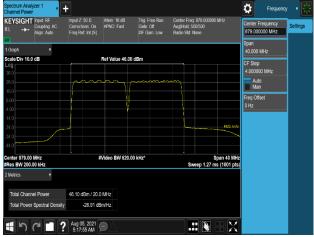


KEYSIGHT hape ## Apple ## 2000 Mitz Apple # 2000 Mitz SeeD 140 08 Ref Value 46.00 dBm SeeD 140 08 Ref Value 46.00 Ref Value 46	Spectrum Analyzer 1	-			Frequency	- 7 詳
1 Singh * Span Span <td< td=""><td>R L +++ Coupling: AC Align: Auto</td><td>Corrections: On #PNO: F</td><td>ast Gate: Off</td><td>Avg[Hold: 500/500</td><td></td><td>Settings</td></td<>	R L +++ Coupling: AC Align: Auto	Corrections: On #PNO: F	ast Gate: Off	Avg[Hold: 500/500		Settings
Log 200 201 201 201 201 201 201 201	1 Graph 🔻		. 10 00			
No. Man 600	36.0			~~~~	4.000000 MHz	
4.00 4.00 3.00 4.0 3.0 4.0 5.00 6.0	16.0				Freq Offset	
54.0 44.0 Conter \$76.00 MHz Span 40 MHz Sveep 1.27 ms (1001 pts) 2 Metrics Total Channel Power 46.09 dBm / 20.0 MHz Total Power Spectral Density -26.52 dBm/tz	-14.0					
BW 200.00 kHz Sweep 1.27 ms (1001 pts) 2 Metrics * Total Channel Power 46.09 dBin / 20.0 MHz. Total Power Spectral Density -26.92 dBm/tz.				His contraction of the second se		
Total Channel Power 46.08 dBm / 20.0 MHz Total Power Spectral Density -26.52 dBm/Hz		#Video BV	V 620.00 kHz*			
Total Power Spectral Density -28.92 dBm/Hz	2 Metrics V					
		Aug 05, 2021 🦲 🛆		• 10	M	

Plot 7-433. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM - Low Channel, Port 0)



Plot 7-435. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM - Low Channel, Port 2)



Plot 7-437. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_256QAM - Mid Channel, Port 0)



Plot 7-434. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM - Low Channel, Port 1)



Plot 7-436. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM - Low Channel, Port 3)



Plot 7-438. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_256QAM - Mid Channel, Port 1)

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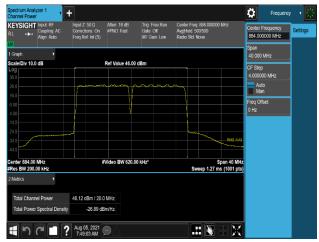


Spectrum Analyzer 1	+					Frequency	- 1
RL + Align: Auto		Atlen: 16 dB #PNC: Fast	Trig: Free Run Gate: Off #IF Gain: Low	Center Freq: 881.500000 Avg Hold: 500/500 Radio Std: None	L. L	Center Frequency 881.500000 MHz	Settings
UT 1 Graph T			_			ipan 40.000 MHz	
Scale/Div 10.0 dB Log 36.0	R	ef Value 46.00				F Step 4.000000 MHz Auto Man	
16.0 6.00 -4.00		ļ				ireq Offset) Hz	
-14.0 -24.0 -34.0					RMS AVG		
-44.0 Center 881.50 MHz #Res BW 200.00 kHz	#VI	ideo BW 620.0) kHz*	Sweep 1.27 m	pan 40 MHz s (1001 pts)		
2 Metrics T							
Total Channel Power Total Power Spectral Densit	46.21 dBm / 20.0 M						
	Aug 05, 2021 6:55:25 AM						

Plot 7-439. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_256QAM - Mid Channel, Port 2)



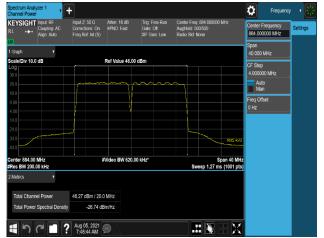
Plot 7-441. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM – High Channel, Port 0)



Plot 7-443. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM – High Channel, Port 2)



Plot 7-440. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_256QAM - Mid Channel, Port 3)



Plot 7-442. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM – High Channel, Port 1)



Plot 7-444. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM – High Channel, Port 3)

FCC ID: A3LRF4440D-13A		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager	
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DSS Ratio	Channel	Port	QPSK	16QAM	64QAM	256QAM	
		0	48.06	48.04	48.02	47.99	
		1	48.17	48.17	48.16	48.14	
	Low	Total MIMO Conducted Power (mW)	129588.01	129294.08	128850.59	128113.46	
		Total MIMO Conducted Power(dBm)	51.13	51.12	51.10	51.08	
	Nud	0	47.90	47.98	47.99	47.95	
LTE 5 :		5:	1	48.06	48.12	48.14	48.09
NR 5		Total MIMO Conducted Power (mW)	125632.98	127669.28	128113.46	126790.41	
		Total MIMO Conducted Power(dBm)	50.99	51.06	51.08	51.03	
		0	47.91	47.95	47.93	47.93	
	High		1	47.98	48.03	48.06	48.02
		Total MIMO Conducted Power (mW)	124607.48	125906.58	126060.39	125473.87	
		Total MIMO Conducted Power(dBm)	50.96	51.00	51.01	50.99	

