

XMit 2023.02.14.0

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
Block - DC	Fairview Microwave	SD3379	AMM	2022-09-09	2023-09-09
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFQ	2023-02-09	2024-02-09
Generator - Signal	Agilent	N5173B	TIW	2020-07-17	2023-07-17

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 27.50(d)(5) and RSS-130 section 4.6.1, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the highest PAPR during periods of continuous transmission.

The RF conducted emission testing was performed on one port. The AHLOA antenna ports are essentially electrically identical (the RF power variation between antenna ports is small as shown in the original certification effort) 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

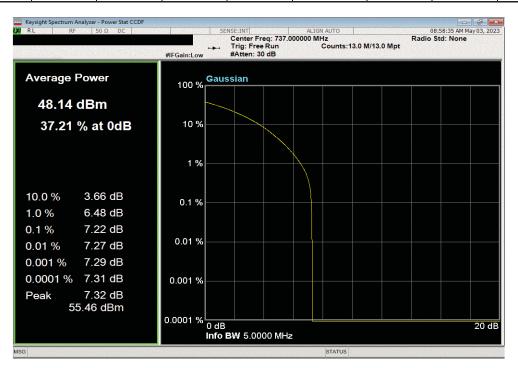


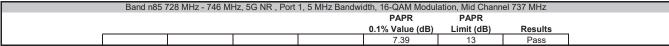
				TbtTx 2022.05.02.0	XMit 2023.0
FUT:	AHLOA (FCC/ISED C2P	C)	Work Order:		AMIL 2023.0
Serial Number:		-1		05/02/2023	
	Nokia Solutions and Ne	tworks	Temperature:		
	John Rattanavong, Mito		Humidity:		
Project:			Barometric Pres.:		
	Brandon Hobbs	Power: 54 VDC	Job Site:	TX07	
EST SPECIFICATI	ONS	Test Method			
CC 27:2023		ANSI C63.26:2015			
SS-130 Issue 2:20	19	ANSI C63.26:2015			
OMMENTS					
II losses in the me	easurement path were ac	ccounted for: attenuators, cables, DC block and filter when in use. Band n85 carriers are ena	abled at maximum power (60 watts/carrie	r).	
EVIATIONS FROM one	I TEST STANDARD				
Configuration #	NOKI0058-2	Signature			
		ongraturo o	PAPR 0.1% Value (dB)	PAPR Limit (dB)	Results
and n85 728 MHz -	746 MHz, 5G NR Port 1				
	5 MHz Band	dwidth			
	3 IVITZ Dalik	QPSK Modulation			
		Mid Channel 737 MHz	7.22	13	Pass
		16-QAM Modulation	1.22	10	1 033
		Mid Channel 737 MHz	7.39	13	Pass
		64-QAM Modulation	1.00	10	1 433
		Mid Channel 737 MHz	7.23	13	Pass
		256-QAM Modulation	7.25		. 400
		Low Channel 730.5 MHz	7.21	13	Pass
		Mid Channel 737 MHz	7.21	13	Pass
		High Channel 743.5 MHz	7.21	13	Pass
	10 MHz Bar				
		QPSK Modulation			
		Mid Channel 737 MHz	7.24	13	Pass
		16-QAM Modulation			
		Mid Channel 737 MHz	7.36	13	Pass
		64-QAM Modulation			
		Mid Channel 737 MHz	7.25	13	Pass
		256-QAM Modulation			
		Low Channel 733 MHz	7.29	13	Pass
		Mid Channel 737 MHz	7.24	13	Pass
		High Channel 741 MHz	7.27	13	Pass
	15 MHz Bar	ndwidth			
		QPSK Modulation			
		Mid Channel 737 MHz	7.23	13	Pass
		16-QAM Modulation			
		Mid Channel 737 MHz	7.34	13	Pass
		64-QAM Modulation			
		Mid Channel 737 MHz	7.23	13	Pass
			7.23	13	Pass
		Mid Channel 737 MHz	7.23 7.30	13	Pass Pass
		Mid Channel 737 MHz 256-QAM Modulation			

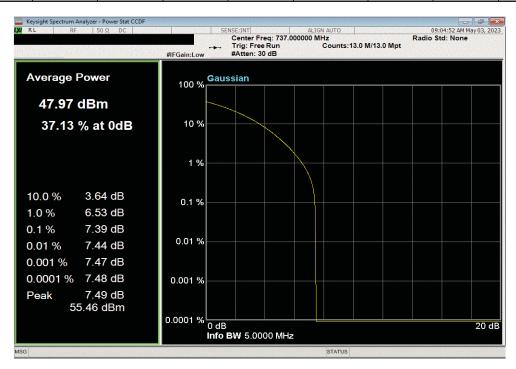
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Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 5 MHz Bandwidth, QPSK Modulation, Mid Channel 737 MHz
PAPR PAPR
0.1% Value (dB) Limit (dB) Results
7.22 13 Pass



