

HANI	NEL		тх (Channel 11		DETECT	OR	Peak (PK	()
REQI	JENCY RA			lz ~ 25GHz		FUNCTIO		Average	(AV)
	Α	NTENN	NA P	OLARITY a	& TEST I	DISTANCE:	HORIZONTAL	. AT 3 M	
Rg	Frequency [MHz]	PK+ L [dBµ\		PK+ Limit [dBµV/m]	PK+ Margir [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,463.500	87.5	51			6.81	н	308.8	1.00
2	2,483.500	46.2	28	74.00	27.72	6.80	н	1	1.00
2	2,487.500	46.6	65	74.00	27.35	6.80	н	359	1.00
95 92,5 % 87,5 % 825 825 825 72,5 % 62,5 62,5 62,5 62,5 62,5 55,5 55,5 50 42,5 40,3 37,5 32,5 30,2 32,5 30,0 27,5 22,5 30,0 30,2 30,2 30,2 30,2 30,2 30,2 30,2				P					
22.5 20								······	
2.	452 G 2.	458 G	2.462 G	2.466 G	2.470 G 2.4	74 G 2.478 G	2.482 G 2.486 G	2.490 G 2.4	94 G 2.5 0 Frequency in H



Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,463.000	75.45			6.81	Н	314.8	1.00
2	2,483.500	31.51	54.00	22.49	6.80	н	355.1	2.00
2	2,487.000	31.66	54.00	22.34	6.80	н	158.2	1.00
$\begin{array}{c} 125\\ -& 120\\ -& 117.5\\ 110.5\\ -& 117.5\\ 110.5\\ -& 110.5\\ 100.5\\ -& 10$		458 G 2462 G	2466 G	4706 24746	2478 G	2482 G 2486 G	2490 G 249	4G 25



Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,463.000	85.64			6.81	v	355.7	2.00
2	2,483.500	45.79	74.00	28.21	6.80	v	355.7	2.00
2	2,487.500	46.13	74.00	27.87	6.80	v	0.9	2.00
$\begin{array}{c} 1255\\ 120\\ 117.5,\\ 120\\ 117.5,\\ 110.5,\\ 110.5,\\ 100.5,\\$								



Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,463.000	74.36			6.81	v	1	2.00
2	2,483.500	31.42	54.00	22.58	6.80	v	359	2.00
2	2,487.000	31.67	54.00	22.33	6.80	v	131.2	2.00
$\begin{array}{c} 125\\ 7\\ 120\\ -120\\ 117.5\\ 110\\ 12.5\\ 110\\ 107.5\\ 100\\ 102.5\\ 100\\ 102.5\\ 100\\ 102.5\\ 100\\ 102.5\\ 100\\ 102.5\\ 100\\ 102.5\\ 100\\ 102.5\\ 100\\ 102.5\\ 100\\ 102.5\\ 100\\ 102.5\\ 100\\ 102.5\\ 100\\ 102.5\\ 100\\ 100\\ 100\\ 100\\ 100\\ 100\\ 100\\ 10$								

REMARKS:

- 1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
- 2. Margin value = Limit value- Emission level.
- 3. 2462MHz: Fundamental frequency.



	HANN	NEL		тх (Channel 3		DETECTO	R	Peak (PK)
F	REQU	JENCY RAI	NGE	1GF	lz ~ 25GHz		FUNCTION	N	Average ((AV)
		A	NTEN	NA P	OLARITY 8		STANCE: H	ORIZONTAL	AT 3 M	
	Rg	Frequency [MHz]	PK+ L [dBµ\		PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
	3	2,373.000	47.8	36	74.00	26.14	6.49	н	285.4	2.00
Γ	3	2,390.000	47.2	21	74.00	26.79	6.52	н	74.6	1.00
Γ	3	2,425.000	92.4	46			6.61	н	232.3	1.00
	95 92.5 87.5 82.5 80 77.5 72.5 72.5 72.5 65 62.5 60 57.5 55 55 52.5 50								h	
	47.5 45 42.5 40 37.5 35 32.5									
	45 -									



۲g	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	2,386.500	32.84	54.00	21.16	6.51	н	355.1	2.00
3	2,389.500	33.22	54.00	20.78	6.51	н	355.1	2.00
3	2,424.500	77.05			6.60	Н	355.1	2.00
$\begin{array}{c} 117.5 \\ 112.5 \\ 110 \\ 112.5 \\ 1107.5 \\ 1007.5 \\ 1007.5 \\ 1007.5 \\ 1000 \\ 97.5 \\ 99.2 \\ 57.5 \\ 99.2 \\$								



Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	2,338.500	47.43	74.00	26.57	6.44	v	359	1.00
3	2,390.000	46.81	74.00	27.19	6.52	v	0.9	2.00
3	2,424.500	83.57			6.60	v	359	2.00
$\begin{array}{c} 125\\ 120\\ 117,5\\ 115\\ 112,5\\ 110,5\\ 110,5\\ 100,5\\ 1$								



Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	2,388.000	32.85	54.00	21.15	6.51	V	1	2.00
3	2,390.000	32.98	54.00	21.02	6.52	v	45.1	2.00
3	2,424.500	72.10			6.60	v	359	2.00
$\begin{array}{c} 125\\ 117.5\\ 117.5\\ 117.5\\ 110.5\\ 110.5\\ 110.5\\ 110.5\\ 100.$	2426 2256 2266	276 2286 2	29 G 230 G 231 G	3 232 G 233 G	2.34 G 2.35 G 2.36	G 237G 238G 239		2426 244

REMARKS:

- 1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
- 2. Margin value = Limit value- Emission level.
- 3. 2412MHz: Fundamental frequency.



Rg Free 2 4,1		RANGE ANTE [dBµV/m] 49.22 54.73		z ~ 25GH DLARITY PK+ Margin [dB] 24.78 19.27	Hz & TES AVG Level [dBμV/m] 38.40 44.33		nit AV	rgin B]		ion Pola		age (AV M Azimuth [deg] 106.9 0.9	
2 4,1 2 7,3 2 7,5 2 7,5 2 7,5 100	[MHz] ,874.000	PK+ Level [dBµV/m] 49.22	PK+ Limit [dBµV/m] 74.00	PK+ Margin [dB] 24.78	AVG Level [dBµV/m] 38.40	AVG Lir [dBµV/n 54.00	nit Mar n] [di 15.	/G rgin B] .60	Correct [dB] 14.76	ion Pola	arization H	Azimuth [deg] 106.9	[m] 1.00
2 4,1 2 7,3 m//rfgp 72.5 - 67.5 - 62.5 - 60 - 57.5 - 55 -	[MHz] ,874.000	[dBµV/m] 49.22	[dBµV/m] 74.00	Margin [dB] 24.78	[dBµV/m] 38.40	[dBµV/I 54.00	m] Mar [d] 15.	rgin B] .60	[dB] 14.76))	н	[deg] 106.9	Height [m] 1.00
2 7,3 E 80 E //1187 75 - 70 - 70 - 70 - 70 - 70 - 62.5 - 62.5 - 60 - 57.5 - 55 -													
E 80 F 75 F 72.5 F 72.5 F 72.5 F 70 F 70	,311.000	54.73	74.00	19.27	44.33	54.00	9,1	67	21.0	5	H	0.9	2.00
Гечеl in dBµ/л 75 - 70 - 67.5 - 65 - 65 - 60 - 57.5 - 55 -													
50 - 47.5 - 46 - 37.5 - 36 - 32.5 - 30 - 27.5 - 22.5 - 20 - 17.5 - 12.5 - 10 - 7.5 - 12.5 - 10 - 7.5 - 5 - 2.2.5 - 0 -													
0 1 G	G		2 G	3 (G 4 G	6 50	6 G	7 G	8G 9	G 10 G			20 G 25 0



Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,874.000	48.52	74.00	25.48	38.50	54.00	15.50	14.76	v	257.8	2.00
2	7,311.000	55.45	74.00	18.55	44.49	54.00	9.51	21.05	v	359	1.00
80			· · · · · ·			· · · · ·		-			1
80 75 72.5 70 67.5 65											
72.5											
70											
มี 67.5											
62.5											
60 57.5											
55								Ð			
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22.5 20											
17.5											
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12.5											
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7.5											
5 2.5											
2.5											
	1 G		2 G	3 (G 40	5 5 G	6G 7G	8G 9G 10	ģ		20 G 25

REMARKS:

- 1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
- 2. Margin value = Limit value- Emission level.
- 3. 2437MHz: Fundamental frequency.



