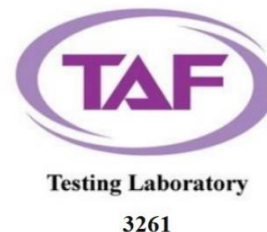


NCC

行動通信電信終端設備技術規範試驗報告

產品名稱 : 一體式體溫與口罩檢測儀
型號 : S409
廠牌 : ARBOR
商標 : 
申請者 : 磐儀科技股份有限公司
申請者地址 : 235 新北市中和區中正路 700 號 10 樓
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 : 2021/5/7
測試日期 : 2021/6/24~2021/9/9

測試工程師 : 
(許丞哲)
報告審核人 : 
(陳柏均)
報告簽署人 : 
(柯承志)



本測試報告僅對實驗室所受測之樣品負責

本測試報告非經本公司同意不可局部複製使用

修訂紀錄

Report No.	Version	Description	Issue Date
2105TWC101-T5	1.0	Original Report	2021-09-09

CONTENTS

Description	Page
1. 一般資訊	5
2. 產品描述	6
2.1 產品資訊.....	6
2.2 產品規格.....	7
2.3 測試配置.....	8
2.4 測試周邊.....	10
3. 測試設備明細	11
4. 量測不確定度	12
5. 測試結果	13
5.1 功率限制.....	14
5.1.1 合格標準.....	14
5.1.2 測試方法.....	14
5.1.3 實驗方法方塊圖.....	15
5.1.4 實驗數據.....	16
5.2 發射頻譜波罩	46
5.2.1 合格標準.....	46
5.2.2 測試方法.....	46
5.2.3 實驗方法方塊圖.....	46
5.2.4 實驗數據.....	47
5.3 傳導帶外輻射發射限制	101
5.3.1 合格標準.....	101
5.3.2 測試方法.....	101
5.3.3 實驗方法方塊圖.....	101
5.3.4 實驗數據.....	102
5.4 相鄰頻道洩漏功率比(ACLR)	174
5.4.1 合格標準.....	174
5.4.2 測試方法.....	174
5.4.3 實驗方法方塊圖.....	174
5.4.4 實驗數據.....	175
5.5 頻率穩定性	221
5.5.1 合格標準.....	221
5.5.2 測試方法.....	222

5.5.3	實驗方法方塊圖.....	222
5.5.4	實驗數據.....	223
5.6	電波功率密度	230
5.6.1	合格標準.....	230
5.6.2	計算方式.....	230
5.6.3	計算結果.....	230

1. 一般資訊

申請者	磐儀科技股份有限公司
申請者地址	235 新北市中和區中正路 700 號 10 樓
製造商	磐儀科技股份有限公司
製造商地址	235 新北市中和區中正路 700 號 10 樓
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	一體式體溫與口罩檢測儀
產品型號	S409
廠牌	ARBOR
商標	
支援規格	WLAN: 2.4G: 802.11b/g/n-20/n-40 5G: 802.11a/n-20/ac-20/n-40/ac-40/ac-80, Band 1, 4 Bluetooth Dual Mode: V4.2 WWAN: 4G: FDD Band 3,7,8,28 GNSS: GPS & Beidou
IMEI 碼	355480071751106
天線樣式	FPCB
天線規格	Brand: ARBOR M/N: WGT_S409 LTE-MAIN Gain: Band3: 1.26dBi, Band7: 1.29dBi, Band8: 1.12dBi, Band28: 1.07dBi,
TX Frequency	Band3: 1710~1785MHz; Band7: 2500~2570MHz; Band8: 885~915MHz, Band28: 703MHz~748MHz
Rx Frequency	Band3: 1805~1880MHz; Band7: 2620~2690MHz; Band8: 930~960MHz, Band28: 758MHz~803MHz
是否有照相功能	☒ 有 (聲響 : 有 ☒ ; 無 ☐) ☐ 無
待測物電壓	1. AC 110V 2. DC 24V (By battery)
配件	
Power Adapter	Brand: AMIGO Model No: AMS200-1202000FU Input: AC 100-240V~50-60Hz 0.8A Output: DC 12V, 2.0A Cable Out: Non-shielding, 1.5m
DC Cable	Brand: ARBOR Model No: 3422002004530M Cable Out: Non-shielding, 2.2m
M8 轉接線	Brand: ARBOR Model No: 3432182000370M Cable Out: Non-shielding, 0.6m

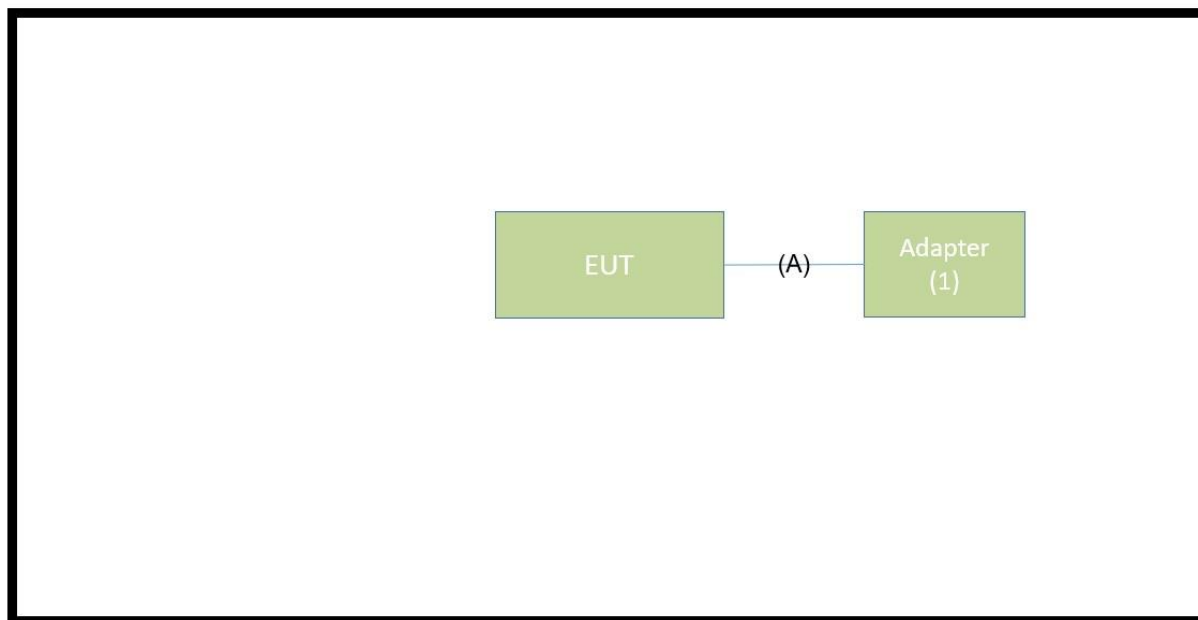
Note: 1.因有兩種電源供應方式，故在傳導輸出功率章節有執行評估，比對結果後，AC 供電方式會導致較大的功率輸出，所以在其他測試項目，皆以 AC 供電方式來進行量測。

2.2 產品規格

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)

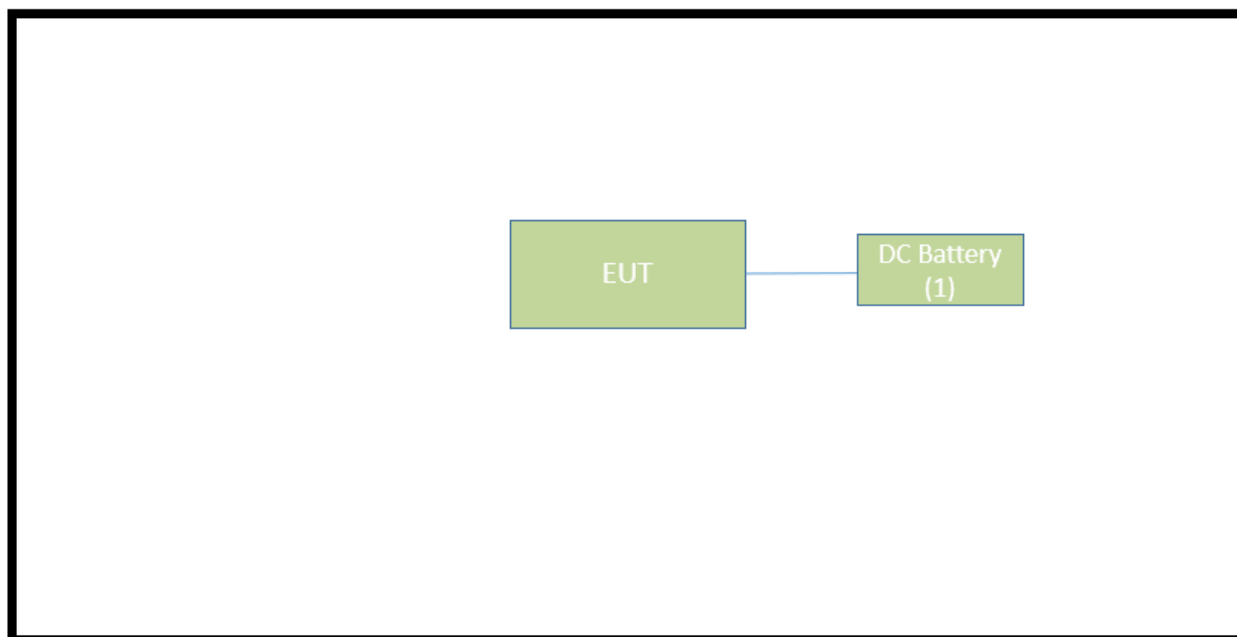
2.3 測試配置

待測物測試配置圖 AC Mode



Signal Cable Type		Signal Cable Description
A	Adapter Cable	Non-Shielded, 1.5m

待測物測試配置圖 DC Mode



2.4 測試周邊

AC Mode

No.	周邊名稱	廠牌	型號	序號	電源線
1	Adapter	AMIGO	AMS200-1202000FU	N/A	N/A

DC Mode

No.	周邊名稱	廠牌	型號	序號	電源線
1	DC Battery	YUASA	55D23L	N/A	N/A

3. 測試設備明細

輻射干擾 – AC1

儀器名稱	廠牌	型號	財產編號	校正週期	有效日期
Broadband TRILOG Antenna	SCHWARZBECK	VULB 9162	MRTTWA00001	1 year	2021/10/5
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 – AC1