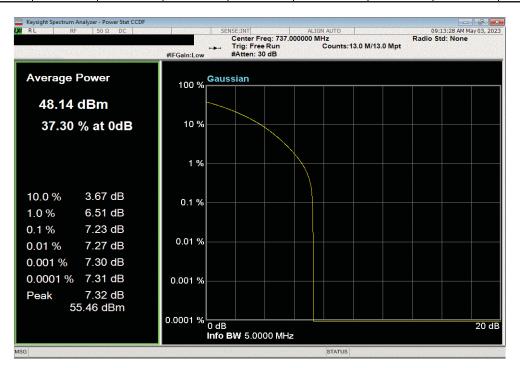


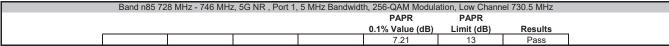


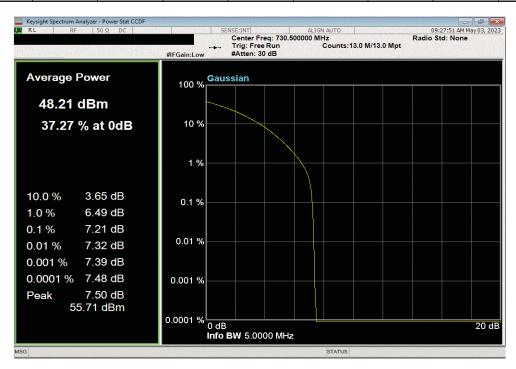
Report No. NOKI0058.0 66/111



Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 5 MHz Bandwidth, 64-QAM Modulation, Mid Channel 737 MHz
PAPR PAPR
0.1% Value (dB) Limit (dB) Results
7.23 13 Pass



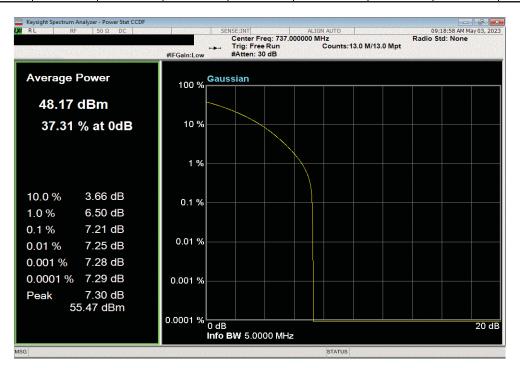




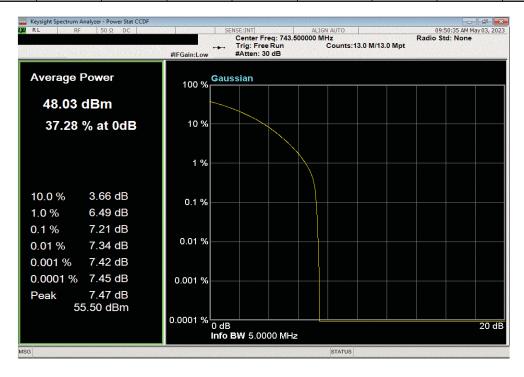
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Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Mid Channel 737 MHz
PAPR PAPR
0.1% Value (dB) Limit (dB) Results
7.21 13 Pass



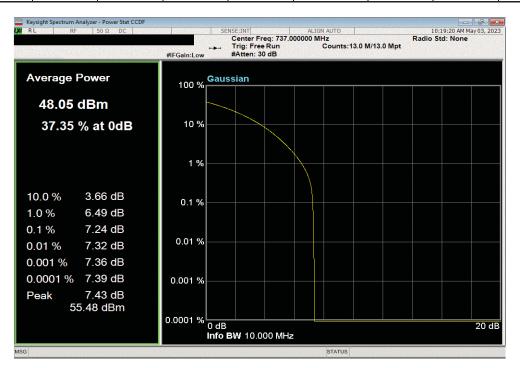


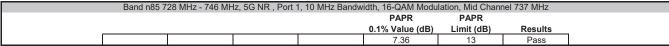


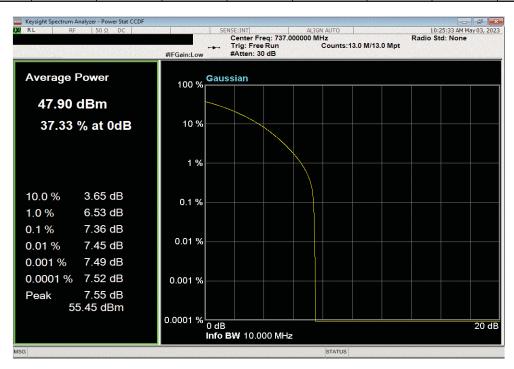
Report No. NOKI0058.0 68/111



Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 10 MHz Bandwidth, QPSK Modulation, Mid Channel 737 MHz
PAPR PAPR
0.1% Value (dB) Limit (dB) Results
7.24 13 Pass



