Report No.: E2/2017/80129 Page 442 of 605



30MHz~3GHz_Band38_15MHz_QPSK_1_0_MidCH38000-2595

3GHz~10GHz_Band38_15MHz_QPSK_1_0_HighCH38175-2612.5

Center Freq 1.515000000	PNO: Fast Trig: Free Run IFGainLow #Atten: 30 dB	Avg Type: Log-Pwr	10-42:59 FM Sep 19, 2017 TRACE TYPE 12 3 4 3 1 TYPE 14 000000000 DET P NIN MILLI	Frequency	Center Freq 11.5000	00000 GHz	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr	08-43:45 11 Sep 19, 2017 TRADE 1, 2, 3, 4, 5 TYPE Provide 1 DET Provide 1	Frequency
Ref Offset 23.8 dB 10 dB/div Ref 30.00 dBm		Mkr1	2.590 1 GHz 26.44 dBm	Auto Tune	Ref Offset 23. Ref 30.00 c	.8 dB 18m		М	kr3 7.838 GHz -27.37 dBm	Auto Tune
2010 10.0 11.00				Center Freq 1.515000000 GHz	2010 10.0 2.15					Center Freq 11.500000000 GHz
ADD	nights of grand provide the first state of the	مەسىرە ئىلىنىلەر يەرەپىرە ئەرەپ	4703 che	Start Freq 30,000000 MHz	and a start of the	acception and a formation of the second	والمقصورة والمعاوم والمعاول	and the second	and the second second second	Start Freq 3.000000000 GHz
40 D				Stop Freq 3.00000000 GHz	40 0 50 p -60 p					Stop Freq 20.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#VBW 1.0 MHz	Sweep 3.60	Stop 3.000 GHz 0 ms (1001 pts)	CF Step 297.000000 MHz Auto Man	Start 3.000 GHz #Res BW 1.0 MHz	#VBW	V 1.0 MHz	Sweep 28	Stop 20.000 GHz 3.33 ms (1001 pts)	CF Step 1.70000000 GHz Auto Man
1 N 1 f 2 3 4 5 6	.590 1 GHz 26.44 dBm		-	Freq Offset 0 Hz	1 N 1 f 2 N 1 f 3 N 1 f 4 5	18.895 GHz 5.225 GHz 7.838 GHz	-21 94 dBm -29.81 dBm -27.37 dBm		-	Freq Offset 0 Hz
8 9 10 11					8 9 10 11					
CAM		STÁTUS			DOM:			STÁTUS		

3GHz~10GHz_Band38_15MHz_QPSK_1_0_MidCH38000-2595

Freq 11.50000000 GHz nter Freq 1.515000000 GHz Avg Type: Log Trig: Free Run Trig: Free Run Auto Tur Auto Tu Ref Offset 23.8 dB Ref 30.00 dBm Ref Offset 23.8 dB Ref 30.00 dBm Center Fre Center Fre ... Start Fre Start Fre Stop Fre Stop Fre 20.00 300 CF Ste 30 MHz BW 1.0 MH CFSI 3.000 GHz BW 1.0 MH Stop 20.000 GHz 28.33 ms (1001 pts) Stop 3.000 GH #VBW 1.0 MHz #VBW 1.0 MH; 3.6 1 70 2.572 3 GH 26.02 9.252 GHz 5.190 GHz 7.785 GHz -20.94 dBm -29.76 dBm -26.07 dBm Freq Offse Freq Offse .

30MHz~3GHz_Band38_15MHz_QPSK_1_0_HighCH38175-2612.5

3GHz~10GHz_Band38_20MHz_QPSK_1_0_LowCH37850

30MHz~3GHz_Band38_20MHz_QPSK_1_0_LowCH37850

🛤 Kayanghi Speatnemi Ananyzer - Skoppt SA	10. 20 M	Kayagiti Spectrum Ananjzer - Skapt SA	1919 M
MR MI Table Doc Strend and Date Strend and Area Type: Log-Pwr Trace Trace Trace Trace Trace Trace Trace Trace Trace Trace	Frequency	20 8.L at a b b b b b b b b b b b b b b b b b	Frequency
Ref Offset 23.8 dB Mkr1 2,605 0 GHz 10.dB/dv Ref 30.00 dBm 26.46 dBm	Auto Tune	Ref Offset 23.8 dB Mkr3 7.830 GH2 -27.65 dBm -27.65 dBm	Auto Tune
	Center Freq 1.515000000 GHz		Center Freq 11.50000000 GHz
100 من 100 من 100 من 100 من	Start Freq 30.000000 MHz		Start Freq 3.000000000 GHz
40 D	Stop Freq 3.000000000 GHz		Stop Freq 20 00000000 GHz
Start 30 MHz Stop 3.000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Sweep 3.600 ms (1001 pts) wes MODE TK2 Sweep 3.600 ms (1001 pts) Sweep 3.600 ms (1001 pts)	CF Step 297.000000 MHz Auto Man	Start 3.000 GHz Stop 20.000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Sweep 28.33 ms (1001 pts) work work Files Sciu x y FilesChork Sciulton	CF Step 1.700000000 GHz Auto Man
1 N 1 f 2.605 0 GHz 26.46 dBm 2 3 - - - - 3 - - - - - 4 - - - - -	Freq Offset 0 Hz		Freq Offset 0 Hz
eranus eranus		e est	A second second second
N STATUS		Hoj Elvios	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms</u> and <u>conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

f (886-2) 2298-0488

Report No.: E2/2017/80129 Page 443 of 605



30MHz~3GHz_Band38_20MHz_QPSK_1_0_MidCH38000

3GHz~10GHz_Band38_20MHz_QPSK_1_0_HighCH38150

Center Freq 1.515000000	CHZ PNO: Fast	Avg Type: Log-Pwr	105.58(30 FM Sep 15, 2017 TRACE TYPE Provide 12, 3, 4, 5 TYPE Provide 10 DET Provide 10	Frequency	RL Minimum Conternet State and Conternet State and From Conternet Autobition Market PROF Rest HFGBRICK From Conternet Autobition Autobition	(05.59)34 376 540 15, 2017 THACE TYPE 14 AMARANAN DET 17 14 14 14 14	Frequency
Ref Offset 23.8 dB 10 dB/div Ref 30.00 dBm		Mkr	1 2.587 2 GHz 27.07 dBm	Auto Tune	Ref Offset 23.8 dB No.00 dBm	Akr3 7.830 GHz -26.41 dBm	Auto Tune
20:0 10:0 19:15				Center Freq 1.515000000 GHz	200		Center Freq 11.500000000 GHz
100 -00 -00	anna a ta ini a ana ana ana ana ana ana ana ana	بلية فيغشبو الماد وستاو والمارك والمستقول	1502000	Start Freq 30,000000 MHz	100 1011 1012 Hand Hall and Declar Andrew Contraction and the main and the second state of the second state of the second	n 101 may	Start Freq 3.000000000 GHz
40 0 50 0 				Stop Freq 3,00000000 GHz	101 102 102		Stop Freq 20.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz MdR MOBE TRC ScL X	#VBW 1.0 MHz		Stop 3.000 GHz 500 ms (1001 pts) FUNCTION VALLE	CF Step 297.000000 MHz Auto Man	Start 3.000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Sweep 2 war wole the: Sku x y Function Function worth	Stop 20.000 GHz 8.33 ms (1001 pts)	CF Step 1.700000000 GHz Auto Man
1 N 1 f 2,0 2 A 4 5 6 7 8	587 2 GHz 27 07 dBm			Freq Offset 0 Hz	1 N 1 f 19830 GHz -2137 dBm N 1 f 5220 GHz -3137 dBm N 1 f 5220 GHz -353 dBm N 1 f 7.830 GHz -26.41 dBm 5 6 7 8		Freq Offset 0 Hz
9 10 11 11		státus			9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		

3GHz~10GHz_Band38_20MHz_QPSK_1_0_MidCH38000

Freq 11.500000000 GHz ter Freq 1.515000000 GHz Trig: Free Run Trig: Free Run #Atten: 30 dB Auto Tu Auto Tu Ref Offset 23.8 dB Ref 30.00 dBm Ref Offset 23.8 dB Ref 30.00 dBm Center Fre Center Fre Start Fre Start Fre Stop Fre Stop Fr 300 30 MHz BW 1.0 MHz CFSI Stop 20.000 GH CFSI op 3.000 G #VBW 1.0 MHz #VBW 1.0 MH; 3.6 -21.94 dBn -28.77 dBn -28.06 dBn 8.827 GHz 5.220 GHz 7 830 GHz Freq Offse Freq Offs 01

30MHz~3GHz_Band38_20MHz_QPSK_1_0_HighCH38150

3GHz~10GHz_Band41_5MHz_QPSK_1_0_LowCH39675

30MHz~3GHz_Band41_5MHz_QPSK_1_0_LowCH39675

M Kwyaght Spectrum Analyzer - Skapt SA	12.22 M	King-anghit Spectralium Anumyzer - Skrapt SA	2.2
The streng day streng	Frequency	00 RL 0/ 30.0 Ct. 30 C	Frequency
Ref Offset 23.8 dB Mkr1 2,602 0 GH	Auto Tune	Ref Offset 23.8 dB Mkr3 7,496 GHz 10 gB/dav Ref 30.00 dBm -28.06 dBm	Auto Tuni
	Center Freq 1.515000000 GHz		Center Free 11.500000000 GH
1903 2000 3001 3001	Start Freq		Start Free 3.000000000 GH
	Stop Freq 3.00000000 GHz		Stop Fre 20 00000000 GH
Start 30 MHz Stop 3.000 GH #Res BW 1.0 MHz #VBW 1.0 MHz Sweep 3.600 ms (1001 pt was Mote To Stu x Plantton water Flucton water	IZ CF Step 297,800000 MHz Auto Man	Start 3.000 GHz Stop 20.000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Sweep 28.33 ms (1001 pts) MRR MORE TR: SCU X Y RMETION FUNCTION NOTH FUNCTION NO	CF Step 1.700000000 GH
1 N 1 7 2.602 0 GHz 26.71 dBm 2 0 4 5	Freq Offset 0 Hz	1 N T 18.402 GHz -22.07 dBm 2 N T 4.997 GHz -27.96 dBm N T 7.496 GHz -28.06 dBm 5	Freq Offse 0 H
INN STATUS		eritus eritus	_

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

f (886-2) 2298-0488

Report No.: E2/2017/80129 Page 444 of 605



30MHz~3GHz_Band41_5MHz_QPSK_1_0_MidCH40620

3GHz~10GHz_Band41_5MHz_QPSK_1_0_HighCH41565

RL A/ 55 G DC	SENSE JUT	ALION NUTO	02-48:23 PM Sep 21, 2017		RL N/ 50 G	abi 24	SPASE JWT	ALION AUTO	02:57:08:00 Sep 71. 2017	
Center Freq 1.515000000 GHz	Fast Trig: Free Run	Avg Type: Log-Pwr	TRADE 1 2 4 4 TVPE PLANAMENT	Frequency	Center Freq 11.5000	000000 GHz	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr	TRACE 1 2 4 5 TIPE	Frequency
Ref Offset 23.8 dB		Mk	1 2.590 1 GHz 27.33 dBm	Auto Tune	Ref Offset 23 10 dB/div Ref 30.00 c	8 dB		N	kr3 8.063 GHz -27.35 dBm	Auto Tune
				Center Freq 1.515000000 GHz						Center Freq 11.500000000 GHz
NDB 2001 2001 - State St	والمستعلمين والمريد والمريد والمريد	استلافا الاستان وبالعزار سندي	1500 alle he fight Manadershi dana fersion	Start Freq 30.000000 MHz		3 And the law of the Property	المعه معاجبا بالموضي والموسر العام	بالمتدحان إروار المردوب والمحاد المحاد وسائل خنيط	-	Start Freq 3.000000000 GHz
40.0 300 600				Stop Freq 3.000000000 GHz	40 D 50 D 460 D					Stop Freq 20.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz	#VBW 1.0 MHz	Sweep 3.	Stop 3.000 GHz 600 ms (1001 pts) FUNCTION VALUE	CF Step 297,000000 MHz Auto Man	Start 3.000 GHz #Res BW 1.0 MHz	#VBW 1		Sweep 28	Stop 20.000 GHz 3.33 ms (1001 pts)	CF Step 1,70000000 GHz Auto Man
1 N 1 f 2.590 1 G				Freq Offset 0 Hz	1 N 1 T 2 N 1 T 3 N 1 T 4 5	5.375 GHz	-22.05 dBm -28.86 dBm -27.35 dBm		-	Freq Offset 0 Hz
7 8 9 10 11					7 8 9 10 11					
MINA		STÁTUS			COM			STÁTUS		-

3GHz~10GHz_Band41_5MHz_QPSK_1_0_MidCH40620

30MHz~3GHz_Band41_10MHz_QPSK_1_0_LowCH39700



30MHz~3GHz_Band41_5MHz_QPSK_1_0_HighCH41565

3GHz~10GHz_Band41_10MHz_QPSK_1_0_LowCH39700

🗱 Kuyaght Spectrum Anulyze - Strapt SA		Kayinght Spectrum Analyzer - Shapt SA	2.2
RL AV SAGE CC STREET AND ALLOW AND RESIDENCE AND AND RESIDENCE AND AND RESIDENCE AND R	Frequency	0 RL #/ 30.0 EC 30.0 Sec 39.0 Sec 39.0 Sec 39.0 Sec 39.0 Sec 39.0 Sec 30.0	Frequency
Ref Offset 23.8 dB Mkr1 2,685 2 GHz 10 dB/div Ref 30.00 dBm 27.30 dBm	Auto Tune	Ref Offset 23.8 dB Mkr3 7.503 GH2 -28.23 dB -28.23 dBm -28.23 dBm	Auto Tune
100 100 100 100 100 100 100 100 100 100	Center Freq 1.515000000 GHz		Center Freq 11.50000000 GHz
ADD Shin Shin 2011 - Shin - Sharen yaran yaran 2011 - Shin -	Start Freq 30,000000 MHz	100 And	Start Freq 3,000000000 GHz
40 u	Stop Freq 3.00000000 GHz	40 0 ζου έμο	Stop Freq 20 00000000 GH/
Start 30 MHz Stop 3.000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Sweep 3.600 ms (1001 pts we MOD FIG Stul x 9 Function Function work Function state	CF Step 297.000000 MHz Auto Man	Start 3.000 GHz Stop 20.000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Sweep 28.33 ms (1001 pts) work work for board x Plantform Practice works	CF Step 1.700000000 GHz Auto Man
1 N 1 f 2.685 2 GHz 27.30 dBm	Freq Offset 0 Hz	1 N 1 f 19.099 GHz -21.91 dBm 2 N 1 f 6.002 GHz -25.78 dBm N 1 f 7.603 GHz -28.23 dBm 5	Freq Offset 0 Hz
auriera (cen		eritans Neol strátus	1

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms</u> and <u>conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



30MHz~3GHz_Band41_10MHz_QPSK_1_0_MidCH40620

3GHz~10GHz_Band41_10MHz_QPSK_1_0_HighCH41540

NL NL<	Prequency	Bit Arr 136 0 State State 201 Auge turn Can burn Can burn <thc< th=""><th>Frequency</th></thc<>	Frequency
Ref Offset 23.8 dB Mkr1 2,590 1 GHz 10 dB/div Ref 30.00 dBm 27.85 dBm	Auto Tune	Ref Officet 23.8 dB Mkr3 8.055 GHz 10 dBrdiv Ref 30.00 dBm -26.64 dBm	Auto Tune
	Center Freq 1.515000000 GHz	200	Center Freq 11.500000000 GHz
100	Start Freq 30.000000 MHz	100 100 200 marth date of the Constant of the	Start Freq 3.000000000 GHz
	Stop Freq 3.00000000 GHz		Stop Freq 20 00000000 GHz
Start 30 MHz Stop 3.000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Sweep 3.600 ms (1001 pts)	CF Step 297.000000 MHz Auto Man	Start 3.000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Sweep 28.33 ms (1001 pts)	CF Step 1.70000000 GHz Auto Man
MRR MODE TACL SOL X Y FUNCTION FUNCTION W0TH FUNCTION V0LLE X 2 3 7 2,590 1 GHz 27,59 dBm FUNCTION W0TH FUNCTION V0LLE X	Freq Offset 0 Hz	Image Mode Trac SQL X Y FUNCTION FUNCTION NOTH FUNCTION NOTH FUNCTION NOLE > 1 N 1 f 19.364 GHz -21.59 dBm FUNCTION NOTH FUNCTION NOLE > 2 N 1 f 6.370 GHz -28.91 dBm FUNCTION NOLE > 3 N 1 f 8.065 GHz -26.64 dBm FUNCTION NOLE >	Freq Offset 0 Hz
MRG STATUS		cratus (con	

3GHz~10GHz_Band41_10MHz_QPSK_1_0_MidCH40620

30MHz~3GHz_Band41_15MHz_QPSK_1_0_LowCH39725



30MHz~3GHz_Band41_10MHz_QPSK_1_0_HighCH41540

3GHz~10GHz_Band41_15MHz_QPSK_1_0_LowCH39725

PNO: Fast Trig: Free Run	ALION IUTO 02:34:37 PM Sep 21, 2017	Frequency	Report Sectore Average: See 34. Street atri ALow store 12/21/17 MM Sec 21, 201 R L atri Street atri ALow store 12/21/17 MM Sec 21, 201 Center Freq 11.5000000000 GHz Trig: Free Run Avg Type: Log-PWr Trice Press PhOl: Fast Trig: Free Run Avg Type: Log-PWr Trice Press Fiscal to: Start atrice 10 dB Out Press Out Press Trice Press	Frequency
IFGain:Low #Atten: 30 dB Ref Offset 23.8 dB 10 dB/div Ref 30.00 dBm	Mkr1 2.682 2 GHz 28.08 dBm	Auto Tune	IFGainLow #Atten: 30 dB 00110000000000000000000000000000000	2 Auto Tune
200 100		Center Freq 1.515000000 GHz		Center Freq 11,500000000 GHz
NDD NDD S01	دى 1500 مى . مەرەلىيەن بىلىم كەرەلىيەن مەرەپىيەن بىلىرى بارىيەن مەرەپىيەن بىلىرى بىلىرى بىلىرى بىلىرى بىلىرى بىلىرى بىلىرى	Start Freq 30,000000 MHz		Start Freq 3.000000000 GHz
40 0 30 0 40 0		Stop Freq 3,00000000 GHz	40 C	Stop Freq 20.00000000 GHz
Start 30 MHz #Res BW 1.0 MHz #VBW 1.0 MHz IMR MODE TRC SCL X Y FUNCTION	Stop 3.000 GHz Sweep 3.600 ms (1001 pts)	CF Step 297.000000 MHz Auto Man	Start 3.000 GHz Stop 20.000 GH #Res BW 1.0 MHz #VBW 1.0 MHz Sweep 28.33 ms (1001 pt IMR MORE TRC SCL X Y FUNCTION NOTH FUNCTION NOTH	CF Step 1,700000000 GHz Auto Man
1 N 1 f 2.682.2 GHz 28.08 dBm 3 - - - - - 4 - - - - - 5 - - - - -		Freq Offset 0 Hz	1 N 1 f 19.031 GHz -21.94 dBm 2 N 1 f 5.001 GHz -25.99 dBm 4 N 1 f 7.001 GHz -25.99 dBm 4 N 1 f 7.011 GHz -25.97 dBm	Freq Offset 0 Hz
6 7 8 9 10			6 7 8 9 10	
195	státus		NEO. ETATUR	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

f (886-2) 2298-0488



30MHz~3GHz_Band41_15MHz_QPSK_1_0_MidCH40620

3GHz~10GHz_Band41_15MHz_QPSK_1_0_HighCH41515

100 M 100		Keyeight Spectrum Analyzer - Skept SA			Keyinght Spectrum Analyzer - Silvept SA
Frequency	Ava Type: Log-Pwr TRACE TRACE	Center Freq 11.500000000 GHz PNO: Fast FGain:Low #Atten: 30 dB	Frequency		
Auto Tune	Mkr3 8.048 GHz -27.49 dBm	Ref Offset 23.8 dB	Auto Tune	23.8 dB Mkr1 2,587 2 GHz 0 dBm 28.01 dBm	Ref Offset 23.8 dB
Center Freq 11.500000000 GHz			Center Freq 1.515000000 GHz		200
Start Freq 3 000000000 GHz	11 TOT SCA	100 Store 10 1 And the start of	Start Freq 30.000000 MHz	ية 100 Cer 1. المحمد الم	na D Son Son Son
Stop Freq 20 000000000 GHz		400	Stop Freq 3.00000000 GHz		40 0 60 0 60 0
CF Step 1.700000000 GHz Auto Man	Stop 20.000 GHz Sweep 28.33 ms (1001 pts)	Start 3.000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz www.wope.tec.scu x 9	CF Step 297.000000 MHz Auto Man	#VBW 1.0 MHz Stop 3.000 CHz #VBW 1.0 MHz Sweep 3.600 ms (1001 pts) X Y Flatting Flatting with the superconstruction with the sup	Start 30 MHz #Res BW 1.0 MHz #VBW 1.0
Freq Offset 0 Hz	POICTOR POICTORMON POICTORVEDE	1 N 1 F 14.050 GHz -21.47 dBm 2 N 1 F 5.385 GHz -27.82 dBm N 1 F 5.048 GHz -27.49 dBm 5 6	Freq Offset 0 Hz	2.687 2 GHz 28.01 dBm	
					7 8 9 9 10 11
-	STATUS	ANN AND AND AND AND AND AND AND AND AND		STATUS	CRIM

3GHz~10GHz_Band41_15MHz_QPSK_1_0_MidCH40620

30MHz~3GHz_Band41_20MHz_QPSK_1_0_LowCH39750



30MHz~3GHz_Band41_15MHz_QPSK_1_0_HighCH41515

3GHz~10GHz_Band41_20MHz_QPSK_1_0_LowCH39750

Image: Sector Average Start Se	Frequency	Knyngtt Spectoren Andres - Stept SA. Stept Spectoren Andres - Stept SA. IM AL AL <t< th=""><th>Frequency</th></t<>	Frequency
Ref Offset 23.8 dB Mkr1 2,676 3 GHz 10 dB/div Ref 30.00 dBm 27.39 dBm	Auto Tune	Ref Offset 23.8 dB Mkr3 7.518 GHz 10 dB/dav Ref 30.00 dBm -27.30 dBm	Auto Tune
	Center Freq 1.515000000 GHz		Center Freq 11.500000000 GHz
NDD	Start Freq 30,000000 MHz	NDD 1971 1972 - Marine Ma	Start Freq 3.000000000 GHz
40 0 50 0 60 0	Stop Freq 3,000000000 GHz		Stop Freq 20 00000000 GHz
Start 30 MHz Stop 3,000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Sweep 3,600 ms (1001 pts) MRR MODE TRC SCL x Y Fluiction	CF Step 297,000000 MHz Auto Man	Start 3.000 GHz #Res BW 1.0 MHz Stop 20.000 GHz #VBW 1.0 MHz Stop 20.000 GHz \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	CF Step 1,70000000 GHz Auto Man
1 N 1 f 2.676 3 GHz 27 39 dBm	Freq Offset 0 Hz	1 N 1 f 19,066 GHz -21,69 dBm 2 N 1 f 5,012 GHz -36,671 dBm 3 N 1 f 7,618 GHz -27,30 dBm 4 S	Freq Offset 0 Hz
(es) státus		ation at the second sec	-

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

f (886-2) 2298-0488



30MHz~3GHz_Band41_20MHz_QPSK_1_0_MidCH40620

3GHz~10GHz_Band41_20MHz_QPSK_1_0_HighCH41490

Keynight Spactnum Anunyzer - Strapt SA		Keyeght Spactesen Analyzer - Sivapt SA	100 A
Mill Bit Bit Static Conternet and Distribution Static Conternet and Avg Type: Log-Pwr Trace Trace Trace Trace Distribution Monternet Information Trace Trace Trace Trace Trace Trace Distribution Trace Trace Trace Trace Trace Trace Distribution Trace Distribution	Frequency	00 RL 01 1.50000000000 GH → 100 KH2 2011 AUG NUTC 12223018 Sec 1,001 Center Freq 11.50000000000 GH → Trig: Free Run FiGain.Com #Atten: 30 dB center 10 Ce	Frequency
Ref Offset 23.8 dB Mkr1 2,584 2 GHz 28.06 dBm 28.06 dBm	Auto Tune	Ref Offset 23.8 dB Mkr3 8.040 GHz 10 dB/div Ref 30.00 dBm -27,46 dBm	Auto Tune
	Center Freq 1.515000000 GHz		Center Fred 11.500000000 GHz
1000 1011 2011 - 2012 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 2011 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014	Start Freq 30,000000 MHz		Start Freq 3.000000000 GHz
40 α ζόρ ξάρ	Stop Freq 3.000000000 GHz		Stop Fred 20 00000000 GH
Start 30 MHz Stop 3.000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Sweep 3.600 ms (1001 pts) wms note First successible sweep 1.600 ms (1001 pts)	CF Step 297.000000 MHz Auto Man	Start 3.000 GHz Stop 20.000 GHz #Res BW 1.0 MHz #VBW 1.0 MHz Sweep 28.37 ms (1001 pts) work mode Fro Scill x Platform From the scill	CF Step 1.70000000 GHu Buto Man
N 1 7 2.684 2 GHz 28 06 dBm 2 3 4 4 5 5	Freq Offset 0 Hz	N 1 f 19,116 GHz -20.90 dBm Z N 1 f 5,360 GHz -22.18 dBm N 1 f 8,440 GHz -27.14 dBm -27.14 dBm	Freq Offset 0 Hz
7 6 9 10 11			
zurktes (2014	-	SUIĂTS (CRM	-

3GHz~10GHz_Band41_20MHz_QPSK_1_0_MidCH40620



30MHz~3GHz_Band41_20MHz_QPSK_1_0_HighCH41490

	a bu	SENSE JUT	ALTON AUTO	12:12:38 PM Sep 21, 2017				
enter Freq 1.5150	PNO: Fast IFGain:Low	Trig: Free Run	Avg Type: Log-Pwr	TRACE I 2 3 4 5 1 TYPE IN CONTACT OF DET P N N N H I IN	Frequency			
Ref Offset 23.8 dB Mkr1 2,670 3 GHz 10 dB/dw Ref 30.00 dBm 26,43 dBm								
.00 2010 1010					Center Fre 1.515000000 GH			
100 Mill 900 dagendegregenerister	المراجع ورودو والمراجع المالية	ويتعادم والمتعادية والمتاهدة والموالي	9.45° 50° 10° 10° 10° 10° 10° 10° 10° 10° 10° 1	دا (1703 میں) ماہ میں نے انہا کا معاد کہ میں انہا	Start Fre 30 000000 MH			
40 0 30 D 60 D					Stop Fre 3.000000000 GH			
Start 30 MHz Res BW 1.0 MHz	#VE	BW 1.0 MHz	Sweep 3	Stop 3.000 GHz 600 ms (1001 pts)	CF Ste 297.000000 Mit Auto Ma			
2 N 1 T 2 3 T 5 5 7 8 9 9	2.670 3 GHz	26.43 dBm	Increase of the second second second	FORTONIZOE	Freq Offse 01			
50		~	ETÁTUS	T 7 .	· · · · · · · · · · · · · · · · · · ·			

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless onerwise stated in escuts shown in this test report term only to the sample(s) tested and storp in sample(s) are related to 90 days only. Keix 5 A gives in but sets # 僅對測試之 樣品 身 ,同時此樣品 僅保留的人気。本報告未變本心引 書面許可,不可能分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format docu-ments, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_edocument.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole respon-sibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the term. law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



10. FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT 10.1. Standard Applicable

According to FCC §2.1053,

FCC §22.917(a), §24.238(a), §27.53 (h), the magnitude of each spurious and harmonic emission that can be detected when the equipment is operated under the conditions specified in the instruction manual and/ or alignment procedure, shall not be less than 43 + 10 log (mean output power in watts) dBc below the mean power output outside a license's frequency block (-13dBm).

§27.53 (c)

(2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P) dB (-13dBm)$

(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

§27.53 (f) For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC §27.53(c) (5) & FCC §27.53(g)

Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC §27.53(h) (3)

Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> <u>e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



FCC §27.53(m) (4) (6)

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

Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed; for mobile digital stations, in the 1 megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 megahertz or 1 percent of emission bandwidth, as specified; or 1 megahertz or 2 percent for mobile digital stations, except in the band 2495-2496 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



According to RSS-130 §4.6

The power of any unwanted emissions in any 100 kHz bandwidth on any frequency outside the frequency range(s) within which the equipment is designed to operate shall be attenuated below the transmitter power, P (dBW), by at least 43 + 10 log10 p (watts), dB. However, in the 100 kHz band immediately outside the equipment's operating frequency range, a resolution bandwidth of 30 kHz may be employed.

In addition to the limit outlined in Section 4.6.1 above, equipment operating in the frequency bands 746-756 MHz and 777-787 MHz shall also comply with the following restrictions:

(a) The power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power,

P (dBW), by at least:

(i) 76 + 10 log10 p(watts), dB, for base and fixed equipment, and

(ii) 65 + 10 log10 p(watts), dB, for mobile and portable equipment.

According to RSS-132 §5.5

Mobile and base station equipment shall comply with the limits in (i) and (ii) below.

(i) In the first 1.0 MHz band immediately outside and adjacent to each of the sub-bands specified in Section 5.1, the power of emissions per any 1% of the occupied bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least 43 + 10 log10 p (watts).

(ii) After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least 43 + 10 log10 p (watts). If the measurement is performed using 1% of the occupied bandwidth, power integration over 100 kHz is required.

According to RSS-133 §6.5.1

Equipment shall comply with the limits in (i) and (ii) below.

(i) In the 1.0 MHz bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1% of the emission bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least 43 + 10 log10 p(watts).

(ii) After the first 1.0 MHz, the emission power in any 1 MHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least 43 + 10 log10 p(watts). If the measurement is performed using 1% of the emission bandwidth, power integration over 1.0 MHz is required.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



According to RSS-139 §6.5

(i) In the first 1.0 MHz bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1% of the emission bandwidth shall be attenuated below the transmitter output power P (in watts) by at least 43 + 10 log10(P), dB.

(ii) After the first 1.0 MHz outside the equipment's operating frequency block, the emission power in any 1 MHz bandwidth shall be attenuated below the transmitter output power P (in watts) by at least 43 + 10 log10(P), dB.

According to RSS-195 §5.6.2

The power of any emission outside the frequency range(s) in which the equipment operates shall be attenuated below the transmitter power, P(dBW), by the amount indicated in Table 2 and graphically represented in Figure 2, where p is the transmitter output power measured in watts.

Table 2 — Unwanted Emissions for Mobile, Portable and Low-Power Fixed Subscriber Equipment

Frequency (MHz)	Attenuation (dB)
<2200	$43 + 10 \log_{10}(p)$
2200 - 2288	$70 + 10 \log_{10}(p)$
2288 - 2292	$67 + 10 \log_{10}(p)$
2292 - 2296	$61 + 10 \log_{10}(p)$
2296 - 2300	$55 + 10 \log_{10}(p)$
2300 - 2305	$43 + 10 \log_{10}(p)$
2305 - 2320	$43 + 10 \log_{10}(p)^{Note}$
2320 - 2324	$55 + 10 \log_{10}(p)$
2324 - 2328	$61 + 10 \log_{10}(p)$
2328 - 2337	$67 + 10 \log_{10}(p)$
2337 - 2341	$61 + 10 \log_{10}(p)$
2341 - 2345	$55 + 10 \log_{10}(p)$
2345 - 2360	$43 + 10 \log_{10}(p)^{Note}$
2360 - 2365	$43 + 10 \log_{10}(p)$
2365 - 2395	$70 + 10 \log_{10}(p)$
>2395	$43 + 10 \log_{10}(p)$

Note: Measured at the edges of the highest and lowest frequency range(s) in which the equipment is designed to operate. See Section 5.2 for the permitted frequency ranges for various equipment types.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> <u>e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



According to RSS-199 §4.6

Equipment shall comply with the following unwanted emission limits:

- (a) for base station and fixed subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least 43 + 10 log₁₀ p.
- (b) for mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least:
- (i) 40 + 10 log10 p from the channel edges to 5 MHz away
- (ii) 43 + 10 log10 p between 5 MHz and X MHz from the channel edges, and
- (iii) 55 + 10 log10 p at X MHz and beyond from the channel edges

In addition, the attenuation shall not be less than 43 + 10 log₁₀ p on all frequencies between 2490.5 MHz and 2496 MHz, and 55 + 10 log₁₀ p at or below 2490.5 MHz.

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

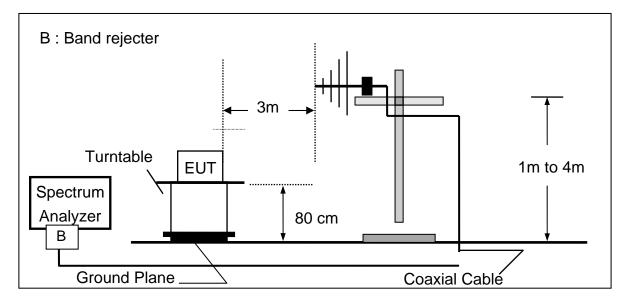
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

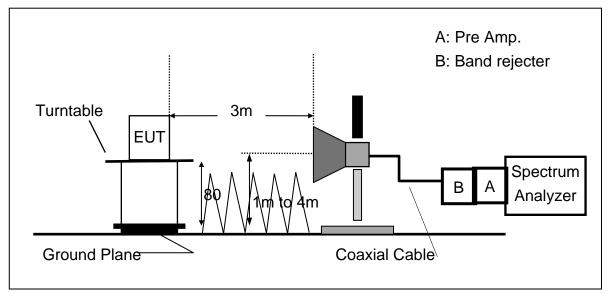


10.2. EUT Setup

Radiated Emission Test Set-Up, Frequency Below 1000MHz



Radiated Emission Test Set-UP Frequency Over 1 GHz



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and diffenders may he prosecuted to the fullest event of the law. document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號



10.3. Measurement Procedure:

The EUT was placed on a non-conductive; the measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The frequency range up to tenth harmonic was investigated for each of three fundamental frequencies (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method.

The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.