儀器名稱	廠牌	型號	財產編號	校正週期	有效日期
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2021/10/14
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2021/7/14
Wideband Radio Communication Taster	R&S	CMW 500	MRTTWA00084	1 year	2021/9/8
Temperature & Humidity Chamber	TEN BILLION	TTH-B3UP	MRTTWA00036	1 year	2022/6/14

EMI 測試軟體

軟體名稱	廠牌	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: $\pm 4.45\text{dB}$
頻率誤差量測 (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 一體式體溫與口罩檢測儀
型號 S409

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	本項測試適用具 NR 終端設備、窄頻終端設備、LTE 或 WCDMA FDD 硬體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	第 5.7 章節

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)

- 攜帶式終端設備限制為 1W。
- 移動式終端設備限制為 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 TS 36.521-1 規定測試)。

(1) 等效幅射功率：

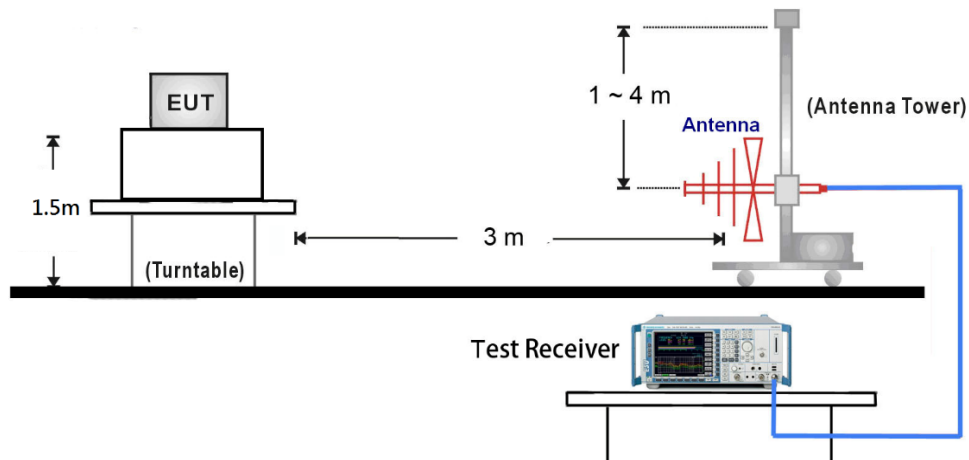
- a. 量測發射功率時，必須使用均方根值等效電壓之儀器量測於任何連續傳輸時段，量測結果須依儀器之反應時間、解析頻寬能力及靈敏度等調整得出正確之發射功率。對每一測量頻率調整儀器足夠之頻率掃描範圍以檢測所欲測量之發射。
- b. 在 1 到 4 米高度內上升下降水平極化之接收天線，將接收天線置於儀器顯示最高讀值時的高度，然後以 360 度轉動測試桌上的受測物，紀錄顯示在儀器上的最高值，以為參考位準。
- c. 以發射天線(不大於 1GHz 為線諧調之偶極天線，1GHz 以上為號角型天線)取代受測物，並與接收天線之同為水平極化。將偶極天線連接至標準之信號產生器，信號產生器設定至前述步驟所得之頻率以及適當之輸出位準。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：

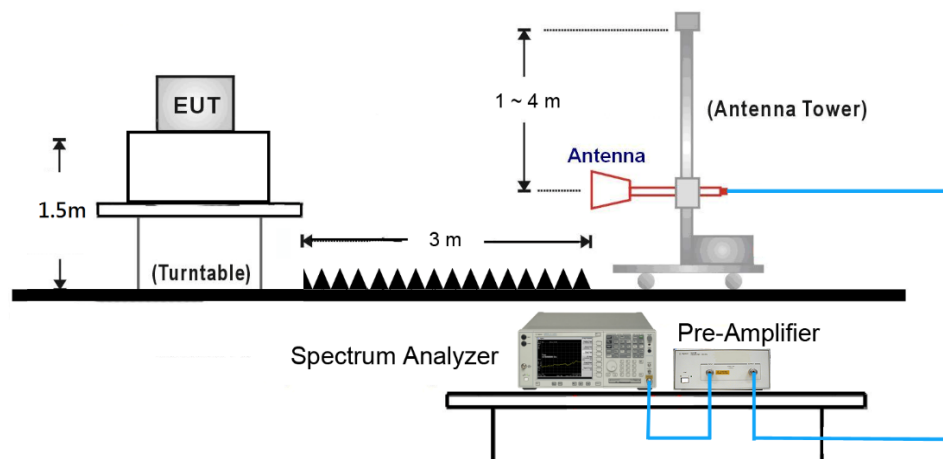
發射機輸出功率的測量藉由模擬基地台調諧頻率至測量頻率並量測其峰值。

5.1.3 實驗方法方塊圖

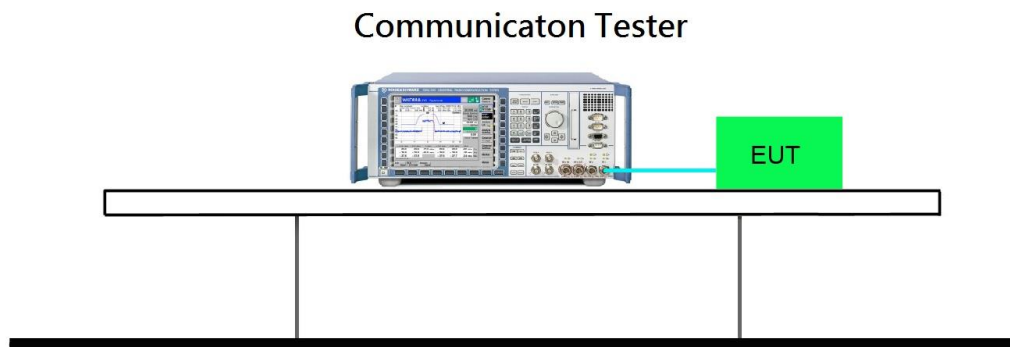
(1) 等效輻射功率 (1G 以下):



(2) 等效輻射功率 (1G 以上):



(3) 傳導輸出功率 :



5.1.4 實驗數據

AC Input

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	22.46	19.8~25.7	1.26	21.57	30
	19575	QPSK	1	#0	22.43	19.8~25.7	1.26	21.54	30
			5	#0	22.53	19.8~25.7	1.26	21.64	30
	19943	QPSK	1	#0	22.81	19.8~25.7	1.26	21.92	30
5MHz	19225	QPSK	1	#0	22.54	19.8~25.7	1.26	21.65	30
			1	#24	22.44	19.8~25.7	1.26	21.55	30
	19575	QPSK	1	#0	22.46	19.8~25.7	1.26	21.57	30
			1	#24	22.40	19.8~25.7	1.26	21.51	30
			8	#0	21.94	19.8~25.7	1.26	21.05	30
	19925	QPSK	1	#0	22.22	19.8~25.7	1.26	21.33	30
			1	#24	22.30	19.8~25.7	1.26	21.41	30
	20MHz	19300	QPSK	1	#0	22.29	19.8~25.7	1.26	21.40
1				#99	22.29	19.8~25.7	1.26	21.40	30
19575		QPSK	1	#0	22.08	19.8~25.7	1.26	21.19	30
			1	#99	21.71	19.8~25.7	1.26	20.82	30
			18	#0	22.07	19.8~25.7	1.26	21.18	30
19850		QPSK	1	#0	21.88	19.8~25.7	1.26	20.99	30
			1	#99	22.32	19.8~25.7	1.26	21.43	30

Note : ERP= Conducted Power + Antenna Gain(dBi)-2.15

1.4MHz CH19207 1RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation PRACH SRS										
FDD	Freq: 7170.7 MHz	Ref. Level:	40.50 dBm	BW: 1.4 MHz	CP: Normal	Meas Subfr/Slot:	0 / All			
TX Measurement										
	Current		Average		Extreme		StdDev			
EVM RMS [%] /h	1.78	1.81	1.62	1.64	1.95	1.96	0.21	0.23		
EVM Peak [%] /h	5.26	5.37	4.30	4.29	6.07	5.62	1.10	1.07		
EVM DMRS [%] /h	1.97	1.92	1.68	1.66	1.97	1.92	0.15	0.14		
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
IQ Offset [dBc]	-74.02		-60.14		-56.47		4.24			
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP			
IQ Quadrature Error [°]	NCAP		NCAP		NCAP		NCAP			
Freq Error [Hz]	-8.04		-3.12		-11.09		5.24			
Timing Error [Ts]	9.26		9.47		9.71		0.13			
OBW [MHz]	0.21		0.20		0.21		0.01			
	Current		Average		Min		Max		StdDev	
TX Power [dBm]	22.28		22.36		22.25		22.46		0.08	
Peak Power [dBm]	27.32		27.13		26.93		27.32		0.16	
RB Power [dBm]	22.39		22.41		22.36		22.45		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										