Table 7-99. Conducted Average Output Power Table (B5_10M(DSS)+5M_2C_2T)

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DSS Ratio	Channel	Port	QPSK	16QAM	64QAM	256QAM	
		0	47.69	47.81	47.79	47.80	
		1	47.83	47.90	47.90	47.92	
	Low	Total MIMO Conducted Power (mW)	119422.57	122054.36	121776.87	122200.07	
		Total MIMO Conducted Power(dBm)	50.77	50.87	50.86	50.87	
		0	47.78	47.92	47.83	47.79	
LTE 5 :	N.4. 1	1	47.91	48.01	47.93	47.91	
NR 5	Mid	Total MIMO Conducted Power (mW)	121780.75	125185.29	122760.54	121919.01	
		Total MIMO Conducted Power(dBm)	50.86	50.98	50.89	50.86	
		0	47.75	47.84	47.85	47.84	
	High		1	47.86	47.98	47.93	47.98
		Total MIMO Conducted Power (mW)	120660.42	123619.34	123040.59	123619.34	
		Total MIMO Conducted Power(dBm)	50.82	50.92	50.90	50.92	

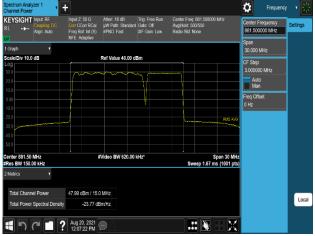
Table 7-100. Conducted Average Output Power Table (B5_10M(DSS)+10M_2C_2T)

FCC ID: A3LRF4440D-13A		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
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Spectrum Analyzer 1	+			Frequency	() 影
KEYSIGHT Input: RF RL +++ Coupling: DC Align: Auto	Input Z: 50 Q Atten: * Corr CCorr RCal µW Pal Freq Ref: Int (S) #PNO: NFE: Adaptive	th: Standard Gate: Off	Center Freq: 876 500000 MHz Avg Hold: 500/500 Radio Std: None	Center Frequency 876.500000 MHz	Settings
1 Graph v				Span 30.000 MHz	
Scale/Div 10.0 dB Log 200 100 .000 .000 .000 .000 .000 .000		ue 40.00 dBm		CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz	
-40.0 -50.0 Center 876.50 MHz #Res BW 150.00 kHz 2 Metrics T	#Video E	W 620.00 kHz*	Span 30 Sweep 1.67 ms (1001		
Total Channel Power	48.06 dBm / 15.0 MHz				
Total Power Spectral Density	-23.71 dBm/Hz				Local
1	Aug 20, 2021			<	

Plot 7-445. Conducted Average Output Power Plot (B5_10M(DSS)+5M_2C_QPSK - Low Channel, Port 0)



Plot 7-447. Conducted Average Output Power Plot (B5_10M(DSS)+5M_2C_64QAM - Mid Channel, Port 0)



Plot 7-449. Conducted Average Output Power Plot (B5_10M(DSS)+5M_2C_64QAM – High Channel, Port 0)



Plot 7-446. Conducted Average Output Power Plot (B5_10M(DSS)+5M_2C_ QPSK - Low Channel, Port 1)



Plot 7-448. Conducted Average Output Power Plot (B5_10M(DSS)+5M_2C_64QAM - Mid Channel, Port 1)



Plot 7-450. Conducted Average Output Power Plot (B5_10M(DSS)+5M_2C_64QAM – High Channel, Port 1)

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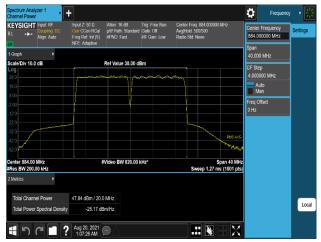


Spectrum Analyzer 1 , +			Frequency	- 景
RL ++ Coupling DC Cor Align: Auto Free	It Z:50 D. Atten: 16 dB. Trig: Free Run CCorr RCal uW Path: Standard Gate: Off Ref: Int (S) #PNO: Fast #IF Gain: Low Adaptive	Center Freq 879.000000 MHz Avg[Hold: 500/500 Radio Std: None	Center Frequency 879.000000 MHz	Settings
1 Graph 🔹	·		Span 40.000 MHz	
Scale/Div 10.0 dB	Ref Value 38.00 dBm		CF Step 4.000000 MHz Auto Man	
8 00 -2 00 -12 0 -22 0			Freq Offset 0 Hz	
-22.0 -32.0 -42.0 -52.0		PMS ANG		
Center 879.00 MHz #Res BW 200.00 kHz	#Video BW 820.00 kHz*	Span 40 MHz Sweep 1.27 ms (1001 pts)		
2 Metrics v				
Total Channel Power 47.8	1 dBm / 20.0 MHz			Local
Total Power Spectral Density	-25.20 dBm/Hz			Local
	g 19, 2021 :55:23 PM			

Plot 7-451. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM - Low Channel, Port 0)



Plot 7-453. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM - Mid Channel, Port 0)



