

# A.7 Radiated Emission

Antenna-port Conducted test data

E = EIRP - 20log D + 104.8

#### where:

 $E = electric field strength in dB\mu V/m$ ,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

EIRP= Measure Conducted output power Value (dBm) + Maximum transmit antenna gain (dBi) + The appropriate maximum ground reflection factor(dB)

# The worst data (Test frequency: below 1 GHz)

The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

Band 111a C	H36									
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
0.005359	-88.49	0	3	2	QP	8.77	86.49	77.72	Note 2	Pass
9.978	-71.59	6	3	2	QP	31.67	86.49	54.82	Note 2	Pass
317.1	-73.58	4.7	3	2	QP	28.38	86.49	58.11	Note 2	Pass
589.4	-70.52	4.7	3	2	QP	31.44	86.49	55.05	Note 2	Pass
0246.0	-46.72	0	3	2	PK	50.54	70.26	19.72		Pass
9346.9	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
162020	-43.67	0	3	2	PK	53.59	70.26	16.67		Pass
103232	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
E170	13.02	0	3	2	PK	110.28	N/A	N/A	Note 1	N/A
01/8	-11.83		3	2	AV	85.43	N/A	N/A		N/A



# Test Plots

# SPURIOUS 9 kHz ~ 150 kHz

Spectrur	n					
Ref Level	-20.00 di	dp Swr 0 E mc	RBW 200 Hz	Mode Auto El	CT.	
1Pk Max	v	ub awi 9.5 ms	YOW INNE	MODE AUTO FI	F1	
-30 dBm				M1[1] M2[1]		-90.38 dBn 29,710 kH -88,49 dBn 53,500 kH
-40 dBm				1	1	00,090 KH
-50 dBm	_				_	
-60 dBm						
-70 dBm						
-80 dBm					_	
da dam-	BALL	MIZ		EM		
-100 dBm-	CUM WARD	a manufallation	handlight	outstall products	hlm. Hunnhmeilt	Anton Antonia and Antonia Marine
-110 dBm—					-	
Start 9.0	Hz		691 pts			Stop 150.0 kHz
larker					0	
Type   Re	Ref   Trc   X-value		Y-value	Function	Fur	nction Result
M1	1	29.71 kHz	-90.38 dBm			
M2	1	53.59 kHz	-88.49 dBm			
M3	1	99.5 kHz	-91.54 dBm			

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# SPURIOUS 150 kHz ~ 30 MHz

Ref Level Att	-20.00 dB	m Offset 18.5 dB SWT 1.	50 dB 🖷	RBW 10 kHz VBW 30 kHz	Mode 4	uto FFT				
1Pk Max										
-30 dBm			_		M3[1] M1[1]				2	-84.32 dBm 0.2590 MHz -75.21 dBm 4.6640 MHz
-40 dBm-		1					-	-		1
-50 dBm				-	_		-	-		-
-60 dBm			_		-		-	-	-	
-70 dBm-	MI	-	12				_			
-so den HA	Milin	Monthing alland	Mart	Attribut the set of the		P.	3			
-80 dBm	withour	of the Area in the second second	Wager	about labor and a	Maulu	web-ha	13 Anamintation	multinul	include	ununtuu
-90 dBm	when	and and a straight	Man	and the production of the second	Marth	viliani	13 Anay Malan	when	Includyable	gentegentelite
-90 dBm	Add Auto	allow for the for	Marrow	ntrothtsburneren	March	webh-ni	is Away Mutun	when	inclusion	insumhtin
-90 dBm	D kHz	apainer for for for the	hum	691 pts	Maruh	render name	ia Aburr Multur	within	Stop	า <mark>พาหมูลไปสม</mark> 3 30.0 MHz
-90 dBm	D KH2	Huiluur Jackad A	hidan	691 pts	Murup	voluni	13 Row Mallan	when	Stoj	มีขายมูลที่ปมย 30.0 MHz
-90 dBm -90 dBm -100 dBm -110 dBm -110 dBm -110 dBm Type   Re	D kHz	X-value	And a feat	691 pts	Funct	tion	13 Professional And English	Function	Stop	มีขายนุษณ์ปมุ่ม 9 30.0 MHz
-90 dBm	D kHz	X-value 4.664 1 9.978 1		691 pts -75.21 dBm -71.59 dBm	Funct	ion	13 Phony Waltern	Functi	Stop	มีขามมุลส่งไปใน 5 30.0 MHz t

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# SPURIOUS 30 MHz ~ 1 GHz

Ref Le	vel -	20.00 0	IBm Offset 18	.50 dB	RBW 100 kH	Z Mode	Auto S	woon		
1Pk M	ax		40 0111	211,1112	- 1011 500 km	noue	Auto 2	weep		
-30 dBr	n					M	1[1] 2[1]			-73.58 dBm 317.10 MHz -70.52 dBm 589.40 MHz
-40 dBn	n		-		-		1	-	1	005.101112
-50 dBn	n					_	-			-
-60 dBn	n	_	-		-	100			-	-
-70 dBn	-		M			M2			MAR	
-80 dBr	burthed	Annahu	- Mulandon Maria	Arrithm	e-engineer-paring allowed	dund	Mananda	here and a second second	mphillingle	wallatertantertantertante
-90 dBn	n+								_	
-100 dB	m+							_		
-110 dB	m+							_		
Start 3	0.0 M	IHz			691 p	ts				Stop 1.0 GHz
1arker										
Type	Ref Trc X-value			Y-value	Function	Fi	unction Re	sult		
M2		1	589.4	MHz	-70.52 dBr					
M3		1	823.8	MHz	-73.89 dBr					

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# Band I 11a CH36, SPURIOUS 1 GHz ~ 25 GHz



Date: 14.SEP.2015 21:13:38



# Test Data(Test frequency: 1 - 25 GHz )

The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

<b>D</b>		01100
Band	I 11a	CH36

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
0246.0	-46.72	0	3	2	PK	50.54	70.26	19.72		Pass
9346.9	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
162222	-43.67	0	3	2	PK	53.59	70.26	16.67		Pass
103232	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
5170	13.02	0	3	2	PK	110.28	N/A	N/A	Note 1	N/A
5176	-11.83		3	2	AV	85.43	N/A	N/A	note i	N/A

# Test Plots

#### Band I 11a CH36, SPURIOUS 1 GHz ~ 25 GHz

Ref Leve Att	20.00 dBr 15 d	m Offset 18.50 dB	VBW 3 MHz	Mode Auto Sw	eep	
1Pk Max						
10 dBm	MI			Ma[1] M1[1]		-43.67 dBn 16.32320 GH 13.02 dBn 5.17800 GH
0 dBm						
-10 dBm				_	_	
-20 dBm						
-30 dBm				-	-	
-40 dBm	-	M2	and a state of the	a share was	Ma And and second	A CARA COMAND
-50 dBm	-	have been and a state				
-60 dBm	_					
-70 dBm						
Start 1.0 C	Hz		4001 pt	s		Stop 25.0 GHz
Marker						
Type   Re	f Trc	X-value	Y-value	Function	Fun	iction Result
M1 M2	1	5.178 GHz	13.02 dBm			
Ma	1	16.3232 GHz	-43.67 dBm			

Date: 14.SEP.2015 21:13:38



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

Band 111a C	H44									
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
12106.2	-44.59	0	3	2	PK	52.67	70.26	17.59		Pass
12100.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
17626.9	-43.91	0	3	2	PK	53.35	70.26	16.91		Pass
17030.0	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
E212.0	13.22	0	3	2	PK	110.48	N/A	N/A	Note 1	N/A
5213.9	-11.63		3	2	AV	85.63	N/A	N/A		N/A

### Test Plots



Date: 14.SEP.2015 21:15:42



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band I 11a CH48

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
10000	-46.05	0	3	2	PK	51.21	70.26	19.05		Pass
12000	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
10424 4	-47.7	0	3	2	PK	49.56	70.26	20.70		Pass
19424.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5240.0	11.9	0	3	2	PK	109.16	N/A	N/A	Noto 1	N/A
5249.9	-12.95	U	3	2	AV	84.31	N/A	N/A	note i	N/A

### Test Plots



Date: 14.SEP.2015 21:16:17



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

### Band I 11n(HT20) CH36

	,									
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11424 4	-47.82	0	3	2	PK	49.44	70.26	20.82		Pass
11434.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
10200 /	-47.77	0	3	2	PK	49.49	70.26	20.77		Pass
19206.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
E101	11.47	0	3	2	PK	108.73	N/A	N/A	Note 1	N/A
5184	-13.38		3	2	AV	83.88	N/A	N/A	INOLE 1	N/A

#### Test Plots

#### Band I 11n(HT20) CH36, SPURIOUS 1 GHz ~ 25 GHz



Date: 15,SEP.2015 14:17:31



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band I 11n(HT20) CH44

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
10074	-46.06	0	3	2	PK	51.20	70.26	19.06		Pass
12074	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
20109.2	-46.42	0	3	2	PK	50.84	70.26	19.42		Pass
20100.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5225.0	11.03	0	3	2	PK	108.29	N/A	N/A	Noto 1	N/A
5225.9	-13.82	0	3	2	AV	83.44	N/A	N/A	NOLE I	N/A

### Test Plots



Date: 15,SEP.2015 14:18:17



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band I 11n(HT20) CH48

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
16/12 1	-45.53	0	3	2	PK	51.73	70.26	18.53		Pass
10413.1	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
010/1 0	-43.82	0	3	2	PK	53.44	70.26	16.82		Pass
21341.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5007.0	12.47	0	3	2	PK	109.73	N/A	N/A	Note 1	N/A
5237.9	-12.38		3	2	AV	84.88	N/A	N/A	NOLE I	N/A