1.4MHz 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: 1.4 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current		Average		Latency		StdDev	
EVM RMS [%] /h	1.30	1.50	1.34	1.45	1.53	1.57	0.14	0.07
EVM Peak [%] /h	3.44	4.27	3.34	3.80	4.53	4.46	0.64	0.33
EVM DMRS [%] /h	1.43	1.40	1.42	1.44	1.64	1.72	0.12	0.14
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-57.71		-56.20		-52.78		2.70	
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP	
IQ Quadrature Error [°]	NCAP		NCAP		NCAP		NCAP	
Freq Error [Hz]	-17.70		-10.21		-17.70		5.88	
Timing Error [Ts]	11.09		11.29		11.73		0.27	
OBW [MHz]	0.21		0.20		0.21		0.01	
	Current		Average		Min		Max	
TX Power [dBm]	22.24		22.33		22.24		22.43	
Peak Power [dBm]	26.57		26.91		26.55		27.24	
RB Power [dBm]	22.34		22.40		22.34		22.48	

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

1.4MHz CH19575 5RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation 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		Extreme		StdDev		
EVM RMS [%] /h	1.63	2.11	1.68	2.06	1.79	2.16	0.08	0.05		
EVM Peak [%] /h	5.26	15.90	7.32	13.79	10.00	16.33	2.19	1.48		
EVM DMRS [%] /h	1.25	2.30	1.37	1.92	1.56	2.36	0.13	0.41		
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
IQ Offset [dBc]	-59.93			-56.60		-52.98		3.78		
IQ Gain Imbalance [dB]	NCAP			NCAP		NCAP		NCAP		
IQ Quadrature Error [°]	NCAP			NCAP		NCAP		NCAP		
Freq Error [Hz]	-15.13			-8.73		-15.52		4.98		
Timing Error [Ts]	12.48			12.28		12.53		0.19		
OBW [MHz]	0.87			0.88		0.89		0.01		
	Current		Average		Min	Max	StdDev			
TX Power [dBm]	22.53		22.43		22.35	22.53	0.06			
Peak Power [dBm]	27.90		28.01		27.76	28.27	0.16			
RB Power [dBm]	15.59		15.49		15.40	15.59	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										

1.4MHz CH19943 1RB#0

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

Multi EvaluationPRACHSRS

FDDFreq: 1784.3 MHzRef. Level: 41.00 dBmBW: 1.4 MHzCP: NormalMeas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Latency	StdDev				
EVM RMS [%] /h	3.15	3.12	3.64	3.62	3.84	3.81	0.24	0.23
EVM Peak [%] /h	12.57	12.56	14.61	14.64	15.45	15.48	0.93	0.93
EVM DMRS [%] /h	1.62	1.69	1.97	2.07	2.30	2.38	0.18	0.18
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-60.11	-57.71	-54.21	4.12				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP				
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP				
Freq Error [Hz]	-9.27	-0.63	-9.66	6.17				
Timing Error [Ts]	8.42	8.38	8.77	0.18				
OBW [MHz]	0.21	0.20	0.21	0.01				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.23	22.66	22.22	22.81	0.19			
Peak Power [dBm]	26.43	26.60	26.41	26.68	0.09			
RB Power [dBm]	22.32	22.70	22.31	22.81	0.19			

Statistic CountOut of ToleranceDetected ModulationDetected Channel TypeView Filter Throughput

20 / 200.00 %QPSKPUSCH100.0 %

PS: Attached RRC State: Connected

5MHz CH19225 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - 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		Extreme		StdDev	
EVMM RMS [%] /h	1.40	1.40	1.41	1.43	1.61	1.60	0.08	0.07
EVMM Peak [%] /h	4.11	4.10	4.06	4.05	5.15	5.06	0.47	0.44
EVMM DMRS [%] /h	1.55	1.50	1.54	1.50	1.91	1.90	0.11	0.12
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-63.56		-65.10		-60.32		4.20	
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP	
IQ Quadrature Error [°]	NCAP		NCAP		NCAP		NCAP	
Freq Error [Hz]	-2.06		-5.02		-12.42		4.81	
Timing Error [Ts]	-1.02		-0.77		-1.52		0.24	
OBW [MHz]	0.21		0.25		0.28		0.04	
	Current		Average		Min	Max	StdDev	
TX Power [dBm]	22.30		22.39		22.25	22.54	0.07	
Peak Power [dBm]	27.29		27.25		27.10	27.37	0.08	
RB Power [dBm]	22.34		22.39		22.29	22.49	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

RRG State:

Connected

5MHz CH19575 1RB#0

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

Multi Evaluation

PRACH

SRS

FDD

Freq: 1747.5 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	1.60	1.62	1.47	1.48	1.69	1.71	0.14	0.14
EVM Peak [%] /h	5.29	5.29	3.97	3.98	5.82	5.81	1.10	1.09
EVM DMRS [%] /h	1.79	1.84	1.56	1.54	2.01	2.05	0.17	0.22
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-56.75	-59.00	-55.78	2.63				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP				
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP				
Freq Error [Hz]	-5.75	-2.89	-17.29	5.85				
Timing Error [Ts]	-10.25	-10.37	-11.61	0.21				
OBW [MHz]	0.26	0.26	0.27	0.01				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.30	22.36	22.27	22.46	0.04			
Peak Power [dBm]	27.40	27.16	26.76	27.51	0.31			
RB Power [dBm]	22.31	22.39	22.30	22.47	0.04			

Statistic Count

Out of Tolerances

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 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement

Multi Evaluation

PRACH

SRS

FDD

Freq: 1747.5 MHz

Ref. Level: 41.00 dBm

BW: 5.0 MHz

CP: Normal

Meas Subtr/Slot: 0 / All

TX Measurement

	Current		Average		Latency		StdDev	
EVM RMS [%] /h	1.61	1.61	1.46	1.48	1.66	1.67	0.14	0.12
EVM Peak [%] /h	3.96	3.82	3.12	3.09	4.06	4.12	0.36	0.31
EVM DMRS [%] /h	1.80	1.76	1.66	1.63	1.96	1.87	0.14	0.14
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-69.97		-60.10		-56.27		3.11	
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP	
IQ Quadrature Error [°]	NCAP		NCAP		NCAP		NCAP	
Freq Error [Hz]	-2.83		-6.51		-15.99		5.88	
Timing Error [Ts]	-8.57		-8.60		-9.10		0.23	
OBW [MHz]	0.28		0.26		0.28		0.03	
	Current		Average		Min		Max	
TX Power [dBm]	22.24		22.25		22.19		22.40	
Peak Power [dBm]	27.71		27.36		26.90		27.76	
RB Power [dBm]	22.26		22.28		22.23		22.41	

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 Subtr/Slot: 0 / All

TX Measurement

	Current	Average	Latency	StdDev				
EVM RMS [%] /h	1.45	1.57	1.43	1.52	1.48	1.58	0.03	0.05
EVM Peak [%] /h	5.64	8.82	4.90	6.76	6.18	9.55	0.74	2.00
EVM DMRS [%] /h	1.67	1.80	1.63	1.83	1.80	1.98	0.08	0.08
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-55.66	-59.67	-55.15	5.66				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP				
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP				
Freq Error [Hz]	-7.42	-5.44	-13.98	5.26				
Timing Error [Ts]	-0.16	-0.06	-0.26	0.11				
OBW [MHz]	1.39	1.40	1.41	0.01				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	21.91	21.87	21.81	21.94	0.05			
Peak Power [dBm]	27.59	27.42	27.26	27.59	0.11			
RB Power [dBm]	12.90	12.86	12.80	12.93	0.05			

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

20 / 200.00 %QPSKPUSCH100.0 %

PS: Attached RRC State: Connected

5MHz CH19925 1RB#0

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

Multi Evaluation

PRACH

SRS

FDD

Freq: 1782.5 MHz

Ref. Level: 41.00 dBm

BW: 5.0 MHz

CP: Normal

Meas Subtr/Slot: 0 / All

TX Measurement

	Current		Average		Latency		StdDev	
EVM RMS [%] /h	1.18	1.24	1.26	1.28	1.34	1.35	0.05	0.04
EVM Peak [%] /h	2.91	2.92	2.85	2.87	3.62	3.55	0.29	0.26
EVM DMRS [%] /h	1.52	1.40	1.54	1.50	1.79	1.83	0.17	0.18
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-64.70		-65.12		-61.39		4.46	
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP	
IQ Quadrature Error [°]	NCAP		NCAP		NCAP		NCAP	
Freq Error [Hz]	0.56		-3.19		-11.49		5.89	
Timing Error [Ts]	1.91		2.09		2.43		0.23	
OBW [MHz]	0.28		0.25		0.28		0.04	
	Current		Average		Min	Max	StdDev	
TX Power [dBm]	22.21		22.11		21.98	22.22	0.07	
Peak Power [dBm]	27.00		27.10		26.98	27.24	0.09	
RB Power [dBm]	22.16		22.11		22.02	22.17	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

