POWER SPECTRAL DENSITY - LOWERED POWER

XMit 2022.02.07.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Generator - Signal	Keysight	N5182B	TEV	2021-04-27	2024-04-27
Block - DC	Fairview Microwave	SD3379	AMM	2021-09-14	2022-09-14
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFQ	2022-01-17	2023-01-17

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The fundamental emission power spectral density was measured using the channels and modes as called out on the following data sheets. The transmit power was set to levels seen in the datasheet.

The method of section 5.2.4.5 of ANSI C63.26 was used to make the measurement. The method uses trace averaging across ON and OFF times of EUT transmissions using the spectrum analyzer's RMS detector. Following the measurement a duty cycle correction was applied by adding [10log(1/D)], where D is the duty cycle, to the measured power to compute the PSD during the transmit times.

RF conducted emissions testing was performed on one port. The AHFII antenna ports are essentially electrically identical (the RF power variation between antenna ports is small) and port 1 was selected to perform the testing under this effort as allowed by ANSI C63.26-2015 paragraphs 5.2.5.3, 5.7.2i and 6.4.

The total PSD of all antenna ports (at the radio output) was determined per ANSI C63.26-2015 paragraph 6.4.3.2.4.

The EIRP calculations were based upon ANSI C63.26-2015 sections 6.4.3.2.4, section 6.4.6.3, section 6.4.5.3 and section 6.4.5.2

Compliance check for EIRP Limit of 3280W/MHz or 65.16dBm/MHz:
As shown in the EIRP calculation tables in the "PSD and EIRP Calculations" report sections, the highest AHFII antenna port 1 PSD level that will not cause the calculated EIRP to exceed the EIRP limit is 41.2dBm/MHz for Band n25 and 40.9dBm/MHz for Band n66. The maximum carrier power levels were reduced by changing the carrier power parameters in the configuration file for the base station to comply with the EIRP limit.

Compliance check for EIRP Limit of 1640W/MHz or 62.15dBm/MHz:
As shown in the EIRP calculation tables in the "PSD and EIRP Calculations" report sections, the highest AHFII antenna port 1 PSD level that will not cause the calculated EIRP to exceed the EIRP limit is 38.2dBm/MHz for Band n25 and 37.9dBm/MHz for Band n66. The maximum carrier power levels were reduced by changing the carrier power parameters in the configuration file for the base station to comply with the EIRP limit.

POWER SPECTRAL DENSITY - LOWERED POWER

element

TbiTx 2022.03.14.0 XMit 2022.02.07.0

EUT:	**AHFII Remote Radio Head**			**Work Order:**	**NOKI0038**
Serial Number:	**YK214000035**			**Date:**	**22-Mar-22**
Customer:	**Nokia of America Corporation**			**Temperature:**	**22.7 °C**
Attendees:	**Mitchell Hill**			**Humidity:**	**24.4% RH**
Project:	**None**			**Barometric Pres.:**	**1023 mbar**
Tested by:	**Brandon Hobbs**	**Power:**	**54 VDC**	**Job Site:**	**TX06**

TEST SPECIFICATIONS	**Test Method**
FCC 24E:2022	ANSI C63.26:2015
RSS-133 Issue 6:2013+A1:2018	RSS-133 Issue 6:2013+A1:2018

COMMENTS

All measurement path losses were accounted for in the reference level offest including any attenuators, filters and DC blocks. The Band n25 NR5, NR10, NR15 and NR20 carrier power levels were reduced to demonstrate compliance with EIRP limits. The maximum port 1 PSD Lower limit level is 38.2 dBm/MHz for the base station calculated EIRP level not to exceed the EIRP limit (1640Watts/MHz). The maximum port 1 PSD higher limit level is 41.2 dBm/MHz for the base station calculated EIRP level not to exceed the EIRP limit (3280 Watts/MHz).

DEVIATIONS FROM TEST STANDARD

None

Configuration #	**2**	*Signature*

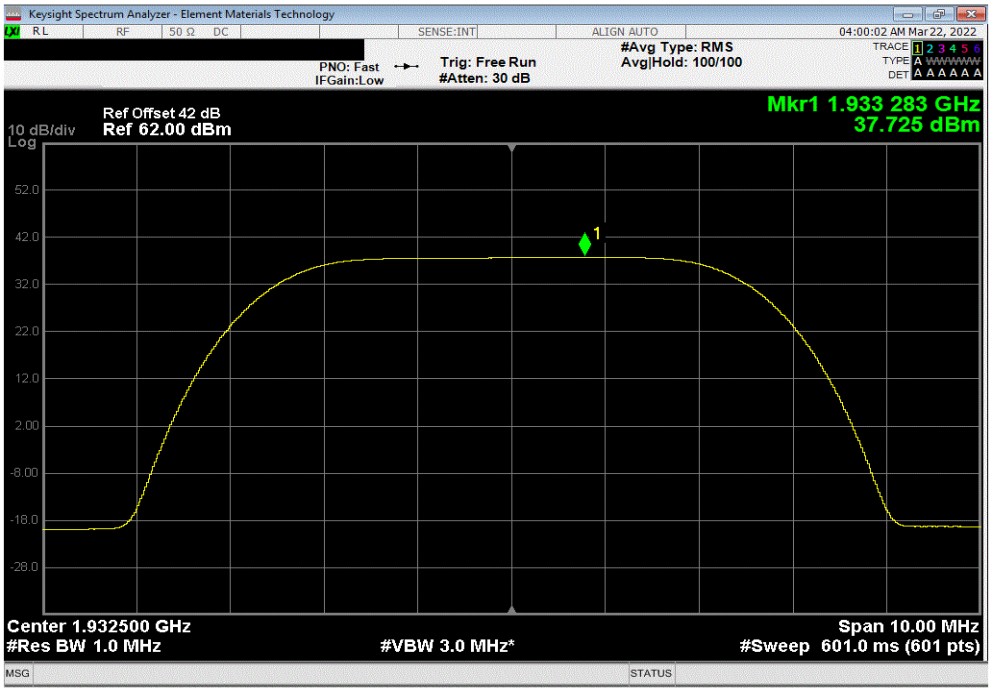
	Initial Value dBm/MHz == PSD	Duty Cycle Factor (dB)	Single Port dBm/MHz == PSD	Limit (dBm/MHz)	Results
Port 1, Band n25, 1930 MHz - 1995 MHz, 5G NR					
256-QAM Modulation					
Single Carrier					
5 MHz Bandwidth, Low Limit					
Low Channel, 1932.5 MHz	37.725	0	37.7	38.2	Pass
5 MHz Bandwidth, High Limit					
Low Channel, 1932.5 MHz	40.664	0	40.7	41.2	Pass
16-QAM Modulation					
Single Carrier					
10 MHz Bandwidth, Low Limit					
Mid Channel, 1962.5 MHz	37.772	0	37.8	38.2	Pass
15 MHz Bandwidth, Low Limit					
Mid Channel, 1962.5 MHz	37.712	0	37.7	38.2	Pass
20 MHz Bandwidth, Low Limit					
Mid Channel, 1962.5 MHz	37.678	0	37.7	38.2	Pass

POWER SPECTRAL DENSITY - LOWERED POWER

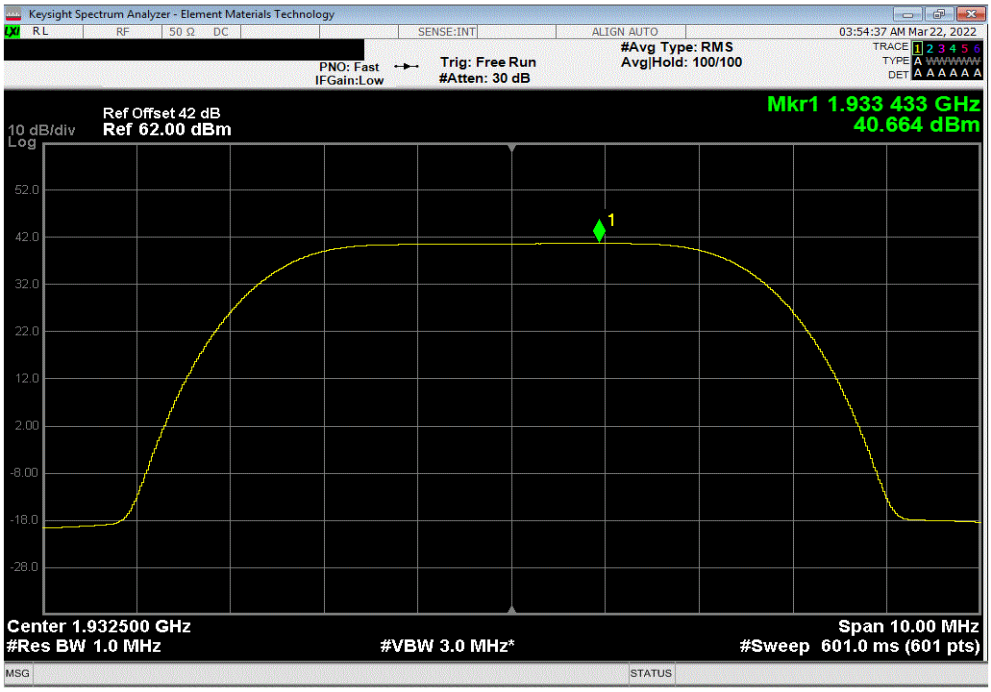
element

TbtTx 2022.03.14.0 XMit 2022.02.07.0

Port 1, Band n25, 1930 MHz - 1995 MHz, 5G NR, 256-QAM Modulation, Single Carrier, 5 MHz Bandwidth, Low Limit , Low Channel, 1932.5 MHz						
	Initial Value dBm/MHz == PSD	Duty Cycle Factor (dB)		Single Port dBm/MHz == PSD	Limit (dBm/MHz)	Results
	37.725	0		37.73	38.2	Pass



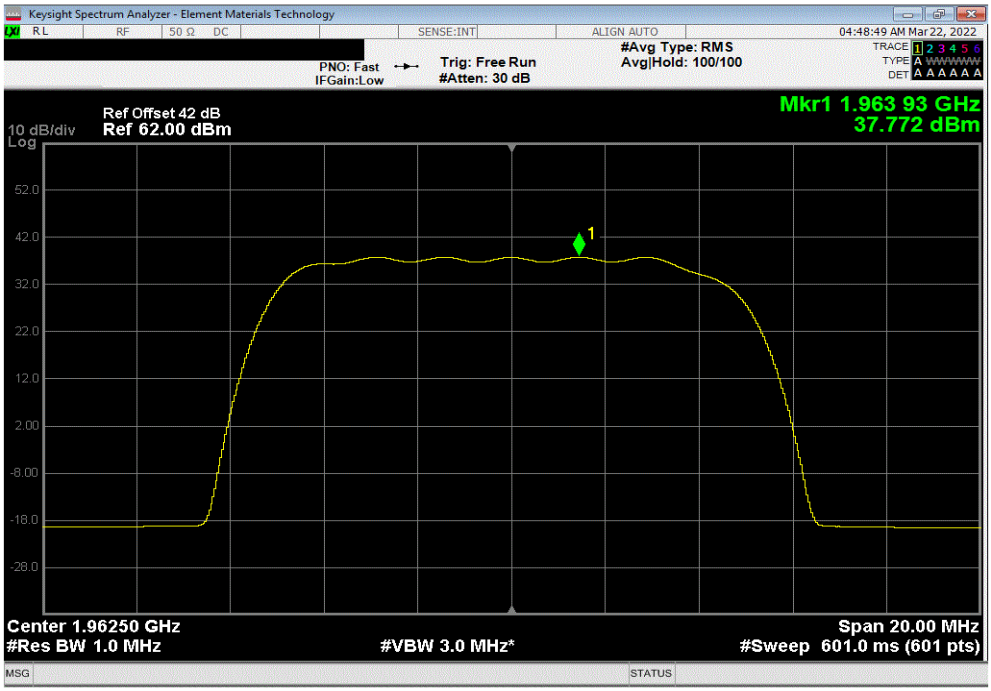
Port 1, Band n25, 1930 MHz - 1995 MHz, 5G NR, 256-QAM Modulation, Single Carrier, 5 MHz Bandwidth, High Limit, Low Channel, 1932.5 MHz						
	Initial Value dBm/MHz == PSD	Duty Cycle Factor (dB)		Single Port dBm/MHz == PSD	Limit (dBm/MHz)	Results
	40.664	0		40.66	41.2	Pass



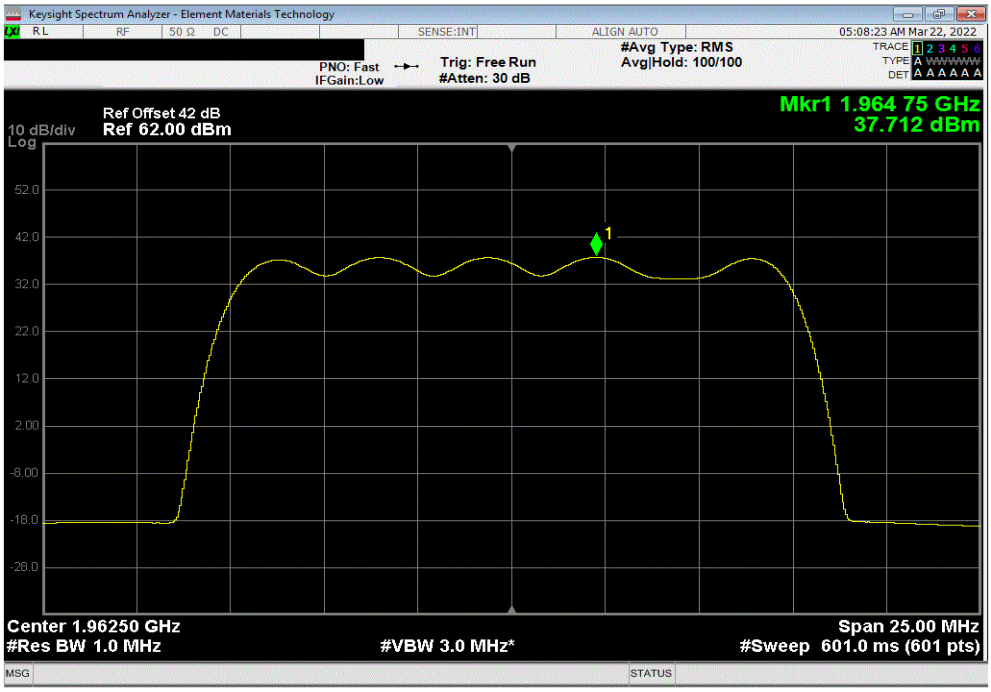
POWER SPECTRAL DENSITY - LOWERED POWER

TbtTx 2022.03.14.0 XMit 2022.02.07.0

Port 1, Band n25, 1930 MHz - 1995 MHz, 5G NR, 16-QAM Modulation, Single Carrier, 10 MHz Bandwidth, Low Limit, Mid Channel, 1962.5 MHz						
	Initial Value dBm/MHz == PSD	Duty Cycle Factor (dB)		Single Port dBm/MHz == PSD	Limit (dBm/MHz)	Results
	37.772	0		37.77	38.2	Pass



