

NCC

行動通信電信終端設備技術規範試驗報告

產品名稱 : 4G LTE Cat.4 N300 無線路由器
型號 : G403
廠牌 : D-Link
商標 : 
申請者 : 友訊科技股份有限公司
申請者地址 : 台北市內湖區新湖三路 289 號
測試標準 : PLMN ALL (109 年版)
適用範圍 : LTE 終端設備(PLMN10)
測試結果 : 符合
接收日期 : August 20, 2021
測試日期 : September 22, 2021

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修訂紀錄

Report No.	Version	Description	Issue Date
2108TWH501-T3	1.0	Original Report	2021-10-27

備註：此案為電信終端設備沿用限制性通信模組測試數據之申請案，其搭配原始模組為廠牌：Quectel / 產品名稱：LTE Cat 4 Module / 型號：EC200T-EU, 報告號碼為 2105TW0107-T3, NCC 證號：CCAJ21Y00010T7, 僅驗證測試傳導功率並重新評估電波功率密度，其驗證傳導輸出功率度與原取得審驗證明器材設備重新檢測符合 ± 2 dB 範圍且符合技術規範限制值。

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1. 一般資訊

申請者	友訊科技股份有限公司
申請者地址	台北市內湖區新湖三路 289 號
製造商	友訊科技股份有限公司
製造商地址	台北市內湖區新湖三路 289 號
實驗室	台灣曼瑞檢測科技有限公司
實驗室地址	33377 台灣桃園市龜山區復興二路 38 號
實驗室資訊	1. MRT facility is a FCC registered (Reg. No. 291082) test facility with the site description report on file and is designated by the FCC as an Accredited Test Film. 2. MRT facility is an IC registered (MRT Reg. No. 21723) test laboratory with the site description on file at Industry Canada. 3. MRT Lab is accredited to ISO 17025 by the Taiwan Accreditation Foundation (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC (Designation Number: TW3261), Industry Taiwan, EU and TELEC Rules.
實驗室測試環境條件	溫度 (°C) : 20-35 / 濕度 (%RH) : 30-65

2. 產品描述

2.1 產品資訊

產品名稱	4G LTE Cat.4 N300 無線路由器
產品型號	G403
廠牌	D-Link
商標	
支援規格	2G: GSM900 3G: Band 1,8 4G: FDD Band 1,3,7,8,28,38,41
IMEI 碼	865334040976653
天線樣式	Dipole Antenna
天線規格	Brand: INPAQ M/N: RFDPA191708IMTB301 Gain: Band1: 4.35dBi, Band3: 3.99dBi, Band7: 3.21dBi, Band8: 1.32dBi, Band28: 1.76dBi, Band38: 3.21dBi, Band41: 3.21dBi,
TX Frequency	Band1: 1920~1980MHz; Band3: 1710~1785MHz; Band7: 2500~2570MHz; Band8: 885~915MHz, Band28: 703MHz~748MHz; Band38: 2570~2620MHz; Band41: 2555~2655MHz.
Rx Frequency	Band1: 2110~2170MHz; Band3: 1805~1880MHz; Band7: 2620~2690MHz; Band8: 930~960MHz, Band28: 758MHz~803MHz; Band38: 2570~2620MHz; Band41: 2555~2655MHz.
是否有照相功能	☐ 有 (聲響 : 有 ☐ ; 無 ☐) ☒ 無
配件	
電源供應器	Brand: AMIGO Model No: AMS159A-1201000FU Input: AC 100-240V-50/60Hz 0.5A, Output: DC 12V, 1.0A DC Cable Out: Non-Shielding, 1.5m

2.2 產品規格

Band1 Channel	5M/1922.5MHz(CH 18025);1950MHz(CH 18300);1977.5MHz(CH 18575) 10M/1925MHz(CH 18050); 1950MHz(CH 18300);1975MHz(CH 18550) 15M/1927.5MHz(CH 18075); 1950MHz(CH 18300);1972.5MHz(CH 18525) 20M/1930MHz(CH 18300); 1950MHz(CH 18300);1970MHz(CH 18500)
Band3 Channel	1.4M/1710.7MHz(CH 19207);1747.5MHz(CH 19575);1784.3MHz(CH 19943) 3M/1711.5MHz(CH 19215);1747.5MHz(CH 19575);1783.5MHz(CH 19935) 5M/1712.5MHz(CH 19225);1747.5MHz(CH 19575);1782.5MHz(CH 19925) 10M/1715MHz(CH 19250);1747.5MHz(CH 19575);1780MHz(CH 19900) 15M/1717.5MHz(CH 19275);1747.5MHz(CH 19575);1777.5MHz(CH 19875) 20M/1720MHz(CH 19300);1747.5MHz(CH 19575);1775MHz(CH 19850)
Band7 Channel	5M/2502.5MHz(CH 20775);2535MHz(CH 21100);2567.5MHz(CH 21425) 10M/2505MHz(CH 20800); 2535MHz(CH 21100);2565MHz(CH 21400) 15M/2507.5MHz(CH 20825); 2535MHz(CH 21100);2562.5MHz(CH 21375) 20M/2510MHz(CH 20850); 2535MHz(CH 21100);2560MHz(CH 21350)
Band8 Channel	1.4M/885.7MHz(CH 21507);900MHz(CH 21650);914.3MHz(CH 21793) 3M/886.5MHz(CH21515); 900MHz(CH 21650);913.5MHz(CH 21785) 5M/887.5MHz(CH 21525); 900MHz(CH 21650);912.5MHz(CH 21775) 10M/890MHz(CH 21550); 900MHz(CH 21650);910MHz(CH 21750)
Band28 Channel	3M/704.5MHz(CH 27225), 725.5MHz(CH 27435), 746.5MHz(CH 27645) 5M/705.5MHz(CH 27235), 725.5MHz(CH 27435), 745.5MHz(CH 27635) 10M/708MHz(CH 27260), 725.5MHz(CH 27435), 743MHz(CH 27610) 15M/710.5MHz(CH 27285), 725.5MHz(CH 27435), 740.5MHz(CH 27585) 20M/713MHz(CH 27310), 725.5MHz(CH 27435), 738MHz(CH 27560)
Band38 Channel	5M/2572.5MHz(CH 37775);2595MHz(CH 38000);2617.5MHz(CH 38225) 10M/2575MHz(CH 37800); 2595MHz(CH 38000);2515MHz(CH 38200) 15M/2577.5MHz(CH 37825); 2595MHz(CH 38000);2612.5MHz(CH 38175) 20M/2580MHz(CH 37850); 2595MHz(CH 38000);2610MHz(CH 38150)
Band41 Channel	5M/2557.5MHz(CH 40265);2605MHz(CH 40740);2652.5MHz(CH 41215) 10M/2560MHz(CH 40290); 2605MHz(CH 40740); 2650MHz(CH 41190) 15M/2562.5MHz(CH 40315); 2605MHz(CH 40740); 2647.5MHz(CH 41165) 20M/2565MHz(CH 40340); 2605MHz(CH 40740); 2645MHz(CH 41140)

3. 測試設備明細

輻射干擾 – AC1

儀器名稱	製造商	型號	財產編號	校正週期	有效日期
Broadband TRILOG Antenna	SCHWARZBECK	VULB 9162	MRTTWA00001	1 year	2022/10/4
EMI Test Receiver	R&S	ESR3	MRTTWA00009	1 year	2022/3/24
Active Loop Antenna	Schwarzbeck	FMZB 1519B	MRTTWA00002	1 year	2022/5/6
Broadband Horn antenna	SCHWARZBECK	BBHA 9120D	MRTTWA00003	1 year	2022/4/21
Breitband Hornantenna	Schwarzbeck	BBHA 9170	MRTTWA00004	1 year	2022/4/28
Broadband Amplifier	Schwarzbeck	BBV 9721	MRTTWA00006	1 year	2022/4/26
Broadband Preamplifier	SCHWARZBECK	BBV 9718	MRTTWA00005	1 year	2022/4/21
Cable	HUBERSUHNER	SF106	MRTTWE00010	1 year	2022/6/15

傳導測試 – SR5

儀器名稱	製造商	型號	財產編號	校正週期	有效日期
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2022/10/18
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2022/7/19
Wideband Radio Communication Taster	R&S	CMW 500	MRTTWA00084	1 year	2022/10/18
Temperature & Humidity Chamber	TEN BILLION	TTH-B3UP	MRTTWA00036	1 year	2022/6/14

EMI 測試軟體

軟體名稱	製造商	版本
e3	Audix	9.160520a
EMI	Quietek	V3

4. 量測不確定度

輻射干擾量測 (Radiated Spurious Emission)
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 9kHz~30MHz: $\pm 3.92\text{dB}$ 30MHz~1GHz: $\pm 4.25\text{dB}$ 1GHz~18GHz: $\pm 4.40\text{dB}$ 18GHz~40GHz: $\pm 4.45\text{dB}$
頻率穩定度量測 (Frequency Error)
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): $\pm 78.4\text{Hz}$
傳導功率量測 (Conducted Power)
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): $\pm 0.84\text{dB}$
傳導干擾量測 (Conducted Spurious Emission)
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): $\pm 2.65\text{ dB}$
佔用頻寬量測 (Occupied Bandwidth)
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 3.3%
溫度 / 濕度 (Temp. / Humidity)
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): $\pm 0.82^\circ\text{C}/\pm 3\%$
直流電源 (DC Voltage)
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): $\pm 0.3\%$

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

5. 測試結果

產品名稱 **4G LTE Cat.4 N300 無線路由器**
 型號 **G403**

法規章節	量測項目	限制值	測試結果	測試數據
6.3.1	功率限制	有效輻射功率(Effective Radiated Power, ERP) 攜帶式終端設備限制為1 W。 移動式終端設備限制為2 W。 傳導輸出功率限制值 採 FDD者：23dBm +2.7/-3.2 dB。 採TDD 者：23 dBm +2.7/-2.7 dB， 但設備屬高功率用戶終端設備(HPUE) 者，其傳導輸出功率限制值為 26 dBm +2.7/-2.7 dB。	符合	第 5.1 章節
6.3.2	發射頻譜波罩	須符合行動通信電信終端設備技術規範附表 47 之頻譜波罩規範值	符合	第 5.2 章節
6.3.3	傳導帶外輻射發射	須符合行動通信電信終端設備技術規範附表 49 之帶外輻射規範值	符合	第 5.3 章節
6.3.4	相鄰頻道洩漏功率比 (ACLR)	≤ 29.2dB，但設備屬 HPUE 者限制值為 30.2 dB。	符合	第 5.4 章節
6.3.5	頻率穩定度	± 0.1PPM 以內	符合	第 5.5 章節
6.6.2.1	電波功率密度	適用移動式或固定式無線接取終端設備 700 MHz 頻段為 0.35 毫瓦特/平方公分(mW/cm ²)； 900 MHz 頻段為 0.45 mW/cm ² ； 1800 MHz 頻段為 0.9 mW/cm ² ； 2100 MHz、2500 MHz 與2600 MHz頻段為1.0 mW/cm ² 。 量測距離為 20 公分，或以設備廠商宣告設備天線與附近人 體可活動範圍之距離。	符合	第 5.6 章節
6.10.1	災防告警細胞廣播訊息 接收功能	本項測試僅適用 介面攜帶式終端設備且具接取行動通信服務經營者提供之 語音服務功能者。	N/A (本設備不具有語音通 話及螢幕顯示功能)	

備註：符合性的判定是基於測試結果符合規範的限制值或客戶的宣告要求，測試結果的判定是不考慮測量不確定度的值。

5.1 功率限制

5.1.1 合格標準

(1) 等效幅射功率(Effective Radiated Power, ERP)

- 手持式行動臺設備限制為 1W。
- 移動式行動臺設備限制為 2W。

(2) 傳導輸出功率限制為

- FDD 為: 23dBm +2.7/-3.2 dB。
- TDD 為: 23dBm +2.7/-2.7 dB。

-但設備屬高功率用戶終端設備(HPUE)者，其傳導輸出功率限制值為 26 dBm +2.7/-2.7 dB。

5.1.2 測試方法

檢測頻道為低、中、高三個頻道，對最低、5MHz 及最高的工作頻寬之 QPSK 調變級數發射模式，均應分別檢測之。(請參照 3GPP 36.521-1 規定測試)。

(1) 等效幅射功率：

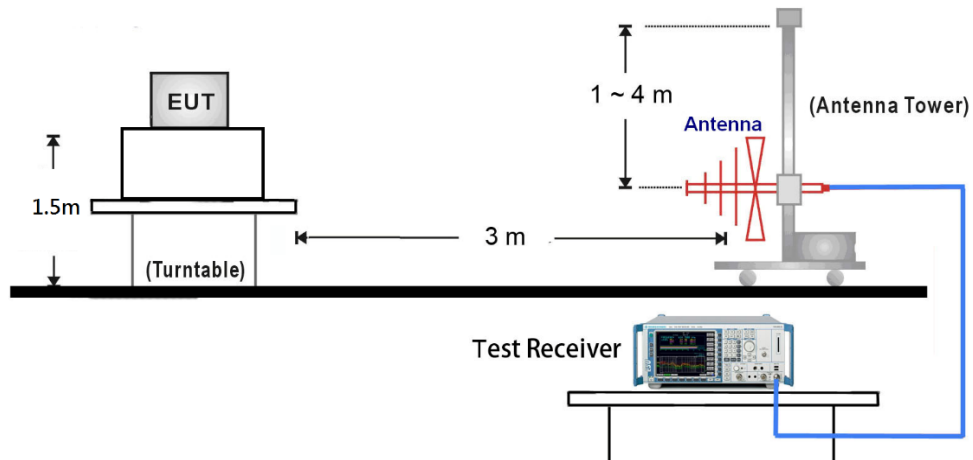
- a. 量測發射功率時，必須使用均方根值等效電壓之儀器量測於任何連續傳輸時段，量測結果須依儀器之反應時間、解析頻寬能力及靈敏度等調整得出正確之發射功率。對每一測量頻率調整儀器足夠之頻率掃描範圍以檢測所欲測量之發射。
- b. 在 1 到 4 米高度內上升下降水平極化之接收天線，將接收天線置於儀器顯示最高讀值時的高度，然後以 360 度轉動測試桌上的受測物，紀錄顯示在儀器上的最高值，以為參考位準。
- c. 以發射天線(不大於 1GHz 為線諧調之偶極天線，1GHz 以上為號角型天線)取代受測物，並與接收天線之同為水平極化。將偶極天線連接至標準之信號產生器，信號產生器設定至前述步驟所得之頻率以及適當之輸出位準。上升、下降接收天線使測試儀器量得最高值，並置於該高度。調整信號產生器之輸出位準以使測試儀器顯示與步驟 2 所得之值相同。紀錄此值以計算結果值。
- d. 若受測物相對於偶極天線(或全向性天線)之天線增益為已知，則 ERP(或 EIRP)可由天線端子之傳導輸出功率與天線增益之積求得。

(2) 傳導輸出功率：

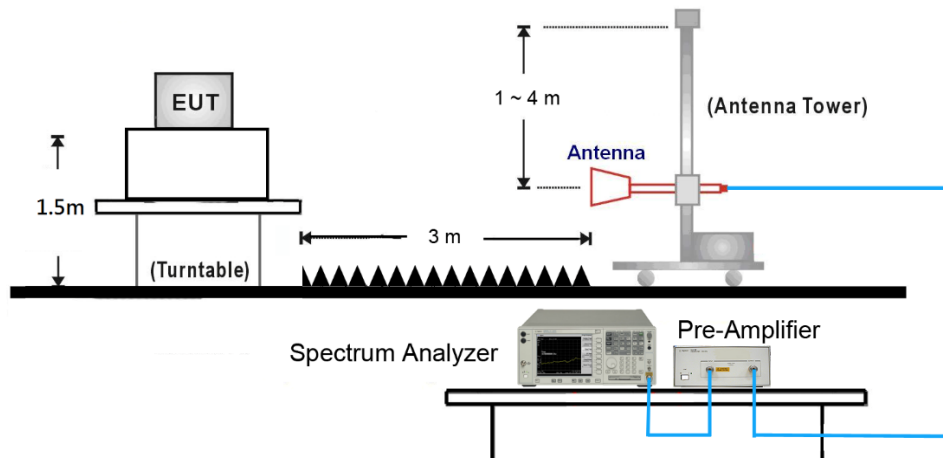
發射機輸出功率的測量藉由模擬基地台調諧頻率至測量頻率並量測其峰值。

5.1.3 實驗方法方塊圖

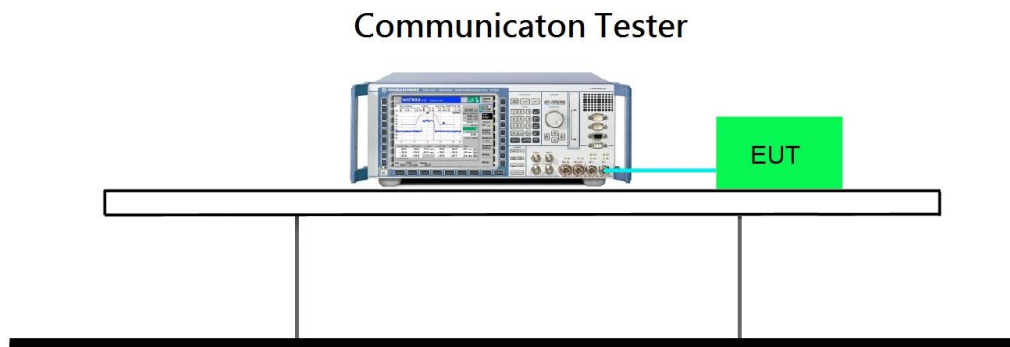
(1) 等效輻射功率 (1G 以下):



(2) 等效輻射功率 (1G 以上):



(3) 傳導輸出功率 :



5.1.4 實驗數據

Band 1 (2100MHz) FDD									
Bandwidth	Channel	Modulation	RB No.	RB Offset	Max Power (Conducted)	Limit (dBm)	Antenna Gain (dBi)	Max Power (ERP) (dBm)	ERP Limit (dBm)
5MHz	18025	QPSK	1	#0	22.75	19.8~25.7	4.35	24.95	33
			8	#0	22.52	19.8~25.7	4.35	24.72	33
	18300	QPSK	1	#0	23.09	19.8~25.7	4.35	25.29	33
			8	#0	23.00	19.8~25.7	4.35	25.20	33
	18575	QPSK	1	#24	22.82	19.8~25.7	4.35	25.02	33
			8	#17	22.83	19.8~25.7	4.35	25.03	33
20MHz	18100	QPSK	1	#0	22.21	19.8~25.7	4.35	24.41	33
			18	#0	22.72	19.8~25.7	4.35	24.92	33
	18300	QPSK	1	#0	23.06	19.8~25.7	4.35	25.26	33
			18	#0	23.05	19.8~25.7	4.35	25.25	33
	18500	QPSK	1	#99	22.60	19.8~25.7	4.35	24.80	33
			18	#82	22.63	19.8~25.7	4.35	24.83	33

Note :

1. 經上表確認,最大傳導輸出功率不超過原行動通訊模組±2dB.
2. $ERP = \text{Conducted Power} + \text{Antenna Gain(dBi)} - 2.15$

5MHz CH18025 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation PRACH SRS										
FDD	Freq: 1922.5 MHz	Ref. Level: 41.00 dBm	BW: 5.0 MHz	CP: Normal	Meas Subfr/Slot: 0 / All					
TX Measurement										
	Current		Average		Extreme		StdDev			
EVM RMS [%] /h	1.43	2.30	1.45	2.24	1.63	2.45	0.09	0.07		
EVM Peak [%] /h	3.61	9.58	3.10	8.91	3.73	10.20	0.33	0.68		
EVM DMRS [%] /h	1.41	2.18	1.46	2.52	1.86	3.06	0.16	0.32		
MErr RMS [%] /h	0.82	1.87	0.85	1.71	1.00	1.92	0.08	0.10		
MErr Peak [%] /h	3.00	-9.41	2.19	8.34	3.00	-9.41	0.41	0.66		
MErr DMRS [%] /h	1.16	1.42	1.08	1.89	1.41	2.68	0.15	0.48		
PhErr RMS [%] /h	0.67	0.77	0.67	0.84	0.76	0.95	0.05	0.05		
PhErr Peak [%] /h	2.03	2.22	1.68	2.74	2.07	3.61	0.21	0.35		
PhErr DMRS [%] /h	0.45	0.95	0.57	0.95	0.74	1.32	0.10	0.14		
IQ Offset [dBc]	-38.01		-37.84		-37.01				0.24	
IQ Gain Imbalance [dB]	-----									
IQ Quadrature Error [°]	-----									
Freq Error [Hz]	11.40		5.36		15.44				6.79	
Timing Error [Ts]	-5.30		-5.49		-5.90				0.19	
OBW [MHz]	0.24		0.24		0.26				0.01	
	Current		Average		Min		Max		StdDev	
TX Power [dBm]	22.69		22.71		22.63		22.75		0.02	
Peak Power [dBm]	27.42		27.86		27.33		28.30		0.41	
RB Power [dBm]	22.74		22.75		22.68		22.78		0.02	
Statistic Count	20 / 20		Out of Tolerance		0.00 %		Detected Modulation		QPSK	
							Detected Channel Type		PUSCH	
							View Filter		Throughput	
									100.0 %	
PS:	Attached		RRC State:		Connected					

5MHz CH18025 8RB#0

CMW 500 V3.7.3.120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation			PRACH		SRS					
FDD	Freq: 1922.5 MHz	Ref. Level: 41.00 dBm	BW: 5.0 MHz	CP: Normal	Meas Subfr/Slot:		0 / All			
TX Measurement										
	Current		Average		LAverage		StdDev			
EVM RMS [%] /h	1.62	5.72	1.74	5.13	1.85	5.82	0.05	0.64		
EVM Peak [%] /h	5.24	71.90	5.58	63.93	6.90	72.73	0.55	7.47		
EVM DMRS [%] /h	1.70	3.46	1.91	4.70	2.31	5.89	0.12	1.12		
MErr RMS [%] /h	0.93	4.39	0.98	3.77	1.04	4.43	0.03	0.66		
MErr Peak [%] /h	-2.73	-61.12	4.18	50.08	-6.38	-62.42	1.33	11.16		
MErr DMRS [%] /h	0.90	2.24	1.11	3.17	1.45	3.99	0.11	0.77		
PhErr RMS [%] /h	0.76	2.65	0.82	2.41	0.88	2.73	0.03	0.26		
PhErr Peak [%] /h	2.86	-40.30	2.98	36.37	3.63	-42.55	0.28	5.23		
PhErr DMRS [%] /h	0.83	1.51	0.89	1.99	1.06	2.56	0.06	0.47		
IQ Offset [dBc]	-37.02		-36.96		-36.65		0.21			
IQ Gain Imbalance [dB]	-----		-----		-----		-----			
IQ Quadrature Error [°]	-----		-----		-----		-----			
Freq Error [Hz]	-7.10		-0.84		12.16		6.18			
Timing Error [Ts]	-5.83		-6.42		-9.89		1.57			
OBW [MHz]	1.41		1.41		1.41		0.00			
	Current		Average		Min	Max	StdDev			
TX Power [dBm]	22.51		22.50		22.49	22.52	0.01			
Peak Power [dBm]	28.51		28.77		28.35	29.08	0.26			
RB Power [dBm]	13.49		13.50		13.49	13.51	0.00			
▼										
Statistic Count		Out of Tolerance		Detected Modulation		Detected Channel Type		View Filter		Throughput
20 / 20		0.00 %		QPSK		PUSCH				100.0 %
PS: Attached RRC State: Connected										

5MHz CH18300 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 1950.0 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAverage	StdDev				
EVM RMS [%] /h	1.66	2.68	1.67	2.42	2.00	2.80	0.14	0.30
EVM Peak [%] /h	4.70	9.48	5.15	8.23	6.86	11.30	0.90	1.78
EVM DMRS [%] /h	1.35	1.95	1.48	2.44	1.97	2.84	0.16	0.28
MErr RMS [%] /h	1.10	2.11	1.22	1.84	1.52	2.21	0.16	0.32
MErr Peak [%] /h	-4.69	-7.38	4.78	6.92	-6.37	-9.52	0.83	1.50
MErr DMRS [%] /h	1.13	1.08	1.13	1.69	1.46	2.30	0.19	0.48
PhErr RMS [%] /h	0.71	0.96	0.65	0.91	0.76	1.06	0.05	0.07
PhErr Peak [%] /h	-1.99	3.54	1.77	3.29	2.32	-4.26	0.25	0.48
PhErr DMRS [%] /h	0.42	0.94	0.55	1.01	0.85	1.37	0.11	0.15
IQ Offset [dBc]	-37.57		-37.54		-36.99		0.22	
IQ Gain Imbalance [dB]								
IQ Quadrature Error [°]								
Freq Error [Hz]	-0.36		4.41		15.34		4.86	
Timing Error [Ts]	-2.41		-1.82		-2.44		1.05	
OBW [MHz]	0.28		0.25		0.28		0.04	
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	23.03	23.01	22.92	23.09	0.06			
Peak Power [dBm]	27.52	27.65	27.51	27.90	0.09			
RB Power [dBm]	23.00	23.02	22.96	23.06	0.03			

Statistic Count: 20 / 20

Out of Tolerance: 0.00 %

Detected Modulation: QPSK

Detected Channel Type: PUSCH

View Filter: Throughput 100.0 %

PS: Attached RRC State: Connected

5MHz CH18300 8RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 1950.0 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAverage	StdDev				
EVM RMS [%] /h	2.01	4.50	1.94	5.18	2.14	5.90	0.09	0.61
EVM Peak [%] /h	10.43	56.03	9.22	63.89	12.81	72.36	2.28	6.86
EVM DMRS [%] /h	1.96	5.80	1.89	4.78	2.25	5.90	0.11	1.12
MErr RMS [%] /h	1.20	3.04	1.12	3.76	1.25	4.44	0.08	0.63
MErr Peak [%] /h	-10.34	-38.42	8.53	49.29	-12.39	-62.10	2.42	11.26
MErr DMRS [%] /h	1.36	4.06	1.28	3.29	1.60	4.15	0.12	0.79
PhErr RMS [%] /h	0.92	2.17	0.90	2.46	1.04	2.79	0.04	0.26
PhErr Peak [%] /h	3.85	-31.35	3.30	37.24	4.17	-44.37	0.46	5.29
PhErr DMRS [%] /h	0.81	2.37	0.80	1.99	0.92	2.45	0.05	0.46
IQ Offset [dBc]	-37.61	-37.69	-37.17	0.21				
IQ Gain Imbalance [dB]								
IQ Quadrature Error [°]								
Freq Error [Hz]	9.14	-3.81	-25.48	11.10				
Timing Error [Ts]	-2.07	-1.52	-2.34	1.29				
OBW [MHz]	1.41	1.41	1.41	0.00				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.98	22.98	22.93	23.00	0.02			
Peak Power [dBm]	28.72	28.57	28.20	28.82	0.17			
RB Power [dBm]	13.98	13.97	13.93	13.99	0.02			

