.5 ㎒)							
3 000.02	H	-54.23	5.36	9.42	-50.17	-13	37.17
3 000.08	V	-57.39	5.36	9.42	-53.33	-13	40.33

* 10 BW 1 RB size / 0 Offset for B2

LTE band 2 (15 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 857.5 ㎒)							
3 000.02	H	-54.37	5.36	9.42	-50.31	-13	37.31
3 000.20	V	-57.46	5.36	9.42	-53.40	-13	40.40
Middle Channel (1 880.0 ㎒)							
2 999.96	H	-54.23	5.36	9.42	-50.17	-13	37.17
3 000.02	V	-58.38	5.36	9.42	-54.32	-13	41.32
High Channel (1 902.5 ㎒)							
3 000.17	H	-54.76	5.36	9.42	-50.70	-13	37.70
3 000.11	V	-58.06	5.36	9.42	-54.00	-13	41.00

* 15 BW 1 RB size / 0 Offset for B2

LTE band 2 (20 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 860.0 ㎒)							
2 999.90	H	-54.57	5.36	9.42	-50.51	-13	37.51
3 000.06	V	-58.06	5.36	9.42	-54.00	-13	41.00
Middle Channel (1 880.0 ㎒)							
3 000.13	H	-54.80	5.36	9.42	-50.74	-13	37.74
3 000.15	V	-58.13	5.36	9.42	-54.07	-13	41.07
High Channel (1 902.5 ㎒)							
3 000.03	H	-54.58	5.36	9.42	-50.52	-13	37.52
3 000.09	V	-57.74	5.36	9.42	-53.68	-13	40.68

* 20 BW 1 RB size / 0 Offset for B2

LTE band 4 (1.4 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 710.7 ㎒)							
3 000.13	H	-54.68	5.36	9.42	-50.62	-13	37.62
3 000.17	V	-57.93	5.36	9.42	-53.87	-13	40.87
5 130.60	H	-50.14	7.61	10.44	-47.31	-13	34.31
5 130.88	V	-53.99	7.61	10.45	-51.15	-13	38.15
Middle Channel (1 732.5 ㎒)							
3 000.18	H	-54.02	5.36	9.42	-49.96	-13	36.96
3 000.05	V	-57.93	5.36	9.42	-53.87	-13	40.87
5 196.20	H	-53.91	7.75	10.60	-51.06	-13	38.06
5 196.24	V	-49.78	7.75	10.60	-46.93	-13	33.93
High Channel (1 754.3 ㎒)							
2 999.98	H	-54.37	5.36	9.42	-50.31	-13	37.31
3 000.10	V	-57.40	5.36	9.42	-53.34	-13	40.34
5 261.24	H	-58.49	7.68	10.71	-55.46	-13	42.46
5 261.98	V	-54.58	7.68	10.71	-51.55	-13	38.55

* 1.4 BW 1 RB size / 0 Offset for B4

LTE band 4 (3 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 711.5 ㎒)							
3 000.06	H	-54.57	5.36	9.42	-50.51	-13	37.51
2 999.97	V	-57.53	5.36	9.42	-53.47	-13	40.47
5 130.80	H	-49.80	7.61	10.44	-46.97	-13	33.97
5 130.78	V	-53.87	7.61	10.44	-51.04	-13	38.04
Middle Channel (1 732.5 ㎒)							
2 999.98	H	-54.19	5.36	9.42	-50.13	-13	37.13
2 999.95	V	-58.05	5.36	9.42	-53.99	-13	40.99
5 193.92	H	-54.01	7.75	10.60	-51.16	-13	38.16
5 193.62	V	-49.50	7.75	10.59	-46.66	-13	33.66
High Channel (1 753.5 ㎒)							
3 000.11	H	-54.45	5.36	9.42	-50.39	-13	37.39
3 000.02	V	-57.64	5.36	9.42	-53.58	-13	40.58
5 256.86	H	-58.35	7.69	10.70	-55.34	-13	42.34
5 256.66	V	-54.45	7.69	10.70	-51.44	-13	38.44

* 3 BW 1 RB size / 0 Offset for B4

LTE band 4 (5 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 712.5 ㎒)							
2 999.96	H	-54.69	5.36	9.42	-50.63	-13	37.63
3 000.11	V	-57.39	5.36	9.42	-53.33	-13	40.33
5 131.02	H	-49.97	7.61	10.45	-47.13	-13	34.13
5 131.12	V	-53.81	7.61	10.45	-50.97	-13	37.97
Middle Channel (1 732.5 ㎒)							
3 000.10	H	-54.27	5.36	9.42	-50.21	-13	37.21
3 000.03	V	-57.56	5.36	9.42	-53.50	-13	40.50
5 191.08	H	-53.50	7.74	10.59	-50.65	-13	37.65
5 191.00	V	-50.28	7.74	10.59	-47.43	-13	34.43
High Channel (1 752.5 ㎒)							
3 000.07	H	-54.66	5.36	9.42	-50.60	-13	37.60
3 000.13	V	-57.90	5.36	9.42	-53.84	-13	40.84
5 250.88	H	-58.09	7.69	10.69	-55.09	-13	42.09
5 250.88	V	-53.75	7.69	10.69	-50.75	-13	37.75