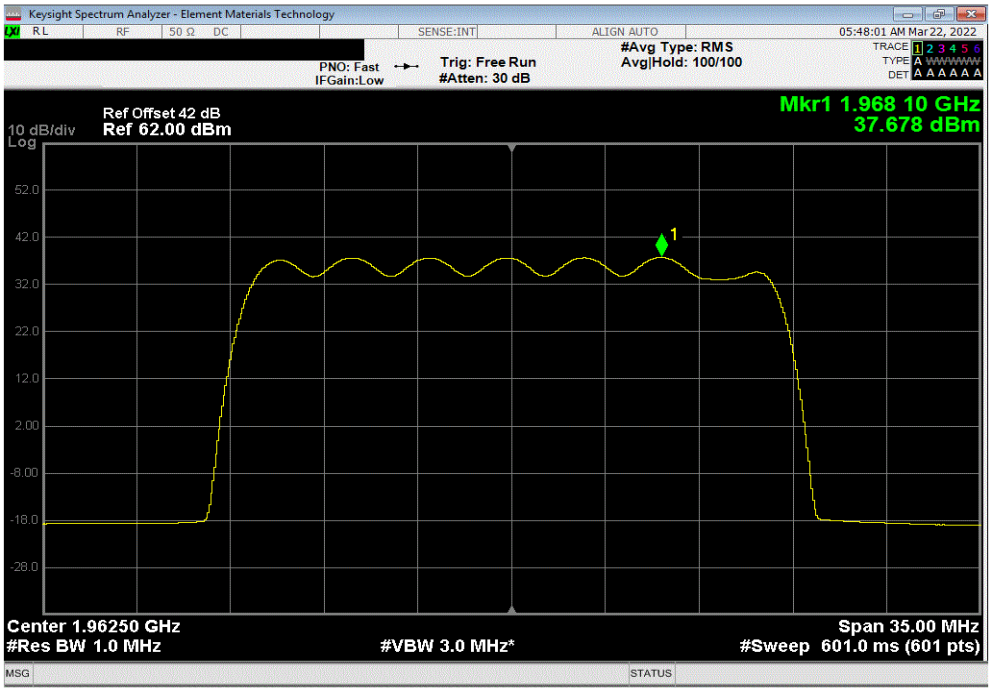
Port 1, Band n25, 1930 MHz - 1995 MHz, 5G NR, 16-QAM Modulation, Single Carrier, 15 MHz Bandwidth, Low Limit, Mid Channel, 1962.5 MHz						
	Initial Value dBm/MHz == PSD	Duty Cycle Factor (dB)		Single Port dBm/MHz == PSD	Limit (dBm/MHz)	Results
	37.712	0		37.71	38.2	Pass



POWER SPECTRAL DENSITY - LOWERED POWER

TbtTx 2022.03.14.0 XMit 2022.02.07.0

Port 1, Band n25, 1930 MHz - 1995 MHz, 5G NR, 16-QAM Modulation, Single Carrier, 20 MHz Bandwidth, Low Limit, Mid Channel, 1962.5 MHz						
	Initial Value dBm/MHz == PSD	Duty Cycle Factor (dB)		Single Port dBm/MHz == PSD	Limit (dBm/MHz)	Results
	37.678	0		37.68	38.2	Pass



POWER SPECTRAL DENSITY - LOWERED POWER

element

TbtTx 2022.03.14.0 XMit 2022.02.07.0

EUT:	**AHFII Remote Radio Head**			**Work Order:**	**NOKI0038**
Serial Number:	**YK214000036**			**Date:**	**22-Mar-22**
Customer:	**Nokia of America Corporation**			**Temperature:**	**22.6 °C**
Attendees:	**Mitchell Hill**			**Humidity:**	**23.7% RH**
Project:	**None**			**Barometric Pres.:**	**1026 mbar**
Tested by:	**Mark Baytan**	**Power:**	**54 VDC**	**Job Site:**	**TX09**

TEST SPECIFICATIONS	**Test Method**
FCC 27:2022	ANSI C63.26:2015
RSS-139 Issue 3:2015	RSS-139 Issue 3:2015
RSS-170 Issue 3:2015	RSS-170 Issue 3:2015

COMMENTS

All measurement path losses were accounted for in the reference level offest including any attenuators, filters and DC blocks. The Band n66 NR5, NR10, NR15 and NR20 carrier power levels were reduced to demonstrate compliance with EIRP limits. The maximum port 1 PSD Lower limit level is 37.9 dBm/MHz for the base station calculated EIRP level not to exceed the EIRP limit (1640Watts/MHz). The maximum port 1 PSD higher limit level is 40.9 dBm/MHz for the base station calculated EIRP level not to exceed the EIRP limit (3280 Watts/MHz).

DEVIATIONS FROM TEST STANDARD

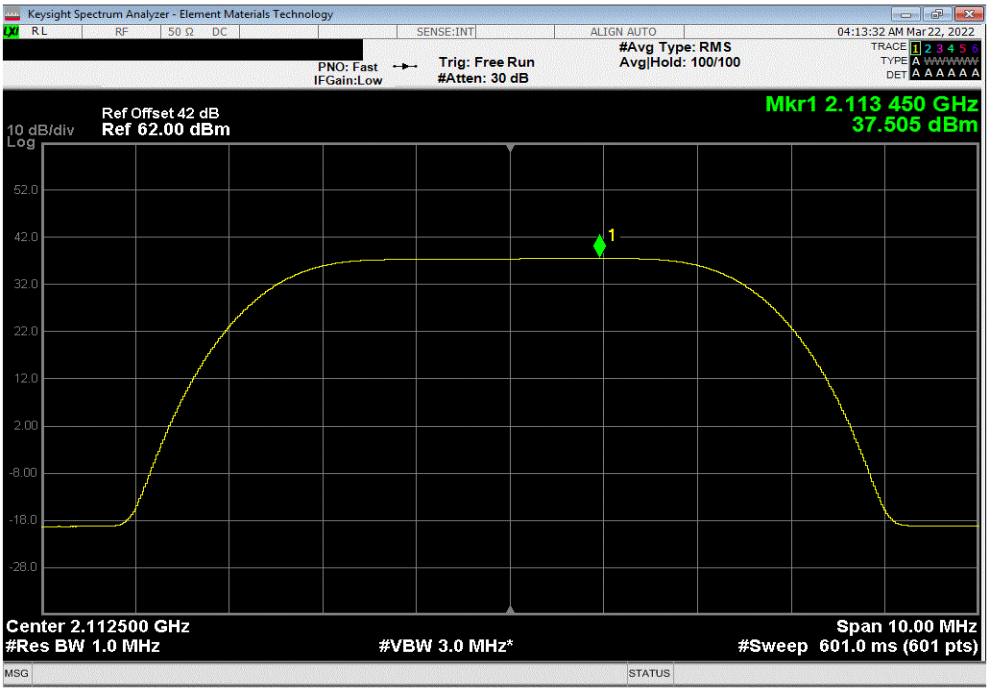
None

Configuration #	**2**	*Signature* 

	Initial Value dBm/MHz == PSD	Duty Cycle Factor (dB)	Single Port dBm/MHz == PSD	Limit (dBm/MHz)	Results
Port 1, Band n66, 2110 MHz - 2200 MHz, 5G NR					
QPSK Modulation					
Single Carrier					
5 MHz Bandwidth, Low Limit					
Low Channel, 2112.5 MHz	37.505	0	37.5	37.9	Pass
5 MHz Bandwidth, High Limit					
Low Channel, 2112.5 MHz	40.491	0	40.5	40.9	Pass
16-QAM Modulation					
Single Carrier					
10 MHz Bandwidth, Low Limit					
Mid Channel, 2155.0 MHz	37.601	0	37.6	37.9	Pass
15 MHz Bandwidth, Low Limit					
Mid Channel, 2155.0 MHz	37.405	0	37.4	37.9	Pass
20 MHz Bandwidth, Low Limit					
Mid Channel, 2155.0 MHz	37.331	0	37.3	37.9	Pass

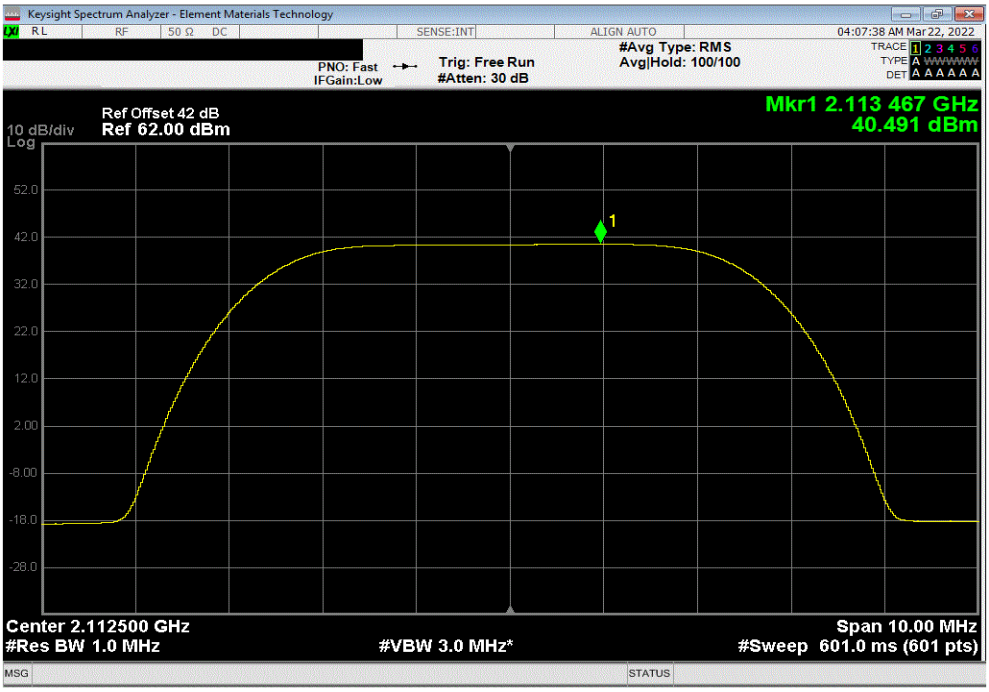
Port 1, Band n66, 2110 MHz - 2200 MHz, 5G NR, QPSK Modulation, Single Carrier, 5 MHz Bandwidth, Low Limit , Low Channel, 2112.5 MHz

	Initial Value dBm/MHz == PSD	Duty Cycle Factor (dB)		Single Port dBm/MHz == PSD	Limit (dBm/MHz)	Results
	37.505	0		37.5	37.9	Pass

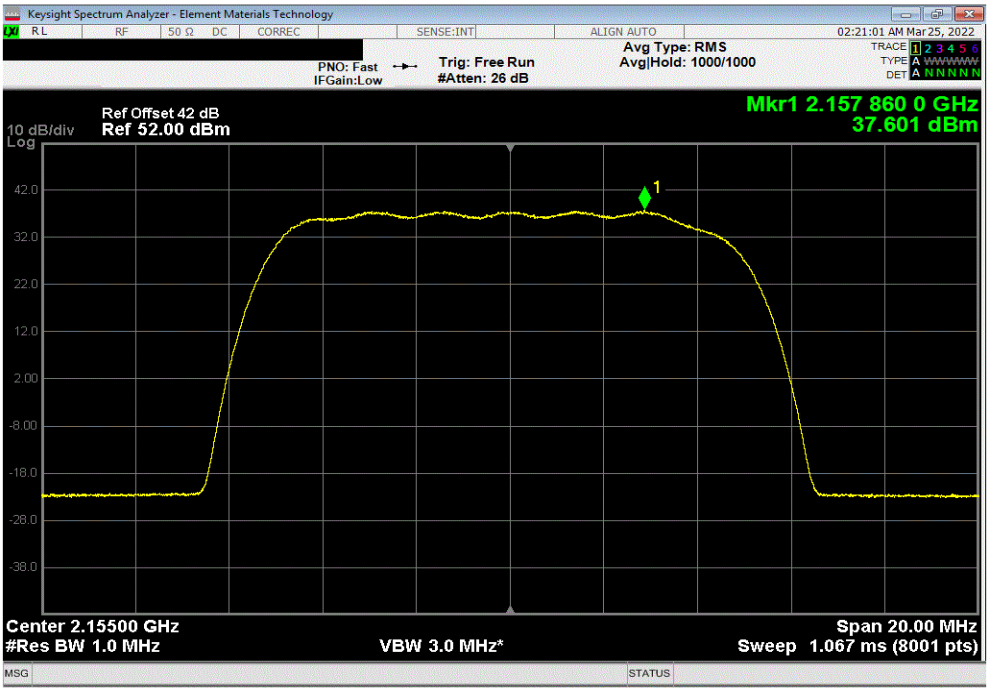


Port 1, Band n66, 2110 MHz - 2200 MHz, 5G NR, QPSK Modulation, Single Carrier, 5 MHz Bandwidth, High Limit, Low Channel, 2112.5 MHz

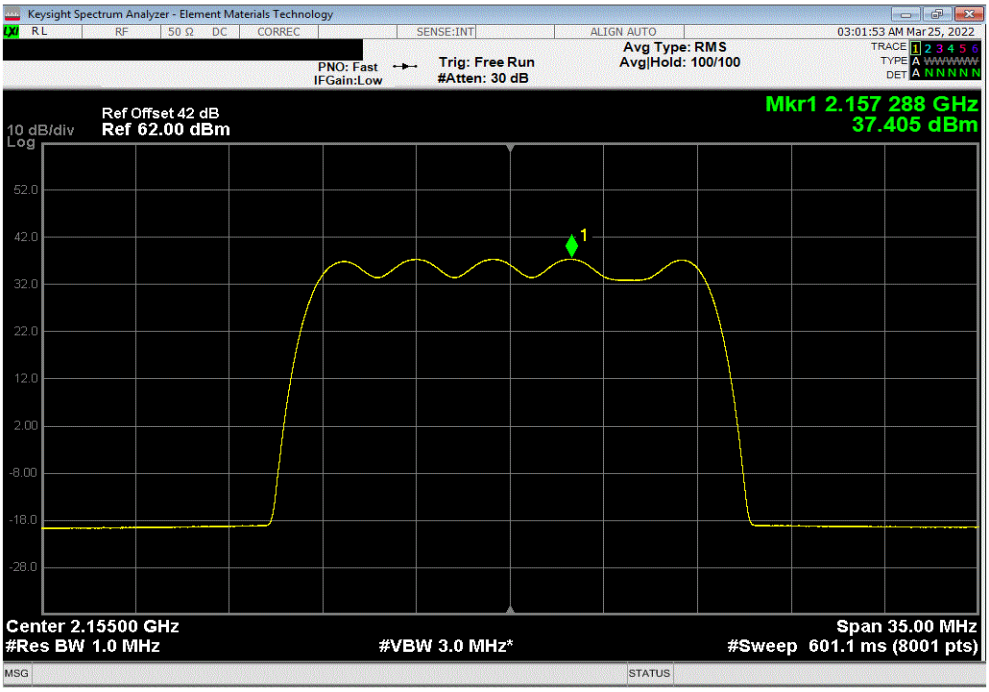
	Initial Value dBm/MHz == PSD	Duty Cycle Factor (dB)		Single Port dBm/MHz == PSD	Limit (dBm/MHz)	Results
	40.491	0		40.5	40.9	Pass