HA	NN	EL		ТХ (Channel 9		DETECTO	R	Peak (PK	.)
RE	ຸວບ				lz ~ 25GHz		FUNCTIO		Average	(AV)
		A	NTEN	NA P	OLARITY	& TEST DI	STANCE: H	ORIZONTAL	AT 3 M	
R	9	Frequency [MHz]	PK+ L [dBµ\		PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4		2,450.000	84.3	39			6.78	н	172.6	1.00
4		2,483.500	46.9	97	74.00	27.03	6.80	н	355	2.00
4		2,491.500	48.5	53	74.00	25.47	6.80	н	285.4	2.00
2 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	$\begin{array}{rrrr} 22.5 & -\\ 100 & -\\ -\\ 100 & -\\ -\\ -\\ 95 & -\\ 95 & -\\ 995 & -\\ 995 & -\\ 995 & -\\ 82.5 & -\\ 887.5 & -\\ 887.5 & -\\ 882.5 & -\\ 882.5 & -\\ 72.5 & -\\ -\\ 77.5 & -\\ 77.5 & -\\ -\\ 77.5 & -\\ -\\ 77.5 & -\\ -\\ 77.5 & -\\ -\\ 77.5 & -\\ -\\ 77.5 & -\\ -\\ 77.5 & -\\ -\\ -\\ 77.5 & -\\ -\\ -\\ 77.5 & -\\ -\\ -\\ -\\ 77.5 & -\\ -\\ -\\ -\\ 77.5 & -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ $								p	P
:	25 - 22.5 - 20									
	2.43	2 G 2.435 G 2.4		445 G	2.450 G 2.455 C		2.465 G 2.470 G	2.475 G 2.480 G	2.485 G 2.490 G	2.495 G 2.5 C Frequency in H



Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	2,469.500	73.63			6.81	н	261	1.00
4	2,483.500	33.46	54.00	20.54	6.80	н	261	1.00
4	2,485.000	33.55	54.00	20.45	6.80	Н	261	1.00
$\begin{array}{c} 125\\ 125\\ 110\\ 117,5\\ 110\\ 112,5\\ 110\\ 112,5\\ 110\\ 102,5\\ 100\\ 102,5\\ 100\\ 102,5\\ 100\\ 102,5\\ 100\\ 102,5\\ 100\\ 102,5\\ 100\\ 102,5\\ 100\\ 102,5\\ 100\\ 102,5\\ 100\\ 102,5\\ 100\\ 102,5\\ 100\\ 102,5\\ 100\\ 102,5\\ 100\\ 102,5\\ 100\\ 100\\ 100\\ 100\\ 100\\ 100\\ 100\\ 10$							P P	



Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	2,435.000	84.84			6.68	v	355	2.00
4	2,483.500	47.31	74.00	26.69	6.80	v	1	2.00
4	2,486.500	48.25	74.00	25.75	6.80	v	335.2	1.00
125 120 117.55 117.55 105 100 97.5 95 92.5 90 87.55 72.5 70 65 62.5 60 57.5 57.5								



Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	2,434.500	70.52			6.67	v	355.8	2.00
4	2,483.500	33.30	54.00	20.70	6.80	v	0.9	2.00
4	2,485.500	33.45	54.00	20.55	6.80	v	359.1	1.00
$\begin{array}{c} 125\\ 1200\\ 117,5\\ 117,5\\ 117,5\\ 110,5\\ 105\\ 100,5\\ 100\\ 97,5\\ 100\\ 97,5\\ 100\\ 97,5\\ 100\\ 97,5\\ 800\\ 97,5\\ 800\\ 97,5\\ 800\\ 77,5\\ 800\\ 77,5\\ 65\\ 62,5\\ 55\\ 55\\ 55\\ 55\\ 55\\ 55\\ 55\\ 55\\ 55\\ $, (P							

REMARKS:

- 1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
- 2. Margin value = Limit value- Emission level.
- 3. 2452MHz: Fundamental frequency.