* 5 BW 1 RB size / 0 Offset for B4

LTE band 4 (10 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 715.0 ㎒)							
3 000.13	H	-53.95	5.36	9.42	-49.89	-13	36.89
3 000.05	V	-57.26	5.36	9.42	-53.20	-13	40.20
5 131.72	H	-49.78	7.61	10.45	-46.94	-13	33.94
5 131.88	V	-53.50	7.61	10.45	-50.66	-13	37.66
Middle Channel (1 732.5 ㎒)							
2 999.98	H	-54.78	5.36	9.42	-50.72	-13	37.72
3 000.11	V	-57.27	5.36	9.42	-53.21	-13	40.21
5 183.88	H	-52.62	7.72	10.57	-49.77	-13	36.77
5 184.46	V	-49.85	7.73	10.57	-47.01	-13	34.01
High Channel (1 750.0 ㎒)							
3 000.17	H	-54.34	5.36	9.42	-50.28	-13	37.28
3 000.05	V	-58.06	5.36	9.42	-54.00	-13	41.00
5 237.04	H	-56.71	7.71	10.67	-53.75	-13	40.75
5 236.71	V	-51.68	7.71	10.67	-48.72	-13	35.72

* 10 BW 1 RB size / 0 Offset for B4

LTE band 4 (15 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 717.5 ㎒)							
3 000.05	H	-54.78	5.36	9.42	-50.72	-13	37.72
2 999.90	V	-57.48	5.36	9.42	-53.42	-13	40.42
5 132.50	H	-49.06	7.61	10.45	-46.22	-13	33.22
5 132.70	V	-53.04	7.61	10.45	-50.20	-13	37.20
Middle Channel (1 732.5 ㎒)							
2 999.98	H	-54.57	5.36	9.42	-50.51	-13	37.51
3 000.01	V	-57.80	5.36	9.42	-53.74	-13	40.74
5 177.74	H	-52.06	7.71	10.56	-49.21	-13	36.21
5 177.12	V	-49.81	7.71	10.56	-46.96	-13	33.96
High Channel (1 747.5 ㎒)							
3 000.14	H	-54.22	5.36	9.42	-50.16	-13	37.16
3 000.05	V	-57.66	5.36	9.42	-53.60	-13	40.60
5 222.46	H	-56.00	7.73	10.65	-53.08	-13	40.08
5 222.54	V	-51.65	7.73	10.65	-48.73	-13	35.73

* 15 BW 1 RB size / 0 Offset for B4

LTE band 4 (20 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 720.0 ㎒)							
3 000.11	H	-54.11	5.36	9.42	-50.05	-13	37.05
3 000.20	V	-58.13	5.36	9.42	-54.07	-13	41.07
5 133.34	H	-48.90	7.61	10.45	-46.06	-13	33.06
5 133.32	V	-52.32	7.61	10.45	-49.48	-13	36.48
Middle Channel (1 732.5 ㎒)							
3 000.06	H	-54.43	5.36	9.42	-50.37	-13	37.37
3 000.15	V	-57.97	5.36	9.42	-53.91	-13	40.91
5 170.98	H	-51.10	7.70	10.54	-48.26	-13	35.26
5 170.78	V	-50.03	7.70	10.54	-47.19	-13	34.19
High Channel (1 745.0 ㎒)							
3 000.02	H	-54.21	5.36	9.42	-50.15	-13	37.15
3 000.17	V	-58.04	5.36	9.42	-53.98	-13	40.98
5 208.14	H	-54.88	7.75	10.62	-52.01	-13	39.01
5 208.20	V	-49.86	7.75	10.62	-46.99	-13	33.99

* 20 BW 1 RB size / 0 Offset for B4

LTE band 7 (5 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 502.5 ㎒)							
3 000.05	H	-52.78	5.36	9.42	-48.72	-25	23.72
3 000.10	V	-54.14	5.36	9.42	-50.08	-25	25.08
5 000.50	H	-55.48	7.44	9.86	-53.06	-25	28.06
5 000.82	V	-57.39	7.44	9.86	-54.97	-25	29.97
Middle Channel (2 535.0 ㎒)							
3 000.22	H	-52.55	5.36	9.42	-48.49	-25	23.49
2 999.98	V	-54.26	5.36	9.42	-50.20	-25	25.20
5 065.78	H	-53.52	7.51	10.20	-50.83	-25	25.83
5 065.80	V	-56.16	7.51	10.20	-53.47	-25	28.47
High Channel (2 567.5 ㎒)							
3 000.13	H	-52.50	5.36	9.42	-48.44	-25	23.44
3 000.03	V	-55.05	5.36	9.42	-50.99	-25	25.99
5 130.75	H	-57.66	7.61	10.44	-54.83	-25	29.83
5 130.74	V	-60.42	7.61	10.44	-57.59	-25	32.59