ERP (dBm) = SG Level(dBm) + Antenna Gain(dBd) + Cable Loss(dB)

EIRP (dBm) = SG Level(dBm) + Antenna Gain(dBi) + Cable Loss(dB)

Note : "F" : denotes Fundamental Frequency. ; "H" : denotes Harmonic Frequency.
"E" : denotes Band Edge Frequency. ; "S" : denotes Spurious Frequency.
"---" : denotes Noise Floor.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



10.4. Measurement Equipment Used:

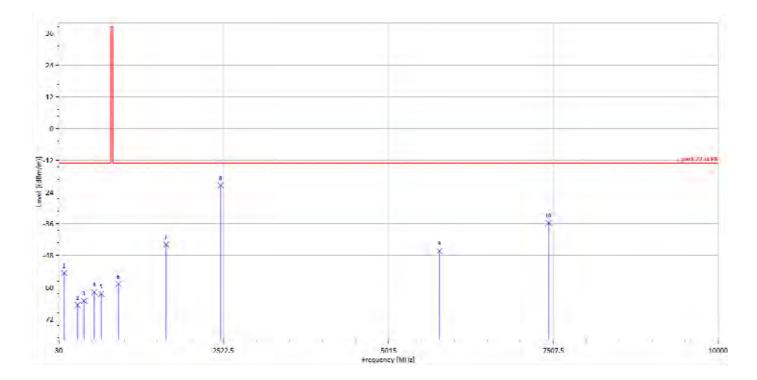
ERP, I	EIRP MEASUREM	IENT EQUIPMEN	NT List 966 C	hamber	
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
EMI Test Receiver	R&S	ESU 40	100363	04/18/2017	04/17/2018
Broadband Antenna	TESEQ	CBL 6112D	35240	11/03/2016	11/02/2017
Broadband Antenna	TESEQ	CBL 6112D	35243	11/09/2016	11/08/2017
Horn Antenna	ETS-Lindgren	3117	00143272	12/15/2016	12/16/2017
Horn Antenna	ETS-Lindgren	3117	143279	11/14/2016	11/13/2017
Horn Antenna	Schwarzbeck	BBHA9170	184	12/11/2016	12/10/2017
Horn Antenna	Schwarzbeck	BBHA9170	185	08/01/2017	07/31/2018
Pre Amplifier	EMC Instruments	EMC330	980096	12/12/2016	12/11/2017
Pre Amplifier	EMC Instruments	EMC0011830	980199	12/12/2016	12/11/2017
Pre Amplifier	R&S	SCU-18	10204	12/12/2016	12/11/2017
Pre Amplifier	R&S	SCU-26	100780	12/12/2016	12/11/2017
Pre Amplifier	EMC Instruments	EMC184045B	980135	12/12/2016	12/11/2017
Coaxial Cable	Huber+Suhner	RG 214/U	966Rx 9K-30M	12/12/2016	12/11/2017
Coaxial Cable	Huber+Suhner	RG 214/U SUCOFLEX 104	966Rx 30M-3G	12/12/2016	12/11/2017
Coaxial Cable	Huber+Suhner	SUCOFLEX 104	966Rx 1G-18G	12/12/2016	12/11/2017
Coaxial Cable	Huber+Suhner	mini 141-12 SUCOFLEX 104	966Rx 18G-40G	12/12/2016	12/11/2017
Coaxial Cable	Huber+Suhner	SUCOFLEX 104	966Tx 30M-18G	12/12/2016	12/11/2017
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	966Tx 18G-40G	12/12/2016	12/11/2017
Attenuator	WOKEN	218FS-10	RF27	12/12/2016	12/11/2017
Communication Tester	Anritsu	MT8820C	6201107337	05/25/2017	05/24/2018
Site NSA	SGS	966 Chamber C	SAC-C	03/02/2017	03/01/2018
Site VSWR	SGS	966 Chamber C	SAC-C	03/02/2017	03/01/2018
DC Power Supply	HOLA	DP-3003	D7070035	05/04/2017	05/03/2018
Controller	MF	MF-7802	N/A	N.C.R.	N.C.R.
Antenna Master	MF	N/A	N/A	N.C.R.	N.C.R.
Turn Table	MF	N/A	N/A	N.C.R.	N.C.R.
Test Software	World-Pallas	Dr. E	V 3.0 Lite	N.C.R.	N.C.R.



10.5. Measurement Result:

Radiated Spurious Emission Measurement Result: GPRS 850 Mode (The Worst Case)

Operation Mode :	GPRS850	Test Date :	2017/9/28
Fundamental Frequency :	824.2 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



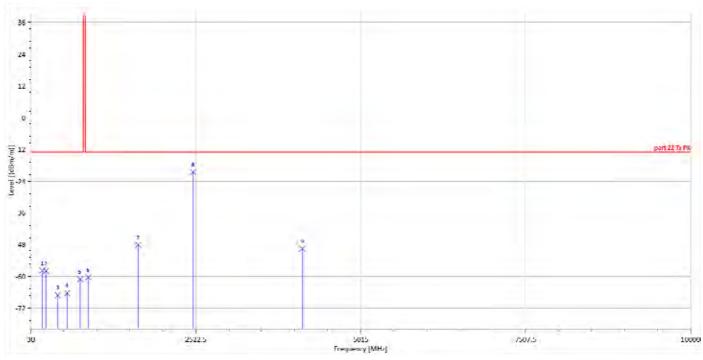
Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
113.42	S	-54.55	-49.59	-3.49	-1.47	-13	-41.55
319.06	S	-66.69	-67.61	3.48	-2.56	-13	-53.69
414.12	S	-65.18	-65.57	3.32	-2.93	-13	-52.18
566.41	S	-61.90	-62.53	4.08	-3.45	-13	-48.90
673.11	S	-62.51	-63.59	4.82	-3.75	-13	-49.51
937.92	S	-58.74	-59.62	5.37	-4.49	-13	-45.74
1652.80	Н	-43.83	-43.96	6.59	-6.46	-13	-30.83
2479.20	Н	-21.47	-22.20	8.53	-7.81	-13	-8.47
5784.80	Н	-46.27	-46.65	10.91	-10.53	-13	-33.27
7437.60	Н	-35.76	-33.47	9.24	-11.52	-13	-22.76

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document and offenders may here produced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may he prosecuted to the fully extent of the law. document is unlawful and offenders may be prosecuted to the fullest extent of the law

S Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號



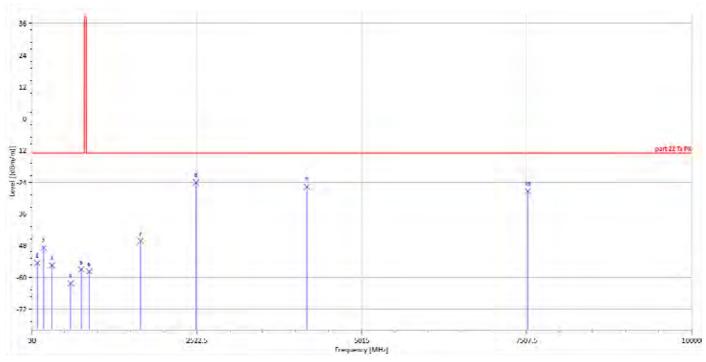
Operation Mode :	GPRS850	Test Date :	2017/9/28
Fundamental Frequency :	824.2 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
199.75	S	-57.79	-59.59	3.79	-1.99	-13	-44.79
254.07	S	-57.93	-58.17	2.51	-2.27	-13	-44.93
435.46	S	-67.13	-67.63	3.50	-3.00	-13	-54.13
579.02	S	-66.39	-67.07	4.17	-3.49	-13	-53.39
772.05	S	-61.12	-62.29	5.19	-4.02	-13	-48.12
896.21	S	-60.37	-61.19	5.23	-4.40	-13	-47.37
1652.80	Н	-48.13	-48.26	6.59	-6.46	-13	-35.13
2479.20	Н	-20.62	-21.34	8.53	-7.81	-13	-7.62
4132.00	Н	-49.59	-50.78	10.45	-9.26	-13	-36.59



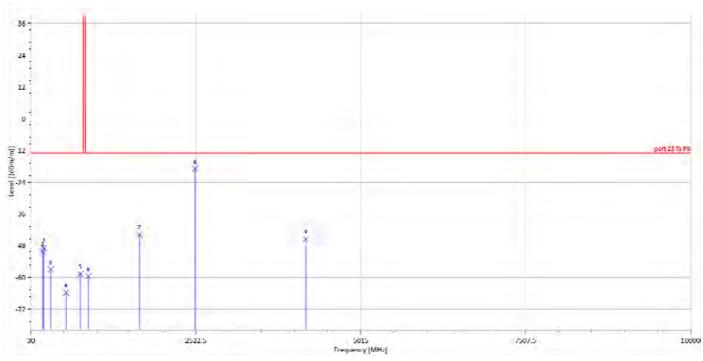
Operation Mode :	GPRS850	Test Date :	2017/9/28
Fundamental Frequency :	836.6 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



	Freq.	Note	ERP/EIRP	SG Output	Antenna	Cable	Limit	Margin
				Level	Gain	Loss	@3m	
	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
-	108.57	S	-54.54	-49.52	-3.57	-1.44	-13	-41.54
2	205.57	S	-48.85	-50.74	3.90	-2.02	-13	-35.85
3	330.70	S	-55.46	-56.32	3.46	-2.60	-13	-42.46
6	616.85	S	-62.31	-63.11	4.42	-3.62	-13	-49.31
7	773.02	S	-56.99	-58.16	5.19	-4.02	-13	-43.99
8	396.21	S	-57.80	-58.63	5.23	-4.40	-13	-44.80
1	673.20	Н	-46.24	-46.42	6.68	-6.50	-13	-33.24
2	509.80	Н	-24.12	-24.84	8.56	-7.84	-13	-11.12
4	183.00	Н	-25.65	-26.80	10.45	-9.30	-13	-12.65
7	529.40	Н	-27.47	-25.05	9.15	-11.57	-13	-14.47

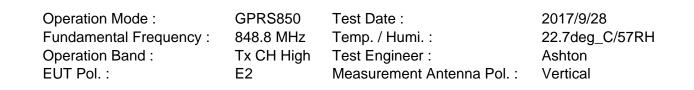


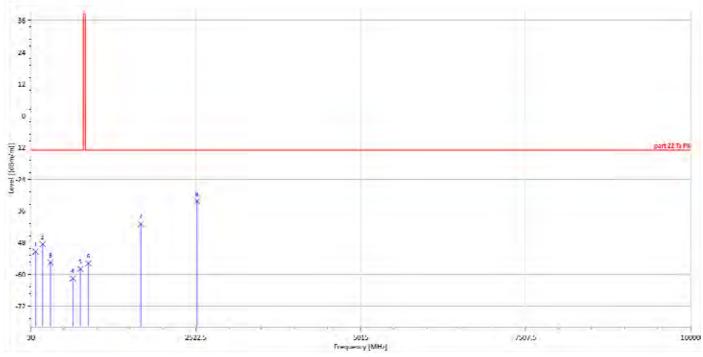
Operation Mode :	GPRS850	Test Date :	2017/9/28
Fundamental Frequency :	836.6 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
	N 41 1-	F/H/E/S	ما 🛛 سم				-	D
_	MHz	г/п/с/З	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	206.54	S	-50.30	-52.20	3.92	-2.02	-13	-37.30
	221.09	S	-48.99	-50.86	3.96	-2.10	-13	-35.99
	328.76	S	-57.01	-57.88	3.47	-2.60	-13	-44.01
	563.50	S	-65.91	-66.53	4.06	-3.44	-13	-52.91
	773.02	S	-58.72	-59.89	5.19	-4.02	-13	-45.72
	897.18	S	-59.65	-60.47	5.23	-4.40	-13	-46.65
	1673.20	Н	-43.75	-43.93	6.68	-6.50	-13	-30.75
	2509.80	Н	-18.93	-19.65	8.56	-7.84	-13	-5.93
	4183.00	Н	-45.56	-46.71	10.45	-9.30	-13	-32.56



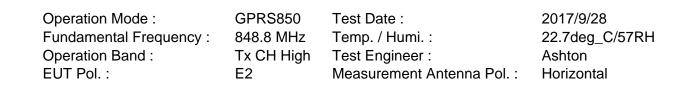


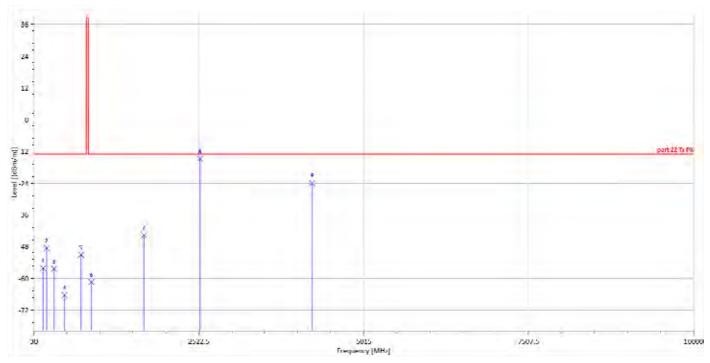


	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	96.93	S	-51.45	-47.08	-3.01	-1.36	-13	-38.45
	204.60	S	-48.70	-50.57	3.88	-2.01	-13	-35.70
	325.85	S	-55.47	-56.36	3.47	-2.58	-13	-42.47
6	661.47	S	-61.62	-62.62	4.72	-3.72	-13	-48.62
-	773.02	S	-57.90	-59.07	5.19	-4.02	-13	-44.90
8	897.18	S	-55.80	-56.63	5.23	-4.40	-13	-42.80
1	693.20	Н	-40.89	-41.10	6.76	-6.55	-13	-27.89
2	539.80	Н	-32.33	-33.05	8.60	-7.87	-13	-19.33



Report No.: E2/2017/80129 Page 461 of 605



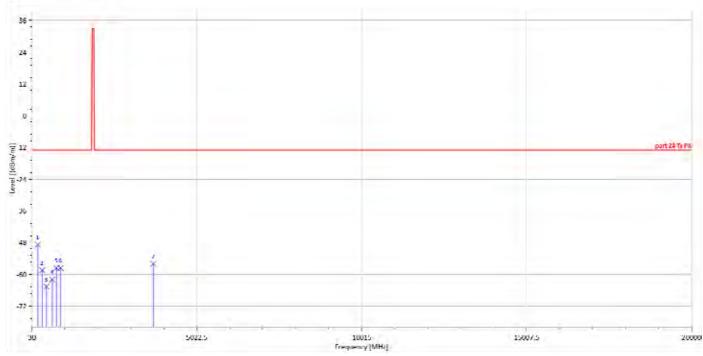


Freq	Note	ERP/EIRP	SG Output	Antenna	Cable	Limit	Margin	
			Level	Gain	Loss	@3m		
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB	
165.8	0 S	-56.15	-56.39	2.05	-1.80	-13	-43.15	
220.1	2 S	-48.61	-50.52	4.00	-2.09	-13	-35.61	
332.6	4 S	-56.36	-57.21	3.46	-2.61	-13	-43.36	
493.6	6 S	-66.37	-67.15	3.99	-3.20	-13	-53.37	
740.0	4 S	-51.16	-52.39	5.14	-3.91	-13	-38.16	
898.1	5 S	-61.41	-62.24	5.23	-4.41	-13	-48.41	
1693.2	20 H	-43.65	-43.86	6.76	-6.55	-13	-30.65	
2539.8	80 H	-14.70	-15.42	8.60	-7.87	-13	-1.70	
4233.0	00 H	-24.04	-25.14	10.45	-9.35	-13	-11.04	



Radiated Spurious Emission Measurement Result: GSM 1900 Mode (The Worst Case)

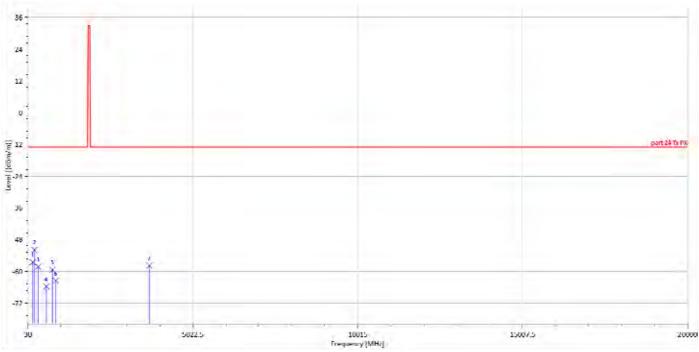
Operation Mode :	GSM 1900	Test Date :	2017/9/28
Fundamental Frequency :	1850.2 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	202.66	S	-48.81	-52.62	5.82	-2.00	-13.01	-35.80
	334.58	S	-58.47	-61.80	5.95	-2.62	-13.01	-45.46
	464.56	S	-64.71	-67.95	6.34	-3.09	-13.01	-51.70
	645.95	S	-61.95	-65.42	7.15	-3.69	-13.01	-48.94
	773.02	S	-57.57	-61.29	7.74	-4.02	-13.01	-44.56
	897.18	S	-57.57	-61.05	7.89	-4.40	-13.01	-44.56
	3700.40	Н	-55.99	-59.51	12.42	-8.90	-13.01	-42.98



Operation Mode :	GSM 1900	Test Date :	2017/9/28
Fundamental Frequency :	1850.2 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

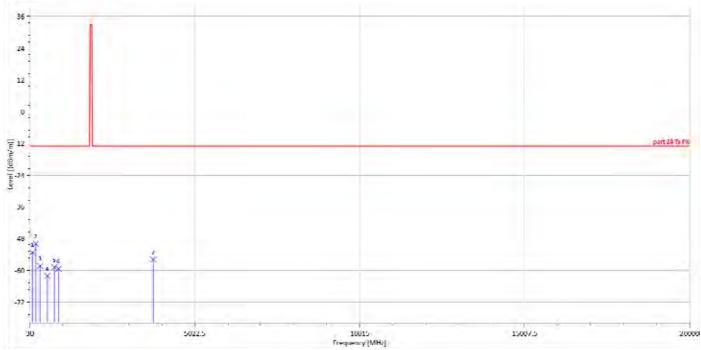


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
168.71	S	-56.53	-58.88	4.17	-1.82	-13.01	-43.52
222.06	S	-51.95	-56.14	6.29	-2.10	-13.01	-38.94
333.61	S	-58.23	-61.56	5.95	-2.61	-13.01	-45.22
585.81	S	-65.81	-69.14	6.84	-3.51	-13.01	-52.80
773.02	S	-59.48	-63.19	7.74	-4.02	-13.01	-46.47
871.96	S	-63.58	-67.08	7.84	-4.34	-13.01	-50.57
3700.40	Н	-57.76	-61.28	12.42	-8.90	-13.01	-44.75



Report No.: E2/2017/80129 Page 464 of 605

Operation Mode :	GSM 1900	Test Date :	2017/9/28
Fundamental Frequency :	1880 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

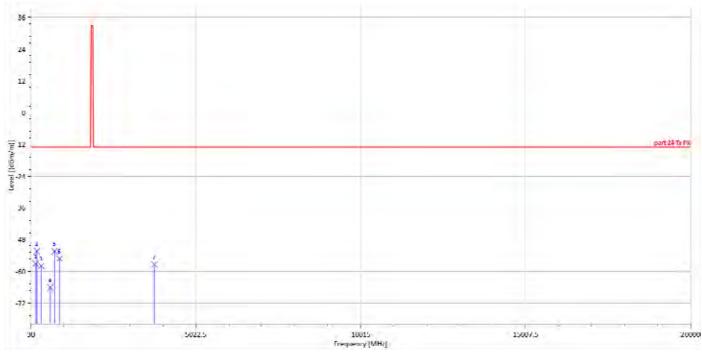


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
104.69	S	-53.14	-50.26	-1.46	-1.41	-13.01	-40.13
202.66	S	-50.00	-53.82	5.82	-2.00	-13.01	-36.99
330.70	S	-58.33	-61.66	5.94	-2.60	-13.01	-45.32
557.68	S	-62.14	-65.30	6.59	-3.43	-13.01	-49.13
773.02	S	-58.83	-62.54	7.74	-4.02	-13.01	-45.82
897.18	S	-59.43	-62.91	7.89	-4.40	-13.01	-46.42
3760.00	Н	-55.90	-59.42	12.46	-8.94	-13.01	-42.89



Report No.: E2/2017/80129 Page 465 of 605

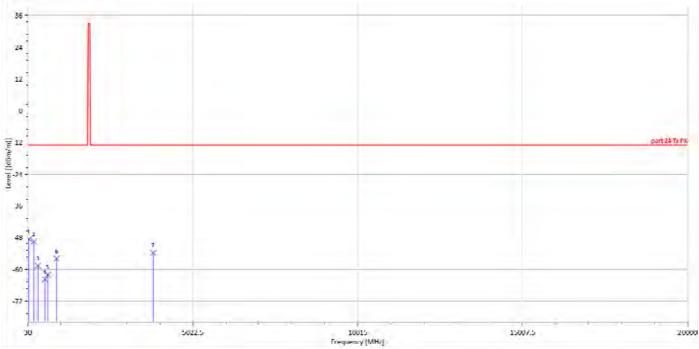
Operation Mode :	GSM 1900	Test Date :	2017/9/28
Fundamental Frequency : Operation Band :	1880 MHz Tx CH Mid	Temp. / Humi. : Test Engineer :	22.7deg_C/57RH Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
-	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	168.71	S	-57.09	-59.44	4.17	-1.82	-13.01	-44.08
	201.69	S	-52.41	-56.20	5.79	-2.00	-13.01	-39.40
	334.58	S	-57.94	-61.27	5.95	-2.62	-13.01	-44.93
	616.85	S	-66.19	-69.61	7.04	-3.62	-13.01	-53.18
	747.80	S	-52.44	-56.22	7.71	-3.93	-13.01	-39.43
	897.18	S	-55.17	-58.65	7.89	-4.40	-13.01	-42.16
	3760.00	Н	-57.41	-60.93	12.46	-8.94	-13.01	-44.40



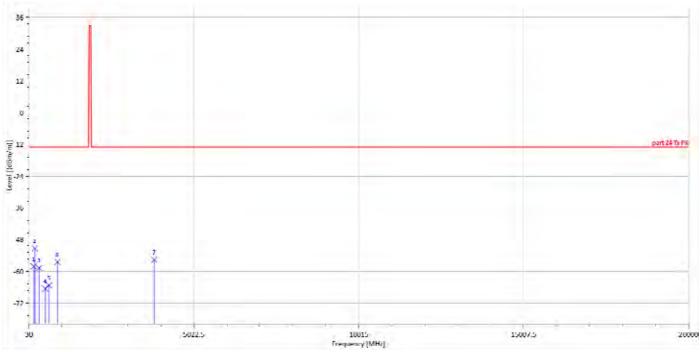
Operation Mode :	GSM 1900	Test Date :	2017/9/28
Fundamental Frequency :	1909.8 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin	
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB	
	62.98	S	-48.64	-46.74	-0.83	-1.08	-13.01	-35.63	
	202.66	S	-49.57	-53.38	5.82	-2.00	-13.01	-36.56	
	328.76	S	-58.62	-61.95	5.93	-2.60	-13.01	-45.61	
	544.10	S	-63.82	-66.94	6.51	-3.39	-13.01	-50.81	
	629.46	S	-62.05	-65.49	7.09	-3.65	-13.01	-49.04	
	900.09	S	-55.90	-59.38	7.89	-4.41	-13.01	-42.89	
	3819.60	Н	-53.69	-57.20	12.49	-8.98	-13.01	-40.68	



Operation Mode :	GSM 1900	Test Date :	2017/9/28
Fundamental Frequency :	1909.8 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

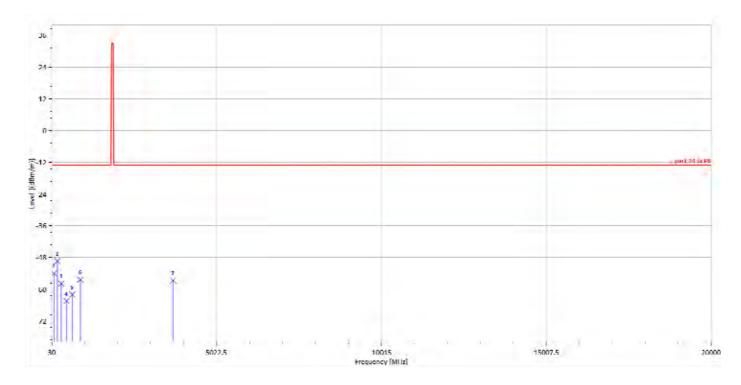


	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin	
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB	
	170.65	S	-58.15	-60.71	4.39	-1.83	-13.01	-45.14	
	204.60	S	-51.39	-55.26	5.88	-2.01	-13.01	-38.38	
	332.64	S	-58.75	-62.08	5.94	-2.61	-13.01	-45.74	
	520.82	S	-66.55	-69.74	6.50	-3.31	-13.01	-53.54	
	638.19	S	-65.38	-68.83	7.12	-3.67	-13.01	-52.37	
	897.18	S	-56.44	-59.93	7.89	-4.40	-13.01	-43.43	
	3819.60	Н	-55.61	-59.12	12.49	-8.98	-13.01	-42.60	



Radiated Spurious Emission Measurement Result: WCDMA Band 2 Mode

Operation Mode :	WCDMA B2	Test Date :	2017/9/28
Fundamental Frequency :	1852.4 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



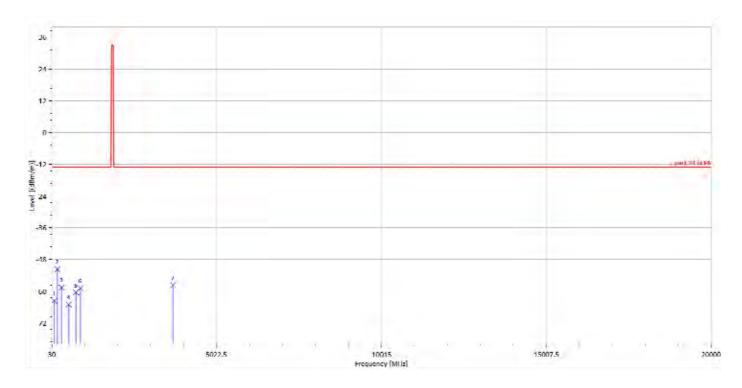
	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
		_ // . / _ / _						
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	101.78	S	-53.94	-51.19	-1.36	-1.39	-13.01	-40.93
	202.66	S	-49.36	-53.17	5.82	-2.00	-13.01	-36.35
	322.94	S	-57.81	-61.16	5.92	-2.57	-13.01	-44.80
	484.93	S	-64.50	-67.75	6.42	-3.17	-13.01	-51.49
	659.53	S	-62.00	-65.55	7.27	-3.72	-13.01	-48.99
	896.21	S	-56.29	-59.78	7.89	-4.40	-13.01	-43.28
	3704.80	Н	-56.63	-60.15	12.42	-8.90	-13.01	-43.62

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and diffenders may he prosecuted to the fullest event of the law. document is unlawful and offenders may be prosecuted to the fullest extent of the law

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 S Taiwan Ltd.



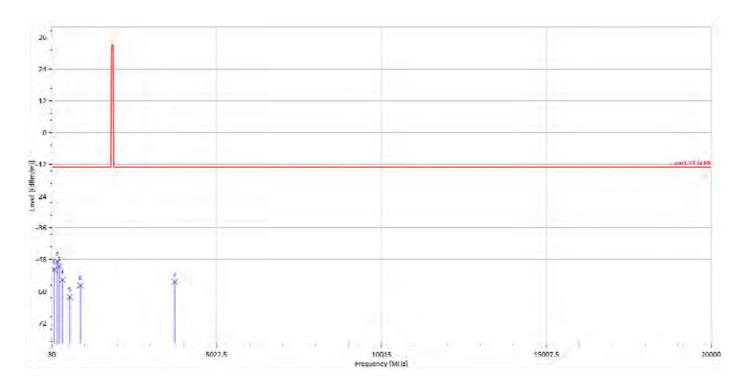
Operation Mode :	WCDMA B2	Test Date :	2017/9/28
Fundamental Frequency :	1852.4 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
 MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
105.66	S	-63.66	-60.74	-1.50	-1.42	-13.01	-50.65
202.66	S	-51.70	-55.51	5.82	-2.00	-13.01	-38.69
330.70	S	-58.59	-61.93	5.94	-2.60	-13.01	-45.58
551.86	S	-65.07	-68.19	6.53	-3.41	-13.01	-52.06
773.02	S	-60.44	-64.16	7.74	-4.02	-13.01	-47.43
896.21	S	-58.78	-62.27	7.89	-4.40	-13.01	-45.77
3704.80	Н	-57.65	-61.17	12.42	-8.90	-13.01	-44.64



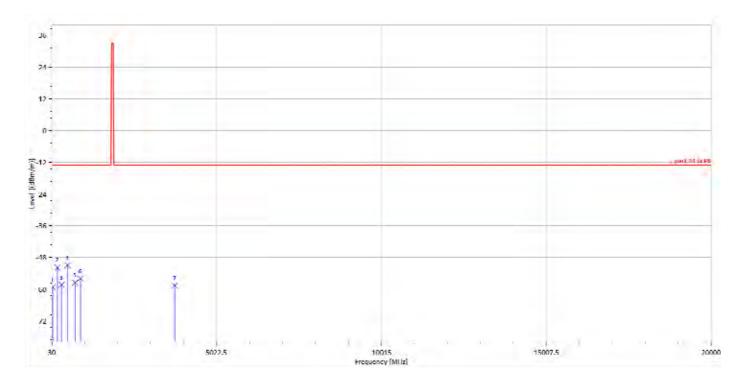
Operation Mode :	WCDMA B2	Test Date :	2017/9/28
Fundamental Frequency :	1880 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
1	00.81	S	-51.74	-49.04	-1.32	-1.39	-13.01	-38.73
2	202.66	S	-48.85	-52.66	5.82	-2.00	-13.01	-35.84
2	264.74	S	-50.62	-53.20	4.90	-2.32	-13.01	-37.61
Э	859.80	S	-55.55	-58.79	5.94	-2.71	-13.01	-42.54
5	581.93	S	-62.16	-65.47	6.81	-3.50	-13.01	-49.15
8	898.15	S	-57.72	-61.21	7.89	-4.41	-13.01	-44.71
3	760.00	Н	-56.46	-59.97	12.46	-8.94	-13.01	-43.45



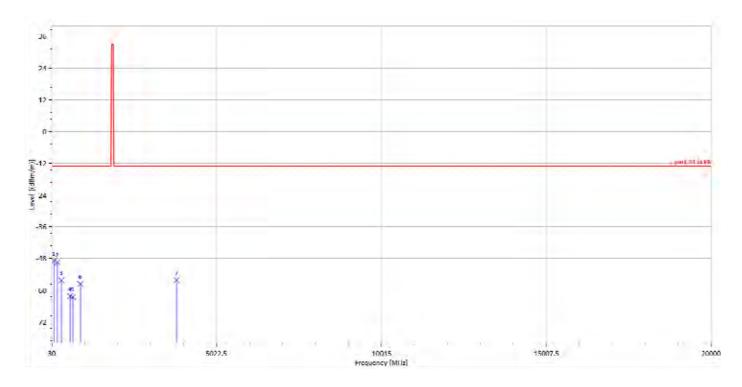
Operation Mode :	WCDMA B2	Test Date :	2017/9/28
Fundamental Frequency :	1880 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
 MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
59.10	S	-59.25	-56.63	-1.58	-1.04	-13.01	-46.24
204.60	S	-51.78	-55.65	5.88	-2.01	-13.01	-38.77
331.67	S	-58.27	-61.60	5.94	-2.61	-13.01	-45.26
514.03	S	-50.99	-54.20	6.50	-3.28	-13.01	-37.98
746.83	S	-57.41	-61.19	7.71	-3.93	-13.01	-44.40
897.18	S	-55.85	-59.34	7.89	-4.40	-13.01	-42.84
3760.00	Н	-58.57	-62.08	12.46	-8.94	-13.01	-45.56



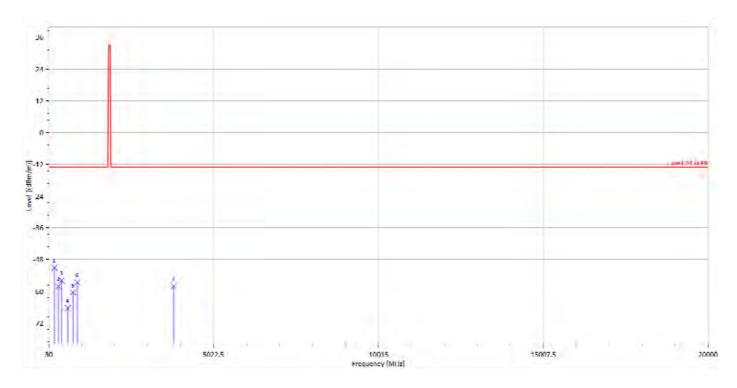
Operation Mode :	WCDMA B2	Test Date :	2017/9/28
Fundamental Frequency :	1907.6 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
 MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
100.81	S	-48.93	-46.22	-1.32	-1.39	-13.01	-35.92
202.66	S	-49.42	-53.24	5.82	-2.00	-13.01	-36.41
326.82	S	-56.17	-59.51	5.93	-2.59	-13.01	-43.16
596.48	S	-62.27	-65.66	6.94	-3.56	-13.01	-49.26
676.99	S	-62.56	-66.26	7.46	-3.76	-13.01	-49.55
897.18	S	-57.55	-61.04	7.89	-4.40	-13.01	-44.54
3815.20	Н	-56.10	-59.61	12.49	-8.98	-13.01	-43.09



Operation Mode :	WCDMA B2	Test Date :	2017/9/28
Fundamental Frequency :	1907.6 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

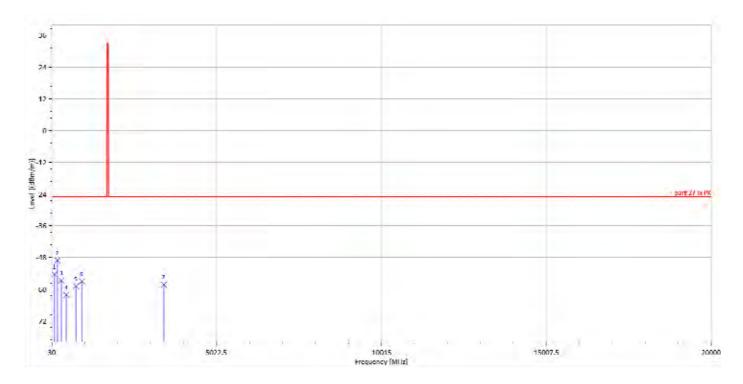


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
 MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
203.63	S	-51.12	-54.96	5.85	-2.01	-13.01	-38.11
327.79	S	-58.03	-61.36	5.93	-2.59	-13.01	-45.02
422.85	S	-55.88	-58.91	5.99	-2.96	-13.01	-42.87
615.88	S	-66.33	-69.75	7.04	-3.62	-13.01	-53.32
773.02	S	-60.48	-64.20	7.74	-4.02	-13.01	-47.47
896.21	S	-56.58	-60.06	7.89	-4.40	-13.01	-43.57
3815.20	Н	-57.98	-61.48	12.49	-8.98	-13.01	-44.97



Radiated Spurious Emission Measurement Result: HSUPA Band 4 Mode

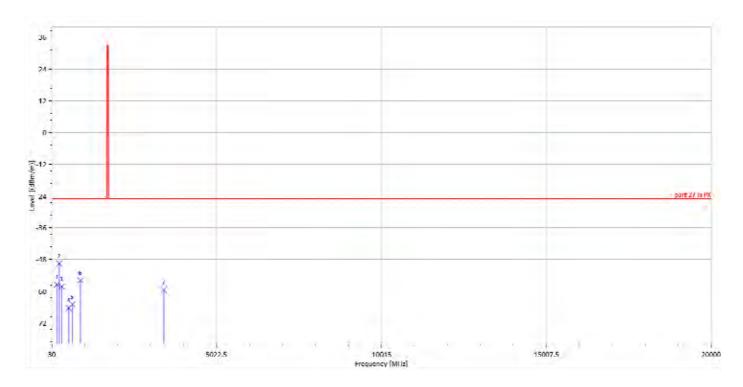
22.7deg_C/57RH
Ashton
nna Pol. : Vertical
r



	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	112.45	S	-54.31	-51.29	-1.55	-1.46	-25	-29.31
	203.63	S	-49.12	-52.96	5.85	-2.01	-25	-24.12
	325.85	S	-56.61	-59.95	5.92	-2.58	-25	-31.61
	473.29	S	-62.13	-65.38	6.37	-3.12	-25	-37.13
	773.02	S	-58.79	-62.50	7.74	-4.02	-25	-33.79
	937.92	S	-56.94	-60.39	7.95	-4.49	-25	-31.94
	3424.80	Н	-58.21	-61.66	12.15	-8.70	-25	-33.21