5MHz CH19925 1RB#24

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

Multi Evaluation

PRACH

SRS

FDD

Freq: 1782.5 MHz

Ref Level: 41.00 dBm

BW: 5.0 MHz

CP: Normal

Meas Subtr/Slot: 0 / All

TX Measurement

	Current			Average			Latency		Jitter	
EVM RMS [%] /h	2.08	2.08	2.41	2.41	2.76	2.74	0.27	0.26		
EVM Peak [%] /h	7.11	7.12	8.66	8.66	10.53	10.58	1.57	1.57		
EVM DMRS [%] /h	1.60	1.61	1.72	1.71	2.29	2.22	0.21	0.20		
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr RMS [*] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr Peak [*] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr DMRS [*] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
IQ Offset [dBc]	-62.71			-63.95			-59.78		2.28	
IQ Gain Imbalance [dB]	NCAP			NCAP			NCAP		NCAP	
IQ Quadrature Error [*]	NCAP			NCAP			NCAP		NCAP	
Freq Error [Hz]	-11.90			-3.43			-19.35		6.14	
Timing Error [Ts]	3.73			3.22			3.73		0.23	
OBW [MHz]	0.18			0.25			0.33		0.07	
	Current			Average			Min	Max	StdDev	
TX Power [dBm]	22.17			22.14			22.00	22.30	0.09	
Peak Power [dBm]	26.11			26.17			26.08	26.26	0.06	
RB Power [dBm]	22.10			22.13			22.04	22.23	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

RRG State:

Connected

20MHz CH19300 1RB#99

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

Multi EvaluationPRACHSRS

FDDFreq: 1720.0 MHzRef Level: 40.60 dBmBW: 20.0 MHzCP: NormalMeas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Latency	StdDev
EVM RMS [%] /h	1.57	1.57	1.46	1.46
EVM Peak [%] /h	3.20	3.20	3.32	3.34
EVM DMRS [%] /h	1.71	1.69	1.53	1.51
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-56.80	-60.18	-56.80	2.77
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP
Freq Error [Hz]	-12.37	-7.11	-20.14	7.64
Timing Error [Ts]	5.86	5.64	5.99	0.17
OBW [MHz]	0.38	0.28	0.38	0.10
	Current	Average	Min	Max
TX Power [dBm]	21.72	21.79	21.64	22.29
Peak Power [dBm]	26.91	26.74	26.43	27.15
RB Power [dBm]	21.70	21.82	21.69	22.36

Statistic CountOut of ToleranceDetected ModulationDetected Channel TypeView Filter Throughput

20 / 200.00 %QPSKPUSCH100.0 %

PS: Attached RRC State: Connected

20MHz CH19575 1RB#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	Latency	StdDev				
EVM RMS [%] /h	1.41	1.42	1.35	1.35	1.42	1.45	0.06	0.06
EVM Peak [%] /h	3.41	3.50	3.08	3.09	3.77	3.76	0.31	0.30
EVM DMRS [%] /h	1.37	1.36	1.48	1.46	1.71	1.67	0.12	0.12
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-62.13	-58.63	-55.19	1.88				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP				
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP				
Freq Error [Hz]	-3.71	-4.75	-14.53	5.94				
Timing Error [Ts]	5.48	4.85	5.58	0.55				
OBW [MHz]	0.18	0.29	0.40	0.11				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	21.97	21.95	21.82	22.08	0.07			
Peak Power [dBm]	27.13	27.04	26.91	27.19	0.09			
RB Power [dBm]	22.02	21.94	21.87	22.03	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 CH19575 1RB#99

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: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Latency	StdDev				
EVM RMS [%] /h	1.57	1.56	1.53	1.53	1.65	1.64	0.07	0.07
EVM Peak [%] /h	3.48	3.45	3.24	3.25	4.09	4.05	0.32	0.28
EVM DMRS [%] /h	1.72	1.67	1.76	1.73	1.97	1.94	0.12	0.11
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-63.94	-62.78	-59.83					2.46
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP					NCAP
IQ Quadrature Error [°]	NCAP	NCAP	NCAP					NCAP
Freq Error [Hz]	-7.50	-3.02	-12.99					6.44
Timing Error [Ts]	5.77	5.55	5.77					0.14
OBW [MHz]	0.40	0.29	0.40					0.11
	Current	Average	Min	Max				StdDev
TX Power [dBm]	21.64	21.60	21.52	21.71				0.06
Peak Power [dBm]	27.09	27.27	27.08	27.48				0.15
RB Power [dBm]	21.58	21.59	21.53	21.69				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 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	Latency	StdDev				
EVM RMS [%] /h	1.46	1.52	1.48	1.54	1.59	1.63	0.03	0.04
EVM Peak [%] /h	6.13	7.93	5.99	7.68	6.99	9.17	0.36	1.07
EVM DMRS [%] /h	1.40	1.41	1.42	1.43	1.59	1.60	0.07	0.07
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-58.56	-59.34	-55.05					2.92
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP					NCAP
IQ Quadrature Error [°]	NCAP	NCAP	NCAP					NCAP
Freq Error [Hz]	-0.79	-7.50	-17.22					6.15
Timing Error [Ts]	5.18	5.09	5.65					0.53
OBW [MHz]	3.16	3.17	3.18					0.01
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	21.98	22.02	21.95	22.07				0.05
Peak Power [dBm]	27.47	27.41	27.29	27.54				0.07
RB Power [dBm]	9.43	9.47	9.39	9.51				0.05

Statistic Count

Out of Tolerance

Detected Modulation

Detected Channel Type

View Filter Throughput

20 / 200.00 %QPSKPUSCH100.0 %

PS:

Attached RRC State: Connected

20MHz CH19850 1RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD	Freq: 1775.0 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	1.33	1.32	1.35	1.35	1.52	1.49	0.09	0.07	
EVM Peak [%] /h	3.60	3.45	3.14	2.93	5.18	3.76	0.57	0.37	
EVM DMRS [%] /h	1.33	1.40	1.48	1.45	1.82	1.84	0.12	0.11	
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	
IQ Offset [dBc]	-55.49		-56.70		-54.06		2.22		
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP		
IQ Quadrature Error [°]	NCAP		NCAP		NCAP		NCAP		
Freq Error [Hz]	-1.00		-0.39		-12.27		5.71		
Timing Error [Ts]	3.48		3.87		4.38		0.25		
OBW [MHz]	0.31		0.35		0.39		0.04		
	Current	Average		Min	Max	StdDev			
TX Power [dBm]	21.86	21.75		21.61	21.88	0.12			
Peak Power [dBm]	26.89	26.73		26.52	26.94	0.16			
RB Power [dBm]	21.70	21.71		21.69	21.74	0.01			
Statistic Count: 20 / 20									
Out of Tolerance		Detected Modulation		Detected Channel Type		View Filter Throughout			
0.00 %		QPSK		PUSCH		100.0 %			
PS: Attached State: Connected									

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	22.40	19.8~25.7	1.29	21.54	30
	21100	QPSK	1	#0	22.13	19.8~25.7	1.29	21.27	30
			8	#0	22.21	19.8~25.7	1.29	21.35	30
	21425	QPSK	1	#0	22.21	19.8~25.7	1.29	21.35	30
20MHz	20850	QPSK	1	#0	22.22	19.8~25.7	1.29	21.36	30
			1	#99	22.05	19.8~25.7	1.29	21.19	30
	21100	QPSK	1	#0	22.09	19.8~25.7	1.29	21.23	30
			1	#99	22.13	19.8~25.7	1.29	21.27	30
			18	#0	22.04	19.8~25.7	1.29	21.18	30
	21350	QPSK	1	#0	22.19	19.8~25.7	1.29	21.33	30
			1	#99	22.09	19.8~25.7	1.29	21.23	30

Note : ERP= Conducted Power + Antenna Gain(dBi)-2.15

5MHz CH20775 1RB#0

CMW 500 V 3.7120 - 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 Subtr/Slot:	0 / All
TX Measurement										
	Current		Average		Extreme		StdDev			
EVM RMS [%] /h	6.57	6.57	6.00	6.01	6.60	6.60	0.53	0.51		
EVM Peak [%] /h	19.98	19.89	17.49	17.41	20.34	20.10	2.55	2.48		
EVM DMRS [%] /h	4.96	5.05	5.02	5.14	5.30	5.41	0.12	0.11		
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
IQ Offset [dBc]	-51.12		-51.98		-49.99		0.88			
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP			
IQ Quadrature Error [°]	NCAP		NCAP		NCAP		NCAP			
Freq Error [Hz]	1.29		-2.70		-20.79		10.17			
Timing Error [Ts]	0.82		0.72		1.20		0.19			
OBW [MHz]	0.26		0.29		0.33		0.04			
	Current		Average		Min		Max		StdDev	
TX Power [dBm]	22.21		22.28		22.12		22.40		0.09	
Peak Power [dBm]	24.87		24.86		24.81		24.92		0.02	
RB Power [dBm]	22.21		22.24		22.12		22.30		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										

5MHz CH21100 1RB#0

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

Multi EvaluationPRACHSRS

FDD Freq: 2535.0 MHz Ref. Level: 41.00 dBm BW: 5.0 MHz CP: Normal Meas Subtr/Slot: 0 / All

TX Measurement

	Current	Average	Latency	StdDev				
EVM RMS [%] /h	4.83	4.76	4.79	4.99	5.05	0.13	0.14	
EVM Peak [%] /h	13.47	13.39	13.36	13.33	14.36	14.28	0.65	0.62
EVM DMRS [%] /h	3.96	4.01	3.78	3.85	4.32	4.34	0.31	0.25
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-50.80	-53.02	-50.05	1.57				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP				
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP				
Freq Error [Hz]	11.67	-4.23	-15.88	8.08				
Timing Error [Ts]	-8.66	-8.30	-8.87	0.22				
OBW [MHz]	0.28	0.29	0.30	0.01				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	21.94	22.00	21.94	22.13	0.05			
Peak Power [dBm]	25.18	25.03	24.84	25.20	0.14			
RB Power [dBm]	21.94	22.00	21.94	22.12	0.05			

Statistic Count 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 V3.7.120 - 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 Subtr/Slot: 0 / All

