



# LTE Band 12 (Low Channel)

#### CH20317 (699.7MHz) QPSK Bandwidth 1.4MHz 1RB#0

#### CH20317 (699.7MHz) QPSK Bandwidth 1.4MHz 6RB#0





#### CH23025 (700.5MHz) QPSK Bandwidth 3MHz 1RB#0

CH23025 (700.5MHz) QPSK Bandwidth 3MHz 15RB#0





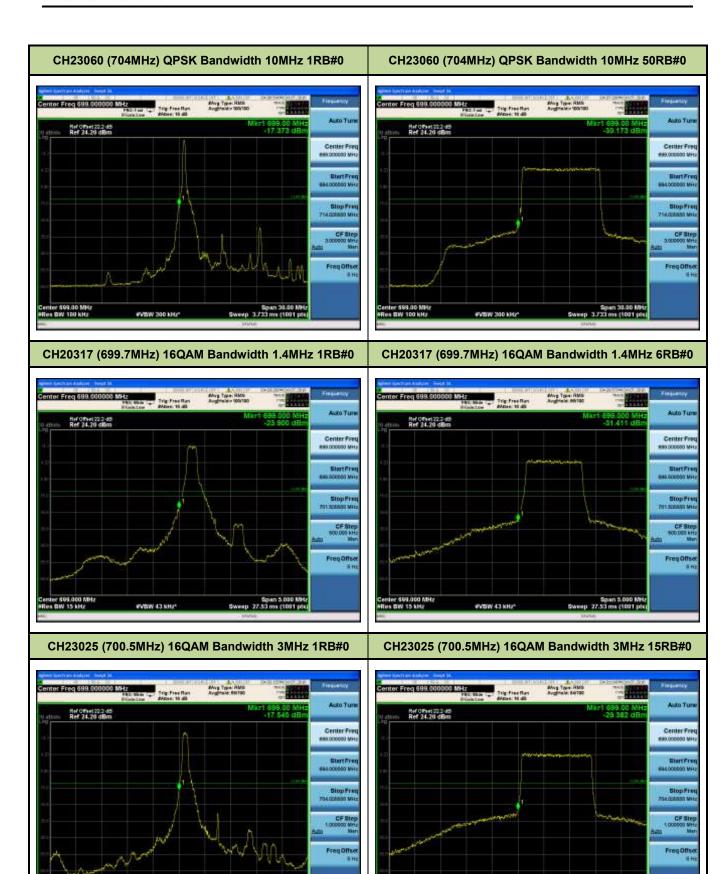
#### CH23035 (701.5MHz) QPSK Bandwidth 5MHz 1RB#0

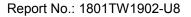
CH23035 (701.5MHz) QPSK Bandwidth 5MHz 25RB#0



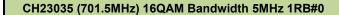












### CH23035 (701.5MHz) 16QAM Bandwidth 5MHz 25RB#0





### CH23060 (704MHz) 16QAM Bandwidth 10MHz 1RB#0

CH23060 (704MHz) 16QAM Bandwidth 10MHz 50RB#0







# LTE Band 12 (High Channel)

#### CH23173 (715.3MHz) QPSK Bandwidth 1.4MHz 1RB#5

#### CH23173 (715.3MHz) QPSK Bandwidth 1.4MHz 6RB#0





#### CH23165 (714.5MHz) QPSK Bandwidth 3MHz 1RB#14

CH23165 (714.5MHz) QPSK Bandwidth 3MHz 15RB#0





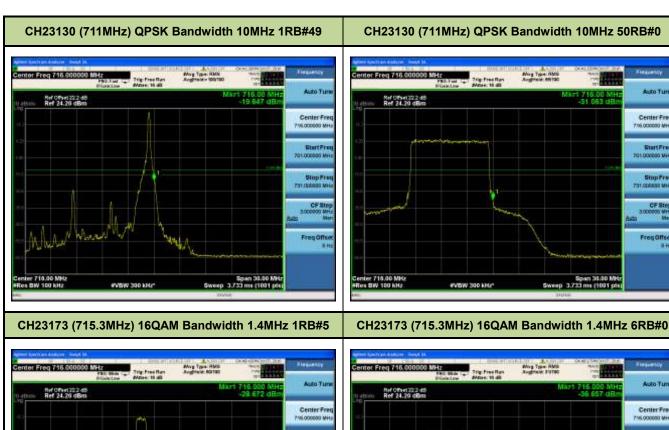
# CH23155 (713.5MHz) QPSK Bandwidth 5MHz 1RB#24

CH23155 (713.5MHz) QPSK Bandwidth 5MHz 25RB#0









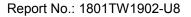




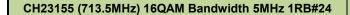
CH23165 (714.5MHz) 16QAM Bandwidth 3MHz 1RB#14











#### CH23155 (713.5MHz) 16QAM Bandwidth 5MHz 25RB#0





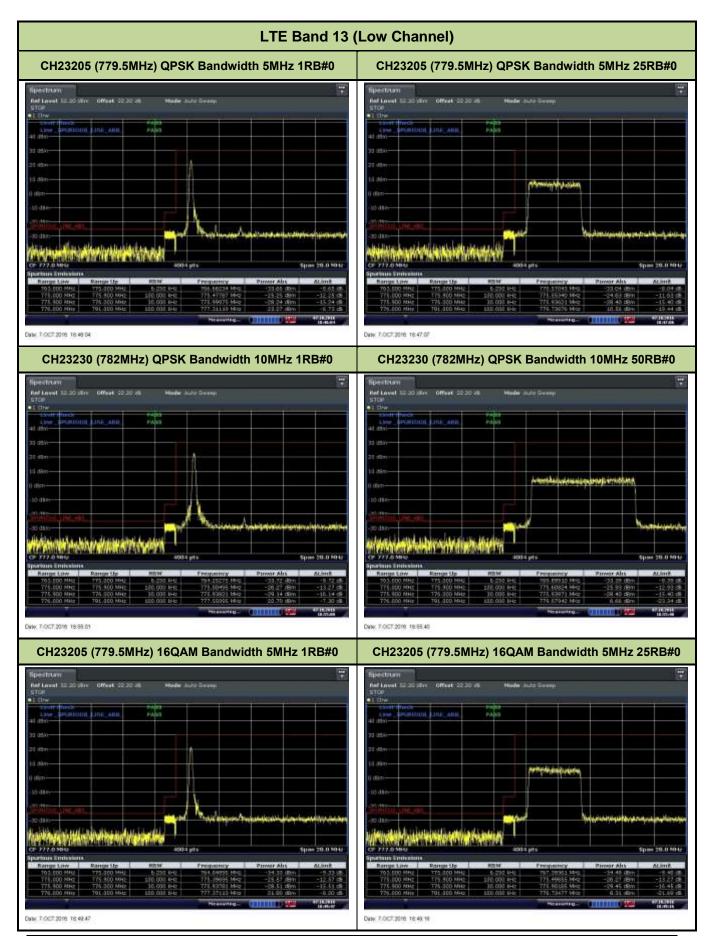
#### CH23130 (711MHz) 16QAM Bandwidth 10MHz 1RB#49

# CH23130 (711MHz) 16QAM Bandwidth 10MHz 50RB#0

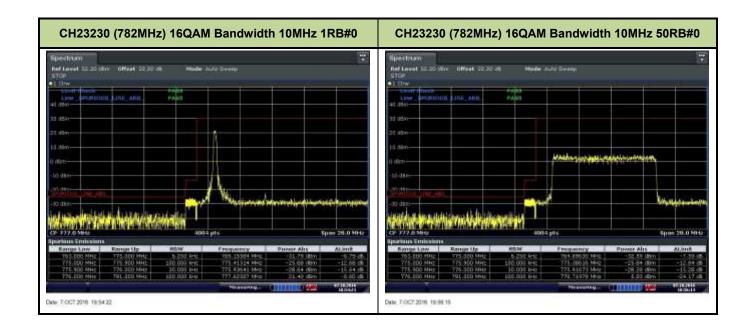




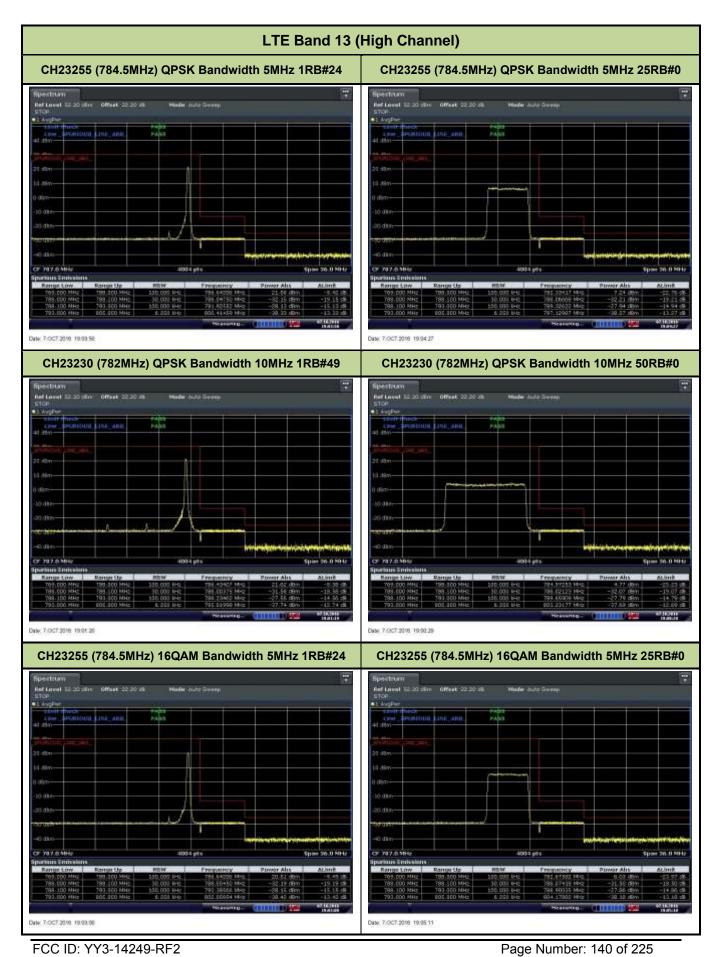




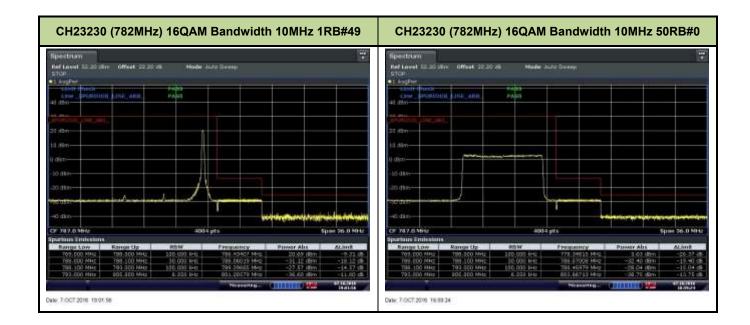














# LTE Band 17 (Low Channel)

#### CH23755 (706.5MHz) QPSK Bandwidth 5MHz 1RB#0

#### CH23755 (706.5MHz) QPSK Bandwidth 5MHz 25RB#0





### CH23780 (709MHz) QPSK Bandwidth 10MHz 1RB#0

CH23780 (709MHz) QPSK Bandwidth 10MHz 50RB#0



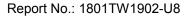


# CH23755 (706.5MHz) 16QAM Bandwidth 5MHz 1RB#0

CH23755 (706.5MHz) 16QAM Bandwidth 5MHz 25RB#0













# LTE Band 17 (High Channel)

#### CH23825 (713.5MHz) QPSK Bandwidth 5MHz 1RB#24

#### CH23825 (713.5MHz) QPSK Bandwidth 5MHz 25RB#0





#### CH23800 (711MHz) QPSK Bandwidth 10MHz 1RB#49

CH23800 (711MHz) QPSK Bandwidth 10MHz 50RB#0





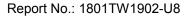
# CH23825 (713.5MHz) 16QAM Bandwidth 5MHz 1RB#24

CH23825 (713.5MHz) 16QAM Bandwidth 5MHz 25RB#0





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# 7.5. Power and Radiated Spurious Emissions

#### 7.5.1 Test Limit

### **Radiated Power**

For FCC Part 22.913(a)(2):

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

For FCC Part 24.232(c)/27.50(h):

The EIRP of mobile transmitters and auxiliary test transmitters must not exceed 2 Watts.

For FCC Part 27.50(b):

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 3 Watts.

For FCC Part 27.50(d):

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 1 Watts.

# **Radiated Spurious Emissions**

For FCC Part 22.917(a)/24.238(a)/27.53(c)/27.53(f)/27.53(h):

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  $43 + 10\log_{10}(P)$  dB.

For FCC Part 27.53(m):

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 55 + 10log<sub>10</sub>(P) dB.

#### 7.5.2 Test Procedure Used

KDB 971168 D01v03 - Section 7 & ANSI/TIA-603-E-2016

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## 7.5.3 Test Setting

- The EUT shall be placed at the specified height on a support, and in the position closest to normal use as declared by provider.
- 2. The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter
- 3. The output of the test antenna shall be connected to the measuring receiver.
- The transmitter shall be switched on and the measuring receiver shall be tuned to the frequency of the transmitter under test.
- The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.
- 6. The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- 7. The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
- 8. The maximum signal level detected by the measuring receiver shall be noted.
- 9. The transmitter shall be replaced by a substitution antenna.
- 10. The substitution antenna shall be orientated for vertical polarization and the length of the substitution antenna shall be adjusted to correspond to the frequency of the transmitter.
- 11. The substitution antenna shall be connected to a calibrated signal generator.
- 12. If necessary, the input attenuator setting of 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 receiver, that is equal to the level noted while the

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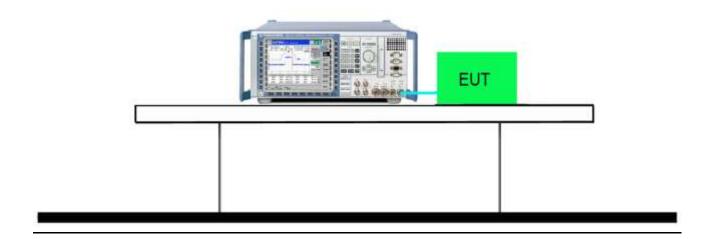


transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.