Port 1, Band n66, 2110 MHz - 2200 MHz, 5G NR, 16-QAM Modulation, Single Carrier, 10 MHz Bandwidth, Low Limit, Mid Channel, 2155.0 MHz						
	Initial Value dBm/MHz == PSD	Duty Cycle Factor (dB)		Single Port dBm/MHz == PSD	Limit (dBm/MHz)	Results
	37.601	0		37.6	37.9	Pass



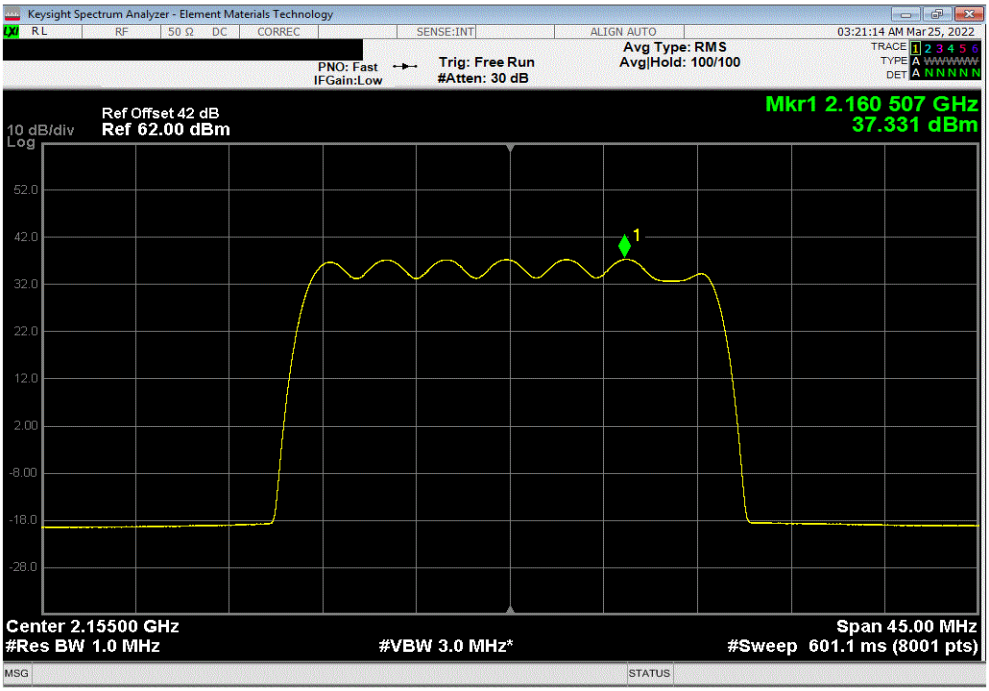
Port 1, Band n66, 2110 MHz - 2200 MHz, 5G NR, 16-QAM Modulation, Single Carrier, 15 MHz Bandwidth, Low Limit, Mid Channel, 2155.0 MHz						
	Initial Value dBm/MHz == PSD	Duty Cycle Factor (dB)		Single Port dBm/MHz == PSD	Limit (dBm/MHz)	Results
	37.405	0		37.4	37.9	Pass



POWER SPECTRAL DENSITY - LOWERED POWER

TbtTx 2022.03.14.0 XMit 2022.02.07.0

Port 1, Band n66, 2110 MHz - 2200 MHz, 5G NR, 16-QAM Modulation, Single Carrier, 20 MHz Bandwidth, Low Limit, Mid Channel, 2155.0 MHz						
	Initial Value dBm/MHz == PSD	Duty Cycle Factor (dB)		Single Port dBm/MHz == PSD	Limit (dBm/MHz)	Results
	37.331	0		37.3	37.9	Pass



PEAK TO AVERAGE (PAPR) CCDF

XMit 2020.12.30.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFQ	2022-01-17	2023-01-17
Block - DC	Fairview Microwave	SD3379	AMM	2021-09-14	2022-09-14
Spectrum Analyzer	Agilent Technologies, Inc.	N9020A	R316	2021-08-19	2023-08-19

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

Because the conducted Output Power was measured using a RMS Average detector, the Peak to Average Power Ratio (PAPR) was measured to show that the maximum peak-max-hold spectrum to the maximum of the average spectrum does not exceed the rule part defined limit.

The PAPR measurement method is described in ANSI C63.26 section 5.2.3.4.
The PAPR was measured using the CCDF function of the spectrum analyzer.

Per FCC part 24.232(d) and RSS 133 6.4, the PAPR limit shall not exceed 13 dB for more than the ANSI described 0.1% of the time.

Per FCC part 27.50(d)(5), RSS-139 6.5, and RSS-170 5.3.1, the maximum peak-to-average power ratio (PAPR) is 13dB.

RF conducted emissions testing was performed only on one port. The testing was performed on the same version of hardware (AHFII) as the original certification test. The AHFII antenna ports are essentially electrically identical (the RF power variation between antenna ports is small as shown in this certification testing) and antenna port 1 was selected to perform the testing under this effort as allowed by ANSI C63.26-2015 paragraphs 5.2.5.3, 5.7.2i, and 6.4.

PEAK TO AVERAGE (PAPR) CCDF

element

TbtTx 2022.03.14.0 XMit 2022.02.07.0

EUT:	**AHFII Remote Radio Head**			**Work Order:**	**NOKI0038**
Serial Number:	**YK214000035**			**Date:**	**18-Mar-22**
Customer:	**Nokia of America Corporation**			**Temperature:**	**19.6 °C**
Attendees:	**Mitchell Hill**			**Humidity:**	**30.9% RH**
Project:	**None**			**Barometric Pres.:**	**1018 mbar**
Tested by:	**Brandon Hobbs**	**Power:**	**54 VDC**	**Job Site:**	**TX06**

TEST SPECIFICATIONS	**Test Method**
FCC 24E:2022	ANSI C63.26:2015
RSS-133 Issue 6:2013+A1:2018	RSS-133 Issue 6:2013+A1:2018

COMMENTS

All measurement path losses were accounted for in the reference level offest including any attenuators, filters and DC blocks.Band n25 carriers are enabled at maximum power (80 watts/carrier).

DEVIATIONS FROM TEST STANDARD

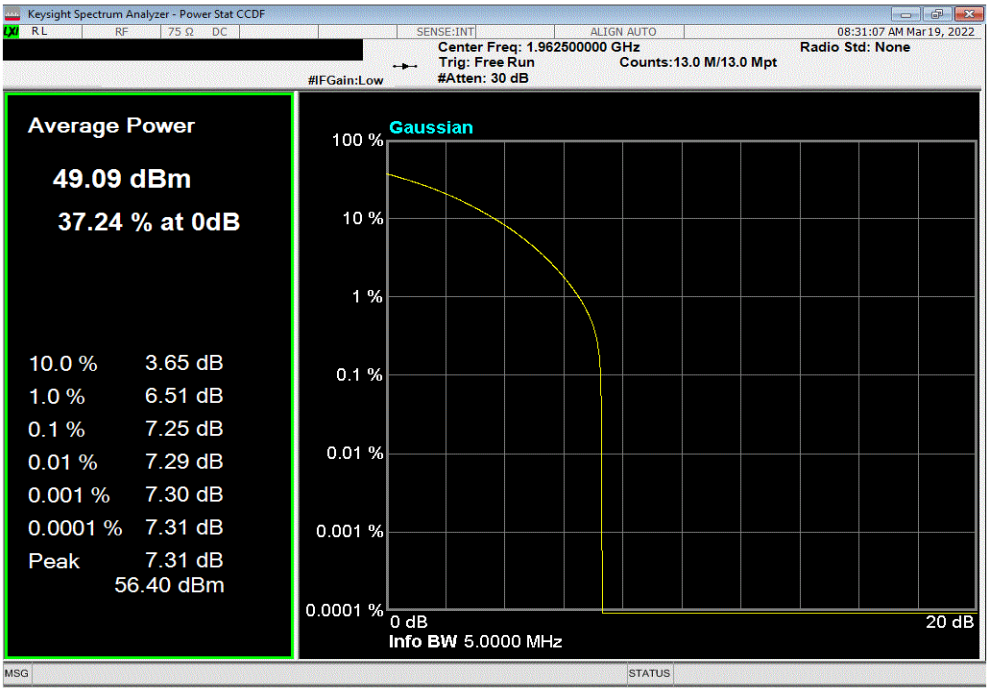
None

Configuration #	**2**	*Signature*

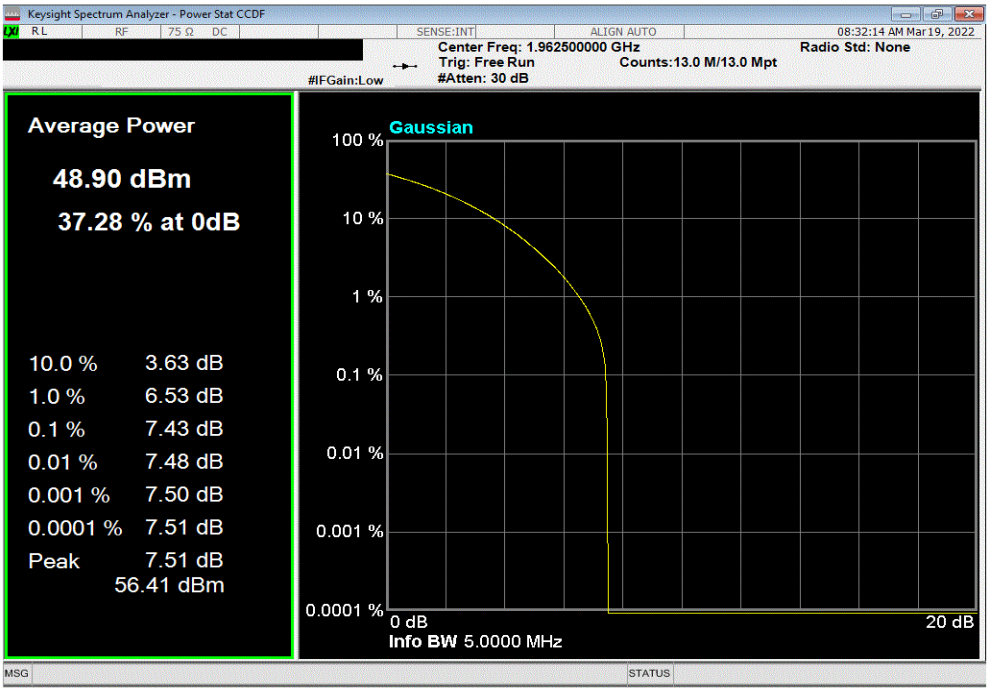
	PAPR Value (dB)	PAPR Limit (dB)	Results
Band n25, 1930 MHz - 1995 MHz, 5G NR			
Port 1			
5 MHz Bandwidth			
QPSK Modulation			
Mid Channel, 1962.5 MHz	7.25	13	Pass
16-QAM Modulation			
Mid Channel, 1962.5 MHz	7.43	13	Pass
64-QAM Modulation			
Mid Channel, 1962.5 MHz	7.24	13	Pass
256-QAM Modulation			
Low Channel, 1932.5 MHz	7.27	13	Pass
Mid Channel, 1962.5 MHz	7.26	13	Pass
High Channel, 1992.5 MHz	7.24	13	Pass
10 MHz Bandwidth			
256-QAM Modulation			
Low Channel, 1935 MHz	7.32	13	Pass
Mid Channel, 1962.5 MHz	7.25	13	Pass
High Channel, 1990 MHz	7.26	13	Pass
15 MHz Bandwidth			
256-QAM Modulation			
Low Channel, 1937.5 MHz	7.40	13	Pass
Mid Channel, 1962.5 MHz	7.22	13	Pass
High Channel, 1987.5 MHz	7.28	13	Pass
20 MHz Bandwidth			
256-QAM Modulation			
Low Channel, 1940 MHz	7.39	13	Pass
Mid Channel, 1962.5 MHz	7.12	13	Pass
High Channel, 1985 MHz	7.23	13	Pass
30 MHz Bandwidth			
256-QAM Modulation			
Low Channel, 1945 MHz	7.55	13	Pass
Mid Channel, 1962.5 MHz	7.13	13	Pass
High Channel, 1980 MHz	7.30	13	Pass

PEAK TO AVERAGE (PAPR) CCDF

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 5 MHz Bandwidth, QPSK Modulation, Mid Channel, 1962.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.25	13	Pass

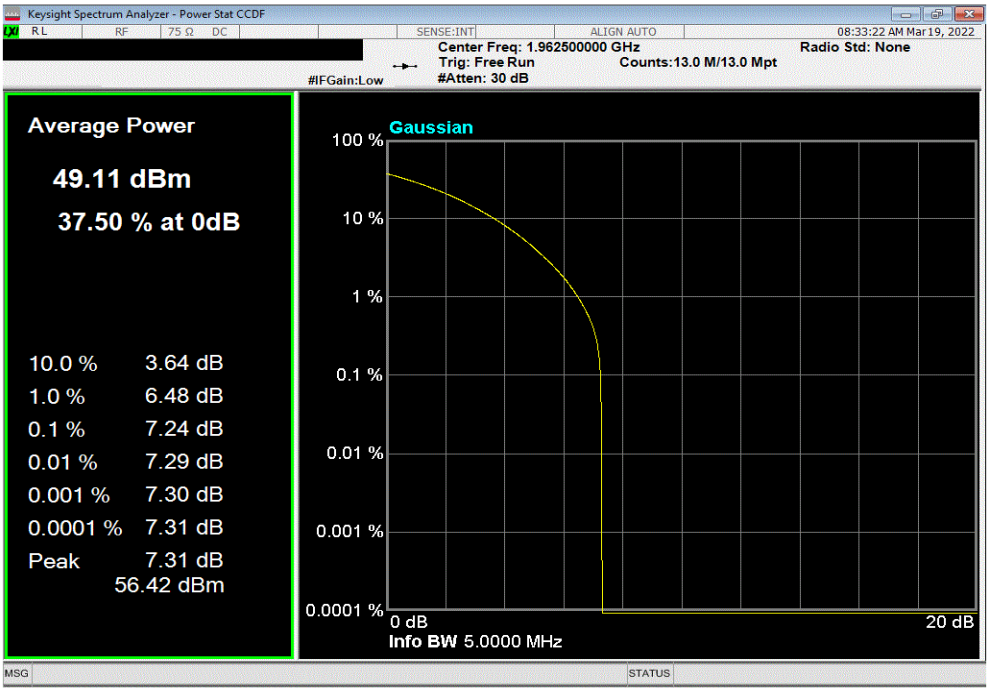


Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 1962.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.43	13	Pass