Statistic Count: 20 / 20

Out of Tolerance: 0.00 %

Detected Modulation: QPSK

Detected Channel Type: PUSCH

View Filter: 100.0 %

Throughput: 100.0 %

PS: ON

RRC State: Idle

5MHz CH18575 1RB#24

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 1977.5 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAverage	StdDev
EVM RMS [%] /h	2.30	3.31	2.01	3.08
EVM Peak [%] /h	8.52	9.92	6.65	10.24
EVM DMRS [%] /h	1.67	3.11	1.59	2.43
MErr RMS [%] /h	1.72	2.75	1.45	2.55
MErr Peak [%] /h	-6.54	-9.75	5.54	9.93
MErr DMRS [%] /h	1.36	2.31	1.29	1.82
PhErr RMS [%] /h	0.89	1.08	0.80	1.00
PhErr Peak [%] /h	-3.24	4.45	2.60	3.68
PhErr DMRS [%] /h	0.55	1.20	0.53	0.92
IQ Offset [dBc]	-37.93	-37.77	-37.31	0.19
IQ Gain Imbalance [dB]	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---
Freq Error [Hz]	-1.24	-0.77	-12.16	4.81
Timing Error [Ts]	-4.67	-4.57	-5.07	0.21
OBW [MHz]	0.31	0.29	0.33	0.03
	Current	Average	Min	Max
TX Power [dBm]	22.74	22.77	22.74	22.82
Peak Power [dBm]	28.25	27.94	27.48	28.34
RB Power [dBm]	22.75	22.78	22.75	22.83

Statistic Count: 20 / 20

Out of Tolerance

Detected Modulation: QPSK

Detected Channel Type: PUSCH

View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

20MHz CH18100 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDDFreq: 1930.0 MHzRef Level: 41.00 dBmBW: 20.0 MHzCP: NormalMeas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Extreme	StdDev				
EVM RMS [%] /h	1.61	1.57	1.61	1.60	1.77	1.80	0.08	0.08
EVM Peak [%] /h	3.68	3.65	3.54	3.49	5.09	5.08	0.54	0.60
EVM DMRS [%] /h	1.49	1.37	1.53	1.52	1.84	1.87	0.18	0.19
MErr RMS [%] /h	0.94	0.94	1.02	1.01	1.08	1.11	0.04	0.04
MErr Peak [%] /h	-2.29	-2.29	2.43	2.43	-2.99	3.04	0.21	0.23
MErr DMRS [%] /h	0.92	0.78	1.11	1.10	1.58	1.54	0.23	0.23
PhErr RMS [%] /h	0.75	0.72	0.71	0.71	0.82	0.83	0.06	0.06
PhErr Peak [%] /h	-1.98	-1.96	1.91	1.88	-2.92	-2.91	0.37	0.39
PhErr DMRS [%] /h	0.67	0.65	0.60	0.60	0.85	0.83	0.12	0.12
IQ Offset [dBc]	-36.53	-36.07	-36.07	-35.69	-35.69	-35.69	0.27	
IQ Gain Imbalance [dB]								
IQ Quadrature Error [°]								
Freq Error [Hz]	4.48	9.16	20.47	5.45				
Timing Error [Ts]	-0.02	-2.08	-4.23	1.39				
OBW [MHz]	0.18	0.32	0.47	0.14				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.11	22.14	22.06	22.21	0.05			
Peak Power [dBm]	27.18	27.45	27.12	27.86	0.29			
RB Power [dBm]	22.20	22.18	22.12	22.21	0.02			

Statistic Count20 / 20

Out of Tolerance0.00 %

Detected ModulationQPSK

Detected Channel TypePUSCH

View Filter Throughput100.0 %

PS: Attached RRC State: Connected

20MHz CH18100 18RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 1930.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Laureme	StdDev	
EVM RMS [%] /h	1.80	1.84	1.85	2.04	2.02 0.08 0.07
EVM Peak [%] /h	5.97	5.92	6.07	6.05	7.98 7.97 0.61 0.62
EVM DMRS [%] /h	1.74	1.76	1.85	1.89	2.10 2.22 0.17 0.18
MErr RMS [%] /h	1.01	1.01	1.02	1.02	1.05 1.05 0.02 0.02
MErr Peak [%] /h	2.76	2.83	3.15	3.17	3.79 3.81 0.30 0.30
MErr DMRS [%] /h	1.35	1.36	1.34	1.35	1.59 1.63 0.13 0.14
PhErr RMS [%] /h	0.85	0.85	0.88	0.88	1.00 0.99 0.05 0.05
PhErr Peak [%] /h	3.42	3.39	3.43	3.41	4.57 4.57 0.37 0.38
PhErr DMRS [%] /h	0.62	0.64	0.73	0.75	0.90 0.92 0.08 0.09
IQ Offset [dBc]	-37.13	-37.24	-36.63	-36.63	-36.63 0.25
IQ Gain Imbalance [dB]	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---
Freq Error [Hz]	-2.16	-3.05	-16.61	7.10	
Timing Error [Ts]	-3.46	-2.44	-3.52	1.48	
OBW [MHz]	3.19	3.20	3.21	0.01	
	Current	Average	Min	Max	StdDev
TX Power [dBm]	22.60	22.63	22.58	22.72	0.04
Peak Power [dBm]	28.44	28.47	28.40	28.57	0.04
RB Power [dBm]	10.04	10.08	10.03	10.17	0.04

Statistic Count20 / 20Out of Tolerance0.00 %Detected ModulationQPSKDetected Channel TypePUSCHView FilterThroughput100.0 %

PS: Attached RRC State: Connected

20MHz CH18300 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 1950.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Extreme	StdDev				
EVM RMS [%] /h	1.42	1.44	1.66	1.65	2.05	2.05	0.24	0.24
EVM Peak [%] /h	4.39	4.40	4.39	4.39	6.34	6.33	1.14	1.14
EVM DMRS [%] /h	1.09	1.26	1.45	1.45	1.76	1.75	0.18	0.17
MErr RMS [%] /h	0.92	0.88	1.23	1.23	1.53	1.53	0.25	0.25
MErr Peak [%] /h	-2.65	-2.59	4.06	4.06	-5.72	-5.80	1.24	1.24
MErr DMRS [%] /h	0.88	1.05	1.15	1.14	1.46	1.41	0.16	0.17
PhErr RMS [%] /h	0.62	0.65	0.64	0.63	0.81	0.81	0.06	0.06
PhErr Peak [%] /h	2.03	2.07	1.72	1.68	2.52	2.60	0.28	0.31
PhErr DMRS [%] /h	0.37	0.40	0.51	0.51	0.67	0.69	0.09	0.09
IQ Offset [dBc]	-37.66	-37.72	-37.30	-37.30	-37.30	-37.30	0.19	
IQ Gain Imbalance [dB]								
IQ Quadrature Error [°]								
Freq Error [Hz]	-4.18	-3.49	-25.25	7.97				
Timing Error [Ts]	-3.43	-3.23	-5.57	0.69				
OBW [MHz]	0.18	0.31	0.47	0.14				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.86	22.95	22.86	23.06	0.05			
Peak Power [dBm]	27.39	27.55	27.32	27.82	0.18			
RB Power [dBm]	22.95	22.99	22.92	23.07	0.04			

Statistic Count

20 / 20

Out of Tolerance

0.00 %

Detected Modulation

QPSK

Detected Channel Type

PUSCH

View Filter

Throughput

100.0 %

PS:

Attached

RRC State:

Connected

20MHz CH18300 18RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDDFreq. 1950.0 MHzRef. Level: 41.00 dBmBW: 20.0 MHzCP: NormalMeas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Laureme	StdDev				
EVM RMS [%] /h	1.77	1.79	1.85	1.84	2.17	2.16	0.10	0.09
EVM Peak [%] /h	6.96	6.99	8.70	8.74	11.22	11.23	1.62	1.59
EVM DMRS [%] /h	1.54	1.53	1.75	1.74	2.15	2.06	0.17	0.15
MErr RMS [%] /h	1.05	1.05	1.09	1.09	1.17	1.17	0.04	0.04
MErr Peak [%] /h	-6.94	-6.97	8.46	8.46	-11.04	-11.04	1.73	1.73
MErr DMRS [%] /h	1.24	1.25	1.31	1.30	1.58	1.51	0.11	0.09
PhErr RMS [%] /h	0.82	0.84	0.86	0.85	1.05	1.05	0.06	0.06
PhErr Peak [%] /h	2.98	3.00	3.35	3.36	4.17	4.57	0.34	0.41
PhErr DMRS [%] /h	0.52	0.50	0.67	0.66	0.83	0.82	0.09	0.09
IQ Offset [dBc]	-37.39	-37.39	-37.13	-37.13	-37.13	-37.13	0.17	
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---
Freq Error [Hz]	0.37	8.93	20.66	6.32				
Timing Error [Ts]	-6.82	-5.74	-7.28	1.21				
OBW [MHz]	3.18	3.18	3.18	0.00				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.99	23.00	22.99	23.05	0.02			
Peak Power [dBm]	28.37	28.40	28.16	28.59	0.11			
RB Power [dBm]	10.44	10.45	10.44	10.50	0.02			

Statistic Count

20 / 20

Out of Tolerance

0.00 %

Detected Modulation

QPSK

Detected Channel Type

PUSCH

View Filter

Throughput

100.0 %

PS: Attached

RRC State: Connected

20MHz CH18500 1RB#99

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDDFreq: 1970.0 MHzRef Level: 41.00 dBmBW: 20.0 MHzCP: NormalMeas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Latency	StdDev				
EVM RMS [%] /h	1.68	1.62	1.57	1.56	1.77	1.82	0.11	0.11
EVM Peak [%] /h	3.50	3.40	3.40	3.36	4.44	4.50	0.40	0.49
EVM DMRS [%] /h	1.61	1.61	1.67	1.69	1.97	2.02	0.14	0.16
MErr RMS [%] /h	1.03	1.00	1.00	1.00	1.10	1.08	0.04	0.04
MErr Peak [%] /h	2.57	2.68	2.53	2.56	3.05	3.05	0.26	0.27
MErr DMRS [%] /h	1.25	1.26	1.18	1.20	1.44	1.39	0.15	0.17
PhErr RMS [%] /h	0.77	0.73	0.70	0.69	0.83	0.86	0.07	0.07
PhErr Peak [%] /h	1.88	-1.85	1.81	1.77	-2.45	-2.47	0.27	0.31
PhErr DMRS [%] /h	0.58	0.58	0.68	0.68	0.89	0.89	0.12	0.13
IQ Offset [dBc]	-37.90	-37.86	-37.38	-37.38	-37.38	-37.38	0.22	
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---
Freq Error [Hz]	1.89	3.19	23.88	7.38				
Timing Error [Ts]	0.32	-1.59	-3.96	1.81				
OBW [MHz]	0.31	0.26	0.31	0.06				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.60	22.47	22.30	22.60	0.12			
Peak Power [dBm]	27.54	27.47	27.32	27.65	0.11			
RB Power [dBm]	22.43	22.42	22.38	22.44	0.02			

Statistic Count: 20 / 20

Out of Tolerance: 0.00 %

Detected Modulation: QPSK

Detected Channel Type: PUSCH

View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

20MHz CH18500 18RB#82

Band 3 (1800MHz) FDD									
Bandwidth	Channel	Modulation	RB No.	RB Offset	Max Power (Conducted)	Limit (dBm)	Antenna Gain (dBi)	Max Power (ERP) (dBm)	ERP Limit (dBm)
1.4MHz	19207	QPSK	1	#0	22.97	19.8~25.7	3.99	24.81	33
	19575	QPSK	1	#0	23.16	19.8~25.7	3.99	25.00	33
			5	#0	23.07	19.8~25.7	3.99	24.91	33
	19943	QPSK	1	#0	22.82	19.8~25.7	3.99	24.66	33
5MHz	19225	QPSK	1	#0	23.05	19.8~25.7	3.99	24.89	33
			1	#24	23.20	19.8~25.7	3.99	25.04	33
	19575	QPSK	1	#0	23.19	19.8~25.7	3.99	25.03	33
			1	#24	23.24	19.8~25.7	3.99	25.08	33
			8	#0	23.17	19.8~25.7	3.99	25.01	33
	19925	QPSK	1	#0	23.01	19.8~25.7	3.99	24.85	33
			1	#24	22.60	19.8~25.7	3.99	24.44	33
	20MHz	19300	QPSK	1	#0	22.75	19.8~25.7	3.99	24.59
1				#99	23.24	19.8~25.7	3.99	25.08	33
19575		QPSK	1	#0	22.90	19.8~25.7	3.99	24.74	33
			1	#99	23.02	19.8~25.7	3.99	24.86	33
			18	#0	23.10	19.8~25.7	3.99	24.94	33
19850		QPSK	1	#0	23.34	19.8~25.7	3.99	25.18	33
			1	#99	22.49	19.8~25.7	3.99	24.33	33

Note :

1. 經上表確認,最大傳導輸出功率不超過原行動通訊模組±2dB.
2. ERP= Conducted Power + Antenna Gain(dBi)-2.15

1.4MHz CH19207 1RB#0

Multi Evaluation **PRACH** **SRS**

FDD Freq: 1710.7 MHz Ref. Level: 41.00 dBm BW: 1.4 MHz CP: Normal Meas Subfr/Slot 0 / All

TX Measurement

	Current	Average	Extreme	StdDev
EVM RMS [%] /h	2.52	2.54	2.68	2.84
EVM Peak [%] /h	10.25	10.25	11.24	11.28
EVM DMRS [%] /h	1.34	1.27	1.45	1.46
MErr RMS [%] /h	2.30	2.30	2.44	2.45
MErr Peak [%] /h	-10.10	-10.10	11.06	11.09
PhErr DMRS [%] /h	0.84	0.82	1.05	1.06
PhErr Peak [%] /h	0.60	0.62	0.63	0.64
PhErr Peak [%] /h	-1.83	-1.84	1.85	1.84
PhErr DMRS [%] /h	0.59	0.55	0.58	0.57
IQ Offset [dBc]	-40.07	-40.50	-39.87	0.27
IQ Gain Imbalance [dB]				
IQ Quadrature Error [°]				
Freq Error [Hz]	-8.55	-4.29	-15.52	3.55
Timing Error [Ts]	-14.29	-14.45	-15.01	0.23
OBW [MHz]	0.24	0.24	0.26	0.01
	Current	Average	Min	Max
TX Power [dBm]	22.87	22.91	22.82	22.97
Peak Power [dBm]	27.37	27.28	27.16	27.49
RB Power [dBm]	22.95	22.94	22.89	22.96

Statistic Count 20 / 20 Out of Tolerance 0.00 % Detected Modulation QPSK Detected Channel Type PUSCH View Filter Throughput 100.0 %

PS: Attached RRC State: Connected

1.4MHz CH19575 1RB#0

CMW 500 V3.7.3.20 - LTE Measurement - V3.7.0 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq: 471.05 MHz BW: 1.4 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current		Average		Extreme		StdDev	
EVMM RMS [%] /h	1.27	1.29	1.34	1.34	1.52	1.52	0.07	0.06
EVMM Peak [%] /h	4.17	4.36	3.97	3.99	5.26	5.44	0.40	0.46
EVMM DMRS [%] /h	1.20	1.23	1.22	1.23	1.59	1.60	0.12	0.13
MErr RMS [%] /h	0.97	0.98	0.94	0.95	1.06	1.07	0.05	0.05
MErr Peak [%] /h	-4.17	-4.36	3.57	3.64	-4.97	-5.08	0.47	0.59
MErr DMRS [%] /h	0.85	0.84	0.88	0.90	1.25	1.26	0.10	0.11
PhErr RMS [*] /h	0.47	0.48	0.54	0.54	0.66	0.65	0.05	0.05
PhErr Peak [*] /h	-1.28	-1.32	1.50	1.49	-2.46	-2.54	0.27	0.26
PhErr DMRS [*] /h	0.48	0.51	0.48	0.48	0.75	0.73	0.09	0.09
IQ Offset [dBc]	-40.59		-39.93		-39.14		0.30	
IQ Gain Imbalance [dB]								
IQ Quadrature Error [°]								
Freq Error [Hz]	-5.65		0.60		28.01		4.39	
Timing Error [Ts]	0.21		-0.50		-16.46		2.62	
OBW [MHz]	0.21		0.22		0.26		0.01	
	Current		Average		Min		Max	
TX Power [dBm]	23.14		23.06		22.96		23.16	
Peak Power [dBm]	28.53		28.57		28.47		28.72	
RB Power [dBm]	23.11		23.09		23.05		23.13	

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

1.4MHz CH19575 5RB#0

CMW 500 V3.7.120 - LTE Measurement - V3.7.10 - TX Measurement

Multi Analysis PRACH SRS

FDD Freq: 1747.5 MHz Ref Level: 41.00 dBm BW: 1.4 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Min	Max	StdDev
EVM RMS [%] /h	1.71	1.72	1.67	1.81	1.79
EVM Peak [%] /h	4.81	3.89	4.89	6.91	6.92
EVM DMRS [%] /h	1.51	1.63	1.66	1.71	1.96
MErr RMS [%] /h	0.89	0.91	0.92	0.93	1.00
MErr Peak [%] /h	-3.00	-3.01	2.96	3.04	-3.88
MErr DMRS [%] /h	1.15	1.26	1.20	1.24	1.38
PhErr RMS [%] /h	0.84	0.84	0.80	0.80	0.87
PhErr Peak [%] /h	2.71	-2.18	2.72	2.59	3.94
PhErr DMRS [%] /h	0.56	0.59	0.66	0.67	0.88
IQ Offset [dBc]	-38.98	-39.81	-38.50	-38.50	0.74
IQ Gain Imbalance [dB]	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---
Freq Error [Hz]	-2.10	2.92	14.12	4.59	0.17
Timing Error [Ts]	-1.04	-0.82	-1.09	0.17	0.01
OBW [MHz]	0.89	0.88	0.89	0.01	0.01
	Current	Average	Min	Max	StdDev
TX Power [dBm]	23.07	23.07	23.01	23.07	0.01
Peak Power [dBm]	28.66	28.94	28.60	29.03	0.26
RB Power [dBm]	16.13	16.13	16.08	16.14	0.01

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: View Filter Throughput: PUSCH 100.0 %

PS: Attached RRC State: Connected

1.4MHz CH19943 1RB#0

CMW 500 V.3.7.120 - LTE Measurement - V3.7.0 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq. 1784.3 MHz Ref. Level: 41.00 dBm BW: 1.4 MHz CP: Normal Meas Subtr/Slot: 0 / All

TX Measurement

	Current		Average		Min		Max		StdDev
EVM RMS [%] /h	1.48	1.49	1.31	1.31	1.61	1.60	0.16	0.16	
EVM Peak [%] /h	3.43	3.52	3.25	3.27	5.26	5.32	0.62	0.64	
EVM DMRS [%] /h	1.43	1.47	1.26	1.27	1.61	1.65	0.21	0.22	
MErr RMS [%] /h	1.06	1.05	0.93	0.92	1.18	1.15	0.16	0.15	
MErr Peak [%] /h	-3.40	-3.48	2.76	2.78	-3.74	-3.82	0.52	0.55	
MErr DMRS [%] /h	0.97	0.97	0.91	0.92	1.25	1.25	0.20	0.20	
PhErr RMS [*] /h	0.59	0.61	0.53	0.53	0.67	0.66	0.05	0.05	
PhErr Peak [*] /h	1.79	1.83	1.49	1.51	2.59	2.66	0.30	0.31	
PhErr DMRS [*] /h	0.60	0.63	0.50	0.50	0.66	0.68	0.09	0.10	
IQ Offset [dBc]	-40.02		-40.88		-39.85				0.70
IQ Gain Imbalance [dB]	---		---		---				---
IQ Quadrature Error [°]	---		---		---				---
Freq Error [Hz]		0.13		0.13		14.08			5.06
Timing Error [Ts]		-13.84		-13.58		-13.98			0.22
OBW [MHz]		0.26		0.22		0.26			0.03
		Current		Average		Min		Max	StdDev
TX Power [dBm]		22.65		22.71		22.60		22.82	0.08
Peak Power [dBm]		27.87		27.64		27.35		28.04	0.23
RB Power [dBm]		22.73		22.74		22.68		22.79	0.04

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

5MHz CH19225 1RB#0

CMW 500 V3.7.120 - LTE Measurement - V3.7.0 - TX Measurement

Multi Analysis PRACH SRS

FDD Freq: 4712.5 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current		Average		Lastest		Stdev
EVM RMS [%] /h	1.99	2.56	1.91	2.53	2.05	2.69	0.06
EVM Peak [%] /h	8.22	8.40	6.42	8.42	8.34	9.31	1.09
EVM DMRS [%] /h	1.12	2.59	1.22	2.44	1.58	3.01	0.17
MErr RMS [%] /h	1.74	2.13	1.58	2.05	1.78	2.19	0.07
MErr Peak [%] /h	-8.18	-8.36	6.24	7.65	-8.18	-8.36	1.01
MErr DMRS [%] /h	0.85	2.05	0.86	1.68	1.14	2.22	0.12
PhErr RMS [*] /h	0.56	0.82	0.62	0.86	0.70	0.95	0.04
PhErr Peak [*] /h	1.32	-2.87	1.92	3.08	-2.63	4.02	0.35
PhErr DMRS [*] /h	0.41	0.90	0.50	1.01	0.67	1.24	0.09
IQ Offset [dBc]	-40.50		-40.53		-40.04		0.23
IQ Gain Imbalance [dB]	---		---		---		---
IQ Quadrature Error [°]	---		---		---		---
Freq Error [Hz]	0.19		-3.43		-15.99		5.29
Timing Error [Ts]	2.20		2.16		2.51		0.20
OBW [MHz]	0.24		0.24		0.24		0.00
	Current		Average	Min	Max		StdDev
TX Power [dBm]	23.03		23.02	22.98	23.05		0.02
Peak Power [dBm]	27.48		27.31	26.92	27.66		0.28
RB Power [dBm]	23.05		23.05	23.00	23.09		0.02

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: View Filter Throughput: PUSCH 100.0 %

PS: Attached RRC State: Connected

5MHz CH19225 1RB#24

CMW 500 V 3.7120 - LTE Measurement - V3.7.0 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq: 1712.5 MHz Ref Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current		Average		Limit		Margin	
EVM RMS [%] /h	1.42	2.43	1.57	2.56	1.85	2.81	0.08	0.14
EVM Peak [%] /h	3.61	9.58	5.42	9.60	8.16	11.02	1.24	0.73
EVM DMRS [%] /h	1.38	1.40	1.14	2.34	1.39	3.36	0.16	1.05
MERR RMS [%] /h	1.07	1.89	1.28	2.16	1.58	2.52	0.10	0.22
MERR Peak [%] /h	-3.41	-8.36	5.27	8.98	-8.15	-10.36	1.29	0.73
MERR DMRS [%] /h	1.17	1.18	0.87	1.76	1.17	2.69	0.13	0.79
PhErr RMS [%] /h	0.54	0.89	0.52	0.80	0.60	0.91	0.04	0.07
PhErr Peak [%] /h	1.52	-4.07	1.40	3.25	2.20	-4.36	0.27	0.46
PhErr DMRS [%] /h	0.42	0.43	0.42	0.88	0.55	1.37	0.08	0.41
IQ Offset [dBc]	-40.98		-40.81		-40.10		0.25	
IQ Gain Imbalance [dB]	---		---		---		---	
IQ Quadrature Error [°]	---		---		---		---	
Freq Error [Hz]	-2.80		-0.83		-21.54		8.51	
Timing Error [Ts]	-1.51		-0.73		2.67		1.55	
OBW [MHz]	0.21		0.25		0.28		0.04	
	Current		Average		Min	Max	StdDev	
TX Power [dBm]	23.14		23.16		23.13	23.20	0.02	
Peak Power [dBm]	27.35		27.62		27.18	28.03	0.31	
RB Power [dBm]	23.18		23.20		23.16	23.23	0.02	

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

5MHz CH19575 1RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 1747.5 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Extreme	StdDev				
EVM RMS [%] /h	1.17	1.99	1.19	2.08	1.33	2.24	0.08	0.08
EVM Peak [%] /h	2.28	8.52	2.65	8.82	3.74	10.02	0.37	0.65
EVM DMRS [%] /h	1.21	2.68	1.23	2.46	1.64	2.95	0.13	0.26
MErr RMS [%] /h	0.80	1.61	0.72	1.65	0.84	1.82	0.06	0.10
MErr Peak [%] /h	1.85	-8.09	1.79	8.37	2.78	-9.34	0.31	0.53
MErr DMRS [%] /h	0.76	2.17	0.91	1.85	1.20	2.43	0.12	0.48
PhErr RMS [%] /h	0.49	0.68	0.54	0.74	0.63	0.82	0.04	0.03
PhErr Peak [%] /h	1.20	2.67	1.44	2.60	2.03	3.46	0.22	0.29
PhErr DMRS [%] /h	0.54	0.89	0.48	0.93	0.64	1.21	0.08	0.15
IQ Offset [dBc]	-40.51	-39.99	-39.24	0.36				
IQ Gain Imbalance [dB]								
IQ Quadrature Error [°]								
Freq Error [Hz]	-0.30	1.27	13.39	5.08				
Timing Error [Ts]	-5.89	-5.75	-6.18	0.20				
OBW [MHz]	0.24	0.24	0.24	0.00				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	23.13	23.14	23.10	23.19	0.03			
Peak Power [dBm]	28.67	28.41	27.84	28.88	0.44			
RB Power [dBm]	23.15	23.18	23.15	23.21	0.02			