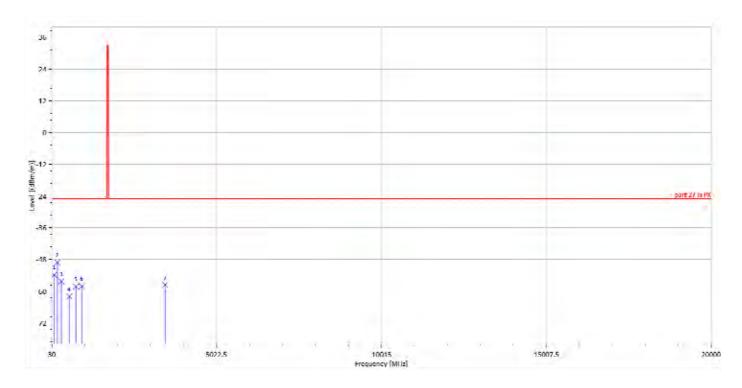
Operation Mode :	HSUPA B4	Test Date :	2017/9/28
Fundamental Frequency :	1712.4 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
192.96	S	-57.41	-61.30	5.84	-1.95	-25	-32.41
261.83	S	-49.54	-51.89	4.66	-2.31	-25	-24.54
336.52	S	-58.21	-61.54	5.95	-2.63	-25	-33.21
550.89	S	-66.30	-69.42	6.53	-3.41	-25	-41.30
661.47	S	-64.98	-68.55	7.29	-3.72	-25	-39.98
896.21	S	-55.80	-59.28	7.89	-4.40	-25	-30.80
3424.80	Н	-59.46	-62.91	12.15	-8.70	-25	-34.46



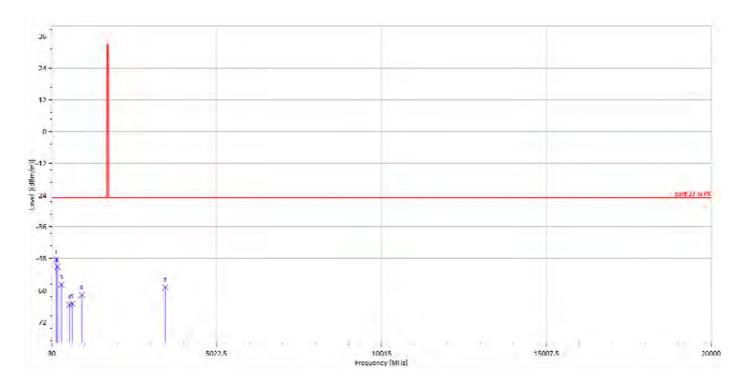
Operation Mode :	HSUPA B4	Test Date :	2017/9/28
Fundamental Frequency :	1732.6 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
103.72	S	-53.73	-50.89	-1.43	-1.41	-25	-28.73
203.63	S	-49.12	-52.96	5.85	-2.01	-25	-24.12
326.82	S	-56.21	-59.55	5.93	-2.59	-25	-31.21
571.26	S	-61.99	-65.24	6.71	-3.46	-25	-36.99
772.05	S	-58.18	-61.90	7.74	-4.02	-25	-33.18
937.92	S	-58.04	-61.49	7.95	-4.49	-25	-33.04
3465.20	Н	-57.53	-61.03	12.23	-8.73	-25	-32.53



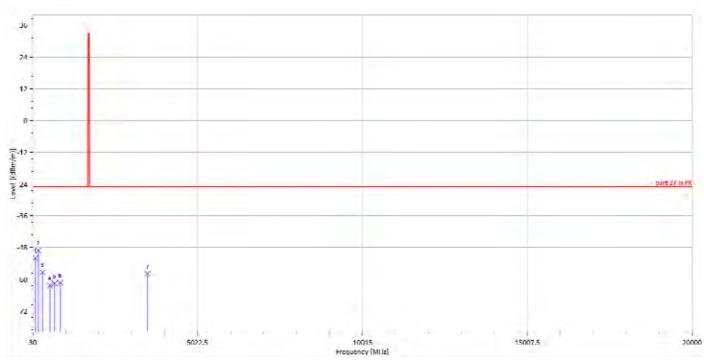
Operation Mode :	HSUPA B4	Test Date :	2017/9/28
Fundamental Frequency :	1732.6 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
167.74	S	-48.47	-50.72	4.06	-1.82	-25	-23.47
203.63	S	-51.11	-54.95	5.85	-2.01	-25	-26.11
329.73	S	-57.79	-61.13	5.94	-2.60	-25	-32.79
576.11	S	-65.54	-68.82	6.76	-3.48	-25	-40.54
658.56	S	-65.18	-68.72	7.26	-3.72	-25	-40.18
937.92	S	-61.76	-65.22	7.95	-4.49	-25	-36.76
3465.20	Н	-58.87	-62.37	12.23	-8.73	-25	-33.87



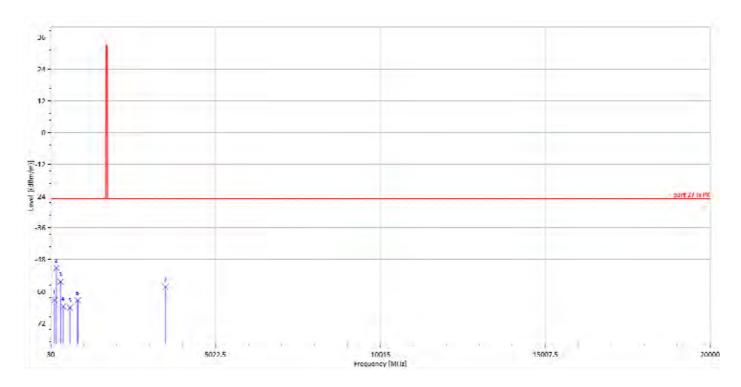
Operation Mode :HSUPA B4Fundamental Frequency :1752.6 MHzOperation Band :Tx CH HighEUT Pol. :E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/28 22.7deg_C/57RH Ashton Vertical
-------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------	---------------------------------------------------



	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	111.48	S	-51.98	-48.93	-1.59	-1.46	-25	-26.98
	203.63	S	-49.20	-53.04	5.85	-2.01	-25	-24.20
	331.67	S	-57.30	-60.63	5.94	-2.61	-25	-32.30
	559.62	S	-62.43	-65.60	6.60	-3.43	-25	-37.43
	699.30	S	-61.61	-65.50	7.70	-3.82	-25	-36.61
	861.29	S	-61.30	-64.81	7.82	-4.31	-25	-36.30
	3505.20	Н	-57.88	-61.42	12.30	-8.76	-25	-32.88



Operation Mode :	HSUPA B4	Test Date :	2017/9/28
Fundamental Frequency :	1752.6 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

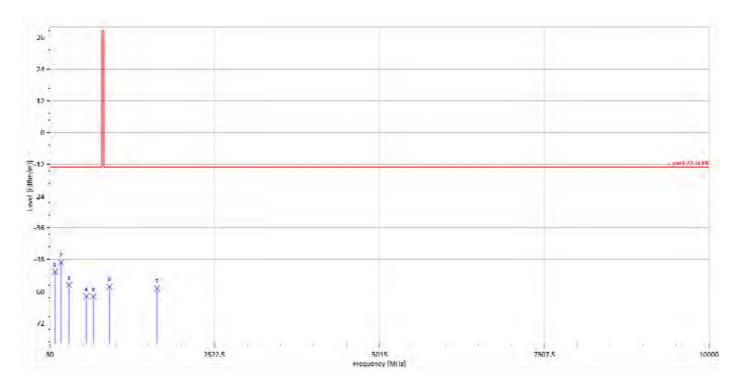


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
 MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
144.46	S	-63.37	-63.10	1.41	-1.68	-25	-38.37
204.60	S	-51.23	-55.09	5.88	-2.01	-25	-26.23
330.70	S	-56.37	-59.70	5.94	-2.60	-25	-31.37
412.18	S	-65.75	-68.71	5.88	-2.93	-25	-40.75
618.79	S	-66.18	-69.60	7.05	-3.63	-25	-41.18
850.62	S	-63.46	-66.99	7.80	-4.27	-25	-38.46
3505.20	Н	-58.33	-61.87	12.30	-8.76	-25	-33.33



Radiated Spurious Emission Measurement Result: WCDMA Band 5 Mode

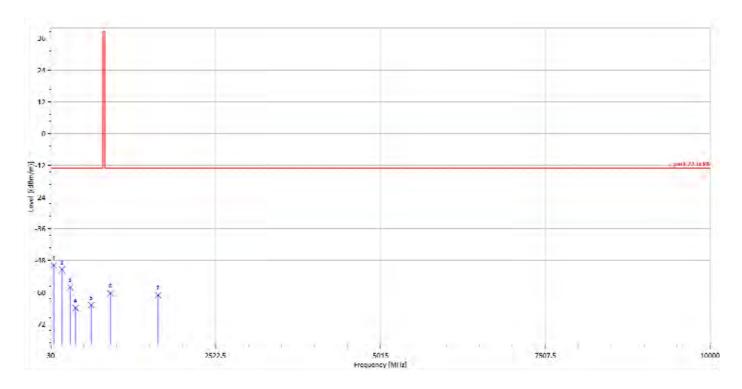
Operation Mode :	WCDMA B5	Test Date :	2017/9/28
Fundamental Frequency :	826.4 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	110.51	S	-52.65	-49.56	-1.64	-1.45	-13	-39.65
	204.60	S	-49.11	-52.97	5.88	-2.01	-13	-36.11
	324.88	S	-57.55	-60.89	5.92	-2.58	-13	-44.55
	583.87	S	-61.90	-65.22	6.83	-3.51	-13	-48.90
	691.54	S	-61.95	-65.77	7.62	-3.80	-13	-48.95
	937.92	S	-58.18	-61.63	7.95	-4.49	-13	-45.18
	1652.80	Н	-58.89	-59.02	6.59	-6.46	-13	-45.89



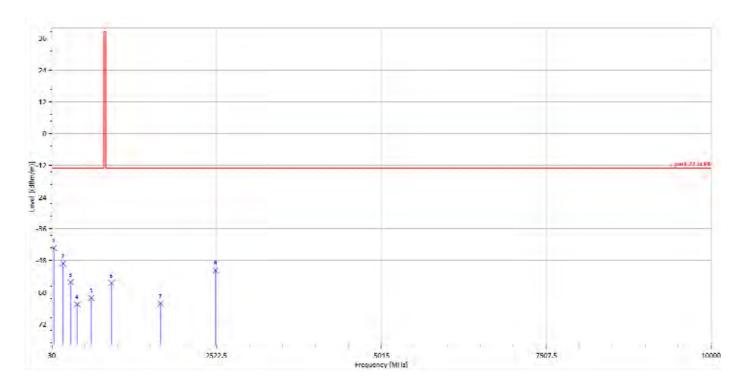
Operation Mode :	WCDMA B5	Test Date :	2017/9/28
Fundamental Frequency :	826.4 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	75.59	S	-49.87	-49.00	0.31	-1.18	-13	-36.87
	204.60	S	-51.45	-55.32	5.88	-2.01	-13	-38.45
	327.79	S	-58.03	-61.37	5.93	-2.59	-13	-45.03
	408.30	S	-65.94	-68.87	5.84	-2.91	-13	-52.94
	643.04	S	-64.92	-68.38	7.14	-3.68	-13	-51.92
	937.92	S	-60.35	-63.80	7.95	-4.49	-13	-47.35
	1652.80	Н	-61.07	-61.20	6.59	-6.46	-13	-48.07



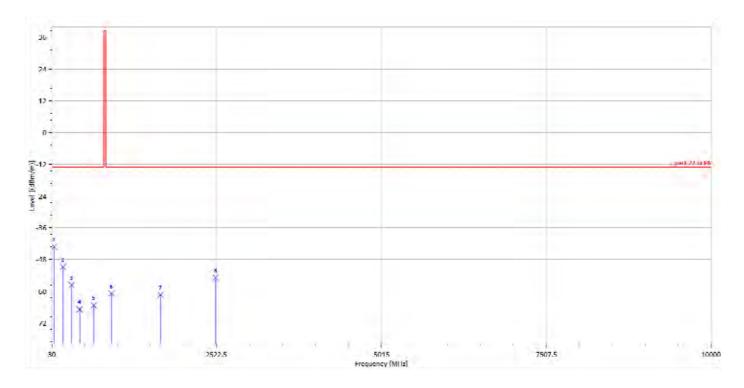
Operation Mode :	WCDMA B5	Test Date :	2017/9/28
Fundamental Frequency :	836.6 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
61.04	S	-43.22	-41.08	-1.09	-1.06	-13	-30.22
203.63	S	-49.11	-52.95	5.85	-2.01	-13	-36.11
320.03	S	-56.14	-59.48	5.91	-2.56	-13	-43.14
418.00	S	-64.65	-67.64	5.94	-2.94	-13	-51.65
626.55	S	-62.17	-65.60	7.08	-3.64	-13	-49.17
937.92	S	-56.47	-59.93	7.95	-4.49	-13	-43.47
1673.20	Н	-64.29	-64.47	6.68	-6.50	-13	-51.29
2509.80	Н	-51.71	-52.43	8.56	-7.84	-13	-38.71



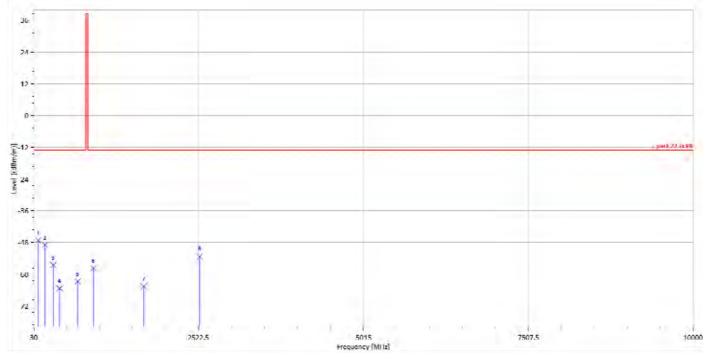
Operation Mode :	WCDMA B5	Test Date :	2017/9/28
Fundamental Frequency :	836.6 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
65.89	S	-43.18	-41.64	-0.44	-1.10	-13	-30.18
204.60	S	-50.86	-54.73	5.88	-2.01	-13	-37.86
332.64	S	-57.60	-60.94	5.94	-2.61	-13	-44.60
452.92	S	-66.81	-70.04	6.29	-3.06	-13	-53.81
667.29	S	-65.36	-68.98	7.36	-3.73	-13	-52.36
937.92	S	-60.87	-64.33	7.95	-4.49	-13	-47.87
1673.20	Н	-61.40	-61.58	6.68	-6.50	-13	-48.40
2509.80	Н	-54.75	-55.47	8.56	-7.84	-13	-41.75



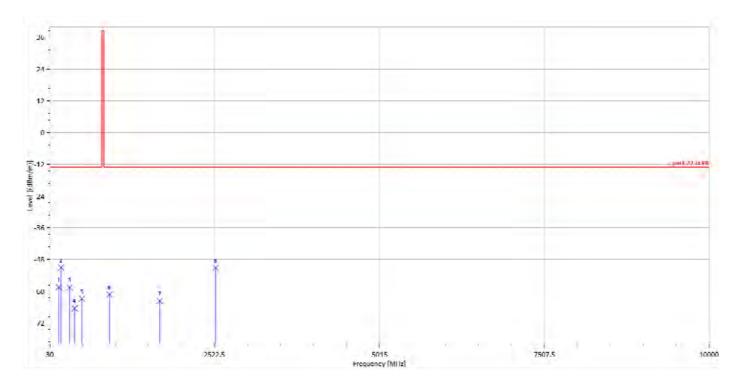
Operation Mode :	WCDMA B5	Test Date :	2017/9/28	
Fundamental Frequency :	846.6 MHz	Temp. / Humi. :	22.7deg_C/57RH	
Operation Band :	Tx CH High	Test Engineer :	Ashton	
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical	



Freq.	Note	ERP/EIRP	SG Output	Antenna	Cable	Limit	Margin
			Level	Gain	Loss	@3m	
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
97.90	S	-47.21	-44.80	-1.04	-1.36	-13	-34.21
202.66	S	-48.95	-52.77	5.82	-2.00	-13	-35.95
329.73	S	-56.45	-59.79	5.94	-2.60	-13	-43.45
422.85	S	-65.37	-68.40	5.99	-2.96	-13	-52.37
695.42	S	-62.68	-66.54	7.66	-3.81	-13	-49.68
937.92	S	-57.65	-61.11	7.95	-4.49	-13	-44.65
1693.20	Н	-64.63	-64.84	6.76	-6.55	-13	-51.63
2539.80	Н	-53.20	-53.93	8.60	-7.87	-13	-40.20



Operation Mode :	WCDMA B5	Test Engineer :	2017/9/28
Fundamental Frequency :	846.6 MHz		22.7deg_C/57RH
Operation Band :	Tx CH High		Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

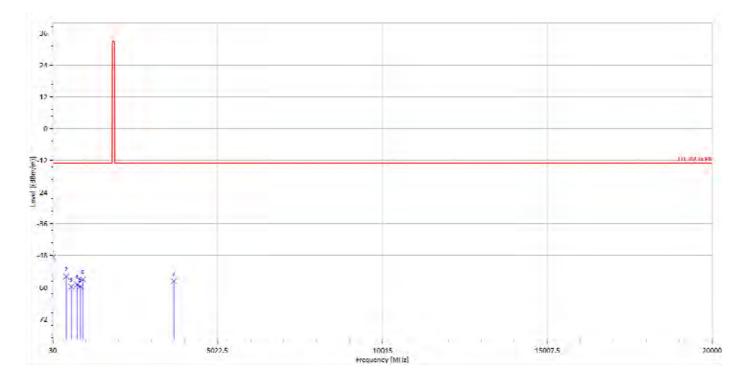


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
169.68	3 S	-58.46	-60.92	4.28	-1.83	-13	-45.46
204.60) S	-51.09	-54.95	5.88	-2.01	-13	-38.09
333.61	S	-58.52	-61.86	5.95	-2.61	-13	-45.52
410.24	l S	-66.42	-69.35	5.86	-2.92	-13	-53.42
515.00) S	-62.85	-66.06	6.50	-3.29	-13	-49.85
938.89) S	-61.19	-64.64	7.95	-4.50	-13	-48.19
1693.2	0 H	-63.70	-63.92	6.76	-6.55	-13	-50.70
2539.8	0 H	-51.16	-51.89	8.60	-7.87	-13	-38.16



Radiated Spurious Emission Measurement Result: LTE-Band 2 (The Worst Case)

Operation Mode :	LTEB2 1.4M QPSK RB 1.0	Test Date :	2017/9/29
Fundamental Frequency	: 1850.7 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

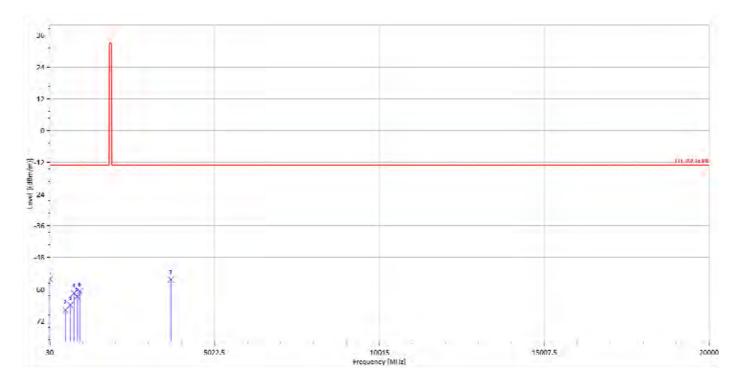


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
35.82	S	-48.66	-32.22	-15.59	-0.84	-13	-35.66
446.13	S	-55.86	-59.06	6.23	-3.03	-13	-42.86
602.30	S	-59.81	-63.22	6.98	-3.58	-13	-46.81
775.93	S	-58.95	-62.66	7.74	-4.03	-13	-45.95
866.14	S	-59.72	-63.22	7.83	-4.33	-13	-46.72
937.92	S	-56.98	-60.43	7.95	-4.49	-13	-43.98
3701.40	Н	-57.61	-61.13	12.42	-8.90	-13	-44.61

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document and offenders may here produced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may he prosecuted to the fully extent of the law. document is unlawful and offenders may be prosecuted to the fullest extent of the law



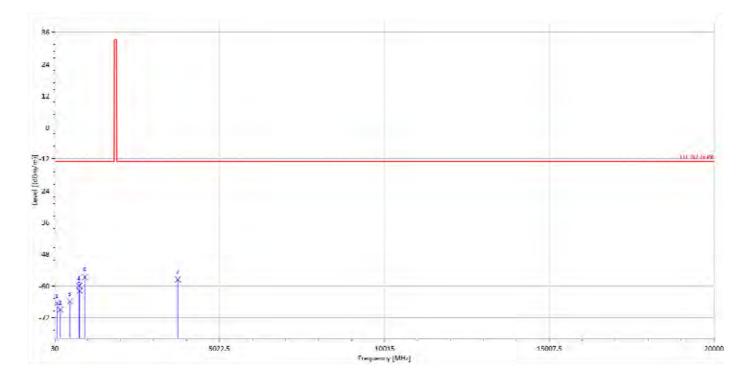
Operation Mode :	LTEB2 1.4M QPSK RB 1.0	Test Date :	2017/9/29
Fundamental Frequency :	1850.7 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
31.94	S	-56.04	-36.44	-18.78	-0.83	-13	-43.04
513.06	S	-67.75	-70.97	6.50	-3.28	-13	-54.75
663.41	S	-65.96	-69.55	7.31	-3.73	-13	-52.96
773.99	S	-61.52	-65.23	7.74	-4.03	-13	-48.52
867.11	S	-62.77	-66.27	7.83	-4.33	-13	-49.77
937.92	S	-60.86	-64.31	7.95	-4.49	-13	-47.86
3701.40	Н	-56.30	-59.82	12.42	-8.90	-13	-43.30



Operation Mode :	LTEB2 1.4M QPSK RB 1.0	Test Date :	2017/9/29
Fundamental Frequency	: 1880 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
101.78	S	-66.66	-63.91	-1.36	-1.39	-13	-53.66
197.81	S	-69.08	-72.86	5.76	-1.98	-13	-56.08
496.57	S	-65.92	-69.18	6.47	-3.22	-13	-52.92
773.99	S	-59.93	-63.65	7.74	-4.03	-13	-46.93
791.45	S	-61.90	-65.57	7.76	-4.09	-13	-48.90
937.92	S	-56.74	-60.19	7.95	-4.49	-13	-43.74
3760.00	Н	-57.62	-61.14	12.46	-8.94	-13	-44.62

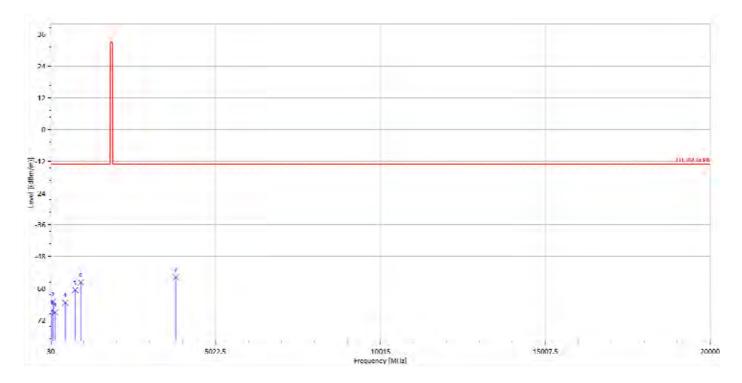


Operation Mode : Fundamental Frequency	LTEB2 1.4M QPSK RB 1.0		2017/9/29 22.7deg_C/57RH		
Operation Band :	Tx CH Mid	Temp. / Humi. : Test Engineer :	Enzo		
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal		
36.					
12					
1					
0- -					
12 ····			111 202.0898		
10					
-36 -					
-48 -					
u * **					
*					
¹²	I		The second		
30	5022.5 Frequ	10015 15007.5 ency [MIJz]	20000		

Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
32.91	S	-57.20	-38.38	-18.00	-0.83	-13	-44.20
497.54	S	-67.92	-71.18	6.48	-3.22	-13	-54.92
730.34	S	-65.39	-69.20	7.71	-3.90	-13	-52.39
775.93	S	-61.54	-65.25	7.74	-4.03	-13	-48.54
865.17	S	-64.52	-68.02	7.83	-4.33	-13	-51.52
937.92	S	-61.86	-65.31	7.95	-4.49	-13	-48.86
3760.00	Н	-57.68	-61.20	12.46	-8.94	-13	-44.68



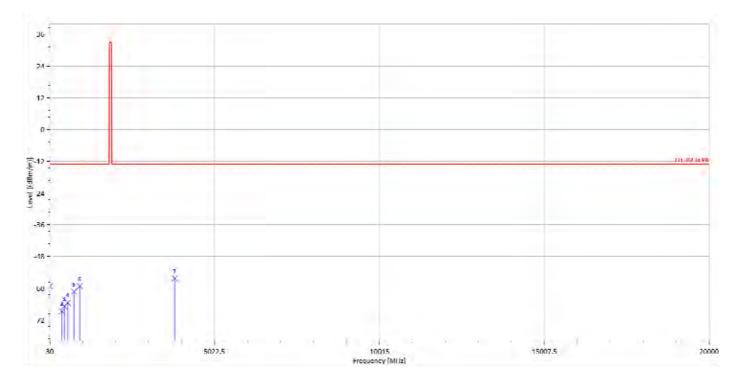
Operation Mode :	LTEB2 1.4M QPSK RB 1.0	Test Date :	2017/9/29
Fundamental Frequency :	1909.3 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
 MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
61.04	S	-68.37	-66.23	-1.09	-1.06	-13	-55.37
101.78	S	-65.09	-62.34	-1.36	-1.39	-13	-52.09
161.92	S	-69.05	-70.68	3.41	-1.78	-13	-56.05
475.23	S	-65.51	-68.76	6.38	-3.13	-13	-52.51
773.99	S	-60.66	-64.37	7.74	-4.03	-13	-47.66
937.92	S	-57.73	-61.18	7.95	-4.49	-13	-44.73
3818.60	Н	-55.81	-59.32	12.49	-8.98	-13	-42.81



Operation Mode :	LTEB2 1.4M QPSK RB 1.0	Test Date :	2017/9/29
Fundamental Frequency :	1909.3 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

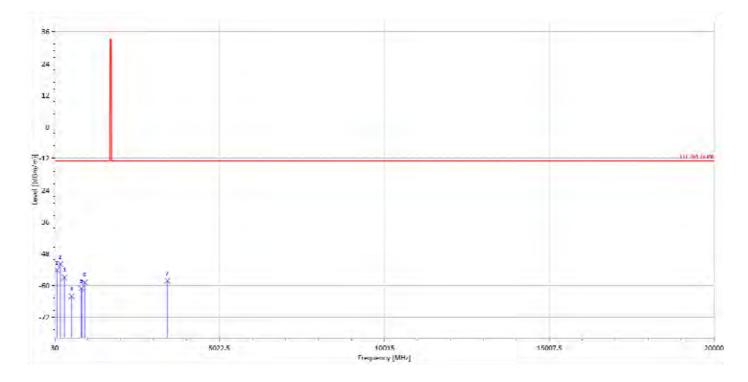


	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	34.85	S	-59.20	-41.93	-16.43	-0.84	-13	-46.20
	404.42	S	-68.66	-71.56	5.80	-2.89	-13	-55.66
	481.05	S	-66.76	-70.01	6.41	-3.15	-13	-53.76
	582.90	S	-65.53	-68.85	6.82	-3.50	-13	-52.53
	773.02	S	-61.31	-65.03	7.74	-4.02	-13	-48.31
	936.95	S	-59.16	-62.62	7.95	-4.49	-13	-46.16
	3818.60	Н	-56.27	-59.78	12.49	-8.98	-13	-43.27



Radiated Spurious Emission Measurement Result: LTE-Band 4 (The Worst Case)

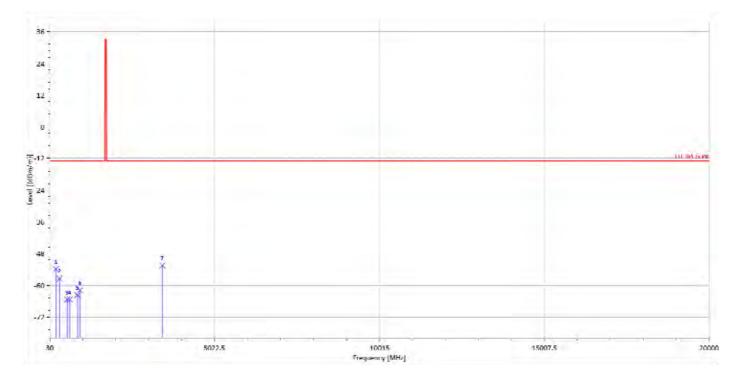
	LTEB4 20M 64QAM RE	3	
Operation Mode :	1.99	Test Date :	2017/9/27
Fundamental Frequency :	1720.0 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
97.90	S	-54.28	-51.88	-1.04	-1.36	-13	-41.28
204.60	S	-51.98	-55.85	5.88	-2.01	-13	-38.98
328.76	S	-57.06	-60.39	5.93	-2.60	-13	-44.06
546.04	S	-64.12	-67.24	6.52	-3.40	-13	-51.12
841.89	S	-61.12	-64.67	7.79	-4.25	-13	-48.12
936.95	S	-58.88	-62.33	7.95	-4.49	-13	-45.88
3440.00	Н	-58.23	-59.55	10.03	-8.71	-13	-45.23



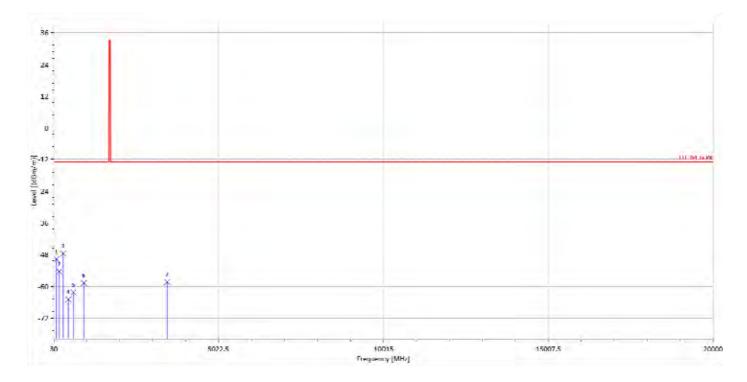
	LTEB4 20M 64QAM RE	3	
Operation Mode :	1.99	Test Date :	2017/9/27
Fundamental Frequency :	1720.0 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
222.06	S	-53.90	-58.09	6.29	-2.10	-13	-40.90
332.64	S	-57.45	-60.79	5.94	-2.61	-13	-44.45
564.47	S	-65.44	-68.65	6.65	-3.44	-13	-52.44
643.04	S	-65.44	-68.90	7.14	-3.68	-13	-52.44
870.02	S	-63.69	-67.19	7.84	-4.34	-13	-50.69
942.77	S	-61.88	-65.33	7.95	-4.51	-13	-48.88
3440.00	Н	-52.57	-53.89	10.03	-8.71	-13	-39.57



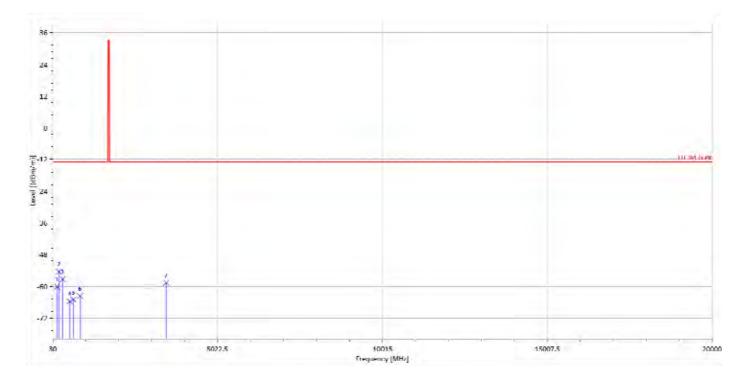
TEB4 20M 64QAM RB		
.99	Test Date :	2017/9/27
732.5 MHz	Temp. / Humi. :	22.7deg_C/57RH
x CH Mid	Test Engineer :	Ashton
2	Measurement Antenna Pol. :	Vertical
	99 732.5 MHz < CH Mid	99Test Date :732.5 MHzTemp. / Humi. :< CH Mid



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
110.51	S	-49.73	-46.64	-1.64	-1.45	-13	-36.73
194.90	S	-54.52	-58.36	5.81	-1.96	-13	-41.52
318.09	S	-47.55	-50.90	5.90	-2.55	-13	-34.55
478.14	S	-64.97	-68.22	6.40	-3.14	-13	-51.97
634.31	S	-62.26	-65.71	7.11	-3.66	-13	-49.26
937.92	S	-58.71	-62.16	7.95	-4.49	-13	-45.71
3465.00	Н	-58.34	-59.69	10.08	-8.73	-13	-45.34



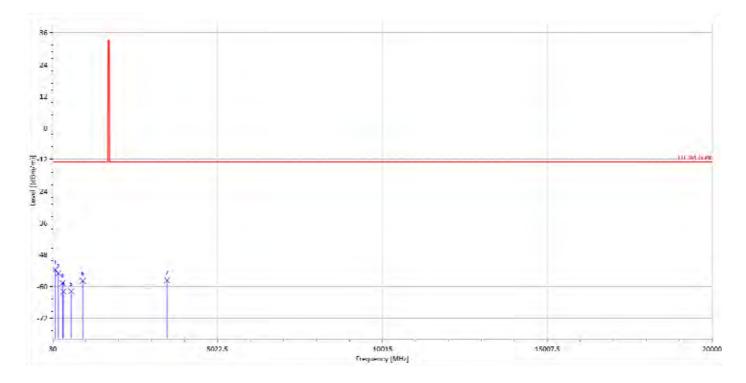
LTEB4 20M 64QAM RE	}	
1.99	Test Date :	2017/9/27
1732.5 MHz	Temp. / Humi. :	22.7deg_C/57RH
Tx CH Mid	Test Engineer :	Ashton
E2	Measurement Antenna Pol. :	Horizontal
	1.99 1732.5 MHz Tx CH Mid	1732.5 MHzTemp. / Humi. :Tx CH MidTest Engineer :



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
164.83	S	-60.10	-62.03	3.74	-1.80	-13	-47.10
222.06	S	-54.50	-58.69	6.29	-2.10	-13	-41.50
333.61	S	-57.32	-60.66	5.95	-2.61	-13	-44.32
549.92	S	-65.70	-68.81	6.52	-3.41	-13	-52.70
665.35	S	-65.05	-68.66	7.34	-3.73	-13	-52.05
860.32	S	-63.66	-67.17	7.82	-4.31	-13	-50.66
3465.00	Н	-58.62	-59.97	10.08	-8.73	-13	-45.62