### Test Plots

### Band I 11n(HT20) CH48, SPURIOUS 1 GHz ~ 25 GHz



Date: 15,SEP.2015 14:19:03



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band I 11n(HT40) CH38

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
10000	-46.96	0	3	2	PK	50.30	70.26	19.96		Pass
12020	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21610.9	-44.86	0	3	2	PK	52.40	70.26	17.86		Pass
21019.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5179	8.01	0	3	2	PK	105.27	N/A	N/A	Noto 1	N/A
5170	-16.84		3	2	AV	80.42	N/A	N/A	NOLE I	N/A

### Test Plots



Date: 15.SEP.2015 14:26:14



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

### Band I 11n(HT40) CH46

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
15111 1	-46.18	0	3	2	PK	51.08	70.26	19.18		Pass
10441.1	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21007.9	-46.51	0	3	2	PK	50.75	70.26	19.51		Pass
21907.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5212.0	7.31	0	3	2	PK	104.57	N/A	N/A	Noto 1	N/A
5213.9	-17.54		3	2	AV	79.72	N/A	N/A	NOLE I	N/A

### Test Plots

### Band I 11n(HT40) CH46, SPURIOUS 1 GHz ~ 25 GHz



Date: 15,SEP.2015 14:27:02



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band I 11ac(HT20) CH36

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
12200.0	-48.42	0	3	2	PK	48.84	70.26	21.42		Pass
13209.9	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
15955 2	-41.94	0	3	2	PK	55.32	70.26	14.94		Pass
10000.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5170	11.32	0	3	2	PK	108.58	N/A	N/A	Noto 1	N/A
5172	-13.53	U	3	2	AV	83.73	N/A	N/A	NOLE I	N/A

### Test Plots



Date: 14.SEP.2015 21;24:56



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

### Band I 11ac(HT20) CH44

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Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
10006 5	-49.52	0	3	2	PK	47.74	70.26	22.52		Pass
10990.5	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
00100 7	-48.86	0	3	2	PK	48.40	70.26	21.86		Pass
22103.7	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5210.0	12.19	0	3	2	PK	109.45	N/A	N/A	Noto 1	N/A
5219.9	-12.66	U	3	2	AV	84.60	N/A	N/A	note i	N/A

# Test Plots

# Band I 11ac(HT20) CH44, SPURIOUS 1 GHz ~ 25 GHz



Date: 14.SEP.2015 21:25:34



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band I 11ac(HT20) CH48

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
10590.1	-45.54	0	3	2	PK	51.72	70.26	18.54		Pass
12560.1	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
10120 5	-45.54	0	3	2	PK	51.72	70.26	18.54		Pass
19130.5	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5227.0	10.8	0	3	2	PK	108.06	N/A	N/A	Noto 1	N/A
5257.9	-14.05	0	3	2	AV	83.21	N/A	N/A	Note 1	N/A

### Test Plots



Date: 14.SEP.2015 21:26:27



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band I 11ac(HT40) CH38

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
12290.0	-46.86	0	3	2	PK	50.40	70.26	19.86		Pass
13309.9	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21715 9	-46.76	0	3	2	PK	50.50	70.26	19.76		Pass
21713.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5201.0	9.06	0	3	2	PK	106.32	N/A	N/A	Noto 1	N/A
5201.9	-15.79	U	3	2	AV	81.47	N/A	N/A	note i	N/A

### Test Plots



Date: 14.SEP.2015 21;34:36



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

# Band I 11ac(HT40) CH46

(										
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
15177 1	-44.98	0	3	2	PK	52.28	70.26	17.98		Pass
15477.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
01071 0	-44.68	0	3	2	PK	52.58	70.26	17.68		Pass
210/1.0	N/A	U	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5210.0	8.23	0	3	2	PK	105.49	N/A	N/A	Noto 1	N/A
5219.9	-16.62	U	3	2	AV	80.64	N/A	N/A	NOLE 1	N/A

### Test Plots





Date: 14.SEP.2015 21:35:24



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band I 11ac(HT80) CH42

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
16241.0	-42.52	0	3	2	PK	54.74	70.26	15.52		Pass
10341.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21001.9	-46.42	0	3	2	PK	50.84	70.26	19.42		Pass
21901.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5100	6.09	0	3	2	PK	103.35	N/A	N/A	Noto 1	N/A
5190	-18.76	0	3	2	AV	78.50	N/A	N/A		N/A

### Test Plots



Date: 14.SEP 2015 21.43:12



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

Band II	11a C	CH52	

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
10706 1	-45.51	0	3	2	PK	51.75	70.26	18.51		Pass
12700.1	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
20102.2	-45.93	0	3	2	PK	51.33	70.26	18.93		Pass
20102.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5267.0	10.73	0	3	2	PK	107.99	N/A	N/A	Note 1	N/A
5267.9	-14.12		3	2	AV	83.14	N/A	N/A	note i	N/A

# Test Plots

#### Band II 11a CH52, SPURIOUS 1 GHz ~ 25 GHz



Date: 14.SEP.2015 21:17:06



Band II 11a CH56

The EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2dBi, whichever is greater.

And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

Danu II Tra C	1150									
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
15940.2	-44.92	0	3	2	PK	52.34	70.26	17.92		Pass
15649.5	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
01017 0	-43.62	0	3	2	PK	53.64	70.26	16.62		Pass
21017.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
E202 0	12.55	0	3	2	PK	109.81	N/A	N/A	Noto 1	N/A
5505.9	-12.30		3	2	AV	84.96	N/A	N/A	NOLE I	N/A

#### Test Plots



Date: 14.SEP.2015 21:17:52



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band II 11a CH64

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
16290.2	-44.31	0	3	2	PK	52.95	70.26	17.31		Pass
10309.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21952 0	-44.12	0	3	2	PK	53.14	70.26	17.12		Pass
21000.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5200.0	11.04	0	3	2	PK	108.30	N/A	N/A	Noto 1	N/A
0309.9	-13.81	0	3	2	AV	83.45	N/A	N/A	NOLE I	N/A

### Test Plots



Date: 14.SEP.2015 21:18:37



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band II 11n(HT20) CH52

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
16252.0	-44.23	0	3	2	PK	53.03	70.26	17.23		Pass
10303.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
24207.2	-44.05	0	3	2	PK	53.21	70.26	17.05		Pass
24397.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5255.0	11.27	0	3	2	PK	108.53	N/A	N/A	Noto 1	N/A
5255.9	-13.58	0	3	2	AV	83.68	N/A	N/A	Note 1	N/A

### Test Plots





Date: 15.SEP.2015 14:19:42



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

# Band II 11n(HT20) CH56

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
10000	-47.1	0	3	2	PK	50.16	70.26	20.10		Pass
12020	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
01071 0	-46.67	0	3	2	PK	50.59	70.26	19.67		Pass
21071.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5207.0	12.74	0	3	2	PK	110.00	N/A	N/A	Noto 1	N/A
5297.9	-12.11		3	2	AV	85.15	N/A	N/A	NOLE I	N/A

### Test Plots

# Band II 11n(HT20) CH52, SPURIOUS 1 GHz ~ 25 GHz



Date: 15,SEP.2015 14:20:22



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band II 11n(HT20) CH64

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
16211.2	-43.71	0	3	2	PK	53.55	70.26	16.71		Pass
10311.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
20122.2	-46.34	0	3	2	PK	50.92	70.26	19.34		Pass
20132.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5215.0	11.44	0	3	2	PK	108.70	N/A	N/A	Noto 1	N/A
5515.9	-13.41	0	3	2	AV	83.85	N/A	N/A	NOLE I	N/A

#### Test Plots



Date: 15 SEP.2015 14:20:59



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

### Band II 11n(HT40) CH54

· · · · · · · · · · · · · · · · · · ·	- / -									
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
16007.0	-45.51	0	3	2	PK	51.75	70.26	18.51		Pass
10207.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
01775 0	-46.11	0	3	2	PK	51.15	70.26	19.11		Pass
21775.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5261.0	7.36	0	3	2	PK	104.62	N/A	N/A	Noto 1	N/A
5201.9	-17.49	U	3	2	AV	79.77	N/A	N/A		N/A

### Test Plots

### Band II 11n(HT40) CH54, SPURIOUS 1 GHz ~ 25 GHz



Date: 15,SEP.2015 14:27:45



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band II 11n(HT40) CH62

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
45774.0	-43.76	0	3	2	PK	53.50	70.26	16.76		Pass
15//1.5	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
01701 0	-45.14	0	3	2	PK	52.12	70.26	18.14		Pass
21701.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5200.0	7.47	0	3	2	PK	104.73	N/A	N/A	Noto 1	N/A
0309.9	-17.38	U	3	2	AV	79.88	N/A	N/A	note i	N/A

#### Test Plots



Date: 15,SEP.2015 14:28:20



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band II 11ac(HT20) CH52

	(									
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
14001 E	-47.67	0	3	2	PK	49.59	70.26	20.67		Pass
14901.5	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21061.9	-45.7	0	3	2	PK	51.56	70.26	18.70		Pass
21901.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5061.0	10.99	0	3	2	PK	108.25	N/A	N/A	Note 1	N/A
5201.9	-13.86	U	3	2	AV	83.40	N/A	N/A	NOLE I	N/A

### Test Plots





Date: 14.SEP.2015 21:27:02



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band II 11ac(HT20) CH56

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
16205.2	-44.48	0	3	2	PK	52.78	70.26	17.48		Pass
10305.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
22500 4	-47.25	0	3	2	PK	50.01	70.26	20.25		Pass
23509.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5207.0	12.11	0	3	2	PK	109.37	N/A	N/A	Noto 1	N/A
5297.9	-12.74	0	3	2	AV	84.52	N/A	N/A	NOLE I	N/A