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached RRC State: Connected

5MHz CH19575 1RB#24

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 1747.5 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAUme	StdDev	
EVM RMS [%] /h	1.06	2.20	1.18	2.42	1.33 2.62 0.07 0.11
EVM Peak [%] /h	2.26	9.57	2.65	9.47	3.87 10.48 0.37 0.33
EVM DMRS [%] /h	1.18	1.29	1.20	2.41	1.44 3.31 0.10 1.00
MErr RMS [%] /h	0.69	1.78	0.71	1.97	0.86 2.22 0.05 0.16
MErr Peak [%] /h	-1.75	-9.41	1.76	9.18	2.76 -10.03 0.25 0.31
MErr DMRS [%] /h	0.89	0.98	0.91	1.91	1.21 2.76 0.11 0.81
PhErr RMS [%] /h	0.46	0.75	0.54	0.82	0.62 0.97 0.04 0.07
PhErr Peak [%] /h	1.27	-2.45	1.42	3.22	-2.12 4.31 0.20 0.42
PhErr DMRS [%] /h	0.44	0.48	0.45	0.84	0.61 1.22 0.08 0.35
IQ Offset [dBc]	-40.72	-40.34	-39.84	0.28	
IQ Gain Imbalance [dB]					
IQ Quadrature Error [°]					
Freq Error [Hz]	13.63	5.69	14.65	6.05	
Timing Error [Ts]	-2.69	-5.49	-10.39	1.90	
OBW [MHz]	0.21	0.25	0.28	0.04	
	Current	Average	Min	Max	StdDev
TX Power [dBm]	23.17	23.19	23.17	23.24	0.02
Peak Power [dBm]	27.94	28.36	27.84	28.81	0.43
RB Power [dBm]	23.22	23.23	23.21	23.27	0.02

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached RRC State: Connected

5MHz CH19575 8RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 1747.5 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAUme	StdDev					
EVM RMS [%] /h	1.40	5.71	1.36	5.04	1.44	5.74	0.04	0.65	
EVM Peak [%] /h	4.21	72.46	4.52	64.14	5.97	73.33	0.72	7.66	
EVM DMRS [%] /h	1.48	3.37	1.53	4.57	1.73	5.75	0.07	1.16	
MErr RMS [%] /h	0.77	4.37	0.79	3.73	0.83	4.40	0.02	0.67	
MErr Peak [%] /h	-3.16	-61.72	3.72	49.82	-5.55	-62.28	1.11	11.37	
MErr DMRS [%] /h	0.82	2.37	0.89	3.12	1.09	3.96	0.07	0.79	
PhErr RMS [%] /h	0.67	2.69	0.63	2.38	0.68	2.69	0.03	0.27	
PhErr Peak [%] /h	-2.36	-42.41	2.19	36.50	-2.82	-42.60	0.25	5.27	
PhErr DMRS [%] /h	0.70	1.37	0.71	1.91	0.79	2.45	0.04	0.49	
IQ Offset [dBc]	-40.48	-40.24	-39.69	0.23					
IQ Gain Imbalance [dB]	---	---	---	---					
IQ Quadrature Error [°]	---	---	---	---					
Freq Error [Hz]	-3.40	0.89	11.16	4.35					
Timing Error [Ts]	-1.43	-1.61	-1.83	0.14					
OBW [MHz]	1.41	1.41	1.41	0.00					
	Current	Average	Min	Max	StdDev				
TX Power [dBm]	23.16	23.15	23.14	23.17	0.01				
Peak Power [dBm]	29.21	29.52	29.17	29.87	0.28				
RB Power [dBm]	14.15	14.15	14.14	14.16	0.00				

Statistic Count

Out of Tolerance

Detected Modulation

Detected Channel Type

View Filter Throughput

20 / 20

0.00 %

QPSK

PUSCH

100.0 %

PS: Attached RRC State: Connected

5MHz CH19925 1RB#0

CMW 500 V 3.7.3.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 1782.5 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAUme	StdDev	
EVM RMS [%] /h	0.99	2.04	1.16	2.06	1.34 2.19 0.09 0.07
EVM Peak [%] /h	2.25	9.14	2.64	8.76	3.97 9.78 0.42 0.58
EVM DMRS [%] /h	1.11	2.09	1.21	2.36	1.59 2.89 0.13 0.30
MErr RMS [%] /h	0.61	1.70	0.73	1.64	0.92 1.81 0.08 0.10
MErr Peak [%] /h	-1.57	-8.45	2.17	8.31	-3.81 -9.23 0.54 0.42
MErr DMRS [%] /h	0.84	1.29	0.90	1.77	1.30 2.37 0.12 0.47
PhErr RMS [%] /h	0.45	0.66	0.52	0.72	0.59 0.82 0.04 0.04
PhErr Peak [%] /h	1.00	-2.46	1.32	2.61	1.76 3.54 0.19 0.32
PhErr DMRS [%] /h	0.41	0.94	0.46	0.89	0.62 1.17 0.09 0.09
IQ Offset [dBc]	-40.56	-40.16	-39.31	0.42	
IQ Gain Imbalance [dB]	---	---	---	---	
IQ Quadrature Error [°]	---	---	---	---	
Freq Error [Hz]	1.42	0.33	8.98	3.99	
Timing Error [Ts]	-0.55	-2.15	-4.60	1.92	
OBW [MHz]	0.24	0.24	0.24	0.00	
	Current	Average	Min	Max	StdDev
TX Power [dBm]	22.98	22.96	22.93	23.01	0.02
Peak Power [dBm]	27.59	28.02	27.54	28.48	0.41
RB Power [dBm]	23.04	23.00	22.98	23.04	0.02

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached RRC State: Connected

5MHz CH19925 1RB#24

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 1782.5 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAUme	StdDev					
EVM RMS [%] /h	1.24	2.64	1.51	2.75	1.97	3.11	0.27	0.23	
EVM Peak [%] /h	2.95	10.29	5.13	10.02	9.33	10.91	2.35	0.36	
EVM DMRS [%] /h	1.32	1.31	1.29	2.31	1.61	3.25	0.15	0.97	
MErr RMS [%] /h	0.83	2.22	1.15	2.36	1.64	2.70	0.31	0.24	
MErr Peak [%] /h	-2.69	-10.26	4.87	9.69	-9.21	-10.55	2.51	0.35	
MErr DMRS [%] /h	1.13	1.09	1.02	1.73	1.23	2.47	0.13	0.72	
PhErr RMS [%] /h	0.53	0.83	0.56	0.82	0.63	0.95	0.05	0.05	
PhErr Peak [%] /h	-1.66	-4.56	1.50	3.50	1.96	-4.65	0.21	0.51	
PhErr DMRS [%] /h	0.39	0.41	0.45	0.88	0.64	1.30	0.09	0.39	
IQ Offset [dBc]	-39.49	-39.69	-39.28	-39.28	-39.28	-39.28	-39.28	-39.28	0.25
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---	---
Freq Error [Hz]	-0.63	-5.85	-5.85	-5.85	-5.85	-5.85	-5.85	-5.85	4.03
Timing Error [Ts]	-4.64	-3.24	-3.24	-3.24	-3.24	-3.24	-3.24	-3.24	1.93
OBW [MHz]	0.26	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.04
	Current	Average	Min	Max	StdDev				
TX Power [dBm]	22.59	22.58	22.53	22.60	0.02				
Peak Power [dBm]	27.51	28.00	27.50	28.49	0.41				
RB Power [dBm]	22.60	22.59	22.53	22.62	0.02				

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

20MHz CH19300 1RB#99

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 1720.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Laureme	StdDev						
EVM RMS [%] /h	1.35	1.34	1.32	1.32	1.45	1.51	0.07	0.07		
EVM Peak [%] /h	2.83	2.83	2.83	2.85	3.98	3.71	0.30	0.29		
EVM DMRS [%] /h	1.36	1.33	1.39	1.40	1.74	1.72	0.13	0.10		
MErr RMS [%] /h	0.90	0.90	0.89	0.87	0.95	0.94	0.03	0.04		
MErr Peak [%] /h	2.14	2.14	2.19	2.10	2.67	2.58	0.26	0.23		
MErr DMRS [%] /h	0.99	0.97	0.94	0.95	1.25	1.17	0.14	0.15		
PhErr RMS [%] /h	0.57	0.57	0.56	0.57	0.65	0.71	0.05	0.06		
PhErr Peak [%] /h	-1.62	-1.62	1.53	1.55	-2.27	-2.12	0.21	0.21		
PhErr DMRS [%] /h	0.53	0.52	0.59	0.59	0.79	0.78	0.10	0.08		
IQ Offset [dBc]	-40.18	-40.19	-39.46	0.32						
IQ Gain Imbalance [dB]	---	---	---	---						
IQ Quadrature Error [°]	---	---	---	---						
Freq Error [Hz]	-0.79	-4.39	-13.90	6.32						
Timing Error [Ts]	-1.70	-3.71	-4.17	0.73						
OBW [MHz]	0.19	0.25	0.31	0.05						
	Current	Average	Min	Max	StdDev					
TX Power [dBm]	22.93	23.07	22.93	23.24	0.13					
Peak Power [dBm]	28.10	28.33	28.09	28.56	0.18					
RB Power [dBm]	23.02	23.03	23.01	23.09	0.03					

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached RRC State: Connected

20MHz CH19575 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 1747.5 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Laureme	StdDev								
EVM RMS [%] /h	1.32	1.33	1.31	1.30	1.44	1.43	0.06	0.06				
EVM Peak [%] /h	3.18	3.21	2.82	2.81	4.20	4.27	0.38	0.35				
EVM DMRS [%] /h	1.42	1.44	1.39	1.38	1.82	1.78	0.12	0.13				
MErr RMS [%] /h	0.93	0.91	0.93	0.93	1.09	1.09	0.05	0.05				
MErr Peak [%] /h	-1.95	-1.93	2.20	2.20	3.09	3.09	0.25	0.26				
MErr DMRS [%] /h	1.21	1.19	0.98	0.98	1.25	1.25	0.12	0.11				
PhErr RMS [%] /h	0.54	0.56	0.52	0.52	0.62	0.61	0.05	0.04				
PhErr Peak [%] /h	1.45	1.48	1.40	1.38	2.25	2.30	0.24	0.23				
PhErr DMRS [%] /h	0.42	0.46	0.57	0.56	0.77	0.77	0.08	0.08				
IQ Offset [dBc]	-40.48	-40.23	-38.67	0.55								
IQ Gain Imbalance [dB]	---	---	---	---								
IQ Quadrature Error [°]	---	---	---	---								
Freq Error [Hz]	4.76	5.64	20.03	4.33								
Timing Error [Ts]	-4.75	-5.05	-8.56	1.30								
OBW [MHz]	0.18	0.33	0.50	0.15								
	Current	Average	Min	Max	StdDev							
TX Power [dBm]	22.87	22.80	22.68	22.90	0.06							
Peak Power [dBm]	28.23	28.32	28.12	28.57	0.10							
RB Power [dBm]	22.80	22.79	22.73	22.84	0.02							
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput												
20 / 20 0.00 % QPSK PUSCH 100.0 %												
PS: Attached RRC State: Connected												

20MHz CH19575 1RB#99

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 1747.5 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Laureme	StdDev				
EVM RMS [%] /h	1.19	1.21	1.27	1.45	1.46	0.08	0.09	
EVM Peak [%] /h	2.38	2.11	2.92	2.90	4.16	4.12	0.52	0.53
EVM DMRS [%] /h	1.16	1.20	1.25	1.24	1.53	1.62	0.13	0.15
MErr RMS [%] /h	0.73	0.71	0.84	0.83	0.95	0.95	0.08	0.07
MErr Peak [%] /h	-1.90	-1.82	2.37	2.38	-3.18	-3.20	0.48	0.48
MErr DMRS [%] /h	0.74	0.82	0.97	0.95	1.37	1.45	0.20	0.21
PhErr RMS [%] /h	0.54	0.56	0.55	0.55	0.64	0.65	0.04	0.04
PhErr Peak [%] /h	-1.31	-1.15	1.46	1.45	-2.23	-2.25	0.26	0.27
PhErr DMRS [%] /h	0.51	0.50	0.46	0.46	0.57	0.60	0.08	0.08
IQ Offset [dBc]	-40.14	-40.24	-39.80	0.27				
IQ Gain Imbalance [dB]	---	---	---	---				
IQ Quadrature Error [°]	---	---	---	---				
Freq Error [Hz]	14.49	1.86	14.49	3.78				
Timing Error [Ts]	-5.89	-6.61	-7.82	1.23				
OBW [MHz]	0.43	0.34	0.43	0.10				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.86	22.95	22.86	23.02	0.05			
Peak Power [dBm]	27.75	27.99	27.69	28.32	0.25			
RB Power [dBm]	22.95	22.98	22.94	23.01	0.02			

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached RRC State: Connected

20MHz CH19575 18RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation

PRACH

SRS

FDD Freq: 1747.5 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Laureme	StdDev						
EVM RMS [%] /h	1.54	1.56	1.50	1.51	1.57	1.59	0.04	0.04		
EVM Peak [%] /h	4.78	4.76	4.64	4.66	6.13	6.13	0.45	0.46		
EVM DMRS [%] /h	1.39	1.50	1.49	1.49	1.77	1.83	0.09	0.09		
MErr RMS [%] /h	0.89	0.88	0.87	0.87	0.91	0.90	0.01	0.01		
MErr Peak [%] /h	-3.03	-2.94	2.74	2.74	3.64	3.64	0.27	0.26		
MErr DMRS [%] /h	0.95	1.02	1.02	1.03	1.14	1.18	0.07	0.07		
PhErr RMS [%] /h	0.72	0.74	0.70	0.70	0.75	0.76	0.03	0.03		
PhErr Peak [%] /h	-2.70	-2.69	2.59	2.60	3.51	3.50	0.28	0.28		
PhErr DMRS [%] /h	0.58	0.63	0.62	0.62	0.79	0.80	0.05	0.05		
IQ Offset [dBc]	-40.69	-40.42	-39.76	0.39						
IQ Gain Imbalance [dB]	---	---	---	---						
IQ Quadrature Error [°]	---	---	---	---						
Freq Error [Hz]	-14.38	-10.60	-18.63	6.91						
Timing Error [Ts]	-5.79	-6.98	-9.87	1.45						
OBW [MHz]	3.18	3.18	3.18	0.00						
	Current	Average	Min	Max	StdDev					
TX Power [dBm]	23.03	23.05	23.03	23.10	0.03					
Peak Power [dBm]	29.05	29.19	29.03	29.36	0.11					
RB Power [dBm]	10.48	10.50	10.48	10.55	0.03					

Statistic Count

Out of Tolerance

Detected Modulation

Detected Channel Type

View Filter Throughput

20 / 20

0.00 %

QPSK

PUSCH

100.0 %

PS:

Attached RRC State: Connected

20MHz CH19850

Band 7 (2600MHz) FDD									
Bandwidth	Channel	Modulation	RB No.	RB Offset	Max Power (Conducted)	Limit (dBm)	Antenna Gain (dBi)	Max Power (ERP) (dBm)	ERP Limit (dBm)
5MHz	20775	QPSK	1	#0	22.05	19.8~25.7	3.21	23.11	33
	21100	QPSK	1	#0	22.06	19.8~25.7	3.21	23.12	33
			8	#0	22.05	19.8~25.7	3.21	23.11	33
	21425	QPSK	1	#0	21.67	19.8~25.7	3.21	22.73	33
20MHz	20850	QPSK	1	#0	22.25	19.8~25.7	3.21	23.31	33
			1	#99	23.08	19.8~25.7	3.21	24.14	33
	21100	QPSK	1	#0	22.54	19.8~25.7	3.21	23.60	33
			1	#99	22.64	19.8~25.7	3.21	23.70	33
			18	#0	22.56	19.8~25.7	3.21	23.62	33
	21350	QPSK	1	#0	22.82	19.8~25.7	3.21	23.88	33
			1	#99	21.31	19.8~25.7	3.21	22.37	33

Note :

1. 經上表確認,最大傳導輸出功率不超過原行動通訊模組±2dB.
2. ERP= Conducted Power + Antenna Gain(dBi)-2.15

5MHz CH20775 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD Freq: 2502.5 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All									
TX Measurement									
	Current	Average	LAverage	StdDev					
EVM RMS [%] /h	2.19	2.99	2.39	2.90	2.66	3.18	0.19	0.17	
EVM Peak [%] /h	8.15	9.25	8.18	9.23	9.90	10.64	1.07	0.44	
EVM DMRS [%] /h	1.91	3.05	1.75	2.97	2.07	3.31	0.16	0.19	
MErr RMS [%] /h	1.78	2.40	1.95	2.28	2.21	2.51	0.18	0.16	
MErr Peak [%] /h	-6.91	-7.74	7.57	8.50	-9.33	-9.64	1.03	0.48	
MErr DMRS [%] /h	1.18	1.81	1.23	1.94	1.57	2.47	0.16	0.22	
PhErr RMS [%] /h	0.74	1.04	0.80	1.04	0.92	1.18	0.06	0.08	
PhErr Peak [%] /h	2.56	3.68	2.36	3.45	3.13	-4.63	0.37	0.51	
PhErr DMRS [%] /h	0.86	1.40	0.71	1.29	0.87	1.56	0.11	0.16	
IQ Offset [dBc]	-36.56	-36.72	-36.46	-36.46	-36.46	-36.46	-36.46	-36.46	0.15
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---	---
Freq Error [Hz]	24.15	5.06	24.15	5.06	24.15	5.06	24.15	5.06	9.04
Timing Error [Ts]	3.85	0.70	3.95	0.70	3.95	0.70	3.95	0.70	1.71
OBW [MHz]	0.30	0.26	0.30	0.26	0.30	0.26	0.30	0.26	0.04
	Current	Average	Min	Max					
TX Power [dBm]	22.03	21.98	21.90	22.05	21.90	22.05	21.90	22.05	0.05
Peak Power [dBm]	26.26	26.33	26.23	26.42	26.23	26.42	26.23	26.42	0.08
RB Power [dBm]	21.99	21.98	21.94	22.01	21.94	22.01	21.94	22.01	0.02
Statistic Count	20 / 20	Out of Tolerance	0.00 %	Detected Modulation	QPSK	Detected Channel Type	PUSCH	View Filter Throughput	100.0 %
PS: Attached RRC State: Connected									

5MHz CH21100 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD Freq: 2535.0 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All									
TX Measurement									
	Current	Average	LAverage	StdDev					
EVM RMS [%] /h	2.79	3.33	2.64	3.29	2.97	3.59	0.23	0.13	
EVM Peak [%] /h	11.48	11.57	9.72	11.11	12.92	13.08	2.13	0.86	
EVM DMRS [%] /h	1.58	2.91	1.71	2.91	2.20	3.65	0.19	0.31	
MErr RMS [%] /h	2.52	3.03	2.20	2.84	2.69	3.26	0.35	0.18	
MErr Peak [%] /h	-11.47	-11.40	8.75	10.59	-12.84	-12.99	2.81	1.09	
MErr DMRS [%] /h	1.16	2.34	1.27	2.11	1.78	2.88	0.20	0.45	
PhErr RMS [%] /h	0.68	0.79	0.84	0.96	1.00	1.15	0.10	0.08	
PhErr Peak [%] /h	1.65	-2.04	2.64	2.98	4.24	4.11	0.62	0.50	
PhErr DMRS [%] /h	0.61	1.00	0.66	1.15	0.85	1.49	0.09	0.14	
IQ Offset [dBc]	-36.26	-36.40	-36.19	-36.19	-36.19	-36.19	-36.19	-36.19	0.15
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---	---
Freq Error [Hz]	-7.07	2.66	13.20	5.12	13.20	5.12	13.20	5.12	5.12
Timing Error [Ts]	0.73	-0.42	-3.20	1.98	-3.20	1.98	-3.20	1.98	1.98
OBW [MHz]	0.27	0.25	0.27	0.01	0.27	0.01	0.27	0.01	0.01
	Current	Average	Min	Max					
TX Power [dBm]	22.03	22.04	22.00	22.06	22.00	22.06	22.00	22.06	0.01
Peak Power [dBm]	27.33	26.98	26.49	27.38	26.49	27.38	26.49	27.38	0.40
RB Power [dBm]	22.01	22.02	21.98	22.05	21.98	22.05	21.98	22.05	0.01
Statistic Count	20 / 20	Out of Tolerance	0.00 %	Detected Modulation	QPSK	Detected Channel Type	PUSCH	View Filter Throughput	100.0 %
PS: Attached RRC State: Connected									

5MHz CH21100 8RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD Freq: 2535.0 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All									
TX Measurement									
	Current	Average	LAverage	StdDev					
EVM RMS [%] /h	2.46	4.22	2.43	4.14	2.61	4.33	0.06	0.10	
EVM Peak [%] /h	9.46	42.78	8.61	41.12	11.39	43.86	1.32	1.46	
EVM DMRS [%] /h	2.39	6.38	2.21	6.62	2.43	7.23	0.11	0.37	
MErr RMS [%] /h	1.65	2.96	1.60	3.09	1.69	3.33	0.04	0.16	
MErr Peak [%] /h	-9.13	-42.02	7.76	39.64	-10.22	-42.88	1.63	1.86	
MErr DMRS [%] /h	1.42	4.62	1.34	4.71	1.58	5.02	0.11	0.17	
PhErr RMS [%] /h	1.05	1.77	1.05	1.63	1.19	1.83	0.04	0.17	
PhErr Peak [%] /h	3.04	-19.31	3.76	17.47	5.10	22.37	0.40	3.19	
PhErr DMRS [%] /h	1.10	2.53	1.01	2.67	1.12	3.01	0.06	0.22	
IQ Offset [dBc]	-36.18	-36.48	-36.05	-36.05	-36.05	-36.05	-36.05	-36.05	0.22
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---	---
Freq Error [Hz]	-11.87	4.82	19.05	8.93	19.05	8.93	19.05	8.93	8.93
Timing Error [Ts]	-3.97	-3.29	-3.97	1.26	-3.97	1.26	-3.97	1.26	1.26
OBW [MHz]	1.41	1.41	1.41	0.00	1.41	0.00	1.41	0.00	0.00
	Current	Average	Min	Max					
TX Power [dBm]	21.98	22.01	21.98	22.05	21.98	22.05	21.98	22.05	0.02
Peak Power [dBm]	27.51	27.27	27.06	27.51	27.06	27.51	27.06	27.51	0.17
RB Power [dBm]	12.96	12.99	12.96	13.02	12.96	13.02	12.96	13.02	0.02
Statistic Count	20 / 20	Out of Tolerance	0.00 %	Detected Modulation	QPSK	Detected Channel Type	PUSCH	View Filter Throughput	100.0 %
PS: Attached RRC State: Connected									

5MHz CH21425 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD Freq: 2567.5 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All									
TX Measurement									
	Current	Average	LAverage	StdDev					
EVM RMS [%] /h	2.17	2.80	2.24	2.83	2.40	3.04	0.09	0.07	
EVM Peak [%] /h	6.23	8.69	5.90	8.94	6.82	9.78	0.51	0.44	
EVM DMRS [%] /h	2.04	2.80	1.89	3.09	2.55	3.79	0.22	0.29	
MErr RMS [%] /h	1.66	2.09	1.66	2.12	1.88	2.27	0.08	0.05	
MErr Peak [%] /h	-6.17	-7.82	5.33	7.79	-6.65	-8.57	0.82	0.51	
MErr DMRS [%] /h	1.63	2.00	1.34	2.10	1.80	2.93	0.21	0.28	
PhErr RMS [%] /h	0.80	1.07	0.86	1.09	0.97	1.20	0.06	0.06	
PhErr Peak [%] /h	2.07	-3.40	2.37	3.56	3.62	4.17	0.40	0.37	
PhErr DMRS [%] /h	0.71	1.13	0.77	1.30	1.10	1.81	0.15	0.20	
IQ Offset [dBc]	-37.14	-36.80	-36.33	-36.33	-36.33	-36.33	-36.33	-36.33	0.22
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---	---
Freq Error [Hz]	-19.50	-12.76	-34.43	8.50	-34.43	8.50	-34.43	8.50	8.50
Timing Error [Ts]	0.41	0.99	4.78	1.54	4.78	1.54	4.78	1.54	1.54
OBW [MHz]	0.26	0.25	0.26	0.00	0.26	0.00	0.26	0.00	0.00
	Current	Average	Min	Max					
TX Power [dBm]	21.47	21.52	21.43	21.67	21.43	21.67	21.43	21.67	0.07
Peak Power [dBm]	26.43	26.13	25.65	26.57	25.65	26.57	25.65	26.57	0.37
RB Power [dBm]	21.49	21.54	21.44	21.70	21.44	21.70	21.44	21.70	0.07
Statistic Count	20 / 20	Out of Tolerance	0.00 %	Detected Modulation	QPSK	Detected Channel Type	PUSCH	View Filter Throughput	100.0 %
PS: Attached RRC State: Connected									

20MHz CH20850 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 2510.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAverage	StdDev					
EVM RMS [%] /h	2.04	2.05	2.20	2.17	2.50	2.46	0.17	0.16	
EVM Peak [%] /h	4.04	4.07	6.21	6.19	8.64	8.52	1.59	1.56	
EVM DMRS [%] /h	1.72	1.72	1.64	1.63	1.93	2.00	0.14	0.14	
MErr RMS [%] /h	1.51	1.51	1.72	1.69	2.07	2.01	0.22	0.20	
MErr Peak [%] /h	-3.87	-3.88	5.38	5.34	-8.09	-7.98	1.51	1.46	
MErr DMRS [%] /h	1.23	1.21	1.22	1.18	1.58	1.65	0.20	0.19	
PhErr RMS [%] /h	0.79	0.80	0.79	0.78	0.88	0.89	0.04	0.04	
PhErr Peak [%] /h	2.15	2.24	2.23	2.23	3.14	3.15	0.35	0.33	
PhErr DMRS [%] /h	0.69	0.70	0.63	0.64	0.74	0.74	0.07	0.07	
IQ Offset [dBc]	-34.33	-34.41	-33.92	-33.92	-33.92	-33.92	-33.92	-33.92	0.25
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---	---
Freq Error [Hz]	-15.13	-6.84	-27.05	15.05	-27.05	15.05	-27.05	15.05	15.05
Timing Error [Ts]	-5.47	-2.53	-5.68	1.18	-5.68	1.18	-5.68	1.18	1.18
OBW [MHz]	0.54	0.47	0.54	0.06	0.54	0.54	0.54	0.54	0.06
	Current	Average	Min	Max	StdDev				
TX Power [dBm]	21.91	22.08	21.91	22.25	0.13				
Peak Power [dBm]	26.48	26.48	26.41	26.55	0.04				
RB Power [dBm]	21.98	22.04	21.98	22.09	0.04				