TX Measurement

	Current	Average	Extreme	StdDev				
EVM RMS [%] /h	5.53	5.55	5.45	5.49	5.66	5.69	0.10	0.10
EVM Peak [%] /h	23.96	24.03	20.59	20.60	24.86	24.72	3.56	3.62
EVM DMRS [%] /h	4.49	4.53	4.61	4.71	4.92	5.06	0.17	0.21
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-46.31	-50.09	-46.31	4.71				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP				
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP				
Freq Error [Hz]	4.99	1.30	-15.85	9.03				
Timing Error [Ts]	-11.06	-11.25	-11.55	0.15				
OBW [MHz]	1.41	1.41	1.41	0.00				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.11	22.13	22.04	22.21	0.04			
Peak Power [dBm]	25.46	25.46	25.37	25.52	0.03			
RB Power [dBm]	13.09	13.10	13.01	13.17	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

5MHz CH21425 1RB#0

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

Multi EvaluationPRACHSRS

FDD Freq: 2535.0 MHzRef. Level: 41.00 dBmBW: 5.0 MHzCP: NormalMeas Subtr/Slot: 0 / All

TX Measurement

	Current	Average	Latency	StdDev				
EVM RMS [%] /h	5.55	5.60	5.47	5.50	5.63	5.68	0.10	0.10
EVM Peak [%] /h	23.52	23.77	20.68	20.74	24.80	31.87	3.48	3.62
EVM DMRS [%] /h	4.47	4.54	4.63	4.74	4.89	5.02	0.16	0.22
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-46.79	-50.27	-46.24	5.50				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP				
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP				
Freq Error [Hz]	-14.19	-5.81	-23.60	9.37				
Timing Error [Ts]	-8.95	-9.09	-9.36	0.19				
OBW [MHz]	1.41	1.41	1.41	0.00				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.15	22.15	22.03	22.21	0.04			
Peak Power [dBm]	25.50	25.45	25.32	25.58	0.06			
RB Power [dBm]	13.13	13.12	13.01	13.17	0.03			

Statistic Count

20 / 20

Out of Tolerance0.00 %

Detected ModulationQPSK

Detected Channel TypePUSCH

View FilterThroughput100.0 %

PS: Attached RRC State: Connected

20MHz CH20850 1RB#0

CMW 500 V 3.7120 - LTE Measurement - V3.7.70 - TX Measurement									
Multi Evaluation PRACH SRS									
FDD	Freq: 2510.0 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	5.05	5.01	5.62	5.61	6.25	6.25	0.60	0.61	
EVM Peak [%] /h	13.50	13.46	14.91	14.90	17.18	17.07	1.76	1.76	
EVM DMRS [%] /h	4.39	4.40	4.56	4.59	4.85	4.89	0.16	0.17	
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	
IQ Offset [dBc]	-58.98			-55.87		-53.12		1.90	
IQ Gain Imbalance [dB]	NCAP			NCAP		NCAP		NCAP	
IQ Quadrature Error [°]	NCAP			NCAP		NCAP		NCAP	
Freq Error [Hz]	-11.62			-6.75		-21.54		8.11	
Timing Error [Ts]	7.45			6.63		7.55		0.60	
OBW [MHz]	0.19			0.31		0.43		0.12	
	Current			Average		Min	Max	StdDev	
TX Power [dBm]	22.14			22.17		22.13	22.22	0.04	
Peak Power [dBm]	24.71			24.81		24.71	24.92	0.08	
RB Power [dBm]	22.19			22.18		22.16	22.19	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									

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	23.01	19.8~25.7	1.12	21.98	30
	21650	QPSK	1	#0	22.91	19.8~25.7	1.12	21.88	30
			5	#0	23.11	19.8~25.7	1.12	22.08	30
	21793	QPSK	1	#0	22.96	19.8~25.7	1.12	21.93	30
5MHz	21525	QPSK	1	#0	22.91	19.8~25.7	1.12	21.88	30
			1	#24	22.88	19.8~25.7	1.12	21.85	30
	21650	QPSK	1	#0	22.82	19.8~25.7	1.12	21.79	30
			1	#24	22.81	19.8~25.7	1.12	21.78	30
			8	#0	22.81	19.8~25.7	1.12	21.78	30
	21775	QPSK	1	#0	23.00	19.8~25.7	1.12	21.97	30
			1	#24	22.75	19.8~25.7	1.12	21.72	30
10MHz	21550	QPSK	1	#0	22.91	19.8~25.7	1.12	21.88	30
			1	#49	22.82	19.8~25.7	1.12	21.79	30
	21650	QPSK	1	#0	22.86	19.8~25.7	1.12	21.83	30
			1	#49	22.78	19.8~25.7	1.12	21.75	30
			12	#0	22.74	19.8~25.7	1.12	21.71	30
	21750	QPSK	1	#0	22.95	19.8~25.7	1.12	21.92	30
			1	#49	22.83	19.8~25.7	1.12	21.80	30

Note : ERP= Conducted Power + Antenna Gain(dBi)-2.15

5MHz CH21650 1RB#0

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

Multi EvaluationPRACHSRS

FDDFreq: 900.0 MHzRef Level: 41.00 dBmBW: 5.0 MHzCP: NormalMeas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Latency	StdDev				
EVM RMS [%] /h	5.30	5.83	5.86	6.65	6.64	0.63	0.59	
EVM Peak [%] /h	17.06	17.10	21.15	21.17	26.26	26.28	4.35	4.34
EVM DMRS [%] /h	2.72	2.69	3.05	3.03	3.84	3.78	0.50	0.50
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-57.70	-61.03	-55.23	4.60				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP	NCAP			
Freq Error [Hz]	2.65	0.44	8.68	3.53				
Timing Error [Ts]	3.48	3.54	3.88	0.19				
OBW [MHz]	0.27	0.27	0.28	0.00				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.80	22.74	22.67	22.82	0.05			
Peak Power [dBm]	26.18	26.30	26.13	26.51	0.14			
RB Power [dBm]	22.79	22.70	22.62	22.80	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

5MHz CH21650 1RB#24

CMW 500 V 3.7.120 - 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		Extreme		StdDev	
EVM RMS [%] /h	1.23	1.30	1.63	1.69	2.11	2.15	0.42	0.41
EVM Peak [%] /h	3.79	3.78	6.71	6.70	10.70	10.71	3.20	3.20
EVM DMRS [%] /h	0.98	0.90	1.14	1.07	1.39	1.31	0.16	0.14
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-69.48	-64.08	-58.06	5.07				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP				
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP				
Freq Error [Hz]	-3.00	-4.23	-13.80	3.36				
Timing Error [Ts]	3.82	3.96	4.38	0.21				
OBW [MHz]	0.27	0.31	0.35	0.04				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.81	22.71	22.64	22.81	0.04			
Peak Power [dBm]	27.46	27.70	27.40	27.99	0.26			
RB Power [dBm]	22.82	22.71	22.63	22.82	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

5MHz CH21650 8RB#0

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation PRACH SRS										
FDD	900.0 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	4.37	4.36	4.23	4.25	4.39	4.43	0.08	0.08		
EVM Peak [%] /h	18.65	18.69	18.91	18.91	20.29	20.25	0.77	0.73		
EVM DMRS [%] /h	3.45	3.59	3.33	3.46	3.61	3.74	0.11	0.11		
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
IQ Offset [dBc]	-61.10		-54.95		-50.39		4.51			
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP			
IQ Quadrature Error [°]	NCAP		NCAP		NCAP		NCAP			
Freq Error [Hz]	-10.10		-6.05		-12.93		3.35			
Timing Error [Ts]	7.32		6.88		7.32		0.55			
OBW [MHz]	1.42		1.41		1.42		0.01			
	Current		Average		Min		Max		StdDev	
TX Power [dBm]	22.81		22.72		22.64		22.81		0.05	
Peak Power [dBm]	26.66		26.68		26.61		26.78		0.04	
RB Power [dBm]	13.81		13.70		13.61		13.81		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										

5MHz CH21775 1RB#0

CMW 500 V 3.7.120 - 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		Latency		StdDev	
EVM RMS [%] /h	3.57	3.58	3.97	3.98	4.52	4.52	0.41	0.40
EVM Peak [%] /h	12.29	12.30	13.74	13.78	16.22	16.28	1.83	1.85
EVM DMRS [%] /h	2.34	2.38	2.74	2.79	3.26	3.31	0.33	0.34
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-64.72	-60.75	-55.78	4.80				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP				
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP				
Freq Error [Hz]	-6.84	-1.66	-10.36	3.73				
Timing Error [Ts]	1.14	0.70	1.14	0.25				
OBW [MHz]	0.28	0.26	0.28	0.03				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.95	22.87	22.71	23.00	0.08			
Peak Power [dBm]	26.55	26.58	26.53	26.63	0.03			
RB Power [dBm]	22.89	22.85	22.73	22.94	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

