OUTPUT 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 output power (maximum average conducted output power) was measured using the channels and modes as called out on the following data sheets. The transmit power was set to its default maximum.

The method in section 5.2.4.4 of ANSI C63.26 was used to make the measurements. This method uses trace averaging across the ON and OFF times of the EUT transmissions in the spectrum analyzer channel power function using an RMS detector. Following the measurement a duty cycle correction was applied by adding [10 log (1/D)], where D is the duty cycle in decimal, to the measured power to compute the average power during the actual transmission times

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.

The total average transmit power of all antenna ports was determined per ANSI C63.26-2105 paragraph 6.4.3.1.

OUTPUT POWER

element

TbtTx 2021.12.14.1 XMit 2022.02.07.0

EUT:	AHFII Remote Radio Head			**Work Order:**	NOKI0038
Serial Number:	YK214000035			**Date:**	16-Mar-22
Customer:	Nokia of America Corporation			**Temperature:**	22.9 °C
Attendees:	Mitchell Hill			**Humidity:**	24.6% RH
Project:	None			**Barometric Pres.:**	1024 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). The following is the output power measurements at the radio output ports. The output power was measured for a single carrier over the carrier channel bandwidth on port 1. The total output power for multiport (2x2 MIMO, 4x4 MIMO) operation was determined based upon ANSI 63.26 clauses 6.4.3.1 and 6.4.3.2.4 (10 log Nout). The total output power for two port operation is single port power + 3dB [i.e. 10log(2)]. The total output power for four port operation is single port power + 6dB [i.e. 10log(4)].

DEVIATIONS FROM TEST STANDARD

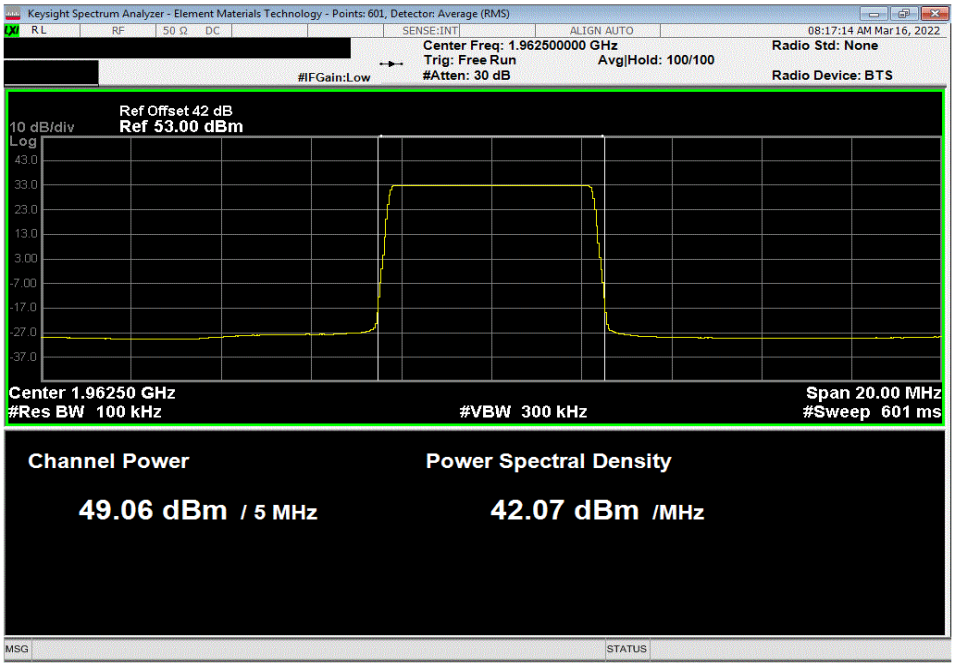
None

Configuration #	2	Signature

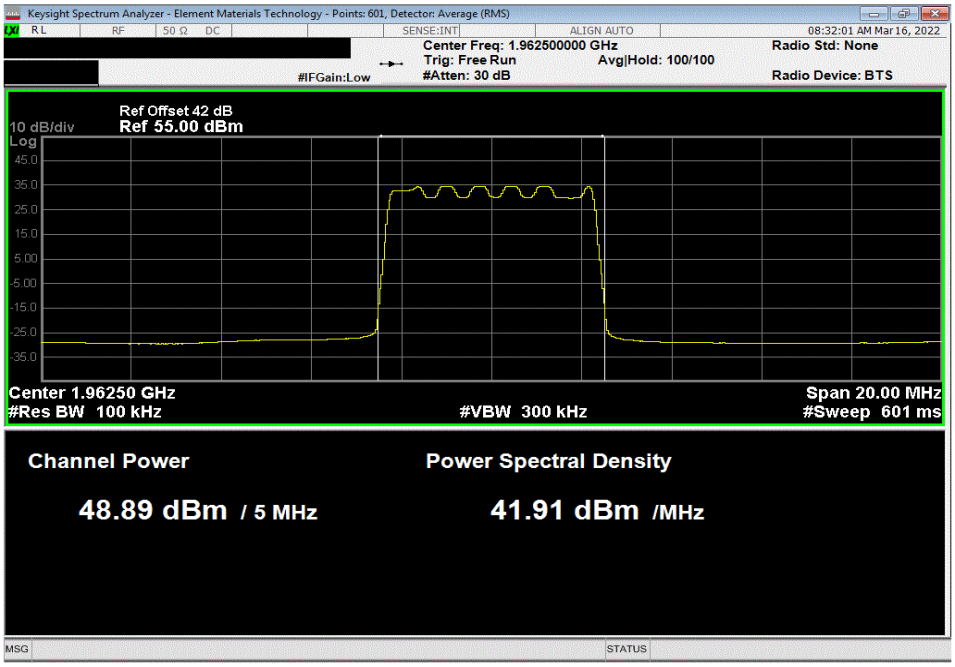
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
Band n25, 1930 MHz - 1995 MHz, 5G NR					
Port 1					
5 MHz Bandwidth					
QPSK Modulation					
Mid Channel, 1962.5 MHz	49.1	0	49.1	52.1	55.1
16-QAM Modulation					
Mid Channel, 1962.5 MHz	48.9	0	48.9	51.9	54.9
64-QAM Modulation					
Mid Channel, 1962.5 MHz	49.1	0	49.1	52.1	55.1
256-QAM Modulation					
Low Channel, 1932.5 MHz	49.2	0	49.2	52.2	55.2
Mid Channel, 1962.5 MHz	49.1	0	49.1	52.1	55.1
High Channel, 1992.5 MHz	49.1	0	49.1	52.1	55.1
10 MHz Bandwidth					
256-QAM Modulation					
Low Channel, 1935 MHz	49.3	0	49.3	52.3	55.3
Mid Channel, 1962.5 MHz	49.1	0	49.1	52.1	55.1
High Channel, 1990 MHz	49.2	0	49.2	52.2	55.2
15 MHz Bandwidth					
256-QAM Modulation					
Low Channel, 1937.5 MHz	49.3	0	49.3	52.3	55.3
Mid Channel, 1962.5 MHz	49.1	0	49.1	52.1	55.1
High Channel, 1987.5 MHz	49.2	0	49.2	52.2	55.2
20 MHz Bandwidth					
256-QAM Modulation					
Low Channel, 1940 MHz	49.4	0	49.4	52.4	55.4
Mid Channel, 1962.5 MHz.	49.2	0	49.2	52.2	55.2
High Channel, 1985 MHz	49.2	0	49.2	52.2	55.2
30 MHz Bandwidth					
256-QAM Modulation					
Low Channel, 1945 MHz	49.3	0	49.3	52.3	55.3
Mid Channel, 1962.5 MHz	49.2	0	49.2	52.2	55.2
High Channel, 1980 MHz	49.3	0	49.3	52.3	55.3

OUTPUT POWER

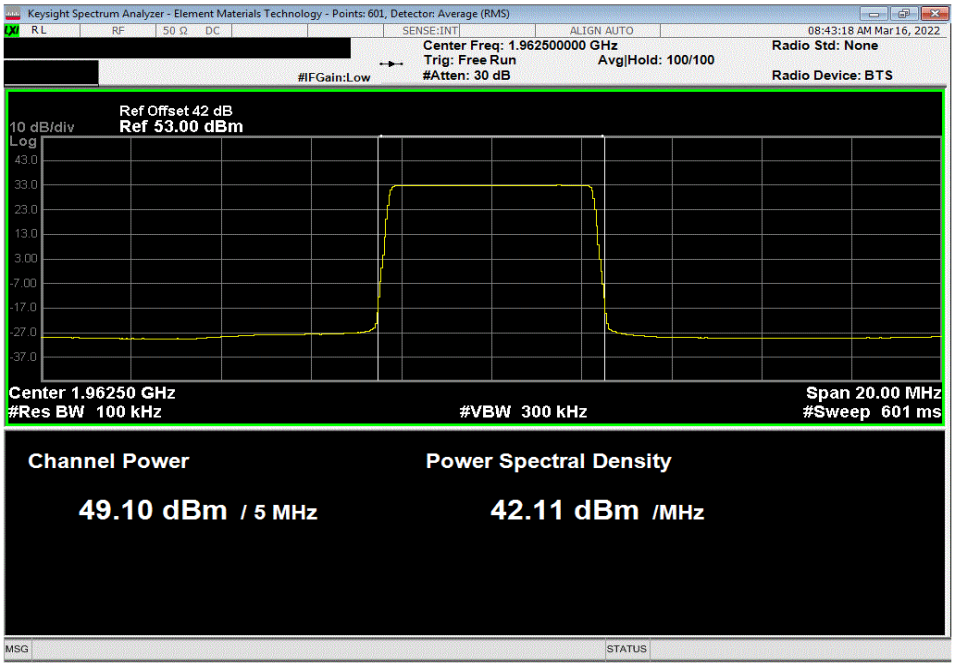
Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 5 MHz Bandwidth, QPSK Modulation, Mid Channel, 1962.5 MHz							
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
		49.06	0	49.1	52.1	55.1	



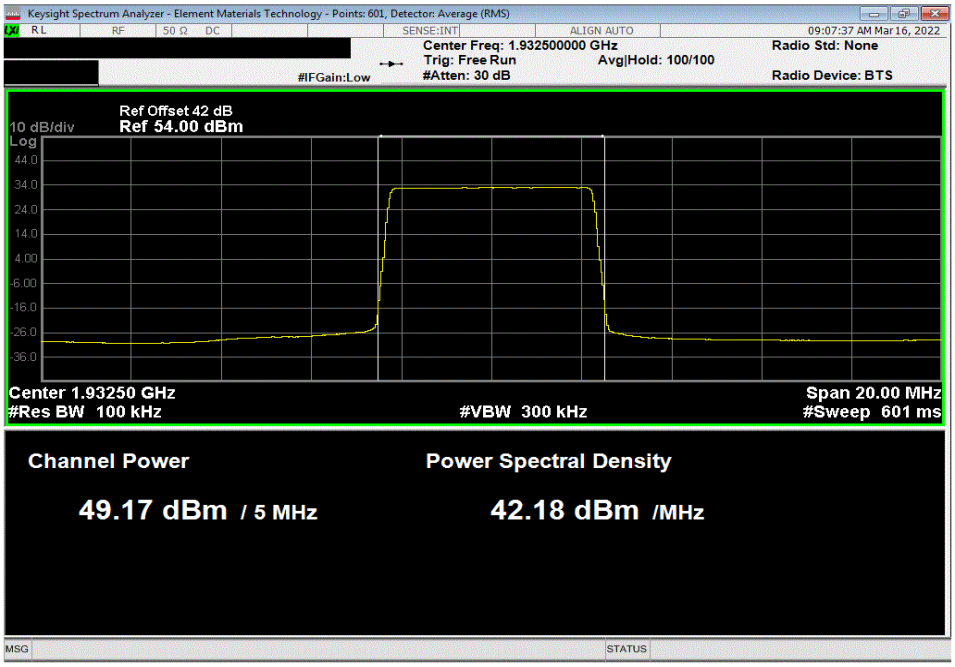
Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 1962.5 MHz							
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
		48.895	0	48.9	51.9	54.9	



Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 1962.5 MHz						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.10	0	49.1	52.1	55.1

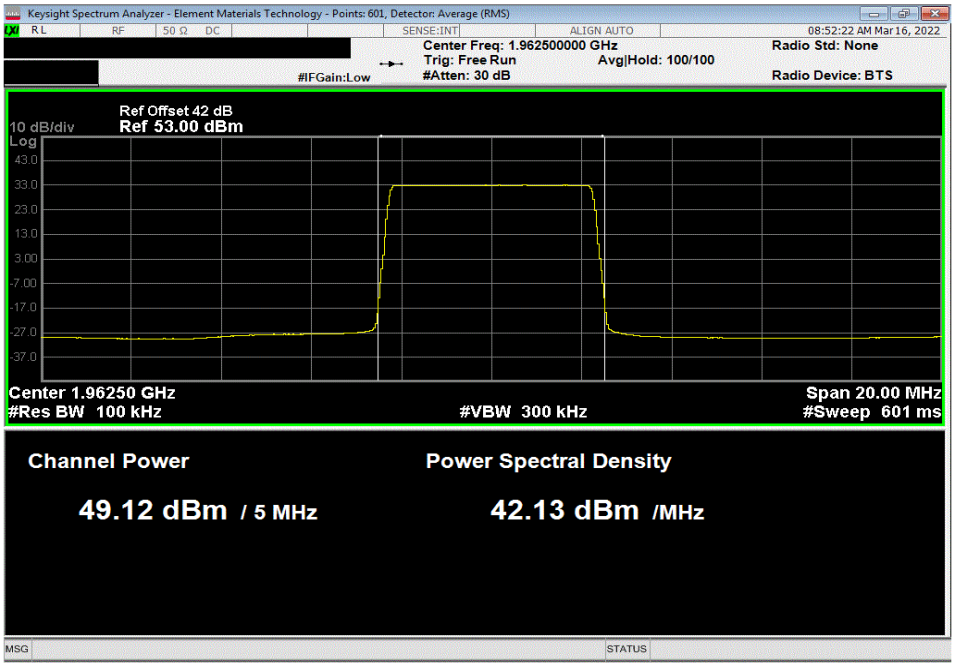


Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1932.5 MHz						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.169	0	49.2	52.2	55.2

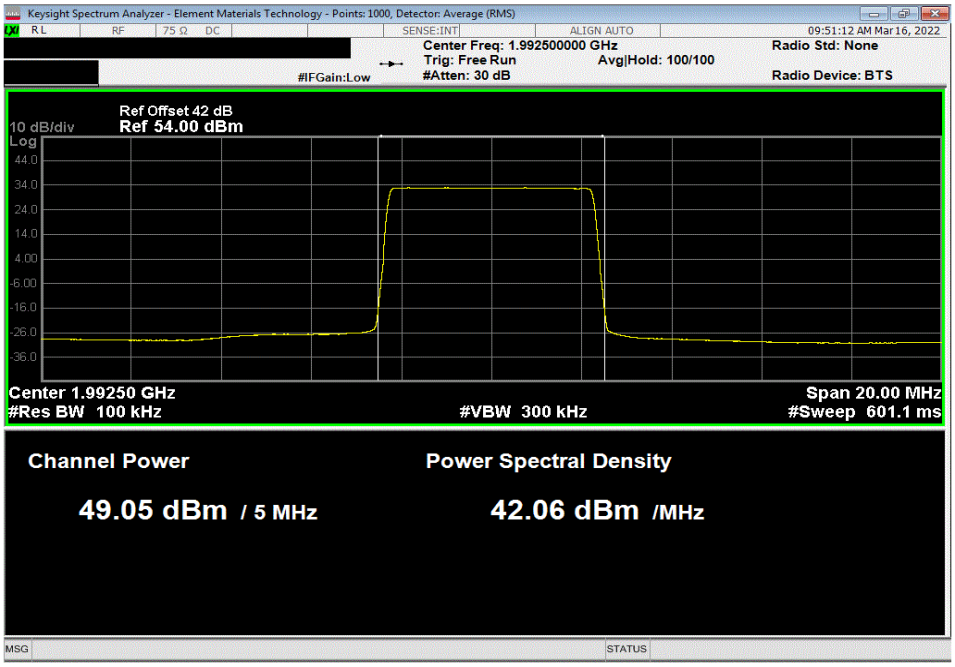


OUTPUT POWER

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.12	0	49.1	52.1	55.1

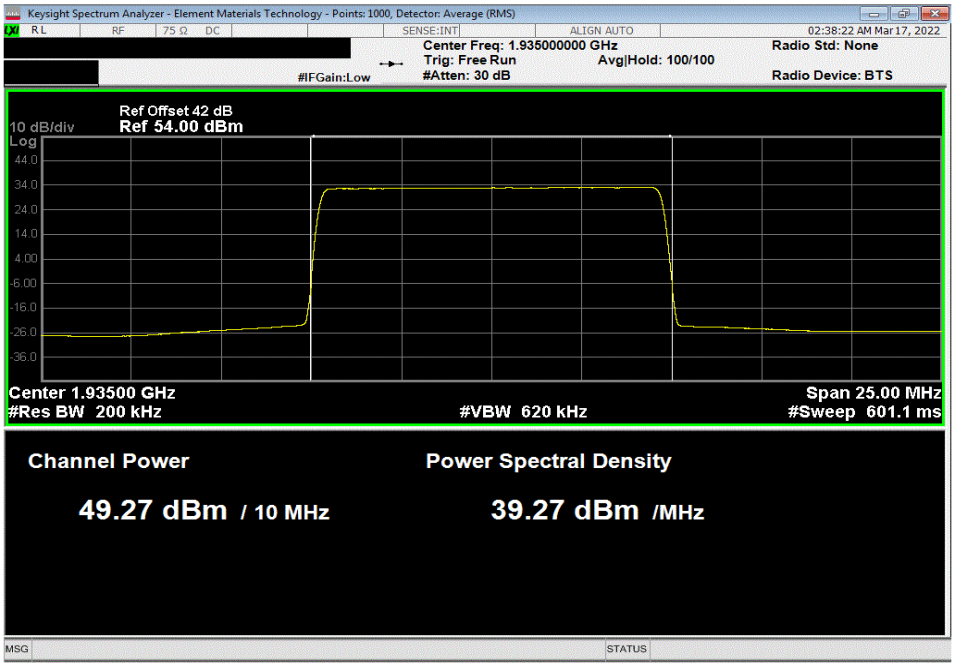


Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, High Channel, 1992.5 MHz						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.1	0	49.1	52.1	55.1

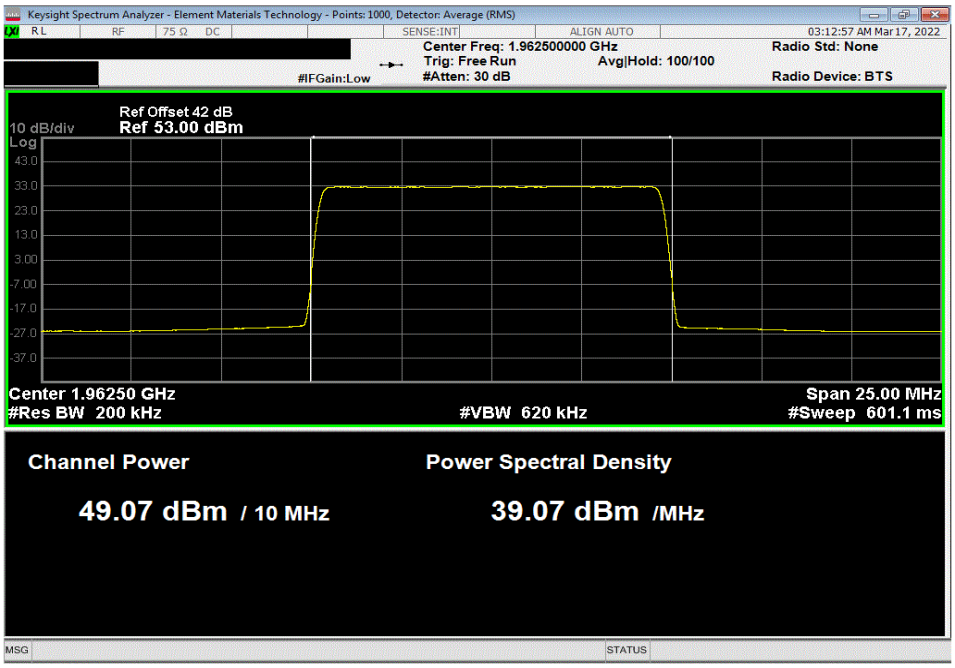


OUTPUT POWER

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1935 MHz						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.30	0	49.3	52.3	55.3