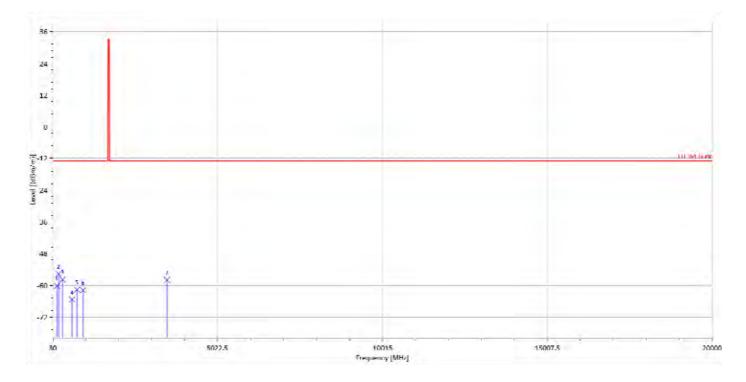
LTEB4 20M 64QAM RB					
1.99	Test Date :	2017/9/28			
1745 MHz	Temp. / Humi. :	22.7deg_C/57RH			
Tx CH High	Test Engineer :	Ashton			
E2	Measurement Antenna Pol. :	Vertical			
	1.99 1745 MHz Tx CH High	1.99Test Date :1745 MHzTemp. / Humi. :Tx CH HighTest Engineer :			



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
103.72	S	-53.76	-50.92	-1.43	-1.41	-13	-40.76
197.81	S	-55.20	-58.98	5.76	-1.98	-13	-42.20
331.67	S	-58.67	-62.01	5.94	-2.61	-13	-45.67
357.86	S	-61.92	-65.17	5.95	-2.70	-13	-48.92
596.48	S	-61.86	-65.25	6.94	-3.56	-13	-48.86
936.95	S	-57.91	-61.37	7.95	-4.49	-13	-44.91
3490.00	Н	-57.66	-59.04	10.13	-8.75	-13	-44.66



	LTEB4 20M 64QAM RE	3	
Operation Mode :	1.99	Test Date :	2017/9/27
Fundamental Frequency :	1745 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

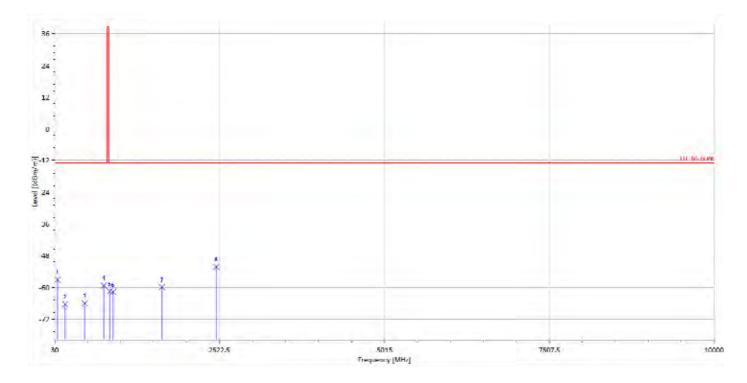


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
161.92	S	-60.17	-61.80	3.41	-1.78	-13	-47.17
213.33	S	-55.78	-59.88	6.16	-2.06	-13	-42.78
330.70	S	-57.79	-61.13	5.94	-2.60	-13	-44.79
620.73	S	-65.42	-68.84	7.05	-3.63	-13	-52.42
773.02	S	-61.58	-65.30	7.74	-4.02	-13	-48.58
946.65	S	-61.84	-65.29	7.96	-4.51	-13	-48.84
3490.00	Н	-57.97	-59.34	10.13	-8.75	-13	-44.97



Radiated Spurious Emission Measurement Result: LTE-Band 5 (The Worst Case)

	LTEB5 1.4M 16QAM RB		
Operation Mode :	1.0	Test Date :	2017/9/29
Fundamental Frequency :	824.7 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
71.71	S	-57.12	-54.07	-1.90	-1.15	-13	-44.12
189.08	S	-66.39	-68.55	4.10	-1.93	-13	-53.39
481.05	S	-66.12	-66.85	3.88	-3.15	-13	-53.12
773.02	S	-59.28	-60.45	5.19	-4.02	-13	-46.28
864.20	S	-61.49	-62.27	5.10	-4.32	-13	-48.49
915.61	S	-61.74	-62.60	5.29	-4.44	-13	-48.74
1649.40	Н	-59.91	-60.03	6.57	-6.45	-13	-46.91
2474.10	Н	-52.26	-52.99	8.52	-7.79	-13	-39.26



E2	Maaguramant Antonna Dal ·	Enzo Horizontal
	Measurement Antenna Pol. :	Horizontal
		111 10-16-98
×		

5015 Treque wy [MH2]

Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
32.91	S	-55.95	-35.15	-19.97	-0.83	-13	-42.95
146.40	S	-70.55	-68.60	-0.26	-1.69	-13	-57.55
324.88	S	-71.31	-72.20	3.47	-2.58	-13	-58.31
551.86	S	-66.54	-67.11	3.98	-3.41	-13	-53.54
774.96	S	-61.73	-62.89	5.19	-4.03	-13	-48.73
937.92	S	-60.70	-61.58	5.37	-4.49	-13	-47.70
1649.40	Н	-56.26	-56.38	6.57	-6.45	-13	-43.26
2474.10	Н	-49.56	-50.29	8.52	-7.79	-13	-36.56

2522.5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. documents in subduiting cannot be reproduced to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

7507.5

10000



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTEB5 1.4M 16QAM RB 1.0 836.5 MHz Tx CH Mid E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/29 22.7deg_C/57RH Enzo Vertical
36-			
12 U IE-12 IE-12 IE-24 IF 24			111-06-19-00
0) 12 24 30 30	××		
	2522.5	5015 7507.5	10000
		es y [MHz]	

Freq.	Note	ERP/EIRP	SG Output	Antenna	Cable	Limit	Margin
			Level	Gain	Loss	@3m	
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
61.04	S	-65.32	-61.21	-3.05	-1.06	-13	-52.32
162.89	S	-67.45	-67.36	1.70	-1.79	-13	-54.45
587.75	S	-62.59	-63.31	4.23	-3.52	-13	-49.59
727.43	S	-61.96	-63.18	5.11	-3.89	-13	-48.96
773.99	S	-60.37	-61.53	5.19	-4.03	-13	-47.37
937.92	S	-57.05	-57.93	5.37	-4.49	-13	-44.05
1673.00	Н	-60.25	-60.41	6.65	-6.49	-13	-47.25
2509.50	Н	-39.32	-40.04	8.55	-7.83	-13	-26.32



Report No.: E2/2017/80129 Page 501 of 605

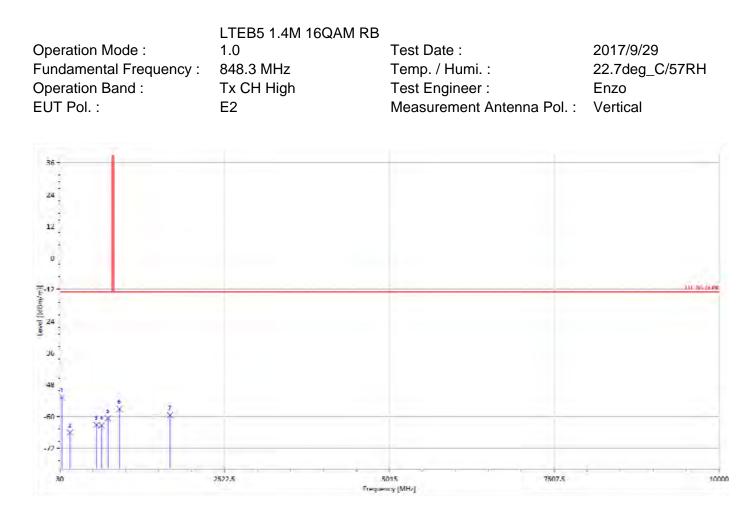
Operation Mode : Fundamental Frequency : Operation Band :	LTEB5 1.4M 16QAM RB 1.0 836.5 MHz Tx CH Mid	Test Date : Temp. / Humi. : Test Engineer :	2017/9/29 22.7deg_C/57RH Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal
36 -			
24			
12			
и.,			
₹-12-			111 05 1640
1(±1)- ± 000 - 24 - 24			
3 24			
96	*		
48	1		
ž 4. *			
-50			
-n - **			
30	2522.5	5015 7507.5	100

-				
Treq	1.00	67AP	DATE:	121

Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
31.94	S	-57.21	-35.56	-20.82	-0.83	-13	-44.21
140.58	S	-72.05	-69.26	-1.13	-1.65	-13	-59.05
220.12	S	-70.68	-72.60	4.00	-2.09	-13	-57.68
773.99	S	-60.47	-61.63	5.19	-4.03	-13	-47.47
887.48	S	-64.43	-65.24	5.19	-4.38	-13	-51.43
937.92	S	-62.31	-63.18	5.37	-4.49	-13	-49.31
1673.00	Н	-57.71	-57.87	6.65	-6.49	-13	-44.71
2509.50	Н	-41.14	-41.86	8.55	-7.83	-13	-28.14

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北產五股區新北產業園區五工路 134 號

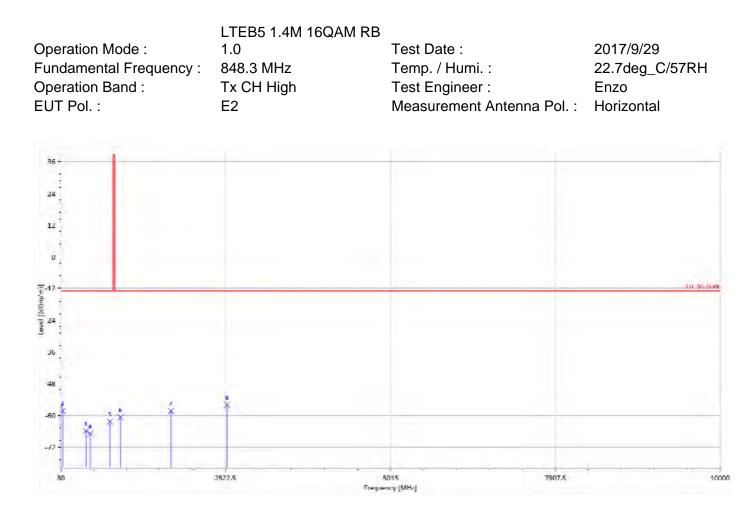




Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
61.04	S	-52.90	-48.79	-3.05	-1.06	-13	-39.90
188.11	S	-66.22	-68.34	4.05	-1.93	-13	-53.22
586.78	S	-63.21	-63.92	4.23	-3.52	-13	-50.21
664.38	S	-63.42	-64.44	4.75	-3.73	-13	-50.42
761.38	S	-60.76	-61.96	5.17	-3.98	-13	-47.76
937.92	S	-57.25	-58.13	5.37	-4.49	-13	-44.25
1696.60	Н	-59.55	-59.77	6.76	-6.55	-13	-46.55

S Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號





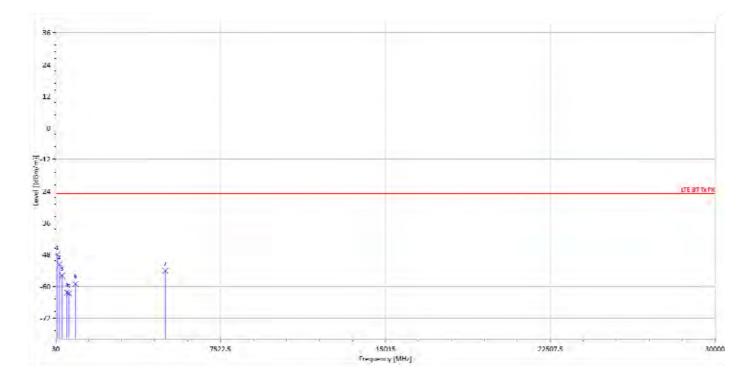
Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
30.97	S	-56.75	-34.26	-21.66	-0.82	-13	-43.75
59.10	S	-58.34	-53.76	-3.54	-1.04	-13	-45.34
416.06	S	-65.91	-66.31	3.33	-2.94	-13	-52.91
474.26	S	-67.03	-67.72	3.82	-3.13	-13	-54.03
774.96	S	-62.38	-63.54	5.19	-4.03	-13	-49.38
937.92	S	-60.71	-61.58	5.37	-4.49	-13	-47.71
1696.60	Н	-58.32	-58.53	6.76	-6.55	-13	-45.32
2544.90	Н	-56.06	-56.78	8.60	-7.87	-13	-43.06

S Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號



Radiated Spurious Emission Measurement Result: LTE-Band 7 (The Worst Case)

	LTE B7 10M QPSK RB		
Operation Mode :	1.49	Test Date :	2017/9/27
Fundamental Frequency :	2505.0 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

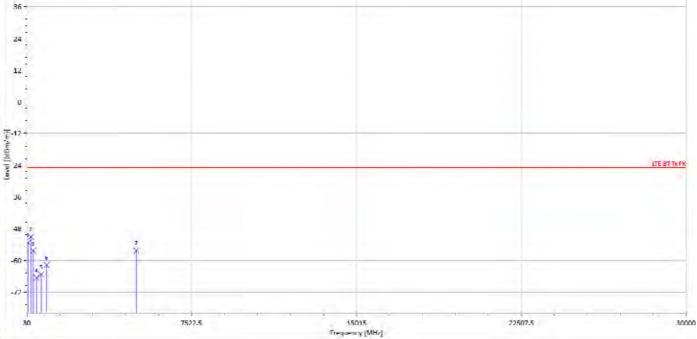


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
100.81	S	-48.03	-45.33	-1.32	-1.39	-25	-23.03
203.63	S	-51.78	-55.62	5.85	-2.01	-25	-26.78
324.88	S	-56.04	-59.38	5.92	-2.58	-25	-31.04
550.89	S	-62.35	-65.47	6.53	-3.41	-25	-37.35
641.10	S	-62.64	-66.10	7.13	-3.67	-25	-37.64
937.92	S	-59.07	-62.52	7.95	-4.49	-25	-34.07
5010.00	Н	-54.20	-56.78	12.51	-9.93	-25	-29.20

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document and offenders may here produced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may he prosecuted to the fully extent of the law. document is unlawful and offenders may be prosecuted to the fullest extent of the law



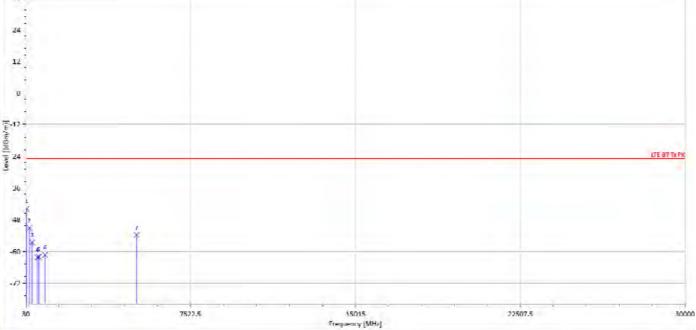
Operation Mode : Fundamental Frequency :	LTE B7 10M QPSK RB 1.49 2505.0 MHz	Test Date : Temp. / Humi. :	2017/9/27 22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
90.14	S	-53.32	-51.90	-0.12	-1.30	-25	-28.32
222.06	S	-51.18	-55.37	6.29	-2.10	-25	-26.18
328.76	S	-56.41	-59.74	5.93	-2.60	-25	-31.41
483.96	S	-66.58	-69.84	6.42	-3.17	-25	-41.58
694.45	S	-65.38	-69.22	7.65	-3.81	-25	-40.38
942.77	S	-61.73	-65.18	7.95	-4.51	-25	-36.73
5010.00	Н	-56.37	-58.95	12.51	-9.93	-25	-31.37



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTE B7 10M QPSK RB 1.49 2535 MHz Tx CH Mid E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/27 22.7deg_C/57RH Ashton Vertical
36 -			

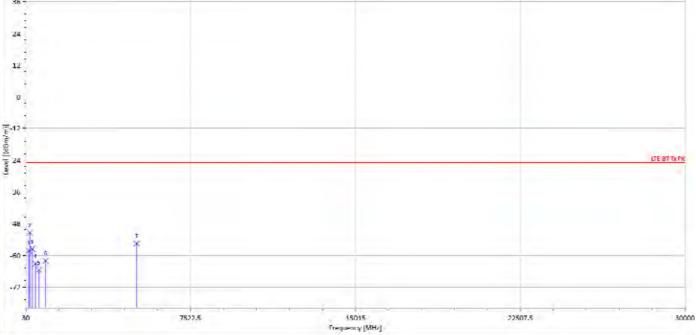


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
64.92	S	-43.85	-42.18	-0.57	-1.09	-25	-18.85
204.60	S	-51.14	-55.01	5.88	-2.01	-25	-26.14
324.88	S	-56.65	-60.00	5.92	-2.58	-25	-31.65
564.47	S	-62.24	-65.45	6.65	-3.44	-25	-37.24
636.25	S	-62.04	-65.50	7.11	-3.66	-25	-37.04
915.61	S	-61.28	-64.76	7.92	-4.44	-25	-36.28
5070.00	Н	-53.86	-56.45	12.57	-9.98	-25	-28.86



Report No.: E2/2017/80129 Page 507 of 605

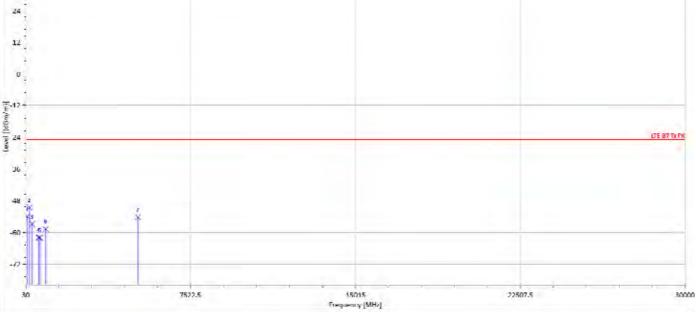
Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTE B7 10M QPSK RB 1.49 2535 MHz Tx CH Mid E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/27 22.7deg_C/57RH Ashton Horizontal
36 -			



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
168.71	S	-58.22	-60.57	4.17	-1.82	-25	-33.22
221.09	S	-51.44	-55.67	6.32	-2.10	-25	-26.44
333.61	S	-57.55	-60.89	5.95	-2.61	-25	-32.55
478.14	S	-63.18	-66.43	6.40	-3.14	-25	-38.18
640.13	S	-65.52	-68.98	7.13	-3.67	-25	-40.52
937.92	S	-62.05	-65.51	7.95	-4.49	-25	-37.05
5070.00	Н	-55.63	-58.22	12.57	-9.98	-25	-30.63



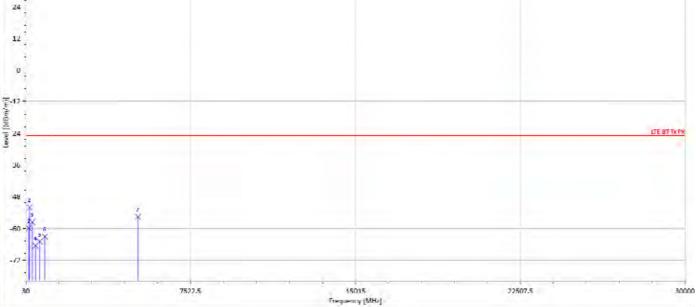
Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTE B7 10M QPSK RB 1.49 2565 MHz Tx CH High E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/27 22.7deg_C/57RH Ashton Vertical
36-			



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
103.72	S	-54.07	-51.24	-1.43	-1.41	-25	-29.07
203.63	S	-50.63	-54.47	5.85	-2.01	-25	-25.63
325.85	S	-56.83	-60.17	5.92	-2.58	-25	-31.83
621.70	S	-61.93	-65.36	7.06	-3.63	-25	-36.93
685.72	S	-62.03	-65.80	7.56	-3.79	-25	-37.03
944.71	S	-58.75	-62.20	7.96	-4.51	-25	-33.75
5130.00	Н	-54.35	-56.96	12.63	-10.02	-25	-29.35



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTE B7 10M QPSK RB 1.49 2565 MHz Tx CH High E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/27 22.7deg_C/57RH Ashton Horizontal
36			

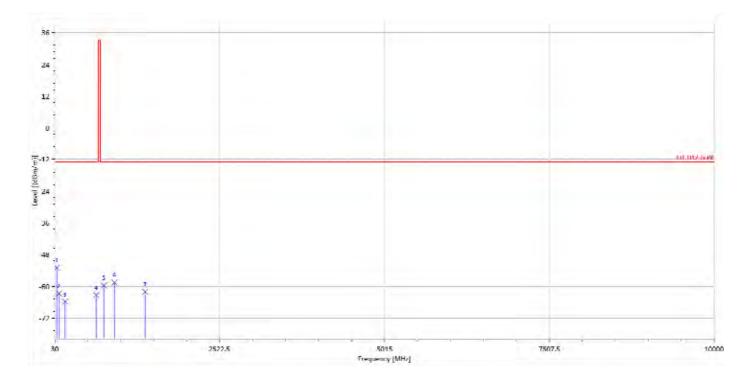


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
166.77	S	-59.92	-62.06	3.96	-1.81	-25	-34.92
204.60	S	-52.12	-55.99	5.88	-2.01	-25	-27.12
331.67	S	-57.59	-60.92	5.94	-2.61	-25	-32.59
481.05	S	-66.62	-69.87	6.41	-3.15	-25	-41.62
672.14	S	-65.03	-68.69	7.41	-3.75	-25	-40.03
909.79	S	-63.14	-66.62	7.91	-4.43	-25	-38.14
5130.00	Н	-55.77	-58.38	12.63	-10.02	-25	-30.77



Radiated Spurious Emission Measurement Result: LTE-Band 12 (The Worst Case)

	LTEB12 1.4M 16QAM RB		
Operation Mode :	1.5	Test Date :	2017/9/29
Fundamental Frequency :	699.7 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

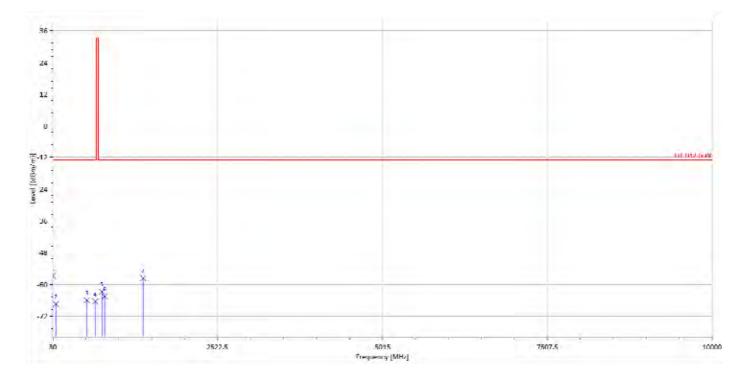


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
62.01	S	-53.05	-49.05	-2.93	-1.07	-13	-40.05
95.96	S	-62.70	-58.44	-2.90	-1.35	-13	-49.70
189.08	S	-65.86	-68.02	4.10	-1.93	-13	-52.86
657.59	S	-63.32	-64.29	4.69	-3.72	-13	-50.32
773.99	S	-59.66	-60.82	5.19	-4.03	-13	-46.66
937.92	S	-58.55	-59.43	5.37	-4.49	-13	-45.55
1399.40	Н	-62.04	-61.60	5.47	-5.90	-13	-49.04



Report No.: E2/2017/80129 Page 511 of 605

	LTEB12 1.4M 16QAM RB		
Operation Mode :	1.5	Test Date :	2017/9/29
Fundamental Frequency :	699.7 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

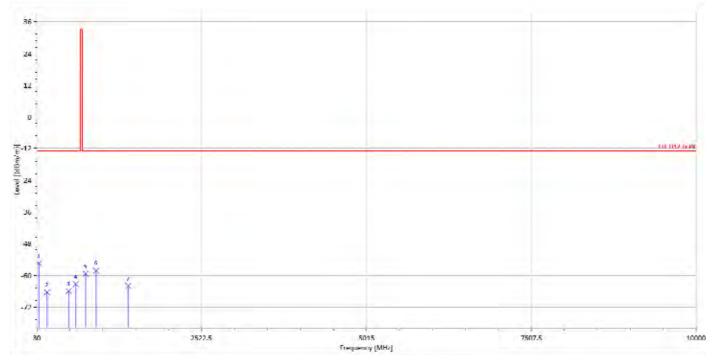


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
31.94	S	-56.81	-35.16	-20.82	-0.83	-13	-43.81
78.50	S	-67.54	-64.61	-1.72	-1.21	-13	-54.54
546.04	S	-66.12	-66.70	3.98	-3.40	-13	-53.12
674.08	S	-66.55	-67.63	4.83	-3.75	-13	-53.55
776.90	S	-62.80	-63.95	5.19	-4.04	-13	-49.80
816.67	S	-64.59	-65.60	5.16	-4.15	-13	-51.59
1399.40	S	-57.67	-57.23	5.45	-5.89	-13	-44.67



Report No.: E2/2017/80129 Page 512 of 605

	LTEB12 1.4M 16QAM RB		
Operation Mode :	1.5	Test Date :	2017/9/29
Fundamental Frequency :	707.5 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

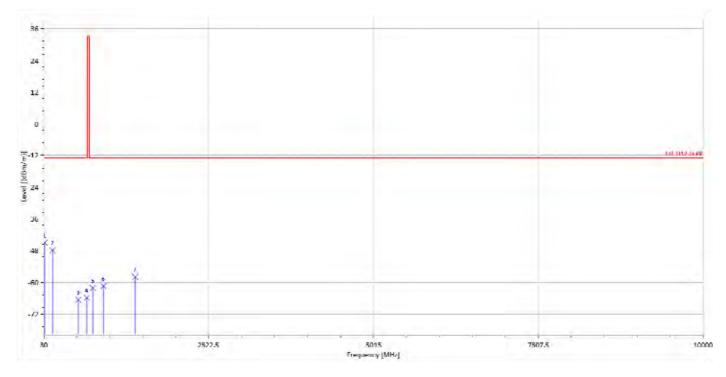


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
62.01	S	-55.47	-51.47	-2.93	-1.07	-13	-42.47
188.11	S	-66.47	-68.59	4.05	-1.93	-13	-53.47
512.09	S	-66.01	-66.76	4.02	-3.27	-13	-53.01
620.73	S	-63.33	-64.14	4.44	-3.63	-13	-50.33
772.05	S	-59.33	-60.50	5.19	-4.02	-13	-46.33
932.10	S	-58.19	-59.06	5.35	-4.48	-13	-45.19
1415.00	Н	-64.01	-63.62	5.54	-5.93	-13	-51.01



Report No.: E2/2017/80129 Page 513 of 605

	LTEB12 1.4M 16QAM RB		
Operation Mode :	1.5	Test Date :	2017/9/29
Fundamental Frequency :	707.5 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
43.58	S	-44.99	-32.74	-11.36	-0.89	-13	-31.99
165.80	S	-47.89	-48.14	2.05	-1.80	-13	-34.89
551.86	S	-66.68	-67.25	3.98	-3.41	-13	-53.68
681.84	S	-65.91	-67.04	4.90	-3.78	-13	-52.91
773.99	S	-62.17	-63.33	5.19	-4.03	-13	-49.17
937.92	S	-61.44	-62.32	5.37	-4.49	-13	-48.44
1415.00	Н	-57.96	-57.56	5.54	-5.93	-13	-44.96



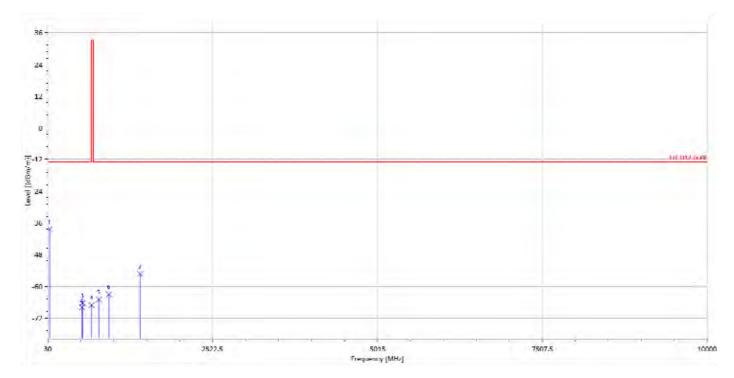
Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTEB12 1.4M 16QAM RB 1.5 715.3 MHz Tx CH High E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/29 22.7deg_C/57RH Enzo Vertical
36 24 12 0			
F-12 Paraget 1224 			01 104 144
48 -60 × × × ×			
30	2522.5 50' Trequent		10000

	Freq.	Note	ERP/EIRP	SG Output	Antenna	Cable	Limit	Margin
				Level	Gain	Loss	@3m	
-	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	71.71	S	-58.90	-55.85	-1.90	-1.15	-13	-45.90
	112.45	S	-41.77	-36.78	-3.52	-1.46	-13	-28.77
	575.14	S	-62.32	-62.99	4.15	-3.48	-13	-49.32
	770.11	S	-61.03	-62.20	5.18	-4.01	-13	-48.03
	860.32	S	-61.26	-62.04	5.09	-4.31	-13	-48.26
	932.10	S	-57.06	-57.93	5.35	-4.48	-13	-44.06
	1430.60	Н	-63.24	-62.88	5.62	-5.97	-13	-50.24



Report No.: E2/2017/80129 Page 515 of 605

	LTEB12 1.4M 16QAM RB		
Operation Mode :	1.5	Test Date :	2017/9/29
Fundamental Frequency :	715.3 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

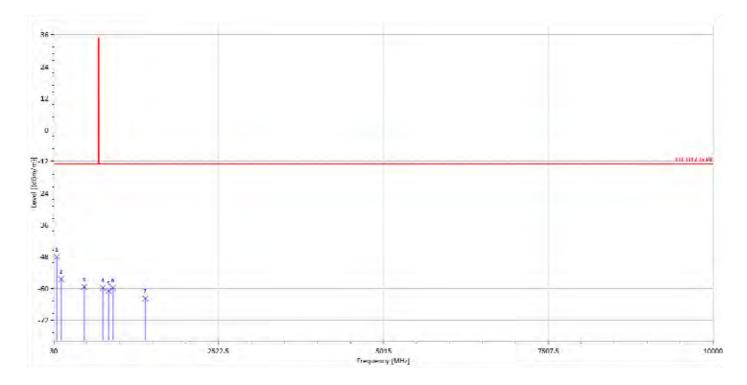


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
59.10	S	-38.39	-33.81	-3.54	-1.04	-13	-25.39
548.95	S	-67.98	-68.55	3.97	-3.41	-13	-54.98
556.71	S	-66.41	-67.01	4.02	-3.42	-13	-53.41
692.51	S	-67.20	-68.39	4.99	-3.81	33	-100.20
805.03	S	-65.00	-66.08	5.20	-4.12	-13	-52.00
961.20	S	-63.00	-63.89	5.44	-4.55	-13	-50.00
1430.60	S	-55.38	-55.03	5.62	-5.97	-13	-42.38



Radiated Spurious Emission Measurement Result: LTE-Band 17 (The Worst Case)

	LTEB17 10M 16QAM RB		
Operation Mode :	1.49	Test Date :	2017/9/29
Fundamental Frequency :	709 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

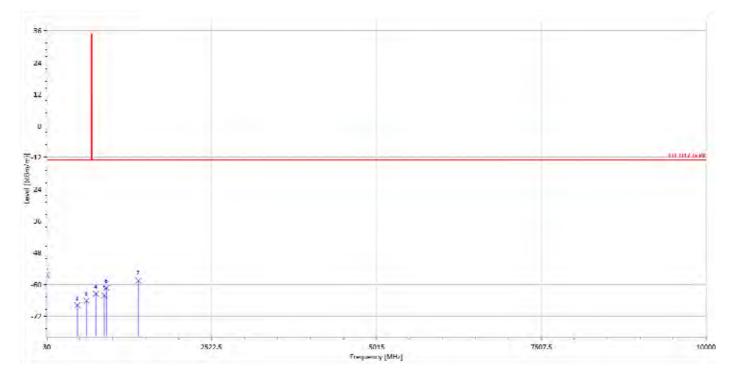


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
76.56	S	-48.11	-45.15	-1.77	-1.19	-13	-35.11
144.46	S	-56.54	-54.31	-0.55	-1.68	-13	-43.54
491.72	S	-59.40	-60.17	3.97	-3.20	-13	-46.40
773.99	S	-59.76	-60.92	5.19	-4.03	-13	-46.76
863.23	S	-60.86	-61.64	5.10	-4.32	-13	-47.86
932.10	S	-59.75	-60.62	5.35	-4.48	-13	-46.75
1418.00	Н	-63.89	-63.50	5.56	-5.94	-13	-50.89



Report No.: E2/2017/80129 Page 517 of 605

	LTEB17 10M 16QAM RB		
Operation Mode :	1.49	Test Date :	2017/9/29
Fundamental Frequency :	709 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

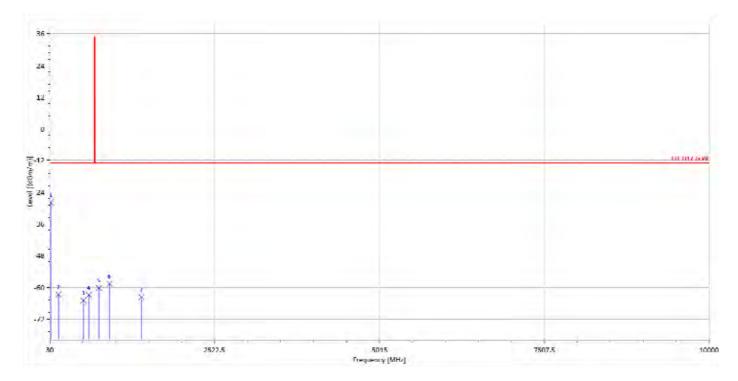


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
31.94	S	-56.48	-34.84	-20.82	-0.83	-13	-43.48
492.69	S	-68.00	-68.77	3.98	-3.20	-13	-55.00
632.37	S	-66.27	-67.13	4.51	-3.65	-13	-53.27
774.96	S	-63.56	-64.72	5.19	-4.03	-13	-50.56
904.94	S	-64.19	-65.03	5.26	-4.42	-13	-51.19
937.92	S	-61.38	-62.26	5.37	-4.49	-13	-48.38
1418.00	S	-58.57	-58.19	5.58	-5.95	-13	-45.57



Report No.: E2/2017/80129 Page 518 of 605

	LTEB17 10M 16QAM RB		
Operation Mode :	1.49	Test Date :	2017/9/29
Fundamental Frequency :	710 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical

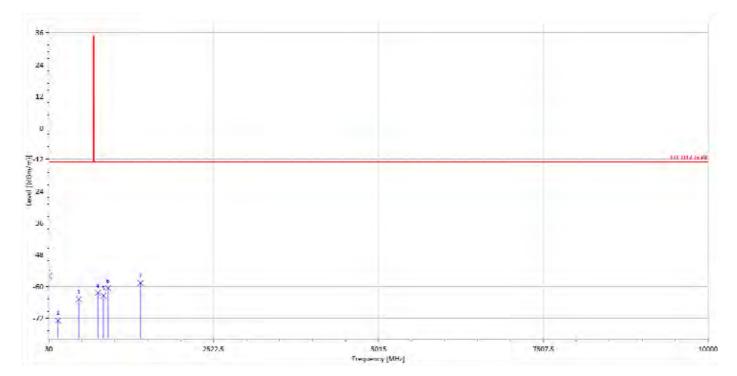


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
45.52	S	-27.80	-16.93	-9.96	-0.91	-13	-14.80
165.80	S	-62.68	-62.93	2.05	-1.80	-13	-49.68
538.28	S	-64.96	-65.58	3.99	-3.37	-13	-51.96
622.67	S	-62.87	-63.69	4.46	-3.64	-13	-49.87
773.99	S	-60.21	-61.37	5.19	-4.03	-13	-47.21
937.92	S	-58.60	-59.47	5.37	-4.49	-13	-45.60
1420.00	Н	-63.72	-63.34	5.57	-5.95	-13	-50.72