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

20MHz CH21100 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD Freq: 2535.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All									
TX Measurement									
	Current	Average	Extreme	StdDev					
EVM RMS [%] /h	2.73	2.72	3.00	2.99	3.33	3.34	0.21	0.23	
EVM Peak [%] /h	10.52	10.50	10.94	10.91	12.85	12.81	1.37	1.35	
EVM DMRS [%] /h	1.98	2.03	2.02	2.04	2.28	2.35	0.15	0.14	
MErr RMS [%] /h	2.11	2.09	2.39	2.38	2.71	2.71	0.24	0.25	
MErr Peak [%] /h	-8.20	-8.13	9.33	9.35	-11.22	-11.37	1.41	1.45	
MErr DMRS [%] /h	1.18	1.18	1.51	1.50	1.76	1.76	0.17	0.16	
PhErr RMS [%] /h	1.00	1.01	1.05	1.05	1.13	1.15	0.05	0.06	
PhErr Peak [%] /h	3.94	3.96	3.83	3.84	4.84	4.89	0.44	0.45	
PhErr DMRS [%] /h	0.91	0.95	0.77	0.79	0.92	0.95	0.09	0.10	
IQ Offset [dBc]	-35.84	-36.04	-35.71	-35.71	-35.71	-35.71	0.20	0.20	
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---	
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---	
Freq Error [Hz]	-5.78	-5.78	-8.74	-8.74	-26.61	-26.61	8.64	8.64	
Timing Error [Ts]	-2.62	-2.62	-5.72	-5.72	-7.21	-7.21	1.66	1.66	
OBW [MHz]	0.18	0.18	0.37	0.37	0.57	0.57	0.19	0.19	
	Current	Average	Min	Max					
TX Power [dBm]	22.45	22.41	22.28	22.54	0.07	0.07	0.07	0.07	
Peak Power [dBm]	26.42	26.48	26.38	26.57	0.06	0.06	0.06	0.06	
RB Power [dBm]	22.37	22.38	22.30	22.46	0.04	0.04	0.04	0.04	
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput									
20 / 20 0.00 % QPSK PUSCH 100.0 %									
PS: Attached RRC State: Connected									

20MHz CH21100 1RB#99

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD Freq: 2535.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All									
TX Measurement									
	Current	Average	Extreme	StdDev					
EVM RMS [%] /h	2.29	2.28	2.00	1.99	2.37	2.37	0.23	0.23	
EVM Peak [%] /h	9.59	9.47	6.61	6.61	9.98	10.04	2.46	2.45	
EVM DMRS [%] /h	1.97	1.94	1.60	1.63	1.99	1.94	0.19	0.18	
MErr RMS [%] /h	1.73	1.72	1.50	1.49	1.73	1.72	0.14	0.14	
MErr Peak [%] /h	-6.74	-6.62	5.40	5.39	-8.34	-8.37	1.46	1.47	
MErr DMRS [%] /h	1.29	1.37	1.09	1.13	1.44	1.39	0.17	0.15	
PhErr RMS [%] /h	0.87	0.88	0.76	0.76	0.95	0.96	0.12	0.12	
PhErr Peak [%] /h	4.32	4.39	2.80	2.80	4.46	4.44	1.18	1.19	
PhErr DMRS [%] /h	0.85	0.79	0.67	0.67	0.85	0.86	0.10	0.10	
IQ Offset [dBc]	-36.72	-37.89	-36.69	-36.69	-36.69	-36.69	0.59	0.59	
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---	
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---	
Freq Error [Hz]	-1.42	-4.39	-15.44	-15.44	6.34	6.34	6.34	6.34	
Timing Error [Ts]	-1.86	-1.54	-2.07	-2.07	0.26	0.26	0.26	0.26	
OBW [MHz]	0.47	0.52	0.59	0.59	0.05	0.05	0.05	0.05	
	Current	Average	Min	Max					
TX Power [dBm]	22.61	22.55	22.51	22.64	0.04	0.04	0.04	0.04	
Peak Power [dBm]	27.55	27.25	26.75	27.69	0.36	0.36	0.36	0.36	
RB Power [dBm]	22.56	22.50	22.46	22.58	0.04	0.04	0.04	0.04	
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput									
20 / 20 0.00 % QPSK PUSCH 100.0 %									
PS: Attached RRC State: Connected									

20MHz CH21100 18RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD Freq: 2535.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All									
TX Measurement									
	Current	Average	Extreme	StdDev					
EVM RMS [%] /h	2.94	2.93	2.91	2.92	3.01	3.01	0.06	0.05	
EVM Peak [%] /h	17.26	17.25	14.59	14.59	17.68	17.70	2.36	2.37	
EVM DMRS [%] /h	2.22	2.18	2.29	2.30	2.61	2.59	0.12	0.11	
MErr RMS [%] /h	2.00	2.01	1.99	1.99	2.05	2.05	0.03	0.03	
MErr Peak [%] /h	-15.47	-15.46	12.98	12.98	-15.70	12.98	2.45	2.46	
MErr DMRS [%] /h	1.59	1.60	1.59	1.59	1.88	1.88	0.10	0.09	
PhErr RMS [%] /h	1.24	1.23	1.22	1.23	1.31	1.32	0.04	0.04	
PhErr Peak [%] /h	4.97	4.97	5.15	5.21	6.95	6.94	0.63	0.65	
PhErr DMRS [%] /h	0.89	0.85	0.94	0.95	1.07	1.06	0.07	0.06	
IQ Offset [dBc]	-37.45	-37.17	-36.68	-36.68	-36.68	-36.68	0.22	0.22	
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---	
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---	
Freq Error [Hz]	5.01	-7.32	-17.04	-17.04	6.81	6.81	6.81	6.81	
Timing Error [Ts]	-3.52	-2.56	-5.76	-5.76	2.03	2.03	2.03	2.03	
OBW [MHz]	3.18	3.18	3.18	3.18	0.00	0.00	0.00	0.00	
	Current	Average	Min	Max					
TX Power [dBm]	22.50	22.53	22.50	22.56	0.02	0.02	0.02	0.02	
Peak Power [dBm]	27.50	27.50	27.33	27.66	0.10	0.10	0.10	0.10	
RB Power [dBm]	9.95	9.97	9.95	10.01	0.02	0.02	0.02	0.02	
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput									
20 / 20 0.00 % QPSK PUSCH 100.0 %									
PS: Attached RRC State: Connected									

20MHz CH21350 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD Freq: 2560.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All									
TX Measurement									
	Current	Average	Extreme	StdDev					
EVM RMS [%] /h	2.29	2.24	2.77	2.76	3.20	3.21	0.26	0.27	
EVM Peak [%] /h	7.06	7.03	9.76	9.82	12.09	12.03	1.40	1.47	
EVM DMRS [%] /h	1.86	1.86	1.98	2.01	2.43	2.51	0.15	0.17	
MErr RMS [%] /h	1.91	1.89	2.35	2.35	2.78	2.79	0.30	0.30	
MErr Peak [%] /h	-6.75	-6.70	9.43	9.50	-11.57	-11.62	1.38	1.46	
MErr DMRS [%] /h	1.29	1.35	1.31	1.31	1.56	1.58	0.11	0.11	
PhErr RMS [%] /h	0.73	0.70	0.84	0.83	0.95	0.95	0.06	0.06	
PhErr Peak [%] /h	-1.74	-1.72	2.37	2.39	3.32	3.42	0.46	0.47	
PhErr DMRS [%] /h	0.77	0.74	0.85	0.87	1.12	1.14	0.10	0.12	
IQ Offset [dBc]	-37.11	-37.08	-36.66	-36.66	-36.66	-36.66	0.22	0.22	
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---	
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---	
Freq Error [Hz]	13.68	4.96	18.75	18.75	7.57	7.57	7.57	7.57	
Timing Error [Ts]	-6.26	-2.62	-6.26	-6.26	1.42	1.42	1.42	1.42	
OBW [MHz]	0.18	0.36	0.56	0.56	0.18	0.18	0.18	0.18	
	Current	Average	Min	Max					
TX Power [dBm]	22.68	22.66	22.54	22.82	0.08	0.08	0.08	0.08	
Peak Power [dBm]	26.67	26.71	26.57	26.84	0.08	0.08	0.08	0.08	
RB Power [dBm]	22.61	22.63	22.56	22.74	0.05	0.05	0.05	0.05	
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput									
20 / 20 0.00 % QPSK PUSCH 100.0 %									
PS: Attached RRC State: Connected									

20MHz CH21350 1RB#99

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD Freq: 2560.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All									
TX Measurement									
	Current	Average	Latency	StdDev					
EVM RMS [%] /h	2.10	2.12	1.95	1.96	2.21	2.20	0.15	0.15	
EVM Peak [%] /h	7.09	7.15	5.76	5.81	7.15	7.15	0.93	0.94	
EVM DMRS [%] /h	1.25	1.23	1.59	1.58	2.11	2.07	0.22	0.20	
MErr RMS [%] /h	1.58	1.59	1.50	1.51	1.67	1.70	0.13	0.14	
MErr Peak [%] /h	-6.81	-6.84	5.55	5.58	-7.08	-6.97	0.90	0.90	
MErr DMRS [%] /h	0.98	0.93	1.09	1.08	1.53	1.49	0.15	0.15	
PhErr RMS [%] /h	0.79	0.81	0.71	0.72	0.86	0.85	0.07	0.07	
PhErr Peak [%] /h	2.31	2.24	1.89	1.92	2.85	2.93	0.33	0.34	
PhErr DMRS [%] /h	0.44	0.46	0.66	0.66	0.89	0.90	0.12	0.11	
IQ Offset [dBc]	-34.44	-34.34	-34.03	-34.03	-34.03	-34.03	0.17	0.17	
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---	
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---	
Freq Error [Hz]	9.90	12.15	23.49	7.97					
Timing Error [Ts]	-6.74	-4.07	-6.74	2.57					
OBW [MHz]	0.18	0.36	0.57	0.19					
	Current	Average	Min	Max	StdDev				
TX Power [dBm]	21.15	21.21	21.10	21.31	0.06				
Peak Power [dBm]	26.06	26.00	25.83	26.15	0.10				
RB Power [dBm]	21.18	21.18	21.13	21.24	0.03				
Statistic Count: Out of Tolerance: Detected Modulation: Detected Channel Type View Filter Throughput									
20 / 20 0.00 % QPSK PUSCH 100.0 %									
PS: Attached RRC State: Connected									

Band 8 (900MHz) FDD									
Bandwidth	Channel	Modulation	RB No.	RB Offset	Max Power (Conducted)	Limit (dBm)	Antenna Gain (dBi)	Max Power (ERP) (dBm)	ERP
									Limit
									(dBm)
1.4MHz	21507	QPSK	1	#0	24.02	19.8~25.7	1.32	23.19	33
	21650	QPSK	1	#0	23.96	19.8~25.7	1.32	23.13	33
			5	#0	23.93	19.8~25.7	1.32	23.10	33
	21793	QPSK	1	#0	23.89	19.8~25.7	1.32	23.06	33
5MHz	21525	QPSK	1	#0	24.17	19.8~25.7	1.32	23.34	33
			1	#24	23.95	19.8~25.7	1.32	23.12	33
	21650	QPSK	1	#0	24.07	19.8~25.7	1.32	23.24	33
			1	#24	24.22	19.8~25.7	1.32	23.39	33
			8	#0	24.00	19.8~25.7	1.32	23.17	33
	21775	QPSK	1	#0	23.68	19.8~25.7	1.32	22.85	33
			1	#24	24.04	19.8~25.7	1.32	23.21	33
10MHz	21550	QPSK	1	#0	24.01	19.8~25.7	1.32	23.18	33
			1	#49	24.19	19.8~25.7	1.32	23.36	33
	21650	QPSK	1	#0	24.07	19.8~25.7	1.32	23.24	33
			1	#49	23.91	19.8~25.7	1.32	23.08	33
			12	#0	24.14	19.8~25.7	1.32	23.31	33
	21750	QPSK	1	#0	23.78	19.8~25.7	1.32	22.95	33
			1	#49	24.05	19.8~25.7	1.32	23.22	33

Note :

1. 經上表確認,最大傳導輸出功率不超過原行動通訊模組±2dB.
2. ERP= Conducted Power + Antenna Gain(dBi)-2.15

1.4MHz CH21507 1RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 885.7 MHz Ref. Level: 41.00 dBm BW: 1.4 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Latency	StdDev				
EVM RMS [%] /h	0.91	0.92	1.04	1.06	1.22	1.23	0.08	0.09
EVM Peak [%] /h	1.76	1.68	2.25	2.26	3.07	3.07	0.39	0.39
EVM DMRS [%] /h	1.05	1.03	1.08	1.04	1.36	1.27	0.07	0.07
MErr RMS [%] /h	0.57	0.61	0.67	0.69	0.85	0.85	0.09	0.09
MErr Peak [%] /h	-1.47	-1.57	1.79	1.81	-2.79	-2.81	0.43	0.43
MErr DMRS [%] /h	0.64	0.60	0.71	0.67	0.87	0.86	0.09	0.08
PhErr RMS [%] /h	0.40	0.40	0.45	0.46	0.53	0.54	0.03	0.03
PhErr Peak [%] /h	-0.92	-0.86	1.14	1.16	-1.59	-1.54	0.14	0.15
PhErr DMRS [%] /h	0.47	0.48	0.46	0.46	0.64	0.63	0.05	0.05
IQ Offset [dBc]	-38.32	-38.18	-37.73	0.29				
IQ Gain Imbalance [dB]								
IQ Quadrature Error [°]								
Freq Error [Hz]	19.76	26.09	33.69	4.51				
Timing Error [Ts]	-9.31	-8.73	-9.46	0.51				
OBW [MHz]	0.24	0.23	0.24	0.01				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	23.98	23.96	23.93	24.02	0.03			
Peak Power [dBm]	28.53	28.82	28.43	29.23	0.31			
RB Power [dBm]	24.04	24.00	23.97	24.07	0.03			

Statistic Count

20 / 20

Out of Tolerance

0.00 %

Detected Modulation

QPSK

Detected Channel Type

PUSCH

View Filter

Throughput

100.0 %

PS:

Attached

RRC State:

Connected

1.4MHz CH21650 1RB#0

CMW 500 V 3.7.3120 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation

PRACH

SRS

FDD Freq: 900.0 MHz Ref. Level: 41.00 dBm BW: 1.4 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Latency	StdDev	
EVM RMS [%] /h	1.11	1.14	1.05	1.07	1.27 1.30 0.12 0.12
EVM Peak [%] /h	3.67	3.67	2.74	2.74	4.39 4.34 0.85 0.84
EVM DMRS [%] /h	1.08	1.01	1.02	0.97	1.20 1.15 0.09 0.09
MErr RMS [%] /h	0.84	0.87	0.77	0.78	1.02 1.04 0.16 0.16
MErr Peak [%] /h	-3.37	-3.39	2.51	2.50	-4.36 -4.31 0.96 0.96
MErr DMRS [%] /h	0.68	0.62	0.69	0.62	0.95 0.88 0.08 0.08
PhErr RMS [%] /h	0.42	0.42	0.41	0.42	0.50 0.49 0.03 0.03
PhErr Peak [%] /h	-0.94	0.88	1.02	1.02	1.30 -1.34 0.10 0.11
PhErr DMRS [%] /h	0.49	0.46	0.43	0.43	0.53 0.53 0.06 0.06
IQ Offset [dBc]	-37.38	-37.51	-36.97	0.19	
IQ Gain Imbalance [dB]					
IQ Quadrature Error [°]					
Freq Error [Hz]	3.33	7.45	18.58	5.36	
Timing Error [Ts]	-12.05	-11.74	-12.29	0.30	
OBW [MHz]	0.23	0.23	0.24	0.01	
	Current	Average	Min	Max	StdDev
TX Power [dBm]	23.93	23.92	23.87	23.96	0.01
Peak Power [dBm]	28.82	28.61	28.31	28.92	0.22
RB Power [dBm]	23.96	23.97	23.91	24.00	0.02

Statistic Count

20 / 20

Out of Tolerance

0.00 %

Detected Modulation

QPSK

Detected Channel Type

PUSCH

View Filter

Throughput

100.0 %

PS:

Attached

RRC State:

Connected

1.4MHz CH21650 5RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDDFreq: 900.0 MHzRef. Level: 41.00 dBmBW: 1.4 MHzCP: NormalMeas Subfr/Slot: 0 / All

TX Measurement

	Current		Average		Extreme		StdDev	
EVM RMS [%] /h	1.73	1.73	1.77	1.77	1.89	1.91	0.05	0.05
EVM Peak [%] /h	5.45	5.43	5.18	5.18	6.79	6.79	0.53	0.53
EVM DMRS [%] /h	1.70	1.69	1.74	1.77	2.11	2.11	0.14	0.12
MErr RMS [%] /h	1.08	1.09	1.10	1.10	1.16	1.16	0.03	0.03
MErr Peak [%] /h	-3.63	-3.62	3.66	3.63	-4.58	-4.58	0.34	0.35
MErr DMRS [%] /h	1.29	1.29	1.32	1.34	1.64	1.64	0.11	0.10
PhErr RMS [%] /h	0.78	0.77	0.79	0.80	0.86	0.87	0.03	0.03
PhErr Peak [%] /h	2.83	2.82	2.69	2.69	3.39	3.39	0.23	0.24
PhErr DMRS [%] /h	0.63	0.62	0.65	0.67	0.77	0.77	0.05	0.04
IQ Offset [dBc]	-37.65		-37.64		-37.09		0.32	
IQ Gain Imbalance [dB]	---		---		---		---	
IQ Quadrature Error [°]	---		---		---		---	
Freq Error [Hz]	5.72		-0.51		-9.80		3.22	
Timing Error [Ts]	-1.98		-2.14		-2.48		0.16	
OBW [MHz]	0.89		0.88		0.89		0.01	
	Current		Average		Min	Max		StdDev
TX Power [dBm]	23.89		23.89		23.84	23.93		0.02
Peak Power [dBm]	29.56		29.56		29.45	29.66		0.04
RB Power [dBm]	16.92		16.92		16.87	16.96		0.02

Statistic Count20 / 20

Out of Tolerance0.00 %

Detected ModulationQPSK

Detected Channel TypePUSCH

View FilterThroughput100.0 %

PS: Attached

RRC State: Connected

1.4MHz CH21793 1RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 914.3 MHz Ref. Level: 41.00 dBm BW: 1.4 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

Input Underdriven

	Current		Average		Latency		StdDev	
EVM RMS [%] /h	3.23	3.24	3.19	3.20	3.46	3.47	0.13	0.13
EVM Peak [%] /h	13.81	13.81	13.57	13.68	15.40	15.53	0.78	0.85
EVM DMRS [%] /h	1.38	1.34	1.59	1.56	1.92	1.92	0.10	0.10
MErr RMS [%] /h	3.00	3.00	2.95	2.95	3.19	3.21	0.10	0.11
MErr Peak [%] /h	-13.80	-13.79	13.30	13.35	-14.57	-14.85	0.60	0.62
MErr DMRS [%] /h	0.83	0.80	1.15	1.15	1.56	1.55	0.14	0.15
PhErr RMS [%] /h	0.69	0.71	0.70	0.71	0.84	0.82	0.06	0.05
PhErr Peak [%] /h	2.35	-2.46	2.38	2.50	3.54	3.37	0.48	0.31
PhErr DMRS [%] /h	0.63	0.61	0.63	0.61	0.79	0.77	0.07	0.07
IQ Offset [dBc]	-38.12		-38.08		-37.58		0.27	
IQ Gain Imbalance [dB]	---		---		---		---	
IQ Quadrature Error [°]	---		---		---		---	
Freq Error [Hz]	10.47		7.95		12.50		2.12	
Timing Error [Ts]	-10.75		-10.86		-11.38		0.25	
OBW [MHz]	0.26		0.24		0.26		0.01	
	Current		Average		Min	Max	StdDev	
TX Power [dBm]	23.80		23.84		23.76	23.89	0.04	
Peak Power [dBm]	28.18		27.99		27.68	28.19	0.19	
RB Power [dBm]	23.87		23.87		23.82	23.88	0.01	

Statistic Count

20 / 20

Out of Tolerance

0.00 %

Detected Modulation

QPSK

Detected Channel Type

PUSCH

View Filter

Throughput

100.0 %

PS: Attached RRC State: Connected

5MHz CH21525 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation PRACH SRS										
FDD	Freq:	887.5 MHz	Ref. Level:	41.00 dBm	BW:	5.0 MHz	CP:	Normal	Meas Subfr/Slot:	0 / All
TX Measurement										
	Current	Average	Latency	StdDev						
EVM RMS [%] /h	1.10	1.61	1.03	2.03	1.16	2.49	0.07	0.39		
EVM Peak [%] /h	2.71	5.81	2.62	7.79	3.87	9.75	0.42	1.53		
EVM DMRS [%] /h	1.09	2.40	1.05	2.34	1.27	2.74	0.10	0.20		
MErr RMS [%] /h	0.81	1.05	0.74	1.55	0.85	2.03	0.06	0.45		
MErr Peak [%] /h	-2.70	-3.56	2.38	5.97	-3.25	-8.51	0.38	2.01		
MErr DMRS [%] /h	0.79	2.02	0.74	1.67	0.90	2.18	0.07	0.49		
PhErr RMS [*] /h	0.43	0.70	0.41	0.77	0.50	0.86	0.04	0.06		
PhErr Peak [*] /h	1.26	2.68	1.10	3.02	1.47	3.57	0.16	0.26		
PhErr DMRS [*] /h	0.43	0.74	0.43	0.94	0.58	1.23	0.06	0.16		
IQ Offset [dBc]	-37.92	-38.25	-37.84	0.22						
IQ Gain Imbalance [dB]	---	---	---	---						
IQ Quadrature Error [*]	---	---	---	---						
Freq Error [Hz]	-0.34	-1.10	-12.06	4.22						
Timing Error [Ts]	5.00	3.89	5.23	1.78						
OBW [MHz]	0.21	0.25	0.28	0.04						
	Current	Average	Min	Max	StdDev					
TX Power [dBm]	24.04	24.08	24.00	24.17	0.06					
Peak Power [dBm]	29.31	29.23	29.07	29.41	0.09					
RB Power [dBm]	24.09	24.09	24.05	24.14	0.02					
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput										
20 / 20 0.00 % QPSK PUSCH 100.0 %										
PS: Attached RRC State: Connected										

5MHz CH21650 1RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 900.0 MHz Ref Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAverage	LAverage	LAverage	LAverage	LAverage	LAverage
EVM RMS [%] /h	1.38	1.74	1.16	2.07	1.38	2.48	0.16	0.35
EVM Peak [%] /h	5.12	6.25	3.90	7.82	5.41	10.19	1.08	1.75
EVM DMRS [%] /h	1.05	2.42	1.00	2.29	1.29	2.65	0.13	0.17
MErr RMS [%] /h	1.15	1.30	0.93	1.63	1.15	2.05	0.18	0.35
MErr Peak [%] /h	-5.12	-5.26	3.84	6.43	-5.41	-8.62	1.10	1.58
MErr DMRS [%] /h	0.85	1.99	0.74	1.60	1.03	2.26	0.10	0.46
PhErr RMS [%] /h	0.44	0.67	0.40	0.74	0.45	0.88	0.03	0.08
PhErr Peak [%] /h	1.27	3.04	1.05	3.06	1.44	3.92	0.15	0.35
PhErr DMRS [%] /h	0.36	0.79	0.38	0.94	0.56	1.22	0.07	0.16
IQ Offset [dBc]	-37.35			-37.33				0.26
IQ Gain Imbalance [dB]								
IQ Quadrature Error [°]								
Freq Error [Hz]	0.66			1.80		6.24		2.19
Timing Error [Ts]	-1.23			-3.84		-5.45		1.90
OBW [MHz]	0.21			0.25		0.28		0.04
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	23.91	23.97	23.90	24.07	0.06			
Peak Power [dBm]	28.76	28.82	28.64	29.04	0.07			
RB Power [dBm]	23.96	23.98	23.95	24.05	0.02			

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached RRC State: Connected

5MHz CH21650 1RB#24

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 900.0 MHz Ref Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAverage	LAverage	LAverage	LAverage	LAverage	LAverage
EVM RMS [%] /h	1.04	2.50	1.10	2.44	1.27	2.62	0.07	0.10
EVM Peak [%] /h	2.00	9.54	2.36	9.67	4.23	10.56	0.30	0.27
EVM DMRS [%] /h	1.16	3.34	1.14	2.46	1.35	3.45	0.12	1.11
MErr RMS [%] /h	0.71	2.16	0.69	2.02	0.93	2.29	0.06	0.19
MErr Peak [%] /h	1.64	-9.33	1.85	9.25	-4.09	-10.29	0.32	0.30
MErr DMRS [%] /h	0.79	2.77	0.85	1.99	1.07	2.83	0.10	0.93
PhErr RMS [%] /h	0.43	0.73	0.49	0.80	0.56	0.95	0.04	0.07
PhErr Peak [%] /h	1.12	3.81	1.21	3.37	1.74	-4.02	0.18	0.33
PhErr DMRS [%] /h	0.49	1.07	0.44	0.84	0.60	1.27	0.08	0.36
IQ Offset [dBc]	-37.81			-37.54		-36.93		0.24
IQ Gain Imbalance [dB]								
IQ Quadrature Error [°]								
Freq Error [Hz]	-2.29			-5.85		-14.08		3.23
Timing Error [Ts]	-2.42			-2.44		4.75		0.85
OBW [MHz]	0.30			0.26		0.30		0.04
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	23.96	23.96	23.94	24.22	0.02			
Peak Power [dBm]	29.62	29.19	28.65	29.79	0.44			
RB Power [dBm]	23.99	24.00	23.98	24.26	0.01			