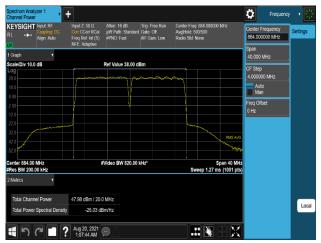
Plot 7-455. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM – High Channel, Port 0)



Plot 7-452. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM - Low Channel, Port 1)



Plot 7-454. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM - Mid Channel, Port 1)



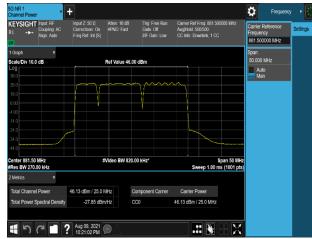
Plot 7-456. Conducted Average Output Power Plot (B5_10M(DSS)+10M_2C_16QAM – High Channel, Port 1)

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DSS Ratio	Channel	Port	QPSK	16QAM	64QAM	256QAM	
		0	45.95	46.13	45.78	45.90	
		1	46.04	46.17	45.89	46.01	
LTE 5 :	· Single	Single	2	45.95	46.15	45.64	46.04
NR 5	Channel	3	46.10	46.28	45.86	46.20	
		Total MIMO Conducted Power (mW)	159627.12	166092.09	151850.89	160673.02	
		Total MIMO Conducted Power(dBm)	52.03	52.20	51.81	52.06	

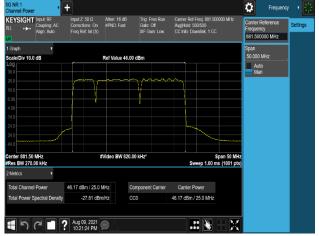
Table 7-101. Conducted Average Output Power Table (B5_10M(DSS)+10M+5M_3C_4T)



Plot 7-457. Conducted Average Output Power Plot (B5_10M(DSS)+10M+5M_3C_16QAM - Port 0)



Plot 7-459. Conducted Average Output Power Plot (B5_10M(DSS)+10M+5M_3C_16QAM - Port 2)



Plot 7-458. Conducted Average Output Power Plot (B5_10M(DSS)+10M+5M_3C_16QAM - Port 1)



Plot 7-460. Conducted Average Output Power Plot (B5_10M(DSS)+10M+5M_3C_16QAM - Port 3)

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DSS Ratio	Channel	Port	QPSK	16QAM	64QAM	256QAM			
	LTE 5 : Single NR 5 Channel	0	47.93	47.93	47.89	47.85			
LTE 5 :		-	Sinale	Single	1	48.02	48.04	47.99	47.93
NR 5			Total MIMO Conducted Power (mW)	125473.87	125766.46	124468.31	123040.59		
		Total MIMO Conducted Power(dBm)	50.99	51.00	50.95	50.90			

Table 7-102. Conducted Average Output Power Table (B5_10M(DSS)+10M+5M_3C_2T)



Plot 7-461. Conducted Average Output Power Plot (B5_10M(DSS)+10M+5M_3C_16QAM - Port 0) Plot 7-462. Conducted Average Output Power Plot (B5_10M(DSS)+10M+5M_3C_16QAM - Port 1)

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7.4 Peak To Average Power Ratio (PAPR)

Test Overview

A peak to average ratio measurement is performed at the conducted port of the EUT. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

Test Procedure Used

KDB 971168 D01 v03r01 - Section 5.7

ANSI C63.26-2015 - Section 5.2.3.4

Test Setting

The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The spectrum analyzer setting were as follows:

- 1. The signal analyzer's CCDF function is enabled.
- 2. Frequency = carrier center frequency
- 3. Measurement BW ≥ OBW or specified reference bandwidth
- 4. The signal analyzer was set to collect one million samples to generate the CCDF curve
- 5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

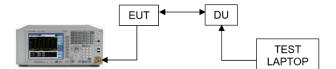


Figure 7-4. Test Instrument & Measurement Setup

<u>Limit</u>

The peak-to-average power ratio (PAPR) limit shall not exceed 13 dB for more than 0.1% of the time.

Test Notes

- 1. All ports and test channels were tested and only the worst case data were reported.
- 2. The port with highest PAPR i.e. worst case port per modulation has been highlighted in the following PAPR tables.
- The peak to average ratio measurement is performed at the conducted ports of the EUT for single RAT mode.

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Channel	Port	PAPR (dB)				Limit
		QPSK	16QAM	64QAM	256QAM	(dB)
Low	0	8.41	8.35	8.30	8.35	< 13
	1	8.39	8.33	8.31	8.32	< 13
Middle	0	8.40	8.34	8.29	8.35	< 13
Middle	1	8.39	8.33	8.29	8.34	< 13
High	0	8.38	8.32	8.32	8.32	< 13
	1	8.39	8.32	8.31	8.32	< 13

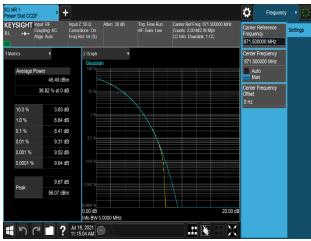
Table 7-103. Peak To Average Power Ratio Summary Data (B5_5M_1C_2T)