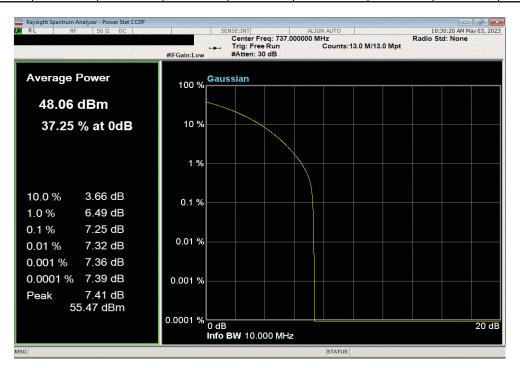




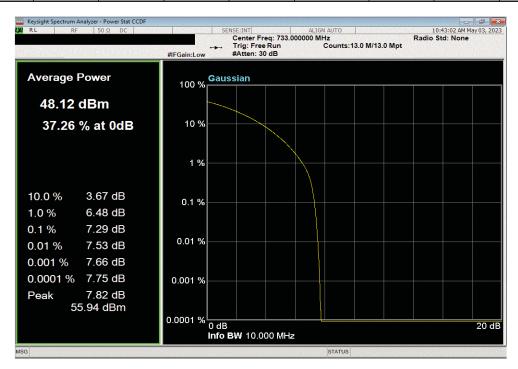
Report No. NOKI0058.0 69/111



Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 10 MHz Bandwidth, 64-QAM Modulation, Mid Channel 737 MHz
PAPR PAPR
0.1% Value (dB) Limit (dB) Results
7.25 13 Pass



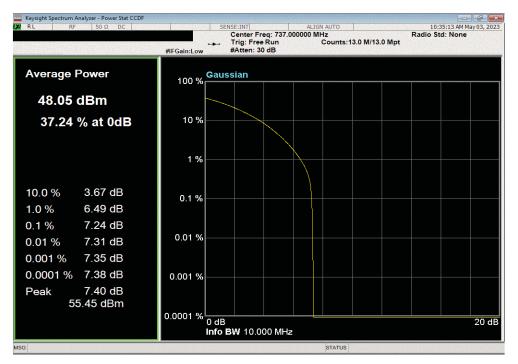




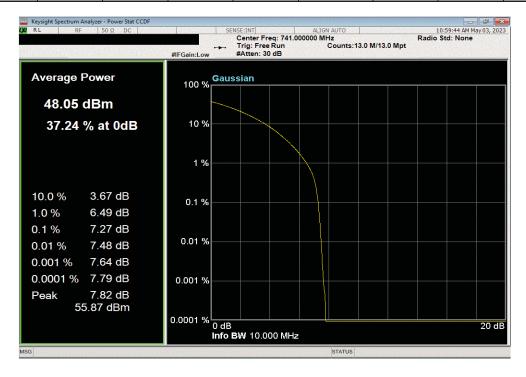
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Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Mid Channel 737 MHz
PAPR PAPR
0.1% Value (dB) Limit (dB) Results
7.24 13 Pass



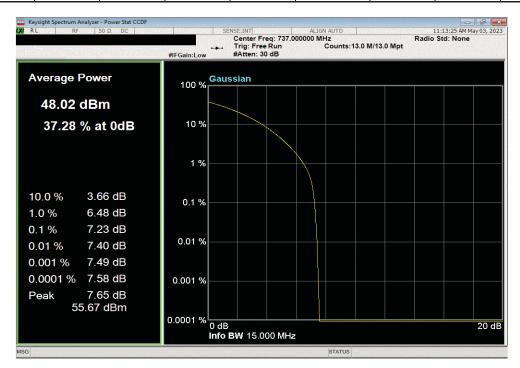


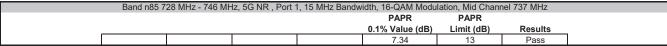


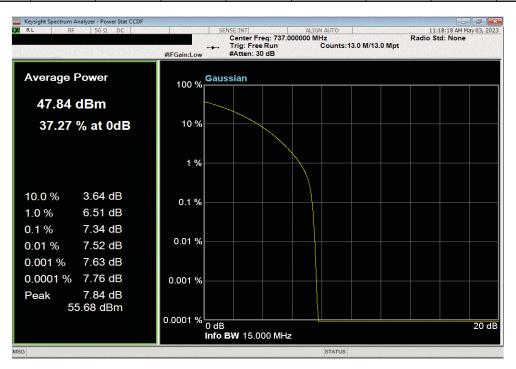
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Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 15 MHz Bandwidth, QPSK Modulation, Mid Channel 737 MHz
PAPR PAPR
0.1% Value (dB) Limit (dB) Results
7.23 13 Pass



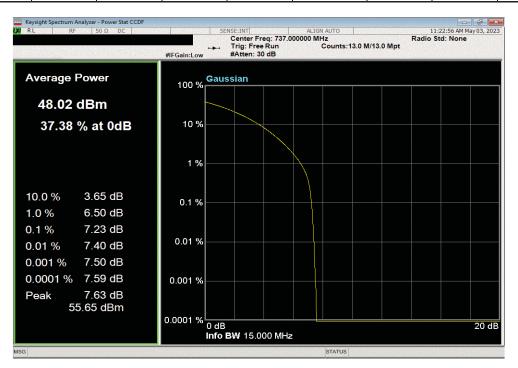


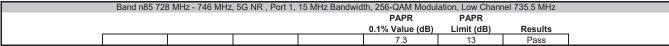


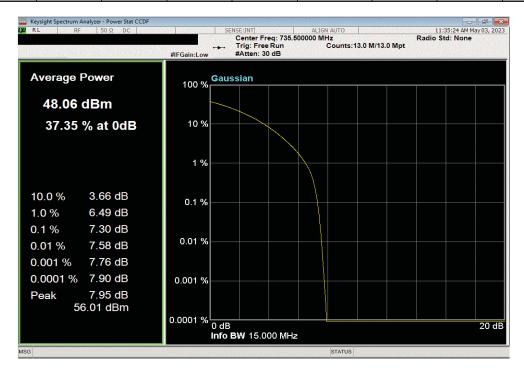
Report No. NOKI0058.0 72/111



Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 15 MHz Bandwidth, 64-QAM Modulation, Mid Channel 737 MHz
PAPR PAPR
0.1% Value (dB) Limit (dB) Results
7.23 13 Pass