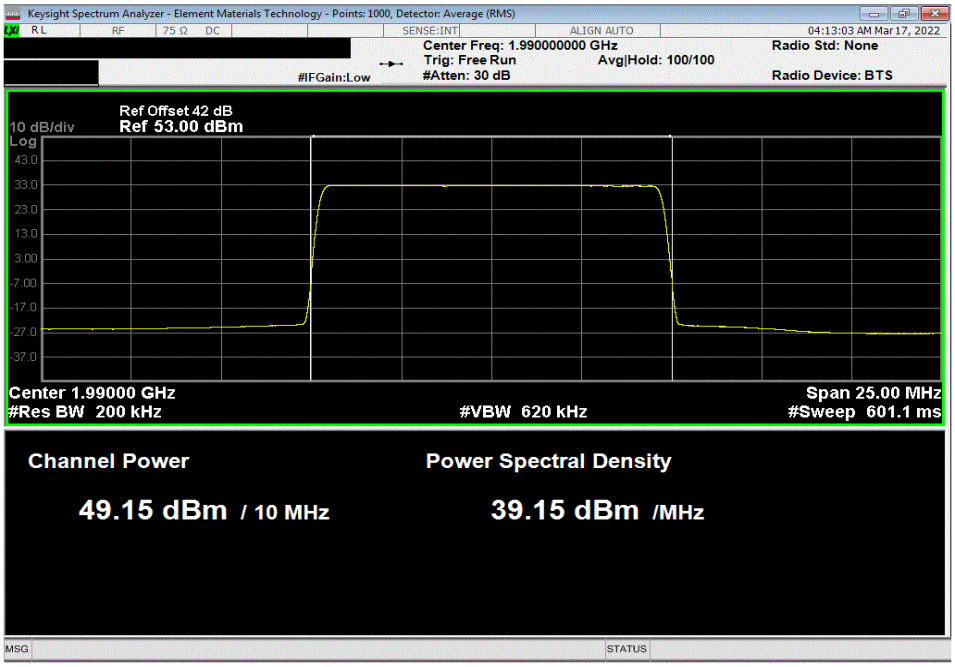


Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.1	0	49.1	52.1	55.1

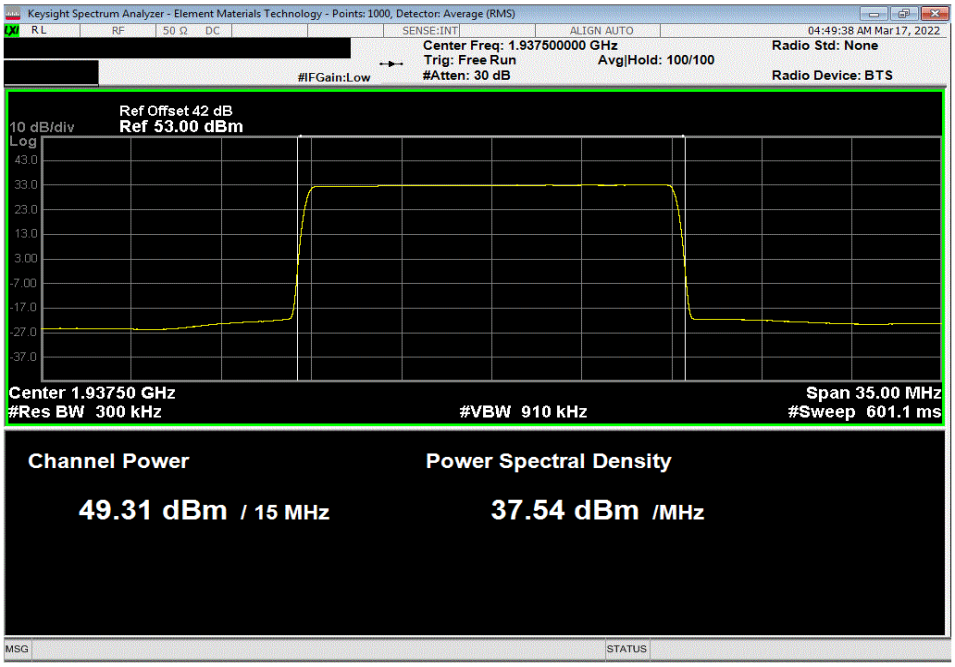


OUTPUT POWER

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, High Channel, 1990 MHz						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.20	0	49.2	52.2	55.2

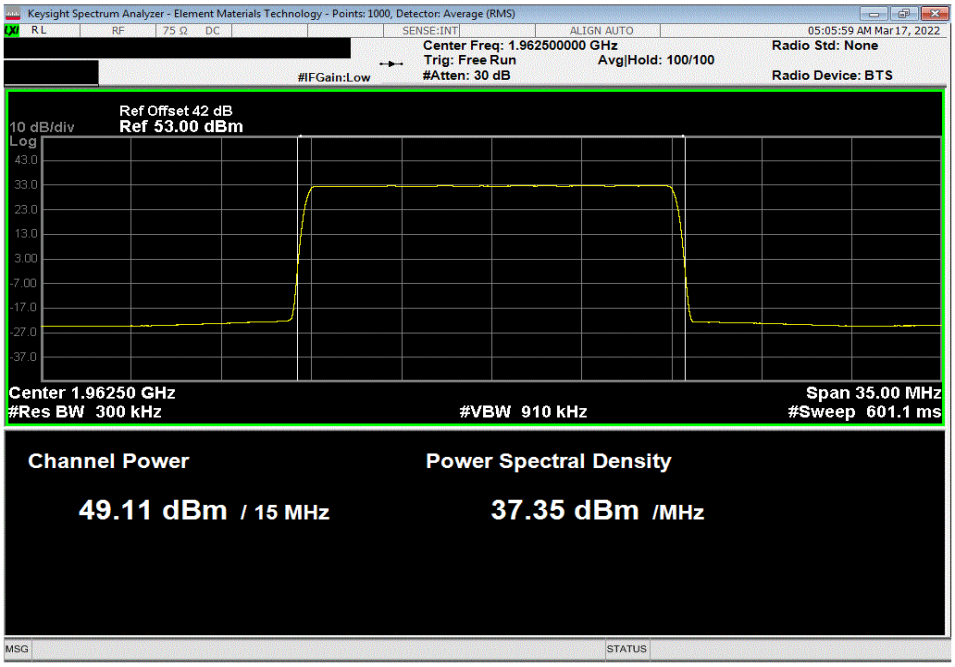


Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1937.5 MHz						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.3	0	49.3	52.3	55.3

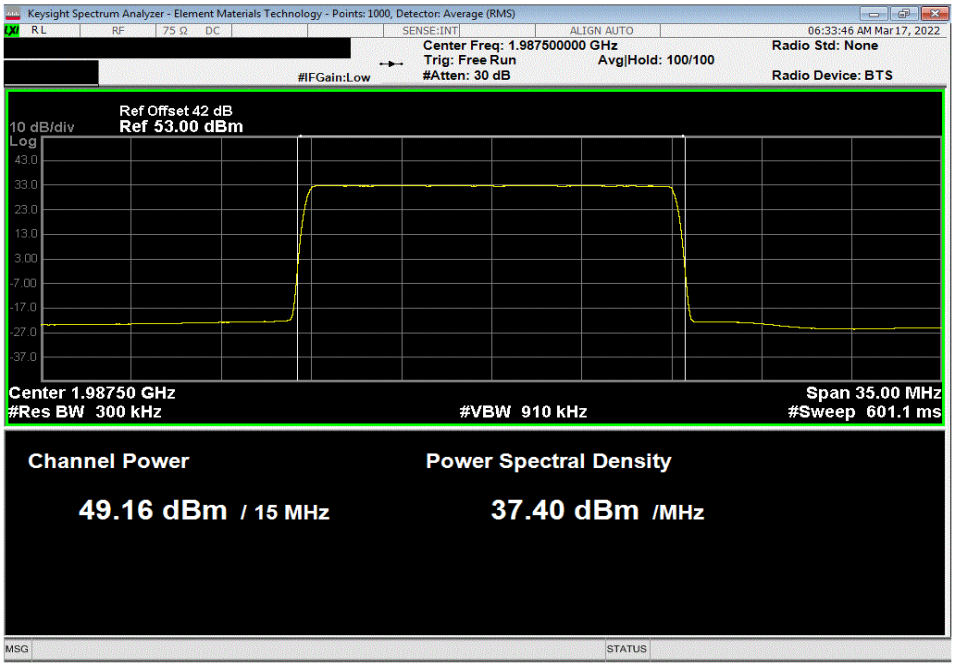


OUTPUT POWER

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.10	0	49.1	52.1	55.1

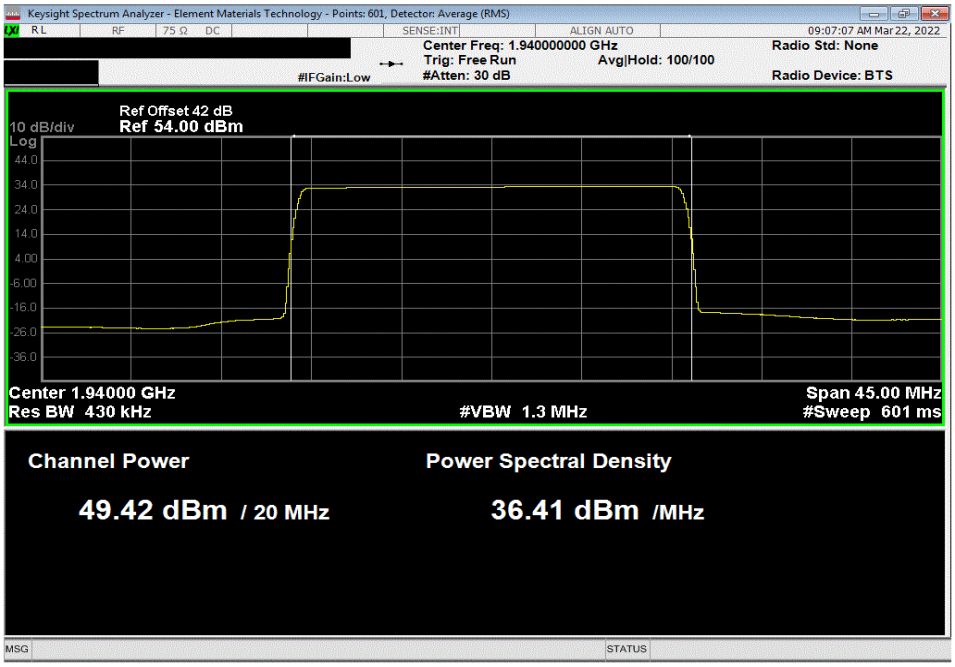


Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, High Channel, 1987.5 MHz						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.2	0	49.2	52.2	55.2

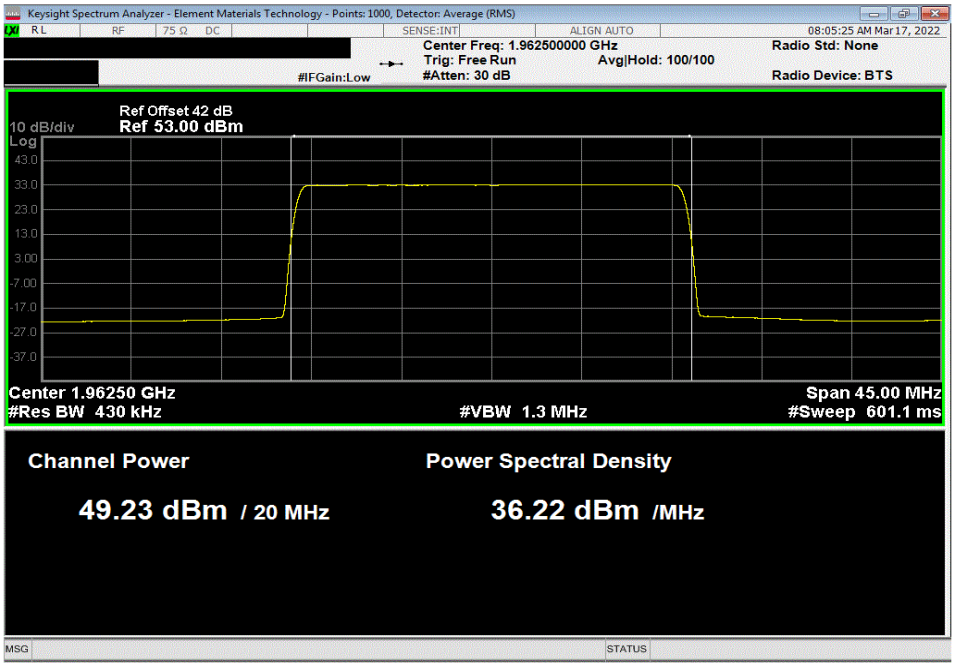


OUTPUT POWER

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1940 MHz						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.40	0	49.4	52.4	55.4

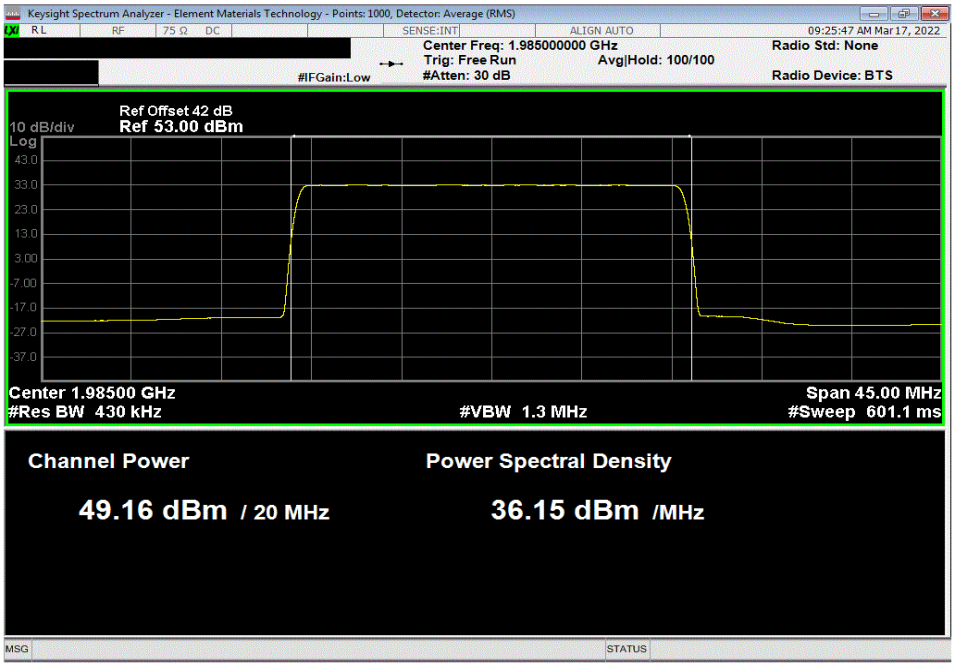


Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz.						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.2	0	49.2	52.2	55.2

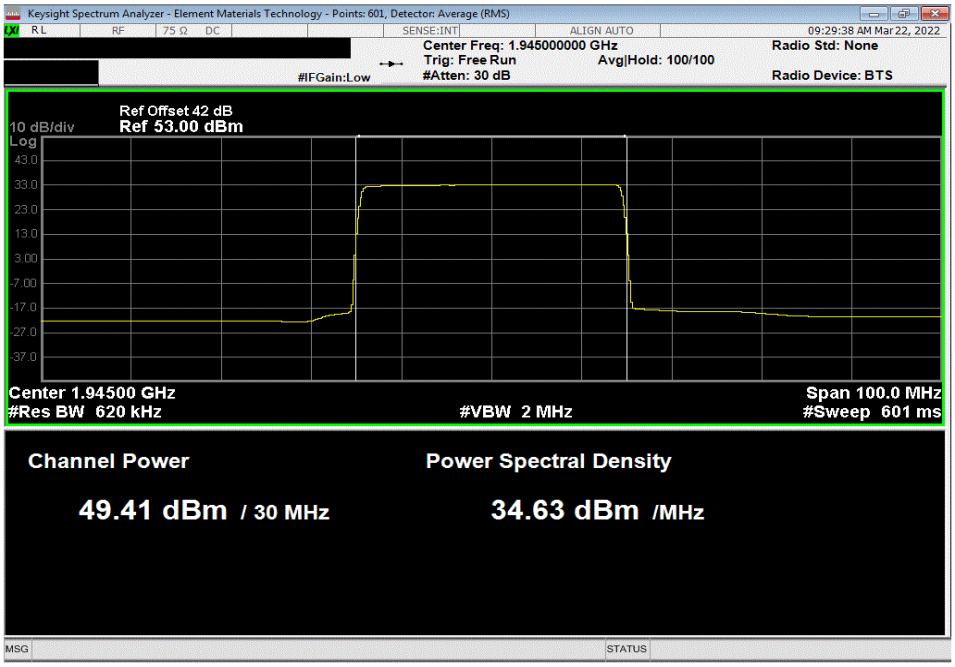


OUTPUT POWER

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, High Channel, 1985 MHz							
			Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
			49.20	0	49.2	52.2	55.2

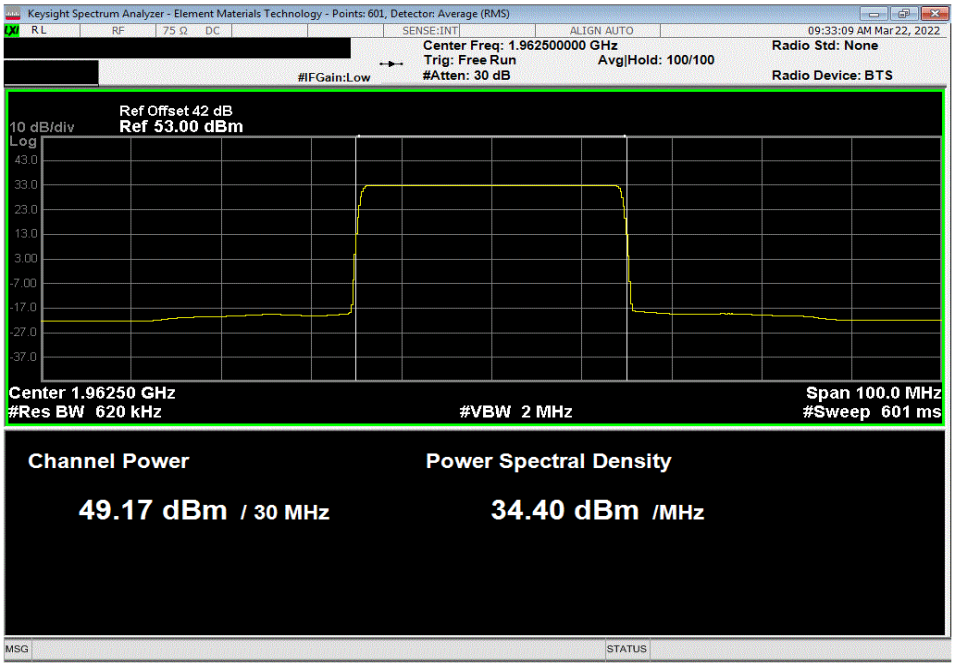


Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 30 MHz Bandwidth, 256-QAM Modulation, Low Channel, 1945 MHz							
			Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
			49.3	0	49.3	52.3	55.3

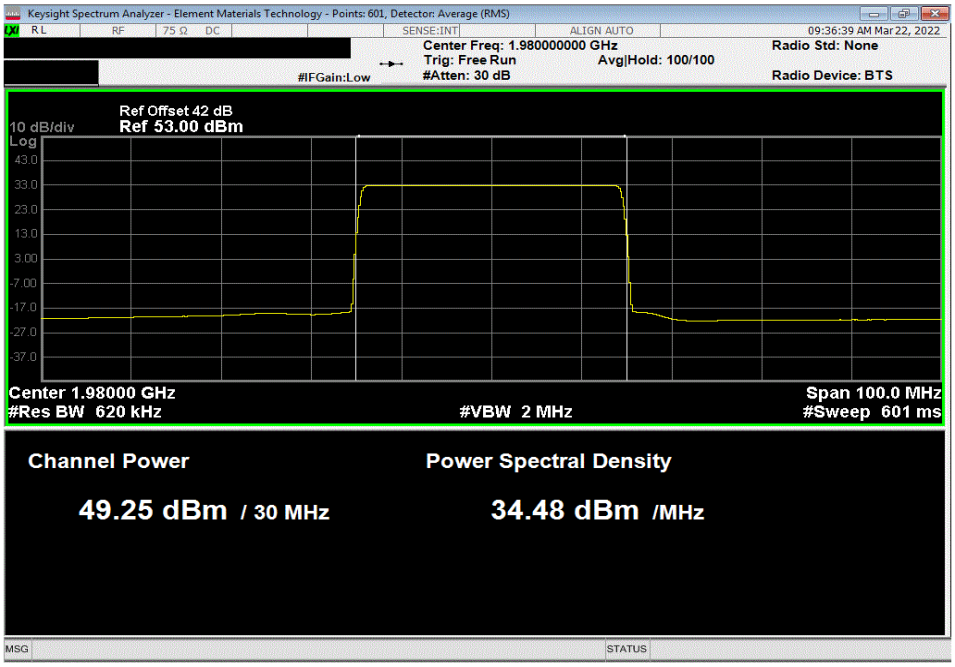


OUTPUT POWER

Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 30 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 1962.5 MHz						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.20	0	49.2	52.2	55.2



Band n25, 1930 MHz - 1995 MHz, 5G NR, Port 1, 30 MHz Bandwidth, 256-QAM Modulation, High Channel, 1980 MHz						
		Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
		49.3	0	49.3	52.3	55.3



OUTPUT POWER

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:**	23.9 °C
Attendees:	Mitchell Hill			**Humidity:**	34.3% RH
Project:	None			**Barometric Pres.:**	1020 mbar
Tested by:	Brandon Hobbs	**Power:**	54 VDC	**Job Site:**	TX09

TEST SPECIFICATIONS	Test Method
FCC 24E: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). The following is the output power measurements at the radio output ports. The output power was measured for a single carrier over the carrier channel bandwidth on port 1. The total output power for multiport (2x2 MIMO and 4x4 MIMO) operation was determined based upon ANSI 63.26 clauses 6.4.3.1 and 6.4.3.2.4 (10 log Nout). The total output power for two port operation is single port power + 3dB [i.e. 10log(2)]. The total output power for four port operation is single port power + 6dB [i.e. 10log(4)].