- 15. The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.
- 16. The measure of the effective radiated power is the larger of the two levels recorded at the input to the substitution antenna, corrected for gain of the substitution antenna if necessary.
- 17. Test site anechoic chamber refer to ANSI C63.4: 2014.

### 7.5.4 Test Setup

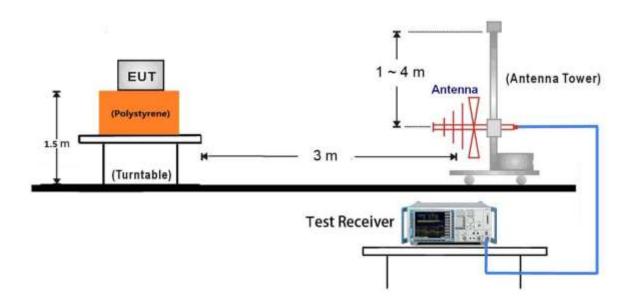
# **Conducted Power**



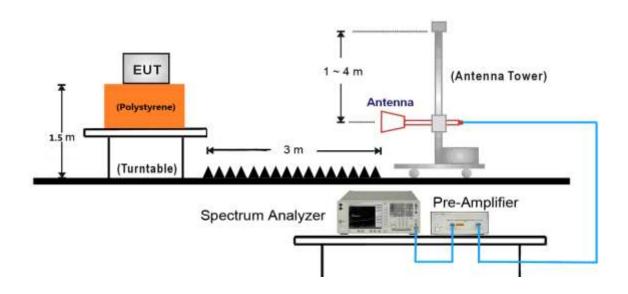


# **Radiated Power & Radiated Spurious Emissions**

# 30MHz ~ 1GHz Test Setup:



# 1GHz ~ 10GHz Test Setup:





# 7.5.5 Test Result

# **Conducted Power**

Ва	and 2		1.4N	1		ЗМ			5M			10M			15M			20M		
		RB	RB	Max	RB	RB	Max	RB	RB	Max	RB	RB	Max	RB	RB	Max	RB	RB	Max	MPR
Channel	Modulation	No.	Offset	Power	No.	Offset	Power	No.	Offset	Power	No.	Offset	Power	No.	Offset	Power	No.	Offset	Power	IVIFK
		186	607 (1850	).7MHz)	186	615 (1851	.5MHz)	186	25 (1852	.5MHz)	18	650 (185	5MHz)	186	75 (1857	.5MHz)	187	700 (1860	MHz)	
		1	#0		1	#0		1	#0		1	#0		1	#0		1	#0		0
		1	#2		1	#7		1	#12		1	#25		1	#36		1	#49		0
		1	#5		1	#14		1	#24		1	#49		1	#74		1	#99		0
	QPSK	3	#0		8	#0		12	#0		25	#0		36	#0		50	#0		0-1
		3	#2		8	#4		12	#6		25	#12		36	#18		50	#24		0-1
		3	#3		8	#7		12	#13		25	#25		36	#37		50	#49		0-1
Low		6	#0		15	#0		25	#0		50	#0		75	#0		100	#0		0-1
Low		1	#0		1	#0		1	#0		1	#0		1	#0		1	#0		0-1
		1	#2		1	#7		1	#12		1	#25		1	#36		1	#49		0-1
		1	#5		1	#14		1	#24		1	#49		1	#74		1	#99		0-1
	16QAM	3	#0		8	#0		12	#0		25	#0		36	#0		50	#0		0-2
		3	#2		8	#4		12	#6		25	#12		36	#18		50	#24		0-2
		3	#3		8	#7		12	#13		25	#25		36	#37		50	#49		0-2
		6	#0		15	#0		25	#0		50	#0		75	#0		100	#0		0-2
Mid	QPSK	18	900 (188	0MHz)	18	900 (188	0MHz)	18	900 (188	0MHz)	18	900 (188	0MHz)	189	900 (188	OMHz)	189	900 (1880	MHz)	MPR



								1	ī			ſ			
	1	#0	1	#0	1	#0	1	#0		1	#0		1	#0	0
	1	#2	1	#7	1	#12	1	#25		1	#36		1	#49	0
							_								
	1	#5	1	#14	1	#24	1	#49		1	#74		1	#99	0
	3	#0	8	#0	12	#0	25	#0		36	#0		50	#0	0-1
	3	#2	8	#4	12	#6	25	#12		36	#18		50	#24	0-1
	3	#3	8	#7	12	#13	25	#25		36	#37		50	#49	0-1
	Ů	"0				7710		"20		00	7701			<i>n</i> 10	<u> </u>
	6	#0	15	#0	25	#0	50	#0		75	#0		100	#0	0-1
	1	#0	1	#0	1	#0	1	#0		1	#0		1	#0	0-1
	1	#2	1	#7	1	#12	1	#25		1	#36		1	#49	0-1
	1	#5	1	#14	1	#24	1	#49		1	#74		1	#99	0-1
16QAM	3	#0	8	#0	12	#0	25	#0		36	#0		50	#0	0-2
	3	#2	8	#4	12	#6	25	#12		36	#18		50	#24	0-2
	3	#3	8	#7	 12	#13	25	#25		36	#37		50	#49	0-2
	6	#0	15	#0	25	#0	50	#0		75	#0		100	#0	0-2

		191	193 (1909	9.3MHz)	191	185 (1908	3.5MHz)	191	75 (1907	.5MHz)	19 <sup>-</sup>	150 (190	5MHz)	191	25 (1902.	.5MHz)	191	100 (1900	MHz)	MPR
		1	#0		1	#0		1	#0		1	#0		1	#0		1	#0		0
High	QPSK	1	#2		1	#7		1	#12		1	#25		1	#36		1	#49		0
		1	#5		1	#14		1	#24		1	#49		1	#74		1	#99		0
		3	#0		8	#0		12	#0		25	#0		36	#0		50	#0		0-1

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	3	#2	8	#4	12	#6	25	#12	36	#18	50	#24	0-1
	3	#3	8	#7	12	#13	25	#25	36	#37	50	#49	0-1
	6	#0	15	#0	25	#0	50	#0	75	#0	100	#0	0-1
	1	#0	1	#0	1	#0	1	#0	1	#0	1	#0	0-1
	1	#2	1	#7	1	#12	1	#25	1	#36	1	#49	0-1
	1	#5	1	#14	1	#24	1	#49	1	#74	1	#99	0-1
16QAM	3	#0	8	#0	12	#0	25	#0	36	#0	50	#0	0-2
	3	#2	8	#4	12	#6	25	#12	36	#18	50	#24	0-2
	3	#3	8	#7	12	#13	25	#25	36	#37	50	#49	0-2
	6	#0	15	#0	25	#0	50	#0	75	#0	100	#0	0-2



Ва	ınd 4		1.4N	1		ЗМ			5M			10M			15M			20M		
		RB	RB	Max	RB	RB	Max	RB	RB	Max	RB	RB	Max	RB	RB	Max	RB	RB	Max	MPR
Channel	Modulation		Offset		No.	Offset		No.	Offset	Power	No.	Offset		No.		Power			Power	IVII IX
		199	957 (1710	).7MHz)	199	65 (1711	.5MHz)	199	75 (1712	.5MHz)	200	000 (171	5MHz)	200	25 (1717	.5MHz)	200	050 (1720	MHz)	
		1	#0		1	#0		1	#0		1	#0		1	#0		1	#0		0
		1	#2		1	#7		1	#12		1	#25		1	#36		1	#49		0
		1	#5		1	#14		1	#24		1	#49		1	#74		1	#99		0
			"0			,,,,		·	,,,,,		'	" 10		·	,,,,			"00		
	QPSK	3	#0		8	#0		12	#0		25	#0		36	#0		50	#0		0-1
		3	#2		8	#4		12	#6		25	#12		36	#18		50	#24		0-1
		3	#2		٥	#4		12	#0		25	#12		30	#10		50	#24		0-1
		3	#3		8	#7		12	#13		25	#25		36	#37		50	#49		0-1
Low		6	#0		15	#0		25	#0		50	#0		75	#0		100	#0		0-1
		1	#0		1	#0		1	#0		1	#0		1	#0		1	#0		0-1
		1	#2		1	#7		1	#12		1	#25		1	#36		1	#49		0-1
		1	#5		1	#14		1	#24		1	#49		1	#74		1	#99		0-1
	16QAM																			
	IOQAW	3	#0		8	#0		12	#0		25	#0		36	#0		50	#0		0-2
		3	#2		8	#4		12	#6		25	#12		36	#18		50	#24		0-2
		3	#3		8	#7		12	#13		25	#25		36	#37		50	#49		0-2
		6	#0		15	#0		25	#0		50	#0		75	#0		100	#0		0-2
			#0 175 (1732	2.5MHz)		75 (1732	.5MHz)		75 (1732.	5MHz)	MPR									
Mid	QPSK																			
iviid	W CON	1	#0		1	#0		1	#0		1	#0		1	#0		1	#0		0
		1	#2		1	#7		1	#12		1	#25		1	#36		1	#49		0

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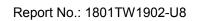
							1		1			-			
	1	#5	1	#14	1	#24		1	#49	1	#74		1	#99	0
	3	#0	8	#0	12	#0		25	#0	36	#0		50	#0	0-1
	3	#2	8	#4	12	#6		25	#12	36	#18		50	#24	0-1
	3	#3	8	#7	12	#13		25	#25	36	#37		50	#49	0-1
	6	#0	15	#0	25	#0		50	#0	75	#0		100	#0	0-1
	1	#0	1	#0	1	#0		1	#0	1	#0		1	#0	0-1
	1	#2	1	#7	1	#12		1	#25	1	#36		1	#49	0-1
	1	#5	1	#14	1	#24		1	#49	1	#74		1	#99	0-1
16QAM	3	#0	8	#0	12	#0		25	#0	36	#0		50	#0	0-2
	3	#2	8	#4	12	#6		25	#12	36	#18		50	#24	0-2
	3	#3	8	#7	12	#13		25	#25	36	#37		50	#49	0-2
	6	#0	15	#0	25	#0		50	#0	75	#0		100	#0	0-2



		203	393 (1754	1.3MHz)	203	885 (1753	s.5MHz)	203	75 (1752	2.5MHz)	20	350 (175	OMHz)	203	25 (1747	.5MHz)	203	300 (1745	iMHz)	MPR
		1	#0		1	#0		1	#0		1	#0		1	#0		1	#0		0
		1	#2		1	#7		1	#12		1	#25		1	#36		1	#49		0
		1	#5		1	#14		1	#24		1	#49		1	#74		1	#99		0
	QPSK	3	#0		8	#0		12	#0		25	#0		36	#0		50	#0		0-1
		3	#2		8	#4		12	#6		25	#12		36	#18		50	#24		0-1
		3	#3		8	#7		12	#13		25	#25		36	#37		50	#49		0-1
High		6	#0		15	#0		25	#0		50	#0		75	#0		100	#0		0-1
		1	#0		1	#0		1	#0		1	#0		1	#0		1	#0		0-1
		1	#2		1	#7		1	#12		1	#25		1	#36		1	#49		0-1
		1	#5		1	#14		1	#24		1	#49		1	#74		1	#99		0-1
	16QAM	3	#0		8	#0		12	#0		25	#0		36	#0		50	#0		0-2
		3	#2		8	#4		12	#6		25	#12		36	#18		50	#24		0-2
		3	#3		8	#7		12	#13		25	#25		36	#37		50	#49		0-2
		6	#0		15	#0		25	#0		50	#0		75	#0		100	#0		0-2



Bar	nd 5		1.4M			ЗМ			5M			10M		
		RB	RB	Max										
Channel	Modulation	No.	Offset	Power	MPR									
		2040	)7 (824.7N	/lHz)	2041	15 (825.5)	MHz)	2042	25 (826.5)	MHz)	204	150 (829M	Hz)	
		1	#0	22.22	1	#0	22.09	1	#0	22.17	1	#0	22.18	0
		1	#2	22.25	1	#7	22.30	1	#12	22.17	1	#25	22.27	0
		1	#5	22.13	1	#14	22.09	1	#24	22.07	1	#49	22.26	0
	QPSK	3	#0	22.27	8	#0	21.27	12	#0	21.29	25	#0	21.25	0-1
		3	#2	22.25	8	#4	21.23	12	#6	21.28	25	#12	21.27	0-1
		3	#3	22.23	8	#7	21.27	12	#13	21.24	25	#25	21.31	0-1
Low		6	#0	21.26	15	#0	21.26	25	#0	21.22	50	#0	21.27	0-1
LOW		1	#0	21.42	1	#0	21.28	1	#0	21.26	1	#0	21.36	0-1
		1	#2	21.37	1	#7	21.37	1	#12	21.13	1	#25	21.47	0-1
		1	#5	21.16	1	#14	21.30	1	#24	21.45	1	#49	21.22	0-1
	16QAM	3	#0	21.26	8	#0	20.36	12	#0	20.36	25	#0	20.32	0-2
		3	#2	21.20	8	#4	20.36	12	#6	20.30	25	#12	20.31	0-2
		3	#3	21.28	8	#7	20.23	12	#13	20.32	25	#25	20.24	0-2
		6	#0	20.43	15	#0	20.31	25	#0	20.28	50	#0	20.27	0-2
		2052	25 (836.5N	/lHz)	2052	25 (836.51	MHz)	2052	25 (836.51	MHz)	2052	25 (836.51	MHz)	MPR
			""		,	"0			""			,,,		
		1	#0		1	#0		1	#0		1	#0		0
		1	#2		1	#7		1	#12		1	#25		0
		1	#5		1	#14		1	#24		1	#49		0
Mid	QPSK	3	#0		8	#0		12	#0		25	#0		0-1
		3	#2		8	#4		12	#6		25	#12		0-1
		3	#3		8	#7		12	#13		25	#25		0-1
		6	#0		15	#0		25	#0		50	#0		0-1
	16QAM	1	#0		1	#0		1	#0		1	#0		0-1