BELOW 1GHz WORST-CASE DATA

				L	BT-LE_M				
IAN	INEL	T	X Channel	19	0DETEC		Quasi	-Peak (QP	1
REQ		ANGE 3	0MHz ~ 1G	GHz	FUNCTI	ON	Quasi)
		ANTENN	A POLARI	TY & TES	T DISTAN	CE: HORIZO	ONTAL AT	Г З М	•
Rg	Frequency [MHz]	QPK Leve [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BV [kHz]
1	35.432	23.10	40.00	16.90	-11.41	н	206.6	2.00	120.000
1	59.585	23.89	40.00	16.11	-10.05	н	152.2	1.00	120.000
1	105.030	18.24	43.50	25.26	-10.76	н	51.2	2.00	120.000
1	209.887	14.88	43.50	28.62	-10.36	н	355.2	2.00	120.000
1	388.415	20.76	46.00	25.24	-3.11	н	359.1	1.00	120.000
1	792.614	24.64	46.00	21.36	0.47	Н	309.9	1.00	120.000
3. 4.	Factor The othe	or(dB) r emissio	dB/m) = An n levels wei nit value – I	tenna Fac re very low	tor(dB/m) - v against th	prrection Fac + Cable Fact ne limit.	,	Pre-Amplifi	er
3. 4.	Factor The othe	or(dB) r emissio	n levels wei	tenna Fac re very low	tor(dB/m) - v against th	+ Cable Fact	,	Pre-Amplifi	er
3. 4. 55 47.5 45 42.5 40	Factor The othe Margin v	or(dB) r emissio	n levels wei	tenna Fac re very low	tor(dB/m) - v against th	+ Cable Fact	,	Pre-Amplifi	er
3. 55 50 47.5 45 42.5 40 37.5 35 32.5	Factor The othe Margin v	or(dB) r emissio	n levels wei	tenna Fac re very low	tor(dB/m) - v against th	+ Cable Fact	,	Pre-Amplifi	er
50 47.5 45 42.5 40 37.5 35	Factor The othe Margin v	or(dB) r emissio	n levels wei	tenna Fac re very low	tor(dB/m) - v against th	+ Cable Fact	,	Pre-Amplifi	er
3. 55 50 47.5 42.5 40 37.5 32.5 32.5 30 0 0 27.5 22.5 20	Factor The othe Margin v	or(dB) r emissio	n levels wei	tenna Fac re very low	tor(dB/m) - v against th	+ Cable Fact	,	Pre-Amplifi	er
3. 4. 55 50 47.5 45. 32.5 30 27.5 25. 20 17.5 15	Factor The othe Margin v	or(dB) r emissio	n levels wei	tenna Fac re very low	tor(dB/m) - v against th	+ Cable Fact	,	Pre-Amplifi	er
3. 4. 55 50 47.5 42.5 40 37.5 32.5 20 17.5 12.5 10	Factor The othe Margin v.	or(dB) r emissio	n levels wei	tenna Fac re very low	tor(dB/m) - v against th	+ Cable Fact	,	Pre-Amplifi	er
3. 4. 55 50 47.5 50 47.5 50 42.5 30.2 30.2 31.2 42.5 32.5 32.5 32.5 30.2 30.2 27.5 15.5 10.2 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11.51111111111111	Factor The othe Margin v.	or(dB) r emissio	n levels wei	tenna Fac re very low	tor(dB/m) - v against th	+ Cable Fact	,	Pre-Amplifi	er
3. 4. 55 50 47.5 32.5 30 27.5 22.5 20 17.5 15 12.5 10 7.5	Factor The othe Margin v.	or(dB) r emissio	n levels wei	tenna Fac re very low	tor(dB/m) - v against th	+ Cable Fact	,	Pre-Amplifi	er
3. 4. 55 50 42.5 40 37.5 30 27.5 20 17.5 12.5 10 7.5 5 2.5 5 0	Factor The othe Margin v.	or(dB) r emissio	n levels wei	tenna Fac re very low	tor(dB/m) - v against th	+ Cable Fact	,	Pre-Amplifi	er
3. 55 55 47.5 42.5 32.5 30 37.5 32.5 30 37.5 5 22.5 20 17.5 12.5 10 7.5 5 5 2.5 5 5 5 5 5 5 5 5	Factor The othe Margin v.	or(dB) r emissio	n levels wei	tenna Fac re very low	tor(dB/m) - v against th	+ Cable Fact	,	Pre-Amplifi	er
3. 55 50 47.5 35 32.5 32.5 32.5 32.5 22.5 20 17.5 12.5 12.5 12.5 12.5 5 0 0 7.5 5 5 5 5 5 5 5 0 0 7.5 5 5 0 0 2.5 5 5 0 0 2.5 5 5 5 0 0 0 2.5 5 5 5 5 5 5 0 0 2.5 5 5 5 0 0 2.5 5 5 5 5 0 0 2.5 5 5 5 5 5 5 5 0 0 2.5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Factor The othe Margin v.	or(dB) r emissio	n levels wei	tenna Fac re very low	tor(dB/m) - v against th	+ Cable Fact	,	Pre-Amplifi	er