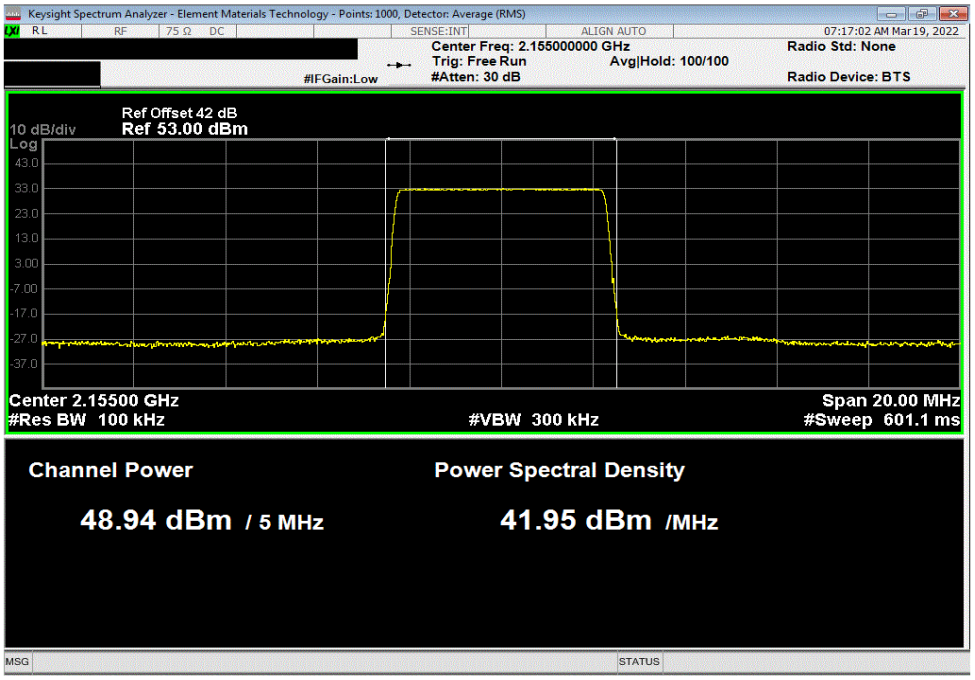
DEVIATIONS FROM TEST STANDARD

None

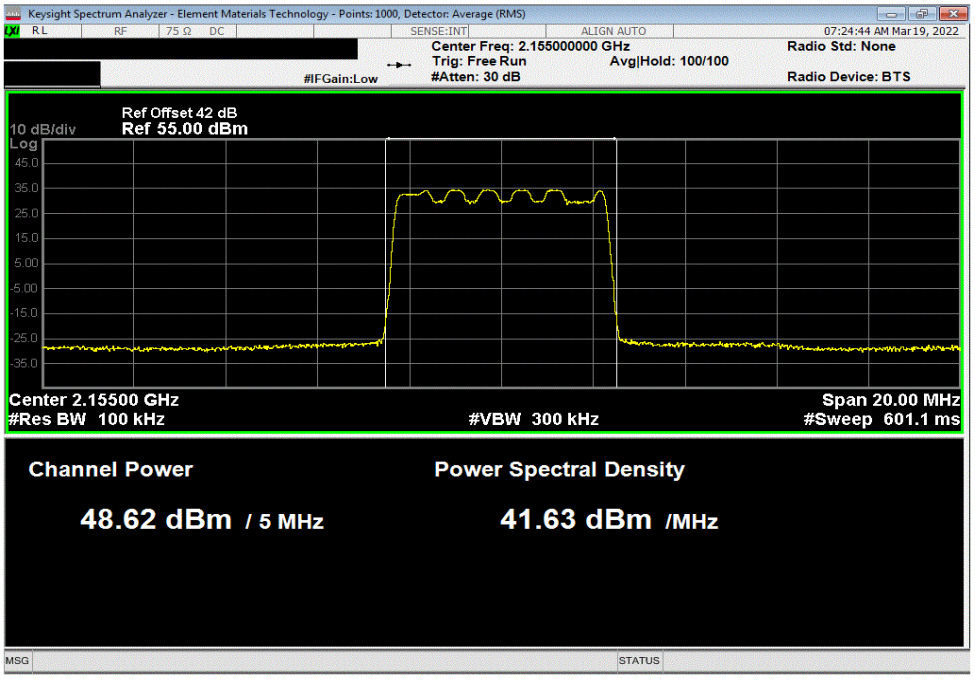
Configuration #	2	Signature

	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW
Band n66, 2110 MHz - 2200 MHz, 5G NR					
Port 1					
5 MHz Bandwidth					
QPSK Modulation					
Mid Channel, 2155 MHz	48.941	0	48.9	51.9	54.9
16-QAM Modulation					
Mid Channel, 2155 MHz	48.618	0	48.6	51.6	54.6
64-QAM Modulation					
Mid Channel, 2155 MHz	48.779	0	48.8	51.8	54.8
256-QAM Modulation					
Low Channel, 2112.5 MHz	49.001	0	49.0	52.0	55.0
Mid Channel, 2155 MHz	48.806	0	48.8	51.8	54.8
High Channel, 2197.5 MHz	48.867	0	48.9	51.9	54.9
10 MHz Bandwidth					
256-QAM Modulation					
Low Channel, 2115 MHz	48.970	0	49.0	52.0	55.0
Mid Channel, 2155 MHz	48.717	0	48.7	51.7	54.7
High Channel, 2195 MHz	48.969	0	49.0	52.0	55.0
15 MHz Bandwidth					
256-QAM Modulation					
Low Channel, 2117.5 MHz	49.068	0	49.1	52.1	55.1
Mid Channel, 2155 MHz	48.755	0	48.8	51.8	54.8
High Channel, 2192.5 MHz	49.082	0	49.1	52.1	55.1
20 MHz Bandwidth					
256-QAM Modulation					
Low Channel, 2120 MHz	49.112	0	49.1	52.1	55.1
Mid Channel, 2155 MHz	49.000	0	49.0	52.0	55.0
High Channel, 2190 MHz	49.107	0	49.1	52.1	55.1
30 MHz Bandwidth					
256-QAM Modulation					
Low Channel, 2125 MHz	49.162	0	49.2	52.2	55.2
Mid Channel, 2155 MHz	48.885	0	48.9	51.9	54.9
High Channel, 2185 MHz	49.213	0	49.2	52.2	55.2

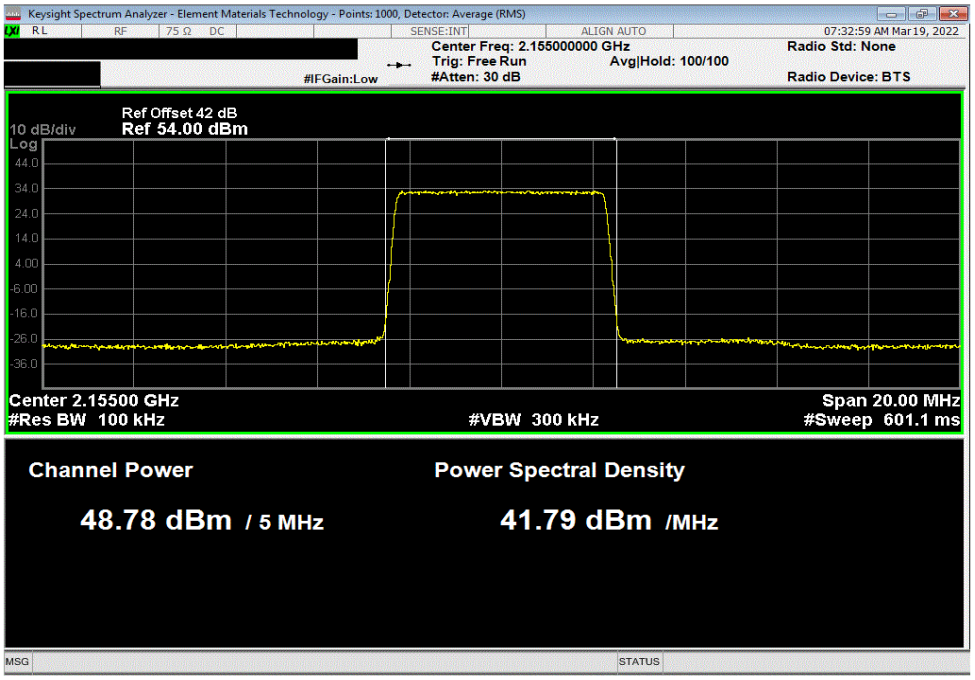
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 5 MHz Bandwidth, QPSK Modulation, Mid Channel, 2155 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	48.941	0	48.941	51.941	54.941	



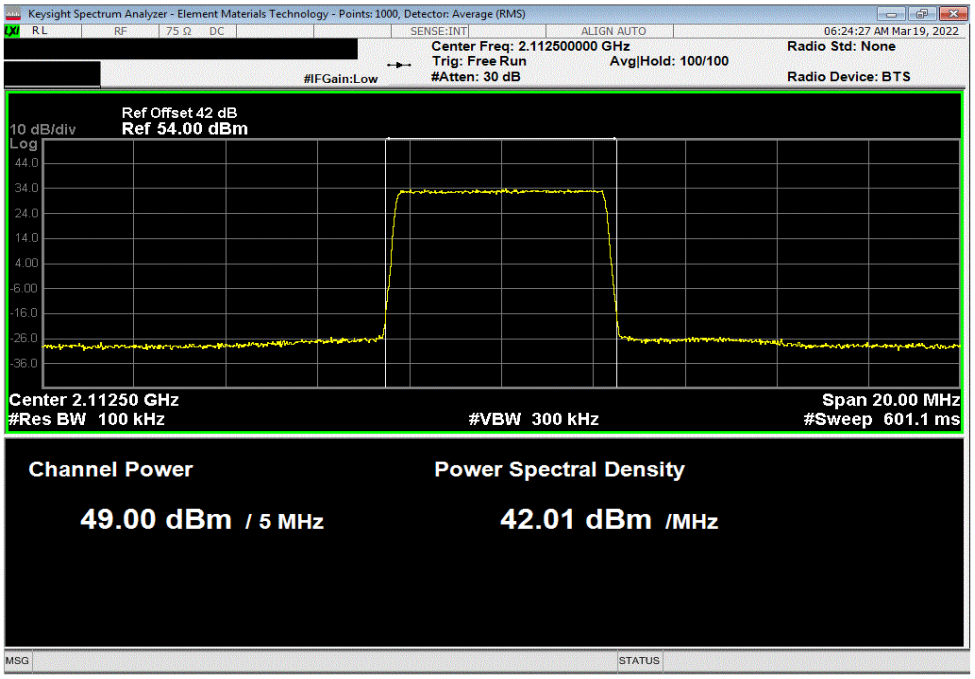
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 2155 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	48.618	0	48.618	51.618	54.618	



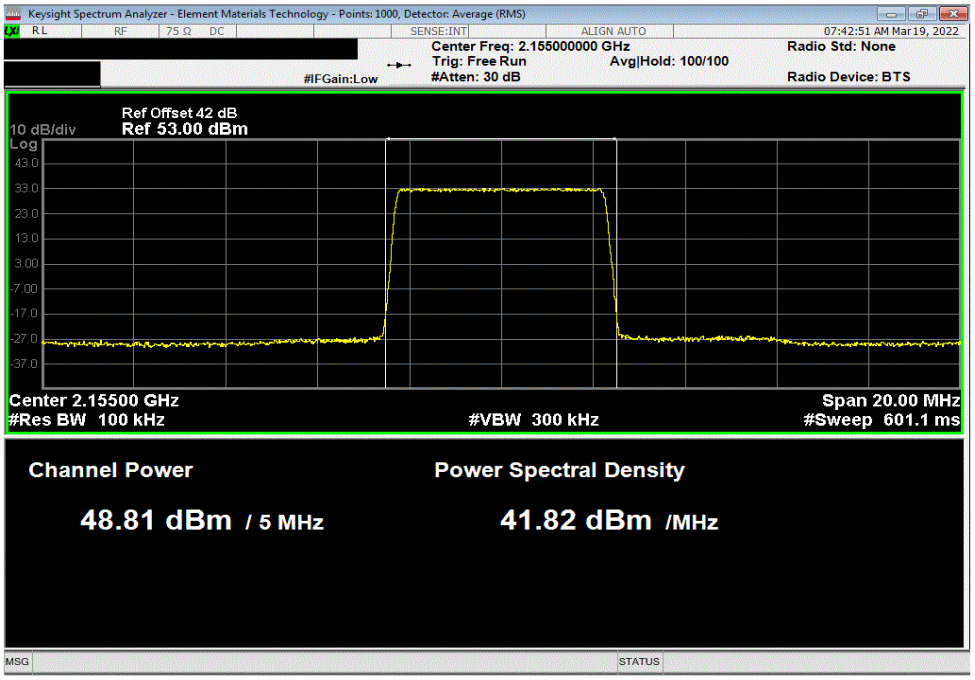
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 2155 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	48.779	0	48.779	51.779	54.779	



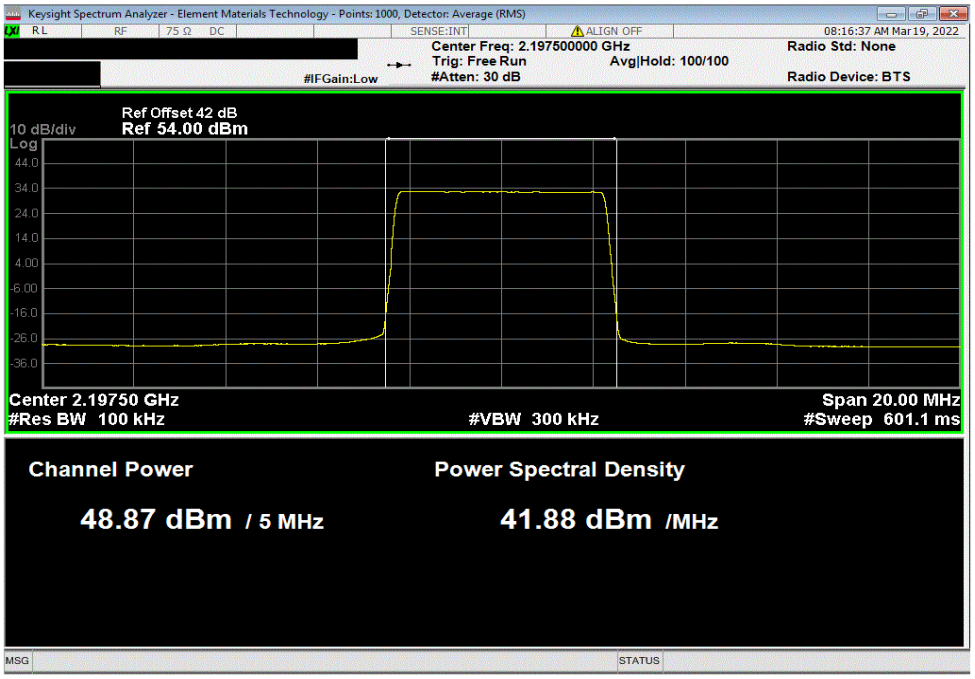
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Low Channel, 2112.5 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	49.001	0	49.001	52.001	55.001	



Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 2155 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	48.806	0	48.806	51.806	54.806	

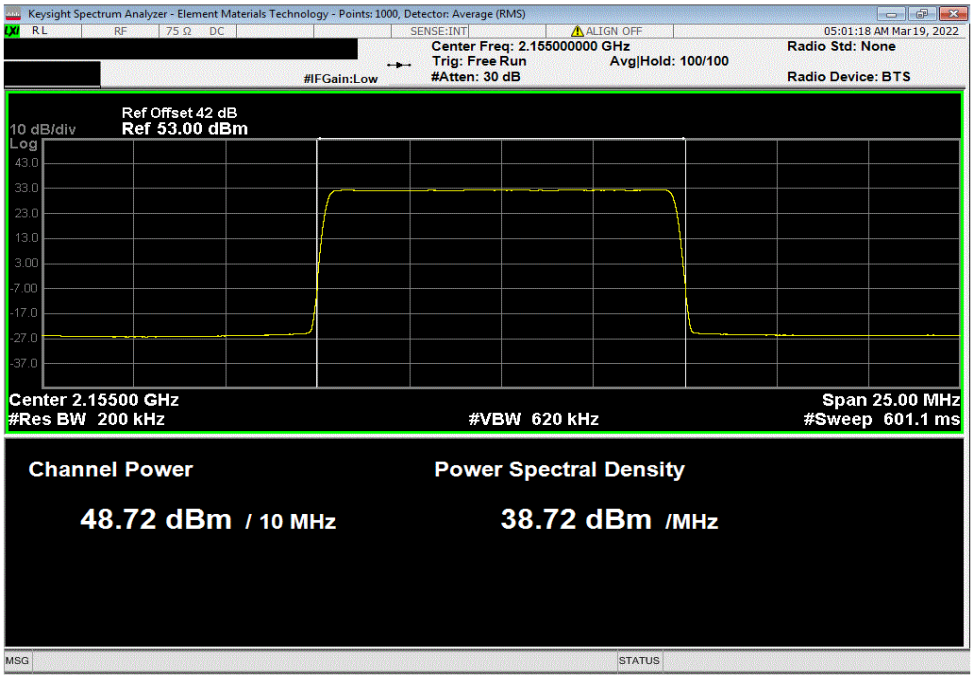


Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, High Channel, 2197.5 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	48.867	0	48.867	51.867	54.867	

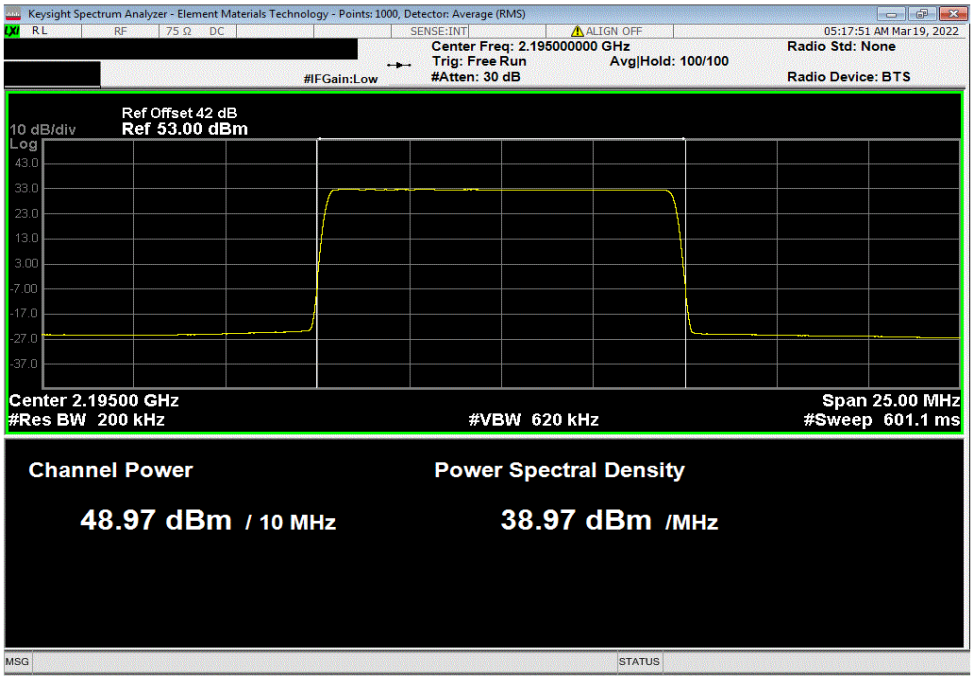


Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Low Channel, 2115 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	48.97	0	48.97	51.97	54.97	

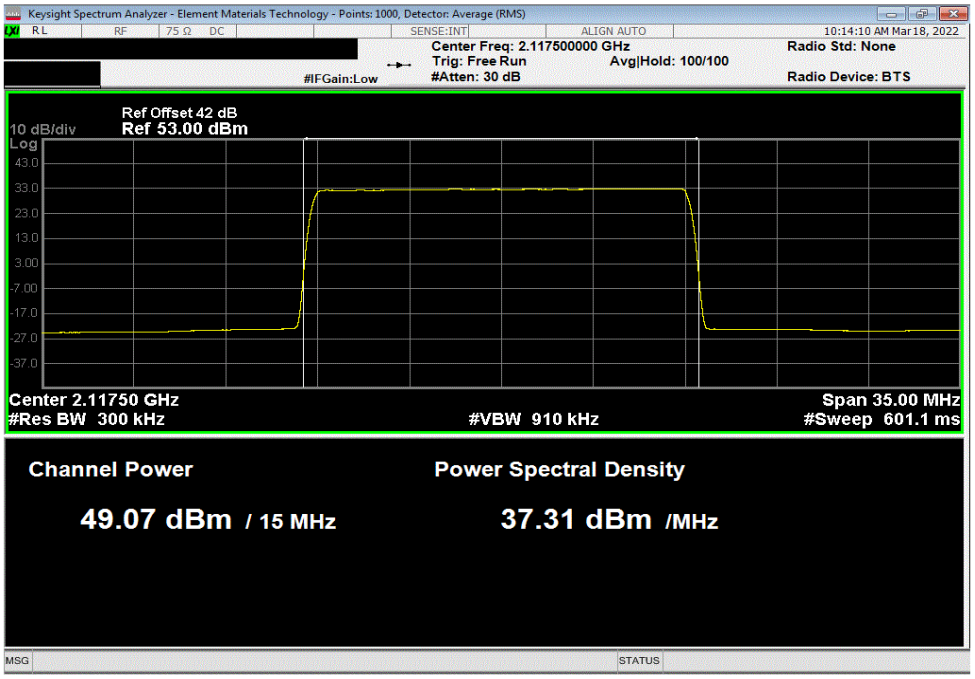
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 2155 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	48.717	0	48.717	51.717	54.717	