Channel	Dent	PAPR (dB)				Limit
	Port	QPSK	16QAM	64QAM	256QAM	(dB)
Low	0	7.62	7.65	7.64	7.65	< 13
	1	7.62	7.64	7.63	7.64	< 13
Middle	0	7.61	7.61	7.61	7.62	< 13
Middle	1	7.60	7.62	7.60	7.61	< 13
High	0	7.61	7.60	7.61	7.62	< 13
	1	7.60	7.59	7.61	7.60	< 13

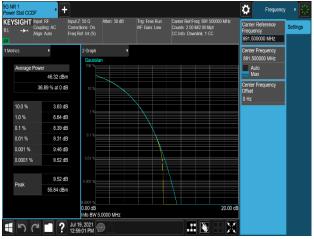
Table 7-104. Peak To Average Power Ratio Summary Data (B5_10M_1C_2T)

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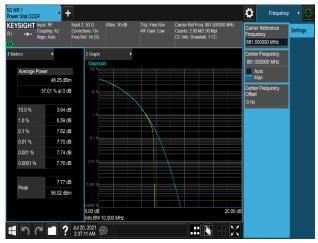




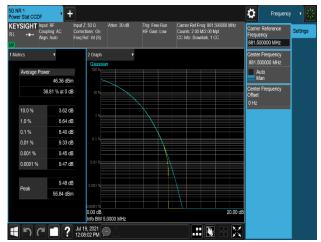
Plot 7-463. Peak To Average Power Ratio Plot (B5_5M_1C_ QPSK - Low Channel, Port 0)

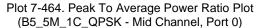


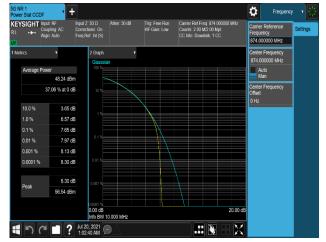
Plot 7-465. Peak To Average Power Ratio Plot (B5_5M_1C_QPSK - High Channel, Port 1)

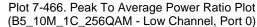


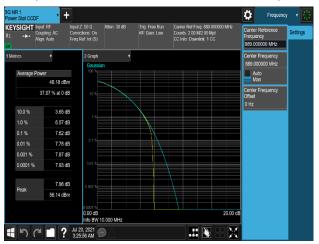
Plot 7-467. Peak To Average Power Ratio Plot (B5_10M_1C_256QAM – Mid Channel, Port 0)











Plot 7-468. Peak To Average Power Ratio Plot (B5_10M_1C_256QAM – High Channel, Port 0)

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Channel	Port	PAPR (dB)				Limit
Channel		QPSK	16QAM	64QAM	256QAM	(dB)
	0	8.42	8.35	8.33	8.35	< 13
Low	1	8.47	8.31	8.35	8.39	< 13
Low	2	8.40	8.36	8.22	8.34	< 13
	3	8.39	8.36	8.33	8.34	< 13
	0	8.45	8.37	8.31	8.30	< 13
Middle	1	8.44	8.32	8.32	8.37	< 13
Middle	2	8.43	8.34	8.29	8.34	< 13
	3	8.44	8.34	8.30	8.34	< 13
	0	8.43	8.32	8.28	8.30	< 13
High	1	8.44	8.33	8.36	8.36	< 13
riigh	2	8.37	8.32	8.28	8.32	< 13
	3	8.41	8.30	8.26	8.33	< 13

Table 7-105. Peak To Average Power Ratio Summary Data (B5_5M_1C_4T)

Channel	Dort		Limit			
Channel	Port	QPSK	16QAM	64QAM	256QAM	(dB)
	0	8.35	8.37	8.34	8.40	< 13
	1	8.36	8.39	8.37	8.40	< 13
Low	2	7.63	7.63	7.64	7.64	< 13
	3	7.63	7.64	7.63	7.64	< 13
	0	8.39	8.33	8.35	8.42	< 13
Middle	1	8.37	8.36	8.36	8.40	< 13
Middle	2	7.61	7.63	7.62	7.62	< 13
	3	7.60	7.63	7.62	7.63	< 13
	0	8.37	8.33	8.36	8.38	< 13
High	1	8.36	8.34	8.36	8.41	< 13
riigh	2	7.61	7.61	7.62	7.61	< 13
	3	7.62	7.62	7.62	7.63	< 13

Table 7-106. Peak To Average Power Ratio Summary Data (B5_10M_1C_4T)

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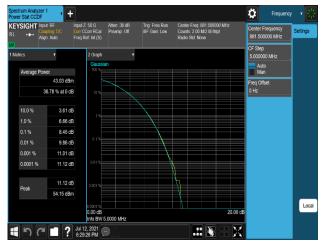
Plot 7-469. Peak To Average Power Ratio Plot (B5_5M_1C_ QPSK - Low Channel, Port 1)



Plot 7-471. Peak To Average Power Ratio Plot (B5_5M_1C_QPSK - High Channel, Port 1)



Plot 7-473. Peak To Average Power Ratio Plot (B5_10M_1C_256QAM – Mid Channel, Port 0)



Plot 7-470. Peak To Average Power Ratio Plot (B5_5M_1C_QPSK - Mid Channel, Port 0)



Plot 7-472. Peak To Average Power Ratio Plot (B5_10M_1C_256QAM - Low Channel, Port 0)