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached RRC State: Connected

5MHz CH21650 8RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 900.0 MHz Ref Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAverage	LAverage	LAverage	LAverage	LAverage	LAverage
EVM RMS [%] /h	1.17	5.61	1.23	5.00	1.32	5.69	0.07	0.65
EVM Peak [%] /h	5.15	70.90	7.29	64.03	10.86	71.99	2.20	7.17
EVM DMRS [%] /h	1.20	3.17	1.23	4.50	1.36	5.68	0.06	1.20
MErr RMS [%] /h	0.73	4.28	0.83	3.72	0.95	4.34	0.08	0.65
MErr Peak [%] /h	-4.57	-60.17	7.00	49.50	-10.64	-61.32	2.25	11.22
MErr DMRS [%] /h	0.84	2.22	0.79	3.11	0.92	4.04	0.06	0.83
PhErr RMS [%] /h	0.52	2.63	0.52	2.36	0.55	2.69	0.02	0.28
PhErr Peak [%] /h	2.24	-42.38	1.86	37.18	2.36	-43.26	0.23	5.42
PhErr DMRS [%] /h	0.49	1.30	0.54	1.87	0.62	2.36	0.03	0.50
IQ Offset [dBc]	-37.50			-37.64		-37.14		0.23
IQ Gain Imbalance [dB]								
IQ Quadrature Error [°]								
Freq Error [Hz]	-8.60			-8.17		-13.55		2.63
Timing Error [Ts]	-2.79			-1.30		-3.21		1.79
OBW [MHz]	1.41			1.41		1.41		0.00
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	24.00	23.96	23.93	24.00	0.03			
Peak Power [dBm]	29.59	29.74	29.35	30.03	0.21			
RB Power [dBm]	14.99	14.96	14.93	14.99	0.02			

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 200.00 %QPSKPUSCH100.0 %

PS: Attached RRC State: Connected

5MHz CH21775 1RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 912.5 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAverage	LAverage	LAverage	LAverage	LAverage	LAverage
EVM RMS [%] /h	1.21	2.00	1.15	2.03	1.31	2.15	0.10	0.04
EVM Peak [%] /h	4.19	8.12	3.62	8.50	4.86	9.40	0.67	0.39
EVM DMRS [%] /h	1.13	2.57	1.00	2.33	1.23	2.70	0.13	0.25
MErr RMS [%] /h	0.90	1.61	0.84	1.66	0.97	1.77	0.10	0.05
MErr Peak [%] /h	-3.57	-8.09	3.22	8.09	-4.34	-8.62	0.73	0.24
MErr DMRS [%] /h	0.88	2.06	0.76	1.69	0.92	2.22	0.10	0.50
PhErr RMS [%] /h	0.47	0.69	0.45	0.68	0.53	0.75	0.03	0.03
PhErr Peak [%] /h	-1.32	-2.76	1.23	2.66	-1.94	-3.39	0.24	0.33
PhErr DMRS [%] /h	0.40	0.88	0.37	0.92	0.52	1.19	0.07	0.13
IQ Offset [dBc]	-37.90			-38.07		-37.27		0.31
IQ Gain Imbalance [dB]								
IQ Quadrature Error [°]								
Freq Error [Hz]	-3.03			-1.22		-10.10		4.01
Timing Error [Ts]	-0.17			-0.97		-4.73		1.64
OBW [MHz]	0.24			0.24		0.26		0.00
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	23.60	23.62	23.59	23.68	0.02			
Peak Power [dBm]	28.76	28.42	27.93	28.81	0.35			
RB Power [dBm]	23.62	23.65	23.62	23.71	0.02			

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached RRC State: Connected

5MHz CH21775 1RB#24

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 912.5 MHz Ref Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAverage	LAverage	LAverage	LAverage	LAverage	LAverage
EVM RMS [%] /h	3.76	4.52	3.24	4.02	3.90	4.62	0.56	0.51
EVM Peak [%] /h	17.31	17.35	13.54	15.38	18.47	18.50	3.79	1.92
EVM DMRS [%] /h	1.74	3.39	1.50	2.57	1.81	3.48	0.23	1.08
MErr RMS [%] /h	3.55	4.20	3.00	3.67	3.67	4.27	0.59	0.52
MErr Peak [%] /h	-17.16	-17.23	12.84	15.27	-18.23	-18.30	4.27	1.84
MErr DMRS [%] /h	1.19	2.49	1.10	1.94	1.35	2.69	0.17	0.84
PhErr RMS [%] /h	0.72	0.98	0.71	0.96	0.84	1.10	0.05	0.07
PhErr Peak [%] /h	2.67	3.64	2.79	3.41	3.84	3.89	0.36	0.27
PhErr DMRS [%] /h	0.73	1.33	0.58	0.97	0.73	1.34	0.10	0.40
IQ Offset [dBc]	-38.10			-38.44		-37.81		0.23
IQ Gain Imbalance [dB]								
IQ Quadrature Error [°]								
Freq Error [Hz]	-0.09			-4.73		-9.24		2.55
Timing Error [Ts]	-3.83			-2.32		-4.51		1.99
OBW [MHz]	0.33			0.29		0.33		0.04
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	23.97	23.98	23.92	24.04	0.02			
Peak Power [dBm]	28.47	28.30	28.00	28.54	0.19			
RB Power [dBm]	23.96	23.98	23.92	24.04	0.03			

Statistic Count: 20 / 20

Out of Tolerance: 0.00 %

Detected Modulation: QPSK

Detected Channel Type: PUSCH

View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

10MHz CH21550 1RB#49

CMW 500 V 3.7.120 - LTE Measurement - V3.7.10 - TX Measurement

Multi Analysis PRACH SRS

FDD Freq: 890.0 MHz Ref Level: 41.00 dBm BW: 10.0 MHz CP: Normal Meas Subfr/Slot 0 / All

TX Measurement

	Current		Average		Latency		StdDev
EVM RMS [%] /h	0.87	1.08	1.00	1.17	1.23	1.36	0.11
EVM Peak [%] /h	2.01	3.02	2.78	3.07	3.89	3.86	0.53
EVM DMRS [%] /h	0.84	0.84	0.96	0.96	1.17	1.18	0.09
MErr RMS [%] /h	0.59	0.84	0.74	0.92	0.95	1.08	0.13
MErr Peak [%] /h	-1.87	-2.79	2.55	2.88	-3.62	-3.62	0.56
DMRS DMRS [%] /h	0.47	0.48	0.68	0.67	0.88	0.95	0.10
PhErr RMS [%] /h	0.37	0.38	0.39	0.42	0.45	0.48	0.03
PhErr Peak [%] /h	-1.09	-1.15	1.05	1.21	1.44	-1.58	0.16
PhErr DMRS [%] /h	0.40	0.40	0.39	0.39	0.49	0.48	0.05
IQ Offset [dBc]	-38.97		-39.06		-38.65		0.28
IQ Gain Imbalance [dB]	-----						
IQ Quadrature Error [%]	-----						
Freq Error [Hz]	5.71		-2.35		-13.28		4.11
Timing Error [Ts]	1.07		3.77		5.26		1.52
OBW [MHz]	0.31		0.28		0.33		0.04
	Current		Average	Min	Max		StdDev
TX Power [dBm]	24.08		24.11	24.06	24.19		0.04
Peak Power [dBm]	28.52		28.77	28.44	29.17		0.25
RB Power [dBm]	24.13		24.17	24.13	24.25		0.04

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached
RRG State: Connected

10MHz CH21650 1RB#0

CMW 500 V3.7.120 - LTE Measurement - V3.7.0 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq: 900.0 MHz Ref Level: 41.00 dBm BW: 10.0 MHz CP: Normal Meas Subtr/Slot: 0 / All

TX Measurement

	Current		Average		Lastest		StdDev	
EVM RMS [%] /h	0.97	1.14	1.18	1.32	1.45	1.57	0.16	0.15
EVM Peak [%] /h	3.35	3.35	3.55	3.62	4.54	4.75	0.39	0.38
EVM DMRS [%] /h	1.10	1.09	1.07	1.15	1.34	1.41	0.16	0.15
MErr RMS [%] /h	0.76	0.91	0.95	1.08	1.21	1.33	0.18	0.17
MErr Peak [%] /h	-3.30	-3.29	3.47	3.53	-4.42	-4.68	0.33	0.37
MDrr RMS [%] /h	0.68	0.68	0.78	0.87	1.04	1.11	0.16	0.14
PhErr RMS [*] /h	0.35	0.39	0.40	0.43	0.46	0.50	0.03	0.03
PhErr Peak [*] /h	0.80	-0.85	1.05	1.25	1.61	-1.72	0.17	0.20
PhErr DMRS [*] /h	0.50	0.49	0.42	0.43	0.50	0.53	0.06	0.06
IQ Offset [dBc]	-37.85		-37.78		-37.41		0.13	
IQ Gain Imbalance [dB]	-----		-----		-----		-----	
IQ Quadrature Error [°]	-----		-----		-----		-----	
Freq Error [Hz]	3.22		-0.04		-7.77		3.00	
Timing Error [Ts]	2.33		2.54		4.44		0.63	
OBW [MHz]	0.33		0.28		0.33		0.05	
	Current		Average		Min	Max		StdDev
TX Power [dBm]	24.02		23.96		23.86	24.07		0.08
Peak Power [dBm]	28.61		28.85		28.52	29.20		0.26
RB Power [dBm]	23.99		23.97		23.93	24.05		0.03

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached RRC State: Connected

10MHz CH21650 1RB#49

CMW 500 V 3.7.120 - LTE Measurement - V3.7.10 - TX Measurement

Multi Analysis PRACH SRS

FDD Freq: 900.0 MHz Ref Level: 41.00 dBm BW: 10.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current			Average		Latency		Success
EVMM RMS [%] / u	0.97	1.23	0.99	1.17	1.14	1.34	0.05	0.06
EVMM Peak [%] / u	2.45	3.23	2.19	3.10	3.13	3.80	0.26	0.29
EVMM DMRS [%] / u	1.14	1.12	1.24	1.22	1.49	1.48	0.12	0.14
MErr RMS [%] / u	0.62	0.91	0.63	0.85	0.73	0.93	0.03	0.03
MErr Peak [%] / u	-1.43	-3.12	1.66	2.81	2.32	-3.38	0.26	0.26
MErr DMRS [%] / u	0.72	0.67	0.84	0.81	1.14	1.12	0.11	0.13
PhErr RMS [°] / u	0.42	0.47	0.43	0.46	0.55	0.57	0.04	0.03
PhErr Peak [°] / u	1.35	-1.67	1.18	1.35	1.79	-1.88	0.16	0.19
PhErr DMRS [°] / u	0.51	0.51	0.52	0.52	0.65	0.66	0.06	0.06
IQ Offset [dBc]	-38.16			-37.68		-36.72		0.25
IQ Gain Imbalance [dB]	---			---		---		---
IQ Quadrature Error [°]	---			---		---		---
Freq Error [Hz]	0.72			-1.56		-16.16		3.59
Timing Error [Ts]	1.82			3.25		7.83		1.63
OBW [MHz]	0.33			0.29		0.33		0.04
	Current			Average	Min	Max	StdDev	
TX Power [dBm]	23.71			23.71	23.64	23.91		0.03
Peak Power [dBm]	28.56			28.84	28.46	29.29		0.29
RB Power [dBm]	23.76			23.77	23.72	23.96		0.03

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

10MHz CH21650 12RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.0 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq: 900.0 MHz Ref Level: 41.00 dBm BW: 10.0 MHz CP: Normal Meas Subtr/Slot: 0 / All

TX Measurement

	Current		Average		LastDev		StdDev	
EVM RMS [%] /h	1.05	1.92	1.07	2.09	1.19	2.37	0.03	0.17
EVM Peak [%] /h	4.25	25.16	4.23	25.75	6.33	27.74	0.77	0.93
EVM DMRS [%] /h	1.16	2.27	1.06	1.91	1.22	2.36	0.06	0.38
MErr RMS [%] /h	0.67	1.51	0.67	1.60	0.73	1.76	0.02	0.09
MErr Peak [%] /h	-4.22	-23.68	4.02	24.68	-6.04	-27.49	0.80	1.49
MErr DMRS [%] /h	0.76	1.59	0.71	1.35	0.79	1.70	0.04	0.29
PhErr RMS [°] /h	0.46	0.69	0.48	0.79	0.55	0.94	0.02	0.09
PhErr Peak [°] /h	1.76	-10.56	1.75	11.44	3.60	13.70	0.34	0.92
PhErr DMRS [°] /h	0.50	0.93	0.45	0.77	0.54	0.97	0.04	0.15
IQ Offset [dBc]	-38.52		-38.28		-37.43		0.25	
IQ Gain Imbalance [dB]	---		---		---		---	
IQ Quadrature Error [°]	---		---		---		---	
Freq Error [Hz]	-3.83		0.93		6.52		3.53	
Timing Error [Ts]	-1.77		1.61		6.69		3.01	
OBW [MHz]	2.10		2.11		2.12		0.01	
	Current		Average		Min	Max		StdDev
TX Power [dBm]	24.02		24.05		24.02	24.14		0.03
Peak Power [dBm]	29.45		29.39		29.17	29.56		0.08
RB Power [dBm]	13.23		13.26		13.23	13.35		0.03

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

10MHz CH21750 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.0 - TX Measurement

Multi Evaluation **PRACH** **SRS**

FDD Freq: 910.0 MHz Ref Level: 41.00 dBm BW: 10.0 MHz CP: Normal Meas Subtr/Slot: 0 / All

TX Measurement

	Current		Average		Extreme		StdDev
EVM RMS [%] /h	1.01	1.14	1.04	1.19	1.11	1.27	0.04
EVM Peak [%] /h	1.76	2.88	2.24	3.12	2.81	3.64	0.26
EVM DMRS [%] /h	1.27	1.45	1.15	1.25	1.37	1.45	0.11
MErr RMS [%] /h	0.69	0.84	0.70	0.86	0.80	0.94	0.05
MErr Peak [%] /h	-1.60	-2.79	1.66	2.87	-2.10	-3.35	0.17
MErr DMRS [%] /h	0.82	0.97	0.77	0.88	0.94	1.02	0.11
PhErr RMS [°] /h	0.42	0.44	0.44	0.47	0.50	0.53	0.02
PhErr Peak [°] /h	1.01	-1.26	1.19	1.27	1.60	1.53	0.17
PhErr DMRS [°] /h	0.55	0.62	0.49	0.51	0.60	0.62	0.06
IQ Offset [dBc]	-38.36		-38.21		-37.75		0.21
IQ Gain Imbalance [dB]	---		---		---		---
IQ Quadrature Error [°]	---		---		---		---
Freq Error [Hz]	2.09		-0.70		-5.87		2.03
Timing Error [Ts]	6.40		5.54		6.75		1.53
OBW [MHz]	0.23		0.28		0.33		0.05
	Current		Average	Min	Max		StdDev
TX Power [dBm]	23.57		23.66	23.57	23.78		0.07
Peak Power [dBm]	29.35		29.02	28.67	29.44		0.29
RB Power [dBm]	23.64		23.68	23.64	23.75		0.03

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

10MHz CH21750 1RB#49

TX Measurement
 Freq: 910.0 MHz Ref Level: 41.00 dBm BW: 10.0 MHz CP: Normal Meas Substr/Slot: 0 / All

	Current		Average		LastOne		SubDev
EVM RMS [%] /h	2.23	2.21	2.84	2.86	3.52	3.57	0.63
EVM Peak [%] /h	9.05	9.06	9.93	10.12	11.52	11.79	0.91
EVM DMRS [%] /h	1.19	1.48	1.59	1.74	2.07	2.07	0.36
MErr RMS [%] /h	2.00	1.98	2.49	2.51	3.08	3.13	0.49
MErr Peak [%] /h	-8.45	-8.45	9.06	9.52	-10.32	-11.23	0.75
MDrr RMS [%] /h	0.70	1.02	1.16	1.20	1.69	1.58	0.38
PhErr RMS [*] /h	0.57	0.56	0.79	0.79	1.08	1.07	0.20
PhErr Peak [*] /h	2.00	2.00	3.06	3.10	4.68	4.74	1.00
PhErr DMRS [*] /h	0.55	0.62	0.62	0.72	0.75	0.87	0.09
IQ Offset [dBc]	-39.10		-38.92		-38.43		0.17
IQ Gain Imbalance [dB]	---		---		---		---
IQ Quadrature Error [°]	---		---		---		---
Freq Error [Hz]	3.68		-5.46		-9.07		2.63
Timing Error [Ts]	4.21		4.07		4.31		0.19
OBW [MHz]	0.31		0.34		0.36		0.02
	Current	Average		Min	Max	StdDev	
TX Power [dBm]	24.04	23.92		23.78	24.05	0.11	
Peak Power [dBm]	27.64	27.76		27.60	28.24	0.15	
RB Power [dBm]	24.02	23.94		23.84	24.03	0.07	

Statistic Count: Out of Tolerance: Detected Modulation: Detected Channel Type: View Filter Throughput:

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached: RRG State: Connected

Band 28 (700MHz) FDD									
Bandwidth	Channel	Modulation	RB No.	RB Offset	Max Power (Conducted)	Limit (dBm)	Antenna Gain (dBi)	Max Power (ERP)	Limit (dBm)
3MHz	27225	QPSK	1	#0	23.72	19.8~25.7	1.76	23.33	33
			4	#0	23.79	19.8~25.7	1.76	23.40	33
	27435	QPSK	1	#0	23.20	19.8~25.7	1.76	22.81	33
			4	#0	23.23	19.8~25.7	1.76	22.84	33
	27645	QPSK	1	#14	22.43	19.8~25.7	1.76	22.04	33
			4	#11	22.40	19.8~25.7	1.76	22.01	33
5MHz	27235	QPSK	1	#0	23.83	19.8~25.7	1.76	23.44	33
			8	#0	23.99	19.8~25.7	1.76	23.60	33
	27435	QPSK	1	#0	23.39	19.8~25.7	1.76	23.00	33
			8	#0	23.28	19.8~25.7	1.76	22.89	33
	27635	QPSK	1	#24	22.36	19.8~25.7	1.76	21.97	33
			8	#17	23.39	19.8~25.7	1.76	23.00	33
20MHz	27310	QPSK	1	#0	23.87	19.8~25.7	1.76	23.48	33
			18	#0	24.16	19.8~25.7	1.76	23.77	33
	27435	QPSK	1	#0	22.51	19.8~25.7	1.76	22.12	33
			18	#0	22.93	19.8~25.7	1.76	22.54	33
	27560	QPSK	1	#99	22.71	19.8~25.7	1.76	22.32	33
			18	#82	22.82	19.8~25.7	1.76	22.43	33

Note :

1. 經上表確認,最大傳導輸出功率不超過原行動通訊模組±2dB.
2. ERP= Conducted Power + Antenna Gain(dBi)-2.15

3MHz CH27225 1RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD Freq: 704.5 MHz Ref. Level: 41.00 dBm BW: 3.0 MHz CP: Normal Meas Subfr/Slot: 0 / All									
TX Measurement									
	Current	Average	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme
EVM RMS [%] /h	1.61	1.60	1.44	1.46	1.74	1.73	0.21	0.18	
EVM Peak [%] /h	4.15	4.16	3.72	3.79	5.88	5.87	1.10	1.03	
EVM DMRS [%] /h	1.57	1.50	1.44	1.40	1.66	1.59	0.11	0.10	
MErr RMS [%] /h	1.28	1.28	1.13	1.16	1.46	1.45	0.23	0.20	
MErr Peak [%] /h	-4.10	-4.10	3.59	3.70	-5.86	-5.84	1.17	1.05	
MErr DMRS [%] /h	0.98	0.89	0.98	0.94	1.22	1.14	0.09	0.09	
PhErr RMS [%] /h	0.56	0.56	0.51	0.51	0.57	0.58	0.03	0.03	
PhErr Peak [%] /h	1.32	1.31	1.26	1.27	1.63	-1.56	0.17	0.14	
PhErr DMRS [%] /h	0.71	0.69	0.60	0.59	0.73	0.72	0.06	0.06	
IQ Offset [dBc]	-38.19	-38.15	-37.51	-37.51	-37.51	-37.51	0.23		
IQ Gain Imbalance [dB]									
IQ Quadrature Error [°]									
Freq Error [Hz]	-10.67	-8.73	-14.49	-14.49	-14.49	-14.49	1.76		
Timing Error [Ts]	2.21	3.26	9.86	9.86	9.86	9.86	2.80		
OBW [MHz]	0.21	0.22	0.23	0.23	0.23	0.23	0.01		
Current Average Min Max StdDev									
TX Power [dBm]	23.72	23.71	23.66	23.72	23.72	23.72	0.02		
Peak Power [dBm]	28.45	28.14	27.78	28.54	28.54	28.54	0.26		
RB Power [dBm]	23.74	23.74	23.68	23.77	23.77	23.77	0.03		
Statistic Count	20 / 20	0.00 %	Detected Modulation	QPSK	Detected Channel Type	PUSCH	View Filter	Throughput	100.0 %
PS: Attached	RRC State: Connected								

3MHz CH27225 4RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD Freq: 704.5 MHz Ref. Level: 41.00 dBm BW: 3.0 MHz CP: Normal Meas Subfr/Slot: 0 / All									
TX Measurement									
	Current	Average	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme
EVM RMS [%] /h	1.53	1.50	1.40	1.41	1.60	1.59	0.12	0.12	
EVM Peak [%] /h	6.51	5.07	4.58	4.65	6.68	6.79	1.45	1.42	
EVM DMRS [%] /h	1.26	1.24	1.12	1.11	1.26	1.26	0.10	0.10	
MErr RMS [%] /h	1.18	1.14	1.00	1.00	1.20	1.21	0.16	0.15	
MErr Peak [%] /h	-6.16	-4.68	4.13	4.06	-6.16	-6.18	1.48	1.39	
MErr DMRS [%] /h	0.88	0.87	0.84	0.83	1.04	1.04	0.10	0.09	
PhErr RMS [%] /h	0.56	0.56	0.56	0.57	0.61	0.63	0.02	0.02	
PhErr Peak [%] /h	1.45	-1.43	1.67	1.74	2.13	2.33	0.17	0.17	
PhErr DMRS [%] /h	0.52	0.51	0.42	0.42	0.52	0.52	0.04	0.04	
IQ Offset [dBc]	-38.52	-37.94	-37.52	-37.52	-37.52	-37.52	0.27		
IQ Gain Imbalance [dB]									
IQ Quadrature Error [°]									
Freq Error [Hz]	-3.45	-4.43	-8.34	-8.34	-8.34	-8.34	1.44		
Timing Error [Ts]	9.34	9.01	9.34	9.34	9.34	9.34	0.16		
OBW [MHz]	0.71	0.71	0.72	0.72	0.72	0.72	0.01		
Current Average Min Max StdDev									
TX Power [dBm]	23.77	23.72	23.70	23.79	23.79	23.79	0.02		
Peak Power [dBm]	28.96	28.92	28.71	29.13	29.13	29.13	0.11		
RB Power [dBm]	17.75	17.72	17.70	17.78	17.78	17.78	0.02		
Statistic Count	20 / 20	0.00 %	Detected Modulation	QPSK	Detected Channel Type	PUSCH	View Filter	Throughput	100.0 %
PS: Attached	RRC State: Connected								

3MHz CH27435 1RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD Freq: 725.5 MHz Ref. Level: 41.00 dBm BW: 3.0 MHz CP: Normal Meas Subfr/Slot: 0 / All									
TX Measurement									
	Current	Average	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme
EVM RMS [%] /h	1.23	1.28	1.31	1.35	1.43	1.47	0.07	0.06	
EVM Peak [%] /h	2.45	2.54	2.67	2.71	3.48	3.46	0.25	0.22	
EVM DMRS [%] /h	1.61	1.50	1.60	1.58	1.88	1.84	0.12	0.11	
MErr RMS [%] /h	0.91	0.97	0.94	0.98	1.02	1.03	0.04	0.03	
MErr Peak [%] /h	2.33	-2.51	2.23	2.44	2.71	-2.87	0.16	0.16	
MErr DMRS [%] /h	1.20	1.08	1.14	1.11	1.44	1.37	0.16	0.14	
PhErr RMS [%] /h	0.47	0.48	0.52	0.53	0.59	0.61	0.04	0.04	
PhErr Peak [%] /h	-1.24	-1.25	1.42	1.41	1.85	1.85	0.16	0.16	
PhErr DMRS [%] /h	0.61	0.59	0.64	0.64	0.74	0.75	0.04	0.04	
IQ Offset [dBc]	-38.54	-38.33	-37.94	-37.94	-37.94	-37.94	0.18		
IQ Gain Imbalance [dB]									
IQ Quadrature Error [°]									
Freq Error [Hz]	-15.22	-12.55	-16.54	-16.54	-16.54	-16.54	2.52		
Timing Error [Ts]	8.69	9.17	16.21	16.21	16.21	16.21	2.24		
OBW [MHz]	0.26	0.24	0.26	0.26	0.26	0.26	0.01		
Current Average Min Max StdDev									
TX Power [dBm]	23.13	23.14	23.07	23.20	23.20	23.20	0.04		
Peak Power [dBm]	28.80	28.41	28.02	28.80	28.80	28.80	0.33		
RB Power [dBm]	23.24	23.22	23.18	23.27	23.27	23.27	0.03		
Statistic Count	20 / 20	0.00 %	Detected Modulation	QPSK	Detected Channel Type	PUSCH	View Filter	Throughput	100.0 %
PS: Attached	RRC State: Connected								

3MHz CH27435 4RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD Freq: 725.5 MHz Ref. Level: 41.00 dBm BW: 3.0 MHz CP: Normal Meas Subfr/Slot: 0 / All									
TX Measurement									
	Current	Average	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme
EVM RMS [%] /h	1.46	1.48	1.50	1.52	1.55	1.56	0.02	0.02	
EVM Peak [%] /h	3.00	3.15	3.37	3.54	4.02	4.44	0.24	0.31	
EVM DMRS [%] /h	1.25	1.24	1.26	1.25	1.40	1.40	0.06	0.07	
MErr RMS [%] /h	1.10	1.10	1.09	1.10	1.14	1.14	0.02	0.01	
MErr Peak [%] /h	-2.84	2.78	2.94	3.07	-3.34	3.48	0.13	0.21	
MErr DMRS [%] /h	0.83	0.84	0.90	0.89	1.04	1.04	0.06	0.05	
PhErr RMS [%] /h	0.55	0.57	0.59	0.60	0.63	0.64	0.02	0.02	
PhErr Peak [%] /h	1.49	-1.76	1.77	1.77	2.30	2.21	0.19	0.15	
PhErr DMRS [%] /h	0.54	0.53	0.51	0.51	0.60	0.61	0.04	0.04	
IQ Offset [dBc]	-38.08	-38.31	-37.84	-37.84	-37.84	-37.84	0.22		
IQ Gain Imbalance [dB]									
IQ Quadrature Error [°]									
Freq Error [Hz]	-1.02	-1.70	8.43	8.43	8.43	8.43	2.23		
Timing Error [Ts]	0.57	4.32	8.91	8.91	8.91	8.91	3.97		
OBW [MHz]	0.71	0.71	0.72	0.72	0.72	0.72	0.01		
Current Average Min Max StdDev									
TX Power [dBm]	23.23	23.21	23.19	23.23	23.23	23.23	0.02		
Peak Power [dBm]	29.30	29.11	28.84	29.37	29.37	29.37	0.20		
RB Power [dBm]	17.19	17.20	17.19	17.21	17.21	17.21	0.00		
Statistic Count	20 / 20	0.00 %	Detected Modulation	QPSK	Detected Channel Type	PUSCH	View Filter	Throughput	100.0 %
PS: Attached	RRC State: Connected								