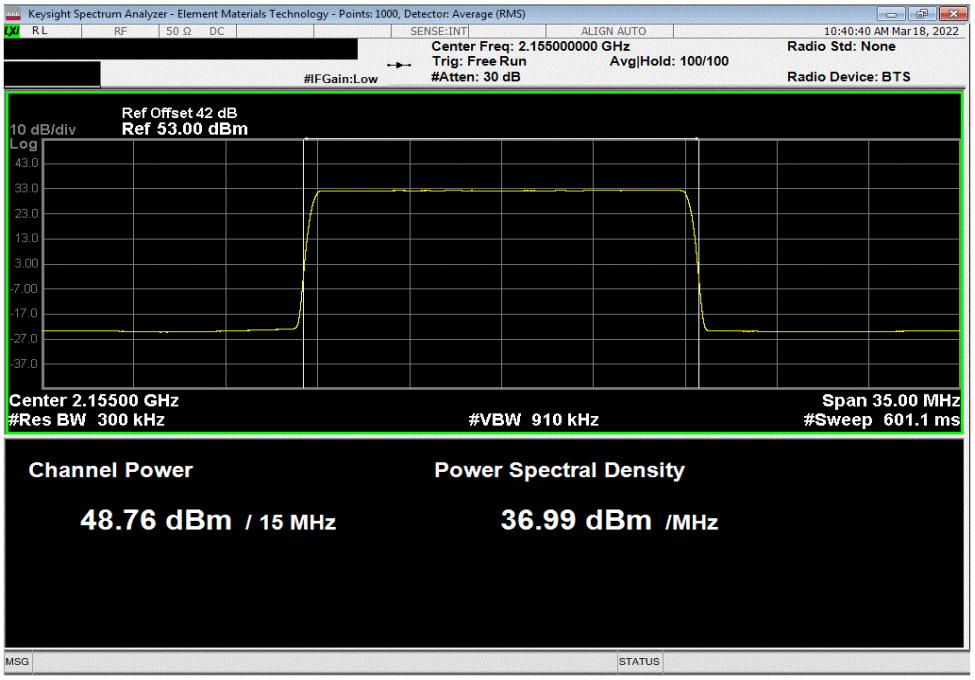
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, High Channel, 2195 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	48.969	0	48.969	51.969	54.969	



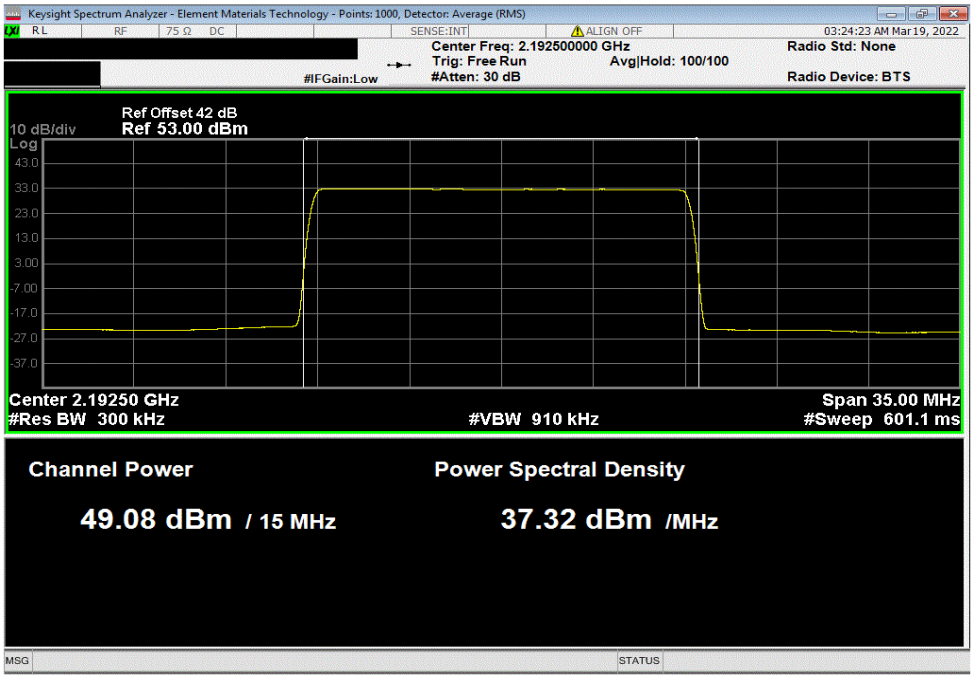
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Low Channel, 2117.5 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	49.068	0	49.068	52.068	55.068	



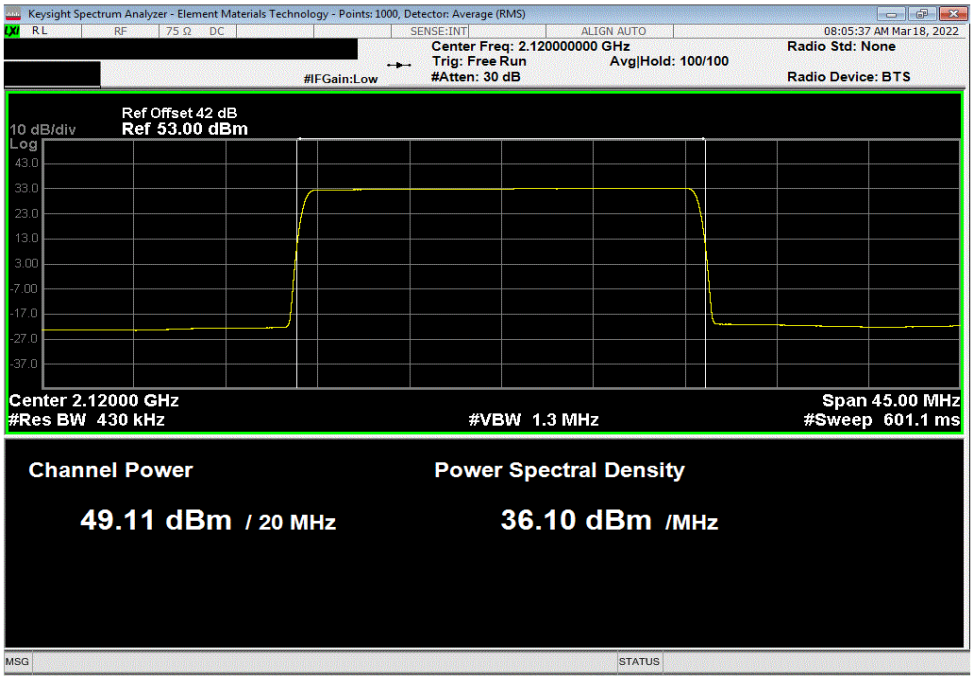
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 2155 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	48.755	0	48.755	51.755	54.755	



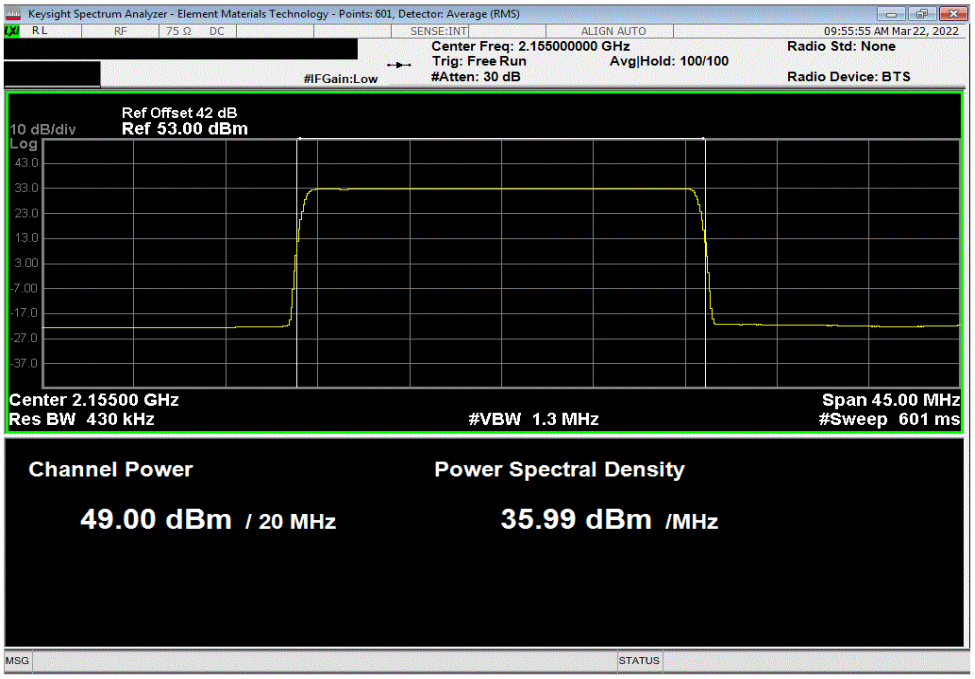
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 15 MHz Bandwidth, 256-QAM Modulation, High Channel, 2192.5 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	49.082	0	49.082	52.082	55.082	



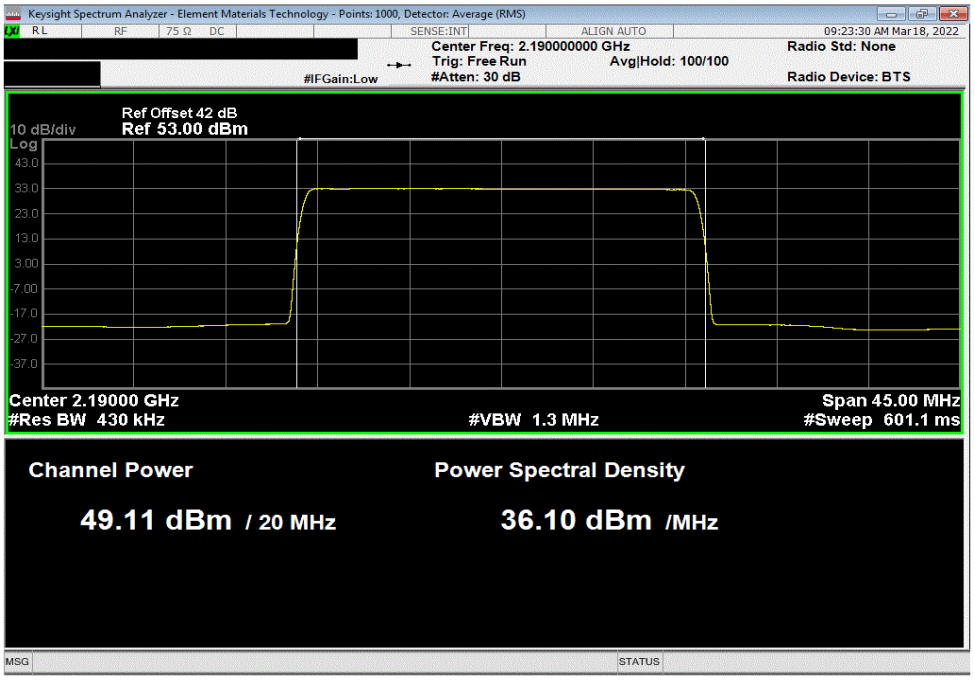
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, Low Channel, 2120 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	49.112	0	49.112	52.112	55.112	



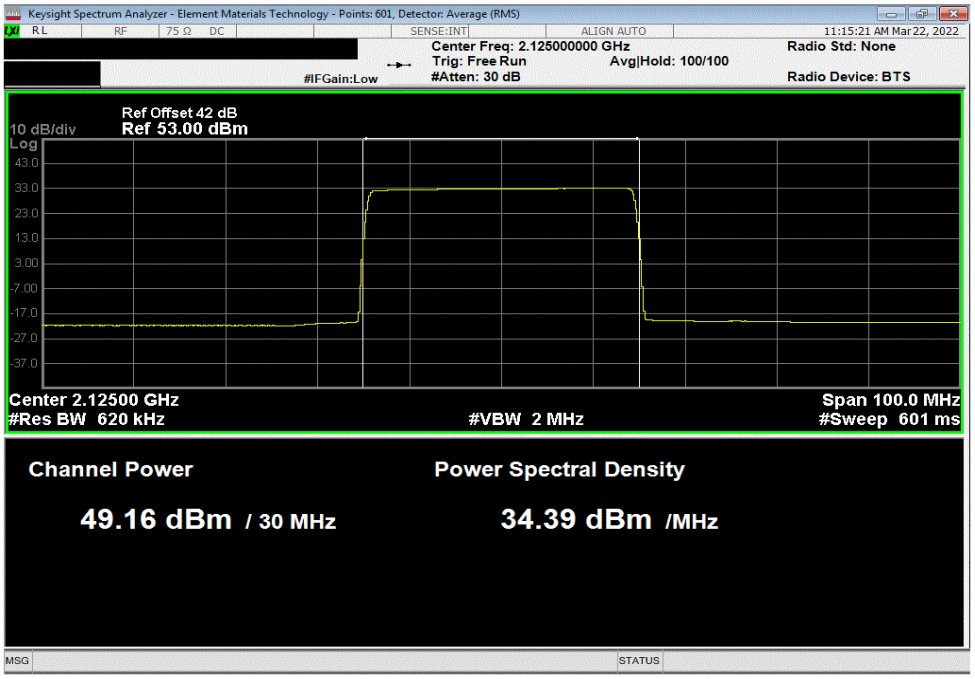
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 2155 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	49	0	49	52	55	



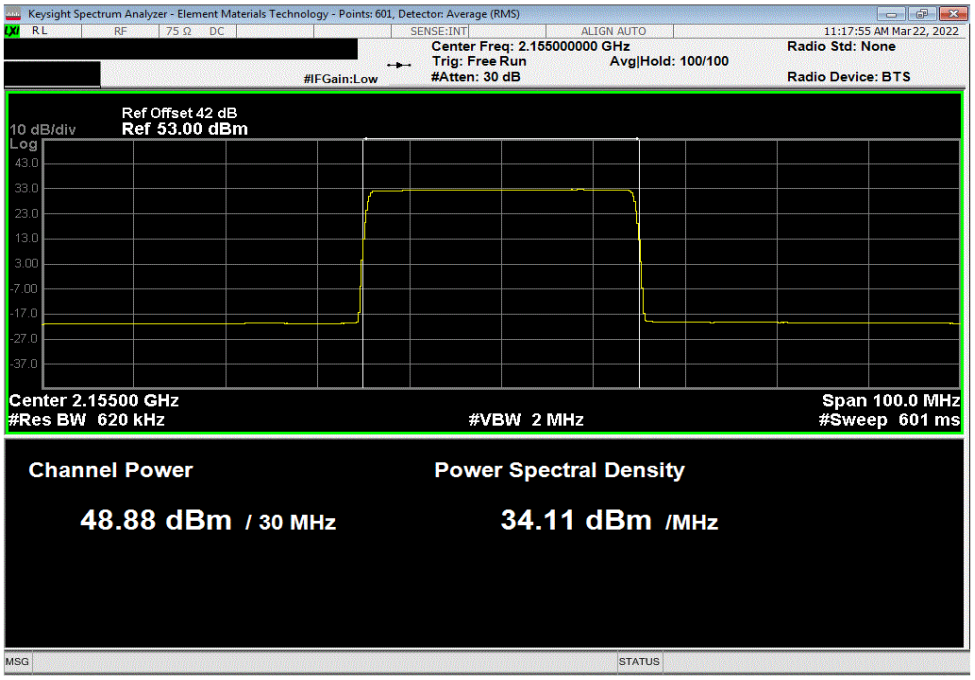
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 20 MHz Bandwidth, 256-QAM Modulation, High Channel, 2190 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	49.107	0	49.107	52.107	55.107	



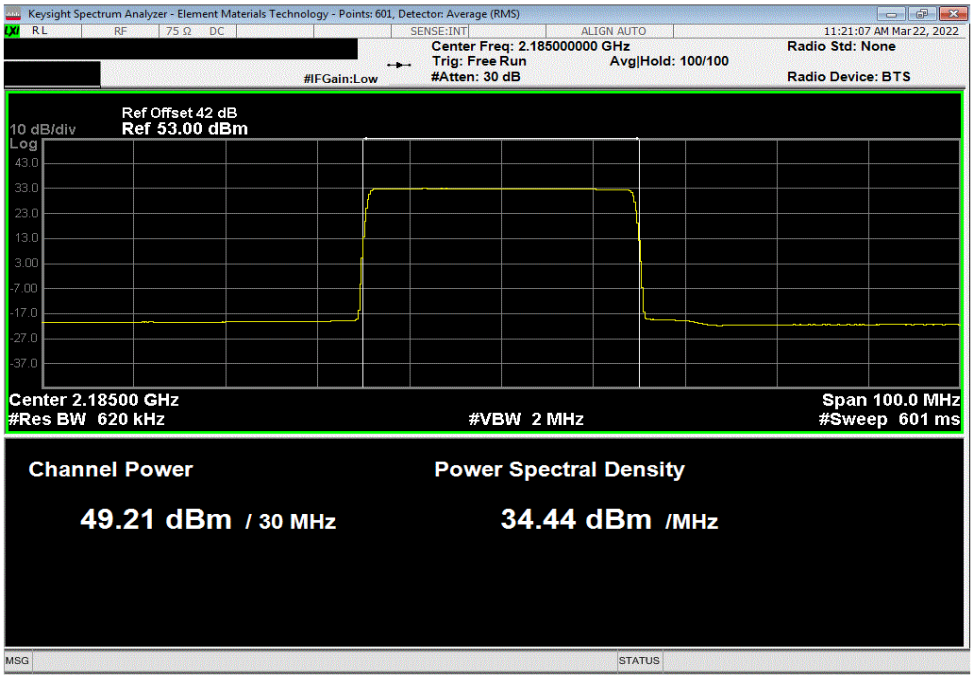
Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 30 MHz Bandwidth, 256-QAM Modulation, Low Channel, 2125 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	49.162	0	49.162	52.162	55.162	



Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 30 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 2155 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	48.885	0	48.885	51.885	54.885	



Band n66, 2110 MHz - 2200 MHz, 5G NR, Port 1, 30 MHz Bandwidth, 256-QAM Modulation, High Channel, 2185 MHz						
	Initial Value dBm/MHz	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port (2x2 MIMO) dBm/Carrier BW	Four Port (4x4 MIMO) dBm/Carrier BW	
	49.213	0	49.213	52.213	55.213	



OUTPUT POWER

element

TbiTx 2021.12.14.1 XMit 2022.02.07.0

EUT:	**AHFII Remote Radio Head**			**Work Order:**	**NOKI0038**
Serial Number:	**YK214000035**			**Date:**	**6-Apr-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 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.). For Test Case 1: The carriers are operated at maximum power (~26.6W or ~44.2dBm/PCS carrier and 40W/AWS carrier) with at total port power of 120 watts (80W for PCS band carriers + 40W for AWS band carrier). For Test Case 2 and 3: The carriers are operated at maximum power (~40W/PCS carrier and 40W/AWS carrier) with at total port power of 120 watts (80W for PCS band carriers + 40W for AWS band carrier). The total output power for multiport (2x2 MIMO and 4x4 MIMO) operation was determined based upon ANSI 63.26 clauses 6.4.3.1 and 6.4.3.2.4 (10 log Nout). The total output power for two port operation is single port power + 3dB [i.e. 10log(2)]. The total output power for four port operation is single port power + 6dB [i.e. 10log(4)].