* 5 BW 1 RB size / 0 Offset

LTE band 7 (10 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 505.0 ㎒)							
3 000.11	H	-52.71	5.36	9.42	-48.65	-25	23.65
3 000.01	V	-54.63	5.36	9.42	-50.57	-25	25.57
5 001.28	H	-55.06	7.44	9.87	-52.63	-25	27.63
5 001.18	V	-56.21	7.44	9.87	-53.78	-25	28.78
Middle Channel (2 535.0 ㎒)							
3 000.23	H	-53.19	5.36	9.42	-49.13	-25	24.13
3 000.15	V	-54.14	5.36	9.42	-50.08	-25	25.08
5 060.96	H	-53.38	7.50	10.17	-50.71	-25	25.71
5 061.36	V	-57.20	7.50	10.17	-54.53	-25	29.53
High Channel (2 565.0 ㎒)							
3 000.05	H	-52.78	5.36	9.42	-48.72	-25	23.72
2 999.96	V	-55.03	5.36	9.42	-50.97	-25	25.97
5 121.04	H	-56.98	7.59	10.42	-54.15	-25	29.15
5 121.20	V	-59.24	7.59	10.42	-56.41	-25	31.41

* 10 BW 1 RB size / 0 Offset

LTE band 7 (15 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 507.5 ㎒)							
3 000.05	H	-52.65	5.36	9.42	-48.59	-25	23.59
2 999.93	V	-54.31	5.36	9.42	-50.25	-25	25.25
5 001.76	H	-52.87	7.44	9.87	-50.44	-25	25.44
5 001.90	V	-54.59	7.44	9.87	-52.16	-25	27.16
Middle Channel (2 535.0 ㎒)							
3 000.18	H	-53.03	5.36	9.42	-48.97	-25	23.97
2 999.98	V	-54.38	5.36	9.42	-50.32	-25	25.32
5 056.62	H	-52.06	7.50	10.15	-49.41	-25	24.41
5 056.86	V	-57.93	7.50	10.15	-55.28	-25	30.28
High Channel (2 562.5 ㎒)							
3 000.02	H	-52.60	5.36	9.42	-48.54	-25	23.54
3 000.15	V	-54.34	5.36	9.42	-50.28	-25	25.28
5 111.82	H	-56.09	7.57	10.40	-53.26	-25	28.26
5 111.64	V	-56.33	7.57	10.40	-53.50	-25	28.50

* 15 BW 1 RB size / 0 Offset

LTE band 7 (20 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 510.0 ㎒)							
3 000.01	H	-52.42	5.36	9.42	-48.36	-25	23.36
3 000.17	V	-54.25	5.36	9.42	-50.19	-25	25.19
5 002.48	H	-52.24	7.44	9.87	-49.81	-25	24.81
5 002.22	V	-54.66	7.44	9.87	-52.23	-25	27.23
Middle Channel (2 535.0 ㎒)							
3 000.10	H	-52.75	5.36	9.42	-48.69	-25	23.69
3 000.01	V	-54.40	5.36	9.42	-50.34	-25	25.34
5 052.15	H	-49.52	7.49	10.13	-46.88	-25	21.88
5 052.24	V	-55.94	7.49	10.13	-53.30	-25	28.30
High Channel (2 560.0 ㎒)							
3 000.22	H	-52.53	5.36	9.42	-48.47	-25	23.47
3 000.18	V	-54.72	5.36	9.42	-50.66	-25	25.66
5 101.76	H	-53.04	7.54	10.38	-50.20	-25	25.20
5 102.14	V	-55.31	7.54	10.38	-52.47	-25	27.47

* 20 BW 1 RB size / 0 Offset

LTE band 12 (1.4 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (699.7 ㎒)							
Below 1 000.00	-	-	-	-	Not detected	-	-
Above 1 000.00	-	-	-	-	Not detected	-	-
Middle Channel (707.5 ㎒)							
Below 1 000.00	-	-	-	-	Not detected	-	-
Above 1 000.00	-	-	-	-	Not detected	-	-
High Channel (715.3 ㎒)							
Below 1 000.00	-	-	-	-	Not detected	-	-
Above 1 000.00	-	-	-	-	Not detected	-	-

* 1.4 BW 1 RB size / 0 Offset for B12

LTE band 12 (3 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (700.5 ㎒)							
Below 1 000.00	-	-	-	-	Not detected	-	-
Above 1 000.00	-	-	-	-	Not detected	-	-
Middle Channel (707.5 ㎒)							
Below 1 000.00	-	-	-	-	Not detected	-	-
Above 1 000.00	-	-	-	-	Not detected	-	-
High Channel (714.5 ㎒)							
Below 1 000.00	-	-	-	-	Not detected	-	-
Above 1 000.00	-	-	-	-	Not detected	-	-

* 3 BW 1 RB size / 0 Offset for B12

LTE band 12 (5 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (701.5 ㎒)							
Below 1 000.00	-	-	-	-	Not detected	-	-
Above 1 000.00	-	-	-	-	Not detected	-	-
Middle Channel (707.5 ㎒)							
Below 1 000.00	-	-	-	-	Not detected	-	-
Above 1 000.00	-	-	-	-	Not detected	-	-
High Channel (713.5 ㎒)							
Below 1 000.00	-	-	-	-	Not detected	-	-
Above 1 000.00	-	-	-	-	Not detected	-	-