	1	#2	1	#7	1	#12	1	#25	0-1
	1	#5	1	#14	1	#24	1	#49	0-1
	3	#0	8	#0	12	#0	25	#0	0-2
	3	#2	8	#4	12	#6	25	#12	0-2
	3	#3	8	#7	12	#13	25	#25	0-2
	6	#0	15	#0	25	#0	50	#0	0-2



		2064	43 (848.3N	ЛHz)	2063	35 (847.5N	ИHz)	2062	25 (846.5	/IHz)	206	00 (844M	Hz)	MPR
		1	#0		1	#0		1	#0		1	#0		0
		1	#2		1	#7		1	#12		1	#25		0
		1	#5		1	#14		1	#24		1	#49		0
	QPSK	3	#0		8	#0		12	#0		25	#0		0-1
		3	#2		8	#4		12	#6		25	#12		0-1
		3	#3		8	#7		12	#13		25	#25		0-1
High		6	#0		15	#0		25	#0		50	#0		0-1
		1	#0		1	#0		1	#0		1	#0		0-1
		1	#2		1	#7		1	#12		1	#25		0-1
		1	#5		1	#14		1	#24		1	#49		0-1
	16QAM	3	#0		8	#0		12	#0		25	#0		0-2
		3	#2		8	#4		12	#6		25	#12		0-2
		3	#3		8	#7		12	#13		25	#25		0-2
		6	#0		15	#0		25	#0		50	#0		0-2



Bar	nd 7		5M			10M			15M			20M		
		RB	RB	Max	RB	RB	Max	RB	RB	Max	RB	RB	Max	MDD
Channel	Modulation	No.	Offset	Power	No.	Offset	Power	No.	Offset	Power	No.	Offset	Power	MPR
		2077	5 (2502.5)	MHz)	208	00 (2505N	(Hz)	2082	5 (2507.5	MHz)	208	50 (2510N	ЛHz)	
		1	#0		1	#0		1	#0		1	#0		0
		1	#12		1	#25		1	#36		1	#49		0
		1	#24		1	#49		1	#74		1	#99		0
	QPSK	12	#0		25	#0		36	#0		50	#0		0-1
		12	#6		25	#12		36	#18		50	#24		0-1
		12	#13		25	#25		36	#37		50	#49		0-1
Low		25	#0		50	#0		75	#0		100	#0		0-1
		1	#0		1	#0		1	#0		1	#0		0-1
		1	#12		1	#25		1	#36		1	#49		0-1
		1	#24		1	#49		1	#74		1	#99		0-1
	16QAM	12	#0		25	#0		36	#0		50	#0		0-2
		12	#6		25	#12		36	#18		50	#24		0-2
		12	#13		25	#25		36	#37		50	#49		0-2
		25	#0		50	#0		75	#0		100	#0		0-2
		211	00 (2535N	1Hz)	211	00 (2535N	(Hz)	211	00 (2535N	/IHz)	211	00 (2535N	/IHz)	MPR
Mid	QPSK	1	#0		1	#0		1	#0		1	#0		0
		1	#12		1	#25		1	#36		1	#49		0

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					 _		_		_	 
	1	#24	1	#49	1	#74		1	#99	0
	12	#0	25	#0	36	#0		50	#0	0-1
	12	#6	25	#12	36	#18		50	#24	0-1
	12	#13	25	#25	36	#37		50	#49	0-1
	25	#0	50	#0	75	#0		100	#0	0-1
	1	#0	1	#0	1	#0		1	#0	0-1
	1	#12	1	#25	1	#36		1	#49	0-1
	1	#24	1	#49	1	#74		1	#99	0-1
16QAM	12	#0	25	#0	36	#0		50	#0	0-2
	12	#6	25	#12	36	#18		50	#24	0-2
	12	#13	25	#25	36	#37		50	#49	0-2
	12	#13	∠5	#25	30	#31		50	#49	0-∠
	25	#0	50	#0	75	#0		100	#0	0-2



		2142	5 (2567.5	MHz)	214	00 (2565N	(Hz)	2137	5 (2562.5	MHz)	213	50 (2560N	(Hz)	MPR
		1	#0		1	#0		1	#0		1	#0		0
		1	#12		1	#25		1	#36		1	#49		0
		1	#24		1	#49		1	#74		1	#99		0
	QPSK	12	#0		25	#0		36	#0		50	#0		0-1
		12	#6		25	#12		36	#18		50	#24		0-1
		12	#13		25	#25		36	#37		50	#49		0-1
High		25	#0		50	#0		75	#0		100	#0		0-1
		1	#0		1	#0		1	#0		1	#0		0-1
		1	#12		1	#25		1	#36		1	#49		0-1
		1	#24		1	#49		1	#74		1	#99		0-1
	16QAM	12	#0		25	#0		36	#0		50	#0		0-2
		12	#6		25	#12		36	#18		50	#24		0-2
		12	#13		25	#25		36	#37		50	#49		0-2
		25	#0		50	#0		75	#0		100	#0		0-2



Ban	d 12		1.4M		ЗМ			5M			10M			
		RB	RB	Max	RB	RB	Max	RB	RB	Max	RB	RB	Max	MDD
Channel	Modulation	No.	Offset	Power	No.	Offset	Power	No.	Offset	Power	No.	Offset	Power	MPR
		230	17 (699.7N	/lHz)	2302	25 (700.51	/IHz)	230	35 (701.5	MHz)	230	060 (704M	IHz)	
		1	#0		1	#0		1	#0		1	#0		0
		1	#2		1	#7		1	#12		1	#25		0
		1	#5		1	#14		1	#24		1	#49		0
	QPSK	3	#0		8	#0		12	#0		25	#0		0-1
		3	#2		8	#4		12	#6		25	#12		0-1
		3	#3		8	#7		12	#13		25	#25		0-1
Low		6	#0		15	#0		25	#0		50	#0		0-1
		1	#0		1	#0		1	#0		1	#0		0-1
		1	#2		1	#7		1	#12		1	#25		0-1
		1	#5		1	#14		1	#24		1	#49		0-1
	16QAM	3	#0		8	#0		12	#0		25	#0		0-2
		3	#2		8	#4		12	#6		25	#12		0-2
		3	#3		8	#7		12	#13		25	#25		0-2
		6	#0		15	#0		25	#0		50	#0		0-2
		2309	95 (707.5N	ЛHz)	2309	95 (707.5N	ЛHz)	2309	95 (707.5 <b>1</b>	MHz)	2309	95 (707.5I	MHz)	MPR
Mid	QPSK	1	#0		1	#0		1	#0		1	#0		0
		1	#2		1	#7		1	#12		1	#25		0



	1	#5	1	#14	1	#24	1	#49	0
	3	#0	8	#0	12	#0	25	#0	0-1
	3	#2	8	#4	12	#6	25	#12	0-1
	3	#3	8	#7	12	#13	25	#25	0-1
	6	#0	15	#0	25	#0	50	#0	0-1
	1	#0	1	#0	1	#0	1	#0	0-1
	1	#2	1	#7	1	#12	1	#25	0-1
	1	#5	1	#14	1	#24	1	#49	0-1
16QAM	3	#0	8	#0	12	#0	25	#0	0-2
	3	#2	8	#4	12	#6	25	#12	0-2
	3	#3	8	#7	12	#13	25	#25	0-2
	3	#3	ď	#/	12	#13	25	#25	0-2
	6	#0	15	#0	25	#0	50	#0	0-2



		231	73 (715.31	/lHz)	2316	65 (714.5	ИHz)	231	55 (713.5	/IHz)	231	30 (711M	Hz)	MPR
		1	#0		1	#0		1	#0		1	#0		0
		1	#2		1	#7		1	#12		1	#25		0
		1	#5		1	#14		1	#24		1	#49		0
	QPSK	3	#0		8	#0		12	#0		25	#0		0-1
		3	#2		8	#4		12	#6		25	#12		0-1
		3	#3		8	#7		12	#13		25	#25		0-1
High		6	#0		15	#0		25	#0		50	#0		0-1
		1	#0		1	#0		1	#0		1	#0		0-1
		1	#2		1	#7		1	#12		1	#25		0-1
		1	#5		1	#14		1	#24		1	#49		0-1
	16QAM	3	#0		8	#0		12	#0		25	#0		0-2
		3	#2		8	#4		12	#6		25	#12		0-2
		3	#3		8	#7		12	#13		25	#25		0-2
		6	#0		15	#0		25	#0		50	#0		0-2



Ban	d 13		5M			10M				
		RB	RB	Max	RB	RB	Max	1		
Channel	Modulation	No. Offset Power		No.	Offset	Power	MPR			
			23205 (779.5MHz)							
		1	#0		N/A	N/A	N/A	0		
		1	#12		N/A	N/A	N/A	0		
		1	#24		N/A	N/A	N/A	0		
	QPSK	12	#0		N/A	N/A	N/A	0-1		
		12	#6		N/A	N/A	N/A	0-1		
		12	#13		N/A	N/A	N/A	0-1		
Low		25	#0		N/A	N/A	N/A	0-1		
Low		1	#0		N/A	N/A	N/A	0-1		
		1	#12		N/A	N/A	N/A	0-1		
	16QAM	1	#24		N/A	N/A	N/A	0-1		
		12	#0		N/A	N/A	N/A	0-2		
		12	#6		N/A	N/A	N/A	0-2		
		12	#13		N/A	N/A	N/A	0-2		
		25	#0		N/A	N/A	N/A	0-2		
			23230 (782MHz)			23230 (782MHz)		MPR		
		1	#0		1	#0		0		
		1	#12		1	#25		0		
	ODCK	1	#24		1	#49		0		
	QPSK	12	#0		25	#0		0-1		
		12	#6		25	#12		0-1		
		12	#13		25	#25		0-1		
Mid		25	#0		50	#0		0-1		
		1	#0		1	#0		0-1		
		1	#12		1	#25		0-1		
		1	#24		1	#49		0-1		
	16QAM	12	#0		25	#0		0-2		
		12	#6		25	#12		0-2		
		12	#13		25	#25		0-2		
		25	#0		50	#0		0-2		



			23255 (784.5MHz)		MPR		
		1	#0	N/A	N/A	N/A	0
		1	#12	N/A	N/A	N/A	0
	QPSK	1	#24	N/A	N/A	N/A	0
	QPSK	12	#0	N/A	N/A	N/A	0-1
		12	#6	N/A	N/A	N/A	0-1
		12	#13	N/A	N/A	N/A	0-1
High		25	#0	N/A	N/A	N/A	0-1
		1	#0	N/A	N/A	N/A	0-1
		1	#12	N/A	N/A	N/A	0-1
		1	#24	N/A	N/A	N/A	0-1
	16QAM	12	#0	N/A	N/A	N/A	0-2
		12	#6	N/A	N/A	N/A	0-2
		12	#13	N/A	N/A	N/A	0-2
		25	#0	N/A	N/A	N/A	0-2



Ban	d 17		5M			10M		
		RB	RB	Max	RB	RB	Max	1
Channel	Modulation	No.	Offset	Power	No.	Offset	Power	MPR
			23755 (706.5MHz)			23780 (709MHz)		
		1	#0		1	#0		0
		1	#12		1	#25		0
		1	#24		1	#49		0
	QPSK	12	#0		25	#0		0-1
		12	#6		25	#12		0-1
		12	#13		25	#25		0-1
Law		25	#0		50	#0		0-1
Low		1	#0		1	#0		0-1
		1	#12		1	#25		0-1
		1	#24		1	#49		0-1
	16QAM	12	#0		25	#0		0-2
		12	#6		25	#12		0-2
		12	#13		25	#25		0-2
		25	#0		50	#0		0-2
			23790 (710MHz)			23790 (710MHz)		MPR
		1	#0		1	#0		0
		1	#12		1	#25		0
	QPSK	1	#24		1	#49		0
	QPSK	12	#0		25	#0		0-1
		12	#6		25	#12		0-1
		12	#13		25	#25		0-1
Mid		25	#0		50	#0		0-1
		1	#0		1	#0		0-1
		1	#12		1	#25		0-1
		1	#24		1	#49		0-1
	16QAM	12	#0		25	#0		0-2
		12	#6		25	#12		0-2
		12	#13		25	#25		0-2
		25	#0		50	#0		0-2



			23825 (713.5MHz)		23800 (711MHz)	MPR
		1	#0	1	#0	0
		1	#12	1	#25	0
	0.004	1	#24	1	#49	0
	QPSK	12	#0	25	#0	0-1
		12	#6	25	#12	0-1
		12	#13	25	#25	0-1
High		25	#0	50	#0	0-1
		1	#0	1	#0	0-1
		1	#12	1	#25	0-1
		1	#24	1	#49	0-1
	16QAM	12	#0	25	#0	0-2
		12	#6	25	#12	0-2
		12	#13	25	#25	0-2
		25	#0	50	#0	0-2



### **Radiated Power**

Band 2-1.4M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 18607							
1850.7	Н	13.11	1.71	10.04	21.44	33.00	-11.56
1850.7	V	9.30	1.71	10.04	17.63	33.00	-15.37
CH 18900							
1880	Н	14.05	1.71	10.04	22.38	33.00	-10.62
1880	V	10.07	1.71	10.04	18.4	33.00	-14.6
CH 19193							
1909.3	Н	14.40	1.71	10.04	22.73	33.00	-10.27
1909.3	V	10.35	1.71	10.04	18.68	33.00	-14.32

# Band 2-1.4M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 18607							
1850.7	Н	12.50	1.71	10.04	20.83	33.00	-12.17
1850.7	V	8.59	1.71	10.04	16.92	33.00	-16.08
CH 18900							
1880	Н	13.04	1.71	10.04	21.37	33.00	-11.63
1880	V	9.26	1.71	10.04	17.59	33.00	-15.41
CH 19193							
1909.3	Н	13.69	1.71	10.04	22.02	33.00	-10.98
1909.3	V	9.54	1.71	10.04	17.87	33.00	-15.13

#### **NOTES:**

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.