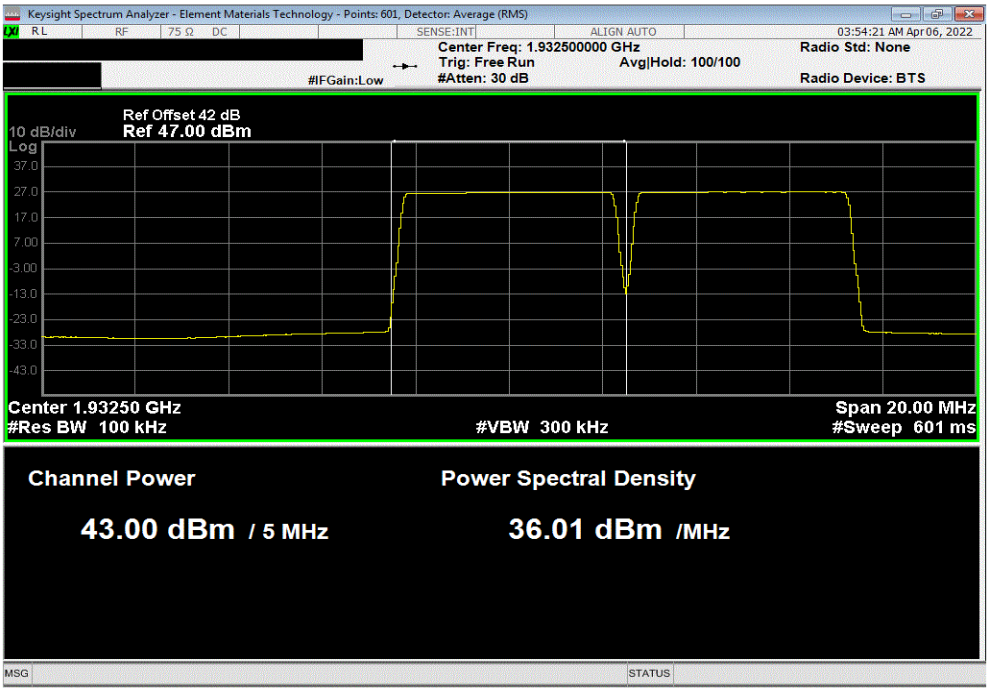
DEVIATIONS FROM TEST STANDARD

None

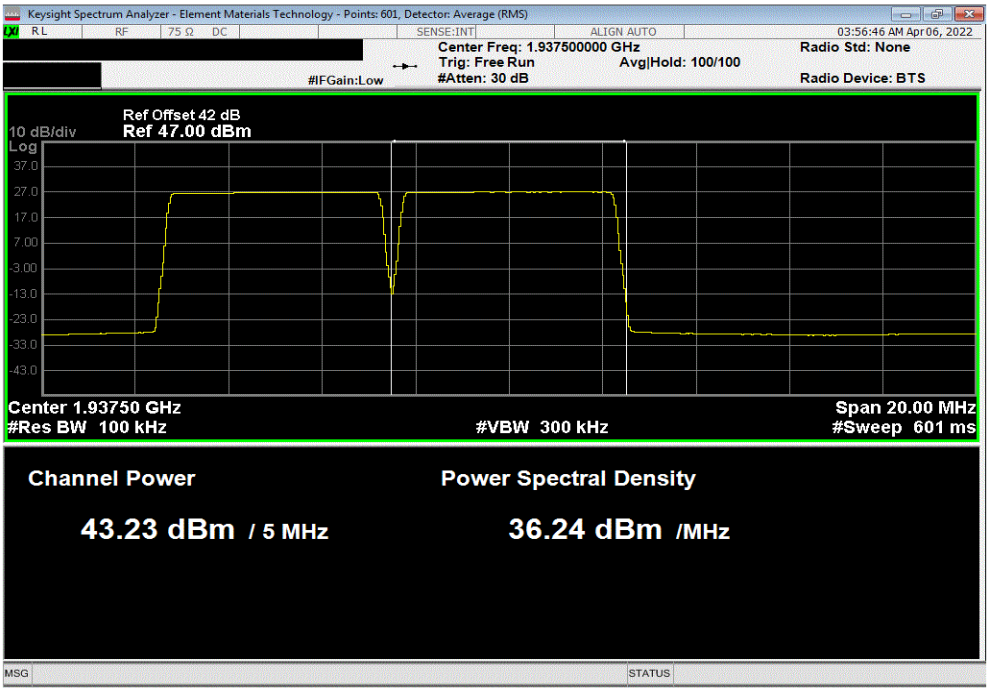
Configuration #	**2**	*Signature*

	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW
PCS Multicarrier Multiband					
Port 1					
Test Case 1: PCS Band NR5 (3 Carriers), AWS Band NR5 (Single Carrier)					
256-QAM Modulation					
PCS Carrier 1, 1932.5 MHz	43.001	0	43.0	46.0	49.0
PCS Carrier 2, 1937.5 MHz	43.234	0	43.2	46.2	49.2
PCS Carrier 3, 1992.5 MHz	43.711	0	43.7	46.7	49.7
AWS Single Carrier, 2155 MHz	45.694	0	46.7	49.7	52.7
Test Case 2: PCS Band NR30 (2 Carriers), AWS Band NR30 (Single Carrier)					
256-QAM Modulation					
PCS Carrier 1, 1945 MHz	45.305	0	45.3	48.3	51.3
PCS Carrier 2, 1975 MHz	45.651	0	45.7	48.7	51.7
AWS Single Carrier, 2155 MHz.	45.754	0	45.8	48.8	51.8
Test Case 3: PCS Band NR30 (2 Carriers), AWS Band NR30 (Single Carrier)					
256-QAM Modulation					
PCS Carrier 1, 1950 MHz	45.374	0	45.4	48.4	51.4
PCS Carrier 2, 1980 MHz	45.626	0	45.6	48.6	51.6
AWS Single Carrier, 2155 MHz..	45.74	0	45.7	48.7	51.7

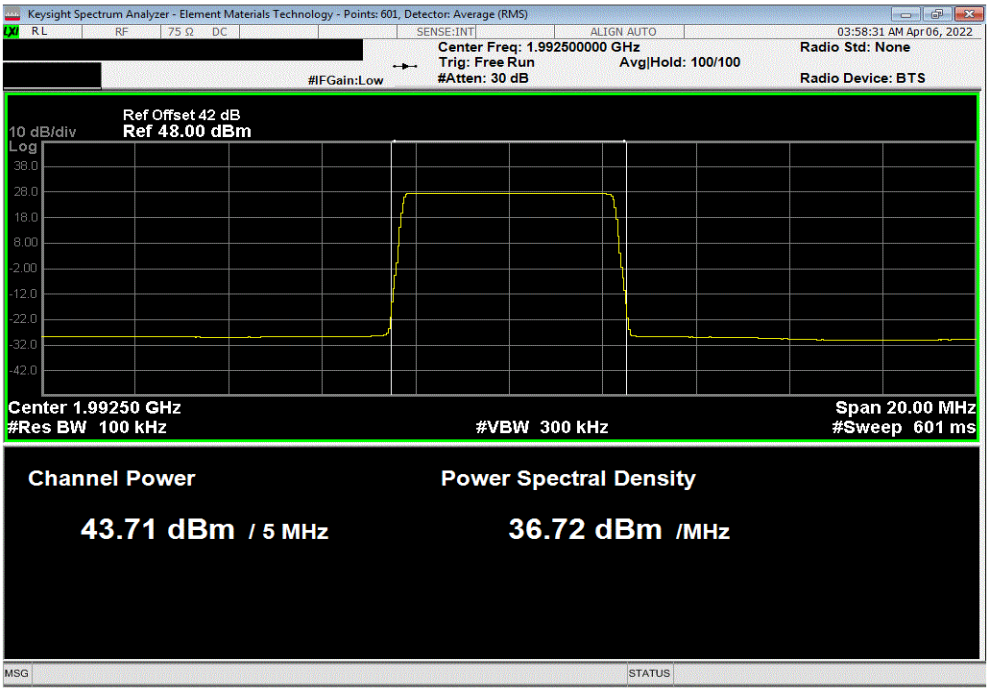
PCS Multicarrier Multiband, Port 1, Test Case 1: PCS Band NR5 (3 Carriers), AWS Band NR5 (Single Carrier), 256-QAM Modulation, PCS Carrier 1, 1932.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	43.001	0	43.0	46.0	49.0	



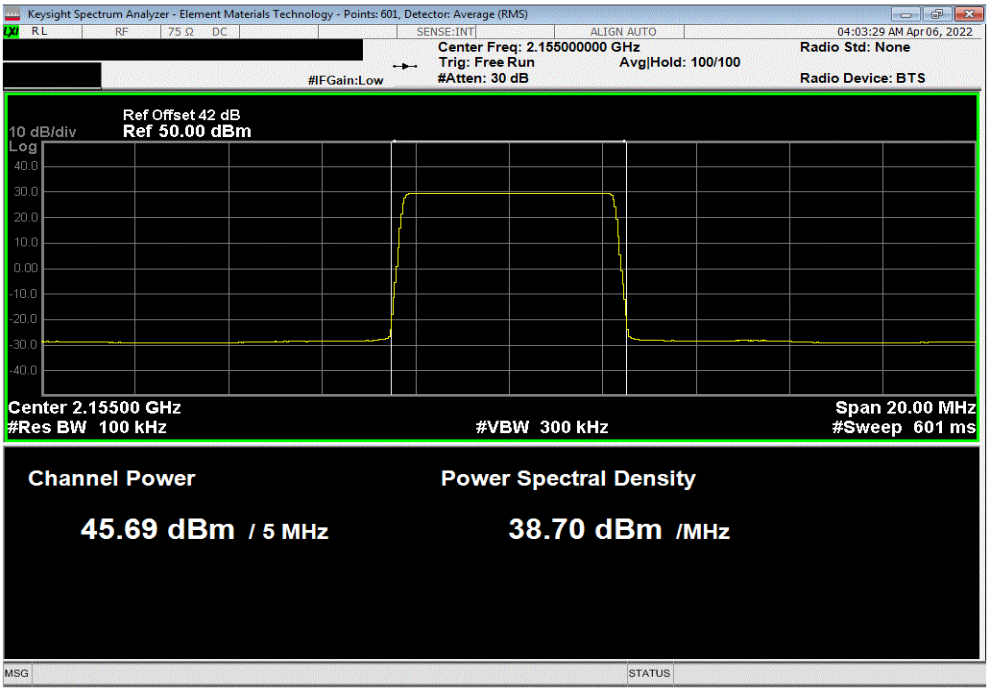
PCS Multicarrier Multiband, Port 1, Test Case 1: PCS Band NR5 (3 Carriers), AWS Band NR5 (Single Carrier), 256-QAM Modulation, PCS Carrier 2, 1937.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	43.234	0	43.2	46.2	49.2	



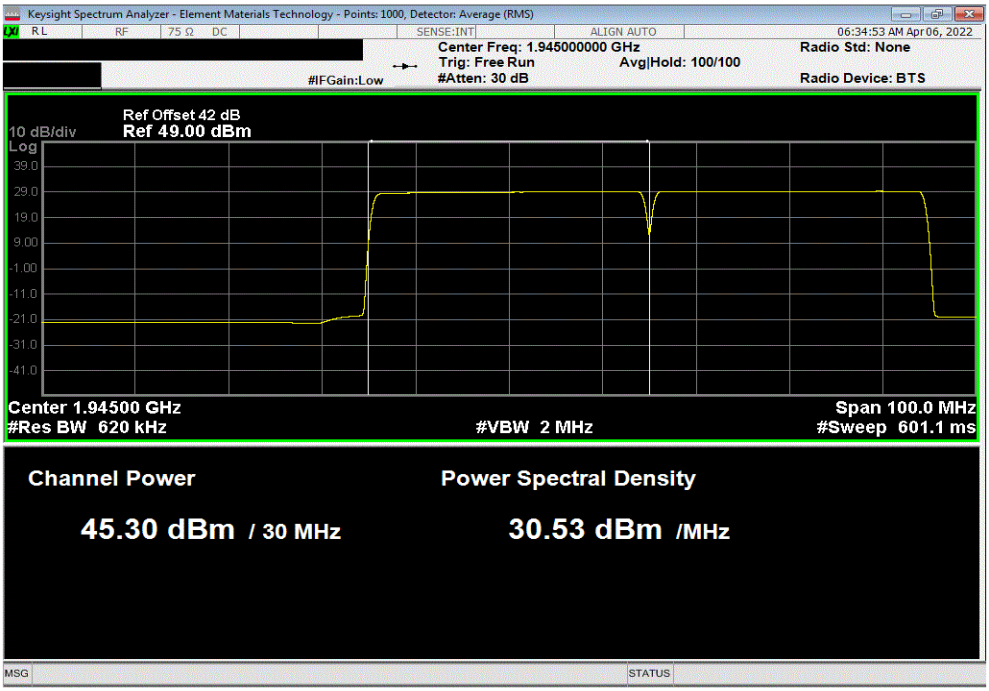
PCS Multicarrier Multiband, Port 1, Test Case 1: PCS Band NR5 (3 Carriers), AWS Band NR5 (Single Carrier), 256-QAM Modulation, PCS Carrier 3, 1992.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	43.711	0	43.7	46.7	49.7	



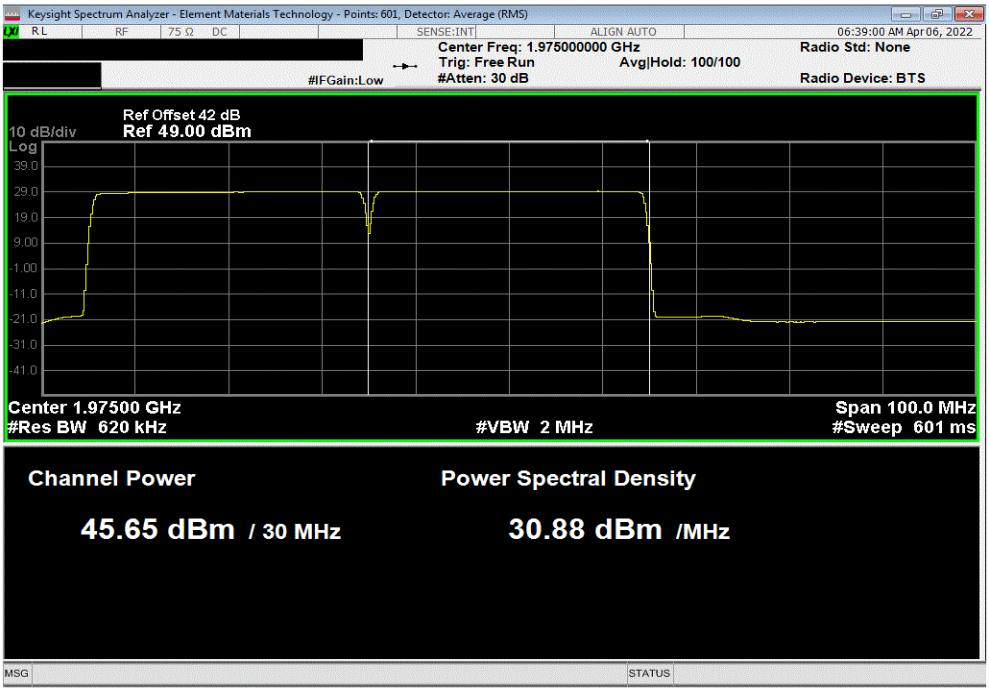
PCS Multicarrier Multiband, Port 1, Test Case 1: PCS Band NR5 (3 Carriers), AWS Band NR5 (Single Carrier), 256-QAM Modulation, AWS Single Carrier, 2155 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.694	0	46.7	49.7	52.7	



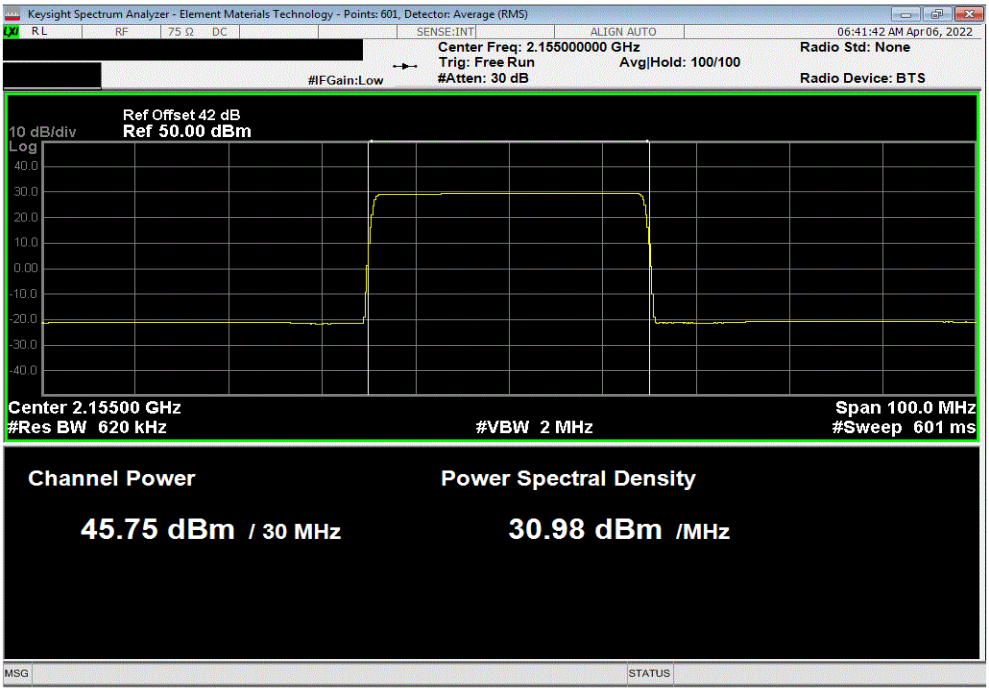
PCS Multicarrier Multiband, Port 1, Test Case 2: PCS Band NR30 (2 Carriers), AWS Band NR30 (Single Carrier), 256-QAM Modulation, PCS Carrier 1, 1945 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.305	0	45.3	48.3	51.3	



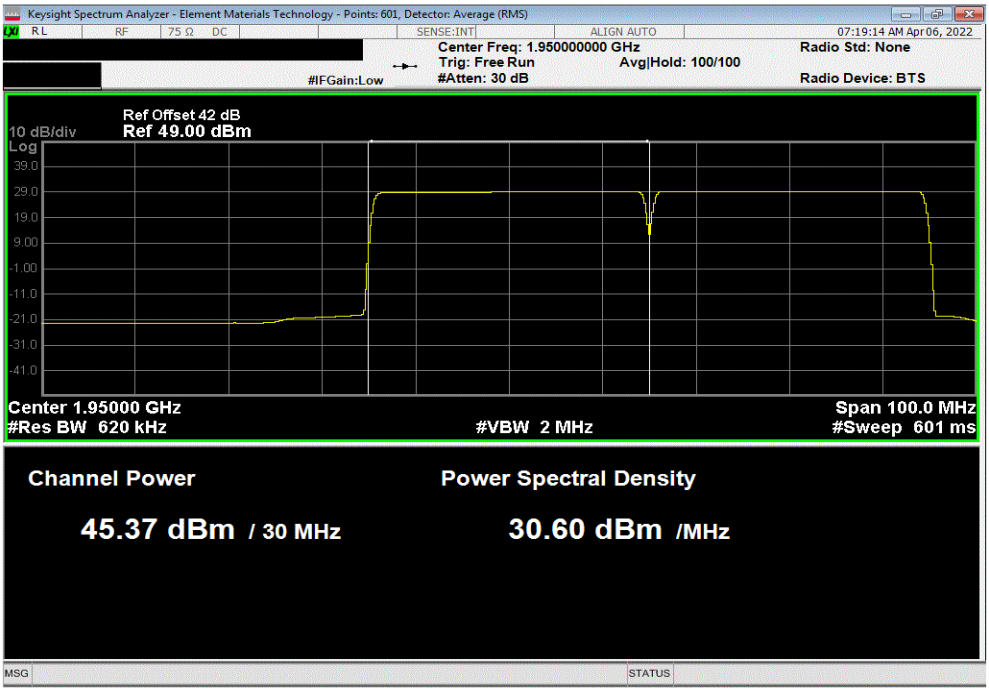
PCS Multicarrier Multiband, Port 1, Test Case 2: PCS Band NR30 (2 Carriers), AWS Band NR30 (Single Carrier), 256-QAM Modulation, PCS Carrier 2, 1975 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.651	0	45.7	48.7	51.7	



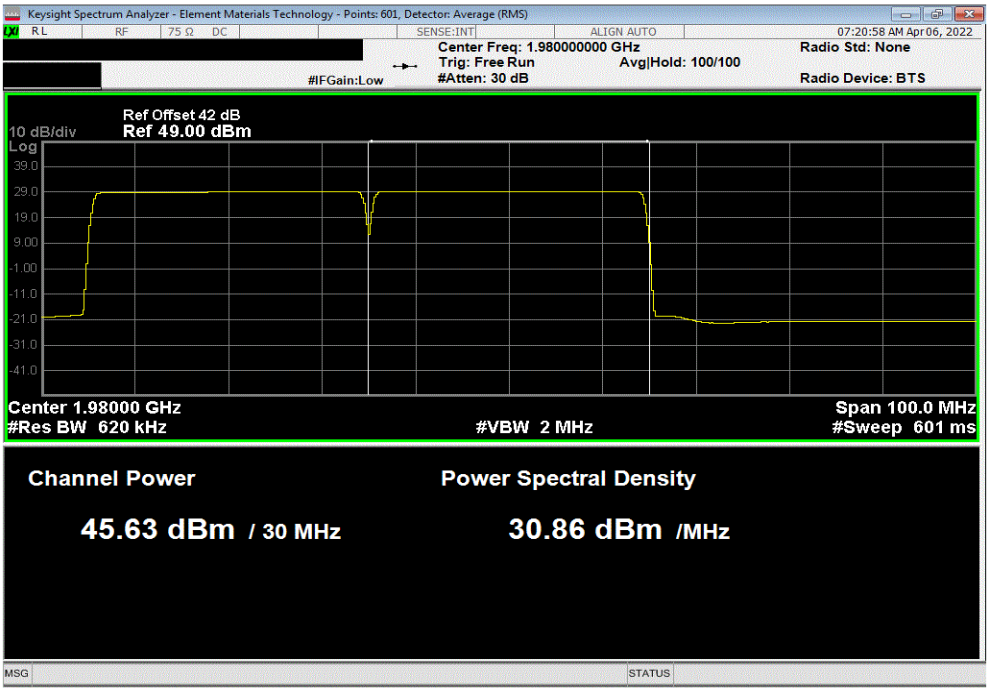
PCS Multicarrier Multiband, Port 1, Test Case 2: PCS Band NR30 (2 Carriers), AWS Band NR30 (Single Carrier), 256-QAM Modulation, AWS Single Carrier, 2155 MHz.						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.754	0	45.8	48.8	51.8	