* 5 BW 1 RB size / 0 Offset for B12

LTE band 12 (10 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (704.0 ㎒)							
Below 1 000.00	-	-	-	-	Not detected	-	-
Above 1 000.00	-	-	-	-	Not detected	-	-
Middle Channel (707.5 ㎒)							
Below 1 000.00	-	-	-	-	Not detected	-	-
Above 1 000.00	-	-	-	-	Not detected	-	-
High Channel (711.0 ㎒)							
Below 1 000.00	-	-	-	-	Not detected	-	-
Above 1 000.00	-	-	-	-	Not detected	-	-

* 10 BW 1 RB size / 0 Offset for B12

LTE band 26/5 (1.4 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (824.7 ㎒)							
3 000.11	H	-52.48	5.36	7.27	-50.57	-13	37.57
3 000.02	V	-55.98	5.36	7.27	-54.07	-13	41.07
Middle Channel (836.5 ㎒)							
2 493.17	H	-44.17	4.81	7.00	-41.98	-13	28.98
2 508.08	V	-45.36	4.82	6.97	-43.21	-13	30.21
3 000.10	H	-52.40	5.36	7.27	-50.49	-13	37.49
3 000.05	V	-55.46	5.36	7.27	-53.55	-13	40.55
High Channel (848.3 ㎒)							
2 543.31	H	-43.06	4.87	6.89	-41.04	-13	28.04
2 543.52	V	-41.74	4.87	6.89	-39.72	-13	26.72
3 000.05	H	-52.12	5.36	7.27	-50.21	-13	37.21
3 000.16	V	-55.67	5.36	7.27	-53.76	-13	40.76

* 1.4 BW 1 RB size / 0 Offset for B26

LTE band 26/5 (3 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (825.5 ㎒)							
3 000.08	H	-52.40	5.36	7.27	-50.49	-13	37.49
3 000.05	V	-55.90	5.36	7.27	-53.99	-13	40.99
Middle Channel (836.5 ㎒)							
2 505.62	H	-43.57	4.82	6.98	-41.41	-13	28.41
2 506.02	V	-45.79	4.82	6.97	-43.64	-13	30.64
2 999.98	H	-52.02	5.36	7.27	-50.11	-13	37.11
3 000.15	V	-55.59	5.36	7.27	-53.68	-13	40.68
High Channel (847.5 ㎒)							
2 538.66	H	-43.81	4.86	6.90	-41.77	-13	28.77
2 538.96	V	-42.90	4.86	6.90	-40.86	-13	27.86
3 000.11	H	-52.41	5.36	7.27	-50.50	-13	37.50
3 000.06	V	-55.91	5.36	7.27	-54.00	-13	41.00

* 3 BW 1 RB size / 0 Offset for B26

LTE band 26/5 (5 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (826.5 ㎒)							
2 999.98	H	-52.39	5.36	7.27	-50.48	-13	37.48
3 000.01	V	-55.90	5.36	7.27	-53.99	-13	40.99
Middle Channel (836.5 ㎒)							
2 503.08	H	-42.57	4.81	6.98	-40.40	-13	27.40
2 502.98	V	-45.12	4.81	6.98	-42.95	-13	29.95
3 000.02	H	-52.12	5.36	7.27	-50.21	-13	37.21
3 000.10	V	-55.88	5.36	7.27	-53.97	-13	40.97
High Channel (846.5 ㎒)							
2 525.62	H	-43.16	4.85	6.93	-41.08	-13	28.08
2 533.04	V	-43.24	4.86	6.91	-41.19	-13	28.19
3 000.13	H	-52.01	5.36	7.27	-50.10	-13	37.10
3 000.02	V	-55.24	5.36	7.27	-53.33	-13	40.33

* 5 BW 1 RB size / 0 Offset for B26

LTE band 26/5 (10 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (829.0 ㎒)							
2 999.98	H	-52.43	5.36	7.27	-50.52	-13	37.52
3 000.01	V	-55.88	5.36	7.27	-53.97	-13	40.97
Middle Channel (836.5 ㎒)							
2 496.28	H	-42.83	4.81	6.99	-40.65	-13	27.65
2 496.32	V	-45.25	4.81	6.99	-43.07	-13	30.07
3 000.10	H	-52.20	5.36	7.27	-50.29	-13	37.29
3 000.04	V	-55.88	5.36	7.27	-53.97	-13	40.97
High Channel (844.0 ㎒)							
2 518.90	H	-42.39	4.84	6.95	-40.28	-13	27.28
2 518.86	V	-42.92	4.84	6.95	-40.81	-13	27.81
3 000.10	H	-52.47	5.36	7.27	-50.56	-13	37.56
3 000.02	V	-55.79	5.36	7.27	-53.88	-13	40.88

* 10 BW 1 RB size / 0 Offset for B26

LTE band 26 (15 ㎒ – QPSK)

Frequency (㎒)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (831.5 ㎒)							
3 000.13	H	-52.37	5.36	7.27	-50.46	-13	37.46
3 000.05	V	-55.91	5.36	7.27	-54.00	-13	41.00
High Channel (841.5 ㎒)							
2 504.62	H	-42.93	4.82	6.98	-40.77	-13	27.77
2 504.58	V	-45.05	4.82	6.98	-42.89	-13	29.89
3 000.10	H	-52.53	5.36	7.27	-50.62	-13	37.62
3 000.04	V	-55.78	5.36	7.27	-53.87	-13	40.87

* 15 BW 1 RB size / 0 Offset for B26

Remark;

1. E.R.P. & E.I.R.P. = S.G level (dB m) - Cable loss (dB) + Ant. gain (dB d/dB i)
2. This device was tested under all bandwidths, RB configurations, and modulations.
3. The data reported in the table above was measured in worst case.