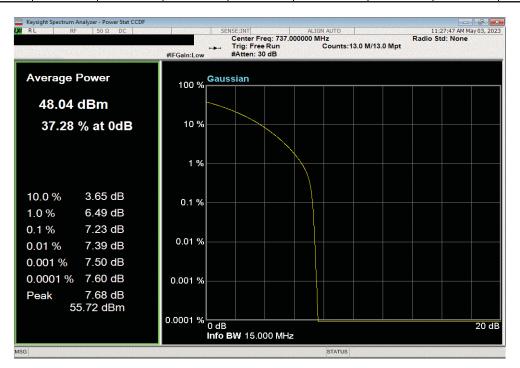


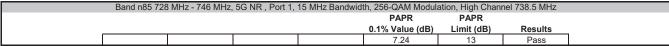


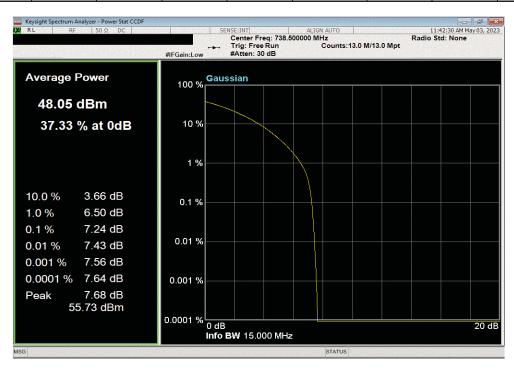
Report No. NOKI0058.0 73/111



Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Mid Channel 737 MHz
PAPR PAPR
0.1% Value (dB) Limit (dB) Results
7.23 13 Pass







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XMit 2023.02.14.0

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
Block - DC	Fairview Microwave	SD3379	AMM	2022-09-09	2023-09-09
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFQ	2023-02-09	2024-02-09
Generator - Signal	Agilent	N5173B	TIW	2020-07-17	2023-07-17

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spurious RF conducted emissions at the edges of the authorized bands were measured with the EUT set to low and high transmit frequencies in the available band. The channels closest to the band edges were selected. The EUT was transmitting at the data rate(s) listed in the datasheet.

The spectrum was scanned below the lower band edge and above the higher band edge.

All limits were adjusted by a factor of [-10*log(4)] dB to account for the device operation as a 4 port MIMO transmitter, as per FCC KDB 622911.

Multicarrier test cases have been developed as shown below: Notes: Max port power (60watts is shared between Bands n71/n85)

Multi-Carrier Test Case 1): 3GPP Band n71 Multicarrier In the Band n71 _Three NR5 carriers using two carriers (with minimum spacing between carrier frequencies) at the lower band edge (619.5 & 624.5MHz) and a third carrier with maximum spacing between the other two carrier frequencies (649.5MHz) at the upper band edge. The NR 5MHz channel bandwidth was selected to maximize carrier power spectral density. The carriers are operated at maximum power for a total port power of 60 watts (~20W/Band n71 carriers). 3GPP Band n85 carrier is not enable.

Multi-Carrier Test Case 2): 3GPP Band n71 Multicarrier: In the Band n71 _ One NR 20MHz carriers and one NR 15MHz carriers (with minimum spacing between carrier frequencies) at the lower band edge (627.0 & 644.5MHz). The largest channel bandwidth is selected to maximize carrier OBW. The carriers are operated at maximum power for a total port power of 60 watts (~30W/Band n71 carriers). 3GPP Band n85 carrier is not enable.

Multi-Carrier Test Case 3): 3GPP Band n85 Multicarrier: In the Band n85 _Two NR5 carriers using one carrier at the lower band edge (730.5MHz) and a second carrier at maximum spacing at the upper band edge (743.5MHz). The NR5 channel bandwidth was selected to maximize carrier power spectral density. The carriers are operated at maximum power for a total port power of 60 watts (~30W/Band n85 carrier). 3GPP Band n71 carrier is not enable.

Multi-Carrier Test Case 4): 3GPP Band n71 and Band n85 Multicarrier Multiband: Three NR 5MHz carriers using two carriers (with minimum spacing between carrier frequencies) at the Band n71 lower band edge (619.5 & 624.5MHz) and a third carrier with maximum spacing between the other two carrier frequencies (743.5MHz) at the Band n85 upper band edge. The smallest channel bandwidth was selected to maximize carrier power spectral density. The carriers were operated at maximum power (~20/ Band n71 carrier and ~20W Band n85 carrier) for a total port power of 60 watts.

Per section 27.53(g) and RSS-130 4.7, the power of any emission outside of the authorized operating frequency range cannot exceed - 13 dBm. The limit is adjusted to -19 dBm [-13 dBm -10 log (4)] per FCC KDB 662911D01 v02r01 because the BTS may operate as a 4 port MIMO transmitter.