### Test Plots





Date: 14.SEP.2015 21:27:40



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band II 11ac(HT20) CH64

	(,									
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
16217 0	-44.96	0	3	2	PK	52.30	70.26	17.96		Pass
10317.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
22120 7	-46.49	0	3	2	PK	50.77	70.26	19.49		Pass
22109.7	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
E21E 0	10.89	0	3	2	PK	108.15	N/A	N/A	Note 1	N/A
0010.9	-13.96		3	2	AV	83.30	N/A	N/A	NOLE I	N/A

#### Test Plots





Date: 14.SEP.2015 21:28:26



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band II 11ac(HT40) CH54

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
10000	-46.11	0	3	2	PK	51.15	70.26	19.11		Pass
12020	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
110022 5	-47.61	0	3	2	PK	49.65	70.26	20.61		Pass
110952.5	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5272.0	7.79	0	3	2	PK	105.05	N/A	N/A	Noto 1	N/A
5275.9	-17.06	0	3	2	AV	80.20	N/A	N/A	INDLE I	N/A

### Test Plots





Date: 14.SEP.2015 21:36:05



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band II 11ac(HT40) CH62

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
15750.0	-45.85	0	3	2	PK	51.41	70.26	18.85		Pass
15759.3	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
20120.2	-46.21	0	3	2	PK	51.05	70.26	19.21		Pass
20130.2	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
5207.0	7.25	0	3	2	PK	104.51	N/A	N/A	Noto 1	N/A
5297.9	-17.60		3	2	AV	79.66	N/A	N/A		N/A

### Test Plots





Date: 14.SEP.2015 21;36:42



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band II 11ac(HT80) CH58

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
15007 /	-45.58	0	3	2	PK	51.68	70.26	18.58		Pass
15237.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
22510.6	-44.66	0	3	2	PK	52.60	70.26	17.66		Pass
22519.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5225.0	5.65	0	3	2	PK	102.91	N/A	N/A	Noto 1	N/A
5225.9	-19.20	0	3	2	AV	78.06	N/A	N/A	NOLE I	N/A

### Test Plots





Date: 14.SEP.2015 21:44:00



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band III 11a CH100

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11009 5	-39.77	0	3	2	PK	57.49	70.26	12.77		Pass
11006.5	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21695 0	-45.45	0	3	2	PK	51.81	70.26	18.45		Pass
21000.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5501.0	11.25	0	3	2	PK	108.51	N/A	N/A	Noto 1	N/A
5501.9	-13.60	U	3	2	AV	83.66	N/A	N/A	NOLE I	N/A

### Test Plots



Date: 14.SEP.2015 21:19:19



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band III 11a CH116

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11164.5	-37.94	0	3	2	PK	59.32	70.26	10.94		Pass
	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
23779.3	-47.47	0	3	2	PK	49.79	70.26	20.47		Pass
	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
5585.9	10.9	0	3	2	PK	108.16	N/A	N/A	Note 1	N/A
	-13.95		3	2	AV	83.31	N/A	N/A		N/A

### Test Plots

### Band III 11a CH116, SPURIOUS 1 GHz ~ 25 GHz



Date: 14.SEP.2015 21;20:09



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band III 11a CH140

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11404.4	-38.16	0	3	2	PK	59.10	70.26	11.16		Pass
	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
20132.2	-44.55	0	3	2	PK	52.71	70.26	17.55		Pass
	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
5693.8	12.1	0	3	2	PK	109.36	N/A	N/A	Note 1	N/A
	-12.75		3	2	AV	84.51	N/A	N/A		N/A

### Test Plots



Date: 14.SEP.2015 21:20:53



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band III 11n(HT20) CH100

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
15825.3	-44.34	0	3	2	PK	52.92	70.26	17.34		Pass
	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
21961.8	-46.04	0	3	2	PK	51.22	70.26	19.04		Pass
	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
5507.9	10.86	0	3	2	PK	108.12	N/A	N/A	Noto 1	N/A
	-13.99		3	2	AV	83.27	N/A	N/A	NOLE I	N/A

### Test Plots



Date: 15,SEP.2015 14:21:35



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band III 11n(HT20) CH116

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict	
16377.2	-43.75	0	3	2	PK	53.51	70.26	16.75		Pass	
	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass	
23437.4	-47.42	0	3	2	PK	49.84	70.26	20.42		Pass	
	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass	
5585.9	12.4	0	3	2	PK	109.66	N/A	N/A	Note 1	N/A	
	-12.45		3	2	AV	84.81	N/A	N/A		N/A	

### Test Plots

# Band III 11n(HT20) CH116, SPURIOUS 1 GHz ~ 25 GHz



Date: 15,SEP.2015 14:22:14


And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band III 11n(HT20) CH140

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
16290.2	-44.81	0	3	2	PK	52.45	70.26	17.81		Pass
10309.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21757 9	-44.63	0	3	2	PK	52.63	70.26	17.63		Pass
21757.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5705 Q	11.01	0	3	2	PK	108.27	N/A	N/A	Noto 1	N/A
5705.8	-13.84	U	3	2	AV	83.42	N/A	N/A	note i	N/A

# Test Plots



Date: 15,SEP.2015 14:22:49



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

## Band III 11n(HT40) CH102

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
16247 0	-45.12	0	3	2	PK	52.14	70.26	18.12		Pass
10347.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
22615 6	-47.67	0	3	2	PK	49.59	70.26	20.67		Pass
22015.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5512.0	7.08	0	3	2	PK	104.34	N/A	N/A	Noto 1	N/A
0013.9	-17.77		3	2	AV	79.49	N/A	N/A		N/A

# Test Plots

# Band III 11n(HT40) CH102, SPURIOUS 1 GHz ~ 25 GHz



Date: 15,SEP.2015 14:29:03



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

## Band III 11n(HT40) CH134

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
15001 4	-43.4	0	3	2	PK	53.86	70.26	16.40		Pass
15231.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21055.9	-46.03	0	3	2	PK	51.23	70.26	19.03		Pass
21955.6	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5697 9	5.88	0	3	2	PK	103.14	N/A	N/A	Noto 1	N/A
5007.0	-18.97	0	3	2	AV	78.29	N/A	N/A	NOLE I	N/A

# Test Plots



Date: 15,SEP.2015 14:29:43



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

# Band III 11ac(HT20) CH100

	(					-				
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11009 5	-39.39	0	3	2	PK	57.87	70.26	12.39		Pass
11006.5	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
20000.2	-46.8	0	3	2	PK	50.46	70.26	19.80		Pass
20090.2	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
5501.0	10.82	0	3	2	PK	108.08	N/A	N/A	Note 1	N/A
5501.9	-14.03	0	3	2	AV	83.23	N/A	N/A	Note 1	N/A

# Test Plots

# Band III 11ac(HT20) CH100, SPURIOUS 1 GHz ~ 25 GHz



Date: 14.SEP.2015 21:29:09



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band III 11ac(HT20) CH116

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11150 5	-37.66	0	3	2	PK	59.60	70.26	10.66		Pass
11156.5	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
22000 7	-46.46	0	3	2	PK	50.80	70.26	19.46		Pass
22009.7	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5572.0	10.63	0	3	2	PK	107.89	N/A	N/A	Noto 1	N/A
5575.9	-14.22	0	3	2	AV	83.04	N/A	N/A	NOLE I	N/A

# Test Plots





Date: 14.SEP.2015 21:29:53



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

## Band III 11ac(HT20) CH140

	(					-				
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11202 /	-40.05	0	3	2	PK	57.21	70.26	13.05		Pass
11392.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21702.0	-45.44	0	3	2	PK	51.82	70.26	18.44		Pass
21793.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5600.9	11.38	0	3	2	PK	108.64	N/A	N/A	Note 1	N/A
0099.0	-13.47	0	3	2	AV	83.79	N/A	N/A	Note 1	N/A

# Test Plots





Date: 14.SEP.2015 21:30:54



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

# Band III 11ac(HT40) CH102

	(									
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11050 5	-47.93	0	3	2	PK	49.33	70.26	20.93		Pass
11050.5	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
16265 0	-44.43	0	3	2	PK	52.83	70.26	17.43		Pass
10303.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5501.0	7.01	0	3	2	PK	104.27	N/A	N/A	Note 1	N/A
0001.9	-17.84	U	3	2	AV	79.42	N/A	N/A	NOLE I	N/A

# Test Plots

# Band III 11ac(HT40) CH102, SPURIOUS 1 GHz ~ 25 GHz



Date: 14.SEP.2015 21:37:31



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The limit line is -27 dBm (68.2 dBuV/m@3m).

Note 2: Average measurement was not performed if peak level went lower than the average limit.

Note 3: The harmonic (2th, 3th, 4th, etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise.