Plot 7-474. Peak To Average Power Ratio Plot (B5_10M_1C_256QAM – High Channel, Port 1)

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Channel Por	Dort	PAPR (dB)				Limit
	Polt	QPSK	16QAM	64QAM	256QAM	(dB)
Low	0	8.01	8.01	7.99	7.97	< 13
	1	8.02	8.01	8.01	7.99	< 13
Middle	0	8.03	8.01	7.62	8.01	< 13
Middle	1	8.02	8.03	7.61	7.99	< 13
High	0	8.02	7.63	7.97	7.95	< 13
	1	7.99	7.64	7.99	7.98	< 13

Table 7-107. Peak To Average Power Ratio Summary Data (B5_5M+5M_2C_2T)

Channel	Port	PAPR (dB)				Limit
	POIL	QPSK	16QAM	64QAM	256QAM	(dB)
Low 1	0	7.71	8.00	8.00	8.01	< 13
	1	7.72	7.99	8.02	8.00	< 13
Middle	0	7.94	7.99	7.62	7.96	< 13
Middle	1	7.98	7.98	7.64	7.97	< 13
High -	0	7.95	7.99	7.59	7.98	< 13
	1	7.98	7.99	7.59	7.97	< 13

Table 7-108. Peak To Average Power Ratio Summary Data (B5_10M+10M_2C_2T)

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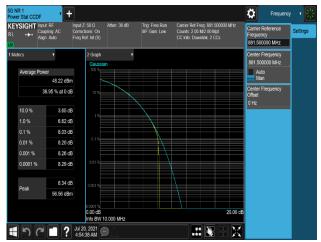
Plot 7-475. Peak To Average Power Ratio Plot (B5_5M+5M_2C_QPSK - Low Channel, Port 1)



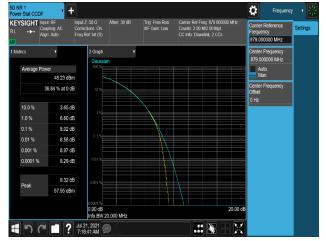
Plot 7-477. Peak To Average Power Ratio Plot (B5_5M+5M_2C_QPSK - High Channel, Port 0)

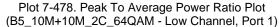


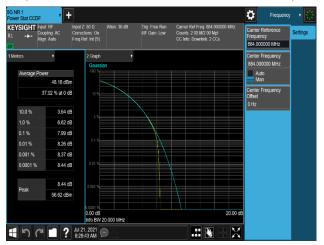
Plot 7-479. Peak To Average Power Ratio Plot (B5_10M+10M_2C_16QAM – Mid Channel, Port 0)



Plot 7-476. Peak To Average Power Ratio Plot (B5_5M+5M_2C_QPSK - Mid Channel, Port 0)







Plot 7-480. Peak To Average Power Ratio Plot (B5_10M+10M_2C_16QAM – High Channel, Port 0)

FCC ID: A3LRF4440D-13A		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager	
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Channel	Dort	PAPR (dB)				Limit
	Port	QPSK	16QAM	64QAM	256QAM	(dB)
	0	8.40	8.35	8.38	8.32	< 13
Low	1	8.39	8.36	8.41	8.35	< 13
LOW	2	8.03	7.69	7.69	8.00	< 13
	3	8.02	7.72	7.70	7.96	< 13
	0	8.46	8.41	8.39	8.33	< 13
Middle	1	8.41	8.43	8.41	8.34	< 13
Middle	2	8.03	8.03	8.04	7.99	< 13
	3	8.04	8.04	8.05	7.99	< 13
	0	8.43	8.45	8.39	8.35	< 13
High –	1	8.44	8.43	8.37	8.34	< 13
	2	7.66	8.03	7.65	7.98	< 13
	3	7.65	8.03	7.64	7.99	< 13

Table 7-109. Peak To Average Power Ratio Summary Data (B5_5M+5M_2C_4T)

Channel	Dort		PAPF	R (dB)		Limit
Channel	Port	QPSK	16QAM	64QAM	256QAM	(dB)
	0	8.42	8.45	8.38	8.35	< 13
Low	1	8.37	8.39	8.37	8.39	< 13
LOW	2	8.00	8.04	7.74	7.76	< 13
	3	8.02	8.02	7.75	7.75	< 13
	0	8.40	8.44	8.37	8.40	< 13
Middle	1	8.37	8.42	8.37	8.41	< 13
Middle	2	8.00	7.68	8.03	8.02	< 13
	3	8.01	7.66	8.00	8.01	< 13
	0	8.41	8.43	8.32	8.37	< 13
High	1	8.36	8.41	8.38	8.39	< 13
High	2	7.63	7.65	7.63	7.63	< 13
	3	7.64	7.64	7.63	7.64	< 13

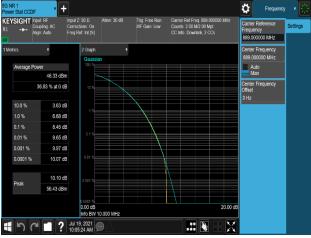
Table 7-110. Peak To Average Power Ratio Summary Data (B5_10M+10M_2C_4T)

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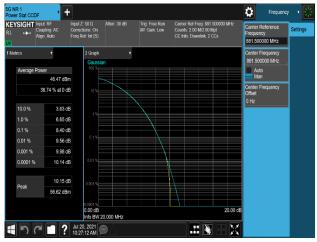