Report No.: E2/2017/80129 Page 519 of 605

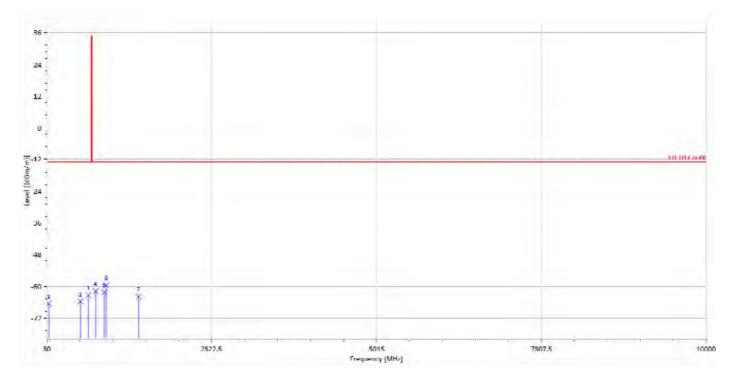
	LTEB17 10M 16QAM RB		
Operation Mode :	1.49	Test Date :	2017/9/29
Fundamental Frequency :	710 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
32.91	S	-56.13	-35.32	-19.97	-0.83	-13	-43.13
170.65	S	-72.90	-73.71	2.64	-1.83	-13	-59.90
482.99	S	-64.89	-65.62	3.90	-3.16	-13	-51.89
775.93	S	-62.48	-63.64	5.19	-4.03	-13	-49.48
860.32	S	-63.50	-64.27	5.09	-4.31	-13	-50.50
932.10	S	-60.65	-61.53	5.35	-4.48	-13	-47.65
1420.00	S	-58.71	-58.34	5.58	-5.95	-13	-45.71



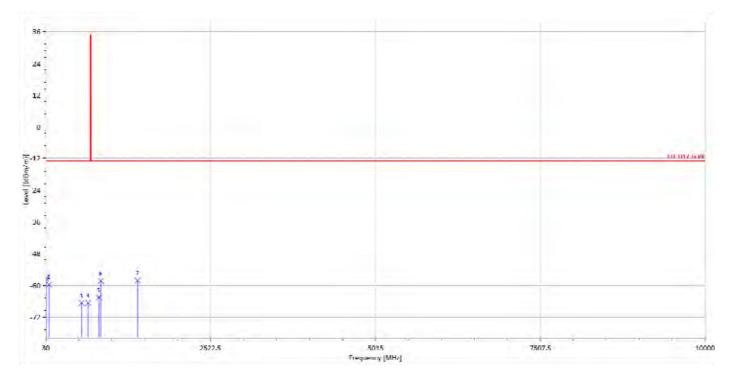
	LTEB17 10M 16QAM RB		
Operation Mode :	1.49	Test Date :	2017/9/29
Fundamental Frequency :	711 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
61.04	S	-66.62	-62.51	-3.05	-1.06	-13	-53.62
538.28	S	-65.76	-66.38	3.99	-3.37	-13	-52.76
658.56	S	-63.38	-64.35	4.70	-3.72	-13	-50.38
771.08	S	-61.80	-62.97	5.19	-4.01	-13	-48.80
903.97	S	-62.17	-63.00	5.25	-4.42	-13	-49.17
934.04	S	-59.56	-60.43	5.36	-4.48	-13	-46.56
1422.00	Н	-63.91	-63.53	5.58	-5.95	-13	-50.91



	LTEB17 10M 16QAM RB		
Operation Mode :	1.49	Test Date :	2017/9/29
Fundamental Frequency :	711 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

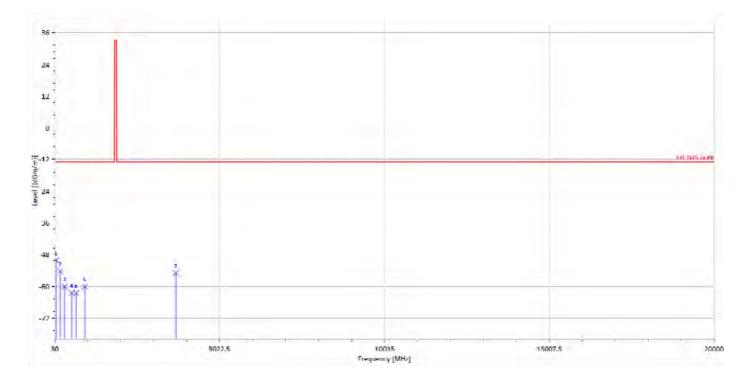


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
36.79	S	-57.46	-39.91	-16.71	-0.85	-13	-44.46
80.44	S	-59.68	-56.75	-1.71	-1.22	-13	-46.68
571.26	S	-66.72	-67.38	4.12	-3.46	-13	-53.72
671.17	S	-66.69	-67.76	4.81	-3.74	-13	-53.69
837.04	S	-64.61	-65.47	5.09	-4.23	-13	-51.61
866.14	S	-58.24	-59.02	5.11	-4.33	-13	-45.24
1422.00	S	-58.14	-57.77	5.58	-5.95	-13	-45.14



Radiated Spurious Emission Measurement Result: LTE-Band 25 (The Worst Case)

	LTE B25 1.4M 16QAM		
Operation Mode :	RB1.5	Test Date :	2017/9/28
Fundamental Frequency :	1850.7 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
73.65	S	-50.15	-49.22	0.24	-1.17	-13	-37.15
197.81	S	-54.38	-58.17	5.76	-1.98	-13	-41.38
330.70	S	-60.06	-63.40	5.94	-2.60	-13	-47.06
553.80	S	-62.50	-65.64	6.55	-3.42	-13	-49.50
686.69	S	-62.55	-66.33	7.57	-3.79	-13	-49.55
938.89	S	-60.11	-63.56	7.95	-4.50	-13	-47.11
3701.40	Н	-55.10	-58.62	12.42	-8.90	-13	-42.10

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and diffenders may he prosecuted to the fullest event of the law document is unlawful and offenders may be prosecuted to the fullest extent of the law

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 S Taiwan Ltd.



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTE B25 1.4M 16QAM RB1.5 1850.7 MHz Tx CH Low E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/28 22.7deg_C/57RH Ashton Horizontal	
36- 24				
U U [[-12 			III DESTRIPE	

	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	166.77	S	-59.21	-61.35	3.96	-1.81	-13	-46.21
	217.21	S	-57.90	-62.09	6.27	-2.08	-13	-44.90
	336.52	S	-59.56	-62.88	5.95	-2.63	-13	-46.56
	506.27	S	-66.57	-69.81	6.49	-3.25	-13	-53.57
	617.82	S	-66.27	-69.69	7.04	-3.62	-13	-53.27
	856.44	S	-63.73	-67.25	7.81	-4.30	-13	-50.73
	3701.40	Н	-57.96	-61.48	12.42	-8.90	-13	-44.96

ey [MHz]

Freque

5022.5

30

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. documents in subduiting cannot be reproduced by the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

15007.5



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTE B25 1.4M 16QAM RB1.5 1882.5 MHz Tx CH Mid E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/28 22.7deg_C/57RH Ashton Vertical	
36- 24 12				
12 0 12 12 12 12 12 12 12 12 12 12 12 12 12			10 Jack Loop	

Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
101.78	S	-50.99	-48.24	-1.36	-1.39	-13	-37.99
224.97	S	-49.12	-53.21	6.20	-2.11	-13	-36.12
329.73	S	-59.42	-62.76	5.94	-2.60	-13	-46.42
536.34	S	-65.36	-68.50	6.51	-3.37	-13	-52.36
657.59	S	-56.89	-60.42	7.25	-3.72	-13	-43.89
937.92	S	-57.88	-61.34	7.95	-4.49	-13	-44.88
3765.00	Н	-57.02	-60.54	12.46	-8.95	-13	-44.02

ey [MH2]

Frequ

5022.5

30

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. document is unlawful and offenders may be proceeded to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

15007.5



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTE B25 1.4M 16QAM RB1.5 1882.5 MHz Tx CH Mid E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/28 22.7deg_C/57RH Ashton Horizontal
36			
12			
[[12			0(18564
0) 1224 21 210			

- - - - -

	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	164.83	S	-59.48	-61.42	3.74	-1.80	-13	-46.48
	217.21	S	-58.38	-62.57	6.27	-2.08	-13	-45.38
	333.61	S	-58.87	-62.20	5.95	-2.61	-13	-45.87
	558.65	S	-65.17	-68.34	6.60	-3.43	-13	-52.17
	772.05	S	-61.02	-64.74	7.74	-4.02	-13	-48.02
	839.95	S	-63.73	-67.29	7.79	-4.24	-13	-50.73
	3765.00	Н	-59.05	-62.56	12.46	-8.95	-13	-46.05

10015

ey [MH2]

Freque

5022.5

30

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. documents in subduiting cannot be reproduced by the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

15007.5



12 24 [(m/mgp]] [aver]

30

LICIUS INFO

20000

Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTE B25 1.4M 16QAM RB1.5 1914.3 MHz Tx CH High E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/28 22.7deg_C/57RH Ashton Vertical
36- 24 12 0			

	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	112.45	S	-53.10	-50.09	-1.55	-1.46	-13	-40.10
	199.75	S	-56.16	-59.91	5.73	-1.99	-13	-43.16
	325.85	S	-60.21	-63.55	5.92	-2.58	-13	-47.21
	552.83	S	-62.42	-65.55	6.54	-3.42	-13	-49.42
	662.44	S	-61.54	-65.12	7.30	-3.72	-13	-48.54
	890.39	S	-61.43	-64.92	7.88	-4.39	-13	-48.43
	3828.60	Н	-56.88	-60.39	12.50	-8.99	-13	-43.88

10015

oy [MH2]

Frequ

5022.5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. documents in subduiting cannot be reproduced by the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

15007.5



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTE B25 1.4M 16QAM RB1.5 1914.3 MHz Tx CH High E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/28 22.7deg_C/57RH Ashton Horizontal
36-			
12			
			ut us ner
[[412			

Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
165.80	S	-60.37	-62.42	3.85	-1.80	-13	-47.37
224.97	S	-57.35	-61.44	6.20	-2.11	-13	-44.35
332.64	S	-59.61	-62.94	5.94	-2.61	-13	-46.61
411.21	S	-66.58	-69.52	5.87	-2.92	-13	-53.58
656.62	S	-65.34	-68.86	7.24	-3.71	-13	-52.34
907.85	S	-63.36	-66.84	7.91	-4.43	-13	-50.36
3828.60	Н	-57.63	-61.14	12.50	-8.99	-13	-44.63

ey [MH2]

Frequ

5022.5

30

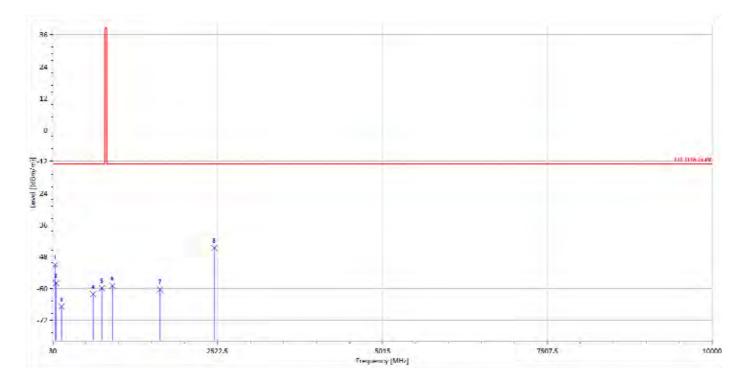
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. documents in subduiting cannot be reproduced to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

15007.5



Radiated Spurious Emission Measurement Result: LTE-Band 26 (The Worst Case)

	LTEB26 3M QPSK RB		
Operation Mode :	1.14	Test Date :	2017/9/29
Fundamental Frequency :	847.5 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
32.91	S	-56.80	-36.00	-19.97	-0.83	-13	-43.80
101.78	S	-71.78	-67.00	-3.39	-1.39	-13	-58.78
558.65	S	-67.07	-67.67	4.03	-3.43	-13	-54.07
741.98	S	-64.35	-65.57	5.14	-3.92	-13	-51.35
776.90	S	-64.26	-65.42	5.19	-4.04	-13	-51.26
937.92	S	-61.69	-62.56	5.37	-4.49	-13	-48.69
1695.00	Н	-58.50	-58.71	6.76	-6.55	-13	-45.50
2542.50	Н	-58.52	-59.25	8.61	-7.88	-13	-45.52



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTEB26 3M QPSK RB 1.14 825.5 MHz Tx CH Low E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/29 22.7deg_C/57RH Enzo Horizontal
36-			
12 0			
(E-12 (E-12 (E-12)) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-12) (E-			00.096.047
48 -60			

Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
32.91	S	-56.81	-36.01	-19.97	-0.83	-13	-43.81
359.80	S	-69.76	-70.45	3.39	-2.71	-13	-56.76
407.33	S	-67.05	-67.41	3.26	-2.91	-13	-54.05
658.56	S	-66.33	-67.31	4.70	-3.72	-13	-53.33
774.96	S	-62.70	-63.86	5.19	-4.03	-13	-49.70
936.95	S	-60.81	-61.68	5.37	-4.49	-13	-47.81
1651.00	Н	-53.49	-53.61	6.57	-6.45	-13	-40.49
2476.50	Н	-42.87	-43.59	8.53	-7.80	-13	-29.87

wy [MH2]

Toque

2522.5

30

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. documents in subduiting cannot be reproduced to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

7507.5



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTEB26 3M QPSK RB 1.14 836.5 MHz Tx CH Mid E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/29 22.7deg_C/57RH Enzo Vertical
36+			
U 12 12 12 12 12 12 12 12 12 12 12 12 12			10.096.049
36 . 48 . -60 - 1	*		
30	3572.5 Tres	5015 7507.5	30000

Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
34.85	S	-47.31	-28.18	-18.29	-0.84	-13	-34.31
71.71	S	-46.57	-43.52	-1.90	-1.15	-13	-33.57
166.77	S	-62.00	-62.36	2.17	-1.81	-13	-49.00
502.39	S	-65.70	-66.50	4.04	-3.24	-13	-52.70
775.93	S	-60.21	-61.37	5.19	-4.03	-13	-47.21
937.92	S	-57.13	-58.00	5.37	-4.49	-13	-44.13
1673.00	Н	-58.76	-58.94	6.69	-6.51	-13	-45.76
2509.50	Н	-39.74	-40.46	8.56	-7.84	-13	-26.74



30	2522.5 Freq	5015 7507.5 [January [MHz]	10000
36 48 -60 -17 -17 -17 -17 -17 -17 -17 -17			
36- 24 12 0 12 12 12 12 12 12 12 12 12 12 12 12 12			ALL RUGSTAVE
Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTEB26 3M QPSK RB 1.14 836.5 MHz Tx CH Mid E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/29 22.7deg_C/57RH Enzo Horizontal

Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
							10
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
33.88	S	-57.34	-37.38	-19.13	-0.84	-13	-44.34
96.93	S	-72.19	-67.83	-3.01	-1.36	-13	-59.19
521.79	S	-66.26	-66.95	4.01	-3.32	-13	-53.26
776.90	S	-62.94	-64.10	5.19	-4.04	-13	-49.94
789.51	S	-64.61	-65.73	5.21	-4.09	-13	-51.61
932.10	S	-59.06	-59.93	5.35	-4.48	-13	-46.06
1673.00	Н	-57.20	-57.38	6.69	-6.51	-13	-44.20



Operation Mode : Fundamental Frequency : Operation Band :	LTEB26 3M QPSK RB 1.14 847.5 MHz Tx CH High	Test Date : Temp. / Humi. : Test Engineer :	2017/9/29 22.7deg_C/57RH Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical
36 24 12 0 12 12 12 12 12 12 12 12 12 12 12 12 12	5x		
30	2522.5	5015 7507.5	10000

Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
67.83	S	-68.83	-65.50	-2.21	-1.12	-13	-55.83
196.84	S	-68.16	-70.08	3.89	-1.97	-13	-55.16
419.94	S	-66.15	-66.56	3.37	-2.95	-13	-53.15
582.90	S	-63.29	-63.99	4.20	-3.50	-13	-50.29
773.99	S	-60.12	-61.29	5.19	-4.03	-13	-47.12
932.10	S	-57.99	-58.86	5.35	-4.48	-13	-44.99
1695.00	Н	-60.37	-60.59	6.76	-6.55	-13	-47.37
2542.50	Н	-57.14	-57.86	8.60	-7.87	-13	-44.14

wy [MH2]

Torqu

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號



Operation Mode : Fundamental Frequency Operation Band : EUT Pol. :	LTEB26 3M QPSK RB 1.14 : 847.5 MHz Tx CH High E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/29 22.7deg_C/57RH Enzo Horizontal
36 24 12			
U TE-12 			111 1116 2147
	2522.5	5015 7507.5 gamay [MHz]	10000

freq	-	100	18.86	1.1
10000	-	- 9	fine	×1.

Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
32.91	S	-56.80	-36.00	-19.97	-0.83	-13	-43.80
101.78	S	-71.78	-67.00	-3.39	-1.39	-13	-58.78
558.65	S	-67.07	-67.67	4.03	-3.43	-13	-54.07
741.98	S	-64.35	-65.57	5.14	-3.92	-13	-51.35
776.90	S	-64.26	-65.42	5.19	-4.04	-13	-51.26
937.92	S	-61.69	-62.56	5.37	-4.49	-13	-48.69
1695.00	Н	-58.50	-58.71	6.76	-6.55	-13	-45.50
2542.50	Н	-58.52	-59.25	8.61	-7.88	-13	-45.52

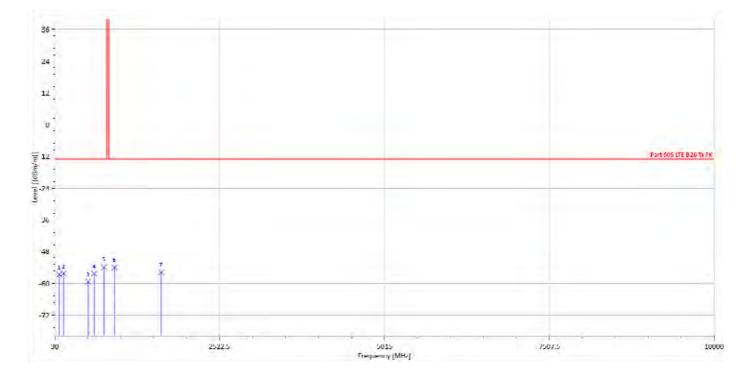
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北產五股區新北產業園區五工路 134 號



Radiated Spurious Emission Measurement Result: LTE-Band 26 for Part 90S

(The Worst Case)

Operation Mode :	LTEB26 10M QPSK 1.49	Test Date :	2017/9/29
Fundamental Frequency :	819 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
98.87	S	-56.66	-52.07	-3.22	-1.37	-13	-43.66
165.80	S	-56.21	-56.46	2.05	-1.80	-13	-43.21
536.34	S	-59.35	-59.97	3.99	-3.37	-13	-46.35
627.52	S	-56.31	-57.15	4.49	-3.65	-13	-43.31
775.93	S	-53.81	-54.96	5.19	-4.03	-13	-40.81
939.86	S	-53.96	-54.84	5.38	-4.50	-13	-40.96
1638.00	Н	-55.81	-55.91	6.53	-6.43	-13	-42.81



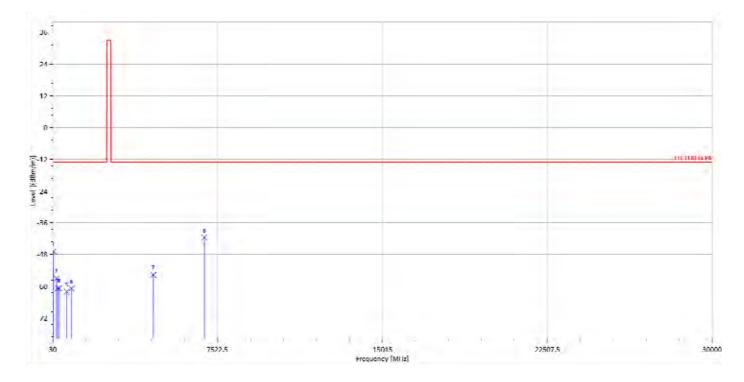
Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTEB26 10M QPSK 1.4 819 MHz Tx CH Mid E2	9 Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/29 22.7deg_C/57RH Ashton Horizontal
36 			
-36 -48			PertVerby LIT-BOTH SPEC
10 1 × × × × × × × × × × × × × × × × × ×	2522.5 Free	.5015 7507.5 uency [Miliz]	i cont

Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
 MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
30.97	S	-50.16	-27.68	-21.66	-0.82	-13	-37.16
160.95	S	-62.30	-61.98	1.46	-1.78	-13	-49.30
515.97	S	-60.85	-61.58	4.02	-3.29	-13	-47.85
742.95	S	-57.94	-59.17	5.15	-3.92	-13	-44.94
776.90	S	-55.55	-56.71	5.19	-4.04	-13	-42.55
935.98	S	-56.21	-57.09	5.36	-4.49	-13	-43.21
1638.00	Н	-56.01	-56.11	6.53	-6.43	-13	-43.01



Radiated Spurious Emission Measurement Result: LTE-Band 30 (The Worst Case)

Operation Mode :	LTE B30 5M 64QAM 1.0	Test Date :	2017/9/28
Fundamental Frequency :	2307.5 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical
201101.		Measurement Antenna i ol	ventical



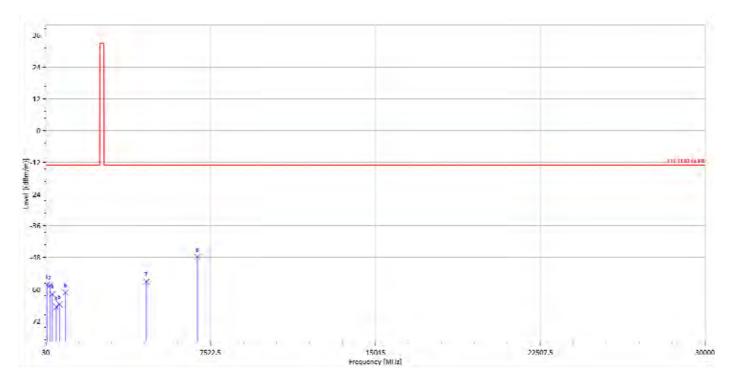
Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
			Level	Gain	LUSS	@SIII	
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
62.98	S	-46.90	-45.00	-0.83	-1.08	-13	-33.90
205.57	S	-56.99	-60.88	5.91	-2.02	-13	-43.99
265.71	S	-60.78	-63.44	4.98	-2.32	-13	-47.78
332.64	S	-60.78	-64.11	5.94	-2.61	-13	-47.78
672.14	S	-62.10	-65.76	7.41	-3.75	-13	-49.10
893.30	S	-60.85	-64.33	7.88	-4.40	-13	-47.85
4615.00	Н	-55.59	-58.55	12.58	-9.61	-13	-42.59
6922.50	Н	-41.53	-42.36	12.05	-11.21	-13	-28.53

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document and offenders may here produced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may he prosecuted to the fully extent of the law. document is unlawful and offenders may be prosecuted to the fullest extent of the law

S Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號



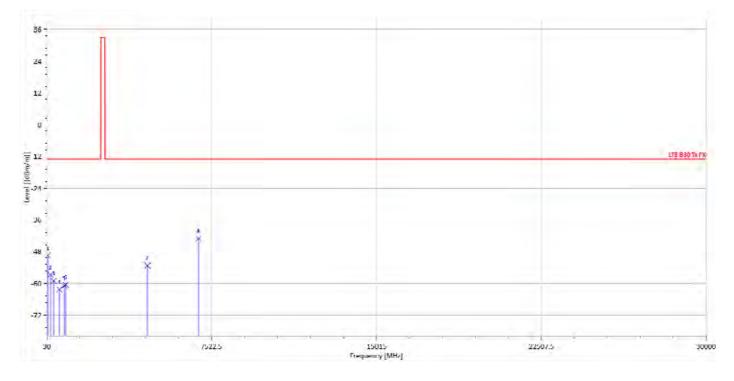
Operation Mode : Fundamental Frequency :	LTE B30 5M 64QAM 1.0 2307.5 MHz	Test Date : Temp. / Humi. :	2017/9/28 22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



Freq.	Note	ERP/EIRP	SG Output	Antenna	Cable	Limit	Margin
			Level	Gain	Loss	@3m	
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
94.99	S	-58.10	-56.07	-0.70	-1.34	-13	-45.10
227.88	S	-58.43	-62.41	6.11	-2.13	-13	-45.43
330.70	S	-61.87	-65.20	5.94	-2.60	-13	-48.87
513.06	S	-66.67	-69.90	6.50	-3.28	-13	-53.67
669.23	S	-65.71	-69.35	7.38	-3.74	-13	-52.71
937.92	S	-61.28	-64.73	7.95	-4.49	-13	-48.28
4615.00	Н	-57.04	-60.01	12.58	-9.61	-13	-44.04
6922.50	Н	-47.80	-48.64	12.05	-11.21	-13	-34.80



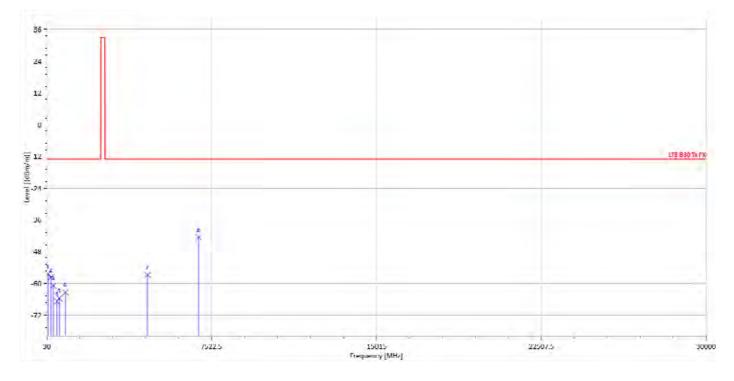
Operation Mode : Fundamental Frequency :	LTE B30 5M 64QAM 1.0 2310.0 MHz	Test Date : Temp. / Humi. :	2017/9/28 22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
76.56	S	-49.53	-48.69	0.35	-1.19	-13	-36.53
205.57	S	-56.71	-60.61	5.91	-2.02	-13	-43.71
352.04	S	-59.08	-62.37	5.98	-2.69	-13	-46.08
612.97	S	-62.30	-65.72	7.02	-3.61	-13	-49.30
836.07	S	-60.84	-64.40	7.79	-4.22	-13	-47.84
904.94	S	-60.52	-64.00	7.90	-4.42	-13	-47.52
4620.00	Н	-53.22	-56.18	12.58	-9.61	-13	-40.22
6930.00	Н	-43.04	-43.86	12.04	-11.22	-13	-30.04



Operation Mode : Fundamental Frequency :	LTE B30 5M 64QAM 1.0 2310.0 MHz	Test Date : Temp. / Humi. :	2017/9/28 22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Ashton
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



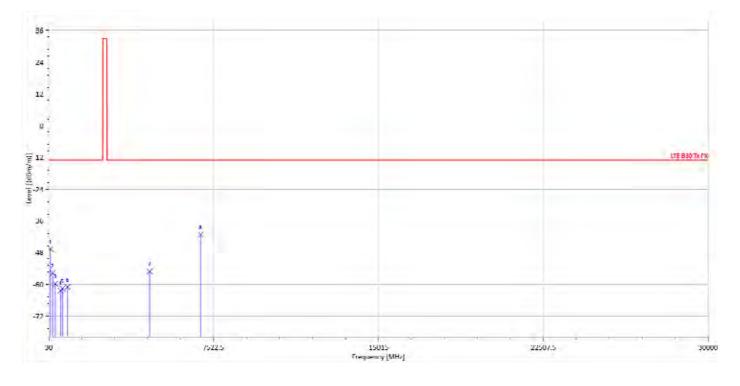
Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
94.02	S	-56.39	-54.48	-0.58	-1.33	-13	-43.39
220.12	S	-57.71	-61.97	6.35	-2.09	-13	-44.71
332.64	S	-60.91	-64.24	5.94	-2.61	-13	-47.91
503.36	S	-66.80	-70.05	6.49	-3.24	-13	-53.80
613.94	S	-65.72	-69.13	7.03	-3.61	-13	-52.72
889.42	S	-63.46	-66.95	7.87	-4.39	-13	-50.46
4620.00	Н	-56.74	-59.70	12.58	-9.61	-13	-43.74
6930.00	Н	-42.48	-43.31	12.04	-11.22	-13	-29.48



Operation Mode : Fundamental Frequency :	LTE B30 5M 64QAM 1.0 2312.5 MHz	Test Da Temp. /
Operation Band :	Tx CH High	Test Eng
EUT Pol. :	E2	Measure

ate : / Humi. : ngineer : Ashton rement Antenna Pol. :

2017/9/28 22.7deg_C/57RH Vertical



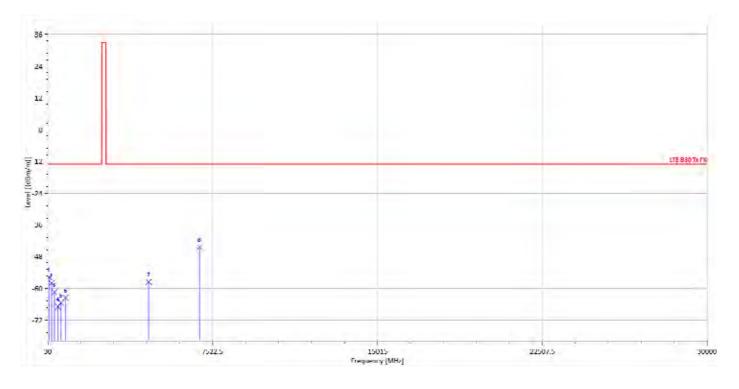
	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
_		F/H/E/3	udili	UDIII	ubu/ubi	uБ	ubiii/iii	uБ
	101.78	S	-46.70	-43.95	-1.36	-1.39	-13	-33.70
	205.57	S	-55.67	-59.56	5.91	-2.02	-13	-42.67
	327.79	S	-59.82	-63.16	5.93	-2.59	-13	-46.82
	579.02	S	-62.42	-65.72	6.78	-3.49	-13	-49.42
	658.56	S	-61.62	-65.17	7.26	-3.72	-13	-48.62
	895.24	S	-61.01	-64.50	7.89	-4.40	-13	-48.01
	4625.00	Н	-55.08	-58.03	12.58	-9.62	-13	-42.08
	6937.50	Н	-41.16	-41.98	12.04	-11.22	-13	-28.16



Operation Mode : LTE B30 5M 64QAM 1.0 Fundamental Frequency : 2312.5 MHz **Operation Band :** Tx CH High EUT Pol. : E2

Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :

2017/9/28 22.7deg_C/57RH Ashton Horizontal

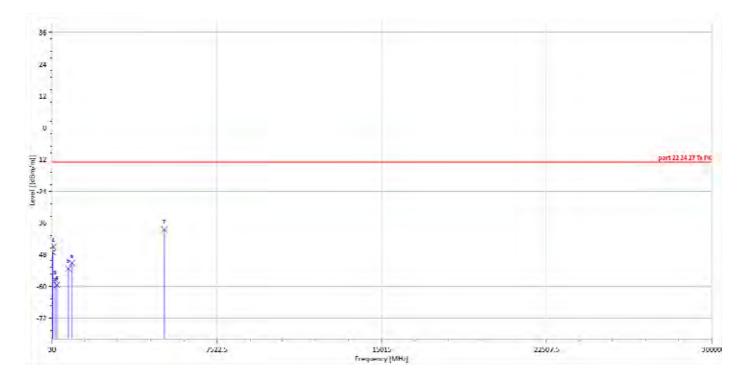


Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
94.99	S	-55.74	-53.70	-0.70	-1.34	-13	-42.74
206.54	S	-57.99	-61.91	5.94	-2.02	-13	-44.99
338.46	S	-61.48	-64.81	5.96	-2.63	-13	-48.48
503.36	S	-66.94	-70.19	6.49	-3.24	-13	-53.94
643.04	S	-65.52	-68.98	7.14	-3.68	-13	-52.52
847.71	S	-63.60	-67.14	7.80	-4.26	-13	-50.60
4625.00	Н	-57.57	-60.53	12.58	-9.62	-13	-44.57
6937.50	Н	-44.44	-45.26	12.04	-11.22	-13	-31.44



Radiated Spurious Emission Measurement Result: LTE-Band 38 (The Worst Case)

LTEB38 5M QPSK 1.0	Test Date :	2017/9/29
2572.5 MHz	Temp. / Humi. :	22.7deg_C/57RH
Tx CH Low	Test Engineer :	Enzo
E2	Measurement Antenna Pol. :	Vertical
	2572.5 MHz Tx CH Low	2572.5 MHzTemp. / Humi. :Tx CH LowTest Engineer :



	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	59.10	S	-47.20	-44.58	-1.58	-1.04	-13.01	-34.19
	80.44	S	-45.07	-44.30	0.45	-1.22	-13.01	-32.06
	163.86	S	-57.46	-59.29	3.63	-1.79	-13.01	-44.45
	248.25	S	-59.52	-62.53	5.25	-2.24	-13.01	-46.51
	768.17	S	-53.25	-56.99	7.73	-4.00	-13.01	-40.24
	938.89	S	-51.25	-54.71	7.95	-4.50	-13.01	-38.24
	5145.00	Н	-38.54	-41.15	12.65	-10.03	-13.01	-25.53

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document and offenders may here produced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may he prosecuted to the fully extent of the law. document is unlawful and offenders may be prosecuted to the fullest extent of the law

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 S Taiwan Ltd.