## Band III 11ac(HT40) CH134

	· · · · -									
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11244 4	-42.86	0	3	2	PK	54.40	70.26	15.86		Pass
11344.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
10509 /	-46.42	0	3	2	PK	50.84	70.26	19.42		Pass
19596.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5691 9	6.85	0	3	2	PK	104.11	N/A	N/A	Noto 1	N/A
0.1000	-18.00		3	2	AV	79.26	N/A	N/A	note i	N/A

# Test Plots



Date: 14.SEP.2015 21;38:23



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

## Band III 11ac(HT80) CH106

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
16290.2	-42.5	0	3	2	PK	54.76	70.26	15.50		Pass
10309.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21071 0	-46.55	0	3	2	PK	50.71	70.26	19.55		Pass
21071.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5207.0	7.48	0	3	2	PK	104.74	N/A	N/A	Noto 1	N/A
5207.9	-17.37	0	3	2	AV	79.89	N/A	N/A	Note 1	N/A

# Test Plots



Date: 14.SEP.2015 21:44:42



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band IV 11a CH149

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11100 1	-39.59	0	3	2	PK	57.67	70.26	12.59		Pass
11400.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21052 0	-45.87	0	3	2	PK	51.39	70.26	18.87		Pass
21000.0	N/A		3	2	AV	N/A	54.00	N/A	Note 3	Pass
E7/1 0	10.61	0	3	2	PK	107.87	N/A	N/A	Noto 1	N/A
5741.0	-14.24	U	3	2	AV	83.02	N/A	N/A	NOLE I	N/A

# Test Plots

# Band IV 11a CH149, SPURIOUS 1 GHz ~ 25 GHz



Date: 14.SEP.2015 21:22:16



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

Band	IV	11a	CH157	
Dunu		1 I U	011107	

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11551 1	-45.14	0	3	2	PK	52.12	70.26	18.14		Pass
11554.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
16677 1	-45.75	0	3	2	PK	51.51	70.26	18.75		Pass
10077.1	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
E777 0	13.17	0	3	2	PK	110.43	N/A	N/A	Note 1	N/A
0111.0	-11.68	U	3	2	AV	85.58	N/A	N/A	note i	N/A

# Test Plots

# Band IV 11a CH157, SPURIOUS 1 GHz ~ 25 GHz



Date: 14.SEP.2015 21:23:02



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band IV 11a CH161

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
12250.2	-45.7	0	3	2	PK	51.56	70.26	18.70		Pass
12250.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
16205.2	-44.1	0	3	2	PK	53.16	70.26	17.10		Pass
10305.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5705 Q	11.08	0	3	2	PK	108.34	N/A	N/A	Noto 1	N/A
0190.0	-13.77		3	2	AV	83.49	N/A	N/A	NOLE I	N/A

# Test Plots



Date: 14.SEP.2015 21:23:37



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band IV 11n(HT20) CH149

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
12005.0	-45.88	0	3	2	PK	51.38	70.26	18.88		Pass
13905.6	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
22224 7	-45.71	0	3	2	PK	51.55	70.26	18.71		Pass
22321.7	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
57/1 9	11.64	0	3	2	PK	108.90	N/A	N/A	Noto 1	N/A
5741.0	-13.21	0	3	2	AV	84.05	N/A	N/A	NOLE I	N/A

# Test Plots

Rand IV 11n/HT20	CH1/0	SPIRIOUS	1 GH7 ~ 25 GH7
Danu iv ini $(\Pi I Z U)$	00149	, SPURIOUS	



Date: 15.SEP.2015 14:24:06



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

# Band IV 11n(HT20) CH157

2	=•) •.									
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
10000.0	-46.58	0	3	2	PK	50.68	70.26	19.58		Pass
12220.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
10149 5	-45.76	0	3	2	PK	51.50	70.26	18.76		Pass
19140.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5777 0	11.48	0	3	2	PK	108.74	N/A	N/A	Noto 1	N/A
0111.0	-13.37	U	3	2	AV	83.89	N/A	N/A	NOLE I	N/A

# Test Plots

# Band IV 11n(HT20) CH157, SPURIOUS 1 GHz ~ 25 GHz



Date: 15.SEP.2015 14:24:48



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band IV 11n(HT20) CH161

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
15447 4	-46.6	0	3	2	PK	50.66	70.26	19.60		Pass
15447.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
01071 0	-45.9	0	3	2	PK	51.36	70.26	18.90		Pass
210/1.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5907 9	10.58	0	3	2	PK	107.84	N/A	N/A	Noto 1	N/A
5607.6	-14.27	0	3	2	AV	82.99	N/A	N/A	NOLE I	N/A

# Test Plots



Date: 15,SEP.2015 14:25:21



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

## Band IV 11n(HT40) CH151

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
15002.2	-44.27	0	3	2	PK	52.99	70.26	17.27		Pass
10903.5	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
00100 7	-47.31	0	3	2	PK	49.95	70.26	20.31		Pass
22123.7	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
E7E2 0	6.93	0	3	2	PK	104.19	N/A	N/A	Note 1	N/A
0700.0	-17.92		3	2	AV	79.34	N/A	N/A		N/A

# Test Plots

# Band IV 11n(HT40) CH151, SPURIOUS 1 GHz ~ 25 GHz



Date: 15,SEP.2015 14:31:03



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

# Band IV 11n(HT40) CH159

20110111										
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
15402.6	-45.95	0	3	2	PK	51.31	70.26	18.95		Pass
15495.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
01707 0	-46.36	0	3	2	PK	50.90	70.26	19.36		Pass
21707.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5702.0	6.93	0	3	2	PK	104.19	N/A	N/A	Noto 1	N/A
0100.0	-17.92		3	2	AV	79.34	N/A	N/A		N/A

# Test Plots

# Band IV 11n(HT40) CH159, SPURIOUS 1 GHz ~ 25 GHz



Date: 15,SEP.2015 14:31:37



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band IV 11ac(HT20) CH149

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11100 1	-38.85	0	3	2	PK	58.41	70.26	11.85		Pass
11400.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21095 9	-47.31	0	3	2	PK	49.95	70.26	20.31		Pass
21900.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5747 9	10.14	0	3	2	PK	107.40	N/A	N/A	Noto 1	N/A
5141.0	-14.71	0	3	2	AV	82.55	N/A	N/A		N/A

# Test Plots



Date: 14.SEP.2015 21:32:11



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band IV 11ac(HT20) CH157

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11570 4	-42.5	0	3	2	PK	54.76	70.26	15.50		Pass
11576.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
10494 4	-45.43	0	3	2	PK	51.83	70.26	18.43		Pass
19404.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5792.9	11.85	0	3	2	PK	109.11	N/A	N/A	Noto 1	N/A
5703.0	-13.00	0	3	2	AV	84.26	N/A	N/A	NOLE I	N/A

# Test Plots





Date: 14.SEP.2015 21:32:53



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

## Band IV 11ac(HT20) CH161

	-(					-				
Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
16217.0	-42.65	0	3	2	PK	54.61	70.26	15.65		Pass
10317.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21905 9	-46.17	0	3	2	PK	51.09	70.26	19.17		Pass
21000.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5001.0	11.61	0	3	2	PK	108.87	N/A	N/A	Note 1	N/A
0.100C	-13.24	0	3	2	AV	84.02	N/A	N/A	Note 1	N/A

# Test Plots





Date: 14.SEP.2015 21;33:48



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

## Band IV 11ac(HT40) CH151

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
11090.2	-47.84	0	3	2	PK	49.42	70.26	20.84		Pass
11960.3	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
10479 4	-44.77	0	3	2	PK	52.49	70.26	17.77		Pass
19470.4	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
57/1 9	6.63	0	3	2	PK	103.89	N/A	N/A	Noto 1	N/A
5741.0	-18.22	0	3	2	AV	79.04	N/A	N/A		N/A

# Test Plots



Date: 14.SEP.2015 21:39:50



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band IV 11ac(HT40) CH159

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
15001 2	-45	0	3	2	PK	52.26	70.26	18.00		Pass
15691.5	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21007.9	-46.22	0	3	2	PK	51.04	70.26	19.22		Pass
21907.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5790.9	7.75	0	3	2	PK	105.01	N/A	N/A	Noto 1	N/A
5769.0	-17.10	0	3	2	AV	80.16	N/A	N/A	Note 1	N/A

# Test Plots





Date: 14.SEP.2015 21:40:32



And the maximum in-band gain of the antenna is 1.1 dBi.

Note 1: The frequency is fundamental signal which can be ignored.

Note 2: Which frequency is not within a restricted band, and its limit line is 20dB below the highest emission level.

Note 3: Average measurement was not performed if peak level went lower than the average limit.

Note 4: The harmonic (2th ,3th , 4th,...etc.) and other spurious are not reported, because those levels are lower than average limit line and background noise

#### Band IV 11ac(HT80) CH155

Frequency (MHz)	Value (dBm)	Ground Reflection Factor (dB)	D (m)	Max gain (dBi)	Detector	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark	Verdict
16292.2	-44.82	0	3	2	PK	52.44	70.26	17.82		Pass
10303.2	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
21010.9	-46.33	0	3	2	PK	50.93	70.26	19.33		Pass
21919.0	N/A	0	3	2	AV	N/A	54.00	N/A	Note 3	Pass
5221.0	5.94	0	3	2	PK	103.20	N/A	N/A	Noto 1	N/A
5231.9	-18.91	U	3	2	AV	78.35	N/A	N/A	NOLE I	N/A

Test Plots



Date: 14.SEP.2015 21:46:20



# Test Frequency: 20 GHz ~ 40 GHz

Note: Only the worst data was reported.

Spectrum	n )								
Ref Level Att	-20,00 dB	m Offset IB SWT	18.50 dB 👄 15 ms 💩	RBW 1 MHz VBW 3 MHz	Mode	Auto Sweep	-		
1Pk Max				_		1			
-30 dBm		-				-			
-40 dBm		-							
-50 dBm					-				
							Mandaline		
-70 dBm		1122							
-80 dBm									
-90 dBm									
-100 dBm—									
-110 dBm—									
Start 25.0	GHz			4001	pts			Stop	40.0 GHz
	)[				Me	asuring		1/1	14.09.2015

Date: 4.SEP.2015 11:30:09



# Cabinet Radiated spurious emission test

Note 1: The symbol of "--" in the table which means not application.

Note 2: For the test data above 1 GHz, According the ANSI C63.4, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note 3: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.