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# Band 2-3M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 18615							
1851.5	Н	12.99	1.71	10.04	21.32	33.00	-11.68
1851.5	V	10.03	1.71	10.04	18.36	33.00	-14.64
CH 18900							
1880	Н	12.29	1.71	10.04	20.62	33.00	-12.38
1880	V	8.17	1.71	10.04	16.50	33.00	-16.50
CH 19185							
1908.75	Н	13.55	1.71	10.04	21.88	33.00	-11.12
1908.75	V	10.14	1.71	10.04	18.47	33.00	-14.53

# Band 2-3M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 18615							
1851.5	Н	12.53	1.71	10.04	20.86	33.00	-12.14
1851.5	V	9.47	1.71	10.04	17.80	33.00	-15.20
CH 18900							
1880	Н	11.43	1.71	10.04	19.76	33.00	-13.24
1880	V	7.51	1.71	10.04	15.84	33.00	-17.16
CH 19185							
1908.75	Н	12.99	1.71	10.04	21.32	33.00	-11.68
1908.75	V	9.48	1.71	10.04	17.81	33.00	-15.19

## NOTES:

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.

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## Band 2-5M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 18625							
1852.5	Н	12.17	1.71	10.04	20.5	33.00	-12.50
1852.5	V	9.42	1.71	10.04	17.75	33.00	-15.25
CH 18900							
1880	Н	12.72	1.71	10.04	21.05	33.00	-11.95
1880	V	9.52	1.71	10.04	17.85	33.00	-15.15
CH 19175							
1907.5	Н	14.90	1.71	10.04	23.23	33.00	-9.77
1907.5	V	10.21	1.71	10.04	18.54	33.00	-14.46

## Band 2-5M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 18625							
1852.5	Н	11.71	1.71	10.04	20.04	33.00	-12.96
1852.5	V	8.86	1.71	10.04	17.19	33.00	-15.81
CH 18900							
1880	Н	11.86	1.71	10.04	20.19	33.00	-12.81
1880	V	8.86	1.71	10.04	17.19	33.00	-15.81
CH 19175							
1907.5	Н	14.34	1.71	10.04	22.67	33.00	-10.33
1907.5	V	9.55	1.71	10.04	17.88	33.00	-15.12

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 2-10M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 18650							
1855	Н	12.86	1.71	10.04	21.19	33.00	-11.81
1855	V	7.99	1.71	10.04	16.32	33.00	-16.68
CH 18900							
1880	Н	13.73	1.71	10.04	22.06	33.00	-10.94
1880	V	9.62	1.71	10.04	17.95	33.00	-15.05
CH 19150							
1902.5	Н	14.63	1.71	10.04	22.96	33.00	-10.04
1902.5	V	10.2	1.71	10.04	18.53	33.00	-14.47

## Band 2-10M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 18650							
1855	Н	12.30	1.71	10.04	20.63	33.00	-12.37
1855	V	7.33	1.71	10.04	15.66	33.00	-17.34
CH 18900							
1880	Η	12.77	1.71	10.04	21.10	33.00	-11.90
1880	<b>V</b>	8.86	1.71	10.04	17.19	33.00	-15.81
CH 19150							
1902.5	Н	13.97	1.71	10.04	22.30	33.00	-10.70
1902.5	<b>V</b>	9.44	1.71	10.04	17.77	33.00	-15.23

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 2-15M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 18675							
1857.5	Н	13.80	1.71	10.04	22.13	33.00	-10.87
1857.5	V	9.44	1.71	10.04	17.77	33.00	-15.23
CH 18900							
1880	Н	14.05	1.71	10.04	22.38	33.00	-10.62
1880	V	10.17	1.71	10.04	18.5	33.00	-14.5
CH 19125							
1902.5	Н	14.53	1.71	10.04	22.86	33.00	-10.14
1902.5	V	9.82	1.71	10.04	18.15	33.00	-14.85

## Band 2-15M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 18675							
1857.5	Н	12.52	1.71	10.04	20.85	33.00	-12.15
1857.5	V	8.06	1.71	10.04	16.39	33.00	-16.61
CH 18900							
1880	Н	12.37	1.71	10.04	20.70	33.00	-12.30
1880	V	8.69	1.71	10.04	17.02	33.00	-15.98
CH 19125							
1902.5	Н	13.15	1.71	10.04	21.48	33.00	-11.52
1902.5	V	8.34	1.71	10.04	16.67	33.00	-16.33

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 2-20M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 18700							
1860	Н	13.47	1.71	10.04	21.80	33.00	-11.20
1855	V	9.92	1.71	10.04	18.25	33.00	-14.75
CH 18900							
1880	Н	13.17	1.71	10.04	21.5	33.00	-11.50
1880	V	8.80	1.71	10.04	17.13	33.00	-15.87
CH 19100							
1900	Н	13.81	1.71	10.04	22.14	33.00	-10.86
1900	V	9.61	1.71	10.04	17.94	33.00	-15.06

# Band 2-20M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 18700							
1860	Н	12.49	1.71	10.04	20.82	33.00	-12.18
1855	V	8.84	1.71	10.04	17.17	33.00	-15.83
CH 18900							
1880	Н	11.79	1.71	10.04	20.12	33.00	-12.88
1880	V	7.62	1.71	10.04	15.95	33.00	-17.05
CH 19100							
1900	Н	12.73	1.71	10.04	21.06	33.00	-11.94
1900	V	8.43	1.71	10.04	16.76	33.00	-16.24

- ERP (dBm) / EIRP (dBm)=
   SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 4-1.4M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 19957							
1710.7	Н	8	1.63	9.95	16.32	30.00	-13.68
1710.7	V	2.17	1.63	9.95	10.49	30.00	-19.51
CH 20175							
1732.5	Н	8.01	1.63	9.95	16.33	30.00	-13.67
1732.5	V	0.5	1.63	9.95	8.82	30.00	-21.18
CH 20393							
1754.3	Н	8.88	1.63	9.95	17.2	30.00	-12.8
1754.3	V	2.15	1.63	9.95	10.47	30.00	-19.53

# Band 4-1.4M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 19957							
1710.7	Н	7.52	1.63	9.95	15.84	30.00	-14.16
1710.7	V	1.59	1.63	9.95	9.91	30.00	-20.09
CH 20175							
1732.5	Н	7.13	1.63	9.95	15.45	30.00	-14.55
1732.5	V	-0.18	1.63	9.95	8.14	30.00	-21.86
CH 20393							
1754.3	Н	8.30	1.63	9.95	16.62	30.00	-13.38
1754.3	V	1.47	1.63	9.95	9.79	30.00	-20.21

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 4-3M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 19965							
1711.5	Н	8.05	1.63	9.95	16.37	30	-13.63
1711.5	V	2.16	1.63	9.95	10.48	30	-19.52
CH 20175							
1732.5	Н	8.72	1.63	9.95	17.04	30	-12.96
1732.5	V	1.64	1.63	9.95	9.96	30	-20.04
CH 20385							
1753.5	Н	8.19	1.63	9.95	16.51	30	-13.49
1753.5	V	1.93	1.63	9.95	10.25	30	-19.75

# Band 4-3M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 19965							
1711.5	Н	7.43	1.63	9.95	15.75	30.00	-14.25
1711.5	V	1.44	1.63	9.95	9.76	30.00	-20.24
CH 20175							
1732.5	Н	7.70	1.63	9.95	16.02	30.00	-13.98
1732.5	V	0.82	1.63	9.95	9.14	30.00	-20.86
CH 20385							
1753.5	Н	7.47	1.63	9.95	15.79	30.00	-14.21
1753.5	V	1.11	1.63	9.95	9.43	30.00	-20.57

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 4-5M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 19975							
1712.5	Н	7.99	1.63	9.95	16.31	30	-13.69
1712.5	V	3.1	1.63	9.95	11.42	30	-18.58
CH 20175							
1732.5	Н	8.82	1.63	9.95	17.14	30	-12.86
1732.5	V	1.26	1.63	9.95	9.58	30	-20.42
CH 20375							
1752.5	Н	8.91	1.63	9.95	17.23	30	-12.77
1752.5	V	1.63	1.63	9.95	9.95	30	-20.05

# Band 4-5M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 19975							
1712.5	Н	7.44	1.63	9.95	15.76	30.00	-14.24
1712.5	V	2.45	1.63	9.95	10.77	30.00	-19.23
CH 20175							
1732.5	Н	7.87	1.63	9.95	16.19	30.00	-13.81
1732.5	V	0.51	1.63	9.95	8.83	30.00	-21.17
CH 20375							
1752.5	Н	8.26	1.63	9.95	16.58	30.00	-13.42
1752.5	V	0.88	1.63	9.95	9.20	30.00	-20.80

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 4-10M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20000							
1715	Н	8.82	1.63	9.95	17.14	30	-12.86
1715	V	3.57	1.63	9.95	11.89	30	-18.11
CH 20175							
1732.5	Н	8.66	1.63	9.95	16.98	30	-13.02
1732.5	V	1.11	1.63	9.95	9.43	30	-20.57
CH 20350							
1750	Н	8.67	1.63	9.95	16.99	30	-13.01
1750	V	2.7	1.63	9.95	11.02	30	-18.98

## Band 4-10M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20000							
1715	Н	8.39	1.63	9.95	16.71	30.00	-13.29
1715	V	3.04	1.63	9.95	11.36	30.00	-18.64
CH 20175							
1732.5	Н	7.83	1.63	9.95	16.15	30.00	-13.85
1732.5	V	0.48	1.63	9.95	8.80	30.00	-21.20
CH 20350							
1750	Н	8.14	1.63	9.95	16.46	30.00	-13.54
1750	V	2.07	1.63	9.95	10.39	30.00	-19.61

- ERP (dBm) / EIRP (dBm)=
   SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 4-15M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20025							
1717.5	Н	9	1.63	9.95	17.32	30	-12.68
1717.5	V	4.42	1.63	9.95	12.74	30	-17.26
CH 20175							
1732.5	Н	8.85	1.63	9.95	17.17	30	-12.83
1732.5	V	3.7	1.63	9.95	12.02	30	-17.98
CH 20325							
1747.5	Н	8.87	1.63	9.95	17.19	30	-12.81
1747.5	V	3.8	1.63	9.95	12.12	30	-17.88

## Band 4-15M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20025							
1717.5	Н	8.61	1.63	9.95	16.93	30.00	-13.07
1717.5	V	3.93	1.63	9.95	12.25	30.00	-17.75
CH 20175							
1732.5	Н	8.06	1.63	9.95	16.38	30.00	-13.62
1732.5	V	3.11	1.63	9.95	11.43	30.00	-18.57
CH 20325							
1747.5	Н	8.38	1.63	9.95	16.70	30.00	-13.30
1747.5	V	3.21	1.63	9.95	11.53	30.00	-18.47

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 4-20M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20050							
1720	Н	8.98	1.63	9.95	17.3	30	-12.7
1720	V	1.57	1.63	9.95	9.89	30	-20.11
CH 20175							
1732.5	Н	8.69	1.63	9.95	17.01	30	-12.99
1732.5	V	1.8	1.63	9.95	10.12	30	-19.88
CH 20300							
1745	Н	8.93	1.63	9.95	17.25	30	-12.75
1745	V	0.73	1.63	9.95	9.05	30	-20.95

# Band 4-20M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20050							
1720	Н	8.30	1.63	9.95	16.62	30.00	-13.38
1720	V	0.79	1.63	9.95	9.11	30.00	-20.89
CH 20175							
1732.5	Н	7.61	1.63	9.95	15.93	30.00	-14.07
1732.5	V	0.92	1.63	9.95	9.24	30.00	-20.76
CH 20300							
1745	Н	8.15	1.63	9.95	16.47	30.00	-13.53
1745	V	-0.15	1.63	9.95	8.17	30.00	-21.83

- 1. ERP (dBm) / EIRP (dBm) =
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 5-1.4M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 20487							
824.7	Н	13.4	0.87	0.68	13.21	38.50	-25.29
824.7	V	10.24	0.87	0.68	10.05	38.50	-28.45
CH 20525							
836.5	Н	14.5	0.87	0.68	14.31	38.50	-24.19
836.5	V	11.08	0.87	0.68	10.89	38.50	-27.61
CH 20643							
848.3	Н	13.4	0.88	0.68	13.2	38.50	-25.3
848.3	V	10.76	0.88	0.68	10.56	38.50	-27.94

## Band 5-1.4M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 20487							
824.7	Н	12.69	0.87	0.68	12.50	38.50	-26.00
824.7	V	9.43	0.87	0.68	9.24	38.50	-29.26
CH 20525							
836.5	Н	13.39	0.87	0.68	13.20	38.50	-25.30
836.5	V	10.17	0.87	0.68	9.98	38.50	-28.52
CH 20643							
848.3	Н	12.58	0.87	0.68	12.39	38.50	-26.11
848.3	V	9.84	0.87	0.68	9.65	38.50	-28.85