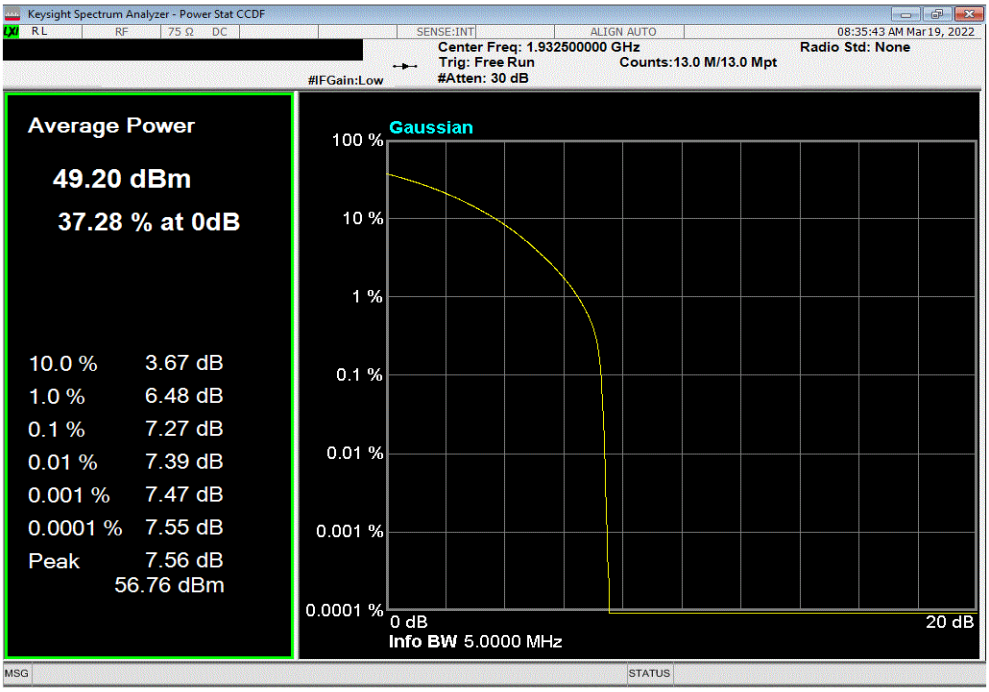


PEAK TO AVERAGE (PAPR) CCDF

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 1962.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.24	13	Pass

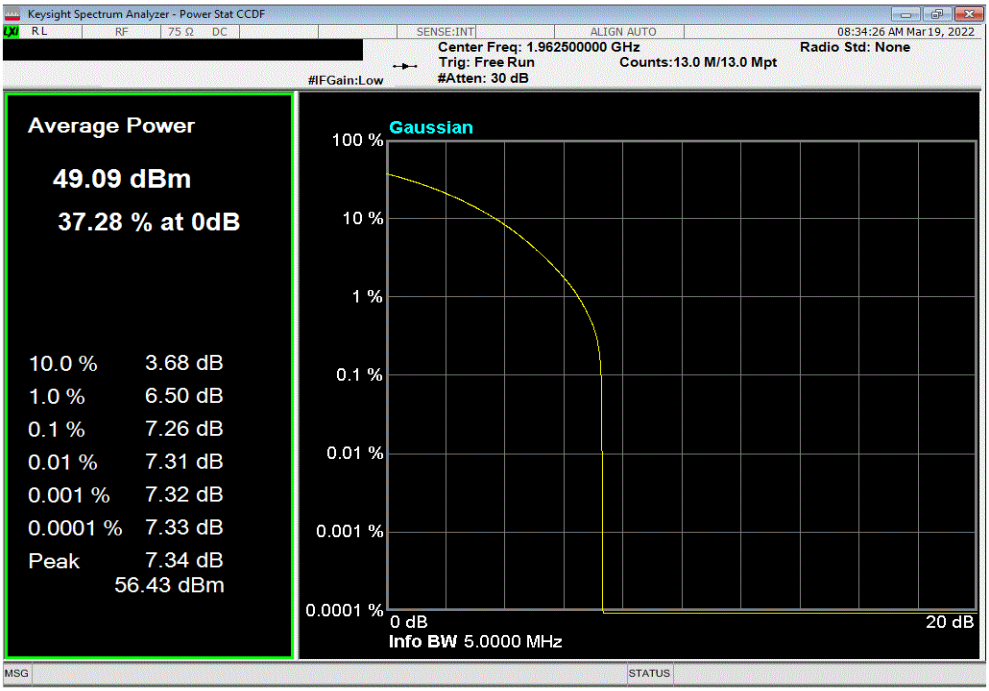


Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1932.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.27	13	Pass

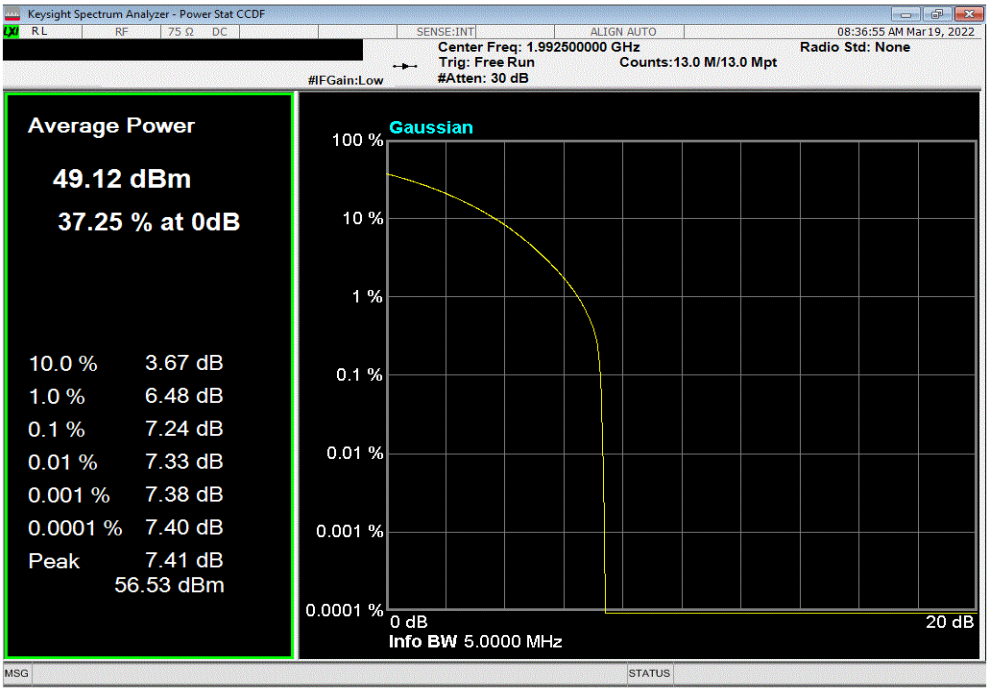


PEAK TO AVERAGE (PAPR) CCDF

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.26	13	Pass

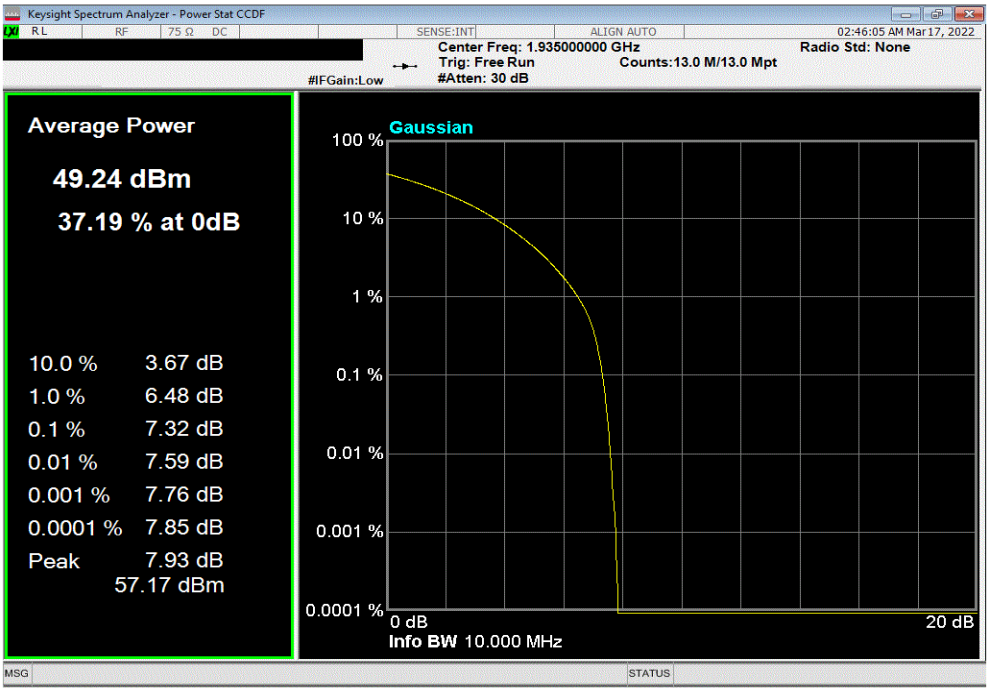


Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, High Channel, 1992.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.24	13	Pass

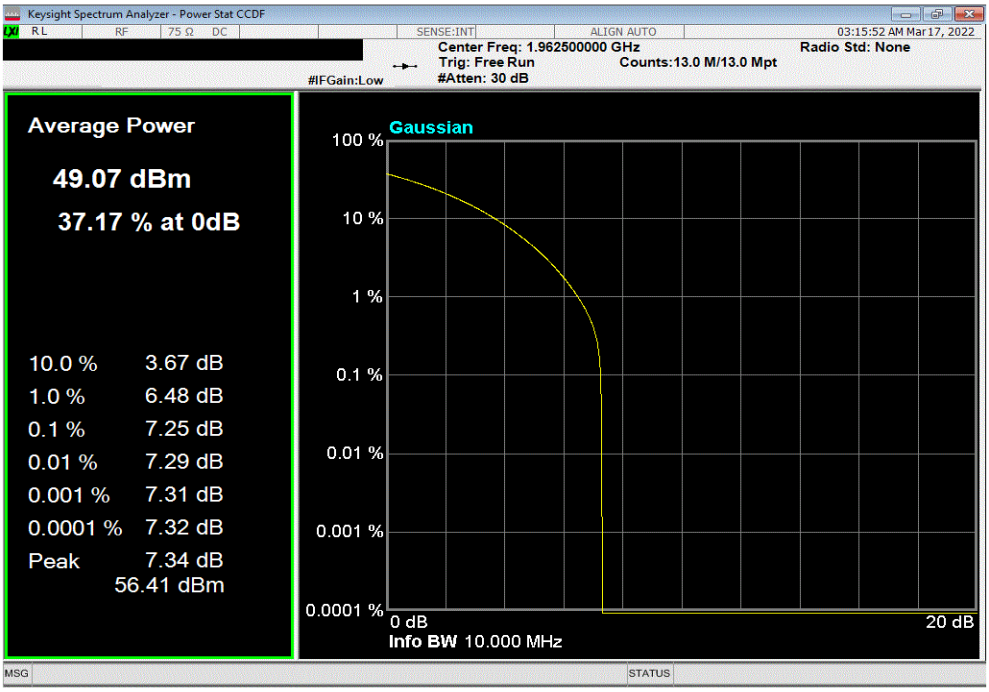


PEAK TO AVERAGE (PAPR) CCDF

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1935 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.32	13	Pass