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTEB38 5M QPSK 1.0 2572.5 MHz Tx CH Low E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/29 22.7deg_C/57RH Enzo Horizontal	
36 - 24 - 12 -				
			part 22 34 27 Ta FK	
26 48 -60 -77				

	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	59.10	S	-37.03	-34.41	-1.58	-1.04	-13.01	-24.02
	164.83	S	-57.33	-59.27	3.74	-1.80	-13.01	-44.32
	376.29	S	-61.18	-64.27	5.87	-2.78	-13.01	-48.17
	502.39	S	-60.98	-64.23	6.49	-3.24	-13.01	-47.97
	774.96	S	-55.50	-59.22	7.74	-4.03	-13.01	-42.49
	938.89	S	-54.22	-57.68	7.95	-4.50	-13.01	-41.21
	5145.00	Н	-41.51	-44.12	12.65	-10.03	-13.01	-28.50

15015

Frequency [MH2]

1522.5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. documents in subduiting cannot be reproduced to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

22507.5



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTEB38 5M QPSK 1.0 2595.0 MHz Tx CH Mid E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/29 22.7deg_C/57RH Enzo Vertical
36 - 24 - 12			
0 [[112 2000]] 1404			part 22 24 27 Tx FVC
3 -50 -50			

	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	60.07	S	-61.25	-58.99	-1.22	-1.05	-13.01	-48.24
	100.81	S	-60.85	-58.15	-1.32	-1.39	-13.01	-47.84
	161.92	S	-57.59	-59.22	3.41	-1.78	-13.01	-44.58
	316.15	S	-55.32	-58.67	5.90	-2.54	-13.01	-42.31
	774.96	S	-52.61	-56.32	7.74	-4.03	-13.01	-39.60
	936.95	S	-51.63	-55.08	7.95	-4.49	-13.01	-38.62
	5190.00	Н	-39.53	-42.16	12.69	-10.06	-13.01	-26.52

15015

Frequency [MH2]

/522.5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. documents in subduiting cannot be reproduced to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

22507.5



LTEB38 5M QPSK 1.0 2595.0 MHz Tx CH Mid E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/29 22.7deg_C/57RH Enzo Horizontal
		part 22 34 27 Tx FX
	2595.0 MHz Tx CH Mid	2595.0 MHzTemp. / Humi. :Tx CH MidTest Engineer :

	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	30.97	S	-49.98	-29.59	-19.56	-0.82	-13.01	-36.97
	254.07	S	-63.05	-65.68	4.90	-2.27	-13.01	-50.04
	561.56	S	-59.34	-62.53	6.62	-3.43	-13.01	-46.33
	773.02	S	-55.76	-59.48	7.74	-4.02	-13.01	-42.75
	890.39	S	-57.84	-61.33	7.88	-4.39	-13.01	-44.83
	934.04	S	-55.46	-58.92	7.94	-4.48	-13.01	-42.45
	5190.00	S	-43.14	-45.76	12.69	-10.06	-13.01	-30.13

15015

Frequency [MH2]

1522.5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. documents in subduiting cannot be reproduced to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

22507.5



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTEB38 5M QPSK 1.0 2617.5 MHz Tx CH High E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/29 22.7deg_C/57RH Enzo Vertical
36			
24			
12			
₩ ₩			part 22 34 27 Tx PK
12 29 29 20 3 20 3 20 4 3 20 4 3 3 3 3			
3 43 43 -50 -77 -77			

Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
60.07	S	-47.60	-45.33	-1.22	-1.05	-13.01	-34.59
165.80	S	-58.31	-60.35	3.85	-1.80	-13.01	-45.30
526.64	S	-58.34	-61.51	6.50	-3.34	-13.01	-45.33
732.28	S	-56.57	-60.38	7.71	-3.90	-13.01	-43.56
774.96	S	-53.54	-57.25	7.74	-4.03	-13.01	-40.53
937.92	S	-51.35	-54.81	7.95	-4.49	-13.01	-38.34
5235.00	S	-43.08	-45.73	12.74	-10.09	-13.01	-30.07

15015

Frequency [MH2]

1522.5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. documents in subduiting cannot be reproduced to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

22507.5



dBm/

-77

30

Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTEB38 5M QPSK 1.0 2617.5 MHz Tx CH High E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/29 22.7deg_C/57RH Enzo Horizontal
36 24 12 0			
₩ 12			part 22 24 27 Tx FVK

Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
31.94	S	-49.93	-30.32	-18.78	-0.83	-13.01	-36.92
161.92	S	-58.54	-60.16	3.41	-1.78	-13.01	-45.53
497.54	S	-60.65	-63.91	6.48	-3.22	-13.01	-47.64
620.73	S	-59.84	-63.26	7.05	-3.63	-13.01	-46.83
774.96	S	-55.55	-59.26	7.74	-4.03	-13.01	-42.54
940.83	S	-55.82	-59.27	7.95	-4.50	-13.01	-42.81
5235.00	Н	-42.30	-44.94	12.74	-10.09	-13.01	-29.29

15015

Frequency [MH2]

1522.5

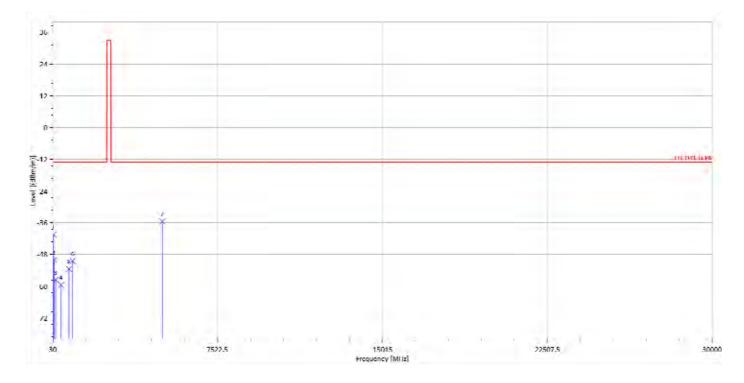
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. document is unlawful and offenders may be proceeded to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

22507.5



Radiated Spurious Emission Measurement Result: LTE-Band 41(The Worst Case)

LTEB41 20M QPSK 1.0	Test Date :	2017/9/29
2506 MHz	Temp. / Humi. :	22.7deg_C/57RH
Tx CH Low	Test Engineer :	Enzo
E2	Measurement Antenna Pol. :	Vertical
	2506 MHz Tx CH Low	Tx CH Low Test Engineer :



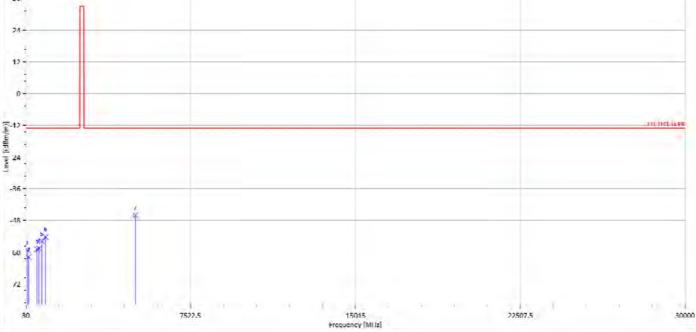
Freq.	Note	ERP/EIRP	SG Output	Antenna	Cable	Limit	Margin
			Level	Gain	Loss	@3m	
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
63.95	S	-40.40	-38.61	-0.70	-1.09	-13	-27.40
87.23	S	-50.14	-48.91	0.05	-1.28	-13	-37.14
162.89	S	-57.56	-59.29	3.52	-1.79	-13	-44.56
414.12	S	-59.48	-62.44	5.90	-2.93	-13	-46.48
776.90	S	-53.37	-57.07	7.74	-4.04	-13	-40.37
937.92	S	-50.53	-53.98	7.95	-4.49	-13	-37.53
5012.00	Н	-35.54	-38.12	12.51	-9.93	-13	-22.54

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document and offenders may here produced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may he prosecuted to the fully extent of the law. document is unlawful and offenders may be prosecuted to the fullest extent of the law

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 S Taiwan Ltd.



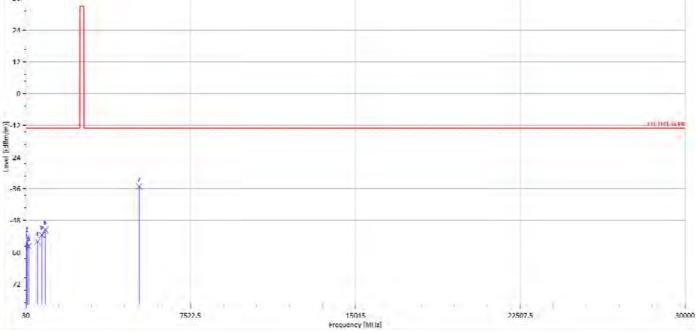
Operation Mode :	LTEB41 20M QPSK 1.0	Test Date :	2017/9/29
Fundamental Frequency :	2506 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Low	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal
j.			



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
113.42	S	-59.17	-56.20	-1.51	-1.47	-13	-46.17
162.89	S	-61.81	-63.54	3.52	-1.79	-13	-48.81
554.77	S	-58.81	-61.95	6.56	-3.42	-13	-45.81
645.95	S	-58.50	-61.97	7.15	-3.69	-13	-45.50
773.99	S	-55.79	-59.50	7.74	-4.03	-13	-42.79
936.95	S	-54.14	-57.59	7.95	-4.49	-13	-41.14
5012.00	Н	-46.06	-48.65	12.51	-9.93	-13	-33.06



Operation Mode :	LTEB41 20M QPSK 1.0	Test Date :	2017/9/29
Fundamental Frequency :	2593 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH Mid	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical
1.00			



Freq.	Note	ERP/EIRP	SG Output	Antenna	Cable	Limit	Margin
			Level	Gain	Loss	@3m	
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
63.95	S	-56.37	-54.58	-0.70	-1.09	-13	-43.37
95.96	S	-54.33	-52.17	-0.81	-1.35	-13	-41.33
165.80	S	-57.65	-59.69	3.85	-1.80	-13	-44.65
569.32	S	-55.86	-59.10	6.69	-3.46	-13	-42.86
774.96	S	-53.38	-57.09	7.74	-4.03	-13	-40.38
932.10	S	-51.52	-54.98	7.94	-4.48	-13	-38.52
5186.00	Н	-35.20	-37.82	12.69	-10.06	-13	-22.20



Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :	LTEB41 20M QPSK 1.0 2593 MHz Tx CH Mid E2	Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :	2017/9/29 22.7deg_C/57RH Enzo Horizontal
-			
12-	1		
0			
			nentiae
E-12 E- B 3 24			
-36 -			

	Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
_	MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
	32.91	S	-51.02	-32.19	-18.00	-0.83	-13	-38.02
	162.89	S	-58.52	-60.25	3.52	-1.79	-13	-45.52
	367.56	S	-61.80	-64.97	5.91	-2.74	-13	-48.80
	538.28	S	-60.25	-63.39	6.51	-3.37	-13	-47.25
	775.93	S	-55.14	-58.84	7.74	-4.03	-13	-42.14
	934.04	S	-53.81	-57.27	7.94	-4.48	-13	-40.81
	5186.00	S	-41.11	-43.74	12.69	-10.06	-13	-28.11

9015 Frequency [MIIz]

4522.5

30

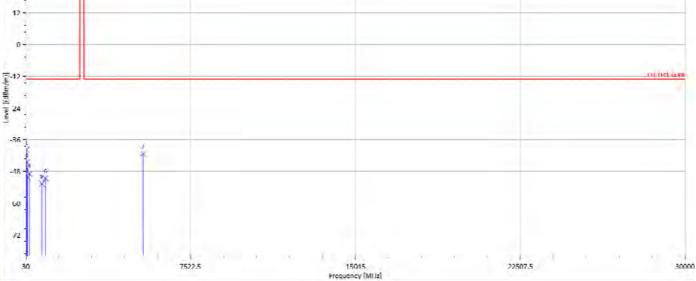
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this documents is unlawful and offenders may he prosecuted to the fullest extent of the law. document is unlawful and offenders may be proceeded to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

13507.5

18000



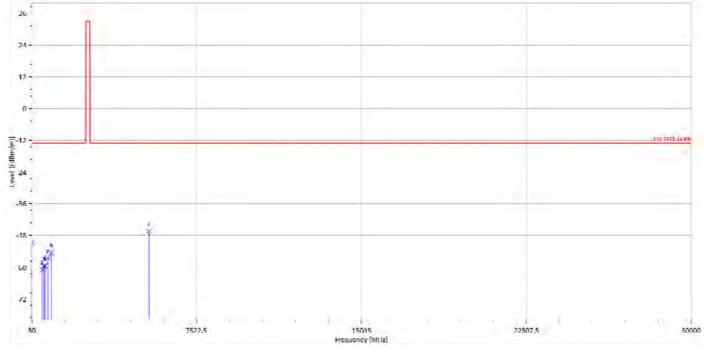
Operation Mode :	LTEB41 20M QPSK 1.0	Test Date :	2017/9/29
Fundamental Frequency :	2680 MHz	Temp. / Humi. :	22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Vertical
36 24			



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
59.10	S	-39.67	-37.05	-1.58	-1.04	-13	-26.67
79.47	S	-44.46	-43.69	0.45	-1.22	-13	-31.46
107.60	S	-50.19	-47.19	-1.57	-1.43	-13	-37.19
191.02	S	-48.83	-52.76	5.87	-1.95	-13	-35.83
773.99	S	-52.58	-56.29	7.74	-4.03	-13	-39.58
937.92	S	-50.61	-54.06	7.95	-4.49	-13	-37.61
5360.00	Н	-41.31	-43.98	12.86	-10.18	-13	-28.31



Operation Mode : Fundamental Frequency :	LTEB41 20M QPSK 1.0 2680 MHz	Test Date : Temp. / Humi. :	2017/9/29 22.7deg_C/57RH
Operation Band :	Tx CH High	Test Engineer :	Enzo
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal



Freq.	Note	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Limit @3m	Margin
 MHz	F/H/E/S	dBm	dBm	dBd/dBi	dB	dBm/m	dB
31.94	S	-50.59	-30.99	-18.78	-0.83	-13	-37.59
512.09	S	-60.97	-64.20	6.50	-3.27	-13	-47.97
586.78	S	-59.56	-62.90	6.85	-3.52	-13	-46.56
639.16	S	-59.43	-62.89	7.13	-3.67	-13	-46.43
776.90	S	-56.48	-60.19	7.74	-4.04	-13	-43.48
936.95	S	-54.37	-57.82	7.95	-4.49	-13	-41.37
5360.00	Н	-46.46	-49.13	12.86	-10.18	-13	-33.46



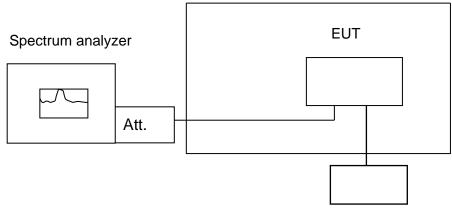
11. FREQUENCY STABILITY MEASUREMENT

11.1. Standard Applicabl

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

11.2. Test Set-up

Temperature Chamber



Variable DC Power Supply

Note: Measurement setup for testing on Antenna connector

11.3. Measurement Procedure

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

Set chamber temperature to 25 . Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint as declared by the manufacturer, record the maximum frequency change.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



11.4. Measurement Equipment Used

Conduc	Conducted Emission (measured at antenna port) Test Site						
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.		
TYPE		NUMBER	NUMBER	CAL.			
Spectrum Analyzer	KEYSIGHT	N9010A	MY51440113	06/20/2017	06/19/2018		
Communication Tester	Anritsu	MT8820C	6201107337	05/25/2017	05/24/2018		
Coaxial Cable 30cm	WOKEN	00100A1F1A 195C	RF01	12/12/2016	12/11/2017		
Temperature Chamber	TERCHY	MHK-120LK	1020582	06/13/2017	06/12/2018		
DC Block	PASTERNACK	PE8210	RF29	12/12/2016	12/11/2017		
Splitter	RF-LAMBAD	RFLT2W1G1 8G	RF35	12/12/2016	12/11/2017		
Attenuator	WOKEN	218FS-10	RF23	12/12/2016	12/11/2017		
DC Power Supply	Agilent	E3640A	MY53140006	05/02/2017	05/01/2018		



11.5. Measurement Result

Reference Frequency: GPRS 850 Mid Channel 836.6 MHz							
	Limit: +/- 2.5 ppm						
Power Supply	Environment	Frequency	Limit (Hz)				
Vdc	Temp.()	(MHz)	Delta (Hz)				
F	FREQUENCY ERROR vs. VOLTAGE						
4.42	20	836600009	17	2091			
3.85	20	836599992	-3	2091			
3.4	20	836599995	8	2091			
3.3 (End point)	20	836599987	-5	2091			
	FREQUENCY	ERROR vs. Te	emp.				
3.85	50	836600001	-8	2091			
3.85	40	836600009	24	2091			
3.85	30	836599985	-14	2091			
3.85	20	836599999	-15	2091			
3.85	10	836600014	25	2091			
3.85	0	836599989	-2	2091			
3.85	-10	836599991	-11	2091			
3.85	-20	836600002	-6	2091			
3.85	-30	836600008	5	2091			

Reference Frequency: GPRS 1900 Mid Channel 1880 MHz							
	Limit: +/- 2.5 ppm						
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)			
Vdc	Temp.()	(MHz)					
FREQUENCY ERROR vs. VOLTAGE							
4.42	20	1879999998	6	4700			
3.85	20	1879999992	-10	4700			
3.4	20	188000002	11	4700			
3.3 (End point)	20	1879999991	-5	4700			
(End point)	FREQUENOV						
	FREQUENCY		•				
3.85	50	1880000008	12	4700			
3.85	40	1879999996	4	4700			
3.85	30	1879999992	-16	4700			
3.85	20	1880000008	13	4700			
3.85	10	1879999995	4	4700			
3.85	0	1879999991	-18	4700			
3.85	-10	1880000009	10	4700			
3.85	-20	1879999999	-6	4700			
3.85	-30	1880000005	3	4700			

t (886-2) 2299-3279



Reference Frequency: WCDMA II Mid Channel 1880 MHz							
	Limit: +/- 2.5 ppm						
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)			
Vdc	Temp. ()	(MHz)					
FREQUENCY ERROR vs. VOLTAGE							
4.42	20	1879999997	-12	4700			
3.85	20	1880000009	25	4700			
3.4	20	1879999984	-24	4700			
3.3	20	1880000008	2	4700			
(End point)	20	10000000	Z	4700			
	FREQUENCY	ERROR vs. Te	emp.				
Reference	e Frequency: V	VCDMA II Mid	Channel 188	30			
	Limit: -	+/- 2.5 ppm					
Power Supply	Environment	Frequency	Delta (Hz)	limit (∐z)			
Vdc	Temp. ()	(MHz)		Limit (Hz)			
2.05				、 <i>,</i>			
3.85	50	1879999991	-13	4700			
3.85 3.85	50 40	1879999991 1880000004	-13 11	. ,			
				4700			
3.85	40	1880000004	11	4700 4700			
3.85 3.85	40 30	1880000004 1879999993	11 -6	4700 4700 4700			
3.85 3.85 3.85	40 30 20	1880000004 1879999993 18799999999	11 -6 -7	4700 4700 4700 4700			
3.85 3.85 3.85 3.85 3.85	40 30 20 10	188000004 1879999993 1879999999 1880000006	11 -6 -7 10	4700 4700 4700 4700 4700 4700			
3.85 3.85 3.85 3.85 3.85 3.85	40 30 20 10 0	1880000004 1879999993 18799999999 1880000006 1879999996	11 -6 -7 10 -6	4700 4700 4700 4700 4700 4700 4700			

documents in subduiting cannot be reproduced by the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號



Reference Frequency: WCDMA IV Mid Channel 1732.6 MHz							
Limit: +/- 2.5 ppm							
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)			
Vdc	Temp. ()	(MHz)					
F	REQUENCY EI	RROR vs. VOL	TAGE				
4.42	20	173260005	12	4331			
3.85	20	173259993	-5	4331			
3.4	20	173259998	-4	4331			
3.3	20	173260002	-5	4331			
(End point)	20	1/3200002	-0	4551			
	FREQUENCY	ERROR vs. Te	emp.				
Reference Fr	Reference Frequency: WCDMA IV Mid Channel 1732.6 MHz						
	Limit: +/- 2.5 ppm						
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)			
Vdc	Temp.()	(MHz)					
3.85	50	173259991	-11	4331			
3.85	40	173260002	-4	4331			
3.85	30	173260006	20	4331			
3.85	20	173259986	2	4331			
3.85	10	173259984	-23	4331			
3.85	0	173260007	-1	4331			
3.85	-10	173260008	9	4331			
3.85	-20	173259999	-10	4331			
3.85	-30	173260009	7	4331			

documents in subduiting cannot be reproduced by the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號



Reference Frequency: WCDMA V Mid Channel 836.6 MHz										
Limit: +/- 2.5 ppm										
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)						
Vdc	Temp.()	(MHz)								
F	REQUENCY EI	rror vs. Vol	TAGE							
4.42	20	836599986	-26	2091						
3.85	20	836600012	8	2091						
3.4	20	836600004	8	2091						
3.3	20	836599996	-1	2091						
(End point)	20	030399990	-1	2091						
	FREQUENCY	ERROR vs. Te	emp.							
Reference F	Reference Frequency: WCDMA V Mid Channel 836.6 MHz									
	Limit: -	+/- 2.5 ppm		Limit: +/- 2.5 ppm						
Douver Cupply		Environment Frequency								
Power Supply	Environment	Frequency	Dolta (Uz)	limit (∐z)						
Vdc	Environment Temp. ()	Frequency (MHz)	Delta (Hz)	Limit (Hz)						
		. ,	Delta (Hz) -8	Limit (Hz) 2091						
Vdc	Temp. ()	(MHz)								
Vdc 3.85	Temp. () 50	(MHz) 836599994	-8	2091						
Vdc 3.85 3.85	Temp. () 50 40	(MHz) 836599994 836600002	-8 11	2091 2091						
Vdc 3.85 3.85 3.85 3.85	Temp. () 50 40 30	(MHz) 836599994 836600002 836599991	-8 11 0	2091 2091 2091						
Vdc 3.85 3.85 3.85 3.85 3.85	Temp. () 50 40 30 20	(MHz) 836599994 836600002 836599991 836599991	-8 11 0 -12	2091 2091 2091 2091 2091						
Vdc 3.85 3.85 3.85 3.85 3.85 3.85 3.85	Temp. () 50 40 30 20 10	(MHz) 836599994 836600002 836599991 836599991 836600003	-8 11 0 -12 7	2091 2091 2091 2091 2091 2091						
Vdc 3.85 3.85 3.85 3.85 3.85 3.85 3.85 3.85	Temp. () 50 40 30 20 10 0	(MHz) 836599994 836600002 836599991 836599991 836600003 836599996	-8 11 0 -12 7 -16	2091 2091 2091 2091 2091 2091 2091						



Reference Freq.:		LTE B2 Mid Channel		MHz 20M QPSK CH 18900
Power Supply Vdc	Temp. ()	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	Fre	eq. ERROR vs. V	OLTAG	E
4.42	25	1880.000006	24	4700
3.85	25	1879.999982	0	4700
3.4	25	1880	18	4700
3.3 (End Point)	25	1880	18	4700
	F	req. ERROR vs.	Temp.	
3.85	-30	1880.000004	-15	4700
3.85	-20	1879.999982	-37	4700
3.85	-10	1880.000013	-6	4700
3.85	0	1879.999981	-38	4700
3.85	10	1879.999982	-37	4700
3.85	20	1880.000019	0	4700
3.85	30	1880.00001	-9	4700
3.85	40	1880.000013	-6	4700
3.85	50	1880.000006	-13	4700

Reference Freq.:		34 Mid nnel	1732.5	MHz 20M QPSK CH 20175
Power Supply Vdc	Temp. ()	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	Freq.	ERROR vs.	VOLTAG	E
4.42	25	1732.5	30	4331
3.85	25	1732.5	0	4331
3.4	25	1732.5	22	4331
3.3 (End Point)	25	1732.5	22	4331
	Free	ą. ERROR v	s. Temp.	
3.85	-30	1732.5	-11	4331
3.85	-20	1732.5	-33	4331
3.85	-10	1732.5	-8	4331
3.85	0	1732.5	-37	4331
3.85	10	1732.5	-40	4331
3.85	20	1732.5	0	4331
3.85	30	1732.5	-5	4331
3.85	40	1732.5	-2	4331
3.85	50	1732.5	-17	4331

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd. No.134, WuckungRoad, NewTaipeiIndustrialPark, WukuDistrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號



Reference Freq.:	LTE B5 Mid Channel		836.5	MHz 10M QPSK CH 20525
Power Supply Vdc	Temp. ()	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	Fre	q. ERROR vs. V	OLTAG	E
4.42	25	836.499991	14	2091
3.85	25	836.499977	0	2091
3.4	25	836.499994	17	2091
3.3 (End Point)	25	836.5	23	2091
	F	req. ERROR vs.	. Temp.	
3.85	-30	836.500021	3	2091
3.85	-20	836.499987	-31	2091
3.85	-10	836.499987	-31	2091
3.85	0	836.500016	-2	2091
3.85	10	836.499986	-32	2091
3.85	20	836.500018	0	2091
3.85	30	836.499991	-27	2091
3.85	40	836.500003	-15	2091
3.85	50	836.500023	5	2091

Reference Freq.:		37 Mid nnel	2535	MHz 10M QPSK CH 21100
Power Supply Vdc	Temp. ()	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	Freq.	ERROR vs.	VOLTAG	E
4.42	25	2535	-7	6338
3.85	25	2535	0	6338
3.4	25	2535	-37	6338
3.3 (End Point)	25	2535	-13	6338
	Free	q. ERROR v	s. Temp.	
3.85	-30	2535	-12	6338
3.85	-20	2535	-29	6338
3.85	-10	2535	-23	6338
3.85	0	2535	10	6338
3.85	10	2535	15	6338
3.85	20	2535	0	6338
3.85	30	2535	-27	6338
3.85	40	2535	-7	6338
3.85	50	2535	-31	6338

t (886-2) 2299-3279



Reference Freq.:		E B12 Mid Channel	707.5	MHz 10M QPSK CH 23095
Power Supply Vdc	Temp. ()	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	Fre	q. ERROR vs. V	OLTAG	E
4.42	25	707.499984	3	1769
3.85	25	707.499981	0	1769
3.4	25	707.499992	11	1769
3.3 (End Point)	25	707.5	19	1769
	F	req. ERROR vs.	. Temp.	
3.85	-30	707.500008	32	1769
3.85	-20	707.499981	5	1769
3.85	-10	707.500022	46	1769
3.85	0	707.499996	20	1769
3.85	10	707.500021	45	1769
3.85	20	707.499976	0	1769
3.85	30	707.500012	36	1769
3.85	40	707.499978	2	1769
3.85	50	707.499984	8	1769

Reference Freq.:	LTE B17 Mid Channel		710	MHz 10M QPSK CH 23790	
Power Supply Vdc	Temp. ()	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)	
Freq. ERROR vs. VOLTAGE					
4.42	25	710.00001	-12	1775	
3.85	25	710.00002	0	1775	
3.4	25	710	-21	1775	
3.3 (End Point)	25	710	-22	1775	
	Free	q. ERROR v	s. Temp.		
3.85	-30	710	-1	1775	
3.85	-20	709.99998	-16	1775	
3.85	-10	710.00001	14	1775	
3.85	0	710.00001	16	1775	
3.85	10	710	2	1775	
3.85	20	710	0	1775	
3.85	30	709.99999	-8	1775	
3.85	40	710	2	1775	
3.85	50	710	1	1775	

www.tw.sgs.com



Reference Freq.:	LTE B25 Mid Channel		1882.5	MHz 20M QPSK CH 26365
Power Supply Vdc	Temp. ()	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	Fre	q. ERROR vs. V	OLTAG	E
4.42	25	1882.500007	-10	2091
3.85	25	1882.500017	0	2091
3.4	25	1882.500018	1	2091
3.3 (End Point)	25	1882.5	-17	2091
	F	req. ERROR vs.	. Temp.	
3.85	-30	1882.499997	7	2091
3.85	-20	1882.499992	2	2091
3.85	-10	1882.500013	23	2091
3.85	0	1882.499994	4	2091
3.85	10	1882.500023	33	2091
3.85	20	1882.49999	0	2091
3.85	30	1882.500015	25	2091
3.85	40	1882.499995	5	2091
3.85	50	1882.5	10	2091

Reference Freq.:	LTE B26 Mid Channel		836.5	MHz 15M QPSK CH 26915
Power Supply Vdc	Temp. ()	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	Fre	q. ERROR vs. V	OLTAG	E
4.42	25	836.499987	-10	2091
3.85	25	836.499997	0	2091
3.4	25	836.500023	26	2091
3.3 (End Point)	25	836.5	3	2091
	F	req. ERROR vs.	Temp.	
3.85	-30	836.499995	-27	2091
3.85	-20	836.500002	-20	2091
3.85	-10	836.500009	-13	2091
3.85	0	836.499995	-27	2091
3.85	10	836.499984	-38	2091
3.85	20	836.500022	0	2091
3.85	30	836.500014	-8	2091
3.85	40	836.500012	-10	2091
3.85	50	836.499998	-24	2091

www.tw.sgs.com



Reference	e Freq.:	LTE Part90 B26 Mid Channel	819	MHz 10M QPSK CH 26740
Power Supply Vdc	Temp. ()	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
Freq.	ERROR vs.	VOLTAGE (LTE B26	for Part 90S)
4.42	25	818.99999	-14	2048
3.85	25	819.00001	0	2048
3.4	25	819	-11	2048
3.3 (End Point)	25	819	-6	2048
	Free	q. ERROR v	s. Temp.	
3.85	-30	818.99999	-17	2048
3.85	-20	819.00001	5	2048
3.85	-10	819.00002	14	2048
3.85	0	819	-6	2048
3.85	10	818.99999	-22	2048
3.85	20	819.00001	0	2048
3.85	30	819	-12	2048
3.85	40	819	-11	2048
3.85	50	819.00002	9	2048

Reference Freq.:	LTE B30 Mid Channel		2310	MHz 10M QPSK CH 27710	
Power Supply Vdc	Temp. ()	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)	
Freq. ERROR vs. VOLTAGE					
4.42	25	2310	-8	6488	
3.85	25	2310	0	6488	
3.4	25	2310	15	6488	
3.3 (End Point)	25	2310	9	6488	
	Free	ą. ERROR v	s. Temp.		
3.85	-30	2310	18	6488	
3.85	-20	2310	21	6488	
3.85	-10	2310	8	6488	
3.85	0	2310	10	6488	
3.85	10	2310	28	6488	
3.85	20	2310	0	6488	
3.85	30	2310	6	6488	
3.85	40	2310	36	6488	
3.85	50	2310	23	6488	



Reference Freq.:	LTE B38 Mid Channel		2595	MHz 10M QPSK CH 38000
Power Supply Vdc	Temp. ()	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	Freq.	ERROR vs.	VOLTAG	E
4.42	25	2595	-18	6488
3.85	25	2595	0	6488
3.4	25	2595	-14	6488
3.3 (End Point)	25	2595	-20	6488
	Free	ą. ERROR v	s. Temp.	
3.85	-30	2595	-9	6488
3.85	-20	2595	-27	6488
3.85	-10	2595	2	6488
3.85	0	2595	-14	6488
3.85	10	2595	9	6488
3.85	20	2595	0	6488
3.85	30	2595	13	6488
3.85	40	2595	-12	6488
3.85	50	2595	10	6488

Reference	Reference Freq.:		2605	MHz 10M QPSK CH 40740
Power Supply Vdc	Temp. ()	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	Fre	q. ERROR vs. V	OLTAG	E
4.42	25	2605.000017	3	6488
3.85	25	2605.000014	0	6488
3.4	25	2604.999991	-23	6488
3.3 (End Point)	25	2605 -14		6488
	F	req. ERROR vs.	Temp.	
3.85	-30	2604.999976	-43	6488
3.85	-20	2605.000002	-17	6488
3.85	-10	2604.999997	-22	6488
3.85	0	2605.000004	-15	6488
3.85	10	2605.000012	-7	6488
3.85	20	2605.000019	0	6488
3.85	30	2604.999987	-32	6488
3.85	40	2605.000001	-18	6488
3.85	50	2605.00002	1	6488

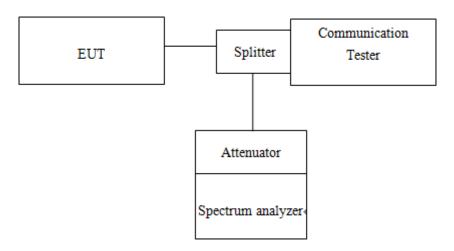


12. PEAK TO AVERAGE RATIO

12.1. Standard Applicable

The peak-to-average ratio (PAR) of the transmission may not exceed 13dB.

12.2. Test SET-UP



12.3. Measurement Procedure

- 1. KDB 971168 D01 is employed as the following procedure is proper adjusted accordingly:
- 2. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth; & internal =1ms
- 3. Set the number of counts to a value that stabilizes the measured CCDF curve.