- 1. ERP (dBm) / EIRP (dBm) =
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 5-3M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 20415							
825.5	Н	13.71	0.87	0.68	13.52	38.50	-24.98
825.5	V	10.43	0.87	0.68	10.24	38.50	-28.26
CH 20525							
836.5	Н	14.2	0.87	0.68	14.01	38.50	-24.49
836.5	V	10.61	0.87	0.68	10.42	38.50	-28.08
CH 20635							
847.5	Н	13.65	0.88	0.68	13.45	38.50	-25.05
847.5	V	10.33	0.88	0.68	10.13	38.50	-28.37

# Band 5-3M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 20415							
825.5	Н	13.01	0.87	0.68	12.82	38.50	-25.68
825.5	V	9.63	0.87	0.68	9.44	38.50	-29.06
CH 20525							
836.5	Н	13.10	0.87	0.68	12.91	38.50	-25.59
836.5	V	9.71	0.87	0.68	9.52	38.50	-28.98
CH 20635							
847.5	Н	12.84	0.87	0.68	12.65	38.50	-25.85
847.5	V	9.42	0.87	0.68	9.23	38.50	-29.27

- 4. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 5. This unit was tested with its standard adapter.
- 6. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 5-5M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 20425							
826.5	Н	12.62	0.87	0.68	12.43	38.50	-26.07
826.5	V	9.53	0.87	0.68	9.34	38.50	-29.16
CH 20525							
836.5	Н	14.08	0.87	0.68	13.89	38.50	-24.61
836.5	V	10.13	0.87	0.68	9.94	38.50	-28.56
CH 20635							
847.5	Н	14.22	0.88	0.68	14.02	38.50	-24.48
847.5	V	9.19	0.88	0.68	8.99	38.50	-29.51

# Band 5-5M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 20425							
826.5	Н	11.92	0.87	0.68	11.73	38.50	-26.77
826.5	V	8.73	0.87	0.68	8.54	38.50	-29.96
CH 20525							
836.5	Η	12.98	0.87	0.68	12.79	38.50	-25.71
836.5	<b>V</b>	9.23	0.87	0.68	9.04	38.50	-29.46
CH 20635							
847.5	Н	13.41	0.87	0.68	13.22	38.50	-25.28
847.5	V	8.28	0.87	0.68	8.09	38.50	-30.41

- 1. ERP (dBm) / EIRP (dBm) =
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 5-10M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 20450							
829	Н	14.13	0.87	0.68	13.94	38.50	-24.56
829	V	10.32	0.87	0.68	10.13	38.50	-28.37
CH 20525							
836.5	Н	14.23	0.87	0.68	14.04	38.50	-24.46
836.5	V	10.52	0.87	0.68	10.33	38.50	-28.17
CH 20600							
844	Н	15.44	0.88	0.68	15.24	38.50	-23.26
844	V	9.51	0.88	0.68	9.31	38.50	-29.19

## Band 5-10M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 20450							
829	Н	13.46	0.87	0.68	13.27	38.50	-25.23
829	V	9.55	0.87	0.68	9.36	38.50	-29.14
CH 20525							
836.5	Н	13.16	0.87	0.68	12.97	38.50	-25.53
836.5	V	9.65	0.87	0.68	9.46	38.50	-29.04
CH 20600							
844	Н	14.66	0.87	0.68	14.47	38.50	-24.03
844	V	8.63	0.87	0.68	8.44	38.50	-30.06

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 7-5M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20775							
2502.5	Н	5.09	2.34	10.73	13.48	33.00	-19.52
2502.5	V	4.03	2.34	10.73	12.42	33.00	-20.58
CH 21100							
2535	Н	4.79	2.34	10.73	13.18	33.00	-19.82
2535	V	4.35	2.34	10.73	12.74	33.00	-20.26
CH 21425							
2567.5	Н	6.14	2.34	10.73	14.53	33.00	-18.47
2567.5	V	3.96	2.34	10.73	12.35	33.00	-20.65

# Band 7-5M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20775							
2502.5	Н	4.31	2.34	10.73	12.70	33.00	-20.30
2502.5	V	3.15	2.34	10.73	11.54	33.00	-21.46
CH 21100							
2535	Н	3.61	2.34	10.73	12.00	33.00	-21.00
2535	V	3.37	2.34	10.73	11.76	33.00	-21.24
CH 21425							
2567.5	Н	5.26	2.34	10.73	13.65	33.00	-19.35
2567.5	V	2.98	2.34	10.73	11.37	33.00	-21.63

- 1. ERP (dBm) / EIRP (dBm) =
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 7-10M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20800							
2505	Н	5.99	2.34	10.73	14.38	33.00	-18.62
2505	V	4.84	2.34	10.73	13.23	33.00	-19.77
CH 21100							
2535	Н	5.63	2.34	10.73	14.02	33.00	-18.98
2535	V	4.60	2.34	10.73	12.99	33.00	-20.01
CH 21400							
2565	Н	5.50	2.34	10.73	13.89	33.00	-19.11
2565	V	4.06	2.34	10.73	12.45	33.00	-20.55

# Band 7-10M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20800							
2505	Н	5.26	2.34	10.73	13.65	33.00	-19.35
2505	<b>V</b>	4.01	2.34	10.73	12.40	33.00	-20.60
CH 21100							
2535	Н	4.50	2.34	10.73	12.89	33.00	-20.11
2535	<b>V</b>	3.67	2.34	10.73	12.06	33.00	-20.94
CH 21400							
2565	Н	4.67	2.34	10.73	13.06	33.00	-19.94
2565	V	3.13	2.34	10.73	11.52	33.00	-21.48

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 7-15M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20825							
2507.5	Н	5.19	2.34	10.73	13.58	33.00	-19.42
2507.5	V	3.92	2.34	10.73	12.31	33.00	-20.69
CH 21100							
2535	Н	5.6	2.34	10.73	13.99	33.00	-19.01
2535	V	4.59	2.34	10.73	12.98	33.00	-20.02
CH 21375							
2562.5	Н	5.62	2.34	10.73	14.01	33.00	-18.99
2562.5	V	4.45	2.34	10.73	12.84	33.00	-20.16

## Band 7-15M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20825							
2507.5	Н	4.41	2.34	10.73	12.80	33.00	-20.20
2507.5	>	3.04	2.34	10.73	11.43	33.00	-21.57
CH 21100							
2535	Н	4.42	2.34	10.73	12.81	33.00	-20.19
2535	<b>V</b>	3.61	2.34	10.73	12.00	33.00	-21.00
CH 21375							
2562.5	Н	4.74	2.34	10.73	13.13	33.00	-19.87
2562.5	<b>V</b>	3.47	2.34	10.73	11.86	33.00	-21.14

- ERP (dBm) / EIRP (dBm)=
   SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 7-20M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20850							
2510	Н	5.65	2.34	10.73	14.04	33.00	-18.96
2510	<b>V</b>	5.19	2.34	10.73	13.58	33.00	-19.42
CH 21100							
2535	Н	5.46	2.34	10.73	13.85	33.00	-19.15
2535	<b>V</b>	3.94	2.34	10.73	12.33	33.00	-20.67
CH 21350							
2560	Н	5.39	2.34	10.73	13.78	33.00	-19.22
2560	V	4.25	2.34	10.73	12.64	33.00	-20.36

## Band 7-20M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 20850							
2510	Н	4.94	2.34	10.73	13.33	33.00	-19.67
2510	V	4.38	2.34	10.73	12.77	33.00	-20.23
CH 21100							
2535	Н	4.35	2.34	10.73	12.74	33.00	-20.26
2535	V	3.03	2.34	10.73	11.42	33.00	-21.58
CH 21350							
2560	Н	4.58	2.34	10.73	12.97	33.00	-20.03
2560	V	3.34	2.34	10.73	11.73	33.00	-21.27

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 12-1.4M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23017							
699.7	Н	16.27	0.8	0.51	15.98	34.77	-18.79
699.7	<b>V</b>	12.64	0.8	0.51	12.35	34.77	-22.42
CH 23095							
707.5	Н	18.36	0.8	0.51	18.07	34.77	-16.70
707.5	V	14.11	0.8	0.51	13.82	34.77	-20.95
CH 23173							
715.3	Н	19.25	0.8	0.51	18.96	34.77	-15.81
715.3	V	15.07	0.8	0.51	14.78	34.77	-19.99

# Band 12-1.4M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23017							
699.7	Н	15.84	0.8	0.51	15.55	34.77	-19.22
699.7	<b>V</b>	12.11	0.8	0.51	11.82	34.77	-22.95
CH 23095							
707.5	Н	17.53	0.8	0.51	17.24	34.77	-17.53
707.5	V	13.48	0.8	0.51	13.19	34.77	-21.58
CH 23173							
715.3	Н	18.72	0.8	0.51	18.43	34.77	-16.34
715.3	V	14.44	0.8	0.51	14.15	34.77	-20.62

- 1. ERP (dBm) / EIRP (dBm) =
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 12-3M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23025							
700.5	Н	16.92	0.8	0.51	16.63	34.77	-18.14
700.5	V	12.74	0.8	0.51	12.45	34.77	-22.32
CH 23095							
707.5	Н	17.03	0.8	0.51	16.74	34.77	-18.03
707.5	V	14.14	0.8	0.51	13.85	34.77	-20.92
CH 23165							
714.5	Н	17.78	0.8	0.51	17.49	34.77	-17.28
714.5	V	14.20	0.8	0.51	13.91	34.77	-20.86

## Band 12-3M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23025							
700.5	Н	16.50	0.8	0.51	16.21	34.77	-18.56
700.5	V	12.22	0.8	0.51	11.93	34.77	-22.84
CH 23095							
707.5	Н	16.21	0.8	0.51	15.92	34.77	-18.85
707.5	<b>V</b>	13.52	0.8	0.51	13.23	34.77	-21.54
CH 23165							
714.5	Н	17.26	0.8	0.51	16.97	34.77	-17.80
714.5	V	13.58	0.8	0.51	13.29	34.77	-21.48

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 12-5M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23035							
701.5	Н	16.99	0.8	0.51	16.70	34.77	-18.07
701.5	<b>V</b>	12.85	0.8	0.51	12.56	34.77	-22.21
CH 23095							
707.5	Н	17.22	0.8	0.51	16.93	34.77	-17.84
707.5	<b>V</b>	13.31	0.8	0.51	13.02	34.77	-21.75
CH 23155							
713.5	Н	17.30	0.8	0.51	17.01	34.77	-17.76
713.5	V	13.27	0.8	0.51	12.98	34.77	-21.79

## Band 12-5M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23035							
701.5	Н	16.59	0.8	0.51	16.30	34.77	-18.47
701.5	V	12.35	0.8	0.51	12.06	34.77	-22.71
CH 23095							
707.5	Н	16.42	0.8	0.51	16.13	34.77	-18.64
707.5	V	12.71	0.8	0.51	12.42	34.77	-22.35
CH 23155							
713.5	Н	16.80	0.8	0.51	16.51	34.77	-18.26
713.5	V	12.67	0.8	0.51	12.38	34.77	-22.39

- ERP (dBm) / EIRP (dBm)=
   SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 12-10M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23060							
704	Н	17.31	0.8	0.51	17.02	34.77	-17.75
704	V	13.23	0.8	0.51	12.94	34.77	-21.83
CH 23095							
707.5	Н	16.88	0.8	0.51	16.59	34.77	-18.18
707.5	V	13.3	0.8	0.51	13.01	34.77	-21.76
CH 23130							
711	Н	18.18	0.8	0.51	17.89	34.77	-16.88
711	V	13.07	0.8	0.51	12.78	34.77	-21.99

## Band 12-10M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23060							
704	Н	16.85	0.8	0.51	16.56	34.77	-18.21
704	V	12.67	0.8	0.51	12.38	34.77	-22.39
CH 23095							
707.5	Н	16.02	0.8	0.51	15.73	34.77	-19.04
707.5	V	12.64	0.8	0.51	12.35	34.77	-22.42
CH 23130							
711	Н	17.62	0.8	0.51	17.33	34.77	-17.44
711	V	12.41	0.8	0.51	12.12	34.77	-22.65

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 13-5M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23205							
779.5	Н	18.09	0.87	0.68	17.9	34.77	-16.87
779.5	<b>V</b>	12.25	0.87	0.68	12.06	34.77	-22.71
CH 23230							
782	Н	18.99	0.87	0.68	18.8	34.77	-15.97
782	<b>V</b>	13.31	0.87	0.68	13.12	34.77	-21.65
CH 23255							
784.5	Н	19.54	0.88	0.68	19.34	34.77	-15.43
784.5	V	13.77	0.88	0.68	13.57	34.77	-21.2

# Band 13-5M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23205							
779.5	Н	17.36	0.88	0.68	17.16	34.77	-17.61
779.5	V	11.42	0.88	0.68	11.22	34.77	-23.55
CH 23230							
782	Н	17.86	0.88	0.68	17.66	34.77	-17.11
782	V	12.38	0.88	0.68	12.18	34.77	-22.59
CH 23255							
784.5	Н	18.70	0.88	0.68	18.50	34.77	-16.27
784.5	V	12.83	0.88	0.68	12.63	34.77	-22.14

- 1. ERP (dBm) / EIRP (dBm) =
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



# Band 13-10M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23230							
782	Н	19.31	0.87	0.68	19.12	34.77	-15.65
782	V	14.08	0.87	0.68	13.89	34.77	-20.88

# Band 13-10M(16QAM)

Frequency (MHz)	Ant. Pol. (H/V)	SA Reading (dBm)	Cable Loss (dB)	Substitute Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)		
CH 23230									
782	Н	18.49	0.87	0.68	18.30	34.77	-16.47		
782	V	13.16	0.87	0.68	12.97	34.77	-21.80		

- ERP (dBm) / EIRP (dBm)=
   SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 17-5M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23755							
706.5	Н	15.85	0.8	0.51	15.56	34.77	-19.21
706.5	<b>V</b>	15.26	0.8	0.51	14.97	34.77	-19.8
CH 23790							
710	Н	17.03	0.8	0.51	16.74	34.77	-18.03
710	<b>V</b>	15.47	0.8	0.51	15.18	34.77	-19.59
CH 23825							
713.5	Н	17.42	0.8	0.51	17.13	34.77	-17.64
713.5	V	13.94	0.8	0.51	13.65	34.77	-21.12

## Band 17-5M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23755							
706.5	Н	14.97	0.8	0.51	14.68	34.77	-20.09
706.5	V	14.28	0.8	0.51	13.99	34.77	-20.78
CH 23790							
710	Н	15.75	0.8	0.51	15.46	34.77	-19.31
710	V	14.39	0.8	0.51	14.10	34.77	-20.67
CH 23825							
713.5	Н	16.44	0.8	0.51	16.15	34.77	-18.62
713.5	V	12.86	0.8	0.51	12.57	34.77	-22.20

- 1. ERP (dBm) / EIRP (dBm)=
  - SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)
- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.