No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(0)	(cm)		
1	43.33	29.16	-18.89	40.0	10.84	Peak	52.00	100	Vertical	Pass
2	82.61	28.29	-24.03	40.0	11.71	Peak	91.20	100	Vertical	Pass
3	145.89	32.40	-23.52	43.5	11.10	Peak	175.30	100	Vertical	Pass
4	181.28	38.36	-22.02	43.5	5.14	Peak	2.50	100	Vertical	Pass
5	282.86	33.14	-18.29	46.0	12.86	Peak	1.40	100	Vertical	Pass
6	479.97	36.64	-13.81	46.0	9.36	Peak	-0.00	100	Vertical	Pass



#### 30 MHz to 1 GHz, ANT H



No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(o)	(cm)		
1	125.52	27.83	-22.52	43.5	15.67	Peak	88.60	100	Horizontal	Pass
2	147.83	34.48	-23.49	43.5	9.02	Peak	66.40	100	Horizontal	Pass
3	180.80	37.75	-22.07	43.5	5.75	Peak	17.00	100	Horizontal	Pass
4	233.16	38.50	-19.51	46.0	7.50	Peak	83.00	100	Horizontal	Pass
5	479.97	38.67	-13.81	46.0	7.33	Peak	138.30	100	Horizontal	Pass
6	960.00	40.12	-5.08	46.0	5.88	Peak	308.00	100	Horizontal	Pass



# 1 GHz to 25 GHz, ANT V



No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(o)	(cm)		
1	1389.90	43.98	-4.45	74.0	30.02	Peak	315.60	100	Vertical	Pass
2	2242.19	46.27	-0.22	74.0	27.73	Peak	108.30	100	Vertical	Pass
3	2987.50	48.00	2.37	74.0	26.00	Peak	358.50	100	Vertical	Pass
4	7168.05	49.99	17.52	74.0	24.01	Peak	0.00	100	Vertical	Pass
5	10806.99	50.67	19.73	74.0	23.33	Peak	12.10	100	Vertical	Pass
6	19189.68	49.81	14.08	74.0	24.19	Peak	51.70	100	Vertical	Pass



# 1 GHz to 25 GHz, ANT H



•	

No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(o)	(cm)		
1	1309.92	43.47	-4.76	74.0	30.53	Peak	167.10	100	Horizontal	Pass
2	2103.72	45.36	-1.46	74.0	28.64	Peak	8.30	100	Horizontal	Pass
3	4516.87	51.94	12.79	74.0	22.06	Peak	224.60	100	Horizontal	Pass
4	8493.34	49.99	17.82	74.0	24.01	Peak	232.70	100	Horizontal	Pass
5	14216.31	49.06	9.61	74.0	24.94	Peak	323.60	100	Horizontal	Pass
6	19209.65	50.65	14.06	74.0	23.35	Peak	301.20	100	Horizontal	Pass



# Band Edge Test Data and Plots

#### Band I 11a CH36

1Pk Max	Av Max		_	_					
Limit (I Line Av 30 dBµV <del>e PK</del>	neck Limit Limit		PA PA PA	88 86 <del>83</del>	N	12[2] 11[1]		2 5.12 3 5.14	4.76 dBµV 27340 GHz 8.97 dBµV 49110 GHz
K Limit		-							
50 dBµV	_								
V Limit									
40 dBµV		And a balance of the	Colonia d	and the		In cash of the			N
30 dBµV	Part Bring Stre						and the second second	A design of the second second	M2
20 dBµV									and
LO dBµV	_		_						_
) dBµV				_	1				-

Date: 4.SEP.2015 20:07:46



# Band I 11n(HT20) CH36

Date: 4.SEP.2015 20:03:55



# Band I 11n(HT40) CH38

THE HIGH CENT	Max				
Limit Chec Line AV Lir 80 dBµV <del>e PK Lin</del>	k nit nit	PA38 PA36 PA33	MI[1] M2[2]	5	40.34 dBpV 149590 GHz 24.88 dBpV 128150 GHz
70 ubuv					
60 dBµV					
V Limit	_				
40 dBµV					F
30 dBµV					M2
20 dBµV-					t
10 dBµV					-
O dbiok					1

Date: 4.SEF.2015 20:12:14

# Band I 11ac(HT20) CH36

1PK Max 2AV Max			
Limit ¢heck Line Ay Limit 30 dBµ <del>Ve P&amp; Limit</del>	PA38 PA36 PA33	M1[1] M2[2]	39.37 dBµ\ 5.149920 GH; 24.88 dBµ\ 5.128150 GH;
K Limit			
50 dBµV-			
V Limit			
40 dBµV	and a lot of a second second		-
30 dBµV-			M2
20 dBµV-			
10 dBµV			
) dBµV			

Date: 4.SEP.2015 20:09:29



# Band I 11ac(HT40) CH38

OIPK MaxO2AV Max			
Limit Check Line AY Limit 80 dB <u>LVe PX Limit</u>	PA38 PA38 PA33	M2[2] M1[1]	24.88 dBpV 5.128150 GHz 40.34 dBpV 5.149590 GHz
K Limit			_
60 dBµV			
V Limit			
40 dBµV		A complete the state of	
30 dBµV			M2
20 dBµV-			
10 dBµV			
) dBµV			-
Start 4.5 GHz	400	11 ptc	ton 5 15 CH

Date: 4.SEF.2015 20:11:03

# Band I 11ac(HT80) CH42

1Pk Max@2Av Max Limit Check Line Av Limit 80 dB/vk-PK Limit 9K Limit 9K Limit 60 dB/v	PA38 PA38 PA39	M2[2] M1[1]	24.74 d8µ\ 5.127990 GHz 40.19 d8µ\ 5.146340 GHz
Limit Check Line AY Limit 80 dBµ <del>Ve PK Limit 70 uBµV- 60 dBµV-</del>	PA38 PA38 PA39	M2[2] M1[1]	24.74 dBµ\ 5.127990 GHz 40.19 dBµ\ 5.146340 GHz
9 <mark>% UBBy</mark>			
60 dBµV			
W Limit			
40 dBµV-	a man in the second stand		M
30 dBµV-			M2
20 dBµV-			
10 dBµV-			
0 dBµV-			
Start 4.5 GHz	4001	pts	Stop 5.15 GHz

Date: 4.SEF.2015 20:13:56



# Band II 11a CH64

1Pk Maxe	2Av Max							_
Limit ( Line A 80 dBµV <del>a P</del>	theck V Limit <del>X Limit</del>		PA38 PA38 PA33	M	11[1]		42 5.3590 25 5.3723	15 dBp/ 1860 GH: .57 dBp/ 8930 GH:
K Limit			_	-				_
60 dBµV							_	-
V Limit Su ubuv M1								
40 dPre/		and the second second	-	a les gradai	an east of	- Constants	-	
30 dBµV	M2							
20 dBµV								
10 dBµV				-				
D dBiA/								_

Date: 4.SEF.2015 20:16:09

# Band II 11n(HT20) CH64



Date: 4.SEF.2015 20:20:27



# Band II 11n(HT40) CH62

OTEK Maxo	2Av Max			
Limit ( Line A 80 dBµ\ <del>/; P</del> i	theck Y Limit <del>&amp; Limit</del>	раз8. Разб Разб	M2[2] M1[1]	24.93 dBµ\ 5.4481920 GH 43.77 dBµ\ 5.3529560 GH
VU UBUV-				
60 dBµV				
V Limit				
ed danv-				
30 dBµV				M2
20 dBµV				
10 dBµV				
0.00.00				

Date: 4.SEP.2015 20:27:06

# Band II 11ac(HT20) CH64

1Pk Max@2Av Max			
Limit ¢heck Line AY Limit 0 dBµX <del>e PX Limit</del>	РА38 РА36 РА33	M2[2] M1[1]	25.87 dBµ\ 5.3717610 GH; 41.87 dBµ\ 5.3521030 GH;
C Limit U UBUV			
0 dвµv-	_		
/ Limit			
11 0 dвµV			
0 dBµV-			
0 dвµV-			
I dBuV			

Date: 4.SEF.2015 20:21:46



## Band II 11ac(HT40) CH62

OIPK MaxO2AV Max			
Limit ¢heck Line A¥ Limit 80 dBµX <del>e PX Limit</del>	ра <u>88</u> Равб <del>Ра</del> вз	M1[1] M2[2]	39.10 dBµ\ 5.3519660 GH: 24.60 dBµ\ 5.3500410 GH:
PK Limit			
60 dвµV			
AV Limit			
M1 40 dBµV			
30 dBµV-			
20 dBµV-			
10 dBµV			
0 dBub/			

Date: 4.SEF.2015 20:28:44

# Band II 11ac(HT80) CH58



Date: 4.SEP.2015 20:13:56



# Band III 11a CH100

OTEK Maxe	2Av Max							
Limit ( Line A 80 dBµV <del>c P</del>	theck V Limit K Limit	PA PA PA	38 36 <del>33</del>	M M	2[2] 1[1]		2 5.44 3 5.37	4.61 dBpV 75590 GHz 7.39 dBpV 11110 GHz
PK Limit 70 ubµV—		 		_				
60 dBµV		 _	_	_				
AV Limit Su ubµV—								-
40 dBµV—	M1 Y		and the second second					Sec. 12
30 dBµV—							M2	
20 dBµV-								
10 dBµV		 		-		-		
o do. At								

Date: 4.SEF.2015 20:17:47

# Band III 11a CH140

10 s • VBW 1 MHz PA3S PA3S PA3S	Mode Auto	Sweep Inp	ut AC		
PASS PASS PASS					
PA35 PA36 PA33					
PABS PABS PABS					
PASS PASS					
PABS					
	-				
	-				
- Inclusion Installation	Sector 19	maharmana	and hid the sta	والم والترسالة	-lula
	-				
		1			
	-				_
400	01 pts			Stop 5	.85 GHz
	40	4001 pts	4001 pts	4001 pts	4001 pts Stop 5