5MHz CH21775 1RB#24

CMW 500 V 3.7.120 - LTE Measurement - V3.7.70 - TX Measurement										
Multi Evaluation PRACH SRS										
FDD	912.5 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	1.32	1.37	1.19	1.22	1.36	1.40	0.13	0.14		
EVm Peak [%] /h	5.20	5.25	4.46	4.43	5.41	5.38	0.70	0.69		
EVm DMRS [%] /h	1.19	1.12	1.03	1.03	1.28	1.25	0.13	0.12		
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr RMS [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr Peak [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
PhErr DMRS [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP		
IQ Offset [dBc]		-75.93		-64.14		-59.46		5.49		
IQ Gain Imbalance [dB]		NCAP		NCAP		NCAP		NCAP		
IQ Quadrature Error [°]		NCAP		NCAP		NCAP		NCAP		
Freq Error [Hz]		-9.96		-4.15		-13.15		4.18		
Timing Error [Ts]		2.06		1.57		2.08		0.25		
OBW [MHz]		0.33		0.26		0.33		0.07		
	Current	Average			Min	Max	StdDev			
TX Power [dBm]	22.59	22.66			22.57	22.75	0.08			
Peak Power [dBm]	27.34	27.28			27.20	27.37	0.06			
RB Power [dBm]	22.64	22.66			22.62	22.69	0.02			
Statistic Count Out of Tolerance Detected Modulation QPSK Detected Channel Type PUSCH View Filter Throughput										
20 / 20		0.00 %				100.0 %				
PS: Attached RRC 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	23.35	19.8~25.7	1.07	22.27	30
			4	#0	23.51	19.8~25.7	1.07	22.43	30
	27435	QPSK	1	#0	23.62	19.8~25.7	1.07	22.54	30
			4	#0	23.68	19.8~25.7	1.07	22.60	30
	27645	QPSK	1	#14	23.48	19.8~25.7	1.07	22.40	30
			4	#11	23.49	19.8~25.7	1.07	22.41	30
5MHz	27235	QPSK	1	#0	23.33	19.8~25.7	1.07	22.25	30
			8	#0	23.31	19.8~25.7	1.07	22.23	30
	27435	QPSK	1	#0	23.51	19.8~25.7	1.07	22.43	30
			8	#0	23.61	19.8~25.7	1.07	22.53	30
	27635	QPSK	1	#24	22.98	19.8~25.7	1.07	21.90	30
			8	#17	22.99	19.8~25.7	1.07	21.91	30
20MHz	27310	QPSK	1	#0	23.34	19.8~25.7	1.07	22.26	30
			18	#0	23.22	19.8~25.7	1.07	22.14	30
	27435	QPSK	1	#0	23.71	19.8~25.7	1.07	22.63	30
			18	#0	23.49	19.8~25.7	1.07	22.41	30
	27560	QPSK	1	#99	23.02	19.8~25.7	1.07	21.94	30
			18	#82	22.84	19.8~25.7	1.07	21.76	30

Note : ERP= Conducted Power + Antenna Gain(dBi)-2.15

3MHz CH27225 1RB#0

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

Multi EvaluationPRACHSRS

FDDFreq: 704.5 MHzRef Level: 41.00 dBmBW: 3.0 MHzCP: NormalMeas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Extreme	StdDev				
EVM RMS [%] /h	4.00	4.22	3.54	3.71	4.73	4.91	0.64	0.68
EVM Peak [%] /h	11.94	15.28	10.96	12.68	13.52	16.78	1.40	2.93
EVM DMRS [%] /h	2.22	2.21	2.06	2.07	2.58	2.57	0.27	0.23
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-69.19	-62.49	-56.59	4.26				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP	NCAP			
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP				
Freq Error [Hz]	2.13	-1.37	-7.14	2.93				
Timing Error [Ts]	-1.49	-1.73	-2.44	0.20				
OBW [MHz]	0.19	0.19	0.19	0.00				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	22.65	22.82	22.64	23.35	0.12			
Peak Power [dBm]	26.64	26.57	26.44	26.80	0.09			
RB Power [dBm]	22.72	22.86	22.72	23.36	0.09			

Statistic CountOut of ToleranceDetected ModulationDetected Channel TypeView Filter Throughput

20 / 200.00 %QPSKPUSCH100.0 %

PS: Attached RRC State: Connected

3MHz CH27225 4RB#0

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

Multi EvaluationPRACHSRS

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	Latency	StdDev
EVM RMS [%] /h	3.56	3.66	3.55	3.61
EVM Peak [%] /h	12.21	12.20	12.55	12.55
EVM DMRS [%] /h	3.00	3.07	2.94	3.15
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-64.05	-59.45	-54.49	4.77
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP
Freq Error [Hz]	-5.74	-8.75	-12.77	2.49
Timing Error [Ts]	-0.93	-1.18	-1.77	0.20
OBW [MHz]	0.72	0.71	0.72	0.01
	Current	Average	Min	Max
TX Power [dBm]	23.30	23.21	22.78	23.51
Peak Power [dBm]	27.09	27.09	26.92	27.25
RB Power [dBm]	17.30	17.21	16.78	17.51

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

3MHz CH27435 1RB#0

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

Multi EvaluationPRACHSRS

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	Latency	StdDev				
EVM RMS [%] /h	3.90	4.02	4.42	4.49	5.09	5.13	0.54	0.50
EVM Peak [%] /h	10.59	10.68	11.99	12.12	14.03	14.19	1.55	1.58
EVM DMRS [%] /h	3.05	3.10	2.95	2.97	3.30	3.31	0.12	0.14
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-63.71	-61.51	-56.72	4.74				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP				
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP				
Freq Error [Hz]	-6.07	-6.68	-14.26	3.55				
Timing Error [Ts]	1.74	1.69	2.02	0.20				
OBW [MHz]	0.21	0.21	0.21	0.00				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	23.56	23.53	23.46	23.62	0.05			
Peak Power [dBm]	26.38	26.52	26.34	26.72	0.14			
RB Power [dBm]	23.60	23.54	23.44	23.66	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

3MHz CH27435 4RB#0

CMW 500 V 3.7.120 - 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	Latency	StdDev				
EVM RMS [%] /h	5.34	5.38	5.56	5.58	5.88	5.88	0.16	0.14
EVM Peak [%] /h	17.74	17.75	19.68	19.70	21.93	21.93	1.56	1.56
EVM DMRS [%] /h	4.40	4.68	4.46	4.64	4.76	5.03	0.12	0.19
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-62.74	-56.07	-51.59	5.03				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP				
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP				
Freq Error [Hz]	-11.96	-11.30	-14.31	2.22				
Timing Error [Ts]	1.18	0.96	1.23	0.17				
OBW [MHz]	0.72	0.72	0.72	0.00				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	23.53	23.59	23.52	23.68	0.05			
Peak Power [dBm]	26.91	27.03	26.88	27.20	0.10			
RB Power [dBm]	17.55	17.60	17.52	17.69	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

3MHz CH27645 1RB#14

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

Multi Evaluation PRACH SRS

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	Latency	SubDev				
EVM RMS [%] /h	1.71	2.10	1.62	1.94	1.87	2.26	0.15	0.21
EVM Peak [%] /h	5.05	5.86	4.49	5.23	6.11	6.51	0.91	0.72
EVM DMRS [%] /h	1.65	1.72	1.49	1.63	1.77	2.00	0.16	0.16
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [*] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [*] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [*] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-64.58	-62.25	-57.22	4.78				
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP				
IQ Quadrature Error [*]	NCAP	NCAP	NCAP	NCAP				
Freq Error [Hz]	-1.23	-6.47	-12.80	2.86				
Timing Error [Ts]	-3.69	-3.81	-4.52	0.19				
OBW [MHz]	0.21	0.22	0.24	0.01				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	23.38	23.38	22.82	23.48	0.07			
Peak Power [dBm]	27.74	27.62	27.21	27.78	0.12			
RB Power [dBm]	23.50	23.49	22.94	23.58	0.07			

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

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Attached RRC State: Connected

20MHz CH27310 1RB#0

CMW 500 VV 3.7,120 - LTE Measurement - V3.7,120 - 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		Extreme		StdDev	
EVM RMS [%] /h	3.52	3.52	3.06	3.06	3.65	3.66	0.56	0.56
EVM Peak [%] /h	11.64	11.66	9.84	9.85	11.76	11.81	1.69	1.70
EMV DMRS [%] /h	2.08	2.05	1.84	1.83	2.08	2.05	0.17	0.15
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-54.95		-55.46		-52.07		1.46	
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP	
IQ Quadrature Error [°]	NCAP		NCAP		NCAP		NCAP	
Freq Error [Hz]	-1.99		-4.88		-10.97		3.10	
Timing Error [Ts]	6.09		5.70		6.77		0.60	
OBW [MHz]	0.39		0.28		0.39		0.10	
	Current		Average		Min	Max	StdDev	
TX Power [dBm]	23.25		23.24		23.14	23.34	0.06	
Peak Power [dBm]	27.23		27.10		26.94	27.24	0.12	
RB Power [dBm]	23.23		23.27		23.20	23.34	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 CH27310 18RB#0

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

Multi Evaluation PRACH SRS

FDD Freq: 713.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subtr/Slot: 0 / All

TX Measurement

	Current	Average	Max	Min	StdDev
EVM RMS [%] /h	2.49	2.52	2.40	2.42	2.50
EVM Peak [%] /h	14.30	14.35	12.92	12.92	14.94
EVM DMRS [%] /h	1.80	1.79	1.72	1.75	1.82
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-53.25	-54.02	-52.61		0.84
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP		NCAP
IQ Quadrature Error [°]	NCAP	NCAP	NCAP		NCAP
Freq Error [Hz]	-10.40	-6.21	-11.66		3.65
Timing Error [Ts]	4.71	6.53	7.05		0.64
OBW [MHz]	3.19	3.19	3.19		0.00
	Current	Average	Min	Max	StdDev
TX Power [dBm]	23.20	23.17	23.10	23.22	0.05
Peak Power [dBm]	27.72	27.67	27.62	27.72	0.03
RB Power [dBm]	10.65	10.62	10.55	10.68	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 CH27435 1RB#0