Per section 27.53(g) and RSS 130 4.7 requires a \geq 100 kHz measurement bandwidth for emissions 100 kHz outside of the RRH operating frequency range. FCC 27.53(g) and RSS 130 4.7 requires a \geq 30 kHz measurement bandwidth for emissions between 100 kHz outside of the RRH operating frequency range and band edge of the operating frequency range

A narrower resolution bandwidth of at least 30 kHz is permitted and used to improve measurement accuracy in the transition regions provided that the measured power is integrated over the full required measurement bandwidth (i.e.: 100kHz).

RF conducted emissions testing was performed only on one port. The testing was performed on the same version of hardware (AHLOA) as the original certification test. The AHLOA 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 paragraph 5.7.2i.

Report No. NOKI0058.0



						TbtTx 2022.05.02.0	XMit 2023.0
	AHLOA (FCC/ISED C2PC	E)			Work Order:		
Serial Number: K						05/03/2023	
	Nokia Solutions and Net				Temperature:		
	John Rattanavong, Mitcl	hel Hill			Humidity:		
Project: N					Barometric Pres.:		
	Brandon Hobbs		Power: 54 VDC		Job Site:	TX07	
ST SPECIFICATIO	INS		Test Method				
CC 27:2023			ANSI C63.26:2015				
SS-130 Issue 2:2019	9		ANSI C63.26:2015				
OMMENTS							
I losses in the mea	surement path were ac	counted for: attenuators, cab	les, DC block and filter when in use. Bands n85/n75 carriers	are enabled at maximun	n power (60 watts/p	ort).	
VIATIONS FROM	TEST STANDARD						
one		T					
onfiguration #	NOKI0058-2	Signature	7-1				
•			Frequency Range	Measured Freq (MHz)	Max Value (dBm)	Limit < (dBm)	Result
rt 1, 5G NR Multi-Ca	arrier Operation						
C	QPSK Modulation						
	Test Case 1,						
		Low Channel 619.5 MHz	1	617.0	-29.3	-19	Pass
		Low Channel 619.5 MHz	2	616.9	-24.7	-19	Pass
		High Channel 649.5 MHz	1	652.0	-29.4	-19	Pass
		High Channel 649.5 MHz	2	652.1	-25.8	-19	Pass
	Test Case 2,						
		Low Channel 627 MHz	1	617.0	-32.8	-19	Pass
		Low Channel 627 MHz	2	616.9	-27.7	-19	Pass
	Test Case 2,	, n71 NR15					
		High Channel 644.5 MHz	1	652.0	-33.0	-19	Pass
		High Channel 644.5 MHz	2	652.1	-28.0	-19	Pass
	Test Case 3,						
		Low Channel 730.5 MHz	1	728.0	-29.1	-19	Pass
		Low Channel 730.5 MHz	2	727.9	-24.5	-19	Pass
		High Channel 743.5 MHz	1	746.0	-26.7	-19	Pass
		High Channel 743.5 MHz	2	746.1	-22.5	-19	Pass
	Test Case 4,						
		Low Channel 619.5 MHz	1	617.0	-28.8	-19	Pass
		Low Channel 619.5 MHz	2	616.9	-24.4	-19	Pass
	Test Case 4,	, n85 NR5					
	Test Case 4,	, n85 NR5 High Channel 743.5 MHz	1	746.0	-28.5	-19	Pass

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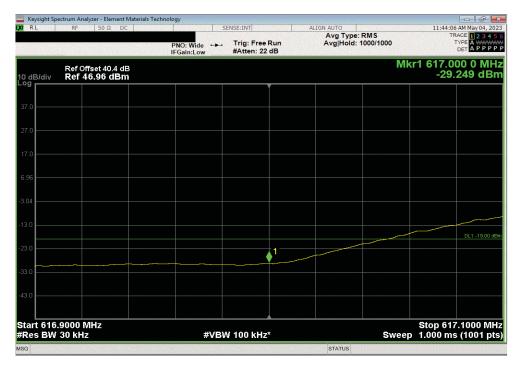


Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 1, n71 NR5, Low Channel 619.5 MHz

Frequency Measured Max Value Limit

Range Freq (MHz) (dBm) < (dBm) Result

1 617 -29.25 -19 Pass



	Port 1, 5G	NR Multi-Carrier	Operation, QPSK	Modulation, Tes	t Case 1, n71 NF	R5, Low Channel	619.5 MHz
		Frequency		Measured	Max Value	Limit	
_		Range		Freq (MHz)	(dBm)	< (dBm)	Result
l		2		616.9	-24.71	-19	Pass



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Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 1, n71 NR5, High Channel 649.5 MHz

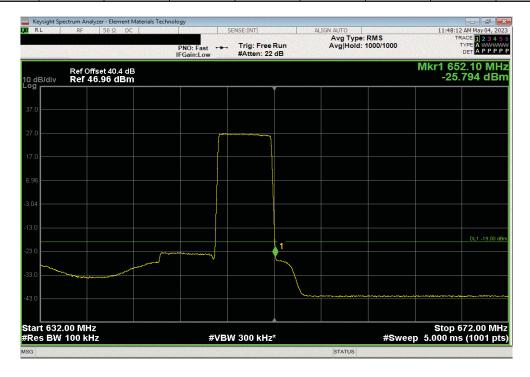
Frequency Measured Max Value Limit

Range Freq (MHz) (dBm) < (dBm) Result

1 652 -29.39 -19 Pass



Port 1, 5G	NR Multi-Carrier	Operation, QPSk	Modulation, Tes	st Case 1, n71 NR	85, High Channel	649.5 MHz
	Frequency		Measured	Max Value	Limit	
	Range		Freq (MHz)	(dBm)	< (dBm)	Result
	2		652.1	-25.79	-19	Pass