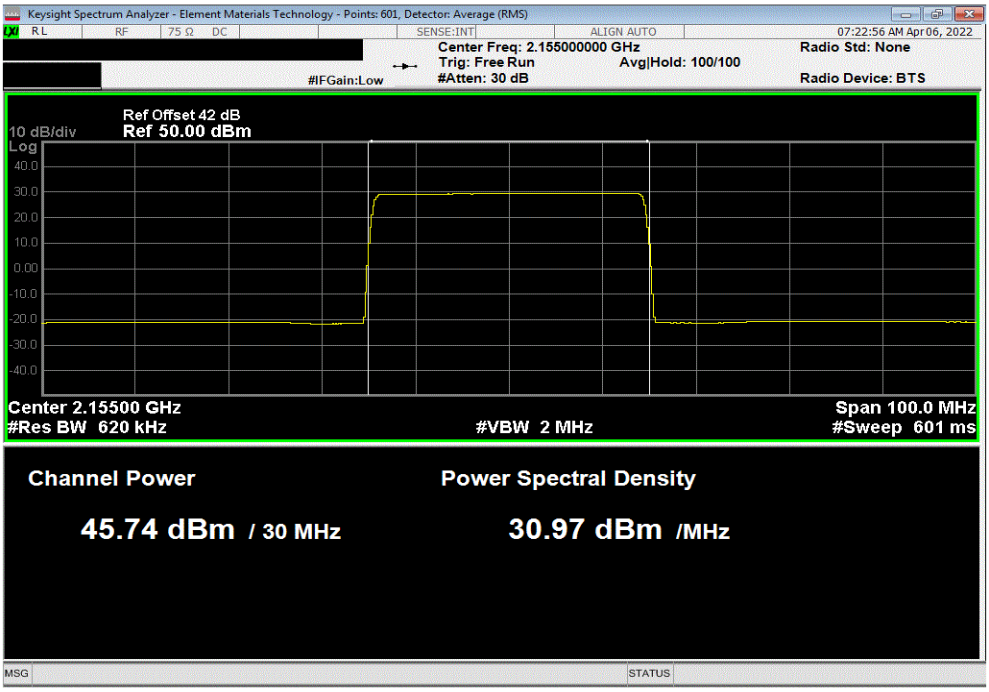
PCS Multicarrier Multiband, Port 1, Test Case 3: PCS Band NR30 (2 Carriers), AWS Band NR30 (Single Carrier), 256-QAM Modulation, PCS Carrier 1, 1950 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.374	0	45.4	48.4	51.4	



PCS Multicarrier Multiband, Port 1, Test Case 3: PCS Band NR30 (2 Carriers), AWS Band NR30 (Single Carrier), 256-QAM Modulation, PCS Carrier 2, 1980 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.626	0	45.6	48.6	51.6	



PCS Multicarrier Multiband, Port 1, Test Case 3: PCS Band NR30 (2 Carriers), AWS Band NR30 (Single Carrier), 256-QAM Modulation, AWS Single Carrier, 2155 MHz..						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.74	0	45.7	48.7	51.7	



OUTPUT POWER

element

TbtTx 2021.12.14.1 XMit 2022.02.07.0

EUT:	**AHFII Remote Radio Head**			**Work Order:**	**NOKI0038**
Serial Number:	**YK214000035**			**Date:**	**6-Apr-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.). For Test Case 1: The carriers are operated at maximum power (~26.6W or ~44.2dBm/AWS carrier and 40W/PCS carrier) with at total port power of 120 watts (80W for AWS band carriers + 40W for PCS band carrier). For Test Case 2 and 3: The carriers are operated at maximum power (~40W/AWS carrier and 40W/PCS carrier) with at total port power of 120 watts (80W for AWS band carriers + 40W for PCS band carrier). The total output power for multiport (2x2 MIMO and 4x4 MIMO) operation was determined based upon ANSI 63.26 clauses 6.4.3.1 and 6.4.3.2.4 (10 log Nout). The total output power for two port operation is single port power + 3dB [i.e. 10log(2)]. The total output power for four port operation is single port power + 6dB [i.e. 10log(4)].

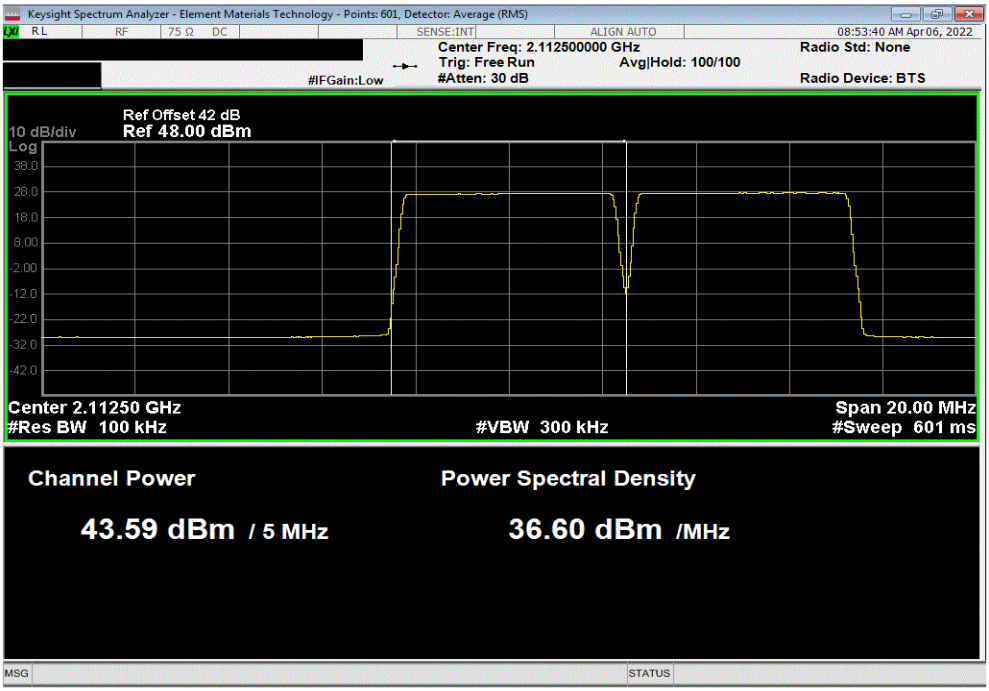
DEVIATIONS FROM TEST STANDARD

None

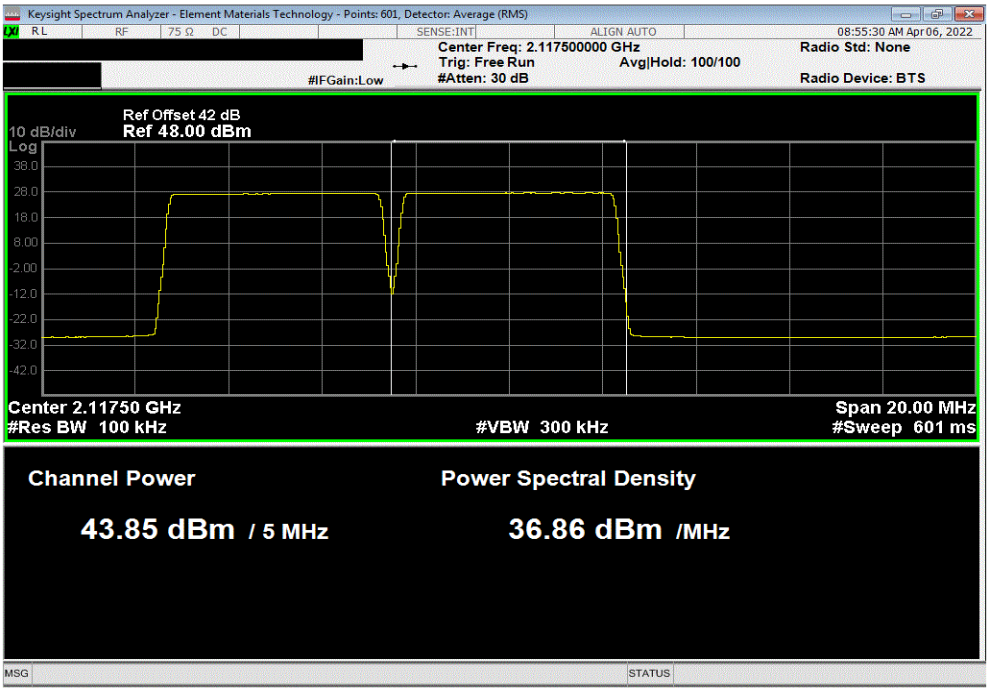
Configuration #	**2**	*Signature*

	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW
AWS Multicarrier Multiband					
Port 1					
Test Case 1: AWS Band NR5 (3 Carriers), PCS Band NR5 (Single Carrier)					
256-QAM Modulation					
AWS Carrier 1, 2112.5 MHz	43.587	0	43.6	46.6	49.6
AWS Carrier 2, 2117.5 MHz	43.853	0	43.9	46.9	49.9
AWS Carrier 3, 2197.5 MHz	44.353	0	44.4	47.4	50.4
PCS Single Carrier, 1962.5 MHz	46.214	0	46.2	49.2	52.2
Test Case 2: AWS Band NR30 (2 Carriers), PCS Band NR30 (Single Carrier)					
256-QAM Modulation					
AWS Carrier 1, 2125 MHz	45.54	0	45.5	48.5	51.5
AWS Carrier 2, 2155 MHz	46.115	0	46.1	49.1	52.1
PCS Single Carrier, 1962.5 MHz.	45.409	0	45.4	48.4	51.4
Test Case 3: AWS Band NR30 (2 Carriers), PCS Band NR30 (Single Carrier)					
256-QAM Modulation					
AWS Carrier 1, 2155 MHz	45.765	0	45.8	48.8	51.8
AWS Carrier 2, 2185 MHz	45.8	0	45.8	48.8	51.8
PCS Single Carrier, 1962.5 MHz..	45.442	0	45.4	48.4	51.4

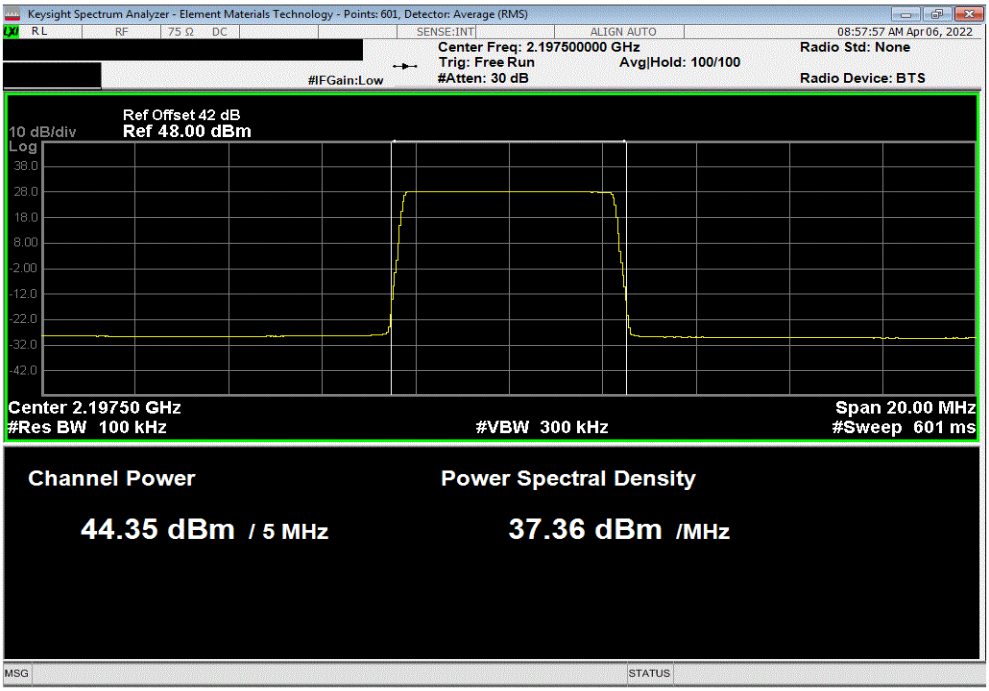
AWS Multicarrier Multiband, Port 1, Test Case 1: AWS Band NR5 (3 Carriers), PCS Band NR5 (Single Carrier), 256-QAM Modulation, AWS Carrier 1, 2112.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	43.587	0	43.6	46.6	49.6	



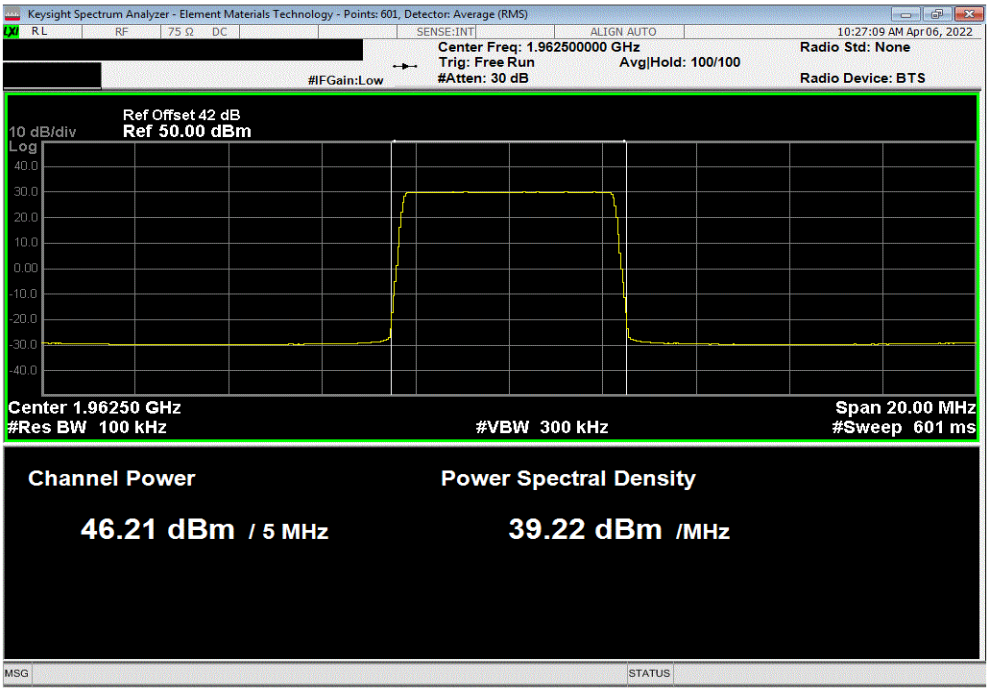
AWS Multicarrier Multiband, Port 1, Test Case 1: AWS Band NR5 (3 Carriers), PCS Band NR5 (Single Carrier), 256-QAM Modulation, AWS Carrier 2, 2117.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	43.853	0	43.9	46.9	49.9	



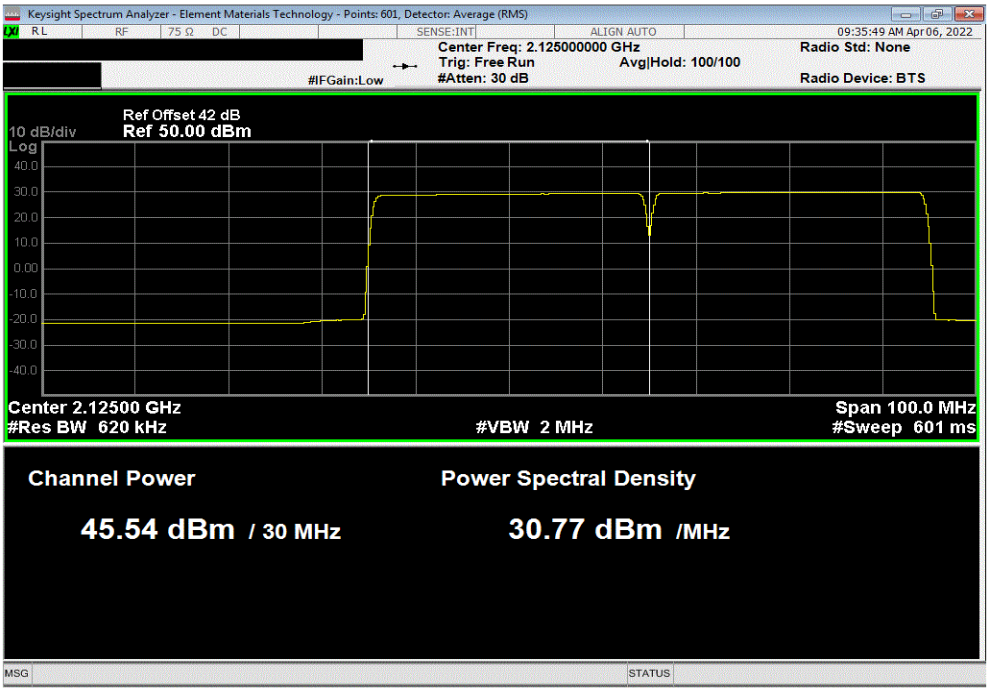
AWS Multicarrier Multiband, Port 1, Test Case 1: AWS Band NR5 (3 Carriers), PCS Band NR5 (Single Carrier), 256-QAM Modulation, AWS Carrier 3, 2197.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	44.353	0	44.4	47.4	50.4	



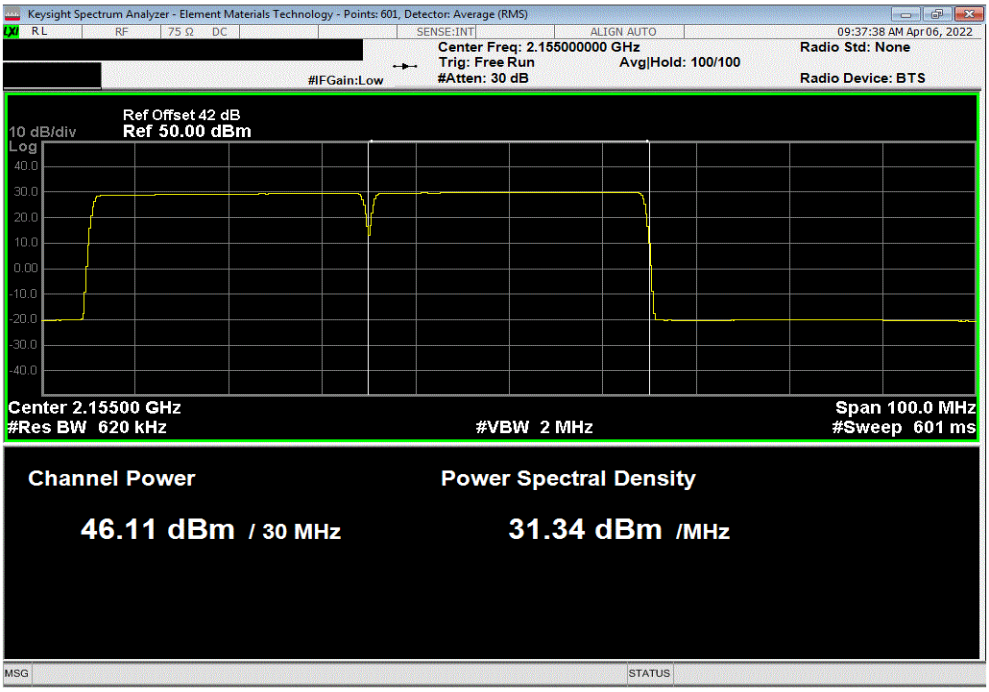
AWS Multicarrier Multiband, Port 1, Test Case 1: AWS Band NR5 (3 Carriers), PCS Band NR5 (Single Carrier), 256-QAM Modulation, PCS Single Carrier, 1962.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	46.214	0	46.2	49.2	52.2	