Date: 22.SEP.2015 17:48:54



# Band III 11n(HT20) CH100

mit check PA38 M1[1] 37.71 dBµV   ne AV Limit PA38 M1[1] 37.71 dBµV   Ve Pt Limit PA38 M1[2] 24.86 dBµV   V PA39 M1[2] 24.86 dBµV   V V S.4470240 GHz 24.86 dBµV   V V S.4480820 GHz S.4480820 GHz   V V V M1   V V V M1   V V V M1   V V V M1   V V V M1	01Pk Max@2Av Max			
	Limit Check Line AV Limit 80 dBµ <del>Ve PK Limit</del>	PA38 PA36 <del>PA33</del>	M1[1] 	37,71 dBµV 5.4477240 GHz 24.86 dBµV 5.4480820 GHz
	PK Limit			
	60 dBµV-			
	W Limit			
	40 dBµV	and the second second		MI
	30 dBµV			Ma
N	20 dвµV-			
	10 dBµV			
	0 dBµV			
	20 dBµV			

Date: 4.SEP.2015 20:19:05

# Band III 11n(HT40) CH140

SGL PS		10.203-2225		10.		
01Pk Max⊙2Av Max						
Limit Check	PASS					
80 dBµV <del>e 14E bandedge AV</del>	PA33	-				-
SE bandedge PK					-	-
60 dBµV						
in the second of the second seco	in the labor labor	Sector 199	and standard	and the longer	المحل فالمرب ال	a highly
LSE bandedge AV						
40 dBpV						
30 dBµV		-				-
20 dBµV		-				
10 dBµV			-			_
0 dBµV					_	
						05.011
start 5.725 GHz	401	11 pts	_		stop a	.85 GHZ

Date: 22.SEP.2015 17:49:00


#### Band III 11nHT40) CH102

Ref Leve	n 1 90.00 dBj 20 i	db <b>swt</b>	● RBW 20 s ● VBW	1 MHz 1 MHz <b>Mode</b>	a Auto Sweep	Input AC		
01Pk Maxe	2Av Max							-
Limit ( Line A 80 dB(A <del>): P</del>	theck V Limit K Limit		PABI PABI PABI		M1[1] —_M2[2]		5.3	37.25 dBμV 567850 GHz 24.04 dBμV 614510 GHz
PK Limit	-	-			_			
60 dвµV					_	_		
AV Limit Su usµV—		-	-					
40 dBµV	MI	-						
30 dBµV-	12							
20 dBµV—								
10 dBµV					-		-	
0 dBµV							-	
Start 5.35	GHz			4001 pts			Sto	p 5.46 GHz
						<b>ALLELEE</b>	444	01.00 3915

Date: 4.SEP.2015 20:32:00

#### Band III 11n(HT40) CH134



Date: 22.SEF.2015 17:50:52



# Band III 11ac(HT20) CH100

01Pk Max02Av Max			
Limit ¢heck Line AV Limit 80 dBµ <del>Ve PK Limit</del>	ра <mark>3</mark> 8 разв разз	M1[1] 	37.17 dBμ\ 5.3599940 GHz 24.93 dBμ\ 5.4481920 GHz
PK Limit			
60 dBµV			
W Limit Su ubyv			
40 dBµV M1			
30 dBµV-			Ma
20 dBµV			
10 dBµV			
0 dBµV			
Chart E OE OUIS			

Date: 4.SEF.2015 20:25:38

# Band III 11ac(HT20) CH140

LPk Maxo2Av Max	1		 	
Limit Check Line 15E bandedge PK	PA55 PA55			
APPle TOC DUILLENGE HY	1400			
E bandedge PK				
) dBµV		-		
والمعادية المحصوص والمحصوص والم	An Income States	ALTER AND	 -	
E bandedge AV				
лавро		-		
) dвµV			-	
) dвµV		_		
) dвµV			 -	

Date: 22.SEF.2015 17:49:50



# Band III 11ac(HT40) CH102

1Pk Max@2Av Ma	ж				
Limit Check Line Ay Limit 30 dBµX <del>e PK Limit</del>		РА <u>38</u> РА <u>36</u> РА <u>33</u>	M2[2] M1[1]	5	24.08 dBµ\ .3604890 GH: 37.28 dBµ\ .3987590 GH:
K Limit /u ubuv					
50 dвµV					
V Limit					-
40 dBµV		MI			
30 dBµV-M2					
20 dBµV-					
10 dBµV					-
0 dBuV			1		-

Daté: 4.SEP.2015 20:30:22

# Band III 11ac(HT40) CH134

91Pk Max@2Av Max						
Limit Check	PASS					
Line 15E bandedde PK	PABS	11 11				
so agans the permeade we	PABS					
		-			-	
se bandeoge PK						
60 dBµV-		-				
	and the second s	a come	-	and the second second		
5E bandedge AV		-				
40 авру-		-				
30 dBµV-						
20 dBhA						
10 49:44						
2 dBub/						
o uppy						
						1.00
Start 5.725 GHz	40	01 pts			Stop 5	.85 GHz

Date: 22.SEF.2015 17:51:32



# Left Band III 11ac(HT80) CH106

JIPK Maxo	2Av Max								
Limit ( Line A 80 dBµV <del>e P</del>	theck V Limit K Limit		PA PA PA	88 86 <del>33</del>	M M	1[1] 2[2]		5.41	37.20 dBpV 134680 GHz 24.03 dBpV 529080 GHz
VU UBUV-	-	-		-					
60 dBµV			_				-	-	
V Limit				-			-	-	
40 dBµV	ani an			and a second	M1.	in the first of		0.00	
30 dBµV	M2								
20 dBµV									
10 dBµV							-		
0 dBi//				-				-	-

Date: 4.SEP.2015 20:35:43

## Right Band III 11ac(HT80) CH106

1Pk Max@2Av Max				
Limit ¢heck Line 15E bandedge PK. 80 dBl\ <del>\k 15E bandedge AV</del>	PA38 PA38 PA38			
SE bandedge PK				
50 dBµV				
55 handedoe AV	and the second second	Production of the second		
10 GRUA-				
30 dBµV-	-	-		 
20 dBµV		_		 
0 dBµV	_	-	-	 
D dBuV				

Date: 22.SEP.2015 17:52:37



# Band IV 11a CH149

Ref Level 90.00 dBµV	RBW 1 MHz	Made tota Co.	and Innut 10	
PS	JS W YBW I MHZ	MODE AUTO SW	eep input AC	
1Pk Maxo2Av Max				2
Limit Check Line 15E bandedge PK	PASS PASS			
O OTHE THE DEMOSPILE HA	PADO			
SE bandedge PK				
50 dBµV				
55 bandedge AV	and the second second second	Land Mr. Button martine of the B	and the second design of the	and the second second second
tu abba				
30 dBµV-			-	
20 dвµV			_	
lo dBµV				
) dBµV				
start 5.6 GHz	40	01 pts		Stop 5.725 GHz

Date: 22.8EF.2015 17:54:45

# Band IV 11a CH165

Limit thack	nabo	1 1	1 1
Line 15E bandedde PK	PABS		
0 dBlive 10E bandedge AV	PA33		
SE handedge PK		-	 
	a company		
5E bandedge AV			
Ю dвµV			_
10 dBµV		-	
D dbia/			
.0 dBµV	-		
) dBµV		_	 

Date: 22.SEP.2015 18:03:51



# Band IV 11n(HT20) CH149

Ref Level 90.00 dBuV	RBW 1 MHz			
Att 30 dB = SWT 10	s 🖷 VBW 1 MHz I	Mode Auto Swe	ep Input AC	
1Pk Max@2Av Max	6 T.C.			
Limit ¢heck Line 15E bandedge PK 80 dBµ <del>Ve 15E bandedge AV</del>	РАЗВ РАЗВ <del>Разз</del>			
SE bandedge PK				
60 dBµV	Service 2			
to do a la sul de la		fragilities (spin)	A COLORED BY THE OWNER OF THE OWN	and the second se
SE bandedge AV		1 m		
40'dBpV-				
30 dBµV		-	_	
20 dвµv				
10 dBµV				
) dBµV				
Start 5.6 GHz	400	L pts		Stop 5.725 GHz

Date: 22.SEP.2015 17:55:20

# Band IV 11n(HT40) CH165

Att 30 dB SWT 10	s VBW 1 MHz M	ode Auto Sweep I	nput AC	
PS				
1Pk Max@2Av Max		1	1 1	
Limit Check	PASS			
Line 15E bandedge PK.	PASS			
on achie the neuronde HA	PADS			
70 40.4				
SE bandedge PK				
co-down				
00 dBpv				
and the state of the second state of the secon	and the state of the state of the state	mild maker mourse	Name and a state of the second	and the state of the state
ESE bandedge AV				
40 dBµV-				
30 dBµV				
20 dBi//				
10 d0/4/				
10 06hA-				
0 dBµV-				
CE 5 925 CH2	4001	nts		Span 150 0 MHz

Date: 22.SEP.2015 18:04:20



# Band IV 11nHT40) CH151

Spectrum Receiver (	x			
Ref Level 90.00 dBµV   Att 30 dB ■ SWT 10   PS 30 dB ■ SWT 10	■ RBW 1 MHz s ■ VBW 1 MHz Mo	de Auto Sweep Inpu	t AC	
1Pk Max@2Av Max				1
Limit Check Line 15E bandedge PK 80 dBµV <del>e 10E bandedge AV</del>	РАВ8 РАВ8 РАВ3			
SE bandedge PK				
60 dBµV-				1.00.00
5E bandedge AV				
40 dBµV				
30 dBµV			-	-
20 dBµV			-	
10 dBµV-			-	
0 dBµV			_	
Start 5.6 GHz	4001 p	ts	Stop	5.725 GHz
JI.			444	0000