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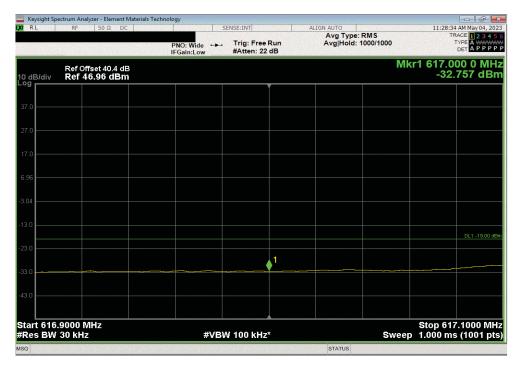


Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 2, n71 NR20, Low Channel 627 MHz

Frequency Measured Max Value Limit

Range Freq (MHz) (dBm) < (dBm) Result

1 617 -32.76 -19 Pass



	Port 1, 5G	NR Multi-Carrier	Operation, QPSI	K Modulation, Te	st Case 2, n71 NF	R20, Low Channe	el 627 MHz
		Frequency		Measured	Max Value	Limit	
_		Range		Freq (MHz)	(dBm)	< (dBm)	Result
1 [2		616.9	-27.7	-19	Pass



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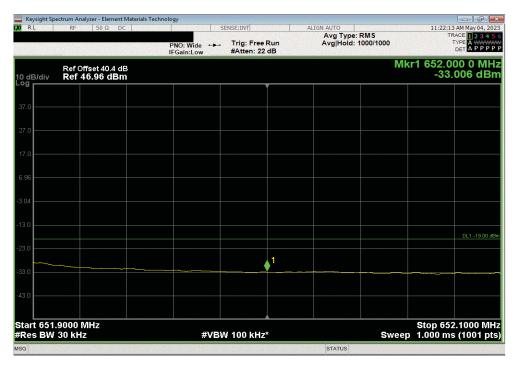


Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 2, n71 NR15, High Channel 644.5 MHz

Frequency Measured Max Value Limit

Range Freq (MHz) (dBm) < (dBm) Result

1 652 -33.01 -19 Pass



	Port 1, 5G	NR Multi-Carrier (Operation, QPSK	Modulation, Test	Case 2, n71 NR	15, High Channel	644.5 MHz
		Frequency		Measured	Max Value	Limit	
_		Range		Freq (MHz)	(dBm)	< (dBm)	Result
i		2		652.1	-28.04	-19	Pass



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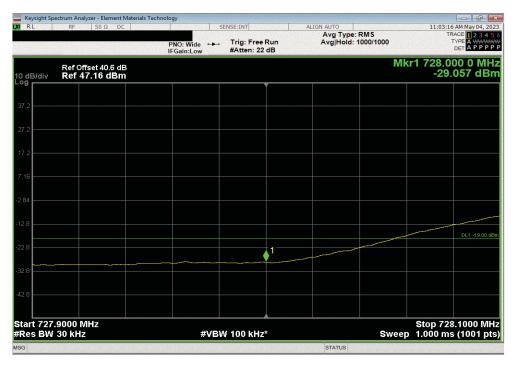


Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 3, n85 NR5, Low Channel 730.5 MHz

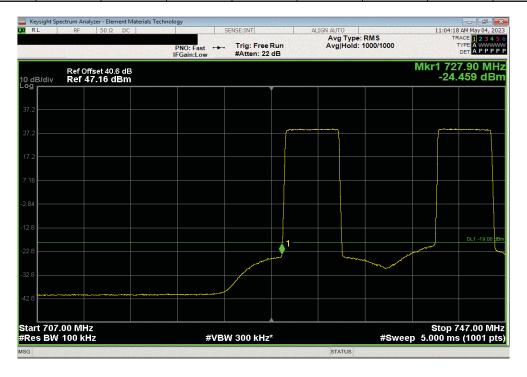
Frequency Measured Max Value Limit

Range Freq (MHz) (dBm) < (dBm) Result

1 728 -29.06 -19 Pass



Port 1, 5G NR Multi-Carrier Operation, QPSK			Modulation, Tes	st Case 3, n85 NF	R5, Low Channel	730.5 MHz
	Frequency		Measured	Max Value	Limit	
	Range		Freq (MHz)	(dBm)	< (dBm)	Result
	2		727.9	-24.46	-19	Pass



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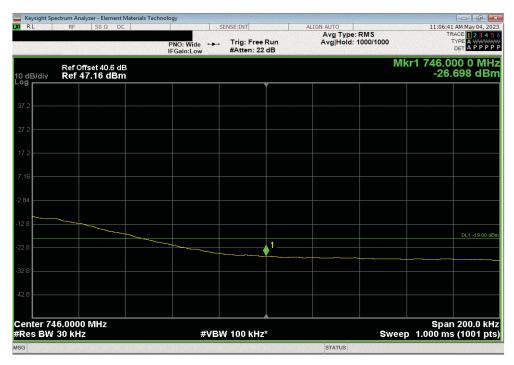


Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 3, n85 NR5, High Channel 743.5 MHz

Frequency Measured Max Value Limit

Range Freq (MHz) (dBm) < (dBm) Result

1 746 -26.7 -19 Pass



Port 1, 5G	NR Multi-Carrier	Operation, QPSk	Modulation, Tes	t Case 3, n85 NR	5, High Channel	743.5 MHz
	Frequency		Measured	Max Value	Limit	
	Range		Freq (MHz)	(dBm)	< (dBm)	Result
	2		746.1	-22.48	-19	Pass



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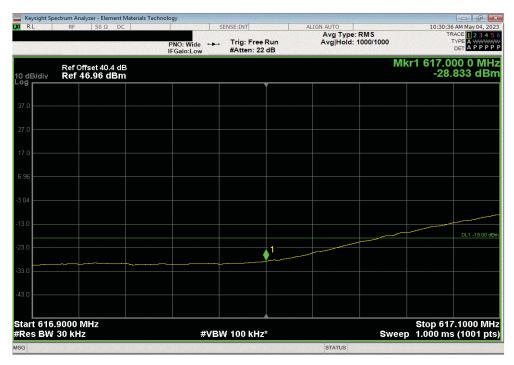


Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 4, n71 NR5, Low Channel 619.5 MHz

Frequency Measured Max Value Limit

Range Freq (MHz) (dBm) < (dBm) Result

1 617 -28.83 -19 Pass



Port 1, 5G	NR Multi-Carrier	Operation, QPSk	Modulation, Tes	st Case 4, n71 NF	R5, Low Channel	619.5 MHz
	Frequency		Measured	Max Value	Limit	
	Range		Freq (MHz)	(dBm)	< (dBm)	Result
	2		616.9	-24.43	-19	Pass



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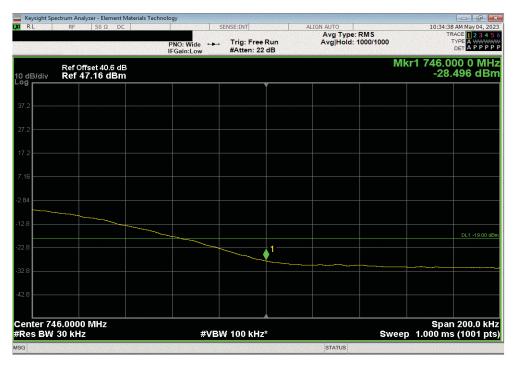


Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 4, n85 NR5, High Channel 743.5 MHz

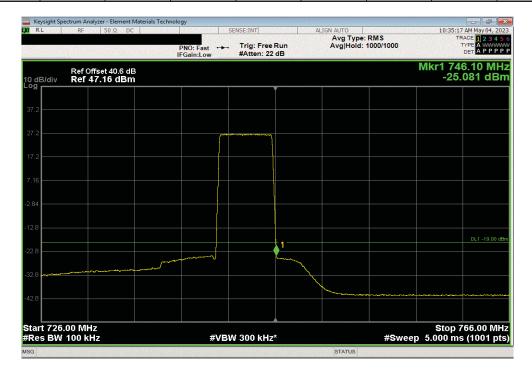
Frequency Measured Max Value Limit

Range Freq (MHz) (dBm) < (dBm) Result

1 746 -28.5 -19 Pass



	Port 1, 5G	NR Multi-Carrier	Operation, QPSk	Modulation, Tes	st Case 4, n85 NR	85, High Channel	743.5 MHz
		Frequency		Measured	Max Value	Limit	
		Range		Freq (MHz)	(dBm)	< (dBm)	Result
1		2		746.1	-25.08	-19	Pass



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XMit 2023.02.14.0

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
Block - DC	Fairview Microwave	SD3379	AMM	2022-09-09	2023-09-09
Generator - Signal	Agilent	N5173B	TIW	2020-07-17	2023-07-17
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFQ	2023-02-09	2024-02-09

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spurious RF conducted emissions at the edges of the authorized bands were measured with the EUT set to low and high transmit frequencies in the available band. The channels closest to the band edges were selected. The EUT was transmitting at the data rate(s) listed in the datasheet.

The spectrum was scanned below the lower band edge and above the higher band edge.

All limits were adjusted by a factor of [-10*log(4)] dB to account for the device operation as a 4 port MIMO transmitter, as per FCC KDB 622911.

Per section 27.53(g) and RSS-130 4.7, the power of any emission outside of the authorized operating frequency range cannot exceed -13 dBm. The limit is adjusted to -19 dBm [-13 dBm -10 log (4)] per FCC KDB 662911D01 v02r01 because the BTS may operate as a 4 port MIMO transmitter.

Per section 27.53(g) and RSS 130 4.7 requires a \geq 100 kHz measurement bandwidth for emissions 100 kHz outside of the RRH operating frequency range. RSS 130 4.7 requires a \geq 30 kHz measurement bandwidth for emissions between 100 kHz outside of the RRH operating frequency range and band edge of the operating frequency range

A narrower resolution bandwidth of at least 30 kHz is permitted and used to improve measurement accuracy in the transition regions provided that the measured power is integrated over the full required measurement bandwidth (i.e.: 100kHz).