CI	HAN	INEL	T.	X Channel	19	DETECT		Quasi	-Peak (QP	`
=	REQ		ANGE 3	0MHz ~ 1G	θHz	FUNCTI	ON	Quasi	reak (Qr)
			ANTEN	NA POLA	RITY & TE	ST DISTA	NCE: VERT	ICAL AT :	3 M	
	Rg	Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]
	1	34.850	26.36	40.00	13.64	-13.47	v	1	1.00	120.000
	1	50.225	23.07	40.00	16.93	-9.82	v	1	1.00	120.000
	1	94.990	19.82	43.50	23.68	-11.90	v	1	2.00	120.000
	1	139.271	23.55	43.50	19.95	-13.84	v	51.1	2.00	120.000
	1	332.495	17.50	46.00	28.50	-5.24	v	1	2.00	120.000
	1	728.109	24.21	46.00	21.79	-0.54	v	1	1.00	120.000
	55 50 47.5 45 42.5 40	-								
	37.5 35 32.5 25 22.5 20 17.5 12.5 10 7.5 5 2.5 0 0 -2.5 -7.5 -10 -12.5 -15									
	-17.5 -20	30 M 40 M	50 M 60 M	И 70 М 80 М	100 M	20	0 M 300 M	400 M	500 M 600 M 7	00 M 800 M 1 G Frequency in Hz



ABOVE 1GHz TEST DATA

Note:

- 1. For radiated emissions testing , the full testing range of different modes have been scanned , only the worst case harmonic data is reported in the sheet.
- 2. All other emissions were greater than 20dB below the limit was not recorded

ł	HAN	NEL		тх (Channel 0		DETECTO	R	Pea	k (PK)	
F	REQL	JENCY RA	NGE	1GF	lz ~ 25GHz		FUNCTIO	N	Ave	rage (AV)	
		A	NTEN	NA P	OLARITY 8	TEST DI	STANCE: H	ORIZON	TAL	AT 3 M	-
	Rg	Frequency [MHz]	PK+ L [dBµ\		PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarizat	ion	Azimuth [deg]	Antenna Height [m]
	5	2,387.000	48.9	95	74.00	25.05	6.51	н		241.8	1.00
	5	2,395.000	50. ⁻	17	74.00	23.83	6.52	Н		241.8	1.00
	5	2,402.500	106.	41			6.53	н		241.8	1.00
	100 97.5 \$ 92.5 \$ 82.5 \$ 85 \$ 85 \$ 85 \$ 86 \$ 77.5 \$ 86 \$ 77.5 \$ 65 \$ 55 \$ 52.5 \$ 60 \$ 77.5 \$ 55 \$ 53 \$ 45 \$ 40 \$ 42.5 \$ 40 \$ 37.5 \$ 50 \$ 32.5 \$ 50 \$ 27.5 \$ 50 \$ 50 \$ 50 \$ 50 \$ 50 \$ 50 \$ 50 \$ 5									 ,	
	25 22.5	-									



٦g	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,394.500	35.66	54.00	18.34	6.52	н	245.4	1.00
5	2,395.000	36.07	54.00	17.93	6.52	н	245.4	1.00
5	2,402.000	89.05			6.53	Н	245.4	1.00
$\begin{array}{c} 117.5 \\ 117.5 \\ 112.5 \\ 107.5 \\ 100.5 \\$						06 23756 23806 238		



Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,388.000	47.38	74.00	26.62	6.51	V	355.2	2.00
5	2,395.000	45.72	74.00	28.28	6.52	v	53.6	2.00
5	2,402.500	97.83			6.53	v	355.2	2.00
$\begin{array}{c} 115\\ 112,5\\ 110, 0\\ 107,5\\ 100, 5\\ 100,$						06 2375 6 2380 6 238		2400 G 244



Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,394.500	31.79	54.00	22.21	6.52	V	121.2	1.00
5	2,395.000	31.88	54.00	22.12	6.52	v	121.2	1.00
5	2,402.000	80.13			6.53	v	184.5	1.00
125 117.5 117.5 117.5 117.5 117.5 117.5 117.5 112.5 110.5 107.5 107.5 102.5 100.5 102.5 100.5 102.5 100.5 102.5 100.5 102.5 100.5 102.5 102.5 100.5 100.5 102.5 102.						06 23756 23806 238		2400 G 24

REMARKS:

- 1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
- 2. Margin value = Limit value–Emission level.
- 3. 2402MHz: Fundamental frequency.