Date: 22.SEP.2015 17:58:03

# Band IV 11n(HT40) CH159

Ref Level 90.00 dBµV	RBW 1 MHz	1.1.1.1.1.1.1		-		1.
Att 30 dB - SWT 10	s 🖷 VBW 1 MHz	Mode Auto !	Sweep In	out AC		
PS		1. 1. A. 1. 7. C.				
01Pk Max⊚2Av Max	1.1.0°					
Limit Check	PAB8					
Line 15E bandedge PK.	PABB					
80 d8µVe 10E bandedge AV	PABS	-				
TO HOLAR		_				
ISE bandedge PK						
60 daux/						
de appy						
والمرجع والمحاجب المرجع والمحاج والمحاج والمالية		ورماده والقع والق	denie wierweise			-
15E bandedge AV						
40 dBµV-						
30 dBuV						_
20 dBió/						
20 0000						
10 dBµV-						
0 dBµV		-	-			
CE 5.925 GHz	40	01 nts			Snan 1	50.0 MHz
W	10				a point and	

Date: 22.SEP.2015 18:07:15

# Band IV 11ac(HT20) CH149

Spectrum Receiver (	X			E ⊂
Ref Level 90.00 dBµV Att 30 dB ■ SWT 10 PS	■ RBW 1 MHz ) s ■ VBW 1 MHz Md	ode Auto Sweep	Input AC	
1Pk Max@2Av Max				
Limit Check Line 15E bandedge PK. 30 dBµ <del>Ve 19E bandedge AV</del>	PASS PASS PA33			
SE bandedge PK				
i0 dBµV				
5E bandedge AV		and the local diversion of the state of the	terre i dente de la contra de la c	and the second
ю авру				
IO dBUV			-	
ю авил-				
0 dBµV			-	
i dBμV				
start 5.6 GHz	4001 r	ots		Stop 5.725 GHz
J(				

Date: 22.SEP.2015 17:55:56

#### Band IV 11ac(HT20) CH165

Span 150.0 MHz

Date: 22.SEP.2015 18:04:40



# Band IV 11ac(HT40) CH151

Spectrum Receiver	×			
Ref Level 90,00 dBµV Att 30 dB = SWT 10	● RBW 1 MHz 0 s ● VBW 1 MHz Mod	e Auto Sweep Inpu	t AC	
1Pk Max@2Av Max				
Limit Check Line 15E bandedge PK 80 dBJW <del>e 16E bandedge AV</del>	РА38 РА38 РА33			
ISE bandedge PK			-	
60 dBµV	-	and a second second		1 Martin
55 bandedge AV				
40 dBµV				
30 dBµV			-	-
20 dBµV				-
10 dBµV				
0 dBµV				-
Start 5.6 GHz	4001 pt	s	Stop	5.725 GHz
			440	

Date: 22.SEF.2015 17:58:03

Ref Level 90.00 dBµV	RBW 1 MHz	de la second	and Int		
Att 30 dB - SWT 10	)s 🖷 VBW 1 MHz	Mode Auto S	weep Inpu	it AC	
1Pk Max@2Av Max					
Limit Check	PABB				
Line 15E bandedge PK	PABE				
o detre The Demoedge HA	PABS				
SE bandedge PK					
O dBpy					
		- and the second	and in surgery of	a second and the second	
SE bandedge AV					
O GBDA					
0 08µv				101	
no dpuó/					
0 060V					
D dB/W					
0 000					
dpu)/					1
( db) V					

# Band IV 11ac(HT40) CH159



# Left Band IV11ac(HT80) CH155

Spectrum Receiver (	8			
Att 30 dB SWT 1 PS	● RBW 1 MHz 0 s ● VBW 1 MHz M	ode Auto Sweep	Input AC	
1Pk Max@2Av Max				
Limit Check Line 15E bandedge PK. 30 dBµV <del>e 19E bandedge AV</del>	РАЗВ РАЗВ РАЗЗ			
5E bandedge PK				
io dBµV				A Limited
E bandedge AV				
0 dBuV-				
0 dBµV			-	
0 dвµV			-	
0 dBµV				
dBµV				
tart 5 6 GHz	4001	nts		Ston 5 725 CHz
cure one unit	4001	1	Street and	500p 5.720 GHz

Date: 22.SEP.2015 17:58:40

# Right Band IV11ac(HT80) CH155

Spectrum Receiver	×				
Ref Level 90.00 dBµV	RBW 1 MHz	and and and	and Only		
Att 30 dB SWT	10 s 🖷 VBW 1 MHz	Mode Auto S	Sweep Input	AC	
PS					
1Pk Maxo2Av Max					
Limit Check	PASS				
Line 15E bandedge PK	PABS				
BO dBble 10E bandedge AV	PABB	+			
SE bandedge PK					
A					
00 08pV		-	-		1
	A CONTRACTOR OF	State Street and a state	indiana hiteration		and the second s
SE bandedge AV					
40 dBuV		-			-
Sec. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19					
30 dBµV		-		-	
20 dBill		-			
CO ODDA					
10 dBµV	-	-	-	-	-
doual					1.
naph.	· · · · · · · · · · · · · · · · · · ·				
	40	01 ptc			150 0 MUS
1 0.920 GHZ	-+0	ur pes		apar	1 100'0 MHS

Date: 22.SEP.2015 18:11:53



# A.8 Frequency Stability

#### Measurement Data (the worst channel)

# Band I:

#### Voltage vs. Frequency Stability (11a CH44)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5200	5200.010214	1.96
20	3.8	5200	5200.014650	2.82
	3.6	5200	5200.017016	3.27

## Temperature vs. Frequency Stability (11a CH44)

Test Co	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5200	5200.015496	2.98
	0	5200	5200.013517	2.60
	10	5200	5200.01398	2.69
3.8	20	5200	5200.015286	2.94
	30	5200	5200.008821	1.70
	40	5200	5200.035657	6.86
	45	5200	5200.035672	6.86

#### Voltage vs. Frequency Stability (11n(HT20) CH44)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5200	5200.014012	2.69
20	3.8	5200	5200.016545	3.18
	3.6	5200	5200.016170	3.11

## Temperature vs. Frequency Stability (11n(HT20) CH44)

Test Co	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5200	5200.015438	2.97
	0	5200	5200.015316	2.95
	10	5200	5200.015483	2.98
3.8	20	5200	5200.011158	2.15
	30	5200	5200.006987	1.34
	40	5200	5200.011247	2.16
	45	5200	5200.017547	3.37



## Voltage vs. Frequency Stability (11n(HT40) CH38)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5190	5190.01421	2.74
20	3.8	5190	5190.01658	3.19
	3.6	5190	5190.011473	2.21

## Temperature vs. Frequency Stability (11n(HT40) CH38)

Test Co	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5190	5190.013488	2.60
	0	5190	5190.013547	2.61
	10	5190	5190.014763	2.84
3.8	20	5190	5190.045642	8.79
	30	5190	5190.008741	1.68
	40	5190	5190.015689	3.02
	45	5190	5190.015234	2.94

#### Voltage vs. Frequency Stability (11ac(HT20) CH44)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5200	5200.012141	2.33
20	3.8	5200	5200.014321	2.75
	3.6	5200	5200.011581	2.23

## Temperature vs. Frequency Stability (11ac(HT20) CH44)

Test Conditions		Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5200	5200.012281	2.36
	0	5200	5200.016687	3.21
	10	5200	5200.011291	2.17
3.8	20	5200	5200.013658	2.63
	30	5200	5200.018081	3.48
	40	5200	5200.012138	2.33
	45	5200	5200.022014	4.23



## Voltage vs. Frequency Stability (11n(HT40) CH38)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5190	5190.011224	2.16
20	3.8	5190	5190.016354	3.15
	3.6	5190	5190.010047	1.94

## Temperature vs. Frequency Stability (11n(HT40) CH38)

Test Co	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5190	5190.013158	2.54
	0	5190	5190.015216	2.93
	10	5190	5190.012139	2.34
3.8	20	5190	5190.011548	2.23
	30	5190	5190.008809	1.70
	40	5190	5190.011124	2.14
	45	5190	5190.016578	3.19

# Voltage vs. Frequency Stability (11ac(HT80) CH42)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5210	5210.01416	2.72
20	3.8	5210	5210.011689	2.24
	3.6	5210	5210.010617	2.04

#### Temperature vs. Frequency Stability (11ac(HT80) CH42)

Test Co	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5210	5210.016452	3.16
	0	5210	5210.013451	2.58
	10	5210	5210.010387	1.99
3.8	20	5210	5210.015534	2.98
	30	5210	5210.008897	1.71
	40	5210	5210.009977	1.91
	45	5210	5210.014579	2.80



# Band II:

# Voltage vs. Frequency Stability (11a CH56)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5280	5280.011457	2.17
20	3.8	5280	5280.010596	2.01
	3.6	5280	5280.017804	3.37

## Temperature vs. Frequency Stability (11a CH56)

Test Co	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5280	5280.015466	2.93
	0	5280	5280.012158	2.30
	10	5280	5280.010571	2.00
3.8	20	5280	5280.013896	2.63
	30	5280	5280.007008	1.33
	40	5280	5280.012315	2.33
	45	5280	5280.013254	2.51

#### Voltage vs. Frequency Stability (11n(HT20) CH56)

Test Cor	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5280	5280.017467	3.31
20	3.8	5280	5280.015372	2.91
	3.6	5280	5280.013310	2.52

## Temperature vs. Frequency Stability (11n(HT20) CH56)

Test Conditions		Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5280	5280.019919	3.77
	0	5280	5280.012985	2.46
	10	5280	5280.013093	2.48
3.8	20	5280	5280.010468	1.98
	30	5280	5280.014408	2.73
	40	5280	5280.014111	2.67
	45	5280	5280.012742	2.41