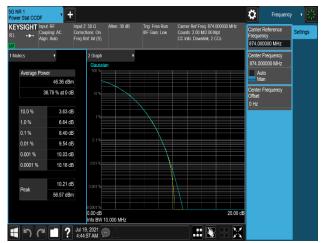
Plot 7-481. Peak To Average Power Ratio Plot (B5_5M+5M_2C_64QAM - Low Channel, Port 1)



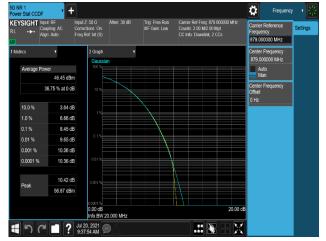
Plot 7-483. Peak To Average Power Ratio Plot (B5_5M+5M_2C_16QAM - High Channel, Port 0)

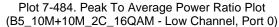


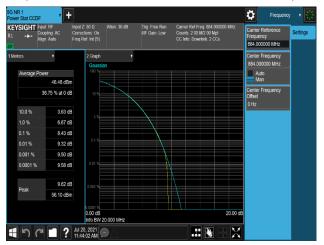
Plot 7-485. Peak To Average Power Ratio Plot (B5_10M+10M_2C_16QAM – Mid Channel, Port 0)



Plot 7-482. Peak To Average Power Ratio Plot (B5_5M+5M_2C_QPSK - Mid Channel, Port 0)







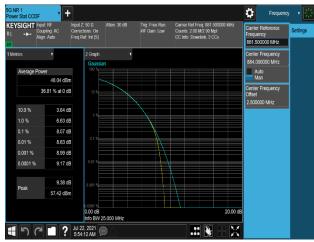
Plot 7-486. Peak To Average Power Ratio Plot (B5_10M+10M_2C_16QAM – High Channel, Port 0)

FCC ID: A3LRF4440D-13A		MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager	
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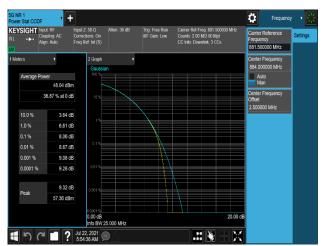


Channel Port	Dort		Limit			
	Poli	QPSK	16QAM	64QAM	256QAM	(dB)
NA: -I -II -	0	7.77	8.07	7.79	7.78	< 13
Middle	1	7.83	8.06	7.81	7.78	< 13

 Table 7-111. Peak To Average Power Ratio Summary Data (B5_5M+10M+10M_3C_2T)



Plot 7-487. Peak To Average Power Ratio Plot (B5_5M+10M+10M_3C_16QAM - Low Channel, Port 0)



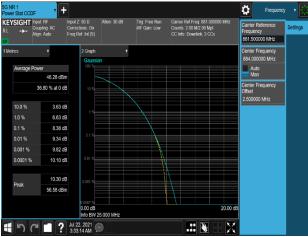
Plot 7-488. Peak To Average Power Ratio Plot (B5_5M+10M+10M_3C_16QAM - Low Channel, Port 1)

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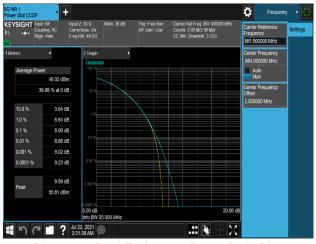


Channel	Port		Limit			
	FOIL	QPSK	16QAM	64QAM	256QAM	(dB)
	0	8.33	8.37	8.38	8.36	< 13
Middle	1	8.36	8.41	8.39	8.28	< 13
Middle -	2	8.06	8.04	7.81	7.79	< 13
	3	8.09	8.07	7.80	7.82	< 13

 Table 7-112. Peak To Average Power Ratio Summary Data (B5_5M+10M+10M_3C_4T)



Plot 7-489. Peak To Average Power Ratio Plot (B5_5M+10M+10M_3C_64QAM - Low Channel, Port 0)

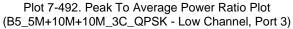


Plot 7-491. Peak To Average Power Ratio Plot (B5_5M+10M+10M_3C_QPSK - Low Channel, Port 2)



Plot 7-490. Peak To Average Power Ratio Plot (B5_5M+10M+10M_3C_16QAM - Low Channel, Port 1)