3. Conducted Output Power

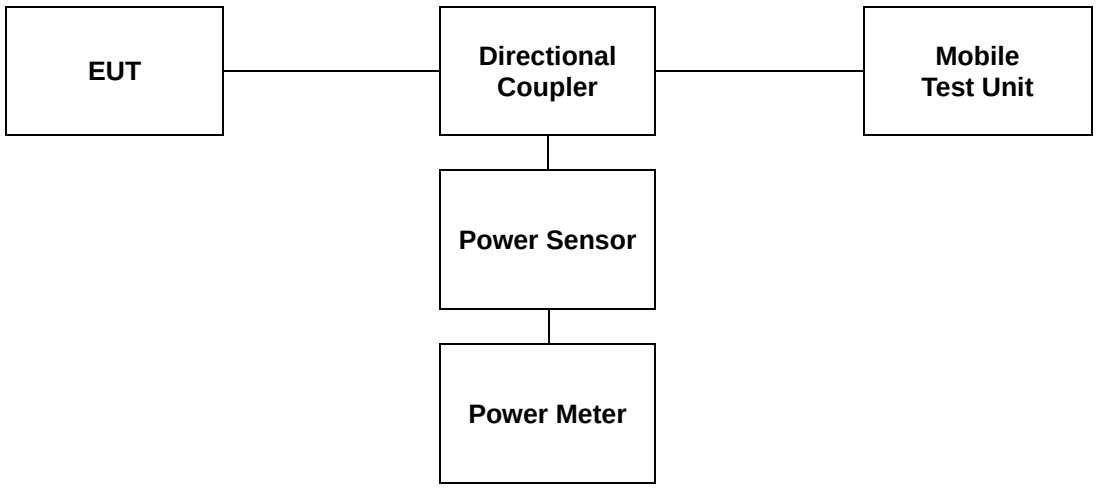
3.1. Limit

CFR 47, Section FCC §2.1046 and IC RSS-Gen Issue 5 6.12.

3.2. Test Procedure

Output power shall be measured at the RF output terminals for all configurations.

1. The RF output of the transmitter was connected to the input of the mobile test unit in order to establish communication with the EUT.
2. The EUT was set up for the max. output power with pseudo random data modulation by using mobile test unit parameters.
3. The measurement performed using a wideband RF power meter.
4. This EUT was tested under all configurations and the highest power was investigated and reported.



3.3. Test Result

Ambient temperature : (23 ± 1) ℃
Relative humidity : 47 % R.H.

Band	Bandwidth (㎒)	RB Size	RB Offset	QPSK			16QAM		
				18607	18900	19193	18607	18900	19193
				1 850.7	1 880.0	1 909.3	1 850.7	1 880.0	1 909.3
2	1.4	1	0	22.85	22.77	22.64	21.99	21.86	21.81
		1	3	22.92	22.86	22.78	22.05	21.89	21.85
		1	5	22.86	22.78	22.67	21.99	21.82	21.76
		3	0	22.95	22.82	22.80	21.89	21.93	21.93
		3	2	22.93	22.82	22.80	21.90	21.91	21.94
		3	3	22.94	22.84	22.78	21.91	21.90	21.99
		6	0	21.93	21.85	21.77	20.91	20.77	20.77
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**18615**	**18900**	**19185**	**18615**	**18900**	**19185**
				1 851.5	**1 880.0**	**1 908.5**	**1 851.5**	**1 880.0**	**1 908.5**
	3	1	0	22.98	22.95	23.19	22.27	22.02	22.06
		1	8	23.07	22.87	23.03	22.40	21.92	21.91
		1	14	22.95	22.94	23.03	22.31	21.99	21.86
		8	0	21.94	21.96	21.87	20.99	21.00	20.97
		8	4	22.01	21.94	21.81	21.09	21.01	20.90
		8	7	22.02	21.91	21.73	21.08	20.95	20.83
		15	0	21.98	21.93	21.81	20.97	20.91	20.81
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**18625**	**18900**	**19175**	**18625**	**18900**	**19175**
				1 852.5	**1 880.0**	**1 907.5**	**1 852.5**	**1 880.0**	**1 907.5**
	5	1	0	22.85	22.91	22.94	22.36	21.99	21.99
		1	12	22.98	22.97	23.22	22.51	22.06	22.28
		1	24	22.86	22.89	22.93	22.38	21.95	21.99
		12	0	21.98	21.95	21.94	21.09	20.98	21.01
		12	7	22.06	21.96	21.92	21.19	20.98	20.98
		12	13	21.91	21.86	21.71	21.06	20.91	20.76
		25	0	21.99	21.90	21.88	21.04	20.85	20.87
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**18650**	**18900**	**19150**	**18650**	**18900**	**19150**
				1 855.0	**1 880.0**	**1 905.0**	**1 855.0**	**1 880.0**	**1 905.0**
	10	1	0	22.77	22.99	22.95	22.09	22.05	21.87
		1	25	22.95	23.14	23.11	22.29	22.19	21.97
		1	49	22.46	22.91	22.61	21.83	21.93	21.51
		25	0	22.03	22.08	22.03	21.05	21.14	20.99
		25	12	22.03	22.18	22.08	21.07	21.20	21.04
		25	25	21.73	22.13	21.95	20.77	21.17	20.97
		50	0	21.92	22.03	22.01	20.92	21.10	21.00
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**18675**	**18900**	**19125**	**18675**	**18900**	**19125**
				1 857.5	**1 880.0**	**1 902.5**	**1 857.5**	**1 880.0**	**1 902.5**
	15	1	0	23.78	23.90	24.01	22.66	23.22	23.31
		1	37	23.16	23.31	23.38	22.07	22.63	22.61
		1	74	23.60	23.66	23.86	22.50	23.02	23.10
		36	0	22.36	22.40	22.44	21.33	21.45	21.40
		36	20	22.19	22.33	22.22	21.17	21.36	21.20
		36	39	22.14	22.27	22.27	21.11	21.30	21.22
		75	0	22.22	22.28	22.28	21.24	21.28	21.23
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**18700**	**18900**	**19100**	**18700**	**18900**	**19100**
				1 860.0	**1 880.0**	**1 900.0**	**1 860.0**	**1 880.0**	**1 900.0**
	20	1	0	23.50	23.83	23.45	23.12	23.21	22.82
		1	50	22.83	23.20	23.49	22.42	22.58	22.80
		1	99	23.54	23.62	23.69	23.15	23.01	23.05
		50	0	22.36	22.51	22.68	21.41	21.53	21.65
		50	25	22.07	22.25	22.49	21.12	21.26	21.45
		50	50	22.30	22.47	22.51	21.35	21.46	21.52
		100	0	22.27	22.49	22.81	21.31	21.48	21.55