Multi Evaluation | PRACH | SRS

FDD Freq: 725.5 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	6.21	6.19	5.82	5.81	6.41	6.37	0.50	0.49
EVM Peak [%] /h	20.24	20.15	17.60	17.59	21.15	21.07	3.12	3.09
EVM DMRS [%] /h	4.31	4.37	4.34	4.35	4.64	4.63	0.14	0.14
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-52.36	-53.17	-53.17	-51.17	1.01			
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP	NCAP			
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP	NCAP			
Freq Error [Hz]	-15.16	-10.21	-20.54	5.24				
Timing Error [Ts]	4.73	4.90	5.79	0.62				
OBW [MHz]	0.18	0.32	0.47	0.14				
	Current	Average	Min	Max	StdDev			
TX Power [dBm]	23.44	23.57	23.42	23.71	0.09			
Peak Power [dBm]	26.39	26.40	26.35	26.48	0.03			
RB Power [dBm]	23.43	23.52	23.42	23.62	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 CH27435 18RB#0

CMW 500 V 3.7.120 - 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 Subtr./Slot: 0 / All

TX Measurement

	Current		Average		Extreme		StdDev	
EVm RMS [%] /h	2.93	2.96	2.99	3.02	3.09	3.12	0.05	0.05
EVm Peak [%] /h	16.03	16.00	15.42	15.43	16.68	16.65	0.86	0.82
EVm DMRS [%] /h	1.88	1.84	1.93	1.92	2.02	2.02	0.06	0.06
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [*] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [*] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [*] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-53.76		-52.95		-51.15		1.30	
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP	
IQ Quadrature Error [*]	NCAP		NCAP		NCAP		NCAP	
Freq Error [Hz]	-12.22		-6.72		-12.22		3.30	
Timing Error [Ts]	4.41		4.41		5.28		0.32	
OBW [MHz]	3.18		3.18		3.18		0.00	
	Current		Average		Min		Max	
TX Power [dBm]	23.39		23.42		23.35		23.49	
Peak Power [dBm]	27.82		27.78		27.72		27.83	
RB Power [dBm]	10.84		10.87		10.81		10.94	

Statistic Count: 19 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

20MHz CH27560 1RB#99

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

Multi Evaluation PRACH SRS

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		Latency		Success	
EVM RMS [%] /h	1.75	1.74	1.82	1.83	1.99	2.01	0.07	0.08
EVM Peak [%] /h	4.67	4.69	5.21	5.23	6.39	6.45	0.69	0.71
EVM DMRS [%] /h	1.47	1.47	1.48	1.47	1.67	1.66	0.09	0.09
MErR RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErR Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErR DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [*] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [*] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [*] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-53.25		-50.54		-48.01		1.46	
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP	
IQ Quadrature Error [*]	NCAP		NCAP		NCAP		NCAP	
Freq Error [Hz]	-1.76		-6.54		-13.65		3.30	
Timing Error [Ts]	4.96		4.84		6.46		0.41	
OBW [MHz]	0.19		0.23		0.28		0.04	
	Current		Average		Min	Max		StdDev
TX Power [dBm]	22.71		22.85		22.64	23.02		0.12
Peak Power [dBm]	27.07		27.19		27.04	27.32		0.09
RB Power [dBm]	22.79		22.81		22.70	22.87		0.04

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 CH27560 18RB#82

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

Multi Evaluation PRACH SRS

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	Limit	StdDev
EVM RMS [%] /h	2.95	2.96	2.97	2.98
EVM Peak [%] /h	18.93	18.94	17.29	17.25
EVM DMRS [%] /h	1.92	1.89	2.03	2.04
MER RMS [%] /h	NCAP	NCAP	NCAP	NCAP
MER Peak [%] /h	NCAP	NCAP	NCAP	NCAP
MER DMRS [%] /h	NCAP	NCAP	NCAP	NCAP
PhErr RMS [*] /h	NCAP	NCAP	NCAP	NCAP
PhErr Peak [*] /h	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [*] /h	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-52.74	-52.36	-50.18	1.24
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP
IQ Quadrature Error [*]	NCAP	NCAP	NCAP	NCAP
Freq Error [Hz]	-2.59	-7.70	-13.90	3.49
Timing Error [Ts]	4.45	4.84	6.29	0.88
OBW [MHz]	3.18	3.18	3.18	0.00
	Current	Average	Min	Max
TX Power [dBm]	22.73	22.78	22.73	22.84
Peak Power [dBm]	27.44	27.38	27.19	27.54
RB Power [dBm]	10.17	10.23	10.17	10.29

Statistic Count: 19 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

DC Input

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	22.62	19.8~25.7	1.26	21.73	30
	19575	QPSK	1	#0	22.59	19.8~25.7	1.26	21.70	30
			5	#0	22.65	19.8~25.7	1.26	21.76	30
	19943	QPSK	1	#0	22.49	19.8~25.7	1.26	21.60	30
5MHz	19225	QPSK	1	#0	22.41	19.8~25.7	1.26	21.52	30
			1	#24	22.46	19.8~25.7	1.26	21.57	30
	19575	QPSK	1	#0	22.58	19.8~25.7	1.26	21.69	30
			1	#24	22.50	19.8~25.7	1.26	21.61	30
			8	#0	22.55	19.8~25.7	1.26	21.66	30
	19925	QPSK	1	#0	22.80	19.8~25.7	1.26	21.91	30
			1	#24	22.42	19.8~25.7	1.26	21.53	30
	20MHz	19300	QPSK	1	#0	22.31	19.8~25.7	1.26	21.42
1				#99	22.59	19.8~25.7	1.26	21.70	30
19575		QPSK	1	#0	22.62	19.8~25.7	1.26	21.73	30
			1	#99	22.38	19.8~25.7	1.26	21.49	30
			18	#0	22.67	19.8~25.7	1.26	21.78	30
19850		QPSK	1	#0	22.04	19.8~25.7	1.26	21.15	30
			1	#99	22.38	19.8~25.7	1.26	21.49	30

Note : ERP= Conducted Power + Antenna Gain(dBi)-2.15

1.4MHz CH19207 1RB#0

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

Multi EvaluationPRACHSRS

FDDFreq: 1710.7 MHzRef Level: 41.00 dBmBW: 1.4 MHzCP: NormalMeas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Latency	StdDev				
EVM RMS [%] /h	1.80	1.62	1.67	1.97	1.98	0.22	0.24	
EVM Peak [%] /h	5.00	5.00	4.53	4.41	6.31	6.16	1.12	0.99
EVM DMRS [%] /h	1.54	1.49	1.66	1.63	2.01	1.98	0.14	0.12
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-59.32	-58.04	-53.68			3.95		
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP			NCAP		
IQ Quadrature Error [°]	NCAP	NCAP	NCAP			NCAP		
Freq Error [Hz]	-0.01	-0.57	-12.63			4.05		
Timing Error [Ts]	12.45	12.41	12.82			0.18		
OBW [MHz]	0.21	0.20	0.21			0.01		
	Current	Average	Min	Max			StdDev	
TX Power [dBm]	22.31	22.43	21.87	22.62			0.11	
Peak Power [dBm]	27.29	27.19	26.69	27.39			0.16	
RB Power [dBm]	22.42	22.49	21.97	22.61			0.07	

Statistic CountOut of ToleranceDetected ModulationDetected Channel TypeView Filter Throughput

20 / 200.00 %QPSKPUSCH100.0 %

PS:Connection EstablishedRRC State: Connected

1.4MHz CH19575 1RB#0

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

Multi EvaluationPRACHSRS

FDDFreq: 1747.5 MHzRef. Level: 41.00 dBmBW: 1.4 MHzCP: NormalMeas Subfr/Slot: 0 / All

TX Measurement

	Current		Average		Latency		StdDev	
EVM RMS [%] /h	1.52	1.52	1.36	1.46	1.59	1.62	0.14	0.07
EVM Peak [%] /h	3.75	3.66	3.19	3.66	4.75	4.67	0.58	0.27
EVM DMRS [%] /h	1.48	1.58	1.46	1.47	1.85	1.84	0.12	0.15
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-60.58		-56.49		-52.62		1.61	
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP	
IQ Quadrature Error [°]	NCAP		NCAP		NCAP		NCAP	
Freq Error [Hz]	-10.47		-9.38		-23.22		4.82	
Timing Error [Ts]	7.04		6.66		7.09		0.22	
OBW [MHz]	0.19		0.20		0.21		0.01	
	Current		Average		Min		Max	StdDev
TX Power [dBm]	22.42		22.45		21.89		22.59	0.05
Peak Power [dBm]	27.30		27.05		26.37		27.43	0.31
RB Power [dBm]	22.47		22.52		21.94		22.67	0.06

Statistic CountOut of ToleranceDetected ModulationDetected Channel TypeView Filter Throughput

20 / 200.00 %QPSKPUSCH100.0 %

PS:Connection EstablishedRRC State: Connected

1.4MHz CH19575 5RB#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: 1.4 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Latency	StdDev				
EVM RMS [%] /h	1.61	2.08	1.68	2.06	1.88	2.23	0.06	0.05
EVM Peak [%] /h	4.98	15.47	7.20	13.55	10.29	16.45	2.01	1.42
EVM DMRS [%] /h	1.32	2.24	1.36	1.89	1.63	2.50	0.12	0.40
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-57.90	-56.51	-50.17			6.93		
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP			NCAP		
IQ Quadrature Error [°]	NCAP	NCAP	NCAP			NCAP		
Freq Error [Hz]	-6.37	-5.21	-15.96			5.04		
Timing Error [Ts]	8.67	8.38	8.70			0.16		
OBW [MHz]	0.87	0.88	0.89			0.01		
	Current	Average	Min	Max			StdDev	
TX Power [dBm]	22.57	22.54	22.03	22.65			0.05	
Peak Power [dBm]	27.83	28.11	27.51	28.49			0.30	
RB Power [dBm]	15.62	15.59	15.07	15.70			0.05	