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DSS	Ohannal	Dent		PAP	R (dB)		Limit
Ratio	Channel	Port	QPSK	16QAM	64QAM	256QAM	(dB)
		0	8.42	8.46	8.30	8.35	< 13
	Low	1	8.41	8.49	8.32	8.33	< 13
	LOW	2	7.98	8.02	7.99	8.00	< 13
		3	7.97	8.00	7.96	7.98	< 13
		0	8.43	8.45	8.30	8.37	< 13
LTE 9 :	Middle	1	8.42	8.44	8.28	8.36	< 13
NR 1	Midule	2	7.99	8.01	7.98	8.02	< 13
		3	8.00	8.02	7.98	8.00	< 13
		0	8.45	8.51	8.34	8.40	< 13
	High	1	8.43	8.46	8.30	8.36	< 13
	riigii	2	8.00	7.99	7.97	7.99	< 13
		3	7.99	7.99	7.96	7.98	< 13
		0	8.42	8.47	8.32	8.36	< 13
	Low	1	8.41	8.51	8.33	8.35	< 13
	LOW	2	8.04	8.04	8.00	8.01	< 13
		3	8.00	8.04	7.97	8.06	< 13
		0	8.43	8.51	8.31	8.42	< 13
LTE 8 :	Middle	1	8.42	8.49	8.27	8.40	< 13
NR 2	Midule	2	8.04	7.99	8.01	8.02	< 13
		3	8.05	8.00	8.01	8.02	< 13
		0	8.44	8.52	8.28	8.39	< 13
	High	1	8.44	8.53	8.31	8.40	< 13
	riigii	2	8.02	8.03	8.00	8.03	< 13 < 13
		3	8.01	8.05	8.00	8.03	
	Low	0	8.37	8.49	8.31	8.39	< 13
		1	8.42	8.50	8.32	8.46	< 13
		2	8.03	8.07	8.06	8.01	< 13
		3	8.00	8.05	8.05	8.06	< 13
	Middle	0	8.39	8.54	9.01	8.42	< 13
LTE 7 :		1	8.43	8.48	8.98	8.47	< 13
NR 3		2	8.03	8.03	8.23	8.06	< 13
		3	8.04	8.06	8.20	8.03	< 13
	High	0	8.35	8.52	8.35	8.46	< 13
		1	8.40	8.54	8.35	8.44	< 13
		2	8.01	8.06	8.04	8.05	< 13
		3	8.05	8.05	8.02	8.04	< 13
	Low	0	8.39	8.48	8.37	8.43	< 13
		1	8.41	8.50	8.38	8.39	< 13
		2	8.05	8.07	8.02	8.02	< 13
		3	8.06	8.08	8.01	8.06	< 13
	Middle	0	8.41	8.52	8.37	8.46	< 13
LTE 6 :		1	8.38	8.52	8.32	8.42	< 13
NR 4		2	8.07	8.09	8.02	8.07	< 13
		3	8.06	8.05	8.03	8.06	< 13
	High	0	8.44	8.53	8.31	8.48	< 13
		1	8.42	8.50	8.37	8.44	< 13
		2	8.05	8.05	8.07	8.05	< 13
		3	8.08	8.03	8.06	8.04	< 13

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,		0	8.83	8.56	8.35	8.43	< 13
	-	0	8.84	8.56	8.27	8.49	< 13
	Low	=					
	-	2	8.49	8.05	8.10	8.05	< 13
		3	8.42	8.01	8.09	8.06	< 13
	-	0	8.37	8.53	8.37	8.46	< 13
LTE 5 :	Middle	1	8.40	8.57	8.36	8.44	< 13
NR 5	-	2	8.05	8.05	8.03	8.08	< 13
		3	8.07	8.03	8.03	8.09	< 13
	-	0	8.86	8.55	8.40	8.51	< 13
	High	1	8.76	8.52	8.38	8.44	< 13
		2	8.51	8.04	8.09	8.08	< 13
		3	8.55	8.08	8.05	8.08	< 13
	-	0	8.38	8.56	8.32	8.48	< 13
	Low	1	8.39	8.56	8.31	8.40	< 13
		2	8.09	8.04	8.10	8.08	< 13
		3	8.00	8.07	8.07	8.13	< 13
		0	8.39	8.57	8.38	8.57	< 13
LTE 4 :	Middle	1	8.39	8.58	8.38	8.44	< 13
NR 6		2	8.06	8.07	8.06	8.10	< 13
		3	8.11	8.03	8.01	8.08	< 13
		0	8.41	8.60	8.34	8.46	< 13
	High	1	8.36	8.56	8.35	8.50	< 13
		2	8.09	8.07	8.10	8.10	< 13
		3	8.09	8.06	8.05	8.13	< 13
	Low	0	8.38	8.59	8.31	8.44	< 13
		1	8.35	8.59	8.34	8.52	< 13
		2	8.11	8.10	8.04	8.14	< 13
		3	8.10	8.16	7.98	8.14	< 13
	Middle	0	8.40	8.55	8.31	8.49	< 13
LTE 3 :		1	8.37	8.56	8.25	8.53	< 13
NR 7		2	8.07	8.10	8.06	8.16	< 13
		3	8.06	8.15	8.10	8.16	< 13
	High	0	8.37	8.57	8.34	9.35	< 13
		1	8.37	8.53	8.38	9.37	< 13
		2	8.15	8.09	8.08	8.29	< 13
		3	8.08	8.06	8.09	8.35	< 13
	Low	0	8.39	8.66	8.35	8.54	< 13
		1	8.39	8.66	8.29	8.41	< 13
	[2	8.10	8.12	8.09	8.11	< 13
	L [3	8.07	8.13	8.13	8.09	< 13
	Middle	0	8.38	8.64	8.32	8.44	< 13
LTE 2 :	[1	8.40	8.64	8.25	8.56	< 13
NR 8	[2	8.11	8.13	8.13	8.15	< 13
	[3	8.04	8.15	8.17	8.17	< 13
	High	0	9.39	9.50	9.42	9.48	< 13
		1	9.37	9.47	9.41	9.48	< 13
	[2	8.38	8.32	8.41	8.35	< 13
	[3	8.41	8.30	8.45	8.42	< 13
	Table 7-11	3 Peak To	Average Powe	r Ratio Summ	ary Data (B5_1(M(DSS) 1C A	

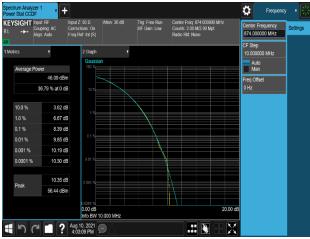
Table 7-113. Peak To Average Power Ratio Summary Data (B5_10M(DSS)_1C_4T)

Note: Test result is no big difference depending on DSS Ratio. So, the only worst-ratio plots are included in this report.