Band	Bandwidth (㎒)	RB Size	RB Offset	QPSK			16QAM		
				19957	20175	20393	19957	20175	20393
				1 710.7	1 732.5	1 754.3	1 710.7	1 732.5	1 754.3
4	1.4	1	0	22.55	22.33	22.44	21.53	21.67	21.47
		1	3	22.62	22.41	22.48	21.59	21.74	21.53
		1	5	22.56	22.33	22.52	21.53	21.68	21.55
		3	0	22.46	22.36	22.40	21.48	21.49	21.60
		3	2	22.51	22.42	22.46	21.54	21.55	21.66
		3	3	22.44	22.41	22.51	21.50	21.53	21.77
		6	0	21.51	21.38	21.55	20.65	20.27	20.72
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**19965**	**20175**	**20385**	**19965**	**20175**	**20385**
				1 711.5	**1 732.5**	**1 753.5**	**1 711.5**	**1 732.5**	**1 753.5**
	3	1	0	22.68	22.37	22.42	22.06	21.45	21.32
		1	8	22.67	22.47	22.69	22.08	21.55	21.57
		1	14	22.54	22.38	22.79	21.96	21.46	21.63
		8	0	21.82	21.50	21.64	20.93	20.53	20.75
		8	4	21.72	21.50	21.84	20.82	20.55	20.93
		8	7	21.70	21.57	21.80	20.76	20.61	20.91
		15	0	21.71	21.50	21.73	20.74	20.44	20.73
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**19975**	**20175**	**20375**	**19975**	**20175**	**20375**
				1 712.5	**1 732.5**	**1 752.5**	**1 712.5**	**1 732.5**	**1 752.5**
	5	1	0	22.62	22.40	22.26	22.12	21.42	21.31
		1	12	22.56	22.48	22.62	22.07	21.51	21.66
		1	24	22.60	22.21	22.75	22.08	21.29	21.81
		12	0	21.84	21.42	21.44	20.96	20.46	20.54
		12	7	21.73	21.51	21.66	20.86	20.53	20.75
		12	13	21.67	21.46	21.68	20.81	20.49	20.75
		25	0	21.65	21.47	21.63	20.71	20.41	20.64
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**20000**	**20175**	**20350**	**20000**	**20175**	**20350**
				1 715.0	**1 732.5**	**1 750.0**	**1 715.0**	**1 732.5**	**1 750.0**
	10	1	0	22.54	22.36	21.85	21.83	21.74	20.75
		1	25	22.69	22.57	22.38	22.03	21.61	21.30
		1	49	22.75	21.89	22.62	22.07	20.90	21.51
		25	0	21.75	21.55	21.27	20.74	20.60	20.30
		25	12	21.84	21.58	21.56	20.84	20.66	20.58
		25	25	21.82	21.57	21.71	20.80	20.64	20.73
		50	0	21.80	21.51	21.56	20.75	20.54	20.53
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**20025**	**20175**	**20325**	**20025**	**20175**	**20325**
				1 717.5	**1 732.5**	**1 747.5**	**1 717.5**	**1 732.5**	**1 747.5**
	15	1	0	22.97	23.05	22.57	22.31	22.29	21.46
		1	37	22.88	22.83	22.42	22.21	22.08	21.33
		1	74	23.34	22.33	23.22	22.72	21.58	22.13
		36	0	21.89	21.92	21.53	20.92	20.87	20.54
		36	20	21.97	21.83	21.65	21.02	20.80	20.64
		36	39	22.06	21.62	22.00	21.10	20.60	20.97
		75	0	21.96	21.72	21.71	20.96	20.73	20.77
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**20050**	**20175**	**20300**	**20050**	**20175**	**20300**
				1 720.0	**1 732.5**	**1 745.0**	**1 720.0**	**1 732.5**	**1 745.0**
	20	1	0	23.00	23.08	23.19	22.39	22.42	22.73
		1	50	23.17	23.00	22.44	22.55	22.33	22.00
		1	99	23.50	22.25	23.33	22.88	21.62	22.86
		50	0	22.01	22.30	21.89	21.02	21.27	20.93
		50	25	22.17	22.02	21.77	21.17	21.00	20.81
		50	50	22.55	21.76	21.90	21.54	20.73	20.93
		100	0	22.13	21.92	21.79	21.12	20.93	20.84