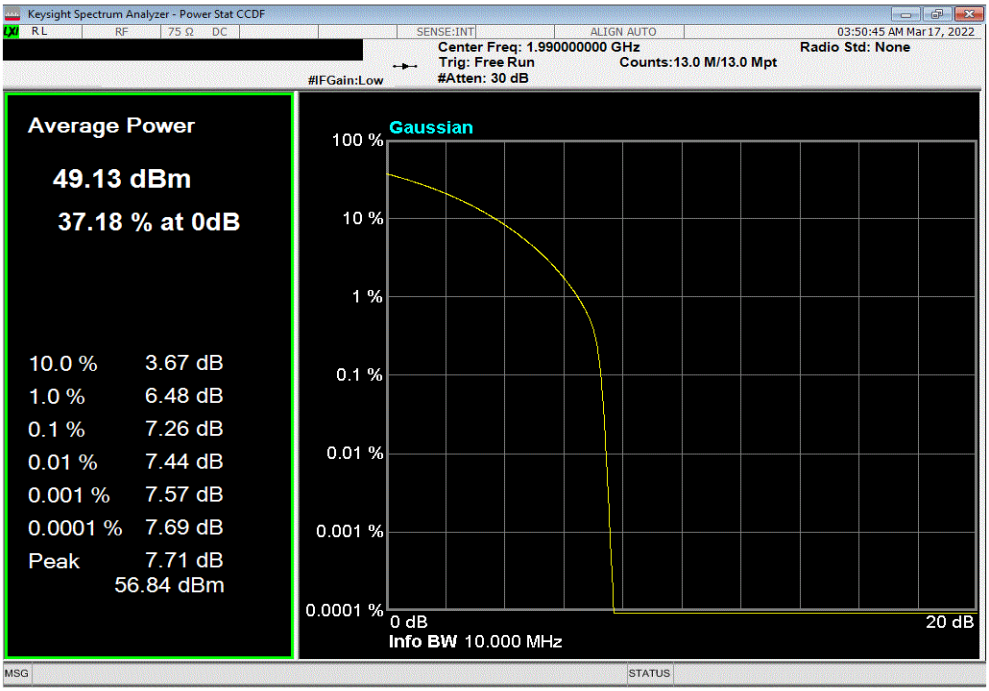


Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.25	13	Pass

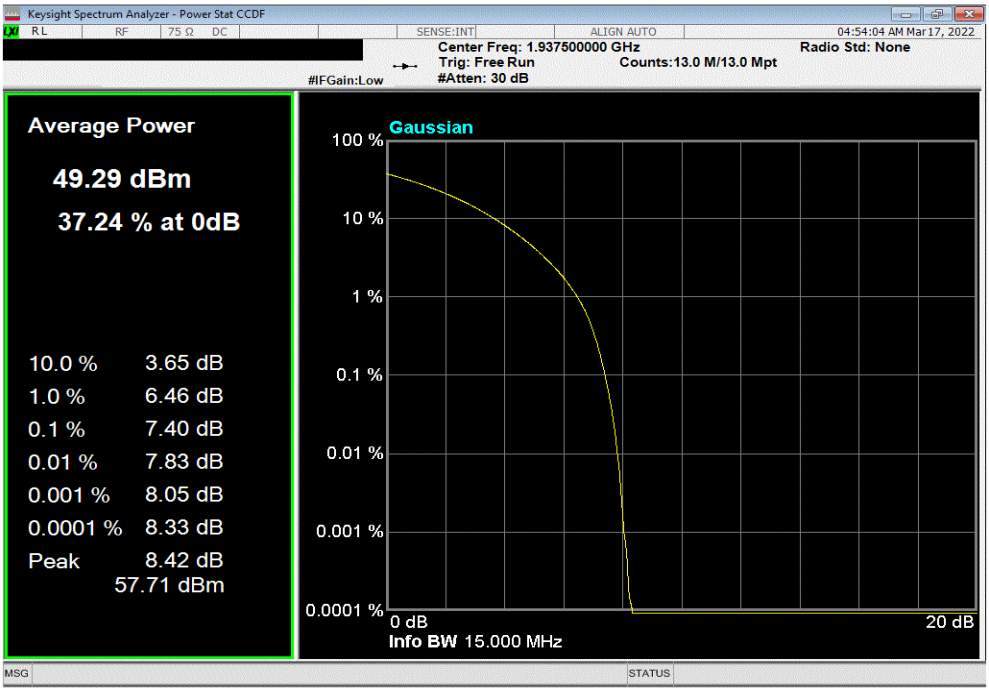


PEAK TO AVERAGE (PAPR) CCDF

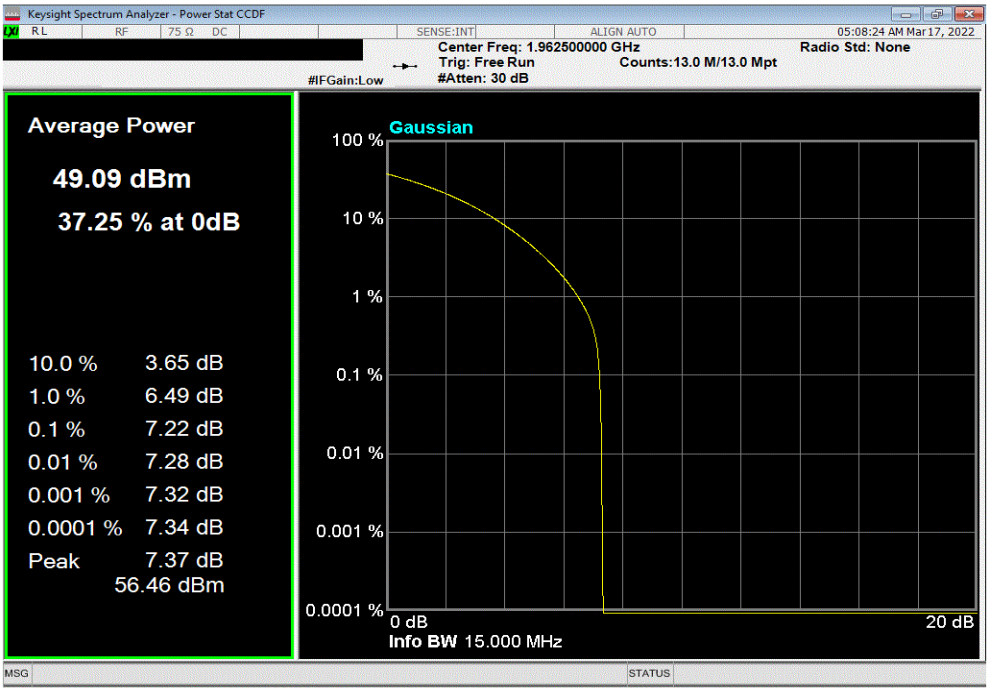
Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, High Channel, 1990 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.26	13	Pass



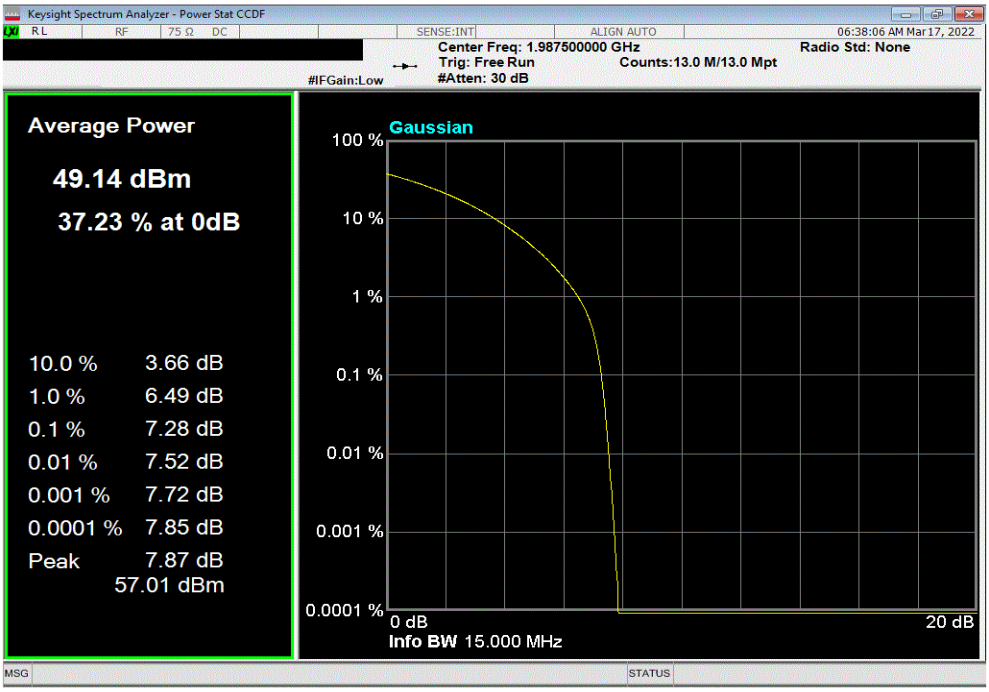
Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1937.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.4	13	Pass



Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.22	13	Pass

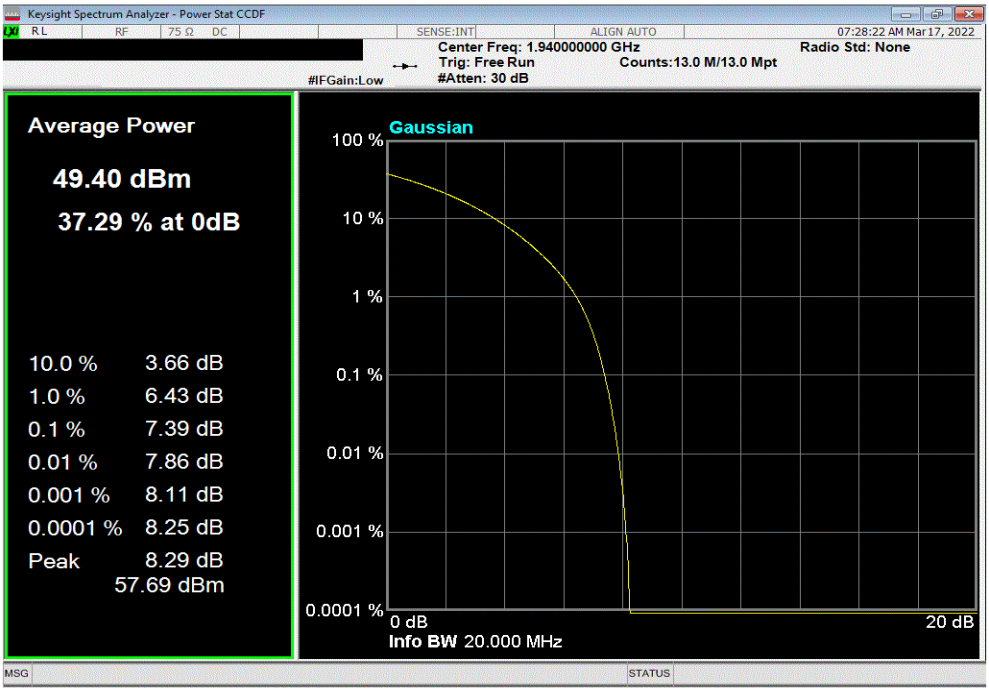


Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, High Channel, 1987.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.28	13	Pass

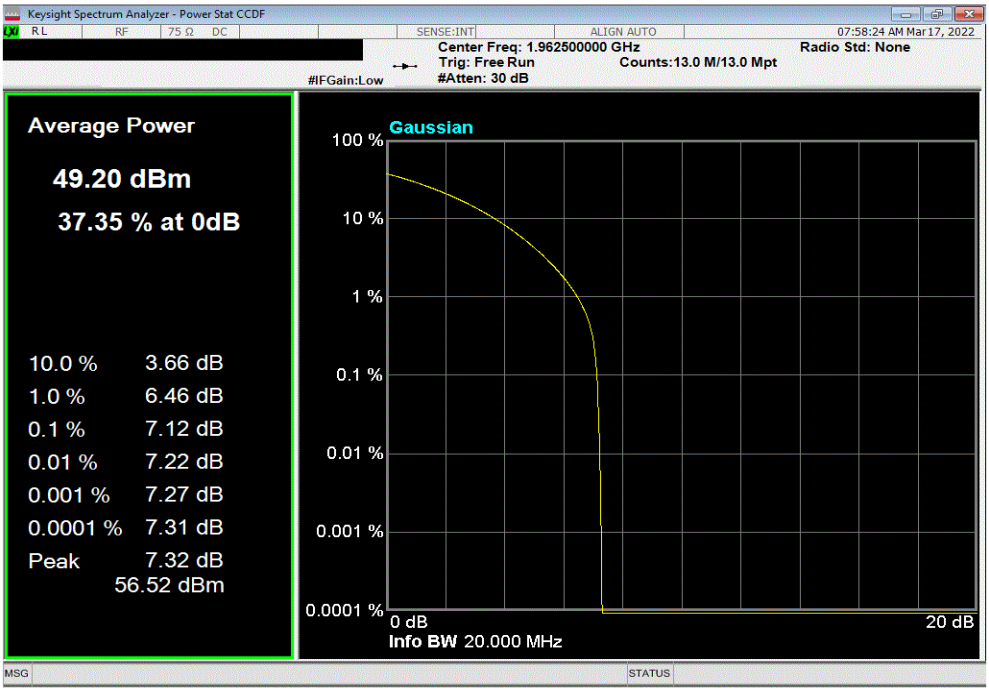


PEAK TO AVERAGE (PAPR) CCDF

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1940 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.39	13	Pass



Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz.						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.12	13	Pass

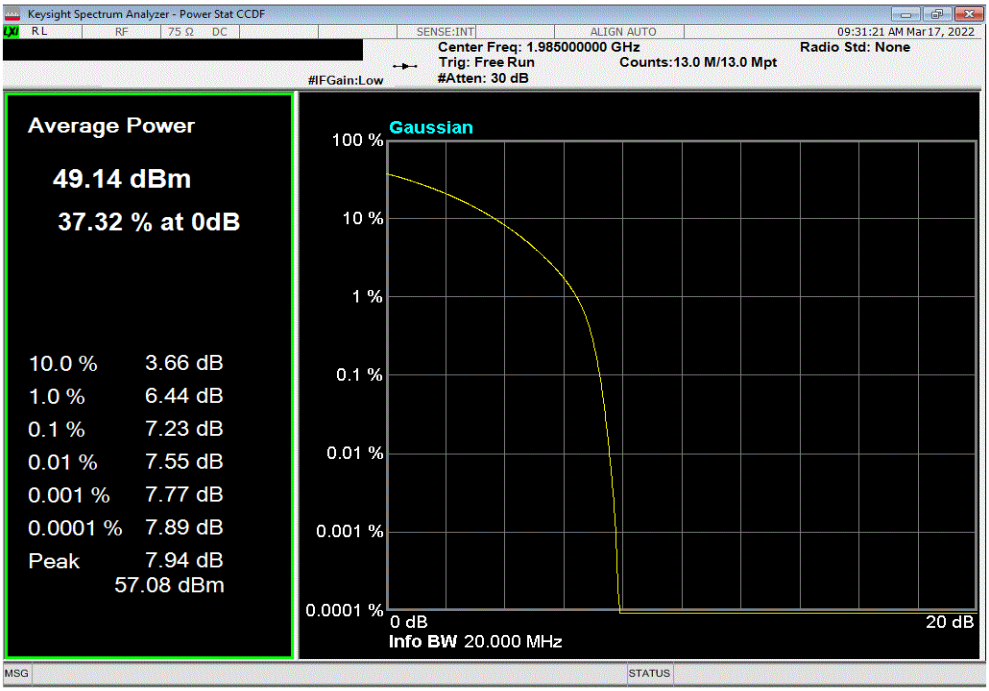


PEAK TO AVERAGE (PAPR) CCDF

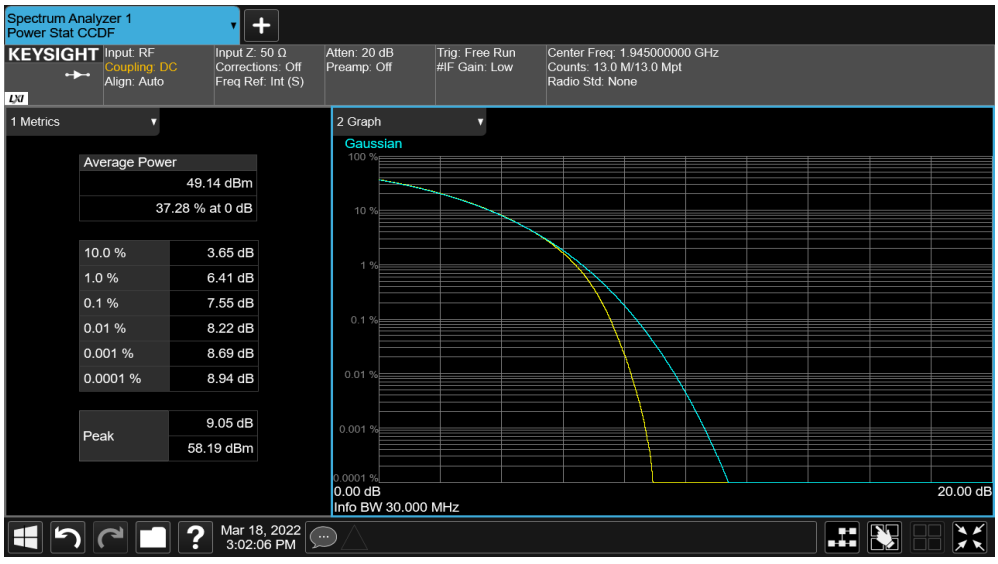
element

TbtTx 2022.03.14.0 XMit 2022.02.07.0

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, High Channel, 1985 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.23	13	Pass