12.4. Measurement Equipment Used

Conduc	Conducted Emission (measured at antenna port) Test Site											
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.							
Spectrum Analyzer	KEYSIGHT	N9010A	MY51440113	06/20/2017	06/19/2018							
Communication Tester	Anritsu	MT8820C	6201107337	05/25/2017	05/24/2018							
Coaxial Cable 30cm	WOKEN	00100A1F1A 195C	RF01	12/12/2016	12/11/2017							
Temperature Chamber	TERCHY	MHK-120LK	1020582	06/13/2017	06/12/2018							
DC Block	PASTERNACK	PE8210	RF29	12/12/2016	12/11/2017							
Splitter	RF-LAMBAD	RFLT2W1G1 8G	RF35	12/12/2016	12/11/2017							
Attenuator	WOKEN	218FS-10	RF23	12/12/2016	12/11/2017							
DC Power Supply	Agilent	E3640A	MY53140006	05/02/2017	05/01/2018							

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



12.5. **Measurement Result**

Tabular Results:

Freq.		Peak-to-A	verage Ra	tio (dB)
(MHz)	СН	GSM	GPRS	EDGE
(11112)		850	850	850
824.2	128	9.73	9.35	7.55
836.6	190	9.65	7.86	8.48
848.8	251	9.29	10.79	9.3

Freq. (MHz)		Peak-to-A	verage Ra	tio (dB)
	СН	GSM	GPRS	EDGE
(11112)		1900	1900	1900
1850.2	512	9.03	8.94	9.78
1880	661	9.8	7.78	10.08
1909.8	810	9.67	9.43	11.01

	Freq.		Peak-to-	Average R	atio (dB)
	(MHz)	СН	WCDMA	HSDPA	HSUPA
	(10112)			=	I
ĺ	1852.4	9262	3.49	3.68	3.72
ĺ	1880	9400	3.77	3.71	3.65
I	1907.6	9538	2.97	3.80	3.89

Freq.		Peak-to-	Average R	atio (dB)
(MHz)	СН	WCDMA IV	HSDPA IV	HSUPA IV
1712.4	1312	3.55	3.79	3.65
1732.6	1413	4.14	3.90	3.78
1752.6	1513	3.95	3.94	3.93

ſ	Erog		Peak-to-	Average R	atio (dB)
	Freq. (MHz)	СН	WCDMA	HSDPA	HSUPA
	(11112)		V	V	V
	826.4	4132	3.14	5.26	5.33
ſ	836.6	4183	3.12	4.55	4.05
I	846.6	4233	3.11	4.46	5.20



LTE BAND 2											
Cha	annel band	width: 1.4N	ЛНz	Ch	annel ban	dwidth: 3M	Hz				
Freq.		Peak-to-	Average	Freq.		Peak-to-	Average				
(MHz)	СН	Ra	tio	(MHz)				СН	Ratio		
		64QAM	Limit				64QAM	Limit			
1850.7	18607	6.22	13	1851.5	18615	6.05	13				
1880.0	18900	6.11	13	1880.0	18900	6.04	13				
1909.3	19193	5.96	13	1908.5	19185	5.92	13				

LTE BAND 2											
Channel bandwidth: 5MHz				Cha	annel band	width: 10N	1Hz				
Freq.	СН	Peak-to- Ra	0	Freq.	СН	Peak-to- Ra	5				
(MHz)		64QAM	Limit	(MHz)		64QAM	Limit				
1852.5	18625	6.05	13	1855.0	18650	5.94	13				
1880.0	18900	6.06	13	1880.0	18900	6.05	13				
1907.5	19175	5.97	13	1905.0	19150	5.99	13				

LTE BAND 2											
Channel bandwidth: 15MHz				Cha	annel band	width: 20N	/Hz				
Freq.	Peak-to-Average CH Ratio	0		CH Ratio ^{Freq.}	СН	Peak-to-Average Ratio					
(MHz)		64QAM	Limit	(MHz)		64QAM	Limit				
1857.5	18675	6.60	13	1860.0	18700	7.06	13				
1880.0	18900	6.60	13	1880.0	18900	6.86	13				
1902.5	19125	6.62	13	1900.0	19100	6.96	13				

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd. No.134, WuckungRoad, NewTaipeiIndustrialPark, WukuDistrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號



LTE BAND 4											
Cha	annel band	width: 1.4N	ЛНz	Ch	annel ban	dwidth: 3M	Hz				
Freq. (MHz)	СН		Peak-to-Average Ratio		СН	Peak-to- Ra	5				
		64QAM	Limit	(MHz)		64QAM	Limit				
1710.7	19957	6.12	13	1711.5	19965	6.04	13				
1732.5	20175	6.02	13	1732.5	20175	6.04	13				
1754.3	20393	5.97	13	1753.5	20385	5.91	13				

	LTE BAND 4										
Ch	annel ban	dwidth: 5M	Hz	Cha	annel band	width: 10N	1Hz				
Freq.			Freq.	СН	Peak-to-Average Ratio						
(MHz)		64QAM	Limit	(MHz)		64QAM	Limit				
1712.5	19957	5.96	13	1715.0	20000	5.93	13				
1732.5	20175	6.00 13		1732.5	20175	6.07	13				
1752.5	20375	5.86	13	1750.0	20350	5.96	13				

	LTE BAND 4										
Cha	annel band	lwidth: 15N	1Hz	Channel bandwidth: 20MHz							
Freq.			Freq.	СН	Peak-to-Averag Ratio						
(MHz)		64QAM	Limit	(MHz)		64QAM	Limit				
1717.5	20025	6.06	13	1720.0	20050	6.64	13				
1732.5	20175	6.20	13	1732.5	20175	6.76	13				
1747.5	20325	6.11	13	1745.0	20300	6.64	13				



	LTE BAND 5										
Cha	innel ban	dwidth: 1.4M	ИНz	Ch	annel ban	dwidth: 3M	Hz				
Freq. (MHz)	СН	Peak-to-Average Ratio (dB)		Freq. (MHz)	СН	Peak-to-Average Ratio (dB)					
		64QAM	Limit			64QAM	Limit				
824.7	20407	6.14	13	825.5	20415	6.01	13				
836.5	20525	6.18 13		836.5	20525	6.08	13				
848.3	20643	6.09	13	847.5	20635	6.01	13				

	LTE BAND 5										
Ch	annel bar	ndwidth: 5N	Hz	Cha	annel band	width: 10N	1Hz				
Freq. (MHz)	СН	CH Peak-to-Average Ratio (dB)			СН	Peak-to- Ra (d	tio				
		64QAM	Limit			64QAM	Limit				
826.5	20425	6.05	13	829.0	20450	6.04	13				
836.5	20525	6.05 13		836.5	20525	6.04	13				
846.5	20625	5.97	13	844.0	20600	6.03	13				

	LTE BAND 7										
Ch	annel bar	ndwidth: 5M	Hz	Cha	annel band	lwidth: 10N	1Hz				
Freq. (MHz)	СН	Peak-to-/ Rat (df	tio	Freq. (MHz)	Peak-to-Averag Ratio CH (dB)		tio				
		64QAM	Limit			64QAM	Limit				
2502.5	20775	6.02	13	2505.0	20800	6.09	13				
2535.0	21100	4.98 13		2535.0	21100	5.71	13				
2567.5	21375	5.98	13	2565.0	21350	6.06	13				

LTE BAND 7										
Cha	annel ban	dwidth: 15N	ЛНz	Cha	annel band	width: 20N	/Hz			
Freq. (MHz)	СН	Peak-to-/ Rai (dl	tio	Freq. (MHz)	СН	Peak-to-Average Ratio (dB)				
		64QAM	Limit			64QAM	Limit			
2507.5	20825	6.11	13	2510	20850	6.62	13			
2535	21100	6.09 13		2535	21100	6.67	13			
2562.5	21375	6.15	13	2560	21350	6.71	13			

t (886-2) 2299-3279

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd. No.134, WuckungRoad, NewTaipeiIndustrialPark, WukuDistrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號

www.tw.sgs.com



	LTE BAND 12										
Cha	annel band	width: 1.4N	ЛНz	Channel bandwidth: 3MHz							
Freq. (MHz)	СН	Peak-to-Average Ratio (dB)		Freq. (MHz)	СН	Peak-to-Average Ratio (dB)					
		64QAM	Limit			64QAM	Limit				
699.7	23017	5.77	13	700.5	23025	5.92	13				
707.5	23095	6.20 13		707.5	23095	6.05	13				
715.3	23173	6.11	13	714.5	23165	6.07	13				

LTE BAND 12										
Ch	Channel bandwidth: 5MHz				annel band	lwidth: 10N	1Hz			
Freq. (MHz)	СН	Peak-to- Ra (d	0	Freq. (MHz)	СН	Peak-to-Average Ratio (dB)				
		64QAM	Limit			64QAM	Limit			
701.5	23035	6.07	13	704.0	23060	6.03	13			
707.5	23095	6.00 13		707.5	23095	5.97	13			
713.5	23155	5.93	13	711.0	23130	6.11	13			

LTE BAND 17										
Ch	annel ban	dwidth: 5M	Hz	Cha	annel band	lwidth: 10N	1Hz			
Freq. (MHz)	СН	-	Average tio B)	Freq. (MHz)	СН	Peak-to-Average Ratio (dB)				
		64QAM	Limit			64QAM	Limit			
706.5	23755	5.78	13	709	23780	5.50	13			
710	23790	5.13 13		710	23790	5.47	13			
713.5	23825	5.21	13	711	23780	5.52	13			



	LTE BAND 25											
Ch	annel band	width: 1.4M	Hz	Channel bandwidth: 3MHz								
Freq.	СН		Average (dB)	Freq.	СН		Average (dB)					
(MHz)		64QAM	LIMIT	(MHz)		64QAM	LIMIT					
1850.7	26047	6.02	13	1851.5	26055	6.05	13					
1882.5	26365	6.09 13		1882.5	26365	6.02	13					
1914.3	26683	6.03	13	1913.5	26675	6.06	13					

	LTE BAND 25										
C	hannel ban	dwidth: 5MH	lz	Cł	nannel band	lwidth: 10M	Hz				
Freq.	СН	Peak-to- Ratic	0	Freq.	СН		Average (dB)				
(MHz)		64QAM	64QAM LIMIT			64QAM	LIMIT				
1852.5	26065	6.00	13	1855.0	26090	6.08	13				
1882.5	26365	6.01 13		1882.5	26365	5.98	13				
1912.5	26665	6.02	13	1910.0	26640	6.02	13				

	LTE BAND 25										
Cł	nannel band	lwidth: 15M	Hz	Cł	nannel band	width: 20M	Hz				
Freq.	СН		Average (dB)	Freq.	СН	Peak-to- Ratic	Average (dB)				
(MHz)		64QAM	LIMIT	(MHz)		64QAM	LIMIT				
1857.5	26115	6.13	13	1860.0	26140	6.82	13				
1882.5	26365	6.12 13		1882.5	26365	6.53	13				
1907.5	16615	6.08	13	1905.0	26590	6.41	13				



LTE BAND 26											
Ch	nannel band	width: 1.4M	Hz	Channel bandwidth: 3MHz							
Freq.	СН		Average (dB)	Freq.	СН	Peak-to-Average Ratio (dB)					
(MHz)		64QAM	LIMIT	(MHz)		64QAM	LIMIT				
814.7	26697	5.89	13	815.5	26705	6.08	13				
831.5	26865	6.10	13	831.5	26865	6.09	13				
848.3	27033	5.68	13	847.5	27025	5.81	13				

	LTE BAND 26											
C	hannel ban	dwidth: 5MH	łz	Channel bandwidth: 10MHz								
Freq.	СН		Peak-to-Average Ratio (dB)		СН	Peak-to-Average Ratio (dB)						
(MHz)		64QAM	LIMIT	(MHz)		64QAM	LIMIT					
816.5	26715	6.00	13	820.0	26750	5.90	13					
831.5	26865	6.06	13	831.5	26865	6.03	13					
846.5	27015	5.76	13	844.0	26990	5.77	13					

LTE BAND 26									
Cł	Channel bandwidth: 15MHz								
Freq. CH Peak-to-Average CH Ratio (dB)									
(MHz)		64QAM	LIMIT						
822.5	26825	6.32	13						
831.5	26865	6.50	13						
841.5	26965	6.32	13						



LTE BAND 26 for part 90S											
Channel bandwidth: 1.4MHz				Channel bandwidth: 3MHz							
Freq. (MHz)	СН	Peak-to-Average Ratio (dB)		Freq. (MHz)			tio				
	64QAM Limit				64QAM	Limit					
814.7	26697	6.64	13	815.5	26705	6.48	13				
819	26740	6.49 13		819	26740	6.41	13				
823.3	26783	6.50	13	822.5	26775	6.37	13				

LTE BAND 26 for part 90S											
Channel bandwidth: 5MHz				Channel bandwidth: 10MHz							
Freq. (MHz)	Peak-to-Average Ratio CH (dB)		Freq. CH (MHz) CH (MHz) CH			tio					
. ,		64QAM				64QAM	Limit				
816.5	26715	6.54	13								
819	26740	6.50	13	819.0	26740	6.43	13				
821.5	26765	6.52	13								

LTE BAND 30										
Ch	annel ban	dwidth: 5M	Hz	Channel bandwidth: 10MHz						
Freq. (MHz)	СН	Peak-to-Average Ratio (dB)		Freq. (MHz)		Peak-to-Average Ratio (dB)				
		64QAM	Limit			64QAM	Limit			
2307.5	27685	6.43	13							
2310.0	27710	6.47	13	2310.0	27710	6.50	13			
2312.5	27735	6.46	13							

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd. No.134, WuckungRoad, NewTaipeiIndustrialPark, WukuDistrict, NewTaipeiCity, Taiwan24803/新北市五股區新北產業園區五工路 134 號



LTE BAND 38											
Ch	annel ban	dwidth: 5M	Hz	Channel bandwidth: 10MHz							
Freq. (MHz)	СН	Peak-to-Average Ratio (dB)		Freq. (MHz)	СН	Peak-to-Average Ratio (dB)					
		64QAM	Limit			64QAM	Limit				
2572.5	37775	10.52	13	2575	37800	9.79	13				
2595	38000	10.61 13		2595	38000	9.09	13				
2617.5	38225	7.98	13	2615	38200	8.04	13				

LTE BAND 38											
Channel bandwidth: 15MHz				Cha	Channel bandwidth: 20MHz						
Freq. (MHz)	· I (H I		Freq. CH (dB) (MHz)		tio						
		64QAM	Limit			64QAM	Limit				
2498.5	39675	10.33	13	2501.0	39700	10.56	13				
2593.0	40620	9.53	13	2593.0	40620	10.15	13				
2687.5	41565	9.12	13	2685.0	41540	9.96	13				

LTE BAND 41											
Ch	annel ban	dwidth: 5M	Hz	Channel bandwidth: 10MHz							
Freq. (MHz)	СН	Peak-to-Average Ratio (dB)		Freq. (MHz)	СН	Peak-to-Average Ratio (dB)					
		64QAM	Limit			64QAM	Limit				
2498.5	39675	10.33	13	2501.0	39700	10.56	13				
2593.0	40620	9.53	13	2593.0	40620	10.15	13				
2687.5	41565	9.12	13	2685.0	41540	9.96	13				

LTE BAND 41											
Cha	annel band	lwidth: 15N	/Hz	Channel bandwidth: 20MHz							
Freq. (MHz)	СН	Peak-to-Average Ratio (dB)		Freq. (MHz)	CH CH Peak-to-Average Ratio (dB)		tio				
		64QAM	Limit			64QAM	Limit				
2503.5	39725	9.90	13	2506.0	39750	8.99	13				
2593.0	40620	10.31	10.31 13		40620	8.76	13				
2682.5	41515	9.78	13	2680.0	41490	9.91	13				

Measurement Results:

Please refer to next page.



Average Power

10.0 %

1.0 %

0.1%

Peak

0.01 %

0.001 %

0.0001 %

22.61 dBm

11.49 % at 0dB

9.34 dB

9.57 dB

9.65.68

9.70 dB

9,71 dB

-- dB

19,76 dB 42,37 dBm

1001

10 %

...

0.1 %

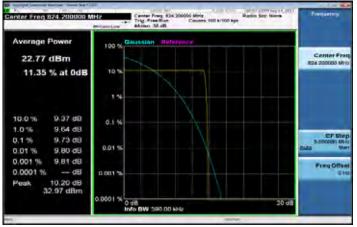
0.01

6 001

00001 %

0 dB Info BW 390.00 ki

GSM_850MHz_LowCH128-824.2

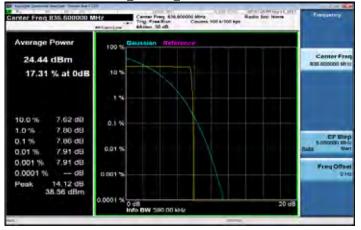


GSM_850MHz_MidCH190-836.6

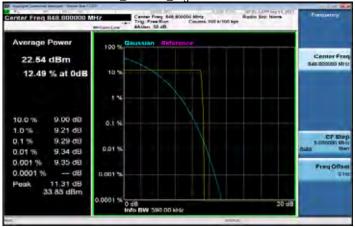
nge Center Fri 23.26 dBm 12.32 % at 0dB 10 ... 10.0 % 9.05 dB 0.15 1.0 % 9.26 dB 9.35.88 0.1 % 0.01 % 9,40 dB 0.01 % 9.42 dB 0.001 % freq Of 0.0001 % -- dB 6 001 11,70 dB 34,96 dBm 0 dB

GPRS_850MHz_LowCH128-824.2

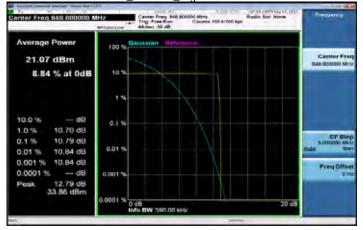
GPRS_850MHz_MidCH190-836.6



GSM_850MHz_HighCH251-848.8



GPRS_850MHz_HighCH251-848.8



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Unless onerwise stated in escuts structure results structure results in the structure of the structure of the state and study and results and the structure of the structure o and offenders may be prosecuted to the fullest extent of the law.

Center Fr

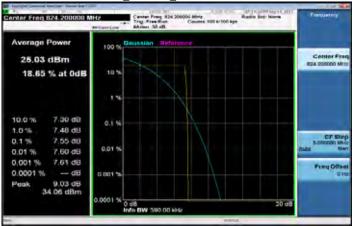
FregOf

20 dB

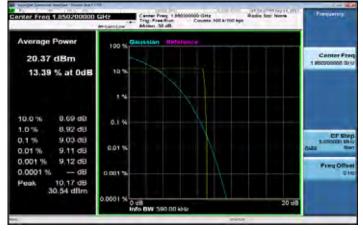
```
www.tw.sgs.com
```



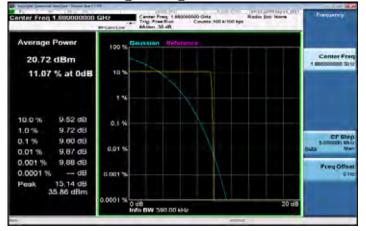
EDGE_850MHz_LowCH128-824.2



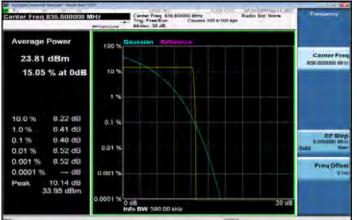
GSM 1900MHz LowCH512-1850.2



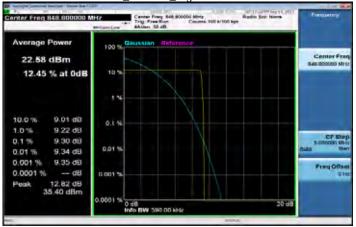
GSM_1900MHz_MidCH661-1880



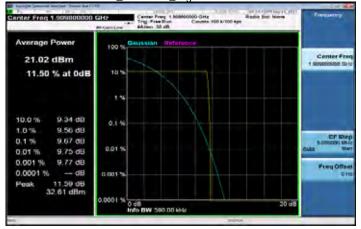




EDGE_850MHz_HighCH251-848.8



GSM_1900MHz_HighCH810-1909.8



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

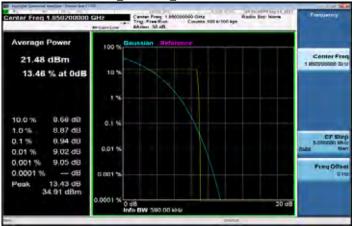
t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

除非另有說明,此報告結果僅對測試之樣品負責,问時此樣品僅係留明天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



GPRS_1900MHz_LowCH512-1850.2



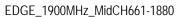
ige Center Fr 20.63 dBm 11.14 % at 0dB ... 10.0 % 9.46 dB 0.15 9.69 dB 1.0 % 9.78 08 0.1 % 0.01 % 9,86 dB 0.01 % 0.001 % 9,87 dB 0.0001 % -- dB

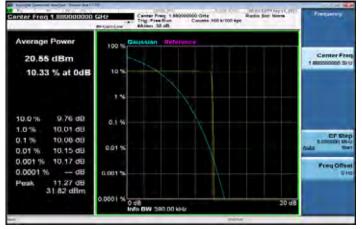
6 001

0 dB

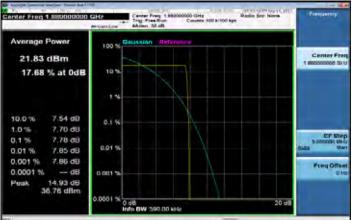
12,19 dB 32,82 dBm

EDGE_1900MHz_LowCH512-1850.2

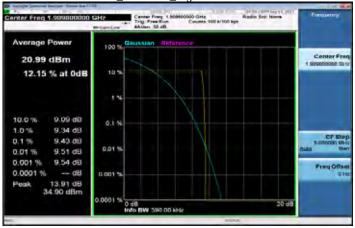




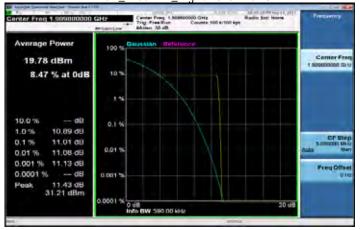
GPRS_1900MHz_MidCH661-1880



GPRS_1900MHz_HighCH810-1909.8



EDGE_1900MHz_HighCH810-1909.8



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

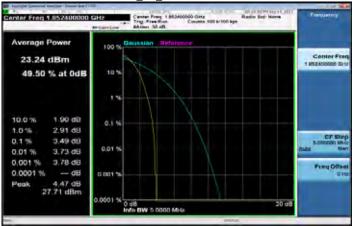
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

除非另有說明,此報告結果僅對測試之樣品負責,问時此樣品僅係留明天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

```
www.tw.sgs.com
```



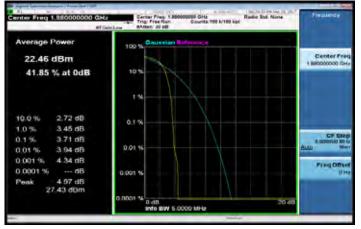
WCDMA_B2_LowCH9262-1852.4



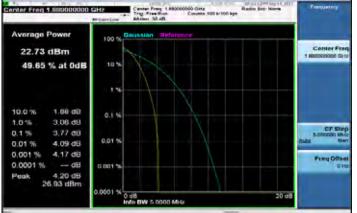
Freq 1.852400000 GM ige P 100 Center Fre 22.16 dBm 42.61 % at 0dB 10 ... 10.0 % 2.69 dB 0.11 3 41 dB 1.0 % 0.1% 3 68 dB 0.01 0.01 % 3 83 dB 0.001 % 4.32 dB Freq Di 0.0001.% +++ dB 5 04 dB Peak 27.20 dBm 0 BIN 5 0000 MI

HSDPA_B2_LowCH9262-1852.4

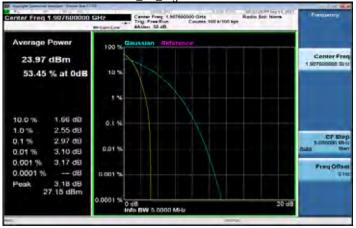
HSDPA_B2_MidCH9400-1880



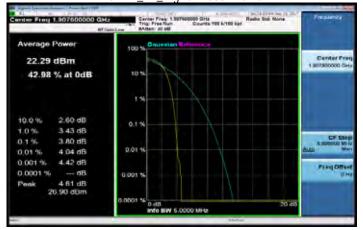
WCDMA_B2_MidCH9400-1880



WCDMA_B2_HighCH9538-1907.6



HSDPA_B2_HighCH9538-1907.6



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

除非方方说明,此我告惑本性對測減之体态員質,问時起來過性体留切乏, 《報覺考虑學社公司書面計引, 不可能放視器。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction form exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

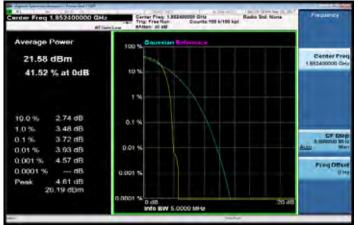
台灣檢驗科技股份有限公司

f (886-2) 2298-0488

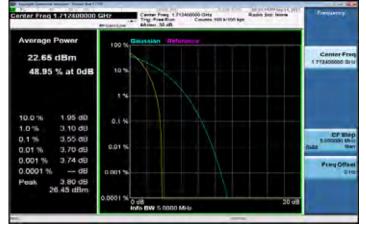
www.tw.sgs.com



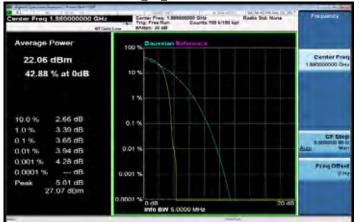
HSUPA_B2_LowCH9262-1852.4



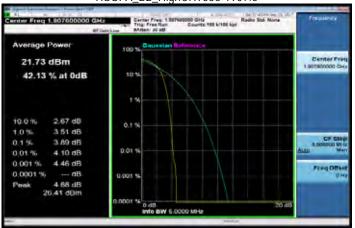
WCDMA_B4_LowCH1312-1712.4



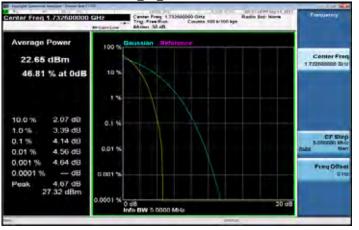
HSUPA_B2_MidCH9400-1880



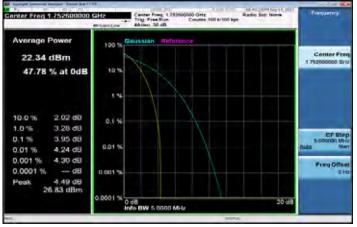
HSUPA_B2_HighCH9538-1907.6



WCDMA_B4_MidCH1413-1732.6



WCDMA_B4_HighCH1513-1752.6



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

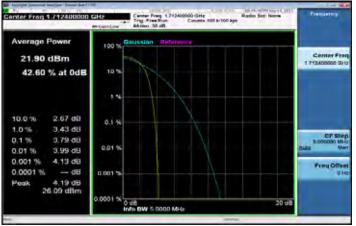
t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

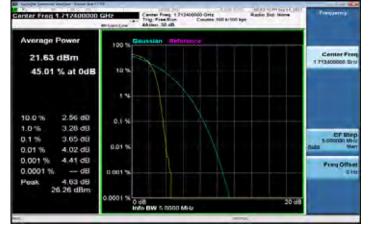
除非另有說明,此報告結果僅對測試之樣品負責,问時此樣品僅係留明天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



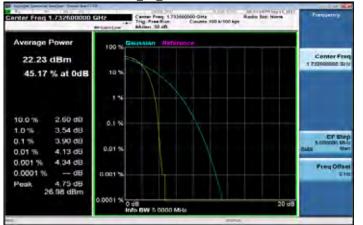
HSDPA_B4_LowCH1312-1712.4



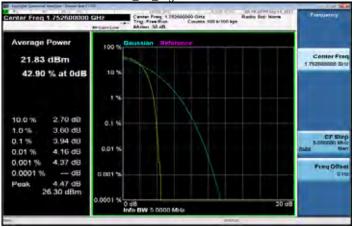
HSUPA_B4_LowCH1312-1712.4



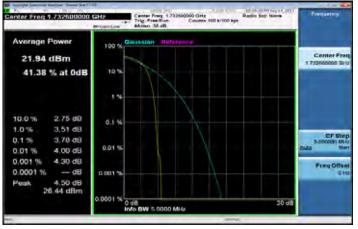
HSDPA_B4_MidCH1413-1732.6



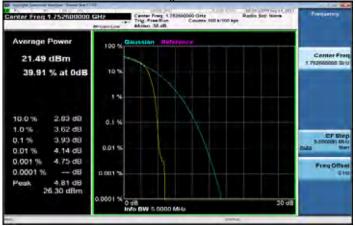
HSDPA_B4_HighCH1513-1752.6



HSUPA_B4_MidCH1413-1732.6



HSUPA_B4_HighCH1513-1752.6



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Unless onerwise stated in escuts structure results structure results in the structure of the structure of the state and study and results and the structure of the structure o and offenders may be prosecuted to the fullest extent of the law.



Average Power

10.0 %

1.0 %

0.1%

Peak

0.01 %

0.001 %

0.0001 %

23,54 dBm

53.02 % at 0dB

1.68 dB

2.62 dB

3.12 68

3.34 dB

3,42 dB

- dB

3,49 dB 27,03 dBm

1001

10 %

2.54

0.1 %

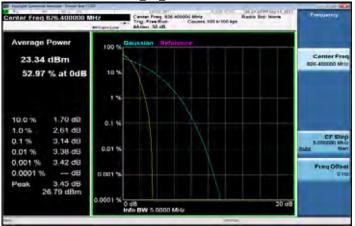
0.01

6 001

00001 %

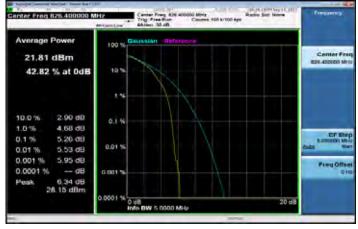
0 dB Info BW 5 0

WCDMA_B5_LowCH4132-826.4

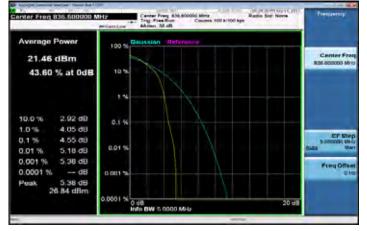


WCDMA_B5_MidCH4183-836.6

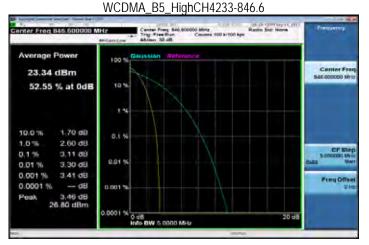
HSDPA_B5_LowCH4132-826.4



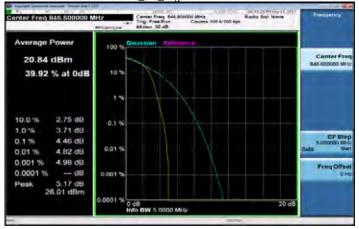
HSDPA_B5_MidCH4183-836.6



10 646



HSDPA_B5_HighCH4233-846.6



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Unless onerwise stated in escuts structure results structure results in the structure of the structure of the state and study and results and the structure of the structure o and offenders may be prosecuted to the fullest extent of the law.

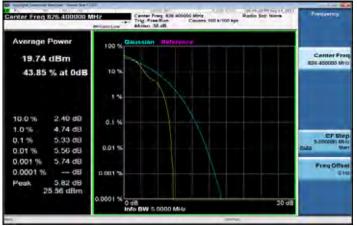
Center Fr

FregOf

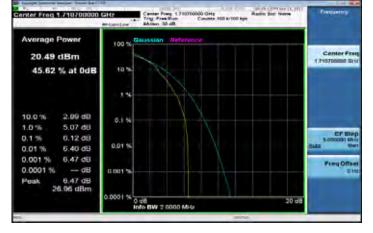
20 dB



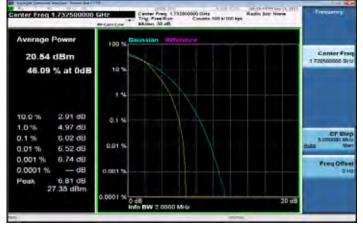
HSUPA_B5_LowCH4132-826.4

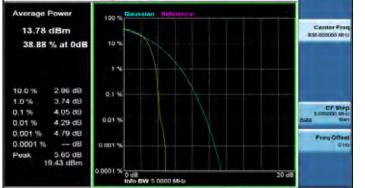






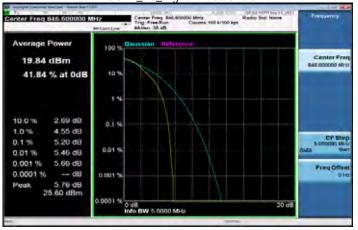
LTE_Band4_1_4MHz_64QAM_6_0_MidCH20175-1732.5



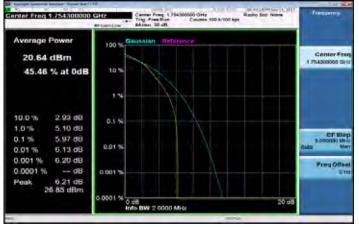


HSUPA_B5_MidCH4183-836.6

HSUPA_B5_HighCH4233-846.6



LTE_Band4_1_4MHz_64QAM_6_0_HighCH20393-1754.3



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

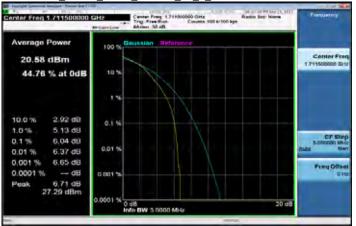
t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

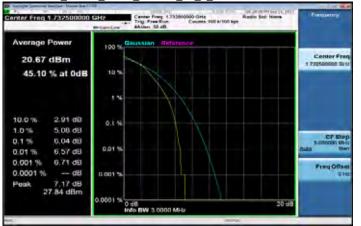
(ホナカオ) 就可, 以根告結本(注利) 利気(人体の資身) (可可以体の運動) (おちえたななの) 音道可可, 小可可加度表。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



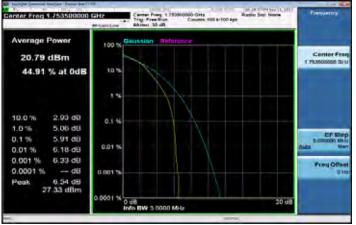
LTE_Band4_3MHz_64QAM_15_0_LowCH19965-1711.5



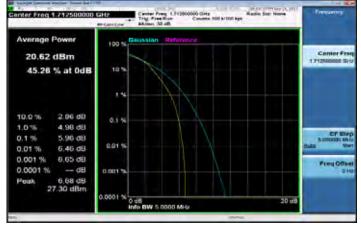
LTE_Band4_3MHz_64QAM_15_0_MidCH20175-1732.5



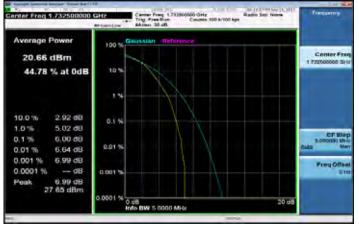
LTE_Band4_3MHz_64QAM_15_0_HighCH20385-1753.5



LTE_Band4_5MHz_64QAM_25_0_LowCH19975-1712.5



LTE_Band4_5MHz_64QAM_25_0_MidCH20175-1732.5



noe Pe 100 1 Center Fre 20.81 dBm 44.61 % at 0dB 10 1 2.95 dB 10.0 % 0.1 1 5.01 dB 1.0% 0.1% 5,86 dB 0.01 % 0.01 % 6.24 dB 0.001 % 6.41 dB 0.0001 % -- dB 0 001 5 6,43 dB 27,24 dBm 0.0001 1 20 di

LTE_Band4_5MHz_64QAM_25_0_HighCH20375-1752.5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

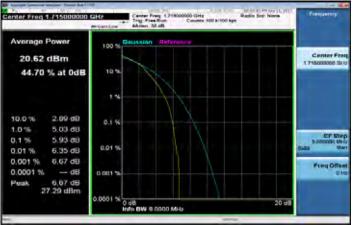
SGS Taiwan Ltd. | No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

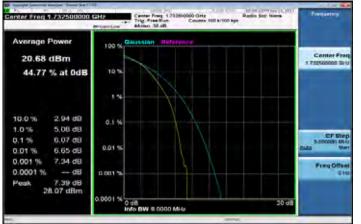
f (886-2) 2298-0488



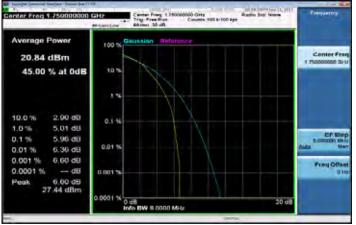
LTE_Band4_10MHz_64QAM_50_0_LowCH20000-1715

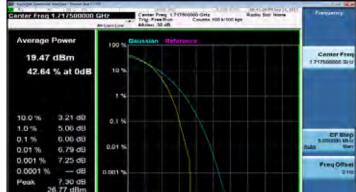


LTE_Band4_10MHz_64QAM_50_0_MidCH20175-1732.5

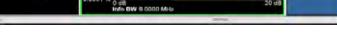


LTE_Band4_10MHz_64QAM_50_0_HighCH20350-1750



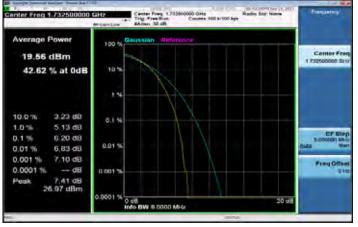


LTE_Band4_15MHz_64QAM_75_0_LowCH20025-1717.5



0.0001

LTE_Band4_15MHz_64QAM_75_0_MidCH20175-1732.5



race Pe 100 1 Center Fre 19,63 dBm 42.85 % at 0dB 10 1 3.19 dB 10.0 % 0.1 1 5.05 dB 1.0% 0.1% 6.11 88 0.01 % 0.01 % 6.74 dB 7.00 dB 0.001 % 0.0001 % -- dB 0 001 5

LTE_Band4_15MHz_64QAM_75_0_HighCH20325-1747.5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

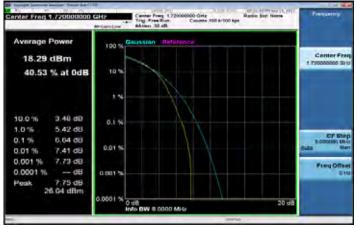
7.01 dB 26.64 dBm

0.0001 1

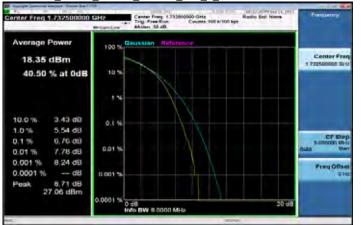
20 di



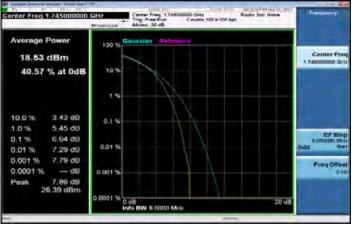
LTE_Band4_20MHz_64QAM_100_0_LowCH20050-1720