## Band 17-10M(QPSK)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23780							
709	Н	15.67	0.8	0.51	15.38	34.77	-19.39
709	V	15.32	0.8	0.51	15.03	34.77	-19.74
CH 23790							
710	Н	16.87	0.8	0.51	16.58	34.77	-18.19
710	V	15.27	0.8	0.51	14.98	34.77	-19.79
CH 23800							
711	Н	16.71	0.8	0.51	16.42	34.77	-18.35
711	V	13.73	0.8	0.51	13.44	34.77	-21.33

# Band 17-10M(16QAM)

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	ERP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBd)			
CH 23780							
709	Н	15.25	0.8	0.51	14.96	34.77	-19.81
709	V	14.80	0.8	0.51	14.51	34.77	-20.26
CH 23790							
710	Н	16.05	0.8	0.51	15.76	34.77	-19.01
710	V	14.65	0.8	0.51	14.36	34.77	-20.41
CH 23800							
711	Н	16.19	0.8	0.51	15.90	34.77	-18.87
711	V	13.11	0.8	0.51	12.82	34.77	-21.95

### NOTES:

1. ERP (dBm) / EIRP (dBm)=

SG (dBm) - Cable Loss (dB) + Substitute Antenna Gain (dBd/dBi)

- 2. This unit was tested with its standard adapter.
- 3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning.

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# **Radiated Spurious Emission**

Band 2-20M

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 18700							
3720	Н	-49.47	3.05	12.32	-40.2	-13	-27.2
5580	Н	-59.66	4.02	13.02	-50.66	-13	-37.66
3720	Н	-55.09	3.05	12.32	-45.82	-13	-32.82
5580	V	-59.14	4.02	13.02	-50.14	-13	-37.14
CH 18900							
3760	Н	-49.27	3.05	12.32	-40	-13	-27
5640	Н	-59.45	4.02	13.02	-50.45	-13	-37.45
3760	Н	-55.02	3.05	12.32	-45.75	-13	-32.75
5640	V	-59.01	4.02	13.02	-50.01	-13	-37.01
CH 19100							
3800	Н	-49.41	3.05	12.32	-40.14	-13	-27.14
5700	Н	-59.41	4.02	13.02	-50.41	-13	-37.41
3800	Н	-54.96	3.05	12.32	-45.69	-13	-32.69
5700	V	-58.51	4.02	13.02	-49.51	-13	-36.51

- 1. Spurious emissions within 30-1000MHz & Other harmonic were found more than 20dB below limit line.
- 2. EIRP (dBm) = SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBi)



### Band 4-20M

Frequency (MHz)	Ant. Pol. (H/V)	SA Reading (dBm)	Cable Loss (dB)	Substitute Antenna	EIRP (dBm)	Limit (dBm)	Margin (dB)
				Gain (dBi)			
CH 20050							
3440	Н	-56.34	3.05	12.32	-47.07	-13	-34.07
5160	Н	-47.88	4.02	13.02	-38.88	-13	-25.88
3440	V	-57.07	3.05	12.32	-47.8	-13	-34.8
5160	V	-47.2	4.02	13.02	-38.2	-13	-25.2
CH 20175							
3465	Н	-55.99	3.05	12.32	-46.72	-13	-33.72
5197.5	Н	-47.57	4.02	13.02	-38.57	-13	-25.57
3465	V	-56.71	3.05	12.32	-47.44	-13	-34.44
5197.5	V	-47.02	4.02	13.02	-38.02	-13	-25.02
CH 20300							
3490	Н	-55.58	3.05	12.32	-46.31	-13	-33.31
5235	Н	-48.15	4.02	13.02	-39.15	-13	-26.15
3490	V	-56.72	3.05	12.32	-47.45	-13	-34.45
5235	V	-47.61	4.02	13.02	-38.61	-13	-25.61

- 1. Spurious emissions within 30-1000MHz & Other harmonic were found more than 20dB below limit line.
- 2. EIRP (dBm) = SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBi)



#### **Band 5-10M**

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin		
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)		
				Gain (dBi)					
CH 20450									
4145	Н	-61.55	3.3	12.45	-52.4	-13	-39.4		
4974	Н	-45.36	3.7	12.43	-36.63	-13	-23.63		
5803	Н	-47.8	4.12	13	-38.92	-13	-25.92		
4145	V	-60.51	3.3	12.45	-51.36	-13	-38.36		
4974	V	-41.02	3.7	12.43	-32.29	-13	-19.29		
5803	V	-55.97	4.12	13	-47.09	-13	-34.09		
CH 20525	CH 20525								
4182.5	Н	-61.91	3.3	12.45	-52.76	-13	-39.76		
5019	Н	-46.31	3.7	12.43	-37.58	-13	-24.58		
5855.5	Н	-48.84	4.12	13	-39.96	-13	-26.96		
4182.5	V	-60.9	3.3	12.45	-51.75	-13	-38.75		
5019	V	-41.55	3.7	12.43	-32.82	-13	-19.82		
5855.5	V	-56.18	4.12	13	-47.3	-13	-34.3		
CH 20600									
4220	Н	-60.59	3.3	12.45	-51.44	-13	-38.44		
5064	Н	-45.04	3.7	12.43	-36.31	-13	-23.31		
5908	Н	-47.81	4.12	13	-38.93	-13	-25.93		
4220	V	-60.16	3.3	12.45	-51.01	-13	-38.01		
5064	V	-40.89	3.7	12.43	-32.16	-13	-19.16		
5908	V	-55.07	4.12	13	-46.19	-13	-33.19		

- 1. Spurious emissions within 30-1000MHz & Other harmonic were found more than 20dB below limit line.
- 2. EIRP (dBm) = SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBi)



### **Band 7-20M**

Frequency (MHz)	Ant. Pol. (H/V)	SA Reading (dBm)	Cable Loss (dB)	Substitute Antenna	EIRP (dBm)	Limit (dBm)	Margin (dB)		
, ,	, ,		, ,	Gain (dBi)			, ,		
CH 20850									
5020	Н	-49.27	3.78	12.47	-40.58	-25	-15.58		
7530	Н	-49.51	5.22	11.12	-43.61	-25	-18.61		
5020	V	-46.15	3.78	12.47	-37.46	-25	-12.46		
7530	V	-51.59	5.22	11.12	-45.69	-25	-20.69		
CH 21100									
5070	Н	-47.32	3.78	12.47	-38.63	-25	-13.63		
7605	Н	-45.91	5.22	11.12	-40.01	-25	-15.01		
5070	V	-47.27	3.78	12.47	-38.58	-25	-13.58		
7605	V	-48.33	5.22	11.12	-42.43	-25	-17.43		
CH 21350									
5120	Н	-55.38	3.78	12.47	-46.69	-25	-21.69		
7680	Н	-49.92	5.22	11.12	-44.02	-25	-19.02		
5120	V	-53.87	3.78	12.47	-45.18	-25	-20.18		
7680	V	-52.26	5.22	11.12	-46.36	-25	-21.36		

- 1. Spurious emissions within 30-1000MHz & Other harmonic were found more than 20dB below limit line.
- 2. EIRP (dBm) = SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBi)



### Band 12-10M

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin		
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)		
				Gain (dBi)					
CH 23060									
4224	Н	-59.59	3.3	12.45	-50.44	-13	-37.44		
4928	Н	-44.87	3.7	12.43	-36.14	-13	-23.14		
5632	Н	-50.7	4.12	13	-41.82	-13	-28.82		
4224	V	-60.79	3.3	12.45	-51.64	-13	-38.64		
4928	V	-41.99	3.7	12.43	-33.26	-13	-20.26		
5632	V	-53.72	4.12	13	-44.84	-13	-31.84		
CH 23095	CH 23095								
4245	Н	-64.26	3.3	12.45	-55.11	-13	-42.11		
4952.5	Н	-49.38	3.7	12.43	-40.65	-13	-27.65		
5660	Н	-55.52	4.12	13	-46.64	-13	-33.64		
4245	V	-63.78	3.3	12.45	-54.63	-13	-41.63		
4952.5	V	-46.59	3.7	12.43	-37.86	-13	-24.86		
5660	V	-57.69	4.12	13	-48.81	-13	-35.81		
CH 23130	CH 23130								
4266	Н	-58.71	3.3	12.45	-49.56	-13	-36.56		
4977	Н	-45.12	3.7	12.43	-36.39	-13	-23.39		
5688	Н	-50.52	4.12	13	-41.64	-13	-28.64		
4266	V	-60.22	3.3	12.45	-51.07	-13	-38.07		
4977	V	-41.75	3.7	12.43	-33.02	-13	-20.02		
5688	V	-54.07	4.12	13	-45.19	-13	-32.19		

- 1. Spurious emissions within 30-1000MHz & Other harmonic were found more than 20dB below limit line.
- 2. EIRP (dBm) = SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBi)



#### **Band 13-5M**

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin			
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)			
				Gain (dBi)						
CH 23205										
3897.5	Н	-64.3	3.05	12.32	-55.03	-13	-42.03			
4677	Н	-47.14	3.61	12.4	-38.35	-13	-25.35			
5456.5	Н	-46.92	4.02	13.02	-37.92	-13	-24.92			
3897.5	V	-66.16	3.05	12.32	-56.89	-13	-43.89			
4677	V	-49.42	3.61	12.4	-40.63	-13	-27.63			
5456.5	V	-47.65	4.02	13.02	-38.65	-13	-25.65			
CH 23230	CH 23230									
3910	Н	-65.53	3.05	12.32	-56.26	-13	-43.26			
4692	Н	-48.38	3.61	12.4	-39.59	-13	-26.59			
5474	Н	-47.05	4.02	13.02	-38.05	-13	-25.05			
3910	V	-66.36	3.05	12.32	-57.09	-13	-44.09			
4692	V	-49.13	3.61	12.4	-40.34	-13	-27.34			
5474	V	-51.69	4.02	13.02	-42.69	-13	-29.69			
CH 23255										
3922.5	Н	-65.53	3.05	12.32	-56.26	-13	-43.26			
4707	Н	-48.24	3.61	12.4	-39.45	-13	-26.45			
5491.5	Н	-47.34	4.02	13.02	-38.34	-13	-25.34			
3922.5	V	-67.94	3.05	12.32	-58.67	-13	-45.67			
4707	V	-49.28	3.61	12.4	-40.49	-13	-27.49			
5491.5	V	-51.92	4.02	13.02	-42.92	-13	-29.92			

- 1. Spurious emissions within 30-1000MHz & Other harmonic were found more than 20dB below limit line.
- 2. EIRP (dBm) = SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBi)



#### Band 17-10M

Frequency	Ant. Pol.	SA Reading	Cable Loss	Substitute	EIRP	Limit	Margin
(MHz)	(H/V)	(dBm)	(dB)	Antenna	(dBm)	(dBm)	(dB)
				Gain (dBi)			
CH 23780							
4254	Н	-59.09	3.3	12.45	-49.94	-13	-36.94
4963	Н	-45.04	3.7	12.43	-36.31	-13	-23.31
5672	Н	-51.38	4.12	13	-42.5	-13	-29.5
4254	V	-60.73	3.3	12.45	-51.58	-13	-38.58
4963	V	-42.09	3.7	12.43	-33.36	-13	-20.36
5672	V	-55.77	4.12	13	-46.89	-13	-33.89
CH 23790							
4260	Н	-60.36	3.3	12.45	-51.21	-13	-38.21
4970	Н	-46.6	3.7	12.43	-37.87	-13	-24.87
5680	Н	-52.09	4.12	13	-43.21	-13	-30.21
4260	V	-61.98	3.3	12.45	-52.83	-13	-39.83
4970	V	-43.55	3.7	12.43	-34.82	-13	-21.82
5680	V	-56.88	4.12	13	-48	-13	-35
CH 23800							
4266	Н	-60.6	3.3	12.45	-51.45	-13	-38.45
4977	Н	-45.44	3.7	12.43	-36.71	-13	-23.71
5688	Н	-51.44	4.12	13	-42.56	-13	-29.56
4266	V	-61.59	3.3	12.45	-52.44	-13	-39.44
4977	V	-42.7	3.7	12.43	-33.97	-13	-20.97
5688	V	-56.26	4.12	13	-47.38	-13	-34.38

## Note:

- 1. Spurious emissions within 30-1000MHz & Other harmonic were found more than 20dB below limit line.
- 2. EIRP (dBm) = SG (dBm) Cable Loss (dB) + Substitute Antenna Gain (dBi)



# 7.6. Peak-Average Ratio

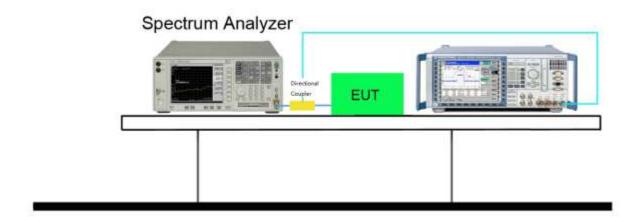
#### 7.6.1 Test Limit

The transmitter's peak-to-average power ratio (PAPR) shall not exceed 13 dB for more than 0.1% of the time using a signal corresponding to the highest PAPR during periods of continuous transmission.