3MHz CH27645 1RB#14

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 746.5 MHz Ref. Level: 41.00 dBm BW: 3.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme
EVM RMS [%] /h	2.47	2.47	2.08	2.09	2.54	2.54	0.41	0.38
EVM Peak [%] /h	9.06	9.09	6.78	6.80	9.73	9.75	2.11	2.12
EVM DMRS [%] /h	1.45	1.36	1.30	1.25	1.60	1.56	0.20	0.16
MErr RMS [%] /h	2.25	2.25	1.88	1.90	2.34	2.35	0.40	0.37
MErr Peak [%] /h	-9.03	-9.05	6.70	6.72	-9.49	-9.49	2.13	2.13
MErr DMRS [%] /h	0.93	0.85	0.91	0.85	1.10	1.04	0.14	0.10
PhErr RMS [%] /h	0.59	0.59	0.51	0.50	0.64	0.63	0.07	0.07
PhErr Peak [%] /h	1.47	1.47	1.35	1.35	-1.94	-1.92	0.24	0.23
PhErr DMRS [%] /h	0.64	0.61	0.54	0.53	0.71	0.70	0.09	0.08
IQ Offset [dBc]	-37.15	-37.22	-36.73	-36.73	-36.73	-36.73	0.22	
IQ Gain Imbalance [dB]								
IQ Quadrature Error [°]								
Freq Error [Hz]	0.96	-2.07	-18.18	-18.18	-18.18	-18.18	3.99	
Timing Error [Ts]	1.71	1.79	2.37	2.37	2.37	2.37	0.22	
OBW [MHz]	0.23	0.23	0.24	0.24	0.24	0.24	0.01	
	Current	Average	Min	Max	Max	Max	StdDev	
TX Power [dBm]	22.36	22.37	22.33	22.43	22.43	22.43	0.02	
Peak Power [dBm]	26.28	26.27	26.04	26.52	26.52	26.52	0.11	
RB Power [dBm]	22.36	22.40	22.35	22.48	22.48	22.48	0.03	

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

5MHz CH27235 1RB#0

CMW 500 V3.7.120 - LTE Measurement - V3.7.10 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq: 705.5 MHz Ref Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot 0 / All

TX Measurement

	Current	Average	Latency	Success
EVM RMS [%] /h	2.25	3.14	1.99	2.93
EVM Peak [%] /h	11.25	11.35	8.26	9.98
EVM DMRS [%] /h	1.68	2.55	1.53	2.38
MErr RMS [%] /h	1.91	2.78	1.69	2.57
MErr Peak [%] /h	-10.81	-10.96	7.98	9.69
PhErr DMRS [%] /h	1.42	2.05	1.25	1.73
PhErr RMS [%] /h	0.68	0.85	0.61	0.82
PhErr Peak [%] /h	-1.90	-2.91	1.75	3.11
PhErr DMRS [%] /h	0.51	0.87	0.51	0.93
IQ Offset [dBc]	-37.81	-37.82	-37.82	-37.30
IQ Gain Imbalance [dB]	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---
Freq Error [Hz]	-3.09	-4.68	-8.81	1.49
Timing Error [Ts]	0.96	0.92	1.44	0.21
OBW [MHz]	0.26	0.24	0.26	0.01
	Current	Average	Min	Max
TX Power [dBm]	23.82	23.81	23.76	23.83
Peak Power [dBm]	29.02	28.73	28.19	29.04
RB Power [dBm]	23.81	23.80	23.76	23.83

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached RRC State: Connected

5MHz CH27235 8RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.0 - TX Measurement

Multi Evaluation

PRACH

SRS

FDD

Freq: 705.5 MHz

Ref Level: 41.00 dBm

BW: 5.0 MHz

CP: Normal

Meas Substr/Slot: 0 / 1

TX Measurement

	Current	Average	Min	Max	StdDev			
EVM RMS [%] /h	1.42	4.34	1.41	4.52	1.51	4.86	0.04	0.26
EVM Peak [%] /h	6.53	50.03	6.04	61.34	8.43	75.09	1.17	12.12
EVM DMRS [%] /h	1.47	7.35	1.49	6.11	1.60	7.35	0.05	1.16
MErr RMS [%] /h	1.05	3.23	1.02	3.47	1.11	3.82	0.04	0.28
MErr Peak [%] /h	-6.13	-44.29	5.77	58.53	-8.22	-74.94	1.16	14.71
MErr DMRS [%] /h	0.80	5.07	0.85	4.18	0.97	5.07	0.06	0.84
PhErr RMS [%] /h	0.55	1.81	0.56	1.81	0.59	1.89	0.02	0.04
PhErr Peak [%] /h	-1.55	22.10	1.88	22.73	2.38	-24.11	0.18	0.71
PhErr DMRS [%] /h	0.71	3.05	0.70	2.55	0.75	3.06	0.02	0.47
IQ Offset [dBc]	-38.49	-	-38.36	-	-37.89	-	-	0.22
IQ Gain Imbalance [dB]	-	-	-	-	-	-	-	-
IQ Quadrature Error [°]	-	-	-	-	-	-	-	-
Freq Error [Hz]	1.00	-	-0.79	-	-7.00	-	-	1.93
Timing Error [Ts]	-0.52	-	-0.34	-	-0.65	-	-	0.16
OBW [MHz]	1.41	-	1.40	-	1.41	-	-	0.01
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	23.96	23.95	23.91	23.99	0.03			
Peak Power [dBm]	29.27	29.32	29.20	29.46	0.06			
RB Power [dBm]	14.95	14.94	14.89	14.98	0.03			

Statistic Count

20 / 20

Out of Tolerance

0.00 %

Detected Modulation

QPSK

Detected Channel Type

PUSCH

View Filter Throughput

100.0 %

PS:

Attached State: Connected

5MHz CH27435 1RB#0

CMW 500 V3.7.120 - LTE Measurement - V3.7.10 - TX Measurement

Multi Analysis: PRACH, SRS

FDD: Freq: 725.5 MHz, Ref Level: 41.00 dBm, BW: 5.0 MHz, CP: Normal, Meas Subtr/Slot: 0, All

TX Measurement

	Current	Average	Latency	Success				
EVM RMS [%] /h	1.44	2.67	1.41	2.52	1.54	2.74	0.05	0.15
EVM Peak [%] /h	2.66	11.57	2.96	10.55	3.98	12.31	0.36	1.24
EVM DMRS [%] /h	1.57	2.50	1.44	2.38	1.68	2.65	0.14	0.17
MErr RMS [%] /h	1.01	2.28	1.01	2.10	1.13	2.32	0.05	0.18
MErr Peak [%] /h	2.39	-11.33	2.51	9.83	-1.97	-11.89	0.46	1.58
MDMS RMS [%] /h	1.29	2.03	1.16	1.79	1.41	2.20	0.12	0.30
PhErr RMS [*] /h	0.59	0.81	0.56	0.81	0.60	0.85	0.03	0.02
PhErr Peak [*] /h	-1.30	-3.21	1.45	3.45	-1.77	-4.02	0.16	0.20
PhErr DMRS [*] /h	0.51	0.83	0.49	0.90	0.61	1.08	0.07	0.07
IQ Offset [dBc]	-38.94	-38.82	-38.41	-38.41	-38.41	-38.41	-38.41	0.22
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---
Freq Error [Hz]	-4.59	-8.57	-12.43	-12.43	-12.43	-12.43	-12.43	2.09
Timing Error [Ts]	0.49	2.71	8.45	8.45	8.45	8.45	8.45	2.56
OBW [MHz]	0.26	0.24	0.26	0.26	0.26	0.26	0.26	0.01
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	23.33	23.34	23.33	23.39	0.02			
Peak Power [dBm]	29.83	29.31	28.73	29.89	0.49			
RB Power [dBm]	23.32	23.34	23.32	23.40	0.02			

Statist. Count: 20 / 20, Out of Tolerance: 0.00 %, Detected Modulation: QPSK, Detected Channel Type: PUSCH, View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

5MHz CH27435 8RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.0 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq: 725.5 MHz Ref Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subtr/Slot: 0 / Multi

TX Measurement

	Current		Average		Lastest		StdDev	
EVM RMS [%] /h	1.51	3.86	1.50	3.88	1.54	3.95	0.02	0.03
EVM Peak [%] /h	3.18	44.27	3.72	46.14	4.91	49.42	0.35	2.08
EVM DMRS [%] /h	1.62	6.39	1.62	6.24	1.70	6.60	0.04	0.21
MErr RMS [%] /h	1.08	3.37	1.08	3.18	1.11	3.43	0.01	0.22
MErr Peak [%] /h	2.70	-42.72	3.02	44.86	3.53	-48.47	0.20	2.35
MErr DMRS [%] /h	0.65	4.42	0.72	4.42	0.85	4.64	0.04	0.09
PhErr RMS [*] /h	0.60	1.14	0.60	1.34	0.63	1.55	0.01	0.19
PhErr Peak [*] /h	-1.69	-14.37	1.98	17.29	2.78	-20.75	0.23	2.90
PhErr DMRS [*] /h	0.85	2.65	0.83	2.52	0.88	2.73	0.02	0.13
IQ Offset [dBc]	-38.58		-38.80		-38.19		0.25	
IQ Gain Imbalance [dB]	---		---		---		---	
IQ Quadrature Error [%]	---		---		---		---	
Freq Error [Hz]	-2.25		-2.43		6.32		2.69	
Timing Error [Ts]	-1.26		-1.38		-1.70		0.15	
OBW [MHz]	1.41		1.41		1.41		0.00	
	Current		Average		Min	Max		StdDev
TX Power [dBm]	23.22		23.22		23.21	23.28		0.01
Peak Power [dBm]	29.13		29.39		29.10	29.75		0.26
RB Power [dBm]	14.20		14.20		14.20	14.26		0.01

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

5MHz CH27635 1RB#24

CMW 500 V 3.7.120 - LTE Measurement - V3.7.0 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq: 745.5 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Min	Max	StdDev
EVM RMS [%] I/h	2.39	3.35	2.98	3.84	3.68
EVM Peak [%] I/h	8.45	13.42	12.49	14.79	18.03
EVM DMRS [%] I/h	1.25	1.21	1.47	2.38	1.87
MErr RMS [%] I/h	2.23	3.05	2.68	3.44	3.22
MErr Peak [%] I/h	-8.28	-13.31	11.20	13.63	-15.71
MErr DMRS [%] I/h	1.00	0.99	1.16	1.80	1.48
PhErr RMS [°] I/h	0.51	0.80	0.77	1.00	1.13
PhErr Peak [°] I/h	-1.35	-3.38	3.32	4.13	-6.17
PhErr DMRS [°] I/h	0.43	0.40	0.52	0.90	0.69
IQ Offset [dBc]	-37.73	-37.53	-36.90	-36.90	-36.90
IQ Gain Imbalance [dB]	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---
Freq Error [Hz]	-1.73	-4.43	-9.98	-9.98	-9.98
Timing Error [Ts]	-2.01	-0.34	-2.35	-2.35	-2.35
OBW [MHz]	0.26	0.29	0.35	0.35	0.35
TX Power [dBm]	22.31	22.31	22.29	22.36	0.02
Peak Power [dBm]	26.43	26.73	26.31	27.09	0.27
RB Power [dBm]	22.32	22.31	22.28	22.37	0.02

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

5MHz CH27635 8RB#17

The screenshot shows the 'Multi Evaluation' window with the 'PRACH' tab selected. The main title is 'CMW 500 V 3.7.120 - LTE Measurement - V3.7.0 - TX Measurement'. Below the title bar, there are tabs for 'Multi Evaluation', 'PRACH', and 'SRS'. The measurement configuration at the top indicates: FDD, Freq: 745.5 MHz, Ref. Level: 3.10 dBm, BW: 5.0 MHz, CP: Normal, Meas Subfr./Slot: 0 / All.

TX Measurement	Current		Average		LastOne		StdDev
EVM RMS [%] I/h	0.75	4.44	0.79	4.74	0.84	5.17	0.35
EVM Peak [%] I/h	2.20	61.15	2.35	62.39	2.84	65.65	2.26
EVM RMS [%] Q/h	0.86	2.81	0.83	2.54	0.92	2.97	0.05
EVM Peak [%] Q/h	0.45	2.67	0.45	3.34	0.49	4.02	0.02
MER RMS [%] I/h	-1.44	-39.99	1.49	47.39	-2.18	-56.92	0.18
MER Peak [%] I/h	0.56	2.01	0.54	1.84	0.66	2.14	0.05
MER RMS [%] Q/h	0.34	2.27	0.37	2.27	0.41	2.35	0.02
MER Peak [%] Q/h	1.17	-37.67	1.30	32.97	-1.55	-37.67	0.15
PhErr DMRS [%] I/h	0.37	1.13	0.36	1.01	0.42	1.20	0.03
IQ Offset [dBc]	-36.36		-35.82		-34.82		0.56
IQ Gain Imbalance [dB]	---		---		---		---
IQ Quadrature Error [°]	---		---		---		---
Freq Error [Hz]	0.99		-0.41		-5.51		1.97
Timing Error [Ts]	1.04		1.20		1.49		0.18
OBW [MHz]	1.41		1.40		1.41		0.01
	Current		Average		Min	Max	StdDev
TX Power [dBm]	23.33		23.34		23.33	23.39	0.02
Peak Power [dBm]	29.83		29.31		28.73	29.89	0.49
RB Power [dBm]	23.32		23.34		23.32	23.40	0.02

At the bottom, there is a status bar showing 'Statistic Count: 20 / 20', 'Out of Tolerance: 0.00 %', 'Detected Modulation: QPSK', 'Detected Channel Type: PUSCH', and 'View Filter Throughput: 100.0 %'. There are also icons for PS, Attached RRC State, and Connected state.

20MHz CH27310 1RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation PRACH SRS										
FDD Freq: 713.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All										
TX Measurement										
	Current	Average	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme
EVM RMS [%] /h	1.51	1.53	1.44	1.45	1.61	1.63	0.10	0.10		
EVM Peak [%] /h	3.13	3.03	2.99	2.99	3.91	3.90	0.30	0.31		
EVM DMRS [%] /h	1.60	1.56	1.60	1.58	1.78	1.79	0.10	0.11		
MErr RMS [%] /h	0.91	0.92	0.98	0.98	1.12	1.12	0.06	0.06		
MErr Peak [%] /h	3.04	2.94	2.71	2.63	-3.79	-3.80	0.38	0.40		
MErr DMRS [%] /h	1.24	1.18	1.08	1.06	1.28	1.31	0.10	0.10		
PhErr RMS [%] /h	0.69	0.70	0.61	0.61	0.70	0.72	0.07	0.08		
PhErr Peak [%] /h	-1.63	-1.59	1.44	1.45	-1.73	1.83	0.16	0.17		
PhErr DMRS [%] /h	0.58	0.58	0.67	0.67	0.82	0.83	0.09	0.09		
IQ Offset [dBc]	-37.96				-37.74				0.24	
IQ Gain Imbalance [dB]										
IQ Quadrature Error [°]										
Freq Error [Hz]	-2.03				-2.62				2.42	
Timing Error [Ts]	-3.84				-3.84				1.78	
OBW [MHz]	0.38				0.43				0.05	
Current Average Min Max StdDev										
TX Power [dBm]	23.80	23.71	23.55	23.87					0.13	
Peak Power [dBm]	28.69	28.57	28.39	28.72					0.09	
RB Power [dBm]	23.63	23.66	23.63	23.69					0.02	
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput										
20 / 20 0.00 % QPSK PUSCH 100.0 %										
PS: Attached RRC State: Connected										

20MHz CH27310 18RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation PRACH SRS										
FDD Freq: 713.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All										
TX Measurement										
	Current	Average	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme
EVM RMS [%] /h	1.49	1.48	1.46	1.46	1.50	1.49	0.02	0.02		
EVM Peak [%] /h	4.81	4.81	5.21	5.22	6.51	6.52	0.55	0.56		
EVM DMRS [%] /h	1.51	1.52	1.50	1.50	1.59	1.56	0.04	0.04		
MErr RMS [%] /h	1.01	1.01	1.00	1.00	1.02	1.01	0.01	0.01		
MErr Peak [%] /h	-4.25	-4.25	4.72	4.73	-5.78	-5.80	0.38	0.38		
MErr DMRS [%] /h	1.15	1.14	1.11	1.12	1.18	1.18	0.03	0.03		
PhErr RMS [%] /h	0.63	0.62	0.61	0.61	0.64	0.64	0.01	0.01		
PhErr Peak [%] /h	2.34	2.35	2.23	2.23	2.67	2.70	0.22	0.23		
PhErr DMRS [%] /h	0.56	0.58	0.57	0.57	0.61	0.62	0.02	0.02		
IQ Offset [dBc]	-37.63				-37.74				0.27	
IQ Gain Imbalance [dB]										
IQ Quadrature Error [°]										
Freq Error [Hz]	-0.94				-4.73				3.15	
Timing Error [Ts]	-4.09				-4.17				1.67	
OBW [MHz]	3.18				3.18				0.00	
Current Average Min Max StdDev										
TX Power [dBm]	24.13	24.14	24.11	24.16					0.02	
Peak Power [dBm]	29.61	29.64	29.51	29.76					0.07	
RB Power [dBm]	11.59	11.59	11.56	11.61					0.01	
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput										
20 / 20 0.00 % QPSK PUSCH 100.0 %										
PS: Attached RRC State: Connected										

20MHz CH27435 1RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation PRACH SRS										
FDD Freq: 725.5 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All										
TX Measurement										
	Current	Average	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme
EVM RMS [%] /h	1.62	1.61	1.60	1.60	1.64	1.64	0.02	0.02		
EVM Peak [%] /h	3.41	3.40	3.16	3.16	3.51	3.49	0.20	0.20		
EVM DMRS [%] /h	1.61	1.56	1.63	1.63	1.74	1.77	0.06	0.05		
MErr RMS [%] /h	1.25	1.25	1.23	1.23	1.30	1.31	0.04	0.05		
MErr Peak [%] /h	-3.13	-3.15	2.95	2.94	-3.45	-3.45	0.29	0.29		
MErr DMRS [%] /h	1.22	1.17	1.17	1.17	1.49	1.51	0.17	0.15		
PhErr RMS [%] /h	0.59	0.59	0.59	0.59	0.64	0.65	0.04	0.04		
PhErr Peak [%] /h	-1.60	-1.58	1.42	1.43	1.66	1.67	0.12	0.13		
PhErr DMRS [%] /h	0.61	0.59	0.65	0.65	0.79	0.79	0.10	0.10		
IQ Offset [dBc]	-37.52				-37.69				0.23	
IQ Gain Imbalance [dB]										
IQ Quadrature Error [°]										
Freq Error [Hz]	9.03				5.34				2.39	
Timing Error [Ts]	-3.60				-1.72				1.82	
OBW [MHz]	0.48				0.33				0.15	
Current Average Min Max StdDev										
TX Power [dBm]	22.51	22.41	22.32	22.51					0.06	
Peak Power [dBm]	28.56	28.15	27.72	28.58					0.36	
RB Power [dBm]	22.49	22.45	22.41	22.49					0.02	
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput										
20 / 20 0.00 % QPSK PUSCH 100.0 %										
PS: Attached RRC State: Connected										

20MHz CH27435 18RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation PRACH SRS										
FDD Freq: 725.5 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All										
TX Measurement										
	Current	Average	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme
EVM RMS [%] /h	1.59	1.59	1.62	1.62	1.65	1.65	0.01	0.01		
EVM Peak [%] /h	3.82	3.81	4.22	4.19	4.56	4.56	0.20	0.19		
EVM DMRS [%] /h	1.48	1.48	1.48	1.48	1.54	1.54	0.03	0.04		
MErr RMS [%] /h	1.25	1.24	1.26	1.26	1.28	1.28	0.01	0.01		
MErr Peak [%] /h	3.82	3.80	4.04	4.02	4.40	4.37	0.19	0.17		
MErr DMRS [%] /h	1.06	1.06	1.07	1.06	1.11	1.12	0.02	0.02		
PhErr RMS [%] /h	0.56	0.57	0.59	0.59	0.61	0.60	0.01	0.01		
PhErr Peak [%] /h	1.83	1.84	2.05	2.04	2.51	2.51	0.18	0.19		
PhErr DMRS [%] /h	0.59	0.59	0.59	0.59	0.63	0.63	0.02	0.02		
IQ Offset [dBc]	-37.91				-37.91				0.19	
IQ Gain Imbalance [dB]										
IQ Quadrature Error [°]										
Freq Error [Hz]	-2.83				-2.42				1.54	
Timing Error [Ts]	-4.60				-4.18				0.78	
OBW [MHz]	3.18				3.17				0.01	
Current Average Min Max StdDev										
TX Power [dBm]	22.92	22.89	22.86	22.93					0.03	
Peak Power [dBm]	29.90	29.72	29.41	29.96					0.19	
RB Power [dBm]	10.37	10.34	10.31	10.37					0.03	
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput										
20 / 20 0.00 % QPSK PUSCH 100.0 %										
PS: Attached RRC State: Connected										

20MHz CH27560 1RB#99

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

FDD Freq: 738.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	LAUme	LAUme	LAUme	LAUme	LAUme	LAUme
EVM RMS [%] /h	1.47	1.53	1.79	1.81	2.09	2.08	0.24	0.22
EVM Peak [%] /h	4.76	4.76	6.92	6.92	8.88	8.90	1.44	1.44
EVM DMRS [%] /h	1.11	1.12	1.27	1.29	1.55	1.60	0.16	0.18
MErr RMS [%] /h	1.23	1.29	1.57	1.59	1.85	1.85	0.24	0.22
MErr Peak [%] /h	-4.75	-4.75	6.90	6.89	-8.87	-8.89	1.45	1.45
MErr DMRS [%] /h	0.85	0.82	1.01	1.03	1.21	1.27	0.15	0.18
PhErr RMS [%] /h	0.46	0.47	0.50	0.50	0.56	0.55	0.04	0.04
PhErr Peak [%] /h	-1.20	-1.19	1.38	1.37	-2.03	-2.02	0.27	0.27
PhErr DMRS [%] /h	0.40	0.44	0.44	0.44	0.56	0.57	0.06	0.06
IQ Offset [dBc]	-36.62				-36.55		-36.10	0.20
IQ Gain Imbalance [dB]	---				---		---	---
IQ Quadrature Error [°]	---				---		---	---
Freq Error [Hz]		1.02			-2.90		-9.38	2.59
Timing Error [Ts]		-2.71			-3.16		-5.42	1.16
OBW [MHz]		0.52			0.35		0.52	0.17
	Current	Average	Min	Max				StdDev
TX Power [dBm]	22.66	22.60	22.50	22.71				0.08
Peak Power [dBm]	27.10	26.98	26.82	27.11				0.08
RB Power [dBm]	22.59	22.57	22.53	22.64				0.03

Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

Band 38 (2600MHz) TDD									
Bandwidth	Channel	Modulation	RB No.	RB Offset	Max Power (Conducted)	Limit (dBm)	Antenna Gain (dBi)	Max Power (ERP)	Limit (dBm)
5MHz	37775	QPSK	1	#0	22.07	20.3~25.7	3.21	23.13	33
			8	#0	22.12	20.3~25.7	3.21	23.18	33
	38000	QPSK	1	#0	23.16	20.3~25.7	3.21	24.22	33
			8	#0	23.17	20.3~25.7	3.21	24.23	33
	38225	QPSK	1	#24	22.83	20.3~25.7	3.21	23.89	33
			8	#17	22.77	20.3~25.7	3.21	23.83	33
20MHz	37850	QPSK	1	#0	21.77	20.3~25.7	3.21	22.83	33
			18	#0	22.10	20.3~25.7	3.21	23.16	33
	38000	QPSK	1	#0	22.77	20.3~25.7	3.21	23.83	33
			18	#0	23.09	20.3~25.7	3.21	24.15	33
	38150	QPSK	1	#99	22.41	20.3~25.7	3.21	23.47	33
			18	#82	22.82	20.3~25.7	3.21	23.88	33

Note :

1. 經上表確認,最大傳導輸出功率不超過原行動通訊模組±2dB.
2. ERP= Conducted Power + Antenna Gain(dBi)-2.15

5MHz CH37775 1RB#0

CMW 500 V3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation

PRACH

SRS

TDD Freq: 2572.5 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subtr/Slot: 0 / All

TX Measurement

	Current	Average	Extreme	StdDev				
EVM RMS [%] /h	2.11	2.90	1.96	2.67	2.22	3.05	0.16	0.18
EVM Peak [%] /h	5.75	9.94	5.14	9.68	7.20	11.36	0.80	0.75
EVM DMRS [%] /h	1.49	3.08	1.73	3.13	2.44	3.60	0.26	0.22
MErr RMS [%] /h	1.43	2.10	1.27	1.94	1.48	2.13	0.15	0.13
MErr Peak [%] /h	-4.57	-9.77	4.39	8.73	-5.56	-10.07	0.77	0.73
MErr DMRS [%] /h	1.13	2.03	1.25	2.31	1.94	2.98	0.25	0.37
PhErr RMS [%] /h	0.89	1.16	0.86	1.06	0.96	1.28	0.07	0.09
PhErr Peak [%] /h	-3.04	4.45	2.54	4.20	-3.40	-5.79	0.44	0.77
PhErr DMRS [%] /h	0.55	1.32	0.69	1.20	0.96	1.50	0.12	0.13
IQ Offset [dBc]	-39.17		-39.26		-38.86		0.23	
IQ Gain Imbalance [dB]	---		---		---			
IQ Quadrature Error [°]	---		---		---			
Freq Error [Hz]	-1.83		-4.05		-17.61		5.82	
Timing Error [Ts]	-8.04		-8.14		-8.64		0.27	
OBW [MHz]	0.23		0.24		0.27		0.02	
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.02	22.03	21.97	22.07	0.03			
Peak Power [dBm]	27.03	26.79	26.46	27.04	0.24			
RB Power [dBm]	22.00	22.01	21.95	22.05	0.03			