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

20 / 20 0.00 % QPSK PUSCH 100.0 %

PS: Connection Established RRC State: Connected

1.4MHz CH19943 1RB#0

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

Multi EvaluationPRACHSRS

FDDFreq 1784.3 MHzRef. Level: 41.00 dBmBW 1.4 MHzCP: NormalMeas Subfr/Slot: 0 / All

TX Measurement

	Current		Average		Extreme		StdDev	
EVM RMS [%] /h	2.98	2.98	2.95	2.95	3.08	3.06	0.06	0.05
EVM Peak [%] /h	11.64	11.64	12.04	12.05	13.05	13.09	0.42	0.39
EVM DMRS [%] /h	1.59	1.68	1.69	1.75	2.05	2.11	0.16	0.16
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-62.09		-57.80		-53.12		4.42	
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP	
IQ Quadrature Error [°]	NCAP		NCAP		NCAP		NCAP	
Freq Error [Hz]	-0.57		-5.46		-16.25		5.24	
Timing Error [Ts]	10.85		11.02		11.48		0.21	
OBW [MHz]	0.21		0.20		0.21		0.01	
	Current		Average		Min	Max		StdDev
TX Power [dBm]	22.32		22.37		22.23	22.49		0.06
Peak Power [dBm]	26.60		26.63		26.55	26.72		0.04
RB Power [dBm]	22.41		22.41		22.32	22.48		0.04

Statistic CountOut of ToleranceDetected ModulationDetected Channel TypeView Filter Throughput

20 / 200.00 %QPSKPUSCH100.0 %

PS:Connection EstablishedRRC State: Connected

5MHz CH19225 1RB#0

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

5MHz CH19575 1RB#0

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

FDD Freq: 1747.5 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	2.12	2.12	1.67	1.70
EVM Peak [%] /h	10.06	10.07	5.86	5.90
EVM DMRS [%] /h	1.73	1.78	1.66	1.62
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP
PhErr RMS [°] /h	NCAP	NCAP	NCAP	NCAP
PhErr Peak [°] /h	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [°] /h	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-63.84	-63.14	-57.98	3.25
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP
Freq Error [Hz]	-8.03	-2.25	13.75	6.54
Timing Error [Ts]	15.77	15.52	16.04	0.22
OBW [MHz]	0.26	0.25	0.27	0.01

	Current	Average	Min	Max	StdDev
TX Power [dBm]	22.57	22.20	21.88	22.58	0.25
Peak Power [dBm]	27.94	27.47	26.94	27.94	0.36
RB Power [dBm]	22.55	22.19	21.87	22.55	0.25

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

PS: Attached RRC State: Connected

5MHz CH19575 1RB#24

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

Multi Evaluation PRACH SRS

FDD Freq: 1747.5 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	1.70	1.71	1.52	1.56	1.84	1.86	0.18	0.17
EVM Peak [%] /h	5.64	5.65	4.22	4.27	7.25	7.26	1.62	1.59
EVM DMRS [%] /h	1.76	1.63	1.67	1.61	1.99	1.99	0.17	0.16
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-63.30		-63.20		-58.42			4.01
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP			NCAP
IQ Quadrature Error [°]	NCAP		NCAP		NCAP			NCAP
Freq Error [Hz]	-8.81		-5.34		-16.91			6.07
Timing Error [Ts]	16.91		16.94		17.31			0.21
OBW [MHz]	0.35		0.31		0.35			0.04
	Current		Average		Min		Max	StdDev
TX Power [dBm]	22.34		22.23		21.82		22.50	0.24
Peak Power [dBm]	28.22		27.79		27.18		28.27	0.39
RB Power [dBm]	22.33		22.23		21.81		22.51	0.24

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 CH19575 8RB#0

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

FDD Freq: 1747.5 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	1.39	1.44	1.53	1.57
EVM Peak [%] /h	4.45	4.78	5.11	6.63
EVM DMSR [%] /h	1.59	1.89	1.64	1.86
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP
MErr DMSR [%] /h	NCAP	NCAP	NCAP	NCAP
PhErr RMS [°] /h	NCAP	NCAP	NCAP	NCAP
PhErr Peak [°] /h	NCAP	NCAP	NCAP	NCAP
PhErr DMSR [°] /h	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-57.43	-57.20	-53.49	3.86
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP
Freq Error [Hz]	-1.10	-2.27	-18.10	6.32
Timing Error [Ts]	14.20	14.30	14.50	0.18
OBW [MHz]	1.41	1.40	1.41	0.01
	Current	Average	Min	Max
TX Power [dBm]	21.99	22.04	21.86	22.55
Peak Power [dBm]	27.49	27.58	27.40	27.84
RB Power [dBm]	12.98	13.03	12.85	13.54

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

PS: Attached RRC State: Connected

5MHz CH19925 1RB#0

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

Detected Allocation	NoRB:		1OffsetRB:				0				StdDev
	Current		Average		Extreme						
EVM RMS [%] / h	1.45	1.48	1.30	1.32	1.45	1.48	0.08	0.08			
EVM Peak [%] / h	4.29	4.34	3.51	3.49	4.75	4.77	0.68	0.71			
EVM DMRS [%] / h	1.55	1.59	1.45	1.43	1.68	1.73	0.12	0.13			
MErr RMS [%] / h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP			
MErr Peak [%] / h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP			
MErr DMRS [%] / h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP			
PhErr RMS [%] / h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP			
PhErr Peak [%] / h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP			
PhErr DMRS [%] / h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP			
IQ Offset [dBc]	-70.39		-61.58		-58.45		3.49				
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP				
IQ Quadrature Error [%]	NCAP		NCAP		NCAP		NCAP				
Freq Error [Hz]	3.66		-4.59		-14.88		5.62				
Timing Error [Ts]	-0.50		-0.09		-0.50		0.22				
OBW [MHz]	0.21		0.25		0.28		0.04				
	Current		Average		Min		Max				
TX Power [dBm]	22.71		22.58		22.12		22.80				
Peak Power [dBm]	27.62		27.44		27.11		27.63				

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 CH19925 1RB#24

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

Multi Analysis PRACH SRS

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	Latency	SubDev
EVM RMS [%] /h	2.05	2.04	2.33	2.32
EVM Peak [%] /h	6.66	6.65	8.28	8.27
EVM DMRS [%] /h	1.50	1.50	1.67	1.65
MErr RMS [%] /h	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] /h	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] /h	NCAP	NCAP	NCAP	NCAP
PhErr RMS [*] /h	NCAP	NCAP	NCAP	NCAP
PhErr Peak [*] /h	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [*] /h	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-60.19	-61.86	-58.19	2.94
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP
IQ Quadrature Error [*]	NCAP	NCAP	NCAP	NCAP
Freq Error [Hz]	-10.67	-6.98	-15.42	6.21
Timing Error [Ts]	0.10	0.12	0.77	0.24
OBW [MHz]	0.18	0.25	0.33	0.07
	Current	Average	Min	Max
TX Power [dBm]	22.29	22.26	22.10	22.42
Peak Power [dBm]	26.25	26.34	26.24	26.44
RB Power [dBm]	22.22	22.25	22.15	22.36

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#0

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

Multi Evaluation PRACH SRS

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

TX Measurement

	Current		Average		Error		StdDev	
EVM RMS [%] /h	1.46	1.47	1.46	1.46	1.63	1.66	0.11	0.11
EVM Peak [%] /h	3.13	3.08	3.13	3.18	4.70	4.73	0.64	0.63
EVM DMRS [%] /h	1.57	1.51	1.56	1.52	1.74	1.68	0.16	0.14
MER RMS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MER Peak [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
MER DMRS [%] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr RMS [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr Peak [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [°] /h	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-58.98		-61.22		-56.97		4.15	
IQ Gain Imbalance [dB]	NCAP		NCAP		NCAP		NCAP	
IQ Quadrature Error [°]	NCAP		NCAP		NCAP		NCAP	
Freq Error [Hz]	6.45		-3.35		-10.46		5.87	
Timing Error [Ts]	7.25		7.31		7.53		0.17	
OBW [MHz]	0.18		0.27		0.38		0.10	
	Current		Average		Min	Max	StdDev	
TX Power [dBm]	21.80		21.91		21.75	22.31	0.17	
Peak Power [dBm]	26.59		26.86		26.56	27.30	0.25	
RB Power [dBm]	21.89		21.95		21.80	22.33	0.16	

Statistic Count: 13 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Attached RRC State: Connected

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	22.59	19.8~25.7	1.29	21.73	30
	21100	QPSK	1	#0	22.27	19.8~25.7	1.29	21.41	30
			8	#0	22.37	19.8~25.7	1.29	21.51	30
	21425	QPSK	1	#0	22.25	19.8~25.7	1.29	21.39	30
20MHz	20850	QPSK	1	#0	22.44	19.8~25.7	1.29	21.58	30
			1	#99	22.17	19.8~25.7	1.29	21.31	30
	21100	QPSK	1	#0	22.18	19.8~25.7	1.29	21.32	30
			1	#99	22.35	19.8~25.7	1.29	21.49	30
			18	#0	22.20	19.8~25.7	1.29	21.34	30
	21350	QPSK	1	#0	22.38	19.8~25.7	1.29	21.52	30
			1	#99	22.31	19.8~25.7	1.29	21.45	30

Note : ERP= Conducted Power + Antenna Gain(dBi)-2.15