## Voltage vs. Frequency Stability (11n(HT40) CH54)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5270	5270.018825	3.57
20	3.8	5270	5270.019563	3.71
	3.6	5270	5270.012403	2.35

## Temperature vs. Frequency Stability (11n(HT40) CH54)

Test Co	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5270	5270.018511	3.51
	0	5270	5270.016504	3.13
	10	5270	5270.011168	2.12
3.8	20	5270	5270.019220	3.65
	30	5270	5270.018706	3.55
	40	5270	5270.013485	2.56
	45	5270	5270.012043	2.29

#### Voltage vs. Frequency Stability (11ac(HT20) CH56)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5280	5280.010265	1.94
20	3.8	5280	5280.011117	2.11
	3.6	5280	5280.018187	3.44

# Temperature vs. Frequency Stability (11ac(HT20) CH56)

Test Conditions		Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5280	5280.018917	3.58
	0	5280	5280.016373	3.10
	10	5280	5280.012135	2.30
3.8	20	5280	5280.013672	2.59
	30	5280	5280.015503	2.94
	40	5280	5280.019122	3.62
	45	5280	5280.010988	2.08



## Voltage vs. Frequency Stability (11ac(HT40) CH54)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5270	5270.012686	2.41
20	3.8	5270	5270.011862	2.25
	3.6	5270	5270.017001	3.23

## Temperature vs. Frequency Stability (11ac(HT40) CH54)

Test Co	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5270	5270.014188	2.69
	0	5270	5270.018499	3.51
	10	5270	5270.015219	2.89
3.8	20	5270	5270.011153	2.12
	30	5270	5270.010592	2.01
	40	5270	5270.013785	2.62
	45	5270	5270.017462	3.31

## Voltage vs. Frequency Stability (11ac(HT80) CH58)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5290	5290.018766	3.55
20	3.8	5290	5290.019924	3.77
	3.6	5290	5290.014704	2.78

## Temperature vs. Frequency Stability (11n(HT80) CH42)

Test Co	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5290	5290.011910	2.25
	0	5290	5290.016436	3.11
	10	5290	5290.018989	3.59
3.8	20	5290	5290.016269	3.08
	30	5290	5290.010085	1.91
	40	5290	5290.012528	2.37
	45	5290	5290.015557	2.94



# Band III:

## Voltage vs. Frequency Stability (11a CH116)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5580	5580.012895	2.31
20	3.8	5580	5580.015659	2.81
	3.6	5580	5580.017556	3.15

## Temperature vs. Frequency Stability (11a CH116)

Test Co	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5580	5580.013404	2.40
	0	5580	5580.014910	2.67
	10	5580	5580.016176	2.90
3.8	20	5580	5580.018439	3.30
	30	5580	5580.010149	1.82
	40	5580	5580.011000	1.97
	45	5580	5580.019258	3.45

## Voltage vs. Frequency Stability (11n(HT20) CH116)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5580	5580.011910	2.13
20	3.8	5580	5580.018836	3.38
	3.6	5580	5580.016515	2.96

#### Temperature vs. Frequency Stability (11n(HT20) CH116)

Test C	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5580	5580.012556	2.25
	0	5580	5580.019156	3.43
	10	5580	5580.010321	1.85
3.8	20	5580	5580.017363	3.11
	30	5580	5580.016466	2.95
	40	5580	5580.013221	2.37
	45	5580	5580.015754	2.82



## Voltage vs. Frequency Stability (11n(HT40) CH102)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5510	5510.015557	2.82
20	3.8	5510	5510.014401	2.61
	3.6	5510	5510.016106	2.92

#### Temperature vs. Frequency Stability (11n(HT40) CH102)

Test Co	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5510	5510.019992	3.63
	0	5510	5510.018951	3.44
	10	5510	5510.011416	2.07
3.8	20	5510	5510.015656	2.84
	30	5510	5510.016594	3.01
	40	5510	5510.012724	2.31
	45	5510	5510.017268	3.13

#### Voltage vs. Frequency Stability (11ac(HT20) CH116)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5580	5580.017457	3.13
20	3.8	5580	5580.010847	1.94
	3.6	5580	5580.015112	2.71

# Temperature vs. Frequency Stability (11ac(HT20) CH116)

Test Conditions		Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5580	5580.013450	2.41
	0	5580	5580.015521	2.78
	10	5580	5580.017858	3.20
3.8	20	5580	5580.010268	1.84
	30	5580	5580.010360	1.86
	40	5580	5580.015506	2.78
	45	5580	5580.018460	3.31



## Voltage vs. Frequency Stability (11ac(HT40) CH102)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5510	5510.013625	2.47
20	3.8	5510	5510.019015	3.45
	3.6	5510	5510.019447	3.53

## Temperature vs. Frequency Stability (11ac(HT40) CH102)

Test Co	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5510	5510.015305	2.78
	0	5510	5510.010063	1.83
	10	5510	5510.014742	2.68
3.8	20	5510	5510.014603	2.65
	30	5510	5510.019014	3.45
	40	5510	5510.010868	1.97
	45	5510	5510.013743	2.49

#### Voltage vs. Frequency Stability (11ac(HT80) CH106)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5530	5530.015052	2.72
20	3.8	5530	5530.012481	2.26
	3.6	5530	5530.018508	3.35

## Temperature vs. Frequency Stability (11ac(HT80) CH106)

Test Conditions		Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5530	5530.015529	2.81
	0	5530	5530.014294	2.58
	10	5530	5530.012035	2.18
3.8	20	5530	5530.017475	3.16
	30	5530	5530.018026	3.26
	40	5530	5530.015013	2.71
	45	5530	5530.017916	3.24



# Band IV:

# Voltage vs. Frequency Stability (11a CH157)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5785	5785.016988	2.94
20	3.8	5785	5785.014238	2.46
	3.6	5785	5785.018002	3.11

## Temperature vs. Frequency Stability (11a CH157)

Test Co	onditions	Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5785	5785.010729	1.85
	0	5785	5785.010050	1.74
	10	5785	5785.013702	2.37
3.8	20	5785	5785.014544	2.51
	30	5785	5785.019886	3.44
	40	5785	5785.018382	3.18
	45	5785	5785.013717	2.37

## Voltage vs. Frequency Stability (11n(HT20) CH157)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5785	5785.015565	2.69
20	3.8	5785	5785.016326	2.82
	3.6	5785	5785.012066	2.09

## Temperature vs. Frequency Stability (11n(HT20) CH157)

Test Conditions		Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5785	5785.016399	2.83
	0	5785	5785.014566	2.52
	10	5785	5785.017959	3.10
3.8	20	5785	5785.013333	2.30
	30	5785	5785.019612	3.39
	40	5785	5785.018767	3.24
	45	5785	5785.014186	2.45



## Voltage vs. Frequency Stability (11n(HT40) CH151)

Test Co	nditions	Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5755	5755.011274	1.96
20	3.8	5755	5755.014426	2.51
	3.6	5755	5755.017503	3.04

## Temperature vs. Frequency Stability (11n(HT40) CH151)

Test Conditions		Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
3.8	-10	5755	5755.015051	2.62
	0	5755	5755.010705	1.86
	10	5755	5755.013297	2.31
	20	5755	5755.016415	2.85
	30	5755	5755.012089	2.10
	40	5755	5755.011787	2.05
	45	5755	5755.010117	1.76

#### Voltage vs. Frequency Stability (11ac(HT20) CH157)

Test Conditions		Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5785	5785.014478	2.50
20	3.8	5785	5785.018521	3.20
	3.6	5785	5785.018023	3.12

# Temperature vs. Frequency Stability (11ac(HT20) CH157)

Test Conditions		Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
3.8	-10	5785	5785.012420	2.15
	0	5785	5785.015254	2.64
	10	5785	5785.017279	2.99
	20	5785	5785.018393	3.18
	30	5785	5785.016234	2.81
	40	5785	5785.018694	3.23
	45	5785	5785.014506	2.51



## Voltage vs. Frequency Stability (11ac(HT40) CH151)

Test Conditions		Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5755	5755.014191	2.47
20	3.8	5755	5755.019688	3.42
	3.6	5755	5755.017775	3.09

## Temperature vs. Frequency Stability (11ac(HT40) CH151)

Test Conditions		Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
3.8	-10	5755	5755.011276	1.96
	0	5755	5755.018558	3.22
	10	5755	5755.012521	2.18
	20	5755	5755.014203	2.47
	30	5755	5755.011908	2.07
	40	5755	5755.011446	1.99
	45	5755	5755.019596	3.41

## Voltage vs. Frequency Stability (11ac(HT80) CH155)

Test Conditions		Test Frequency	Measurement	Max. Deviation
Temperature (°C)	Voltage (VDC)	(MHz)	Frequency (MHz)	(ppm)
	4.35	5775	5775.010705	1.85
20	3.8	5775	5775.018311	3.17
	3.6	5775	5775.010680	1.85

#### Temperature vs. Frequency Stability (11ac(HT80) CH155)

Test Conditions		Test Frequency	Measurement	Max. Deviation
Voltage (VDC)	Temperature (°C)	(MHz)	Frequency (MHz)	(ppm)
	-10	5775	5775.010116	1.75
3.8	0	5775	5775.017216	2.98
	10	5775	5775.014461	2.50
	20	5775	5775.018690	3.24
	30	5775	5775.016794	2.91
	40	5775	5775.016322	2.83
	45	5775	5775.012424	2.15



# ANNEX B TEST SETUP PHOTOS

Please refer the document "NII Test setup photo.PDF".

# ANNEX C EUT EXTERNAL PHOTOS

Please refer the document "EUT EXTERNAL PHOTOS.PDF".

# ANNEX D EUT INTERNAL PHOTOS

Please refer the document "EUT INTERNAL PHOTOS.PDF".

--END OF REPORT--