#### 7.6.2 Test Procedure

KDB 971168 D01v03 - Section 5.7 & ANSI/TIA-603-E-2016

### 7.6.3 Test Setup





# 7.6.4 Test Result

Test Mode	Modulation	Channel/ Frequency (MHz)	Bandwidth (MHz)	RB Size	RB Offset	Limit (dBm)	Result
			1.4	1	2	13	PASS
			3	1	7	13	PASS
	ODGK		5	1	12	13	PASS
	QPSK	18900/1880	10	1	25	13	PASS
			15	1	36	13	PASS
LTE Band 2			20	1	49	13	PASS
(Middle Channel)		10900/1000	1.4	1	2	13	PASS
			3	1	7	13	PASS
16QAM	160 AM		5	1	12	13	PASS
	TOWAIN		10	1	25	13	PASS
			15	1	36	13	PASS
			20	1	49	13	PASS

Test Mode	Modulation	Channel/ Frequency (MHz)	Bandwidth (MHz)	RB Size	RB Offset	Limit (dBm)	Result
			1.4	1	2	13	PASS
			3	1	7	13	PASS
	QPSK		5	1	12	13	PASS
	QPSK		10	1	25	13	PASS
			15	1	36	13	PASS
LTE Band 4		20175	20	1	49	13	PASS
(Middle Channel)		/1732.5	1.4	1	2	13	PASS
			3	1	7	13	PASS
	16QAM		5	1	12	13	PASS
			10	1	25	13	PASS
			15	1	36	13	PASS
			20	1	49	13	PASS



Test Mode	Modulation	Channel/ Frequency (MHz)	Bandwidth (MHz)	RB Size	RB Offset	Limit (dBm)	Result
			1.4	1	2	13	PASS
	QPSK		3	1	7	13	PASS
		20525/020 5	5	1	12	13	PASS
LTE Band 5			10	1	25	13	PASS
(Middle Channel)		20525/836.5	1.4	1	2	13	PASS
	16QAM		3	1	7	13	PASS
			5	1	12	13	PASS
		-	10	1	25	13	PASS

Test Mode	Modulation	Channel/ Frequency (MHz)	Bandwidth (MHz)	RB Size	RB Offset	Limit (dBm)	Result
			5	1	12	13	PASS
	QPSK	21100/2535	10	1	25	13	PASS
			15	1	36	13	PASS
LTE Band 7			20	1	49	13	PASS
(Middle Channel)		21100/2555	5	1	12	13	PASS
	16QAM		10	1	25	13	PASS
			15	1	36	13	PASS
			20	1	49	13	PASS

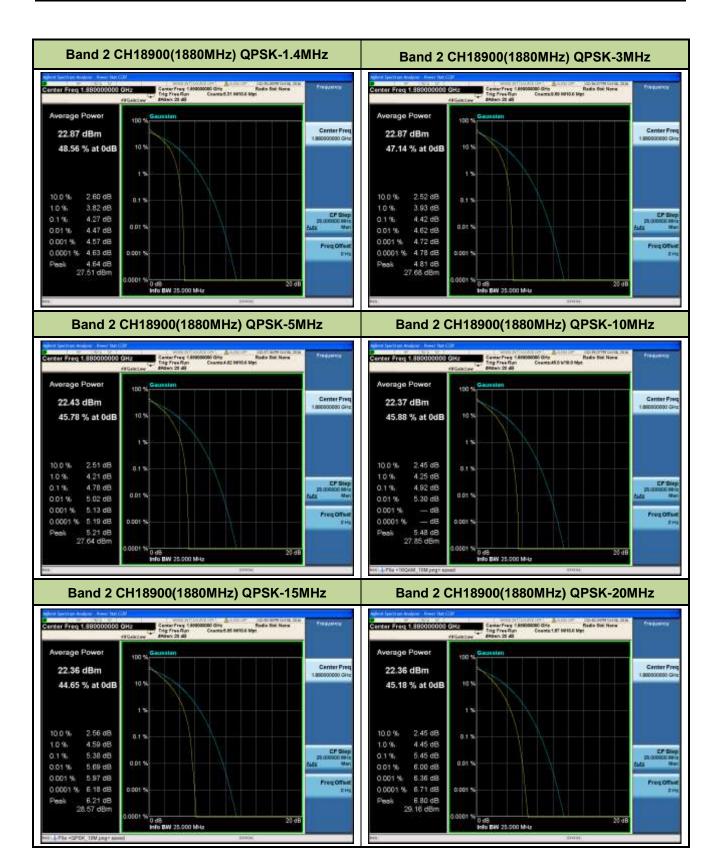
Test Mode	Modulation	Channel/ Frequency (MHz)	Bandwidth (MHz)	RB Size	RB Offset	Limit (dBm)	Result
			1.4	1	2	13	PASS
	QPSK		3	1	7	13	PASS
			5	1	12	13	PASS
LTE Band 12		23095/707.5	10 1	25	13	PASS	
(Middle Channel)		23093/101.5	1.4	1	2	13	PASS
	16QAM		3	3 1 7 13	13	PASS	
			5	1	12	13	PASS
			10	1	25	13	PASS



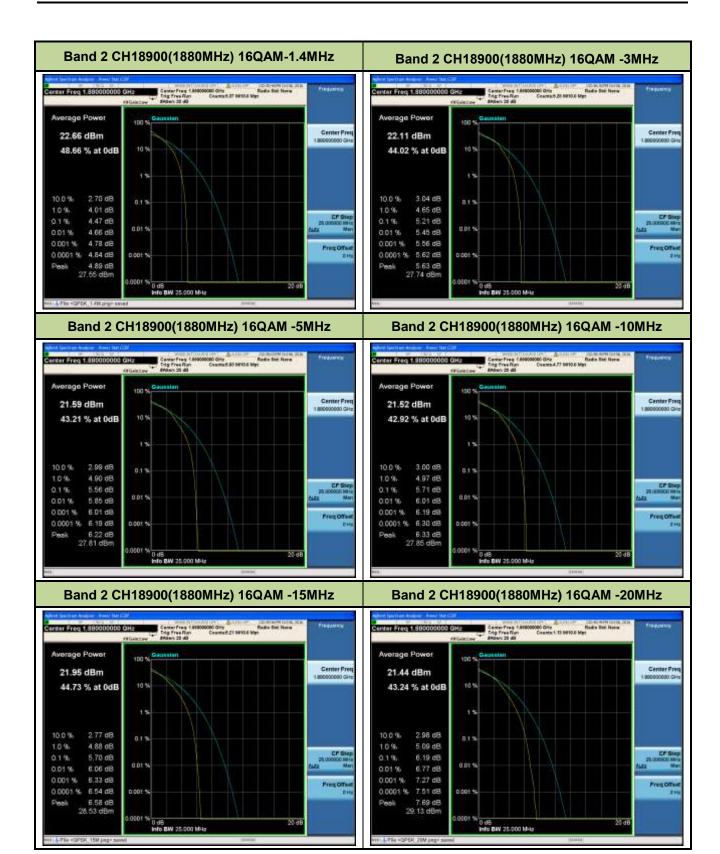
Test Mode	Modulation	Channel/ Frequency (MHz)	Bandwidth (MHz)	RB Size	RB Offset	Limit (dBm)	Result
	ODOK		5	1	12	13	PASS
LTE Band 13	QPSK	23230/782	10	1	25	13	PASS
(Middle Channel)	16QAM	23230/762	5	1	12	13	PASS
			10	1	25	13	PASS

Test Mode	Modulation	Channel/ Frequency (MHz)	Bandwidth (MHz)	RB Size	RB Offset	Limit (dBm)	Result
	ODOK		5	1	12	13	PASS
LTE Band 17	QPSK	00700/740	10	1	25	13	PASS
(Middle Channel)	16QAM	23790/710	5	1	12	13	PASS
			10	1	25	13	PASS