Statistic Count

Out of Tolerance

Detected Modulation

Detected Channel Type

View Filter

Throughput

20 / 20

0.00 %

QPSK

PUSCH

100.0 %

PS:

Attached RRC State: Connected

5MHz CH37775 8RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

TDD Freq 2572.5 MHz Ref Level: 41.00 dBm BW 5.0 MHz CP Normal Meas Subtr/Slot 0 / All

TX Measurement

	Current	Average	Extreme	StdDev				
EVM RMS [%] /h	2.32	4.64	2.32	4.99	2.50	5.42	0.07	0.33
EVM Peak [%] /h	7.37	59.43	7.59	60.92	9.23	63.39	0.66	1.16
EVM DMRS [%] /h	2.30	2.62	2.15	2.66	2.34	2.99	0.11	0.15
MErr RMS [%] /h	1.31	2.99	1.26	3.36	1.35	3.78	0.05	0.37
MErr Peak [%] /h	-5.09	-54.41	5.43	50.01	-7.31	-55.44	0.58	4.85
MErr DMRS [%] /h	1.00	1.40	1.31	1.73	1.54	2.03	0.13	0.17
PhErr RMS [%] /h	1.10	2.23	1.12	2.39	1.24	2.62	0.05	0.14
PhErr Peak [%] /h	-3.97	-29.08	4.10	30.77	5.28	-35.31	0.40	2.43
PhErr DMRS [%] /h	1.18	1.27	0.98	1.16	1.18	1.32	0.08	0.08
IQ Offset [dBc]	-39.83		-39.09		-38.24		0.45	
IQ Gain Imbalance [dB]	---		---		---			
IQ Quadrature Error [°]	---		---		---			
Freq Error [Hz]	-21.00		0.34		-21.00		8.60	
Timing Error [Ts]	-6.05		-6.06		-6.59		0.23	
OBW [MHz]	1.41		1.42		1.42		0.01	
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.06	22.07	22.06	22.12	0.01			
Peak Power [dBm]	27.41	27.51	27.35	27.64	0.08			
RB Power [dBm]	13.03	13.04	13.03	13.09	0.01			

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 20

0.00 %

QPSK

PUSCH

100.0 %

PS: Attached RRC State: Connected

5MHz CH38000 1RB#0

CMW 500 V3.7.120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation PRACH SRS										
TDD	Freq	2595.0 MHz	Ref. Level	41.00 dBm	BW	5.0 MHz	CP	Normal	Meas Subtr/Slot	0 / All
TX Measurement										
		Current	Average	Extreme	StdDev					
EVM RMS [%] /h		2.73	3.30	2.60	3.20	2.97	3.68	0.29	0.32	
EVM Peak [%] /h		8.26	10.76	7.54	10.74	9.57	12.40	1.09	0.69	
EVM DMRS [%] /h		2.42	3.04	2.19	3.31	2.79	3.73	0.32	0.23	
MErr RMS [%] /h		2.17	2.67	2.00	2.51	2.34	2.88	0.29	0.28	
MErr Peak [%] /h		-8.19	-9.68	7.28	9.10	-9.25	-11.80	1.11	1.38	
MErr DMRS [%] /h		1.98	2.24	1.62	2.45	2.16	2.91	0.35	0.29	
PhErr RMS [%] /h		0.95	1.12	0.95	1.15	1.10	1.36	0.07	0.11	
PhErr Peak [%] /h		-2.53	3.17	2.88	4.23	-3.63	5.71	0.38	0.73	
PhErr DMRS [%] /h		0.80	1.17	0.84	1.27	1.12	1.54	0.14	0.13	
IQ Offset [dBc]		-38.35		-38.68		-38.22		0.24	0.22	
IQ Gain Imbalance [dB]		---		---		---			---	
IQ Quadrature Error [°]		---		---		---			---	
Freq Error [Hz]		-12.37		-6.77		-17.71		7.01		
Timing Error [Ts]		-4.45		-3.91		-4.97		0.39		
OBW [MHz]		0.23		0.24		0.27		0.02		
		Current	Average	Min	Max	StdDev				
TX Power [dBm]		23.06	23.09	23.01	23.16	0.05				
Peak Power [dBm]		27.43	27.33	27.11	27.47	0.10				
RB Power [dBm]		23.04	23.07	22.99	23.15	0.06				
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput										
20 / 20 0.00 % QPSK PUSCH 100.0 %										
PS: Attached RRC State: Connected										

5MHz CH38000 8RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation PRACH SRS										
TDD	Freq	2595.0 MHz	Ref. Level	41.00 dBm	BW	5.0 MHz	CP	Normal	Meas Subtr/Slot	0 / All
TX Measurement										
		Current	Average	Extreme	StdDev					
EVM RMS [%] /h		2.89	3.99	2.81	4.88	3.04	5.82	0.17	0.89	
EVM Peak [%] /h		16.16	33.11	12.12	46.09	17.96	61.61	3.39	13.29	
EVM DMRS [%] /h		2.41	2.58	2.42	5.34	2.79	7.41	0.17	2.36	
MErr RMS [%] /h		1.83	2.93	1.75	3.82	1.89	4.64	0.10	0.82	
MErr Peak [%] /h		-9.47	-33.11	8.59	43.56	-9.81	-56.46	0.70	11.05	
MErr DMRS [%] /h		1.31	1.39	1.42	3.50	1.67	5.03	0.14	1.69	
PhErr RMS [%] /h		1.28	1.59	1.26	1.97	1.39	2.44	0.08	0.41	
PhErr Peak [%] /h		-9.07	16.01	6.42	20.69	-10.19	30.25	2.07	5.91	
PhErr DMRS [%] /h		1.16	1.24	1.13	2.32	1.31	3.18	0.10	0.97	
IQ Offset [dBc]		-38.64		-39.23		-38.64		0.32		
IQ Gain Imbalance [dB]		---		---		---				
IQ Quadrature Error [°]		---		---		---				
Freq Error [Hz]		5.06		9.96		23.33		5.74		
Timing Error [Ts]		-4.02		-1.99		-4.19		1.84		
OBW [MHz]		1.39		1.40		1.41		0.01		
		Current	Average	Min	Max	StdDev				
TX Power [dBm]		23.17	23.13	23.13	23.17	0.02				
Peak Power [dBm]		27.97	27.92	27.75	28.03	0.07				
RB Power [dBm]		14.13	14.10	14.08	14.15	0.02				
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput										
20 / 20 0.00 % QPSK PUSCH 100.0 %										
PS: Attached RRC State: Connected										

20MHz CH38225 1RB#24

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

TDD Freq: 2617.5 MHz Ref Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subtr/Slot: 0 / All

TX Measurement

	Current	Average	Extreme	StdDev
EVM RMS [%] /h	2.42	2.93	2.18	2.90
EVM Peak [%] /h	6.52	9.71	5.66	10.81
EVM DMRS [%] /h	1.98	1.83	1.99	2.50
MErr RMS [%] /h	1.94	2.48	1.69	2.43
MErr Peak [%] /h	-6.52	-9.65	5.32	10.67
MErr DMRS [%] /h	1.70	1.59	1.43	1.93
PhErr RMS [%] /h	0.83	0.90	0.79	0.91
PhErr Peak [%] /h	-2.14	-2.35	2.20	2.86
PhErr DMRS [%] /h	0.58	0.52	0.80	0.91
IQ Offset [dBc]	-38.45	-38.71	-38.33	0.25
IQ Gain Imbalance [dB]				
IQ Quadrature Error [°]				
Freq Error [Hz]	14.38	4.09	18.71	6.85
Timing Error [Ts]	-7.93	-8.08	-8.70	0.34
OBW [MHz]	0.23	0.25	0.27	0.02
	Current	Average	Min	Max
TX Power [dBm]	22.79	22.76	22.69	22.83
Peak Power [dBm]	27.49	27.25	26.88	27.60
RB Power [dBm]	22.76	22.74	22.66	22.81

Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached RRC State: Connected

20MHz CH38225 8RB#17

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20MHz CH37850 1RB#0

CMW 500 V3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation

PRACH

SRS

TDD

Freq: 2580.0 MHz

Ref. Level: 41.00 dBm

BW: 20.0 MHz

CP: Normal

Meas Subtr/Slot:

0 / All

TX Measurement

	Current	Average	Extreme	StdDev				
EVM RMS [%] /h	1.81	1.80	1.88	1.83	2.17	2.09	0.11	0.10
EVM Peak [%] /h	5.24	5.08	5.30	4.98	6.16	6.05	0.50	0.62
EVM DMRS [%] /h	1.38	1.35	1.55	1.57	2.06	2.11	0.25	0.25
MErr RMS [%] /h	1.08	1.05	1.17	1.14	1.40	1.36	0.10	0.08
MErr Peak [%] /h	-2.96	-2.91	3.64	3.26	-5.05	-4.25	0.51	0.49
MErr DMRS [%] /h	0.98	0.99	1.06	1.06	1.65	1.55	0.23	0.20
PhErr RMS [%] /h	0.83	0.84	0.84	0.83	0.96	0.94	0.06	0.06
PhErr Peak [%] /h	-2.52	-2.45	2.72	2.53	-3.29	-3.39	0.31	0.35
PhErr DMRS [%] /h	0.56	0.53	0.65	0.66	0.93	0.98	0.13	0.14
IQ Offset [dBc]	-37.57	-37.60	-37.80	-37.80	-37.42	-37.42	0.19	0.19
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---
Freq Error [Hz]	-9.47	-10.14	-27.14	-27.14	-27.14	-27.14	6.69	6.69
Timing Error [Ts]	0.18	-0.67	-2.77	-2.77	-2.77	-2.77	1.84	1.84
OBW [MHz]	0.28	0.36	0.43	0.43	0.43	0.43	0.07	0.07
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	21.70	21.71	21.66	21.77	0.03			
Peak Power [dBm]	26.83	26.81	26.74	26.91	0.04			
RB Power [dBm]	21.71	21.70	21.64	21.77	0.03			

Statistic Count

20 / 20

Out of Tolerance

0.00 %

Detected Modulation

QPSK

Detected Channel Type

PUSCH

View Filter

Throughput

100.0 %

PS:

Attached

RRC State:

Connected

20MHz CH37850 18RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation

PRACH

SRS

TDD

Freq: 2580.0 MHz

Ref. Level: 41.00 dBm

BW: 20.0 MHz

CP: Normal

Meas Subtr/Slot

0 / All

TX Measurement

	Current	Average	Extreme	StdDev				
EVM RMS [%] /h	2.21	2.22	2.61	2.31	3.10	2.48	0.30	0.08
EVM Peak [%] /h	7.53	7.52	22.01	8.28	45.07	9.75	14.76	0.70
EVM DMRS [%] /h	2.04	2.02	2.09	2.10	2.38	2.33	0.16	0.14
MErr RMS [%] /h	1.16	1.16	1.49	1.15	1.96	1.23	0.30	0.04
MErr Peak [%] /h	-6.57	-6.56	20.86	5.98	-44.99	-7.46	15.29	0.77
MErr DMRS [%] /h	1.51	1.54	1.50	1.50	1.71	1.74	0.13	0.13
PhErr RMS [%] /h	1.08	1.08	1.23	1.15	1.38	1.25	0.10	0.05
PhErr Peak [%] /h	-4.32	-4.31	8.05	4.50	-13.85	5.48	3.88	0.47
PhErr DMRS [%] /h	0.78	0.74	0.83	0.84	0.97	0.96	0.08	0.06
IQ Offset [dBc]	-37.34	-37.61	-37.25	-37.25	-37.25	-37.25	0.20	0.20
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---
Freq Error [Hz]	-13.16	-15.92	-34.69	-34.69	-34.69	-34.69	8.54	8.54
Timing Error [Ts]	1.05	0.48	1.43	1.43	1.43	1.43	1.02	1.02
OBW [MHz]	3.19	3.19	3.19	3.19	3.19	3.19	0.01	0.01
TX Power [dBm]	22.04	22.04	22.00	22.10	22.10	22.10	0.03	0.03
Peak Power [dBm]	27.89	27.79	27.58	28.05	28.05	28.05	0.16	0.16
RB Power [dBm]	9.47	9.48	9.44	9.53	9.53	9.53	0.03	0.03

Statistic Count

20 / 20

Out of Tolerance

0.00 %

Detected Modulation

QPSK

Detected Channel Type

PUSCH

View Filter

Throughput

100.0 %

PS:

Attached

RRC State:

Connected

20MHz CH38000 1RB#0

CMW 500 V3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
TDD	Freq: 2595.0 MHz	Ref. Level: 41.00 dBm	BW: 20.0 MHz	CP: Normal	Meas Subtr/Slot	0 / All			
TX Measurement									
	Current	Average	Extreme	StdDev					
EVM RMS [%] /h	1.63	1.63	2.32	2.02	2.95	2.41	0.48	0.23	
EVM Peak [%] /h	4.14	4.06	7.73	4.83	12.50	5.74	3.32	0.63	
EVM DMRS [%] /h	1.50	1.50	1.60	1.59	1.94	1.92	0.20	0.18	
MErr RMS [%] /h	1.10	1.10	1.72	1.41	2.36	1.72	0.48	0.21	
MErr Peak [%] /h	-3.78	-3.74	6.23	4.09	-10.56	-5.37	2.77	0.61	
MErr DMRS [%] /h	0.95	0.94	1.14	1.13	1.47	1.52	0.20	0.21	
PhErr RMS [%] /h	0.69	0.69	0.89	0.83	1.05	0.97	0.12	0.08	
PhErr Peak [%] /h	-2.14	-2.13	3.05	2.41	-4.39	-3.18	0.90	0.41	
PhErr DMRS [%] /h	0.66	0.67	0.65	0.64	0.85	0.86	0.13	0.12	
IQ Offset [dBc]	-37.88	-37.88	-38.45	-37.88	-37.88	-37.88	0.33	0.33	
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---	
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---	
Freq Error [Hz]	-1.20	1.69	26.66	10.23	10.23	10.23	6.27	6.27	
Timing Error [Ts]	1.08	0.91	1.34	0.31	0.31	0.31	1.61	1.61	
OBW [MHz]	0.30	0.38	0.47	0.08	0.08	0.08	0.00	0.00	
	Current	Average	Min	Max	StdDev				
TX Power [dBm]	22.73	22.73	22.65	22.77	0.03				
Peak Power [dBm]	27.14	27.30	26.98	27.54	0.18				
RB Power [dBm]	22.74	22.69	22.59	22.76	0.05				
Statistic Count	20 / 20	Out of Tolerance	0.00 %	Detected Modulation	QPSK	Detected Channel Type	PUSCH	View Filter	Throughput
							100.0 %		
PS:	Attached	RRC State:	Connected						

20MHz CH38000 18RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation

PRACH

SRS

TDD

Freq: 2595.0 MHz

Ref. Level: 41.00 dBm

BW: 20.0 MHz

CP: Normal

Meas Subtr/Slot

0 / All

TX Measurement

	Current	Average	Extreme	StdDev				
EVM RMS [%] /h	2.60	2.66	3.07	2.63	3.77	2.76	0.47	0.08
EVM Peak [%] /h	10.19	10.18	32.46	9.86	66.69	11.63	23.42	0.79
EVM DMRS [%] /h	2.20	2.37	2.35	2.35	2.73	2.54	0.14	0.12
MErr RMS [%] /h	1.55	1.56	2.04	1.55	2.74	1.62	0.49	0.04
MErr Peak [%] /h	-8.83	-8.81	31.82	8.59	-66.69	-10.01	23.66	0.70
MErr DMRS [%] /h	1.67	1.75	1.69	1.70	1.90	1.86	0.13	0.11
PhErr RMS [%] /h	1.20	1.24	1.33	1.22	1.54	1.30	0.13	0.05
PhErr Peak [%] /h	5.75	5.74	10.09	5.10	19.53	-6.47	5.41	0.56
PhErr DMRS [%] /h	0.82	0.92	0.94	0.93	1.13	1.07	0.08	0.06
IQ Offset [dBc]	-38.61	-38.61	-38.34	-38.61	-37.56	-37.56	0.38	0.38
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---
Freq Error [Hz]	-9.36	-10.37	-18.88	6.27	6.27	6.27	6.27	6.27
Timing Error [Ts]	5.03	2.28	5.03	1.61	1.61	1.61	1.61	1.61
OBW [MHz]	3.16	3.16	3.16	0.00	0.00	0.00	0.00	0.00
TX Power [dBm]	23.08	23.04	22.99	23.09	23.09	23.09	0.03	0.03
Peak Power [dBm]	28.24	28.16	27.91	28.31	28.31	28.31	0.10	0.10
RB Power [dBm]	10.53	10.48	10.43	10.54	10.54	10.54	0.03	0.03

Statistic Count

20 / 20

Out of Tolerance

0.00 %

Detected Modulation

QPSK

Detected Channel Type

PUSCH

View Filter

Throughput

100.0 %

PS:

Attached

RRC State:

Connected

20MHz CH38150 1RB#99

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

TDD Freq: 2610.0 MHz Ref Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subtr/Slot: 0 / All

TX Measurement

	Current	Average	Extreme	StdDev				
EVM RMS [%] /h	2.65	1.96	2.19	1.82	2.95	2.20	0.56	0.25
EVM Peak [%] /h	11.83	4.08	7.93	4.13	14.37	5.78	4.04	0.39
EVM DMRS [%] /h	2.00	1.98	1.57	1.55	2.10	2.09	0.23	0.23
MErr RMS [%] /h	2.17	1.54	1.75	1.40	2.46	1.74	0.52	0.24
MErr Peak [%] /h	-9.43	-3.96	6.60	3.87	-12.56	-5.39	3.06	0.42
MErr DMRS [%] /h	1.18	1.23	1.12	1.09	1.63	1.67	0.19	0.20
PhErr RMS [%] /h	0.89	0.70	0.76	0.66	1.12	0.84	0.15	0.07
PhErr Peak [%] /h	-4.30	-2.03	2.92	1.76	-6.08	2.94	1.39	0.27
PhErr DMRS [%] /h	0.92	0.89	0.63	0.63	1.02	1.01	0.12	0.11
IQ Offset [dBc]	-35.67	-35.81	-35.16	-35.16	-35.16	-35.16	0.24	0.24
IQ Gain Imbalance [dB]	---	---	---	---	---	---	---	---
IQ Quadrature Error [°]	---	---	---	---	---	---	---	---
Freq Error [Hz]	-12.77	-9.51	-31.76	6.27	6.27	6.27	6.27	6.27
Timing Error [Ts]	-1.55	0.49	3.17	1.52	1.52	1.52	1.52	1.52
OBW [MHz]	0.19	0.27	0.36	0.07	0.07	0.07	0.07	0.07
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.36	22.35	22.34	22.41	0.01			
Peak Power [dBm]	26.93	26.69	26.43	26.94	0.15			
RB Power [dBm]	22.27	22.32	22.25	22.41	0.05			

Statistic Count

Out of Tolerance

Detected Modulation

Detected Channel Type

View Filter

Throughput

100.0 %

100.0 %

QPSK

PUSCH

100.0 %

PS:

Attached RRC State: Connected

Band 41 (2500MHz) TDD									
Bandwidth	Channel	Modulation	RB No.	RB Offset	Max Power (Conducted)	Limit (dBm)	Antenna Gain (dBi)	Max Power (ERP) (dBm)	ERP Limit (dBm)
5MHz	40265	QPSK	1	#0	22.06	20.3~25.7	3.21	23.12	33
			1	#24	22.29	20.3~25.7	3.21	23.35	33
	41215	QPSK	1	#0	22.28	20.3~25.7	3.21	23.34	33
			1	#24	22.34	20.3~25.7	3.21	23.40	33
20MHz	40340	QPSK	1	#0	21.85	20.3~25.7	3.21	22.91	33
			1	#99	22.39	20.3~25.7	3.21	23.45	33
	41140	QPSK	1	#0	21.73	20.3~25.7	3.21	22.79	33
			1	#99	21.95	20.3~25.7	3.21	23.01	33

Note :

1. 經上表確認,最大傳導輸出功率不超過原行動通訊模組±2dB.
2. $ERP = \text{Conducted Power} + \text{Antenna Gain(dBi)} - 2.15$

5MHz CH40265 1RB#0

CMW 500 V3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation

PRACH

SRS

TDD

Freq: 2557.5 MHz

Ref. Level: 41.00 dBm

BW: 5.0 MHz

CP: Normal

Meas Subtr/Slot:

0 / All

TX Measurement

	Current	Average	Extreme	StdDev				
EVM RMS [%] /h	1.84	2.59	1.75	2.52	1.99	2.79	0.12	0.14
EVM Peak [%] /h	4.38	9.20	4.35	9.43	5.29	10.45	0.45	0.61
EVM DMRS [%] /h	2.03	2.56	1.68	2.96	2.40	3.54	0.24	0.37
MErr RMS [%] /h	1.34	1.98	1.24	1.93	1.43	2.08	0.14	0.10
MErr Peak [%] /h	-3.67	-8.87	3.77	8.60	-4.61	-9.64	0.61	0.57
MErr DMRS [%] /h	1.23	1.48	1.16	2.24	1.61	3.01	0.18	0.56
PhErr RMS [%] /h	0.72	0.97	0.71	0.94	0.84	1.09	0.04	0.07
PhErr Peak [%] /h	1.67	3.48	2.06	3.72	-2.81	-4.90	0.33	0.52
PhErr DMRS [%] /h	0.92	1.19	0.70	1.11	1.08	1.48	0.15	0.15
IQ Offset [dBc]	-38.04	-38.14	-37.67					
IQ Gain Imbalance [dB]	---	---	---					
IQ Quadrature Error [°]	---	---	---					
Freq Error [Hz]	10.57	-2.16	-16.78					
Timing Error [Ts]	0.90	1.15	1.75					
OBW [MHz]	0.23	0.24	0.27					
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	21.91	21.99	21.91	22.06	0.04			
Peak Power [dBm]	21.91	26.87	26.45	27.18	0.29			
RB Power [dBm]	21.90	21.97	21.90	22.04	0.04			

Statistic Count

20 / 20

Out of Tolerance

0.00 %

Detected Modulation

QPSK

Detected Channel Type

PUSCH

View Filter

Throughput

100.0 %

PS:

Attached

RRC State:

Connected

5MHz CH40265 1RB#24

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

TDD Freq: 2557.5 MHzRef. Level: 41.00 dBmBW: 5.0 MHzCP: NormalMeas Subtr/Slot: 0 / All

TX Measurement

	Current	Average	Extreme	StdDev				
EVM RMS [%] /h	1.63	2.63	1.75	2.61	2.02	2.87	0.10	0.12
EVM Peak [%] /h	3.01	9.93	3.79	10.02	4.86	12.02	0.52	0.86
EVM DMRS [%] /h	1.22	3.23	1.57	2.94	1.94	3.65	0.22	0.33
MErr RMS [%] /h	1.08	1.98	1.20	1.89	1.34	2.17	0.07	0.17
MErr Peak [%] /h	-2.47	-8.87	3.06	8.30	-4.02	-9.99	0.44	1.06
MErr DMRS [%] /h	0.98	2.47	1.09	2.26	1.43	2.83	0.20	0.26
PhErr RMS [%] /h	0.70	1.00	0.73	1.04	0.88	1.29	0.06	0.13
PhErr Peak [%] /h	-1.68	2.95	1.96	3.80	2.78	5.11	0.34	0.73
PhErr DMRS [%] /h	0.42	1.20	0.65	1.08	0.88	1.44	0.13	0.18
IQ Offset [dBc]	-38.36	-38.35	-37.84					
IQ Gain Imbalance [dB]	---	---	---					
IQ Quadrature Error [°]	---	---	---					
Freq Error [Hz]	-1.72	-7.47	-22.54	8.23				
Timing Error [Ts]	-3.63	-3.78	-7.89	1.18				
OBW [MHz]	0.24	0.25	0.26	0.01				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.24	22.17	22.08	22.29	0.08			
Peak Power [dBm]	26.28	26.69	26.25	27.17	0.40			
RB Power [dBm]	22.15	22.14	22.12	22.20	0.01			

Statistic Count

Out of Tolerance

Detected Modulation

Detected Channel Type

View Filter

Throughput

20 / 20

0.00 %

QPSK

PUSCH

100.0 %

PS: Attached

RRC State: Connected

5MHz CH41215 1RB#0

CMW 500 V3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
TDD	Freq: 2652.5 MHz		Ref. Level: 41.00 dBm	BW: 5.0 MHz		CP: Normal	Meas Subtr/Slot: 0 / All		
TX Measurement									
	Current		Average		Extreme		StdDev		
EVM RMS [%] /h	2.02	2.59	1.99	2.91	2.38	3.29	0.19	0.26	
EVM Peak [%] /h	4.99	12.09	4.61	11.76	7.41	13.49	1.09	1.17	
EVM DMRS [%] /h	1.29	1.38	1.81	2.79	2.25	3.84	0.24	0.85	
MErr RMS [%] /h	1.37	2.11	1.39	2.33	1.67	2.70	0.15	0.27	
MErr Peak [%] /h	-4.99	-12.08	4.04	11.28	-6.01	-12.52	1.05	0.81	
MErr DMRS [%] /h	0.88	1.06	1.28	2.32	1.68	3.22	0.22	0.86	
PhErr RMS [*] /h	0.85	0.87	0.82	1.01	1.00	1.11	0.08	0.08	
PhErr Peak [*] /h	2.59	2.60	2.15	3.19	3.27	4.29	0.40	0.54	
PhErr DMRS [*] /h	0.54	0.50	0.74	0.89	0.97	1.31	0.14	0.20	
IQ Offset [dBc]	-38.68		-38.75		-38.36				0.22
IQ Gain Imbalance [dB]	---		---		---				---
IQ Quadrature Error [°]	---		---		---				---
Freq Error [Hz]	5.09		4.98		24.20				6.45
Timing Error [Ts]	-7.63		-6.91		-8.44				1.50
OBW [MHz]	0.21		0.26		0.31				0.05
	Current		Average		Min		Max		StdDev
TX Power [dBm]	22.12		22.18		22.08		22.28		0.08
Peak Power [dBm]	26.92		26.59		26.19		27.00		0.30
RB Power [dBm]	22.16		22.16		22.11		22.21		0.03
Statistic Count									
20 / 20		Out of Tolerance 0.00 %		Detected Modulation QPSK		Detected Channel Type PUSCH		View Filter Throughput 100.0 %	
PS: Attached									
RRC State: Connected									