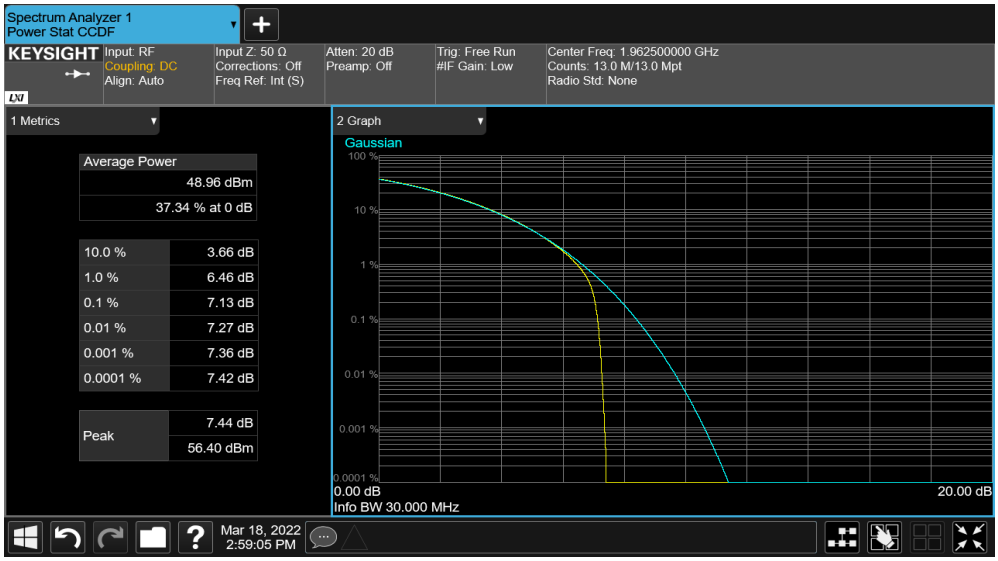


Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 30 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1945 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.55	13	Pass



PEAK TO AVERAGE (PAPR) CCDF

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 30 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.13	13	Pass



Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 30 MHz Bandwidth, 256-QAM Modulation, High Channel, 1980 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.3	13	Pass

PEAK TO AVERAGE (PAPR) CCDF

element

TbtTx 2022.03.14.0 XMit 2022.02.07.0

EUT:	**AHFII Remote Radio Head**			**Work Order:**	**NOKI0038**
Serial Number:	**YK214000035**			**Date:**	**19-Mar-22**
Customer:	**Nokia of America Corporation**			**Temperature:**	**22.1 °C**
Attendees:	**Mitchell Hill**			**Humidity:**	**43.2% RH**
Project:	**None**			**Barometric Pres.:**	
Tested by:	**Brandon Hobbs**	**Power:**	**54 VDC**	**Job Site:**	**TX09**

TEST SPECIFICATIONS	**Test Method**
FCC 27:2022	ANSI C63.26:2015
RSS-139 Issue 3:2015, RSS-170 Issue 3:2015	RSS-139 Issue 3:2015, RSS-170 Issue 3:2015

COMMENTS

All measurement path losses were accounted for in the reference level offest including any attenuators, filters and DC blocks.Band n66 carriers are enabled at maximum power (80 watts/carrier).

DEVIATIONS FROM TEST STANDARD

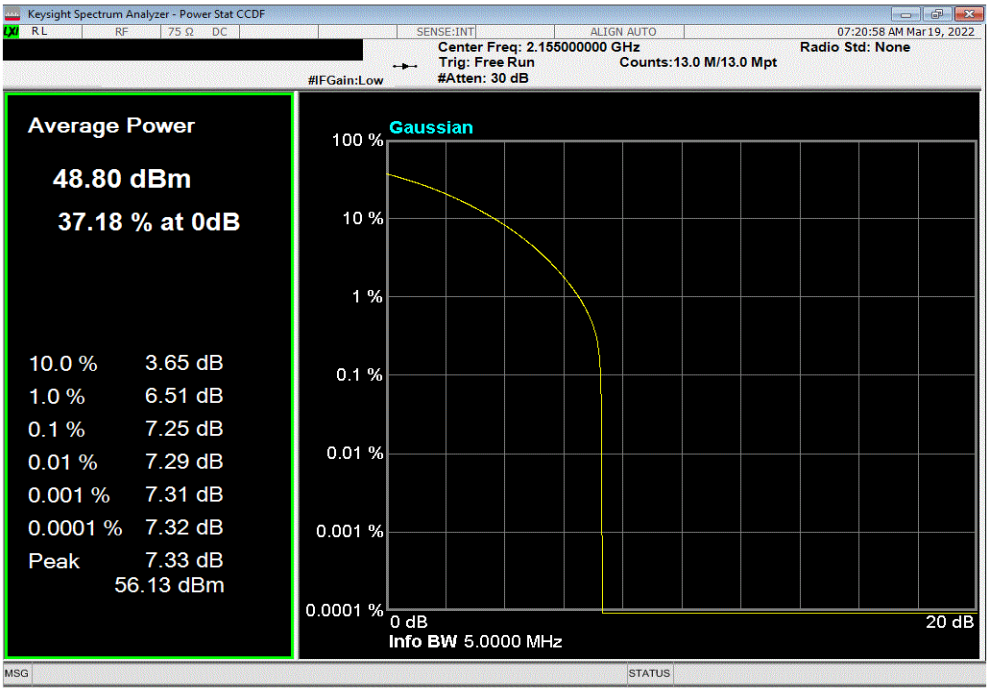
None

Configuration #	**2**	*Signature*

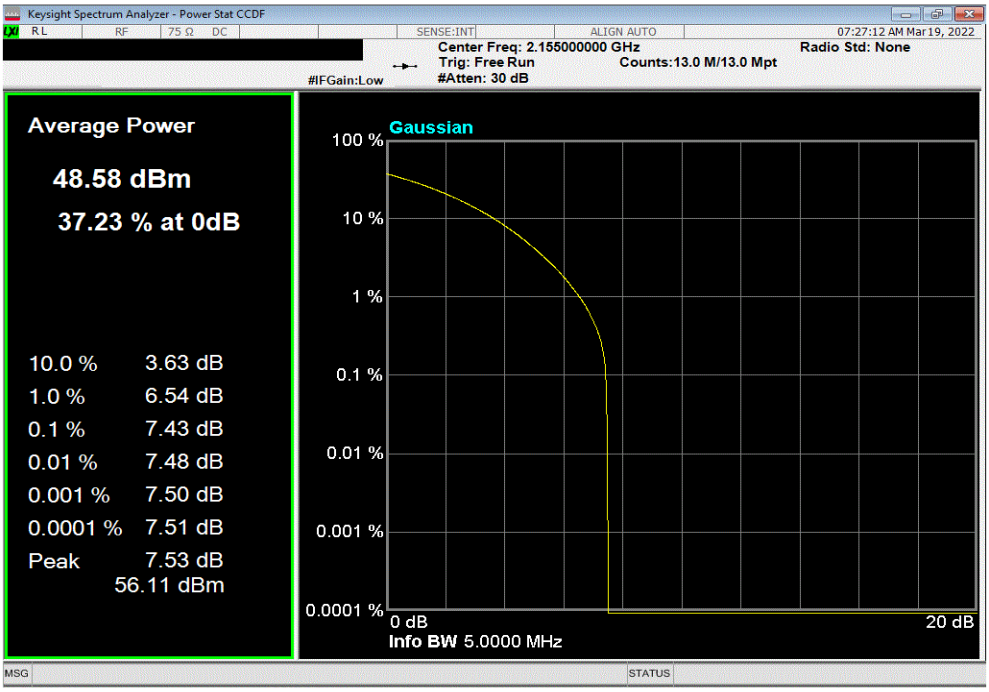
	PAPR Value (dB)	**PAPR Limit (dB)**	**Results**
Band n66, 2110 MHz - 2200 MHz, 5G NR			
Port 1			
5 MHz Bandwidth			
QPSK Modulation			
Mid Channel, 2155 MHz	7.25	13	Pass
16-QAM Modulation			
Mid Channel, 2155 MHz	7.43	13	Pass
64-QAM Modulation			
Mid Channel, 2155 MHz	7.25	13	Pass
256-QAM Modulation			
Low Channel, 2112.5 MHz	7.26	13	Pass
Mid Channel, 2155 MHz	7.26	13	Pass
High Channel, 2197.5 MHz	7.26	13	Pass
10 MHz Bandwidth			
256-QAM Modulation			
Low Channel, 2115 MHz	7.26	13	Pass
Mid Channel, 2155 MHz	7.26	13	Pass
High Channel, 2195 MHz	7.26	13	Pass
15 MHz Bandwidth			
256-QAM Modulation			
Low Channel, 2117.5 MHz	7.27	13	Pass
Mid Channel, 2155 MHz	7.23	13	Pass
High Channel, 2192.5 MHz	7.26	13	Pass
20 MHz Bandwidth			
256-QAM Modulation			
Low Channel, 2120 MHz	7.21	13	Pass
Mid Channel, 2155 MHz	7.13	13	Pass
High Channel, 2190 MHz	7.19	13	Pass
30 MHz Bandwidth			
256-QAM Modulation			
Low Channel, 2125 MHz	7.27	13	Pass
Mid Channel, 2155 MHz	7.11	13	Pass
High Channel, 2185 MHz	7.24	13	Pass

PEAK TO AVERAGE (PAPR) CCDF

Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 5 MHz Bandwidth, QPSK Modulation, Mid Channel, 2155 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.25	13	Pass

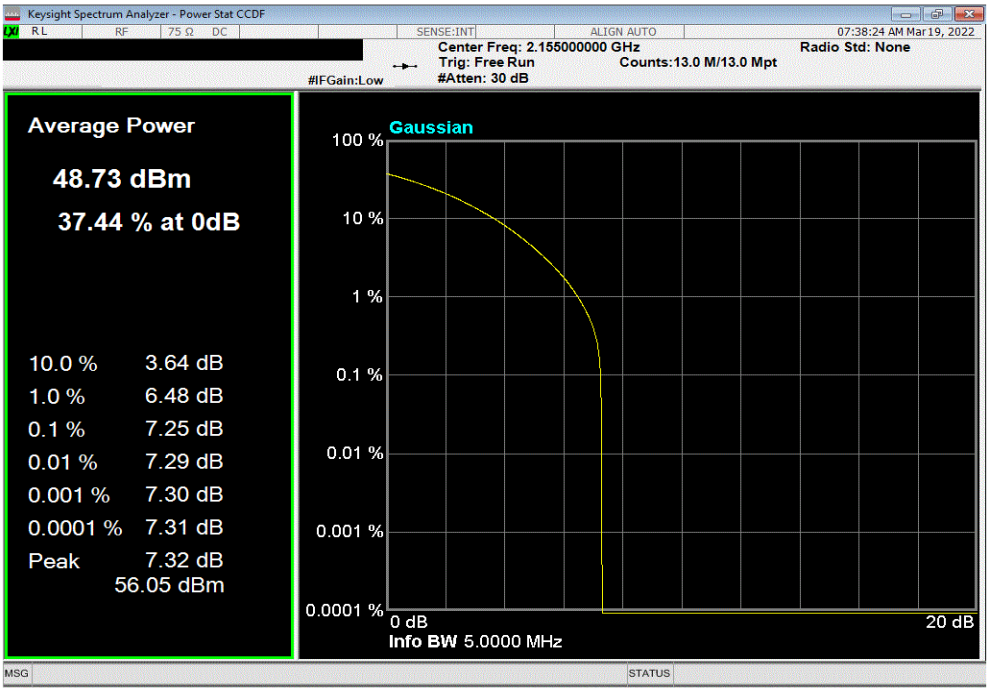


Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 2155 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.43	13	Pass

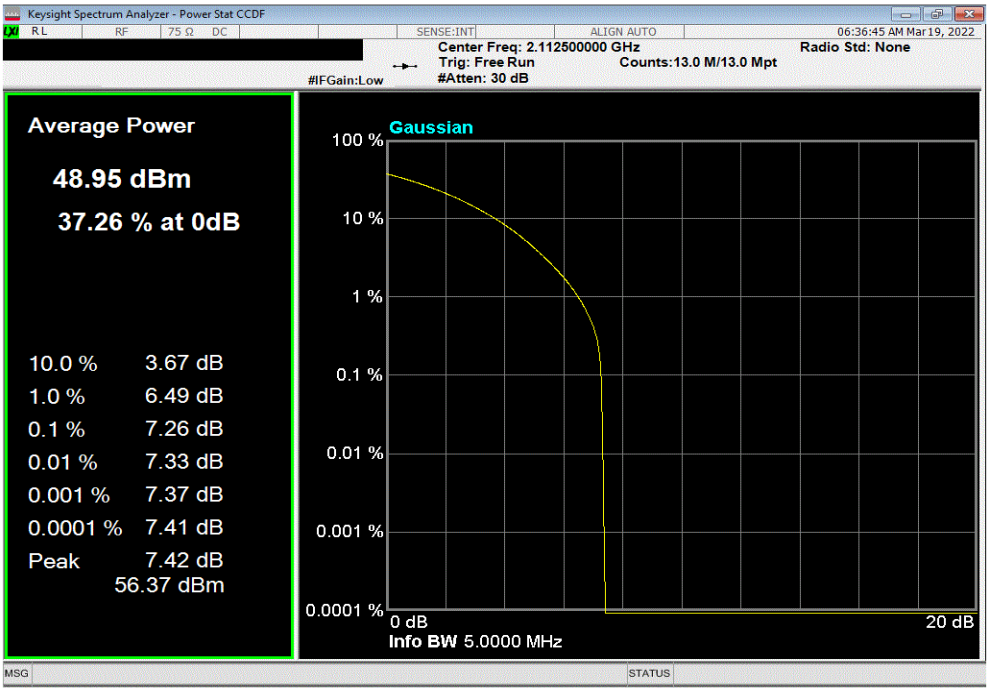


PEAK TO AVERAGE (PAPR) CCDF

Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 2155 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.25	13	Pass