LTE Band	Bandwidth (㎒)	RB Size	RB Offset	QPSK			16QAM		
				20775	21100	21425	20775	21100	21425
				2 502.5	2 535.0	2 567.5	2 502.5	2 535.0	2 567.5
7	5	1	0	22.97	22.44	22.72	22.49	21.52	21.76
		1	12	22.79	22.73	22.88	22.31	21.81	21.90
		1	24	22.64	22.75	22.89	22.15	21.86	21.95
		12	0	22.10	21.54	21.86	21.25	20.62	20.89
		12	7	21.97	21.70	21.91	21.11	20.77	20.93
		12	13	21.87	21.70	21.90	21.00	20.76	20.95
		25	0	21.95	21.68	21.87	21.00	20.67	20.81
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**20800**	**21100**	**21400**	**20800**	**21100**	**21400**
				2 505.0	**2 535.0**	**2 565.0**	**2 505.0**	**2 535.0**	**2 565.0**
	10	1	0	22.96	22.24	22.74	22.30	21.27	21.69
		1	25	22.83	22.77	22.81	22.18	21.78	21.74
		1	49	22.32	22.88	22.78	21.67	21.87	21.64
		25	0	22.01	21.53	21.92	21.06	20.60	20.93
		25	12	21.97	21.80	22.07	20.99	20.88	21.08
		25	25	21.65	21.85	21.92	20.68	20.91	20.91
		50	0	21.89	21.68	21.97	20.89	20.77	20.96
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**20825**	**21100**	**21375**	**20825**	**21100**	**21375**
				2 507.5	**2 535.0**	**2 562.0**	**2 507.5**	**2 535.0**	**2 562.0**
	15	1	0	23.59	22.68	23.25	22.93	22.03	22.16
		1	37	22.94	22.73	23.04	22.20	22.13	21.97
		1	74	23.01	23.50	23.38	22.35	22.86	22.28
		36	0	22.25	21.58	22.39	21.29	20.53	21.39
		36	20	22.02	21.86	22.24	21.05	20.81	21.23
		36	39	21.88	22.14	22.26	20.90	21.07	21.23
		75	0	22.05	21.86	22.28	21.07	20.86	21.29
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**20850**	**21100**	**21350**	**20850**	**21100**	**21350**
				2 510.0	**2 535.0**	**2 560.0**	**2 510.0**	**2 535.0**	**2 560.0**
	20	1	0	23.65	22.91	23.75	23.07	22.27	23.29
		1	50	23.02	22.82	23.33	22.45	22.22	22.86
		1	99	22.95	23.58	23.66	22.39	22.97	23.19
		50	0	22.39	21.75	22.54	21.41	20.70	21.57
		50	25	22.15	21.87	22.43	21.16	20.83	21.46
		50	50	22.11	22.42	22.55	21.13	21.37	21.57
		100	0	22.16	22.07	22.49	21.17	21.06	21.53