5MHz CH41215 1RB#24

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation PRACH SRS										
TDD	Freq: 2652.5 MHz	Ref. Level: 41.00 dBm	BW: 5.0 MHz	CP: Normal	Meas Subtr/Slot	0 / All				
TX Measurement										
	Current	Average	Extreme	StdDev						
EVM RMS [%] /h	1.94	2.92	2.00	2.82	2.35	3.16	0.16	0.11		
EVM Peak [%] /h	3.58	11.15	4.73	10.62	6.77	12.15	0.92	0.73		
EVM DMRS [%] /h	1.61	3.04	1.83	2.98	2.56	3.68	0.26	0.32		
MErr RMS [%] /h	1.31	2.23	1.38	2.09	1.63	2.37	0.12	0.12		
MErr Peak [%] /h	-3.21	-10.26	4.25	8.76	-6.29	-10.65	1.23	0.99		
MErr DMRS [%] /h	1.02	2.38	1.30	2.37	2.23	2.92	0.27	0.26		
PhErr RMS [%] /h	0.82	1.09	0.83	1.10	0.97	1.27	0.07	0.10		
PhErr Peak [%] /h	1.87	4.33	2.23	3.97	3.24	5.54	0.38	0.60		
PhErr DMRS [%] /h	0.72	1.10	0.74	1.03	1.09	1.29	0.14	0.17		
IQ Offset [dBc]	-39.21	-38.71	-38.18							0.28
IQ Gain Imbalance [dB]	---	---	---							---
IQ Quadrature Error [°]	---	---	---							---
Freq Error [Hz]	-25.19	-19.47	-34.79							7.05
Timing Error [Ts]	0.52	-0.42	-3.20							1.72
OBW [MHz]	0.24	0.25	0.27							0.04
	Current	Average	Min	Max	StdDev					
TX Power [dBm]	22.29	22.21	22.08	22.34	0.09					
Peak Power [dBm]	26.40	26.60	26.22	26.97	0.28					
RB Power [dBm]	22.21	22.18	22.12	22.25	0.03					
Statistic Count										
Out of Tolerance 0.00 % Detected Modulation QPSK Detected Channel Type PUSCH View Filter Throughput										
20 / 20 100.0 %										
PS: Attached RRC State: Connected										

20MHz CH40340 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
TDD	Freq: 2565.0 MHz	Ref. Level: 41.00 dBm	BW: 20.0 MHz	CP: Normal	Meas Subtr/Slot	0 / All			
TX Measurement									
	Current	Average	Extreme	StdDev					
EVM RMS [%] /h	1.71	1.57	1.72	1.63	1.89	1.83	0.08	0.08	
EVM Peak [%] /h	4.45	4.30	5.07	4.15	6.76	5.25	0.74	0.62	
EVM DMRS [%] /h	1.56	1.58	1.61	1.64	2.17	2.17	0.27	0.29	
MErr RMS [%] /h	1.25	1.13	1.23	1.11	1.40	1.24	0.07	0.07	
MErr Peak [%] /h	-4.12	-3.51	4.60	3.61	-5.76	-4.76	0.89	0.68	
MErr DMRS [%] /h	0.96	0.98	1.11	1.14	1.56	1.76	0.23	0.25	
PhErr RMS [%] /h	0.66	0.62	0.69	0.68	0.81	0.80	0.05	0.06	
PhErr Peak [%] /h	2.05	1.45	1.93	1.85	2.69	2.61	0.34	0.29	
PhErr DMRS [%] /h	0.70	0.71	0.67	0.68	0.90	0.86	0.14	0.13	
IQ Offset [dBc]	-36.84	-36.78	-36.45						
IQ Gain Imbalance [dB]	---	---	---						
IQ Quadrature Error [°]	---	---	---						
Freq Error [Hz]	-13.90	-6.71	-27.92						
Timing Error [Ts]	0.27	0.75	1.30						
OBW [MHz]	0.19	0.30	0.42						
	Current	Average	Min	Max	StdDev				
TX Power [dBm]	21.80	21.82	21.76	21.85	0.02				
Peak Power [dBm]	26.67	27.09	26.58	27.57	0.42				
RB Power [dBm]	21.70	21.71	21.66	21.74	0.02				
Statistic Count									
20 / 20		Out of Tolerance	0.00 %	Detected Modulation	QPSK	Detected Channel Type	PUSCH	View Filter	Throughput
									100.0 %
PS: Attached									
RRC State: Connected									

20MHz CH40340 1RB#99

CMW 500 V3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
TDD	Freq: 2565.0 MHz	Ref. Level:	41.00 dBm	BLW: 20.0 MHz	CP: Normal	Meas Subtr/Slot	0	All	
TX Measurement									
	Current	Average	Extreme	StdDev					
EVM RMS [%] 1/h	1.82	1.69	1.89	1.75	2.17	1.94	0.12	0.09	
EVM Peak [%] 1/h	6.62	5.00	6.13	4.92	7.90	6.45	1.35	0.92	
EVM DMRS [%] 1/h	1.66	1.65	1.55	1.55	1.95	2.02	0.19	0.17	
MErr RMS [%] 1/h	1.42	1.26	1.41	1.26	1.58	1.43	0.11	0.07	
MErr Peak [%] 1/h	-6.41	-4.88	5.68	4.51	-7.56	-6.19	1.49	0.90	
MErr DMRS [%] 1/h	1.14	1.12	1.08	1.08	1.66	1.47	0.18	0.14	
PhErr RMS [°] 1/h	0.66	0.64	0.72	0.70	0.87	0.83	0.06	0.06	
PhErr Peak [°] 1/h	-1.91	-1.90	2.06	1.90	2.92	-2.37	0.35	0.28	
PhErr DMRS [°] 1/h	0.69	0.70	0.63	0.64	0.87	0.87	0.12	0.10	
IQ Offset [dBc]	-38.52			-38.56		-38.21		0.24	
IQ Gain Imbalance [dB]	---			---		---		---	
IQ Quadrature Error [°]	---			---		---		---	
Freq Error [Hz]	-0.43			-6.34		-20.23		6.82	
Timing Error [Ts]	-2.36			-2.33		-3.07		0.25	
OBW [MHz]	0.31			0.43		0.56		0.11	
	Current	Average	Min	Max	StdDev				
TX Power [dBm]	22.35	22.34	22.29	22.39					
Peak Power [dBm]	27.17	27.39	26.94	27.80					
RB Power [dBm]	22.23	22.23	22.18	22.28					
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput									
20 / 20 0.00 % QPSK PUSCH 100.0 %									
PS: Attached RRC State: Connected									

20MHz CH41140 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi EvaluationPRACHSRS

TDD Freq: 2645.0 MHzRef Level: 41.00 dBmBW: 20.0 MHzCP: NormalMeas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Max	Min	StdDev			
EVM RMS [%] I/h	1.84	1.86	1.82	1.98	1.90	0.10	0.08	
EVM Peak [%] I/h	5.88	6.02	5.88	5.03	8.55	6.50	0.91	0.95
EVM DMRS [%] I/h	1.51	1.56	1.67	1.69	2.05	2.10	0.22	0.24
MErr RMS [%] I/h	1.27	1.27	1.30	1.24	1.39	1.37	0.05	0.06
MErr Peak [%] I/h	-5.73	-5.80	4.64	4.28	-5.73	-5.80	0.76	1.02
MErr DMRS [%] I/h	0.75	0.85	1.16	1.21	1.70	1.75	0.24	0.25
PhErr RMS [°] I/h	0.76	0.78	0.73	0.70	0.86	0.81	0.07	0.06
PhErr Peak [°] I/h	1.60	1.64	2.45	2.15	4.50	2.97	0.74	0.47
PhErr DMRS [°] I/h	0.75	0.75	0.69	0.67	0.87	0.85	0.10	0.10
IQ Offset [dBc]	-37.20		-37.41		-36.92		0.26	
IQ Gain Imbalance [dB]	---							
IQ Quadrature Error [°]	---							
Freq Error [Hz]	-12.10		-14.51		-28.91		7.02	
Timing Error [Ts]	1.48		0.07		3.77		1.62	
OBW [MHz]	0.40		0.30		0.42		0.11	
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	21.73	21.69	21.65	21.73		0.03		
Peak Power [dBm]	27.18	26.82	26.36	27.26		0.38		
RB Power [dBm]	21.61	21.57	21.54	21.61		0.02		

Statistic Count20 / 20

Out of Tolerance0.00 %

Detected ModulationQPSK

Detected Channel TypePUSCH

View Filter Throughput100.0 %

PS: Attached

RRC State: Connected

20MHz CH41140 1RB#99

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
TDD	Freq: 2645.0 MHz	Ref Level: 41.00 dBm	BW: 20.0 MHz	CP: Normal	Meas Subfr/Slot: 0 / All				
TX Measurement									
	Current	Average	Min	Max	StdDev				
EVM RMS [%] I/h	1.85	1.70	1.87	1.75	1.97	2.02	0.06	0.10	
EVM Peak [%] I/h	6.39	4.47	6.08	4.76	7.19	7.15	0.56	0.93	
EVM DMRS [%] I/h	1.90	1.70	1.76	1.76	2.22	2.18	0.22	0.21	
MErr RMS [%] I/h	1.42	1.31	1.38	1.27	1.51	1.46	0.09	0.10	
MErr Peak [%] I/h	-5.96	-4.47	5.14	4.35	-6.79	-6.29	1.06	1.00	
MErr DMRS [%] I/h	1.44	1.21	1.16	1.16	1.51	1.45	0.25	0.23	
PhErr RMS [°] I/h	0.68	0.62	0.72	0.69	0.80	0.89	0.06	0.07	
PhErr Peak [°] I/h	1.74	-1.37	2.29	1.95	3.27	3.40	0.48	0.50	
PhErr DMRS [°] I/h	0.72	0.69	0.76	0.76	1.07	1.10	0.11	0.13	
IQ Offset [dBc]	-36.94		-37.05		-36.71		0.20		
IQ Gain Imbalance [dB]	---		---		---				
IQ Quadrature Error [°]	---		---		---				
Freq Error [Hz]	7.52		8.25		24.68		6.54		
Timing Error [Ts]	0.67		0.72		1.17		0.27		
OBW [MHz]	0.33		0.44		0.57		0.12		
	Current	Average	Min	Max	StdDev				
TX Power [dBm]	21.90	21.89	21.83	21.95		0.03			
Peak Power [dBm]	27.40	26.99	26.55	27.40		0.38			
RB Power [dBm]	21.78	21.78	21.73	21.83		0.03			
Statistic Count Out of Tolerance Detected Modulation Detected Channel Type View Filter Throughput									
20 / 20 0.00 % QPSK PUSCH 100.0 %									
PS: Attached RRC State: Connected									

5.2 發射頻譜波罩

5.2.1 合格標準

需符合下表之頻譜波罩規範值

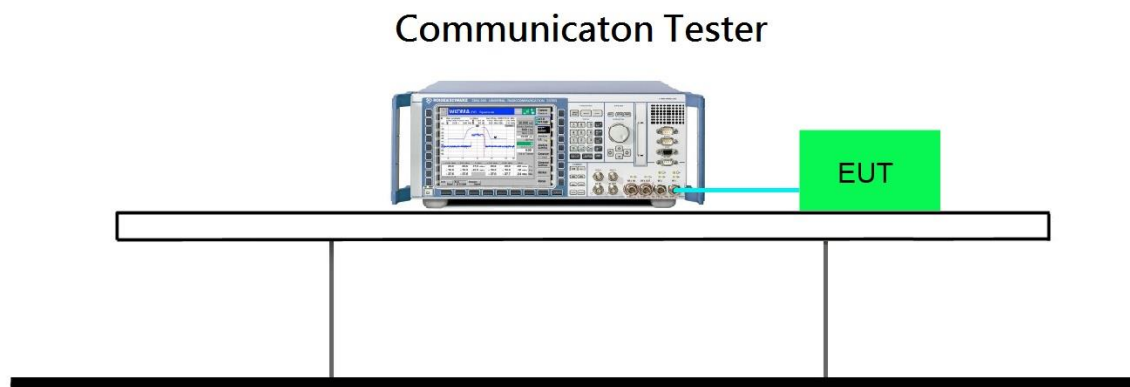
Δf_{OOB} (MHz)	發射限制值(dB)/頻道頻寬						
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	解析頻寬
± 0 to 1	-8.5	-11.5	-13.5	-16.5	-18.5	-19.5	30kHz
± 1 to 2.5	-8.5	-8.5	-8.5	-8.5	-8.5	-8.5	1MHz
± 2.5 to 2.8	-23.5	-8.5	-8.5	-8.5	-8.5	-8.5	1MHz
± 2.8 to 5		-8.5	-8.5	-8.5	-8.5	-8.5	1MHz
± 5 to 6		-23.5	-11.5	-11.5	-11.5	-11.5	1MHz
± 6 to 10			-23.5	-11.5	-11.5	-11.5	1MHz
± 10 to 15				-23.5	-11.5	-11.5	1MHz
± 15 to 20					-23.5	-11.5	1MHz
± 20 to 25						-23.5	1MHz

備註： Δf_{OOB} 是發射頻帶外的頻率偏移量 (Δ Frequency of Out-of-band emission)

5.2.2 測試方法

- (1) 頻譜波罩限制值依頻道頻寬及 Δf_{OOB} 而不同，量測時的解析頻寬不小於上表的設定值。
- (2) 檢測頻道為低、中、高三個頻道，對最低、5MHz、10MHz及最高的工作頻寬之調變級數發射模式，均應分別檢測之。
- (3) 其餘相關規定請參照 3GPP TS 36.521-1。

5.2.3 實驗方法方塊圖



5.2.4 實驗數據

備註：此案為電信終端設備沿用限制性通信模組之測試數據,僅驗證測試傳導功率。

5.3 傳導帶外輻射發射限制

5.3.1 合格標準

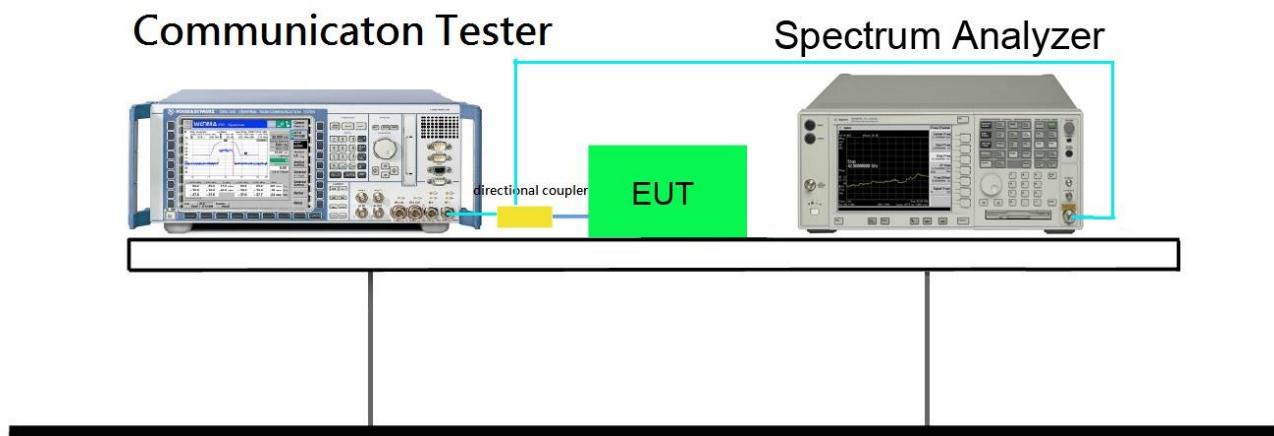
工作頻帶外輻射發射應符合下表之帶外輻射規範值。

頻率範圍	最大位準	解析頻寬
$9\text{kHz} \leq f < 150\text{kHz}$	-36 dBm	1kHz
$150\text{kHz} \leq f < 30\text{MHz}$	-36 dBm	10kHz
$30\text{MHz} \leq f < 1\text{GHz}$	-36 dBm	100kHz
$1\text{GHz} \leq f < 12.75\text{Hz}$	-30 dBm	1MHz

5.3.2 測試方法

- (1) 帶外輻射量測頻率範圍，不包含6.3.2.1節中 Δf_{OOB} 。量測時的解析頻寬不小於上表的設定值。
- (2) 檢測頻道為低、中、高三個頻道，對最低、5MHz及最高的工作頻寬之QPSK調變級數發射模式，均應分別檢測之。
- (3) 其餘相關規定請參照 3GPP TS 36.521-1。

5.3.3 實驗方法方塊圖



5.3.4 實驗數據

備註：此案為電信終端設備沿用限制性通信模組之測試數據,僅驗證測試傳導功率。

5.4 相鄰頻道洩漏功率比(ACLR)

5.4.1 合格標準

LTE 終端設備 ACLR 規範值

	頻道頻寬					
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz
相鄰頻道偏移	±1.4MHz	±3MHz	±5MHz	±10MHz	±15MHz	±20MHz
頻道量測頻寬	1.08 MHz	2.7 MHz	4.5 MHz	9.0 MHz	13.5 MHz	18 MHz
相鄰頻道洩漏功率限制值	29.2dB					

LTE 終端設備 ACLR 規範值 (HPUE 適用)

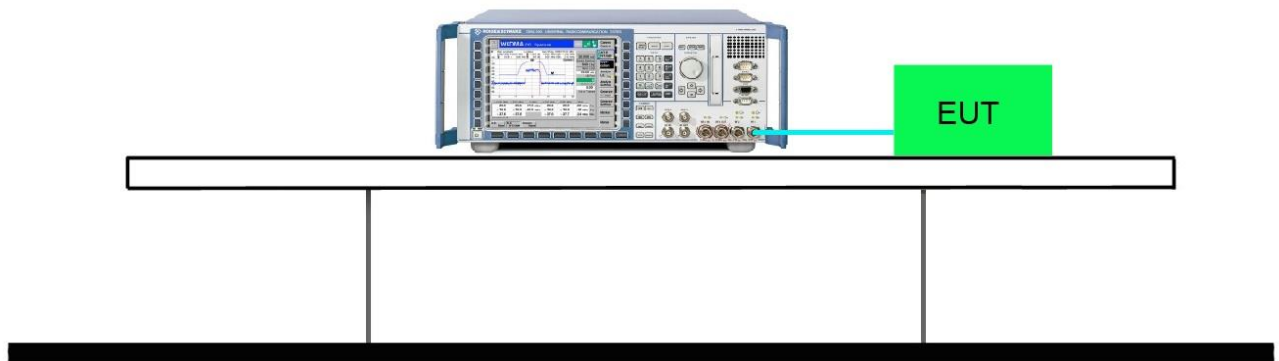
	頻道頻寬					
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz
相鄰頻道偏移	N/A	N/A	±5MHz	±10MHz	±15MHz	±20MHz
頻道量測頻寬	N/A	N/A	4.5 MHz	9.0 MHz	13.5 MHz	18 MHz
相鄰頻道洩漏功率限制值	N/A	N/A	30.2 dB			

5.4.2 測試方法

- (1) 測量檢測頻道與其相鄰通道的平均功率，計算相鄰頻道洩漏功率比。測量時，頻道的量測頻寬依表三之規定。
- (2) 檢測頻道為低、中、高三個頻道，對最低、5MHz、10MHz及最高的工作頻寬之調變級數發射模式，均應分別檢測之。
- (3) 其餘相關規定請參照 3GPP TS 36.521-1。

5.4.3 實驗方法方塊圖

Communicaton Tester



5.4.4 實驗數據

備註：此案為電信終端設備沿用限制性通信模組之測試數據,僅驗證測試傳導功率。

5.5 頻率穩定度

5.5.1 合格標準

a) 依測試環境條件，終端設備於常態環境常態電壓、低極端溫度低極端電壓、低極端溫度高極端電壓、高極端溫度低極端電壓、高極端溫度高極端電壓等五種測試環境下，分別進行頻率量測，經0/2/5/10 分鐘量測結果，頻率應維持在頻道之主波頻率0.1ppm 以內。

常態環境溫度範圍為+15℃至+35℃，濕度範圍為25%至75%。

極端環境溫度範圍為-10℃至+55℃，其他規定應符合IEC 60068-2-1 與IEC 60068-2-2。

在極端環境溫度，終端設備若可通電開機，則不得無效使用第3 點規定之頻段。

電壓條件：

終端設備之電源電壓應於低極端電壓與高極端電壓之間。終端設備審驗申請者應宣告其標稱電壓(nominal)、低極端電壓、高極端電壓與關機電壓。若終端設備可操作在一種或多種電源，其低極端電壓不得高於下表限制值，高極端電壓不得低於下表限制值。

電源	低極端電壓	高極端電壓	常態電壓
交流電源	0.9 * Nominal	1.1 * Nominal	Nominal
調節式鉛酸電池	0.9 * Nominal	1.3 * Nominal	1.1 * Nominal
非調節式電池:			
勒克朗社電池	0.85 * Nominal	Nominal	Nominal
鋰電池	0.95 * Nominal	1.1 * Nominal	1.1 * Nominal
水銀電池/鎳鎘電池	0.9 * Nominal	1.1 * Nominal	Nominal

電源電壓低於上表之低極端電壓或高於上表之高極端電壓，終端設備若可通電開機時，不得無效使用第3 點規定之頻段。

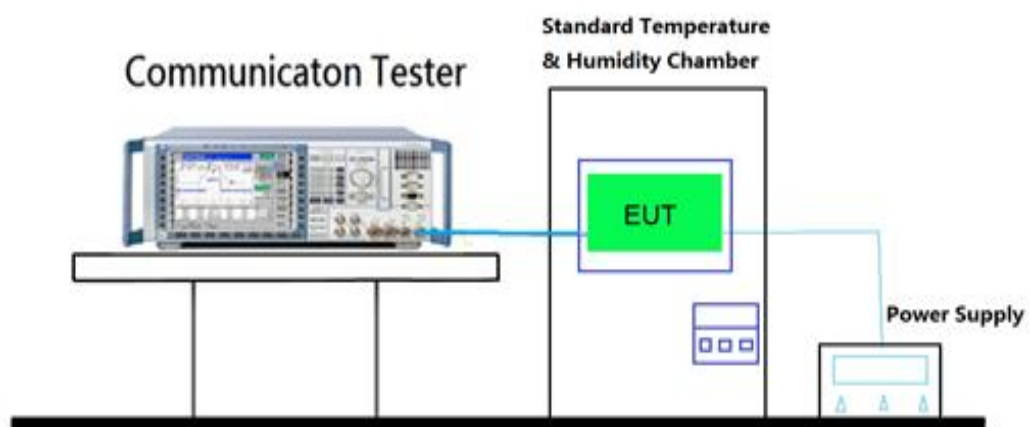
b) 檢測終端設備之電源電壓低於關機電壓時，終端設備不得發射。。

5.5.2 測試方法

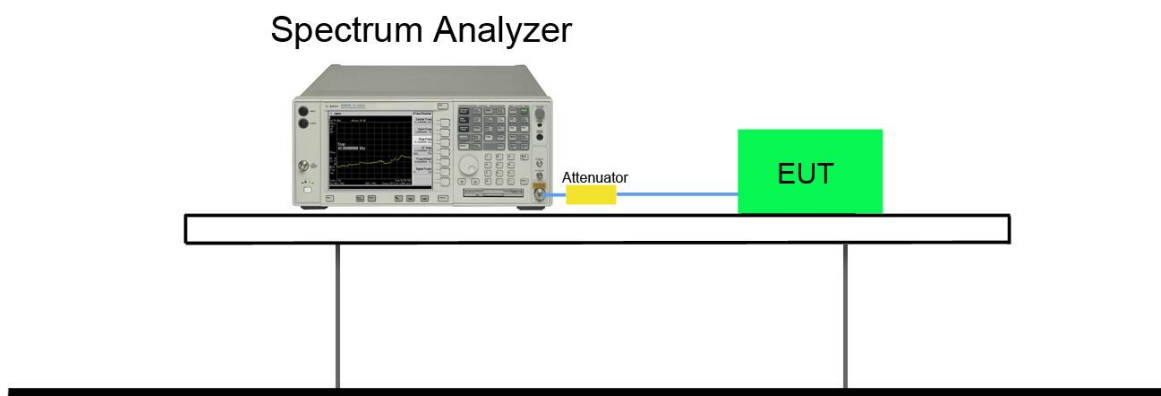
- 發射機頻率穩定度的測量經由模擬基地台控制頻率至欲測量頻率並量測其頻率穩定度。
- 頻譜分析儀設定適當頻率範圍並接上終端設備量測。

5.5.3 實驗方法方塊圖

a)



b)



5.5.4 實驗數據

備註：此案為電信終端設備沿用限制性通信模組之測試數據，經驗證電信終端設備供應給模組電壓為3.8V，符合原模組測試的電壓範圍(DC 3.42~DC 4.18V)內故可免評估。

5.6 電波功率密度

5.6.1 合格標準

電波功率密度最大值(本項測試適用於移動式或固定式無線接取終端設備)：

700MHz 頻段為 0.35mW/cm²；

900MHz 頻段為 0.45mW/cm²；

1800MHz 頻段為 0.9mW/cm²。

2100 MHz、2500 MHz 與2600 MHz、頻段為1.0 mW/cm²。

5.6.2 計算方式

$$Pd = (Pout \times G) / (4 \times \pi \times r^2)$$

Pd = 功率密度 (mW/cm²)

Pout = 輸出功率 (mW)

G = 天線增益 (linear)

π = 3.1416

r = 量測距離20公分，或以設備廠商宣告設備天線與附近人體可活動範圍之距離。

5.6.3 計算結果

Frequency (MHz)	EIRP (dBm)	Level (mW/cm ²)	Limit (mW/cm ²)
700	25.92	0.0778	0.35
900	25.54	0.0712	0.45
1800	27.33	0.1076	0.9
2100	27.44	0.1103	1.00
2500	25.60	0.0722	1.00
2600	26.38	0.0864	1.00

— The End —