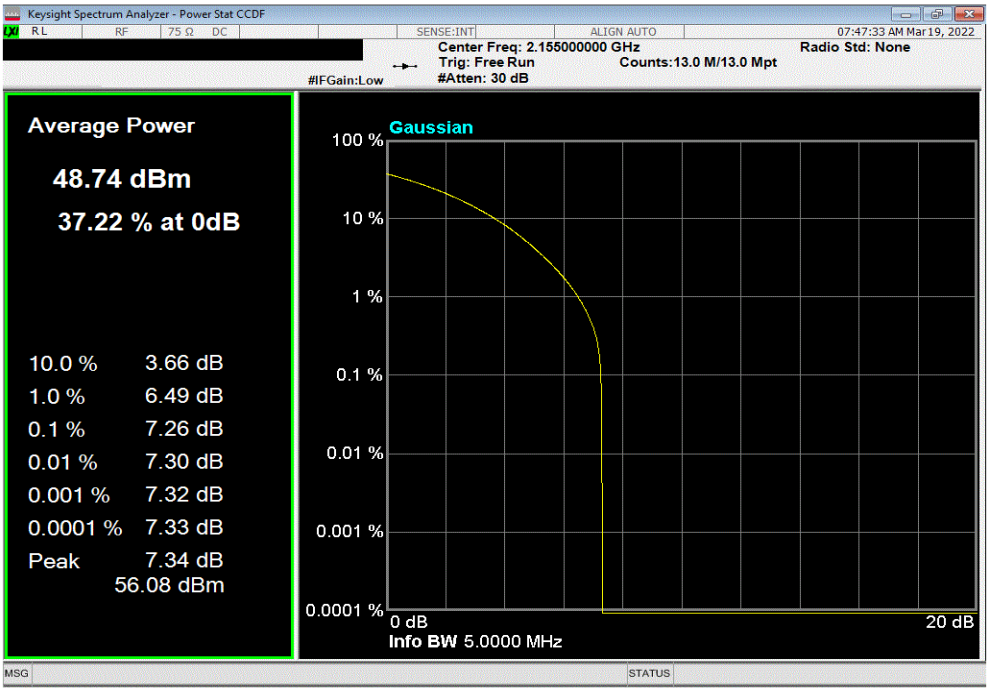


Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Low Channel, 2112.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.26	13	Pass

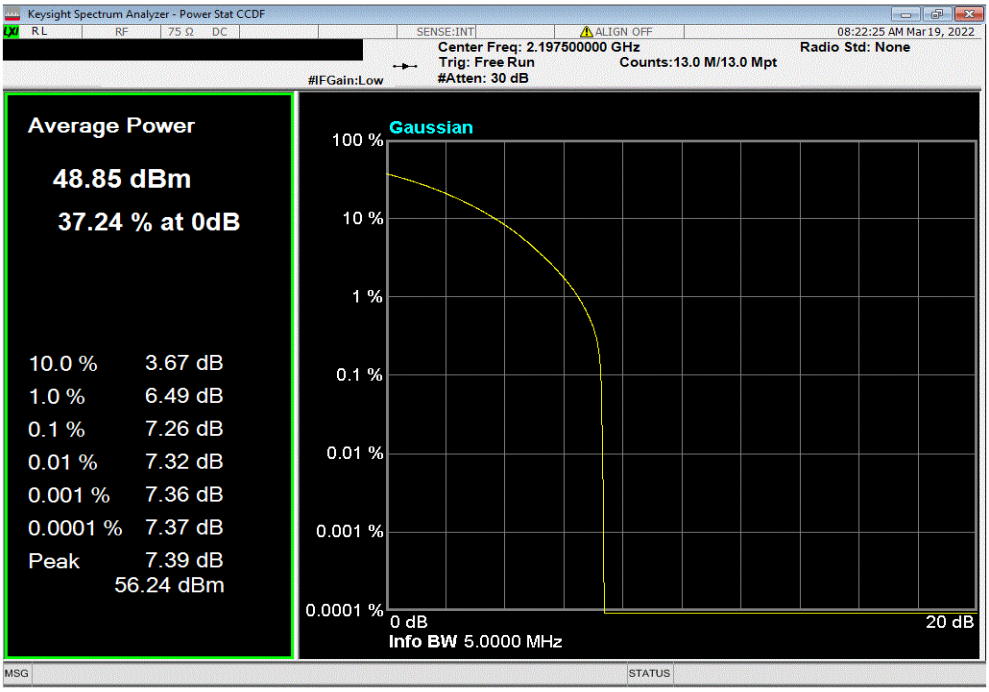


PEAK TO AVERAGE (PAPR) CCDF

Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 2155 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.26	13	Pass

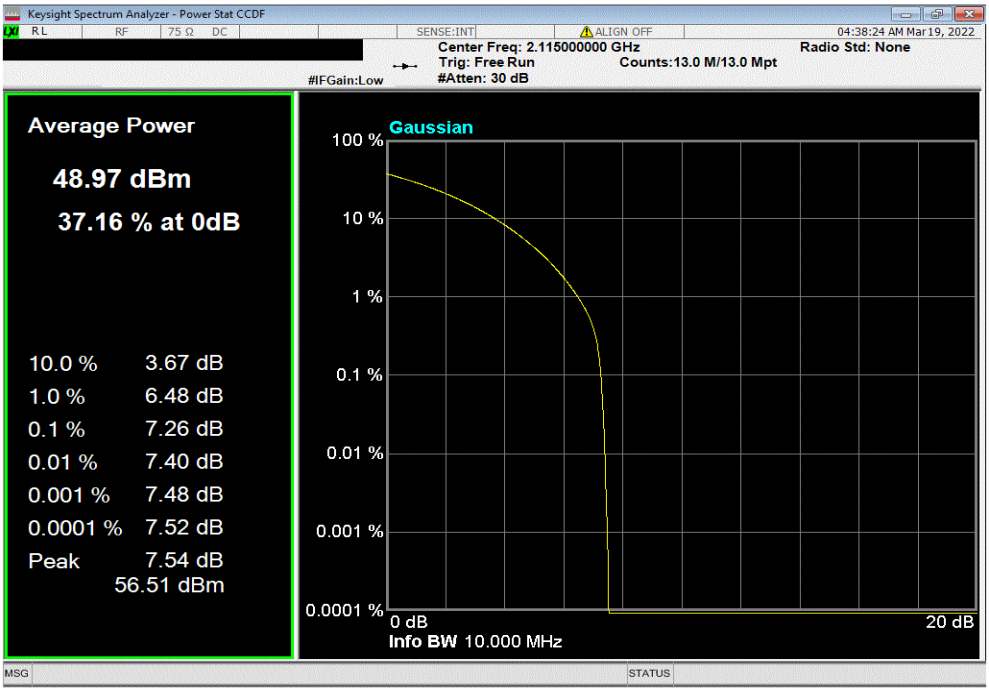


Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, High Channel, 2197.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.26	13	Pass

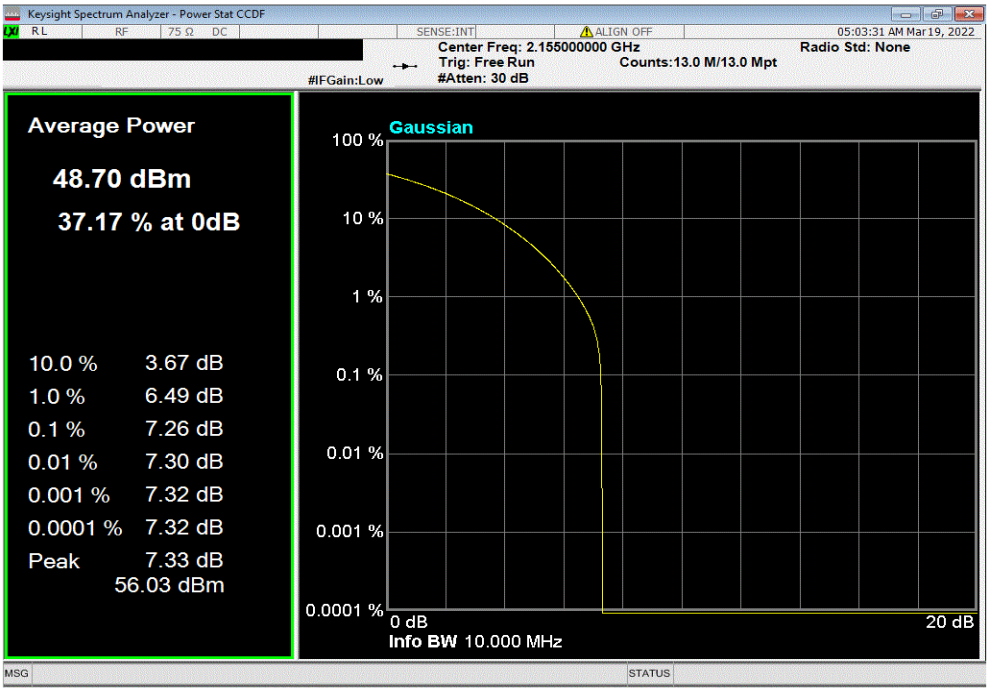


PEAK TO AVERAGE (PAPR) CCDF

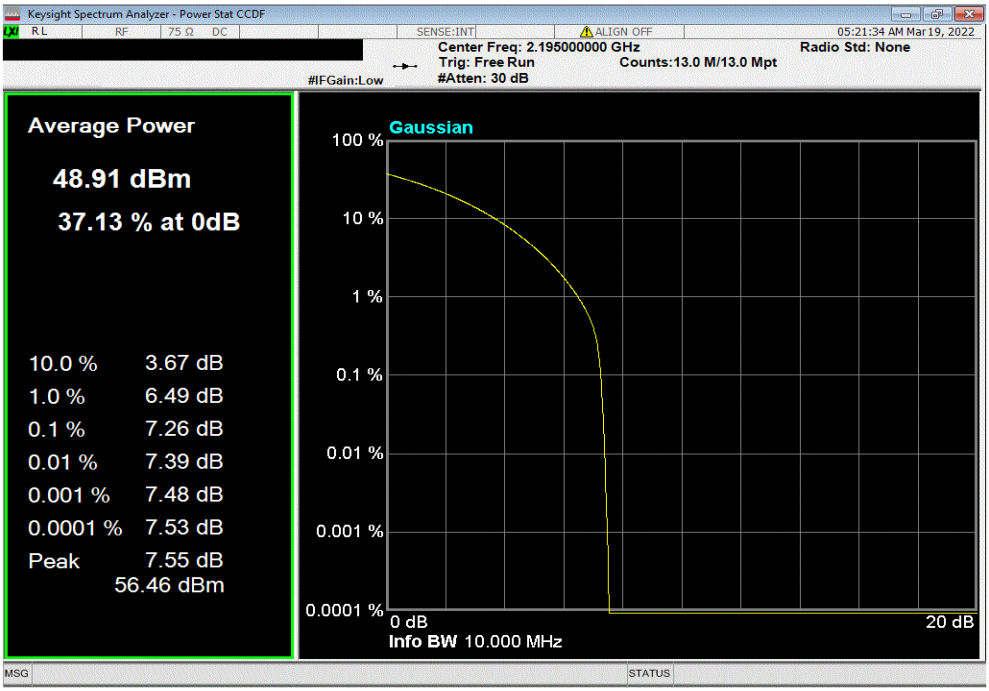
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Low Channel, 2115 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.26	13	Pass



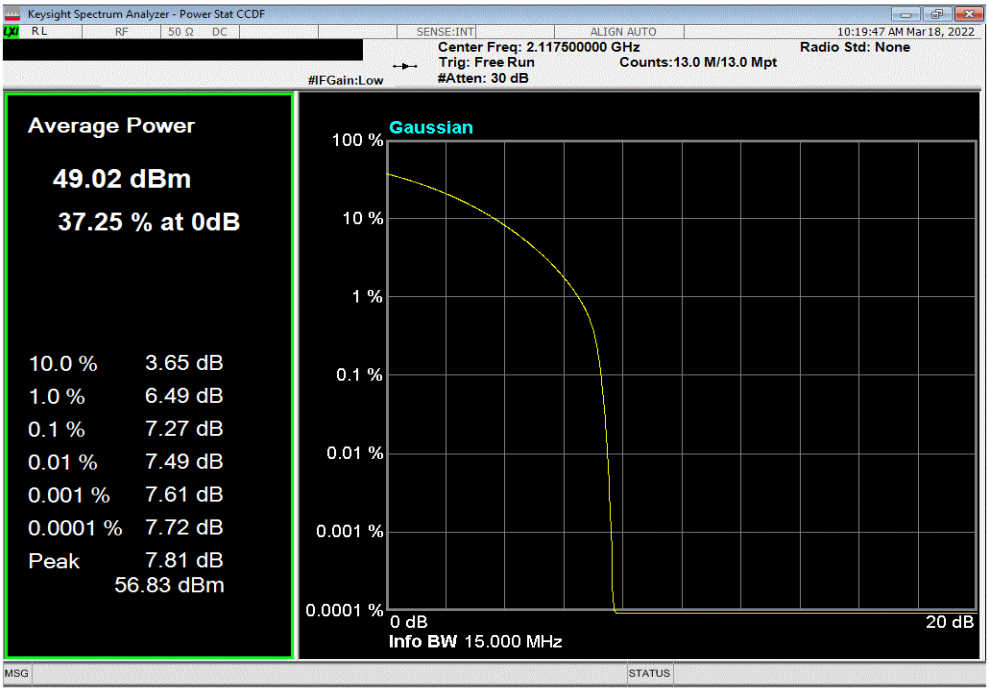
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 2155 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.26	13	Pass



Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, High Channel, 2195 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.26	13	Pass