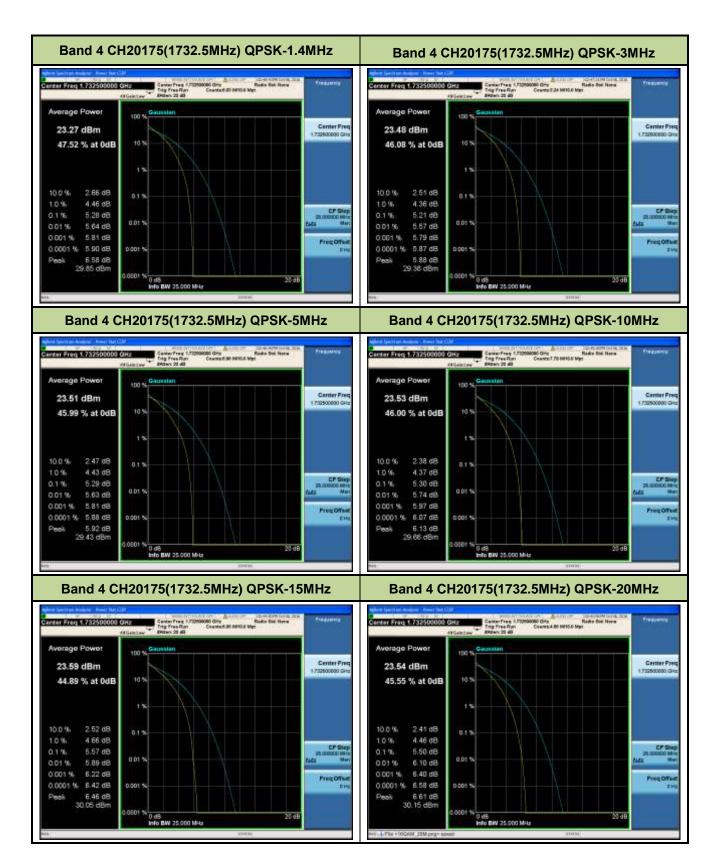




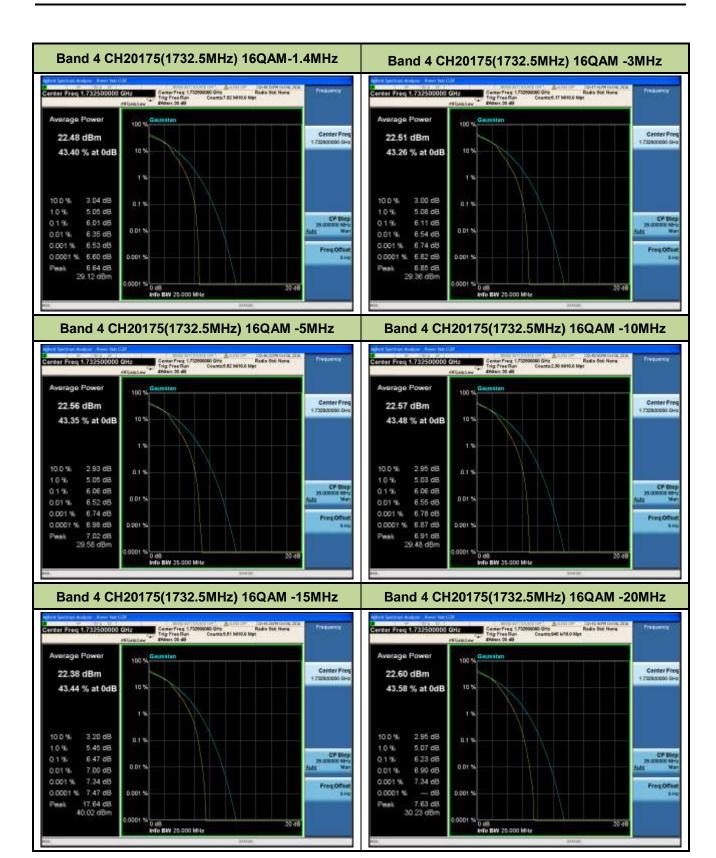




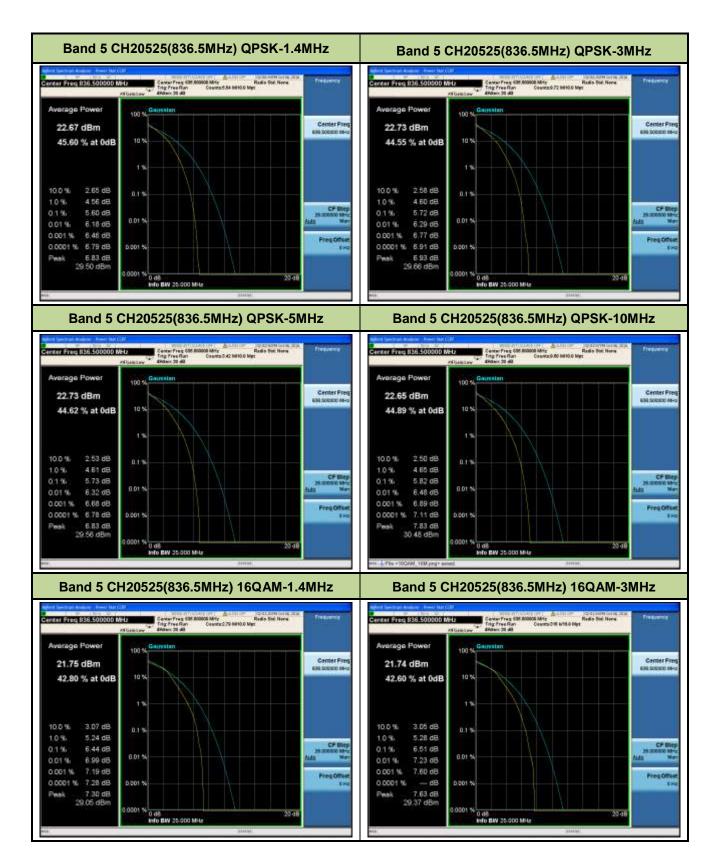




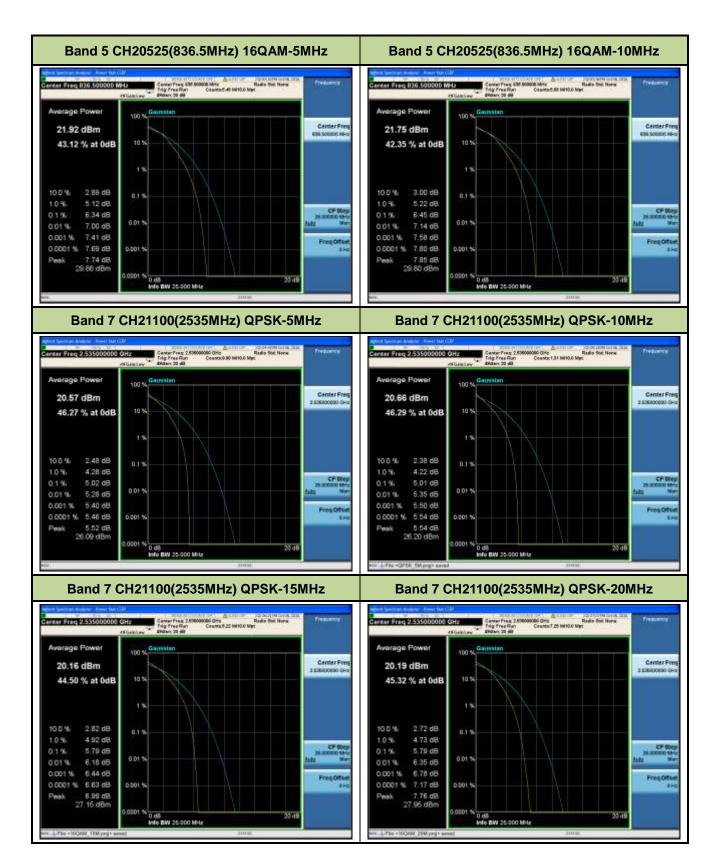




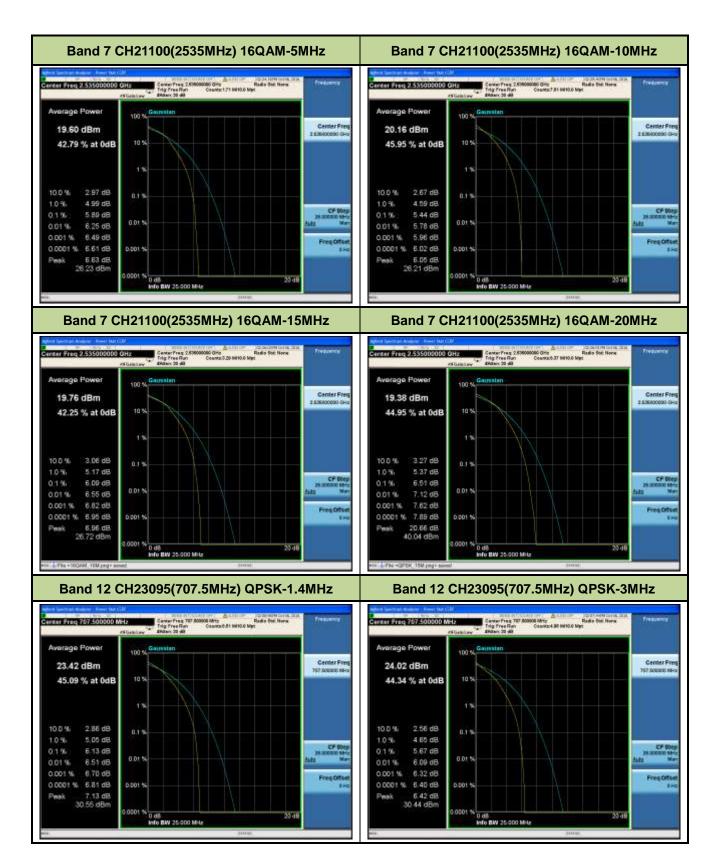




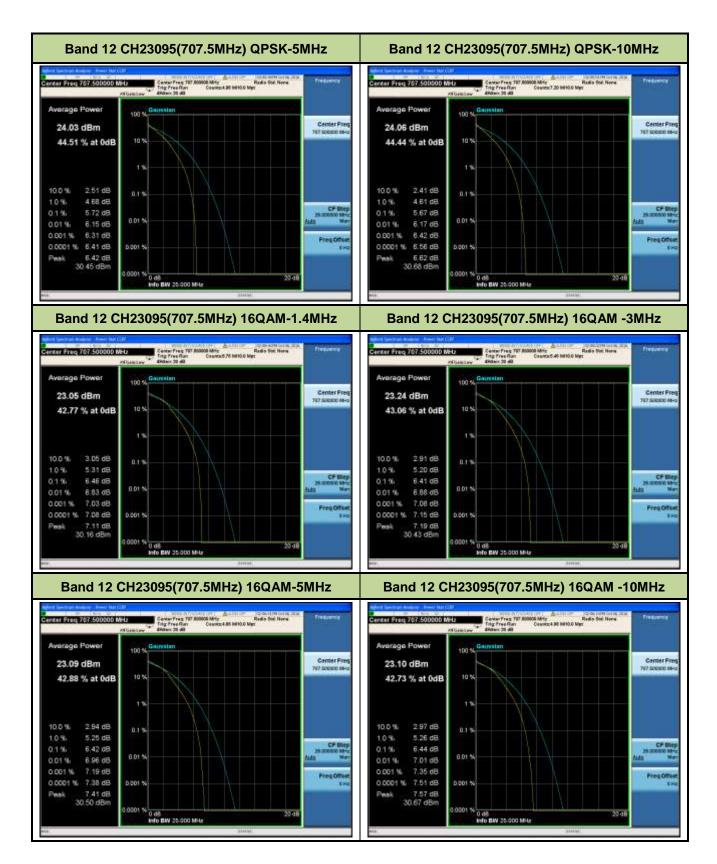




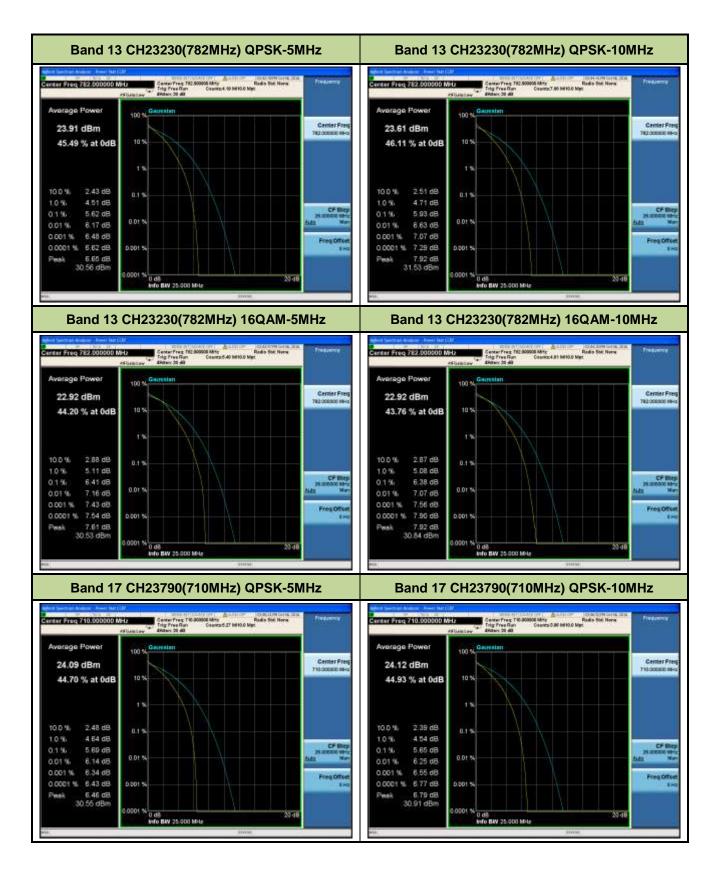


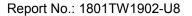


















# 7.7. Frequency Stability Under Temperature & Voltage Variations

#### 7.7.1 Test Limit

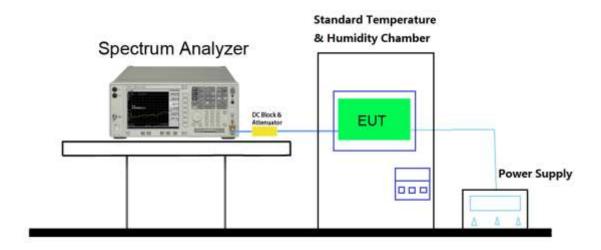
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Limit	< ± 2.5 ppm
	· ·

### 7.7.2 Test Procedure

KDB 971168 D01v03 - Section 9 & ANSI/TIA-603-E-2016

### 7.7.3 Test Setup

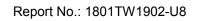




# 7.7.4 Test Result

Operating Frequency	1880MHz
Channel	18900
Test Mode	Band 2
Reference Voltage	DC 3.7V

Voltage	Power	TEMP Freq. Dev.		Limit
(%)	(DC)	(℃)	(kHz)	(kHz)
100%		50	0.0021	4.7
100%		40	0.0013	4.7
100%		30	0.0044	4.7
100%		20	0.0076	4.7
100%	3.7V	10	0.0023	4.7
100%		0	0.0053	4.7
100%		-10	0.0045	4.7
100%		-20	0.0053	4.7
100%		-30	0.0077	4.7
115%	4.26	30	0.0012	4.7
End Point	3.40	30	0.0053	4.7





Operating Frequency	1732.5MHz
Channel	20175
Test Mode	Band 4
Reference Voltage	DC 3.7V

Voltage	Power	TEMP	Freq. Dev.	Limit
(%)	(DC)	(℃)	(kHz)	(kHz)
100%		50	0.0023	4.3
100%		40	0.0053	4.3
100%		30	0.0058	4.3
100%		20	0.0053	4.3
100%	3.7V	10	0.0013	4.3
100%		0	0.0066	4.3
100%		-10	0.0023	4.3
100%		-20	0.0065	4.3
100%		-30	0.0013	4.3
115%	4.26	30	0.0053	4.3
End Point	3.40	30	0.0064	4.3



Report No.: 1801TW1902-U8

Operating Frequency	836.5MHz
Channel	20525
Test Mode	Band 5
Reference Voltage	DC 3.7V

Voltage	Power	TEMP	Freq. Dev.	Limit
(%)	(DC)	(℃)	(kHz)	(kHz)
100%		50	0.0035	2.09
100%		40	0.0022	2.09
100%		30	0.0082	2.09
100%		20	0.0028	2.09
100%	3.7V	10	0.0058	2.09
100%		0	0.0014	2.09
100%		-10	0.0048	2.09
100%		-20	0.0013	2.09
100%		-30	0.0053	2.09
115%	4.26	30	0.0024	2.09
End Point	3.40	30	0.0055	2.09



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Operating Frequency	2535MHz
Channel	21100
Test Mode	Band 7
Reference Voltage	DC 3.7V

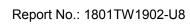
Voltage	Power	TEMP	Freq. Dev.	Limit
(%)	(DC)	(℃)	(kHz)	(kHz)
100%		50	0.0022	6.33
100%		40	0.0053	6.33
100%		30	0.0058	6.33
100%		20	0.0084	6.33
100%	3.7V	10	0.0013	6.33
100%		0	0.0045	6.33
100%		-10	0.0085	6.33
100%		-20	0.0028	6.33
100%		-30	0.0054	6.33
115%	4.26	30	0.0058	6.33
End Point	3.40	30	0.0022	6.33



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Operating Frequency	707.5MHz
Channel	23095
Test Mode	Band 12
Reference Voltage	DC 3.7V

Voltage	Power	TEMP	Freq. Dev.	Limit
(%)	(DC)	(℃)	(kHz)	(kHz)
100%		50	0.0025	1.76
100%		40	0.0037	1.76
100%		30	0.0055	1.76
100%		20	0.0059	1.76
100%	3.7V	10	0.0082	1.76
100%		0	0.0044	1.76
100%		-10	0.0018	1.76
100%		-20	0.0053	1.76
100%		-30	0.0032	1.76
115%	4.26	30	0.0055	1.76
End Point	3.40	30	0.0038	1.76





Operating Frequency	782MHz
Channel	23230
Test Mode	Band 13
Reference Voltage	DC 3.7V

Voltage	Power	TEMP	Freq. Dev.	Limit
(%)	(DC)	(℃)	(kHz)	(kHz)
100%		50	0.0034	1.95
100%		40	0.0083	1.95
100%		30	0.0082	1.95
100%		20	0.0038	1.95
100%	3.7V	10	0.0048	1.95
100%		0	0.0016	1.95
100%		-10	0.0044	1.95
100%		-20	0.0084	1.95
100%		-30	0.0028	1.95
115%	4.26	30	0.0024	1.95
End Point	3.40	30	0.0082	1.95



Operating Frequency	710MHz
Channel	23790
Test Mode	Band 17
Reference Voltage	DC 3.7V

Voltage	Power	TEMP	Freq. Dev.	Limit
(%)	(DC)	(℃)	(kHz)	(kHz)
100%		50	0.0058	1.77
100%		40	0.0067	1.77
100%		30	0.0024	1.77
100%		20	0.0095	1.77
100%	3.7V	10	0.0082	1.77
100%		0	0.0058	1.77
100%		-10	0.0053	1.77
100%		-20	0.0018	1.77
100%		-30	0.0025	1.77
115%	4.26	30	0.0035	1.77
End Point	3.40	30	0.0052	1.77

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