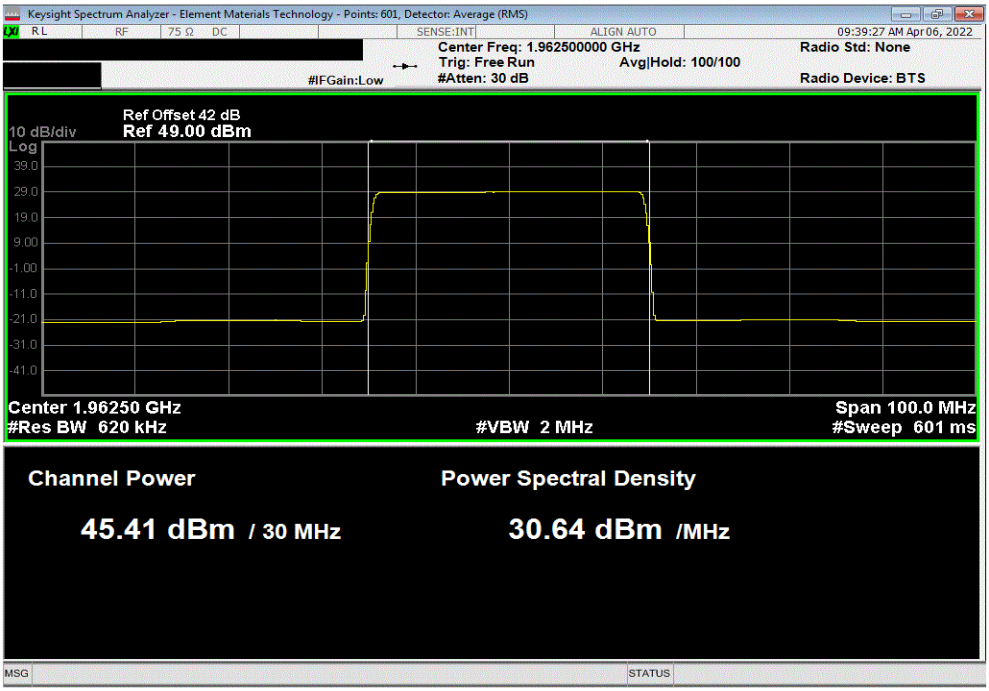
AWS Multicarrier Multiband, Port 1, Test Case 2: AWS Band NR30 (2 Carriers), PCS Band NR30 (Single Carrier), 256-QAM Modulation, AWS Carrier 1, 2125 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.54	0	45.5	48.5	51.5	



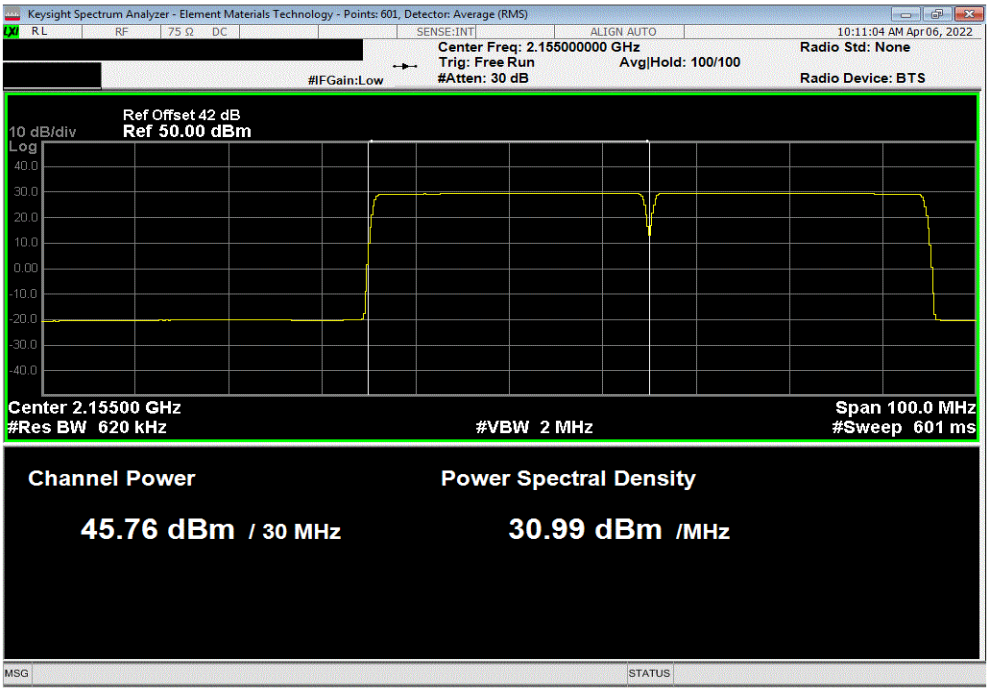
AWS Multicarrier Multiband, Port 1, Test Case 2: AWS Band NR30 (2 Carriers), PCS Band NR30 (Single Carrier), 256-QAM Modulation, AWS Carrier 2, 2155 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	46.115	0	46.1	49.1	52.1	



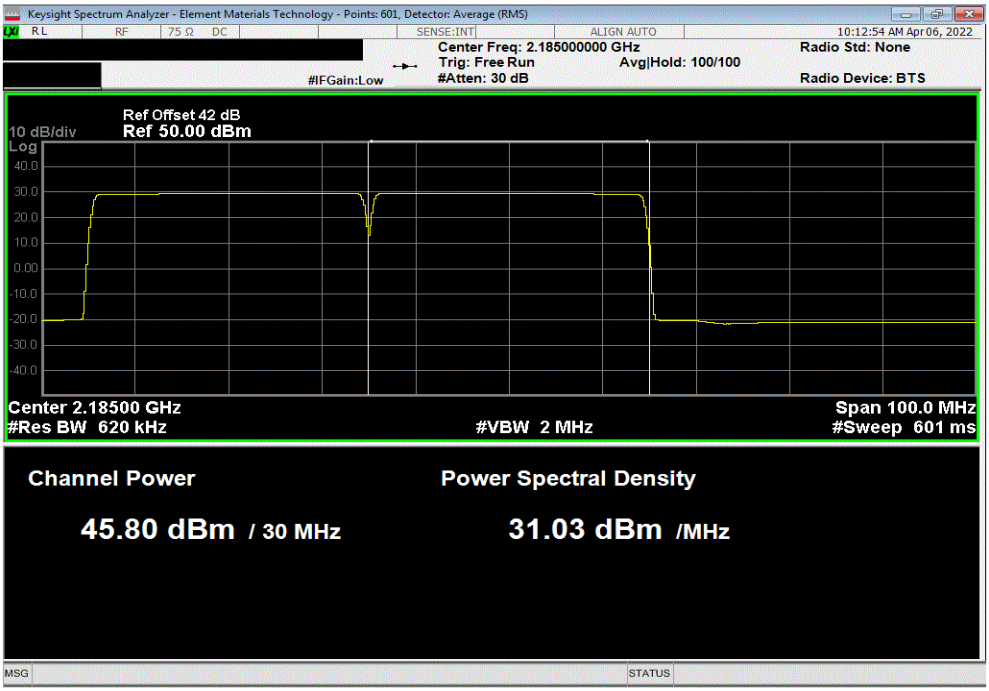
AWS Multicarrier Multiband, Port 1, Test Case 2: AWS Band NR30 (2 Carriers), PCS Band NR30 (Single Carrier), 256-QAM Modulation, PCS Single Carrier, 1962.5 MHz.						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.409	0	45.4	48.4	51.4	



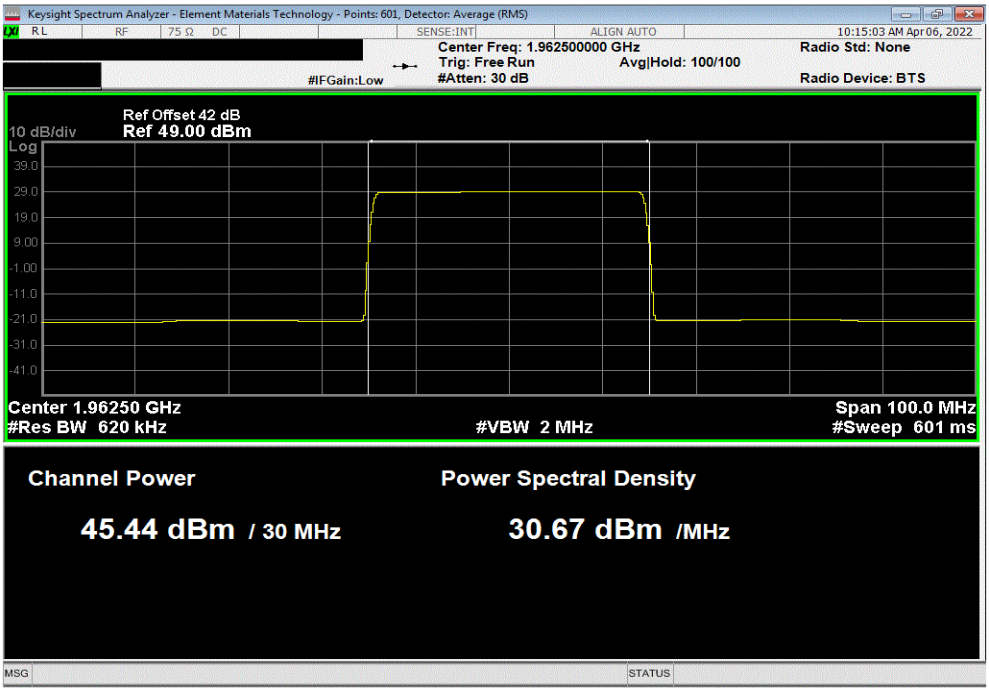
AWS Multicarrier Multiband, Port 1, Test Case 3: AWS Band NR30 (2 Carriers), PCS Band NR30 (Single Carrier), 256-QAM Modulation, AWS Carrier 1, 2155 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.765	0	45.8	48.8	51.8	



AWS Multicarrier Multiband, Port 1, Test Case 3: AWS Band NR30 (2 Carriers), PCS Band NR30 (Single Carrier), 256-QAM Modulation, AWS Carrier 2, 2185 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.8	0	45.8	48.8	51.8	



AWS Multicarrier Multiband, Port 1, Test Case 3: AWS Band NR30 (2 Carriers), PCS Band NR30 (Single Carrier), 256-QAM Modulation, PCS Single Carrier, 1962.5 MHz..						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.442	0	45.4	48.4	51.4	



OUTPUT POWER

element

TbtTx 2021.12.14.1 XMit 2022.02.07.0

EUT:	**AHFII Remote Radio Head**			**Work Order:**	**NOKI0038**
Serial Number:	**YK214000035**			**Date:**	**6-Apr-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 24E:2022	ANSI C63.26:2015
RSS-133 Issue 6:2013+A1:2018	RSS-133 Issue 6:2013+A1:2018
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 carriers were operated at maximum power (40W/PCS carrier and 40W/AWS carrier) with at total port power of 120 watts (80W for PCS band carriers + 40W for AWS band carrier). The total output power for multiport (2x2 MIMO and 4x4 MIMO) operation was determined based upon ANSI 63.26 clauses 6.4.3.1 and 6.4.3.2.4 (10 log Nout). The total output power for two port operation is single port power + 3dB [i.e. 10log(2)]. The total output power for four port operation is single port power + 6dB [i.e. 10log(4)].

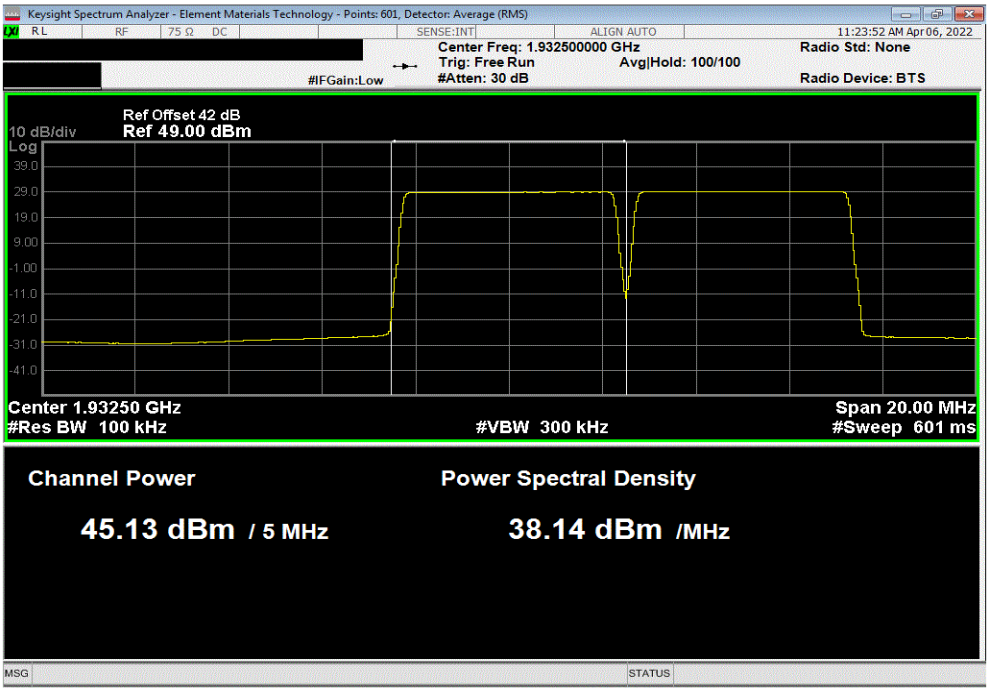
DEVIATIONS FROM TEST STANDARD

None

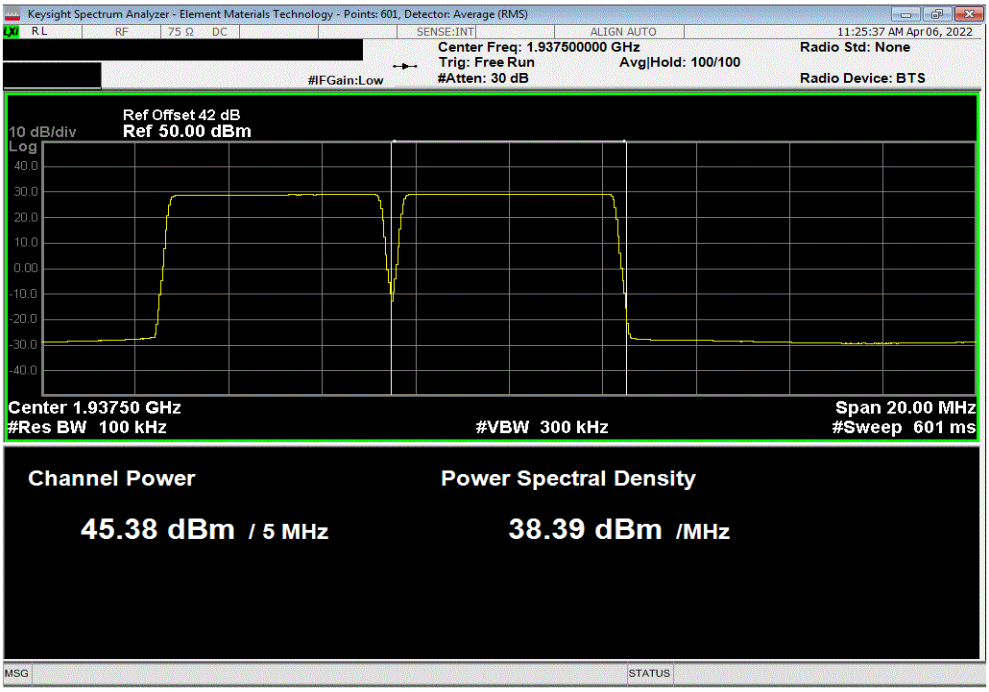
Configuration #	**2**	*Signature*

		Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW
Multicarrier Multiband						
	Port 1					
	Test Case: PCS Band NR5 (2 Carriers), AWS Band NR5 (Single Carrier)					
	QPSK Modulation					
	PCS Carrier 1, 1932.5 MHz	45.133	0	45.1	48.1	51.1
	PCS Carrier 2, 1937.5 MHz	45.375	0	45.4	48.4	51.4
	AWS Single Carrier, 2197.5 MHz	45.721	0	45.7	48.7	51.7

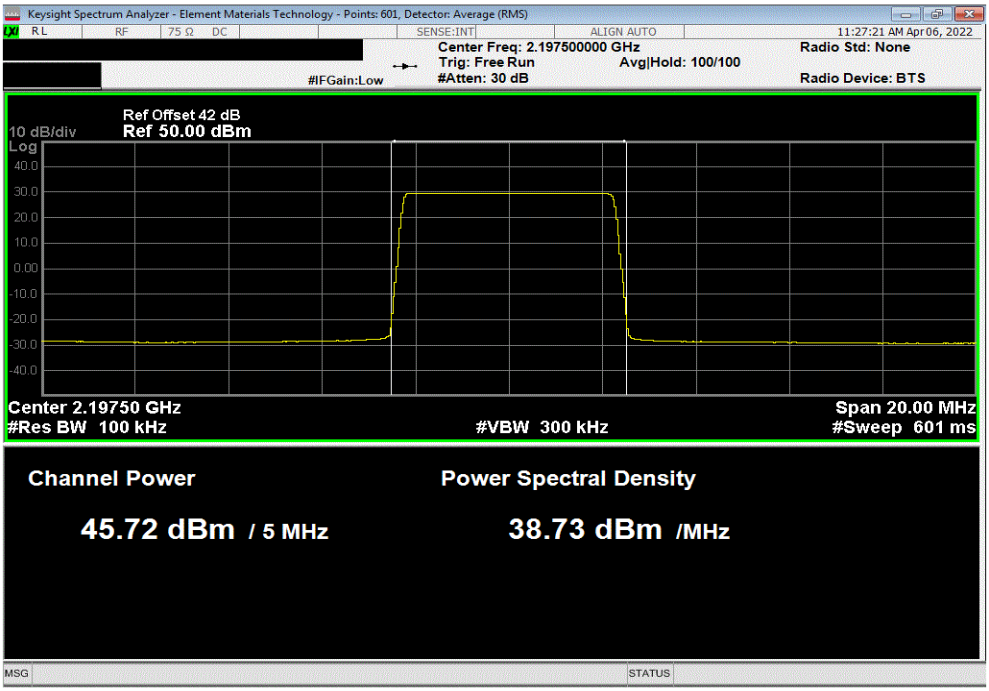
Multicarrier Multiband, Port 1, Test Case: PCS Band NR5 (2 Carriers), AWS Band NR5 (Single Carrier), QPSK Modulation, PCS Carrier 1, 1932.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.133	0	45.1	48.1	51.1	



Multicarrier Multiband, Port 1, Test Case: PCS Band NR5 (2 Carriers), AWS Band NR5 (Single Carrier), QPSK Modulation, PCS Carrier 2, 1937.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.375	0	45.4	48.4	51.4	



Multicarrier Multiband, Port 1, Test Case: PCS Band NR5 (2 Carriers), AWS Band NR5 (Single Carrier), QPSK Modulation, AWS Single Carrier, 2197.5 MHz						
	Initial Value dBm/Carrier BW	Duty Cycle Factor (dB)	Single Port dBm/Carrier BW	Two Port dBm/Carrier BW	Four Port dBm/Carrier BW	
	45.721	0	45.7	48.7	51.7	



OUTPUT POWER - LOWERED POWER

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
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 output power (maximum average conducted output power) was measured using the channels and modes as called out on the following data sheets. The transmit power was set to its default maximum.

The method in section 5.2.4.4 of ANSI C63.26 was used to make the measurement. This method uses trace averaging across ON and OFF times of the EUT transmissions in the spectrum analyzer channel power function using an RMS detector. Following the measurement a duty cycle correction was applied by adding [10 log (1 / D)], where D is the duty cycle to the measured power to compute the average power during the actual transmission 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 as shown in this certification report) 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 average transmit power of all antenna ports was determined per ANSI C63.26-2015 paragraph 6.4.3.1.

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.

OUTPUT POWER - LOWERED POWER

element

TbtTx 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:**	24.3% 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 shown elsewhere in this report.