Band	Bandwidth (㎒)	RB Size	RB Offset	QPSK			16QAM		
				23017	23095	23173	23017	23095	23173
				699.7	707.5	715.3	699.7	707.5	715.3
12	1.4	1	0	22.55	22.44	22.08	21.58	21.80	21.12
		1	3	22.53	22.49	22.08	21.57	21.84	21.13
		1	5	22.46	22.44	22.14	21.47	21.80	21.20
		3	0	22.38	22.45	22.10	21.45	21.61	21.29
		3	2	22.46	22.38	22.08	21.51	21.54	21.28
		3	3	22.37	22.39	22.22	21.42	21.52	21.38
		6	0	21.51	21.42	21.22	20.63	20.31	20.37
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**23025**	**23095**	**23165**	**23025**	**23095**	**23165**
				700.5	**707.5**	**714.5**	**700.5**	**707.5**	**714.5**
	3	1	0	22.85	22.35	22.39	22.23	21.39	21.30
		1	8	22.72	22.38	22.22	22.06	21.40	21.14
		1	14	22.58	22.38	22.15	21.93	21.42	21.00
		8	0	21.64	21.42	21.39	20.68	20.43	20.50
		8	4	21.68	21.47	21.27	20.75	20.49	20.36
		8	7	21.63	21.56	21.26	20.67	20.57	20.36
		15	0	21.66	21.52	21.30	20.69	20.42	20.33
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**23035**	**23095**	**23155**	**23035**	**23095**	**23155**
				701.5	**707.5**	**713.5**	**701.5**	**707.5**	**713.5**
	5	1	0	22.52	22.28	22.81	22.04	21.32	21.86
		1	12	22.45	22.27	22.39	21.98	21.29	21.48
		1	24	22.40	22.25	22.28	21.93	21.30	21.31
		12	0	21.66	21.36	21.78	20.77	20.37	20.85
		12	7	21.60	21.42	21.58	20.74	20.43	20.64
		12	13	21.55	21.36	21.36	20.66	20.37	20.41
		25	0	21.58	21.46	21.51	20.59	20.38	20.49
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**23060**	**23095**	**23130**	**23060**	**23095**	**23130**
				704.0	**707.5**	**711.0**	**704.0**	**707.5**	**711.0**
	10	1	0	22.51	22.07	22.52	21.83	21.11	21.43
		1	25	22.62	22.39	22.37	21.92	21.45	21.30
		1	49	22.62	22.01	21.66	21.95	21.02	20.54
		25	0	21.59	21.51	21.71	20.60	20.59	20.71
		25	12	21.71	21.69	21.60	20.72	20.74	20.62
		25	25	21.72	21.41	21.15	20.74	20.48	20.19
		50	0	21.66	21.48	21.44	20.65	20.49	20.41

Band	Bandwidth (㎒)	RB Size	RB Offset	QPSK			16QAM		
				26797	26915	27033	26797	26915	27033
				824.7	836.5	848.3	824.7	836.5	848.3
26/5	1.4	1	0	22.97	22.73	22.93	21.94	22.10	21.92
		1	3	22.90	22.71	22.89	21.90	22.05	21.91
		1	5	22.90	22.69	22.67	21.93	22.04	21.68
		3	0	22.84	22.74	22.82	21.90	21.90	21.88
		3	2	22.80	22.71	22.83	21.85	21.87	21.87
		3	3	22.80	22.72	22.68	21.84	21.88	21.71
		6	0	21.85	21.69	21.66	20.95	20.61	20.78
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**26805**	**26915**	**27025**	**26805**	**26915**	**27025**
				825.5	**836.5**	**847.5**	**825.5**	**836.5**	**847.5**
	3	1	0	22.98	22.73	22.58	22.33	21.62	21.66
		1	8	22.98	22.65	22.58	22.32	21.52	21.71
		1	14	23.07	22.77	22.56	22.42	21.63	21.62
		8	0	21.87	21.74	21.86	20.94	20.84	20.94
		8	4	21.93	21.72	21.60	20.99	20.81	20.66
		8	7	21.96	21.72	21.38	21.00	20.82	20.47
		15	0	21.93	21.75	21.66	20.93	20.77	20.64
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**26815**	**26915**	**27015**	**26815**	**26915**	**27015**
				826.5	**836.5**	**846.5**	**826.5**	**836.5**	**846.5**
	5	1	0	22.77	22.80	22.61	22.28	21.88	21.71
		1	12	22.82	22.67	22.73	22.35	21.75	21.75
		1	24	22.69	22.81	22.60	22.21	21.88	21.17
		12	0	21.77	21.86	21.98	20.88	20.91	21.00
		12	7	21.83	21.86	21.81	20.93	20.91	20.84
		12	13	21.80	21.80	21.37	20.90	20.86	20.42
		25	0	21.75	21.79	21.77	20.77	20.74	20.66
	Bandwidth (㎒)	**RB Size**	**RB Offset**	**26840**	**26915**	**26990**	**26840**	**26915**	**26990**
				829.0	**836.5**	**844.0**	**829.0**	**836.5**	**844.0**
	10	1	0	22.91	22.75	22.58	22.24	21.67	21.65
		1	25	23.05	22.58	22.73	22.38	21.49	21.77
		1	49	22.36	22.93	22.52	21.68	21.77	21.60
		25	0	21.99	21.81	21.79	21.00	20.81	20.77
		25	12	21.99	21.78	22.12	21.00	20.78	21.08
		25	25	21.75	21.83	21.81	20.76	20.82	20.79
		50	0	21.83	21.78	21.85	20.81	20.76	20.81
26	**Bandwidth (㎒)**	**RB Size**	**RB Offset**	**26865**	**-**	**26965**	**26865**	**-**	**26965**
				831.5	**-**	**841.5**	**831.5**	**-**	**841.5**
	15	1	0	23.00	-	22.95	22.57	-	21.83
		1	37	22.72	-	22.93	22.25	-	21.81
		1	74	22.83	-	22.87	22.25	-	21.78
		36	0	22.15	-	21.69	21.14	-	20.69
		36	20	21.95	-	22.09	20.92	-	21.04
		36	39	21.70	-	22.20	20.68	-	21.17
		75	0	21.88	-	21.92	20.87	-	20.92