Rg Frequencies 2 4,888	ENCY RAN AN quency PK+ Lo MHz] PK+ Lo [dBµV 80.000 49.8 20.000 55.4	NTENN evel PK //m] [dl 87		~ 25GH	& TEST	FUNC DISTAI AVG Limit [dBµV/m] 54.00 54.00		ORIZON Correction [dB] 14.77 21.11	Peak (PK Average (ITAL AT 3 Polarization H H	(AV)	Antenna Height [m] 2.00 2.00
Kg [M] 2 4,884 2 7,321 2 7,321 2 7,321 2 7,321 2 7,321 2 7,321 2 7,321 2 7,321 2 7,321 2 7,321 3 5 425 -	quency MHz]PK+ Lo [dBµV80.00049.8	evel PK //m] [dl 87	(<mark>+ Limit</mark> BµV/m] 74.00	PK+ Margin [dB] 24.13	AVG Level [dBµV/m] 38.50	AVG Limit [dBµV/m] 54.00	AVG Margin [dB] 15.50	Correction [dB] 14.77	Polarization H	Azimuth [deg] 359	Height [m] 2.00
Kg Im 2 4,884 2 7,321 2 7,321 1 75 1 75 1 75 1 75 1 67.5 62.5 60 57.5 55 50 - 47.5 45 42.5 - 40 37.5 35 -	WHz] [dBµV 80.000 49.8	<mark>//m] [dl</mark> 87 :	BµV/m] 74.00	Margin [dB] 24.13	[dBµV/m] 38.50	[dBµV/m] 54.00	Margin [dB] 15.50	[dB] 14.77	H	[deg] 359	Height [m] 2.00
2 7,324 E // 75 - 72.5 - 72.5 - 60 - 65 60 - 57.5 - 55 - 50 - 47.5 - 45 - 42.5 - 40 - 37.5 - 35											
E 80 17 75 190 72.5 190 72.5 190 67.5 65 62.5 60 - 57.5 - 52.5 - 50 - 42.5 - 40 - 37.5 - 35 -	20.000 55.4	42	74.00	18.58	44.58	54.00	9.42	21.11	H	17	2.00
L//17 75 - 70 - 70 - 70 - 70 - 65 - 60 65 - 60 57.5 - 55 - 55 - 55 - 55 - 55 - 55											
30 - 27.5 - 25 - 22.5 - 20											
0 1 G			2 G	3 (G 4 G	5 G	6G 7G	8G 9G	10 G		20 G 25 G



Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,880.000	49.92	74.00	24.08	38.58	54.00	15.42	14.77	v	343.8	1.00
2	7,320.000	56.51	74.00	17.49	44.73	54.00	9.27	21.11	v	269.8	2.00
80											
80 75 72.5 70 67.5 65											
72.5											
70											
67.5	5										
62.5											
60 57.5											
55							(φ			
52.5											
50						0					
47.5	5										
45)			
42.5											
40						0					
37.5 35						T					
32.5											
30											
27.5											
25											
22.5											
20											
17.5 15											
12.5											
10											
7.5											
5											
2.5											
0			i	i	i i	L i	- i - i	<u>i i</u>	i		i
	1 G		2 G	3 (G 4 G	5 G	6G 7G	8G 9G 10) G		20 G 25 equency in H

REMARKS:

- 1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
- 2. Margin value = Limit value–Emission level.
- 3. 2440MHz: Fundamental frequency.



HAN	NEL		ТХ (Channel 39		DETECTO		Peak (PK)	
REQL	JENCY RAI	NGE	1GF	lz ~ 25GHz		FUNCTION	N	Average (AV)
	A	NTEN	NA P	OLARITY &	TEST DI	STANCE: H	ORIZONT	AL AT 3 M	
Rg	Frequency [MHz]	PK+ L [dBµ\		PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarizatio	on Azimuth [deg]	Antenna Height [m]
6	2,480.250	103.	22			6.81	н	259.8	1.00
6	2,483.500	62.2	24	74.00	11.76	6.80	н	259.8	1.00
6	2,497.750	63.7	73	74.00	10.27	6.79	н	99	2.00
لله المرابق ال مرابع المرابق المرابق المرابع المرابع	175G 24	778 G 2	440 G	2.482.6 2.48	4G 2486 G	2486 2.490	JG 2492 G	2.494 G 2.496 G	2498 G 2,5 G



Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.000	86.64			6.81	н	259.8	1.00
6	2,483.500	35.38	54.00	18.62	6.80	Н	259.8	1.00
6	2,488.500	35.60	54.00	18.40	6.80	Н	259.8	1.00
$\begin{array}{c} 117.5 \\ 112.5 \\ 112.5 \\ 112.5 \\ 100.25 \\ $	475 G 24	78 G 2440 G	24826 2486	4 G 2486 G	2486 2490	G 2492 G 24	94 G 2496 G	2.498 G 2.5



Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,479.750	98.25			6.81	v	355.2	2.00
6	2,483.500	54.17	74.00	19.83	6.80	v	355.2	2.00
6	2,498.000	61.08	74.00	12.92	6.79	v	5.5	1.00
$\begin{array}{c} 125\\ 120\\ 117,5,5\\ 117,5,5\\ 117,5,5\\ 117,5,5\\ 112,5\\ 112,5\\ 112,5\\ 107,5$	475.6 24	76 G 2.480 G	2482 G 248	4.6 2.486.9	2486 2490	G 2492 G 24	94 G 2496 G	2486 2.5



Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.000	82.80			6.81	v	355.1	2.00
6	2,483.500	32.34	54.00	21.66	6.80	v	355.1	2.00
6	2,488.500	32.42	54.00	21.58	6.80	v	355.1	2.00
$\begin{array}{c} 1255\\ 117.5\\ 107.5\\ 107.5\\ 117.5\\ 117.5\\ 117.5\\ 1100\\ 1005\\$	475 G 24	76 2440 G	2482 G 248	4 G 2486 G	2486 2490	G 2492 G 24	44 G 2496 G	2486 25

REMARKS:

- 1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
- 2. Margin value = Limit value–Emission level.
- 3. 2480MHz: Fundamental frequency.



3.3 6 dB BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum 6dB Bandwidth Measurement is 0.5 MHz.

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	R&S	ESW 44	101973	Mar.28,24	Mar.27,26
Open Switch and Control Unit	R&S	OSP-B157W8	100836	N/A	N/A
Vector Signal Generator	R&S	SMBV100B	102176	Mar.29,24	Mar.28,26
Signal Generator	R&S	SMB100A03	182185	Mar.29,24	Mar.28,26
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.19,24	Jun.18,26
Hygrothermograph	DELI	20210528	SZ015	Sep.06,23	Sep.05,25
PC	LENOVO	E14	HRSW0024	N/A	N/A
CABLE	R&S	J12J103539- 00-1	SEP-03-20-069	Apr.27,24	Apr.26,25
CABLE	R&S	J12J103539- 00-1	SEP-03-20-069	Apr.26,25	Apr.25,26
CABLE	R&S	J12J103539- 00-1	SEP-03-20-070	Apr.27,24	Apr.26,25
CABLE	R&S	J12J103539- 00-1	SEP-03-20-070	Apr.26,25	Apr.25,26
Test Software	EMC32	EMC32	N/A	N/A	N/A
Temperature Chamber	votsch	VT4002	58566078100050	May.30,24	May.29,26
Power Meter	R&S	NRX	102380	Mar.28,24	Mar.27,26
Power Meter probe	R&S	NRP6A	102942	Mar.28,24	Mar.27,26

3.3.2 TEST INSTRUMENTS

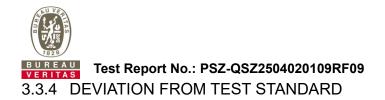
NOTE:

- 1. The calibration interval of the above test instruments is 12/24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
- 2. The test was performed in RF Oven room.



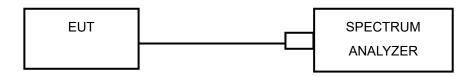
3.3.3 TEST PROCEDURE

- Set RBW = shall be in the range of 1% to 5% of the 0BW but not less than 100 kHz.
- 2. Set the video bandwidth (VBW) \geq 3 RBW.
- 3. Detector = Peak.
- 4. Trace mode = max hold.
- 5. Sweep = auto couple.
- 6. Allow the trace to stabilize.
- 7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



No deviation.

3.3.5 TEST SETUP



3.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.3.7 TEST RESULTS

Please Refer to Appendix A/B Of this test report..

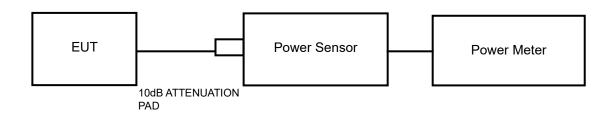


BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF09 3.4 CONDUCTED OUTPUT POWER

3.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 2400–2483.5 MHz band: 1 Watt (30dBm)

3.4.2 TEST SETUP



3.4.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.4.4 TEST PROCEDURES

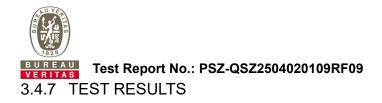
A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



3.4.7.1 MAXIMUM PEAK OUTPUT POWER

Please Refer to Appendix A/B Of this test report..



3.4.7.2 AVERAGE OUTPUT POWER (FOR REFERENCE)

The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. Record the power level.