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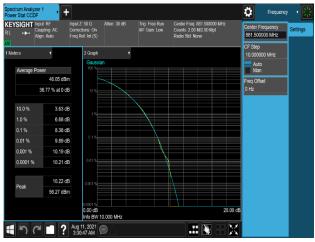




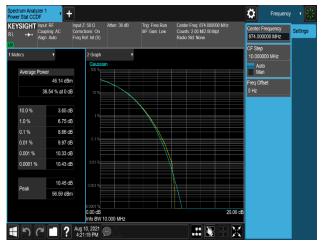
Plot 7-493. Peak To Average Power Ratio Plot (B5_10M(DSS)_1C_QPSK - Low Channel, Port 0)



Plot 7-495. Peak To Average Power Ratio Plot (B5_10M(DSS)_1C_64QAM - Low Channel, Port 0)

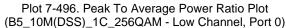


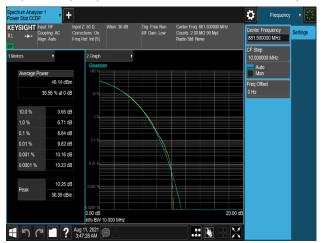
Plot 7-497. Peak To Average Power Ratio Plot (B5_10M(DSS)_1C_QPSK - Middle Channel, Port 0)



Plot 7-494. Peak To Average Power Ratio Plot (B5_10M(DSS)_1C_16QAM - Low Channel, Port 0)



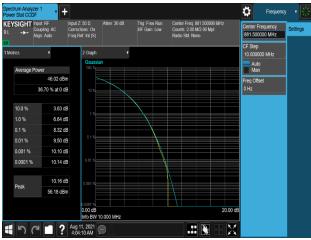




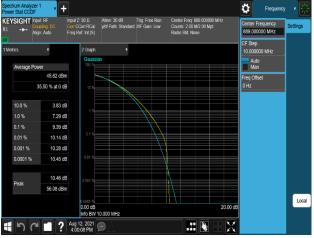
Plot 7-498. Peak To Average Power Ratio Plot (B5_10M(DSS)_1C_16QAM - Middle Channel, Port 0)

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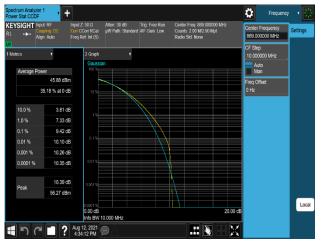




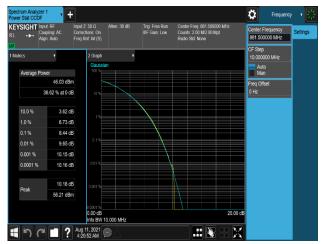
Plot 7-499. Peak To Average Power Ratio Plot (B5_10M(DSS)_1C_64QAM - Middle Channel, Port 0)



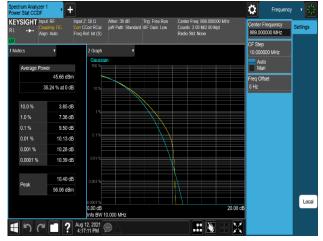
Plot 7-501. Peak To Average Power Ratio Plot (B5_10M(DSS)_1C_QPSK - High Channel, Port 0)



Plot 7-503. Peak To Average Power Ratio Plot (B5_10M(DSS)_1C_64QAM - High Channel, Port 0)



Plot 7-500. Peak To Average Power Ratio Plot (B5_10M(DSS)_1C_256QAM - Middle Channel, Port 0)



Plot 7-502. Peak To Average Power Ratio Plot (B5_10M(DSS)_1C_16QAM - High Channel, Port 0)



Plot 7-504. Peak To Average Power Ratio Plot (B5_10M(DSS)_1C_256QAM - High Channel, Port 0)

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DSS Channel		Dort	PAPR (dB)				Limit
Ratio	Channel	Port	QPSK	16QAM	64QAM	256QAM	(dB)
	Low	0	8.08	8.00	8.04	8.05	< 13
		1	8.08	8.00	8.04	8.03	< 13
LTE 5 :	Middle	0	8.12	8.06	8.08	8.08	< 13
NR 5	5 Middle	1	8.05	8.05	8.07	8.10	< 13
	High	0	8.11	8.01	8.06	8.10	< 13
		1	8.08	8.05	8.10	8.09	< 13

Table 7-114. Peak To Average Power Ratio Summary Data (B5_10M(DSS)_1C_2T)

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