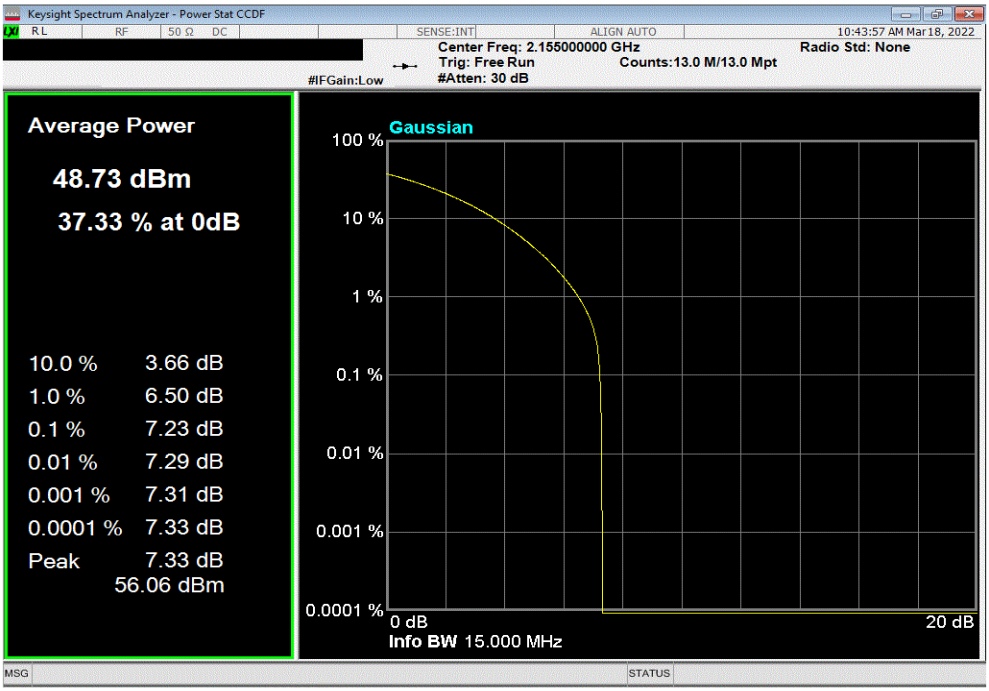


Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Low Channel, 2117.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.27	13	Pass

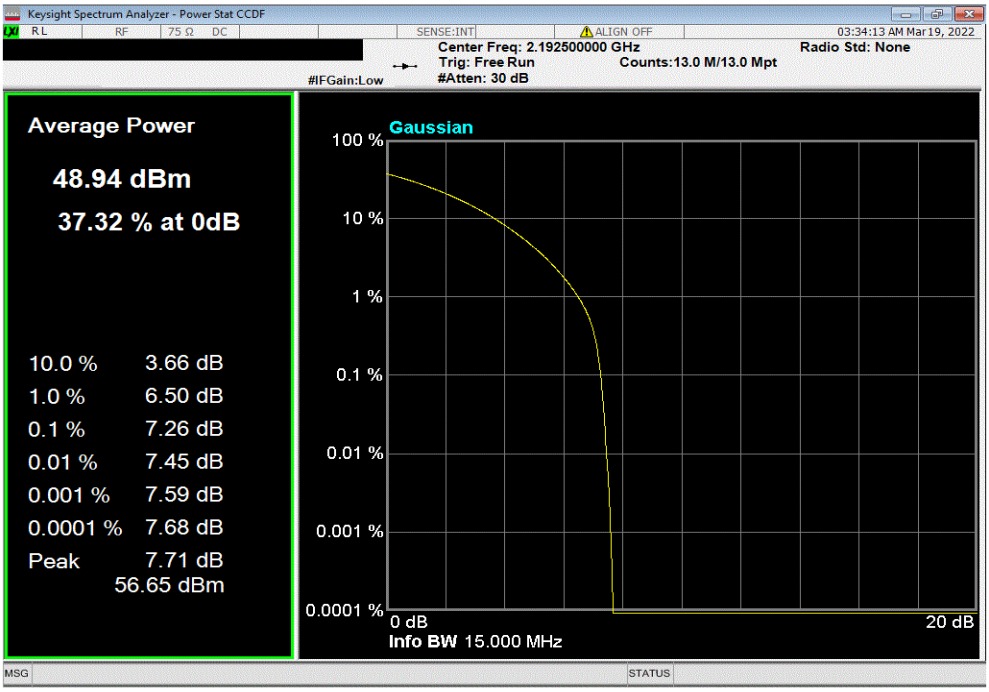


PEAK TO AVERAGE (PAPR) CCDF

Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 2155 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.23	13	Pass

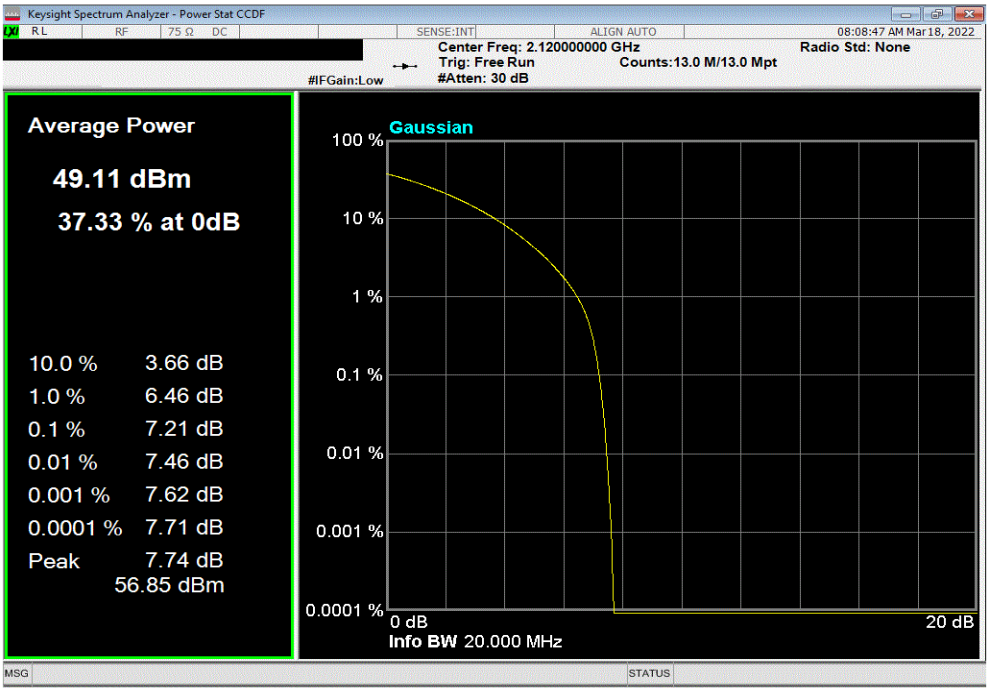


Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, High Channel, 2192.5 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.26	13	Pass

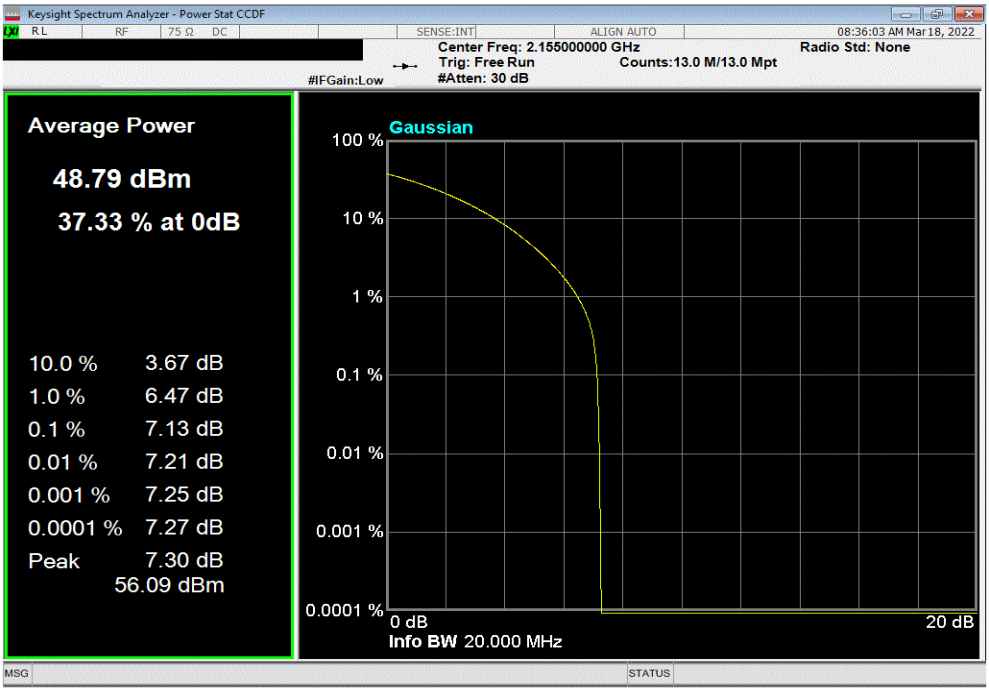


PEAK TO AVERAGE (PAPR) CCDF

Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, Low Channel, 2120 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.21	13	Pass



Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 2155 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.13	13	Pass

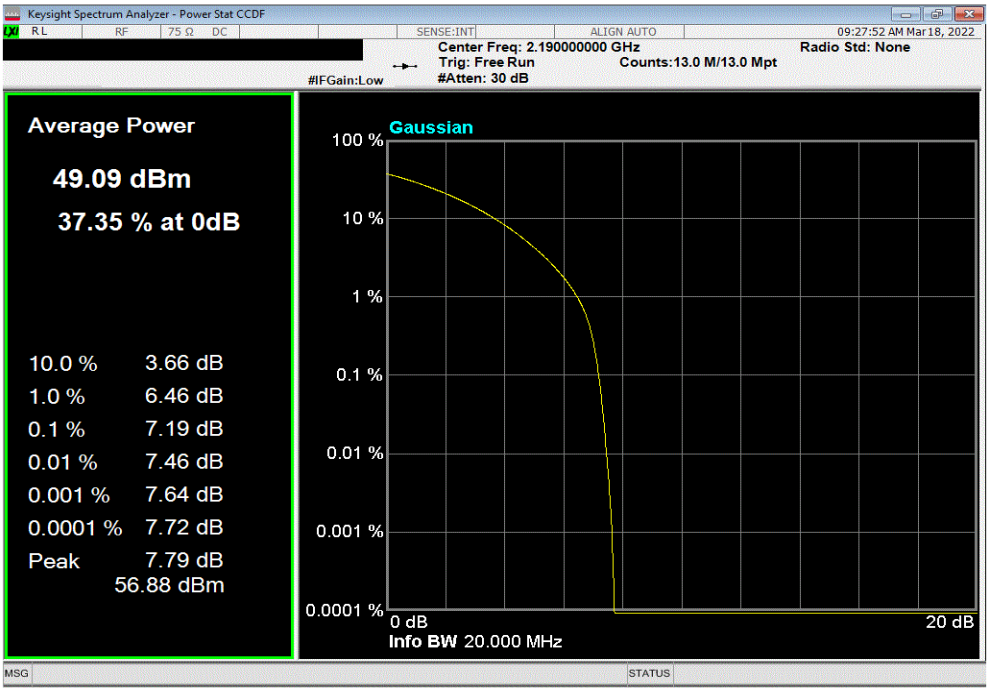


PEAK TO AVERAGE (PAPR) CCDF

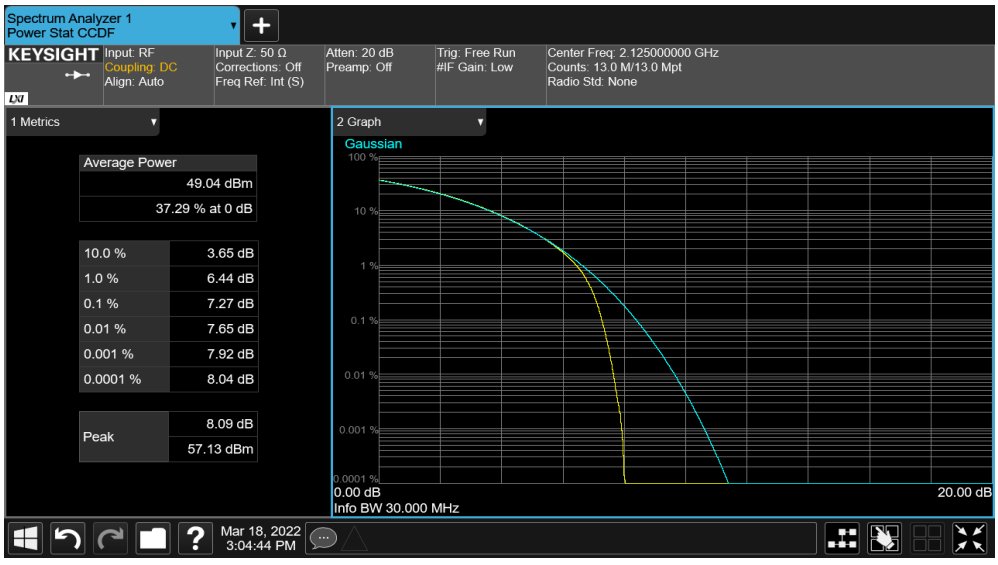
element

TbtTx 2022.03.14.0 XMit 2022.02.07.0

Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, High Channel, 2190 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.19	13	Pass

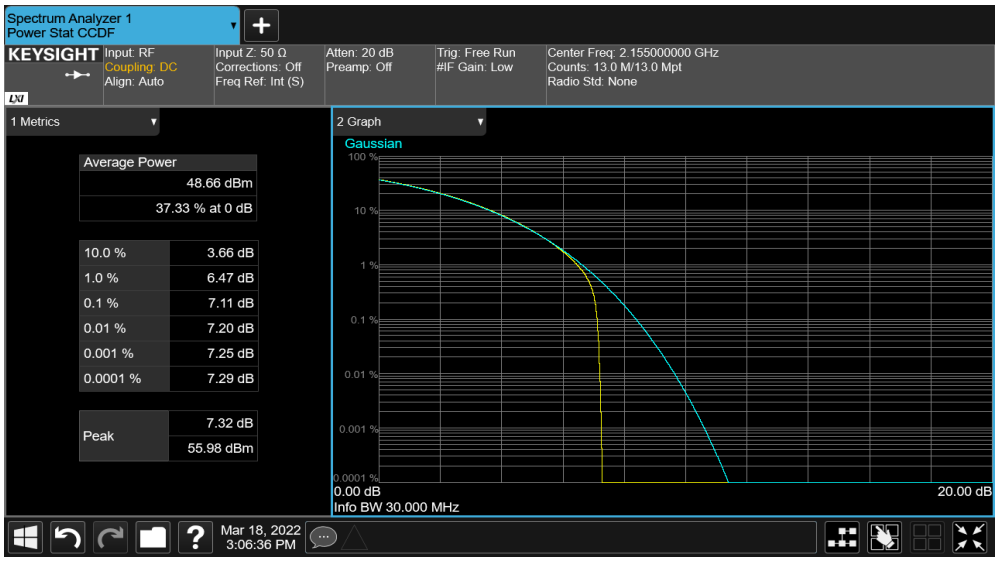


Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 30 MHz Bandwidth, 256-QAM Modulation, Low Channel, 2125 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.27	13	Pass



PEAK TO AVERAGE (PAPR) CCDF

Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 30 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 2155 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.11	13	Pass



Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 30 MHz Bandwidth, 256-QAM Modulation, High Channel, 2185 MHz						
				PAPR Value (dB)	PAPR Limit (dB)	Results
				7.24	13	Pass