Please Refer to Appendix A/B Of this test report..

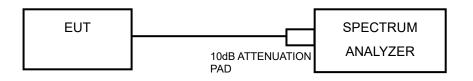


BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF09 3.5 POWER SPECTRAL DENSITY MEASUREMENT

3.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm/3KHz.

3.5.2 TEST SETUP



3.5.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.5.4 TEST PROCEDURE

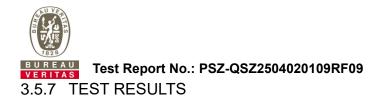
- 1. Set the span to 1.5 times the DTS bandwidth
- 2. Set the RBW = 3 kHz, VBW \ge 3 x RBW, Detector = peak.
- 3. Sweep time = auto couple, Trace mode = max hold, allow trace to fully stabilize.
- 4. Use the peak marker function to determine the maximum amplitude level.

3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

3.5.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



Please Refer to Appendix A/B Of this test report..

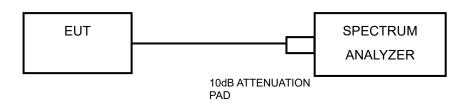


Test Report No.: PSZ-QSZ2504020109RF09 OUT OF BAND EMISSION MEASUREMENT

3.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

3.6.2 TEST SETUP



3.6.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.6.4 TEST PROCEDURE

MEASUREMENT PROCEDURE REF

- 1. Set the RBW = 100 kHz.
- 2. Set the VBW \geq 300 kHz.
- 3. Detector = peak.
- 4. Sweep time = auto couple.
- 5. Trace mode = max hold.
- 6. Allow trace to fully stabilize.
- 7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.



MEASUREMENT PROCEDURE OOBE

- 1. Set RBW = 100 kHz.
- 2. Set VBW \ge 300 kHz.
- 3. Set span to encompass the spectrum to be examined
- 4. Detector = peak.
- 5. Trace Mode = max hold.
- 6. Sweep = auto couple.

3.6.5 DEVIATION FROM TEST STANDARD

No deviation.

3.6.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.6.7 TEST RESULTS

The spectrum plots are attached on the following images. D1 line indicates the highest level. D2 line indicates the 20dB offset below D1. It shows compliance to the requirement.

Please Refer to Appendix A/B Of this test report..



BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF09 3.7 ANTENNA REQUIREMENTS

3.7.1 STANDARD APPLICABLE

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.7.2 ANTENNA CONNECTED CONSTRUCTION

An embedded-in antenna design is used.

3.7.3 ANTENNA GAIN

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit and PSD limit.



4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF09 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.



6 APPENDIX A:WIFI

Case No. : <u>NA</u>

Ambient Condition: <u>25</u>°C, 45 %RH,

Test Date: <u>NA</u>

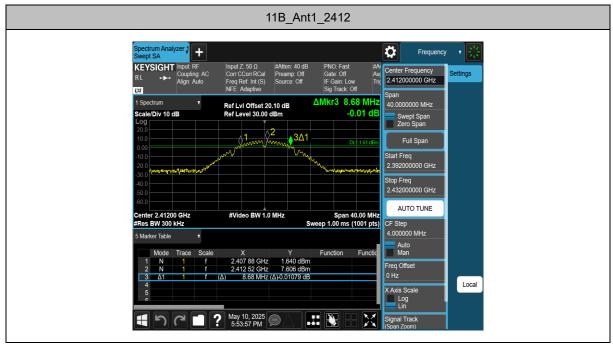
Test Engineer: Alan Yu

DTS BANDWIDTH

TEST RESULT

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict	
11B	Ant1	2412	8.680	2407.880	2416.560	0.5	PASS	
		2437	9.080	2432.440	2441.520	0.5	PASS	
		2462	9.080	2457.440	2466.520	0.5	PASS	
11G	Ant1		2412	16.200	2403.920	2420.120	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS	
		2462	16.360	2453.800	2470.160	0.5	PASS	
	Ant1		2412	17.320	2403.360	2420.680	0.5	PASS
11N20SISO		2437	17.480	2428.200	2445.680	0.5	PASS	
		2462	17.440	2453.280	2470.720	0.5	PASS	
11N40SISO	Ant1	2422	36.000	2404.000	2440.000	0.5	PASS	
		2437	36.240	2418.840	2455.080	0.5	PASS	
		2452	36.000	2434.000	2470.000	0.5	PASS	

TEST GRAPHS



Huarui 7layers High Technology (Suzhou) Co., Ltd. Tel: +86 (0557) 368 1008