LTE_Band4_20MHz_64QAM_100_0_MidCH20175-1732.5

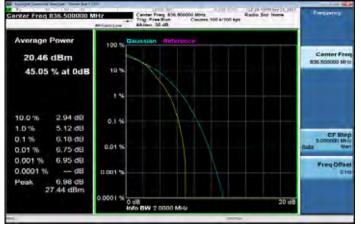


LTE_Band4_20MHz_64QAM_100_0_HighCH20300-1745





LTE_Band5_1_4MHz_64QAM_6_0_MidCH20525-836.5



noe Po 100 1 Center Fre 20.51 dBm 44.65 % at 0dB 10 1 3.01 dB 10.0 % 0.1 1 5.09 dB 1.0% 0.1% 6.09 68 0.01 % 0.01 % 6.42 dB 0.001 % 6.48 dB 0.0001 % -- dB 0 001 5 6.76 dB 27.27 dBm 0.0001 1 20 di

LTE_Band5_1_4MHz_64QAM_6_0_HighCH20643-848.3

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

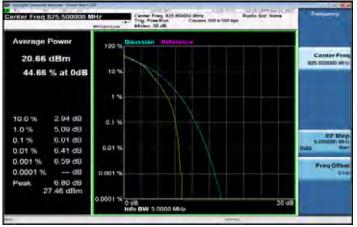
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司



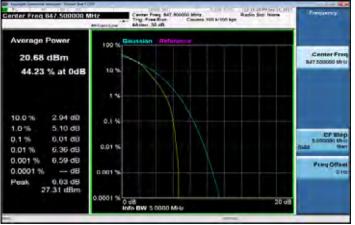
LTE_Band5_3MHz_64QAM_15_0_LowCH20415-825.5



LTE_Band5_3MHz_64QAM_15_0_MidCH20525-836.5

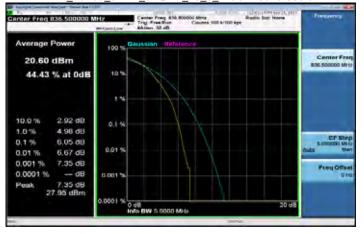


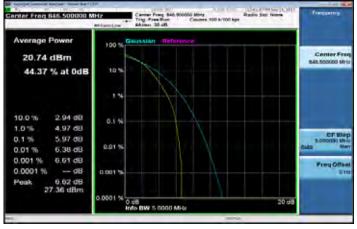
LTE_Band5_3MHz_64QAM_15_0_HighCH20635-847.5





LTE_Band5_5MHz_64QAM_25_0_MidCH20525-836.5





LTE_Band5_5MHz_64QAM_25_0_HighCH20625-846.5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

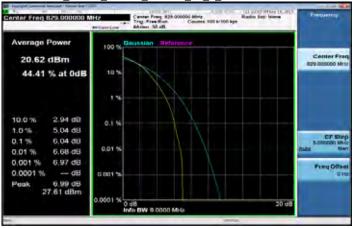
台灣檢驗科技股份有限公司

f (886-2) 2298-0488

www.tw.sgs.com



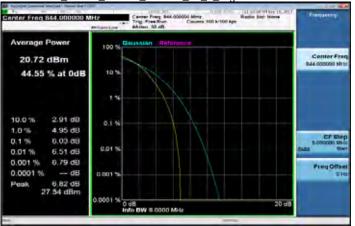
LTE_Band5_10MHz_64QAM_50_0_LowCH20450-829

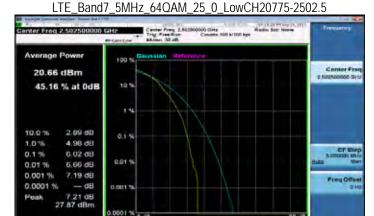


LTE_Band5_10MHz_64QAM_50_0_MidCH20525-836.5



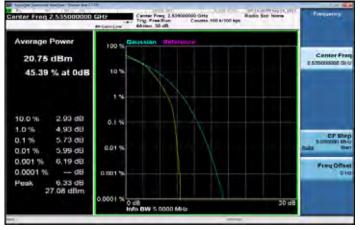
LTE_Band5_10MHz_64QAM_50_0_HighCH20600-844

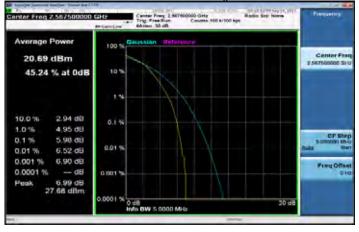




LTE_Band7_5MHz_64QAM_25_0_MidCH21100-2535

0.08





LTE_Band7_5MHz_64QAM_25_0_HighCH21425-2567.5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

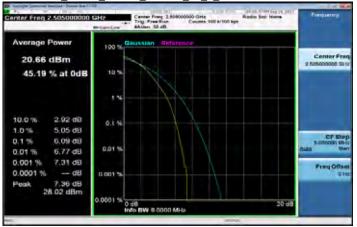
t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



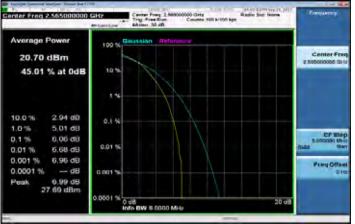
LTE_Band7_10MHz_64QAM_50_0_LowCH20800-2505

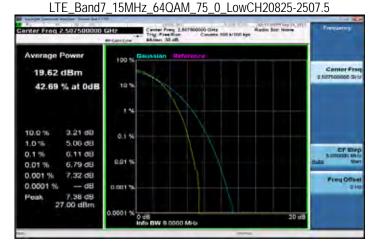


LTE_Band7_10MHz_64QAM_50_0_MidCH21100-2535

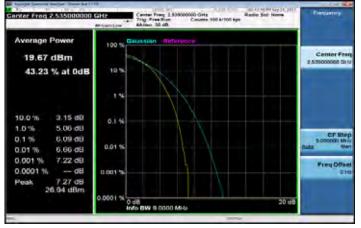


LTE_Band7_10MHz_64QAM_50_0_HighCH21400-2565

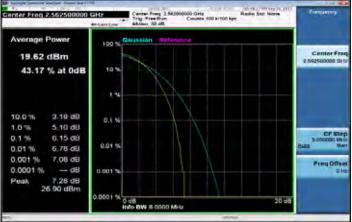




LTE_Band7_15MHz_64QAM_75_0_MidCH21100-2535



LTE_Band7_15MHz_64QAM_75_0_HighCH21375-2562.5



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

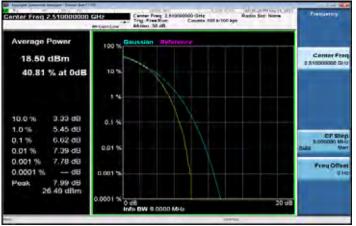
t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



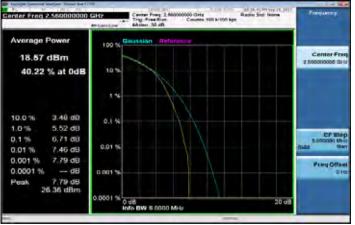
LTE_Band7_20MHz_64QAM_100_0_LowCH20850-2510



LTE_Band7_20MHz_64QAM_100_0_MidCH21100-2535

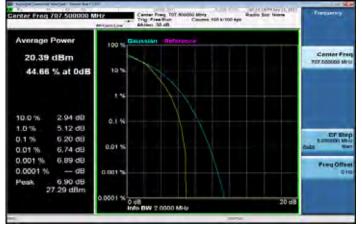


LTE_Band7_20MHz_64QAM_100_0_HighCH21350-2560

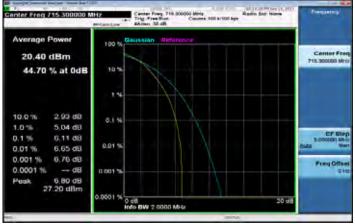




LTE_Band12_1_4MHz_64QAM_6_0_MidCH23095-707.5



LTE_Band12_1_4MHz_64QAM_6_0_HighCH23173-715.3



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

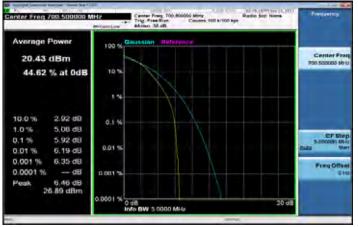
t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

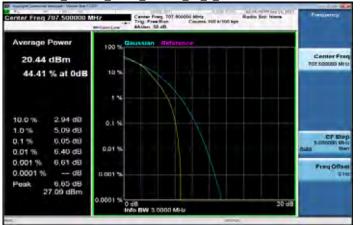
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



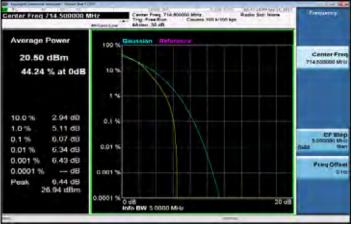
LTE_Band12_3MHz_64QAM_15_0_LowCH23025-700.5



LTE_Band12_3MHz_64QAM_15_0_MidCH23095-707.5

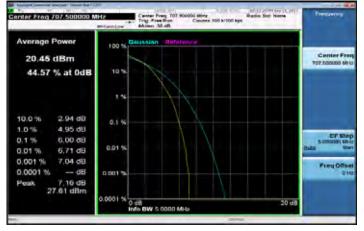


LTE_Band12_3MHz_64QAM_15_0_HighCH23165-714.5

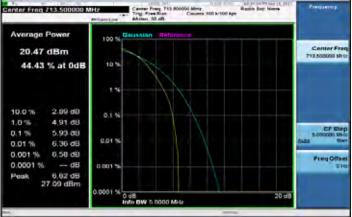




LTE_Band12_5MHz_64QAM_25_0_MidCH23095-707.5



LTE_Band12_5MHz_64QAM_25_0_HighCH23155-713.5



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

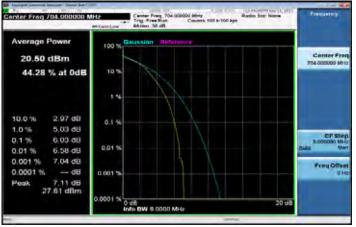
t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

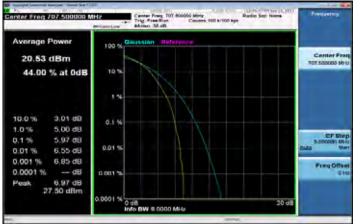
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

```
www.tw.sgs.com
```

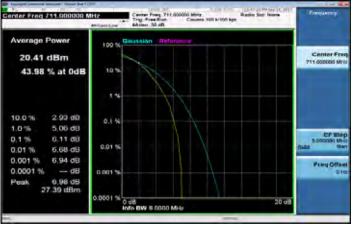
LTE_Band12_10MHz_64QAM_50_0_LowCH23060-704



LTE_Band12_10MHz_64QAM_50_0_MidCH23095-707.5

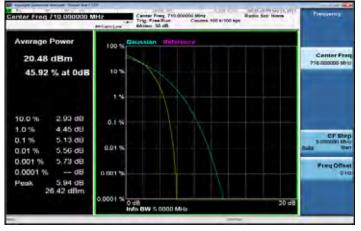


LTE_Band12_10MHz_64QAM_50_0_HighCH23130-711





LTE_Band17_5MHz_64QAM_25_0_MidCH23790-710



nac Po 100 1 Center Fre 20.53 dBm 46.50 % at 0dB 10 1 2.88 dB 10.0 % 0.1 1 4,43 dB 1.0% 0.1% 5.21 68 0.01 % 0.01 % 5.66 dB 0.001 % 5.76 dB 0.0001 % -- dB 0 001 5 5,78 dB 26,31 dBm 0.0001 1 20 di

LTE_Band17_5MHz_64QAM_25_0_HighCH23825-713.5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

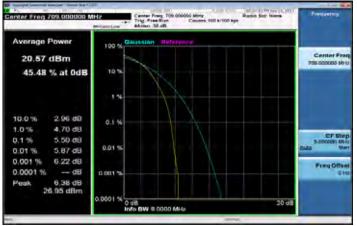
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. | No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

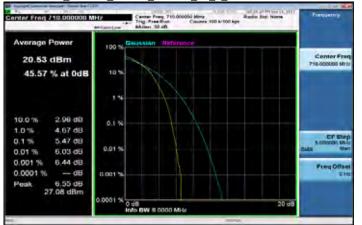
台灣檢驗科技股份有限公司



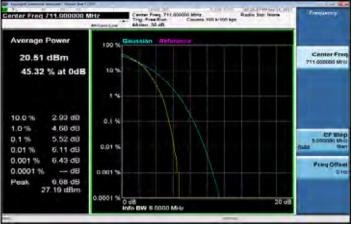
LTE_Band17_10MHz_64QAM_50_0_LowCH23780-709

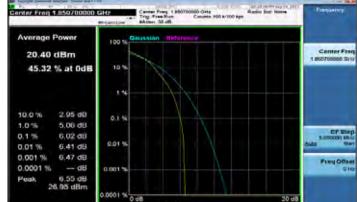


LTE_Band17_10MHz_64QAM_50_0_MidCH23790-710

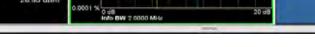


LTE_Band17_10MHz_64QAM_50_0_HighCH23800-711

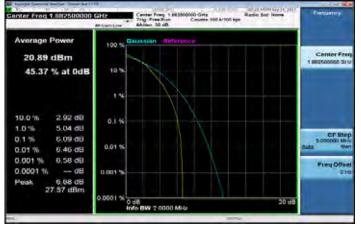




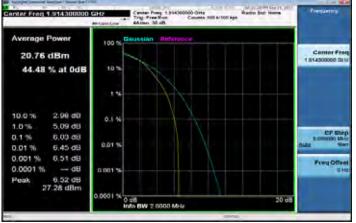
LTE_Band25_1_4MHz_64QAM_6_0_LowCH26047-1850.7



LTE_Band25_1_4MHz_64QAM_6_0_MidCH26365-1882.5



LTE_Band25_1_4MHz_64QAM_6_0_HighCH26683-1914.3



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

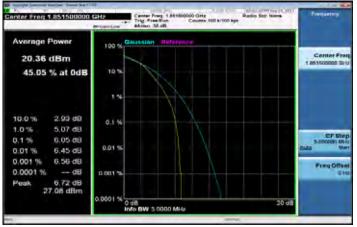
t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

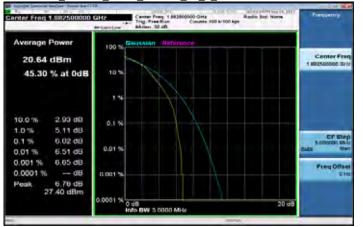
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



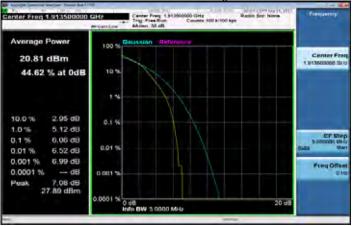
LTE_Band25_3MHz_64QAM_15_0_LowCH26055-1851.5



LTE_Band25_3MHz_64QAM_15_0_MidCH26365-1882.5

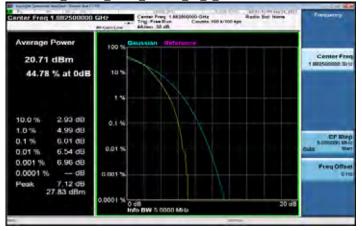


LTE_Band25_3MHz_64QAM_15_0_HighCH26675-1913.5





LTE_Band25_5MHz_64QAM_25_0_MidCH26365-1882.5



660 GHz rade Pe 100 1 Center Fre 20.84 dBm 44.25 % at 0dB 10 1 3.00 dB 10.0 % 0.1 1 4.99 dB 1.0% 0.1 % 6.02 dB 0.01 % 0.01 % 6.55 dB 7.07 dB 0.001 % From Of 0.0001 % -- dB 0 001 5 7,16 dB 28,00 dBm 0.0001 1 20 di

LTE_Band25_5MHz_64QAM_25_0_HighCH26665-1912.5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

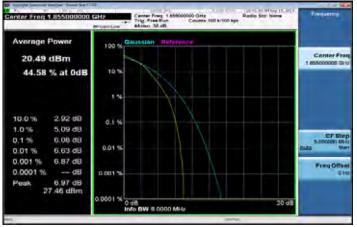
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

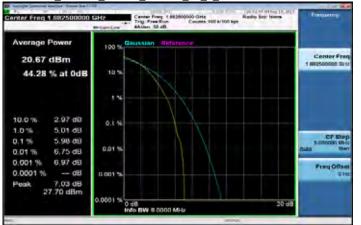
台灣檢驗科技股份有限公司



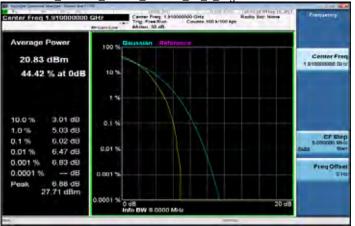
LTE_Band25_10MHz_64QAM_50_0_LowCH26090-1855



LTE_Band25_10MHz_64QAM_50_0_MidCH26365-1882.5

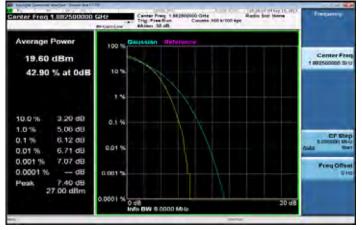


LTE_Band25_10MHz_64QAM_50_0_HighCH26640-1910





LTE_Band25_15MHz_64QAM_75_0_MidCH26365-1882.5



LTE_Band25_15MHz_64QAM_75_0_HighCH26615-1907.5



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

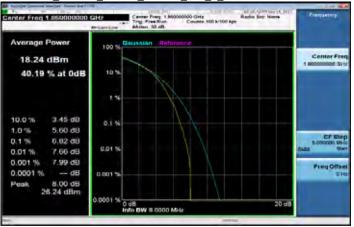
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

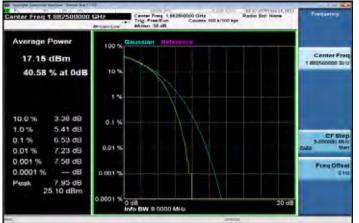
```
www.tw.sgs.com
```



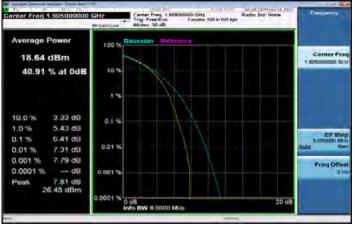
LTE_Band25_20MHz_64QAM_100_0_LowCH26140-1860



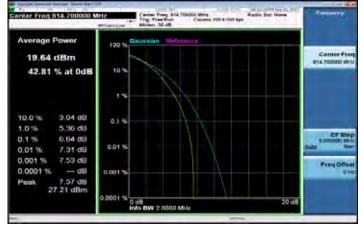
LTE_Band25_20MHz_64QAM_100_0_MidCH26365-1882.5



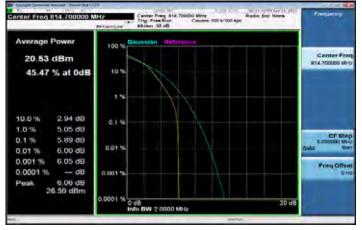
LTE_Band25_20MHz_64QAM_100_0_HighCH26590-1905



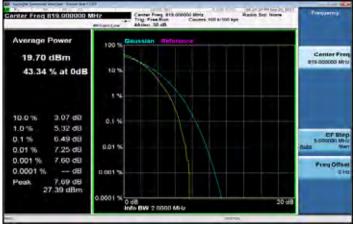
LTE_Band26_1_4MHz_64QAM_6_0_LowCH26697



LTE_Band26_1_4MHz_64QAM_6_0_LowCH26697-814.7



LTE_Band26_1_4MHz_64QAM_6_0_MidCH26740



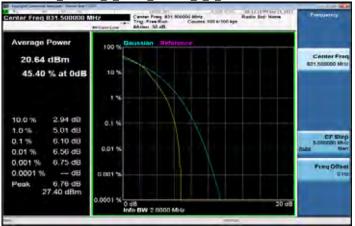
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

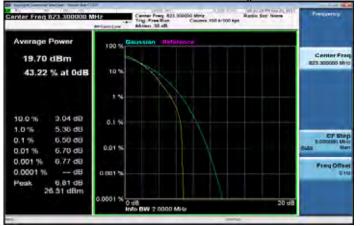
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

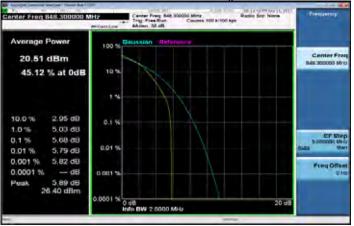
LTE_Band26_1_4MHz_64QAM_6_0_MidCH26865-831.5



LTE_Band26_1_4MHz_64QAM_6_0_HighCH26783

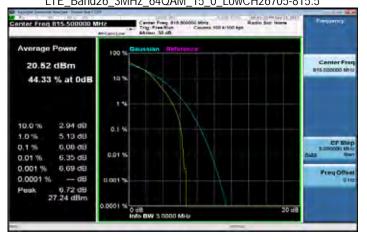


LTE_Band26_1_4MHz_64QAM_6_0_HighCH27033-848.3

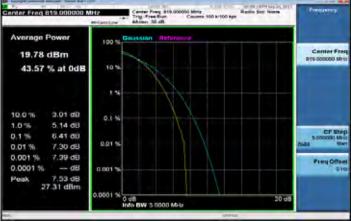




LTE_Band26_3MHz_64QAM_15_0_LowCH26705-815.5







Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

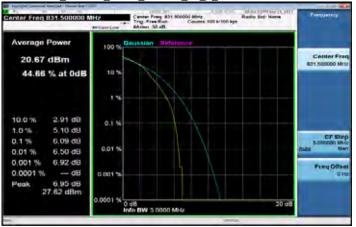
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

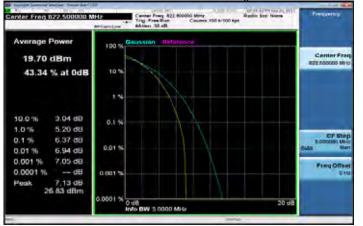
台灣檢驗科技股份有限公司



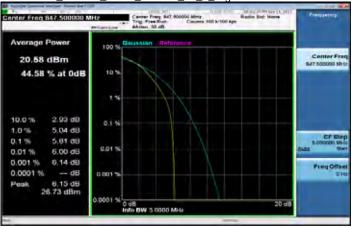
LTE_Band26_3MHz_64QAM_15_0_MidCH26865-831.5



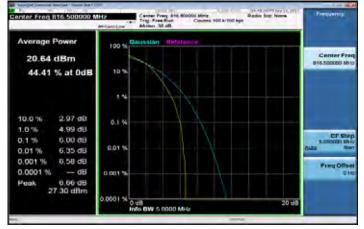
LTE_Band26_3MHz_64QAM_15_0_HighCH26775



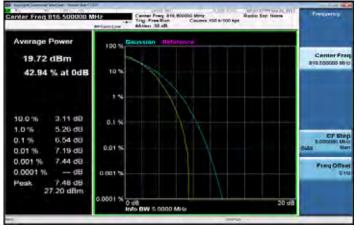
LTE_Band26_3MHz_64QAM_15_0_HighCH27025-847.5



LTE_Band26_5MHz_64QAM_25_0_LowCH26715-816.5



LTE_Band26_5MHz_64QAM_25_0_LowCH26715-816.5



LTE_Band26_5MHz_64QAM_25_0_MidCH26740



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

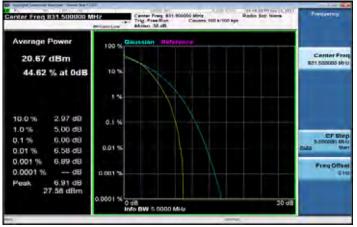
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

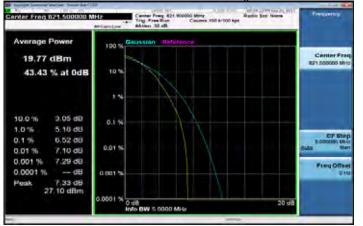
```
www.tw.sgs.com
```



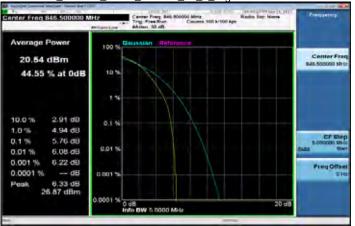
LTE_Band26_5MHz_64QAM_25_0_MidCH26865-831.5



LTE_Band26_5MHz_64QAM_25_0_HighCH26765

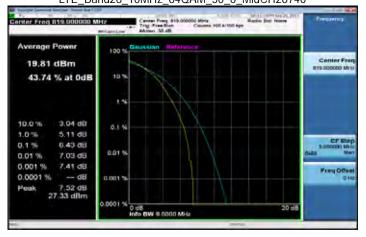


LTE_Band26_5MHz_64QAM_25_0_HighCH27015-846.5





LTE_Band26_10MHz_64QAM_50_0_MidCH26740



noe Pe 100 1 Center Fre 20.67 dBm 44.35 % at 0dB 10 1 2.97 dB 10.0 % 0.1 5.08 dB 1.0% 0.1% 6.03 88 0.01 % 0.01 % 646 dB 0.001 % 6.61 dB 0.0001 % -- dB 0 001 5 6,64 dB 27,31 dBm 0.0001 1 20 di

LTE_Band26_10MHz_64QAM_50_0_MidCH26865-831.5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

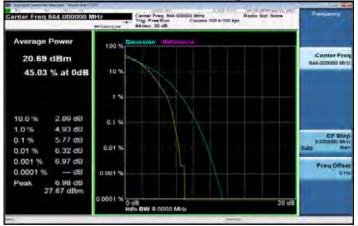
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

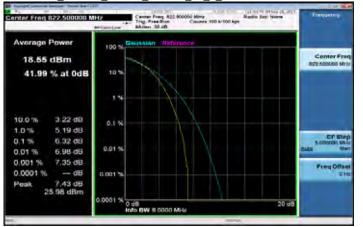
台灣檢驗科技股份有限公司



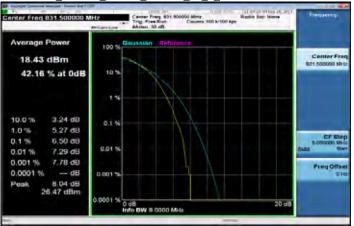
LTE_Band26_10MHz_64QAM_50_0_HighCH26990-844



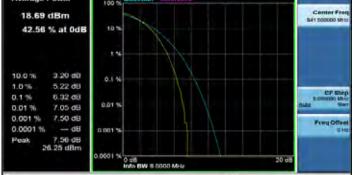
LTE_Band26_15MHz_64QAM_75_0_LowCH26775-822.5



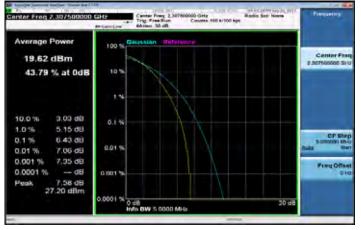
LTE_Band26_15MHz_64QAM_75_0_MidCH26865-831.5



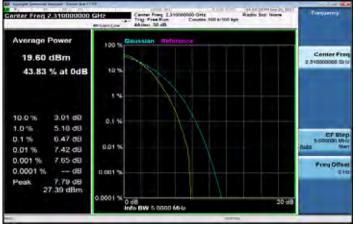




LTE_Band30_5MHz_64QAM_25_0_LowCH27685



LTE_Band30_5MHz_64QAM_25_0_MidCH27710



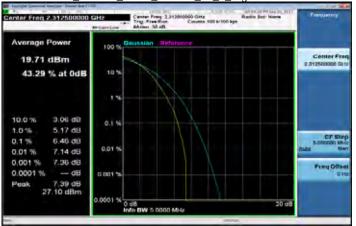
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

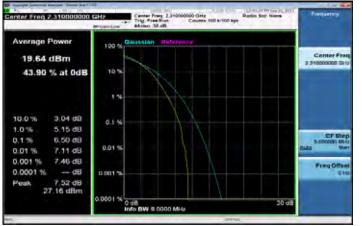
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

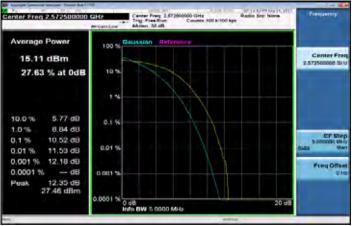
LTE_Band30_5MHz_64QAM_25_0_HighCH27735



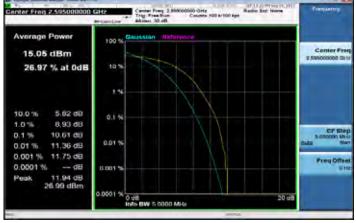
LTE_Band30_10MHz_64QAM_50_0_MidCH27710



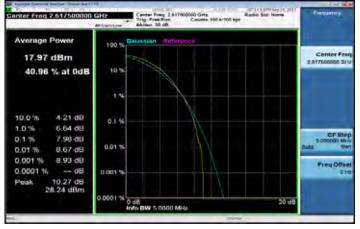
LTE_Band38_5MHz_64QAM_25_0_LowCH37775-2572.5

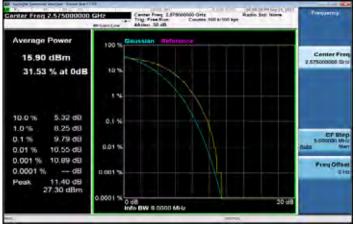


LTE_Band38_5MHz_64QAM_25_0_MidCH38000-2595



LTE_Band38_5MHz_64QAM_25_0_HighCH38225-2617.5





LTE_Band38_10MHz_64QAM_50_0_LowCH37800-2575

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

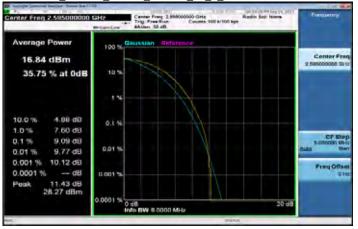
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

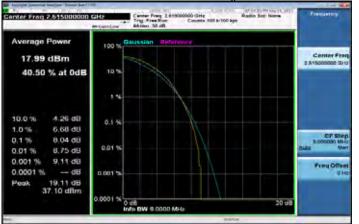
```
www.tw.sgs.com
```



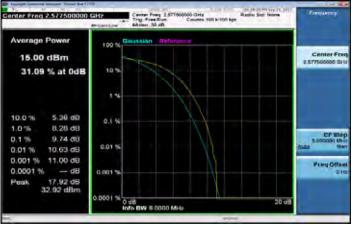
LTE_Band38_10MHz_64QAM_50_0_MidCH38000-2595



LTE_Band38_10MHz_64QAM_50_0_HighCH38200-2615

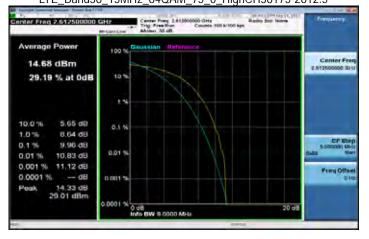


LTE_Band38_15MHz_64QAM_75_0_LowCH37825-2577.5

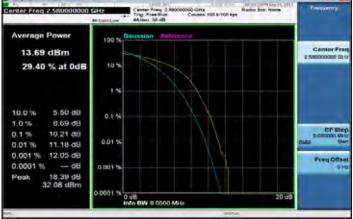




LTE_Band38_15MHz_64QAM_75_0_HighCH38175-2612.5



LTE_Band38_20MHz_64QAM_100_0_LowCH37850



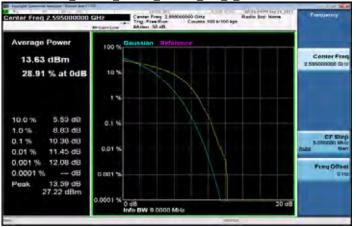
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

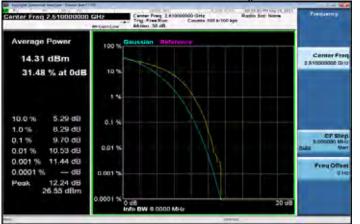
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

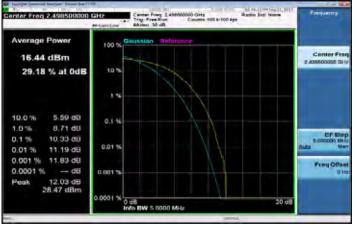
LTE_Band38_20MHz_64QAM_100_0_MidCH38000

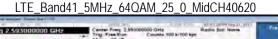


LTE_Band38_20MHz_64QAM_100_0_HighCH38150



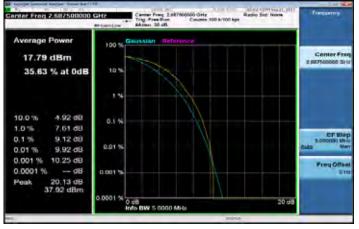
LTE_Band41_5MHz_64QAM_25_0_LowCH39675







LTE_Band41_5MHz_64QAM_25_0_HighCH41565



LTE_Band41_10MHz_64QAM_50_0_LowCH39700



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

(ホナカオ) 就可, 以根告結本(注利) 利気(人体の資身) (可可以体の運動) (おちえたななの) 音道可可, 小可可加度表。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

LTE_Band41_10MHz_64QAM_50_0_MidCH40620

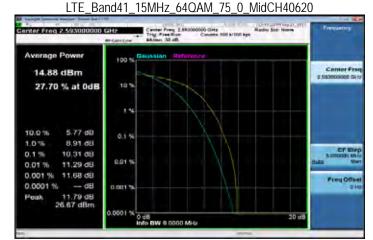


LTE_Band41_10MHz_64QAM_50_0_HighCH41540



LTE_Band41_15MHz_64QAM_75_0_LowCH39725

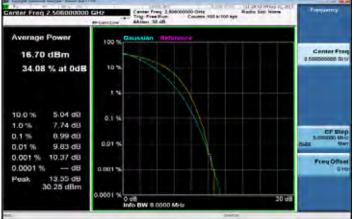




LTE_Band41_15MHz_64QAM_75_0_HighCH41515



LTE_Band41_20MHz_64QAM_100_0_LowCH39750



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

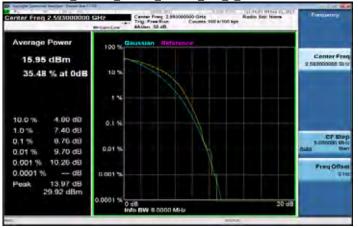
t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

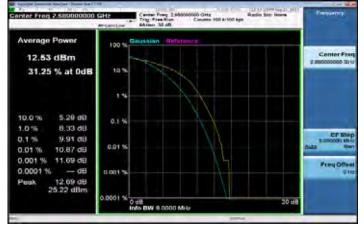
(ホナカオ) 就可, 以根告結本(注利) 利気(人体の資身) (可可以体の運動) (おちえたななの) 音道可可, 小可可加度表。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



LTE_Band41_20MHz_64QAM_100_0_MidCH40620



LTE_Band41_20MHz_64QAM_100_0_HighCH41490



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留別天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_edocument.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction form exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.

t (886-2) 2299-3279 台灣檢驗科技股份有限公司