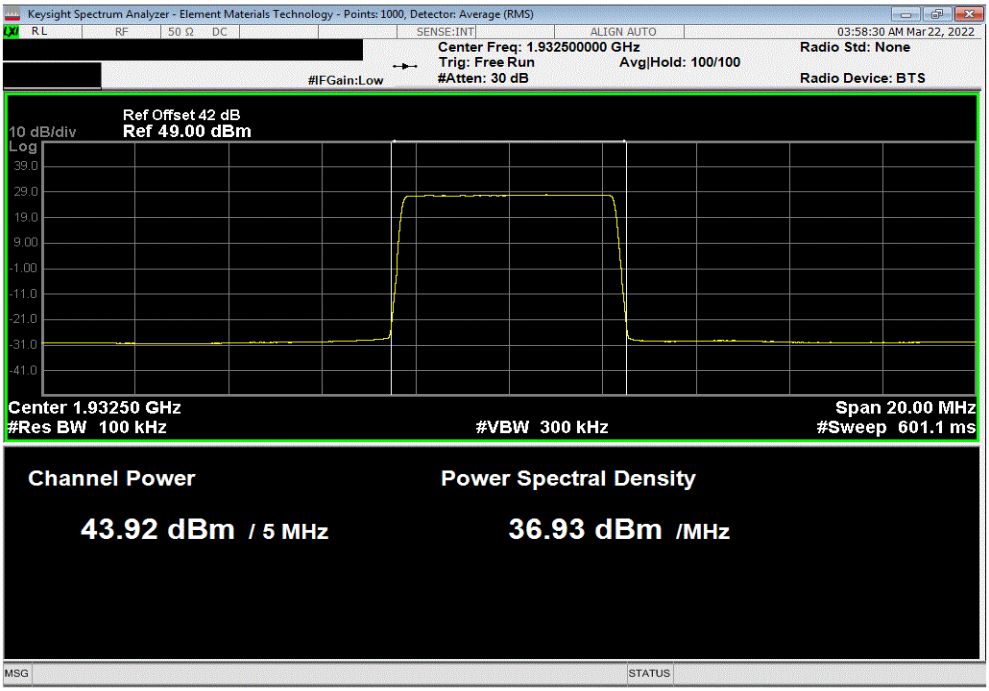
DEVIATIONS FROM TEST STANDARD

None

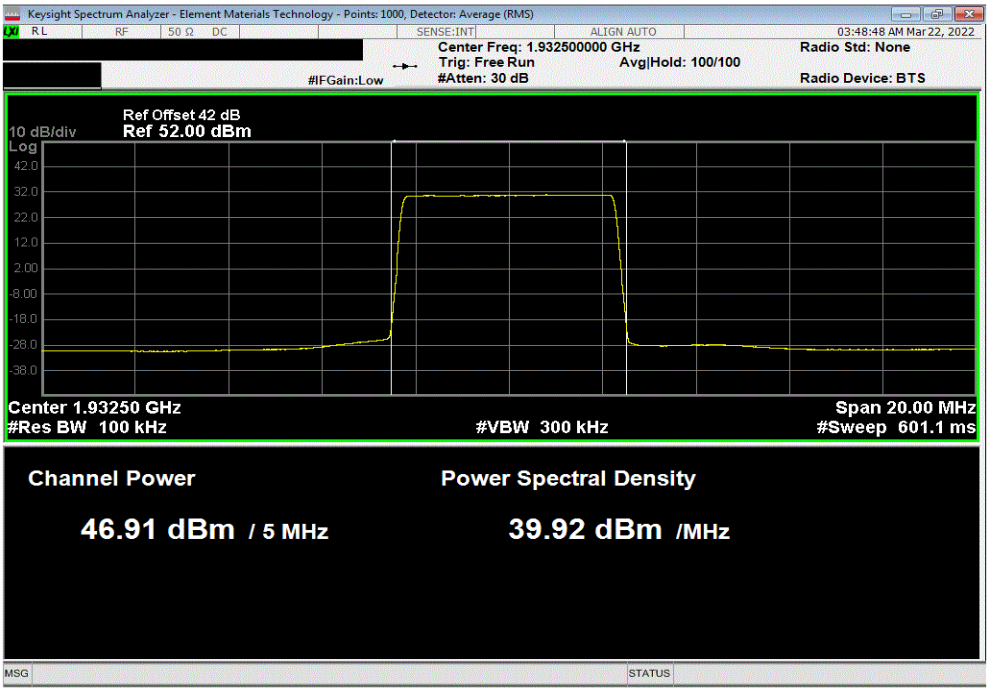
Configuration #	**2**	*Signature*

	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Value (dBm)	Limit (dBm)	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	43.917	0	43.9	N/A	N/A
5 MHz Bandwidth, High Limit					
Low Channel, 1932.5 MHz	46.909	0	46.9	N/A	N/A
16-QAM Modulation					
Single Carrier					
10 MHz Bandwidth, Low Limit					
Mid Channel, 1962.5 MHz	46.441	0	46.4	N/A	N/A
15 MHz Bandwidth, Low Limit					
Mid Channel, 1962.5 MHz	47.345	0	47.3	N/A	N/A
20 MHz Bandwidth, Low Limit					
Mid Channel, 1962.5 MHz	48.493	0	48.5	N/A	N/A

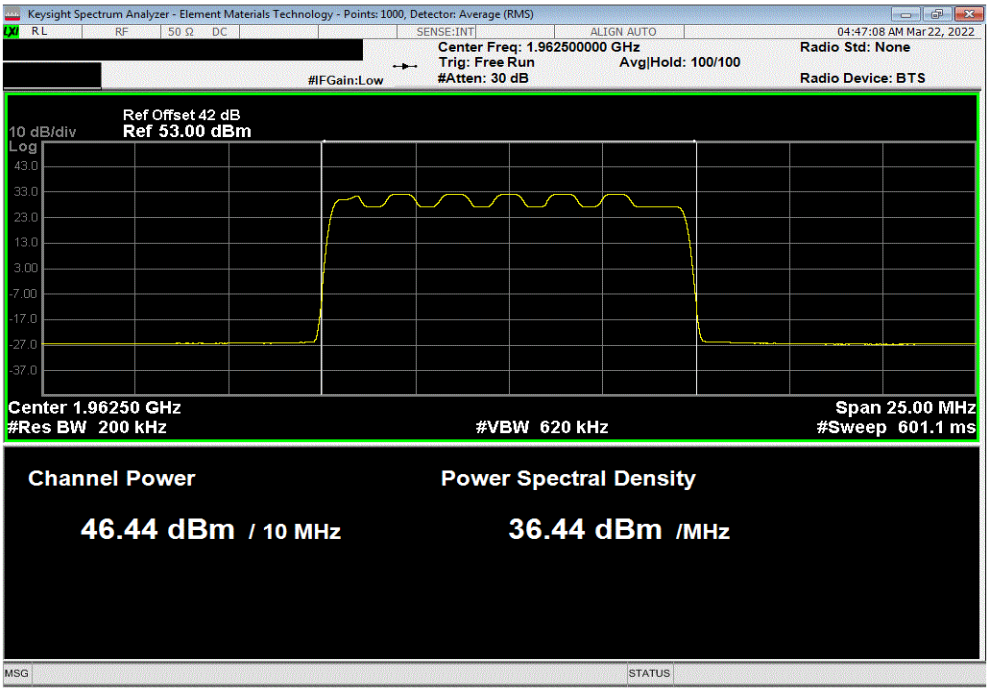
Port 1, Band n25, 1930 MHz - 1995 MHz, 5G NR, 256-QAM Modulation, Single Carrier, 5 MHz Bandwidth, Low Limit , Low Channel, 1932.5 MHz						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	43.917	0		43.9	N/A	N/A



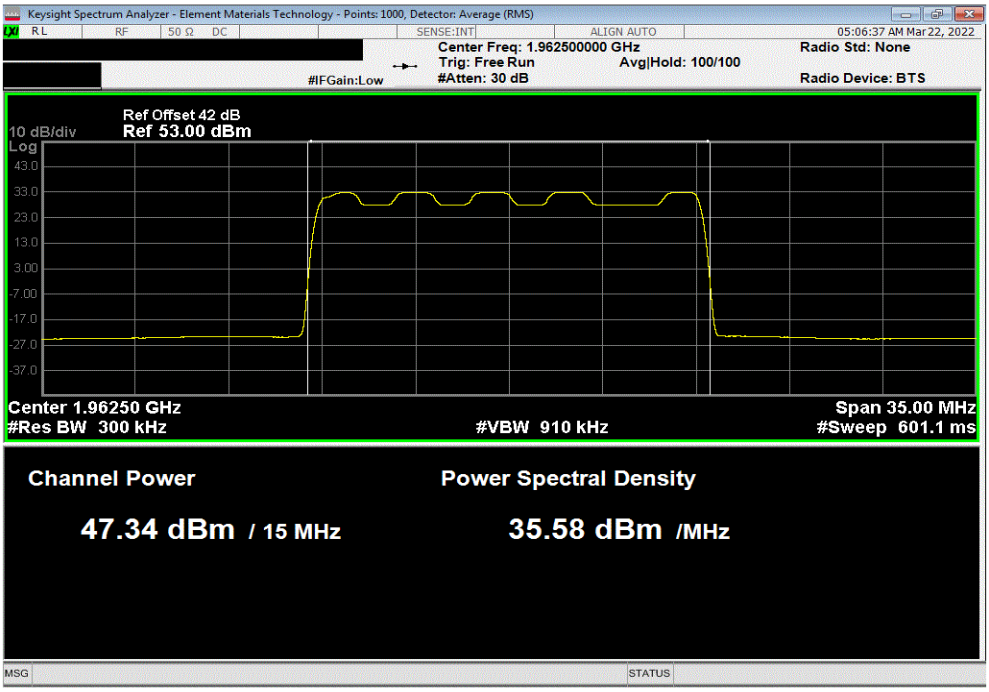
Port 1, Band n25, 1930 MHz - 1995 MHz, 5G NR, 256-QAM Modulation, Single Carrier, 5 MHz Bandwidth, High Limit, Low Channel, 1932.5 MHz						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	46.909	0		46.9	N/A	N/A



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						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	46.441	0		46.4	N/A	N/A

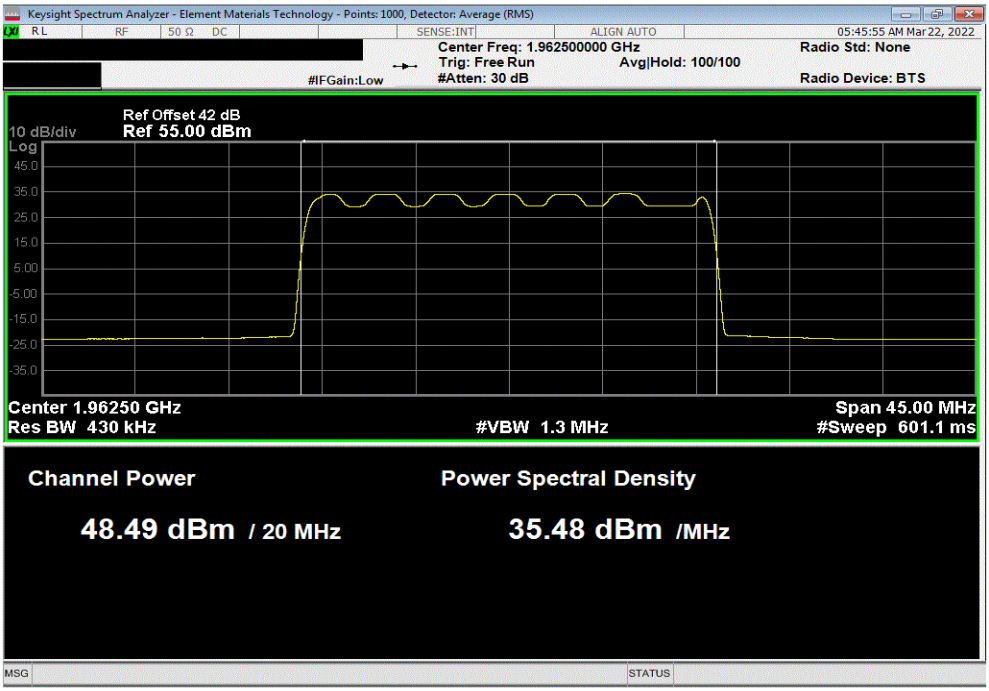


Port 1, Band n25, 1930 MHz - 1995 MHz, 5G NR, 16-QAM Modulation, Single Carrier, 15 MHz Bandwidth, Low Limit, Mid Channel, 1962.5 MHz						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	47.345	0		47.3	N/A	N/A



OUTPUT POWER - LOWERED POWER

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						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	48.493	0		48.5	N/A	N/A



N/A	N/A

OUTPUT POWER - LOWERED POWER

element

TbtTx 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 °C
Attendees:	Mitchell Hill			**Humidity:**	42.5% RH
Project:	None			**Barometric Pres.:**	1018 mbar
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. The Band n66 NR5, NR10, NR15 and NR20 carrier power levels were reduced to demonstrate compliance with EIRP limits shown elsewhere in this report.

DEVIATIONS FROM TEST STANDARD

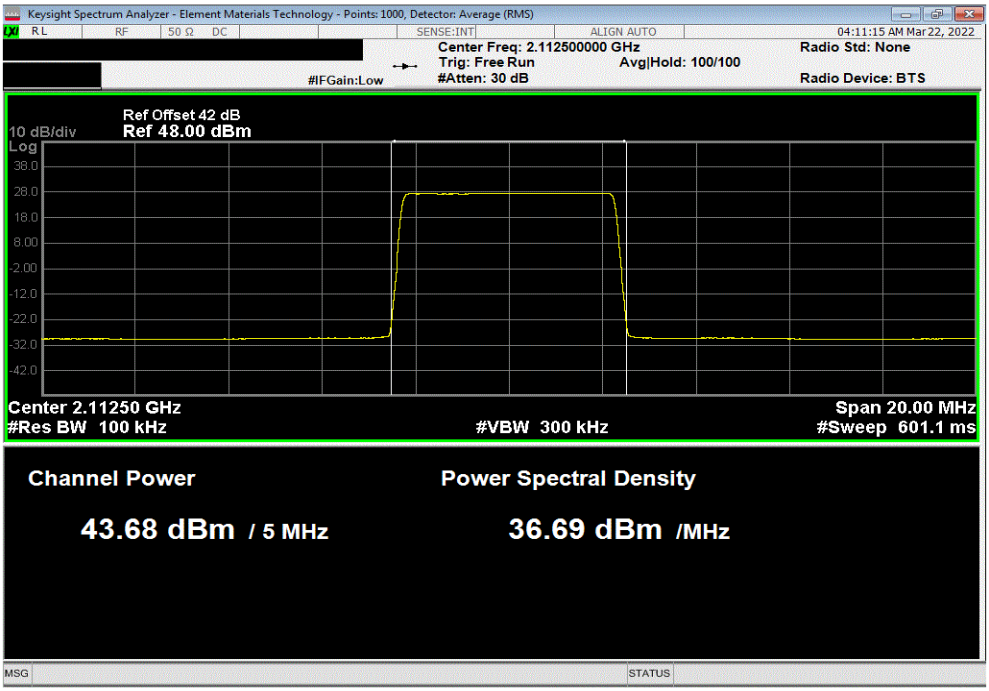
None

Configuration #	2	Signature

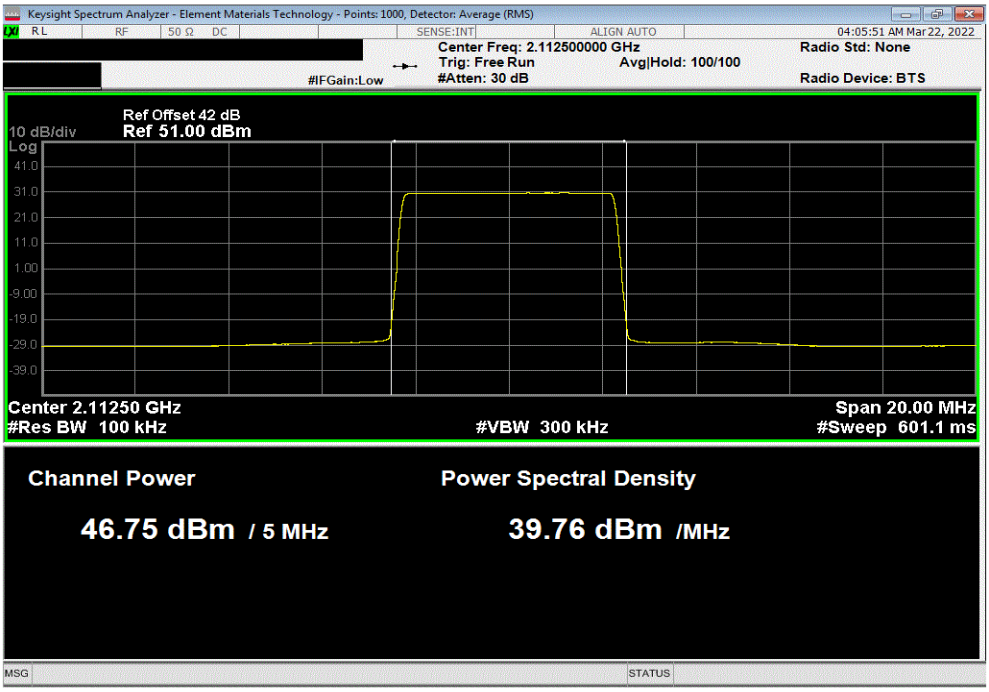
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Value (dBm)	Limit (dBm)	Results
Port 1, Band n66, 2110 MHz - 2200 MHz, 5G NR					
QPSK Modulation					
Single Carrier					
5 MHz Bandwidth, Low Limit					
Low Channel, 2112.5 MHz	43.677	0	43.7	N/A	N/A
5 MHz Bandwidth, High Limit					
Low Channel, 2112.5 MHz	46.754	0	46.8	N/A	N/A
16-QAM Modulation					
Single Carrier					
10 MHz Bandwidth, Low Limit					
Mid Channel, 2155.0 MHz	45.800	0	45.8	N/A	N/A
15 MHz Bandwidth, Low Limit					
Mid Channel, 2155.0 MHz	46.930	0	47.0	N/A	N/A
20 MHz Bandwidth, Low Limit					
Mid Channel, 2155.0 MHz	47.980	0	48.0	N/A	N/A

OUTPUT POWER - LOWERED POWER

Port 1, Band n66, 2110 MHz - 2200 MHz, 5G NR, QPSK Modulation, Single Carrier, 5 MHz Bandwidth, Low Limit , Low Channel, 2112.5 MHz						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	43.677	0		43.7	N/A	N/A

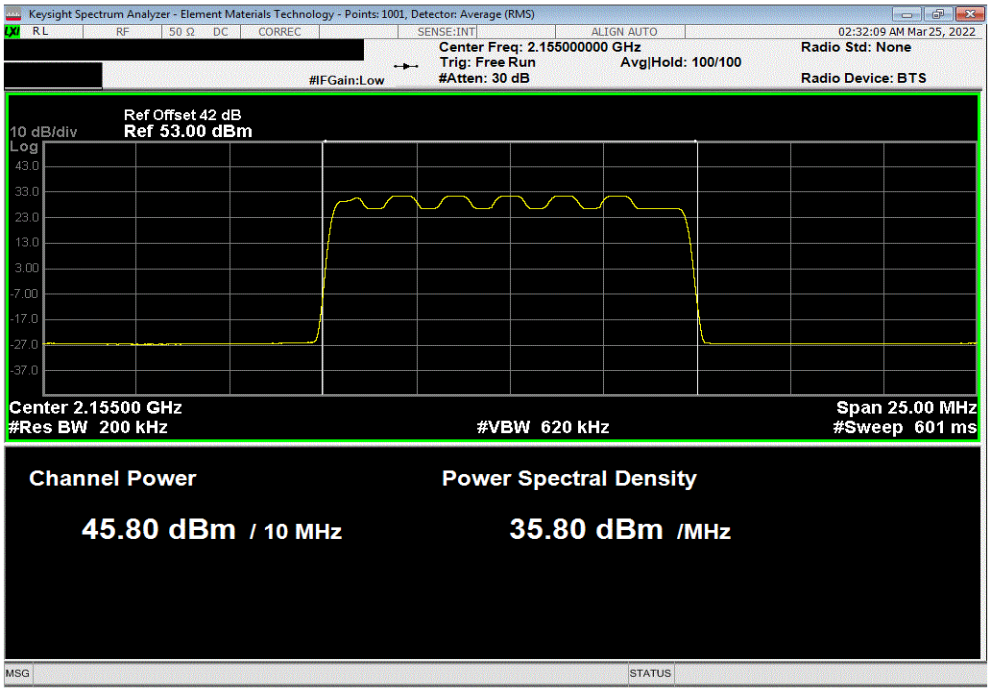


Port 1, Band n66, 2110 MHz - 2200 MHz, 5G NR, QPSK Modulation, Single Carrier, 5 MHz Bandwidth, High Limit, Low Channel, 2112.5 MHz						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	46.754	0		46.8	N/A	N/A

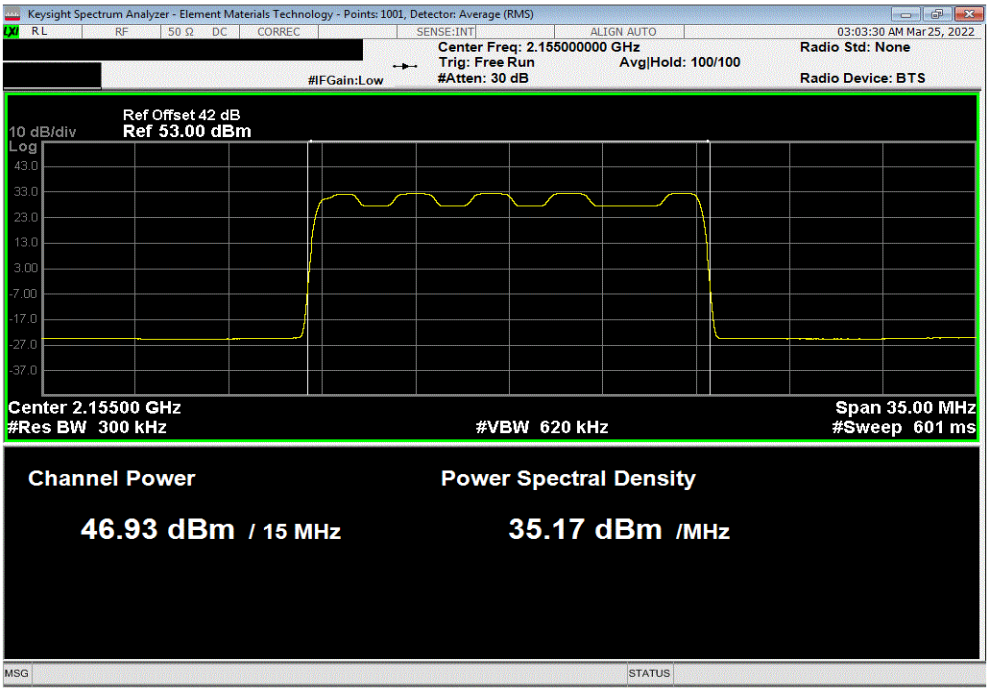


OUTPUT POWER - LOWERED POWER

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						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	45.8	0		45.8	N/A	N/A



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						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	46.93	0		47	N/A	N/A



OUTPUT POWER - LOWERED POWER

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						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	47.98	0		48	N/A	N/A