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

Report No. NOKI0058.0



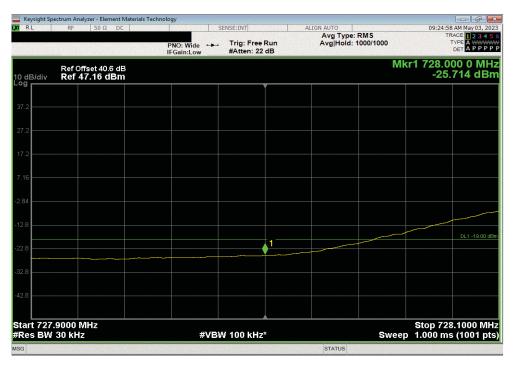
EUT.						TbtTx 2022.05.02.0	XMit 2023.		
	AHLOA (FCC/ISED C2PC)				Work Order:				
Serial Number:					Date:	05/02/2023			
Customer:	Nokia Solutions and Netwo	orks			Temperature:	22.5°C			
	John Rattanavong, Mitche	l Hill			Humidity:				
Project:	None				Barometric Pres.:	1012 mbar			
	Brandon Hobbs		Power: 54 VDC		Job Site:	TX07			
EST SPECIFICATI	ONS		Test Method						
CC 27:2023			ANSI C63.26:2015						
SS-130 Issue 2:20	19		ANSI C63.26:2015						
OMMENTS									
losses in the me	easurement path were acco	ounted for: attenuators, cables, DC block an	d filter when in use. Band n85 carriers are	enabled at maximum pow	er (60 watts/carrie	r).			
EVIATIONS FROM	I TEST STANDARD								
one									
			4						
onfiguration #	NOKI0058-2	Signature	ZJ-A						
			Frequency	Measured	Max Value	Limit			
			Range	Freq (MHz)	(dBm)	< (dBm)	Result		
and n85 728 MHz -	746 MHz, 5G NR								
	Port 1								
	POIL								
	5 MHz Bandwi	dth							
	5 MHz Bandwi	56-QAM Modulation							
	5 MHz Bandwi	56-QAM Modulation Low Channel 730.5 MHz	1	728.0	-25.7	-19	Pass		
	5 MHz Bandwi	56-QAM Modulation Low Channel 730.5 MHz Low Channel 730.5 MHz	1 2	727.9	-21.6	-19 -19	Pass Pass		
	5 MHz Bandwi	56-QAM Modulation Low Channel 730.5 MHz Low Channel 730.5 MHz High Channel 743.5 MHz	2 1	727.9 746.0	-21.6 -25.8	-19 -19	Pass Pass		
	5 MHz Bandwi 2	56-QAM Modulation Low Channel 730.5 MHz Low Channel 730.5 MHz High Channel 743.5 MHz High Channel 743.5 MHz	•	727.9	-21.6	-19	Pass		
	5 MHz Bandwi 2 10 MHz Bandw	56-QAM Modulation Low Channel 730.5 MHz Low Channel 730.5 MHz High Channel 743.5 MHz High Channel 743.5 MHz vidth	2 1	727.9 746.0	-21.6 -25.8	-19 -19	Pass Pass		
	5 MHz Bandwi 2 10 MHz Bandw	56-QAM Modulation Low Channel 730.5 MHz Low Channel 730.5 MHz High Channel 743.5 MHz High Channel 743.5 MHz vidth 56-QAM Modulation	2 1 2	727.9 746.0 746.1	-21.6 -25.8 -21.8	-19 -19 -19	Pass Pass Pass		
	5 MHz Bandwi 2 10 MHz Bandw	Low Channel 730.5 MHz Low Channel 730.5 MHz Low Channel 743.5 MHz High Channel 743.5 MHz High Channel 743.5 MHz vidth Low Channel 743.5 MHz Low Channel 733 MHz	2 1 2	727.9 746.0 746.1 728.0	-21.6 -25.8 -21.8	-19 -19 -19	Pass Pass Pass		
	5 MHz Bandwi 2 10 MHz Bandw	56-QAM Modulation Low Channel 730.5 MHz Low Channel 730.5 MHz High Channel 743.5 MHz High Channel 743.5 MHz vidth 56-QAM Modulation Low Channel 733 MHz Low Channel 733 MHz	2 1 2	727.9 746.0 746.1 728.0 727.9	-21.6 -25.8 -21.8 -28.7 -24.2	-19 -19 -19 -19	Pass Pass Pass Pass Pass		
	5 MHz Bandwi 2 10 MHz Bandw	56-QAM Modulation Low Channel 730.5 MHz Low Channel 730.5 MHz High Channel 743.5 MHz High Channel 743.5 MHz width 56-QAM Modulation Low Channel 733 MHz Ligh Channel 741 MHz	2 1 2 1 2	727.9 746.0 746.1 728.0 727.9 746.0	-21.6 -25.8 -21.8 -28.7 -24.2 -28.1	-19 -19 -19 -19 -19 -19	Pass Pass Pass Pass Pass Pass		
	5 MHz Bandwi 2 10 MHz Bandw 2	Low Channel 730.5 MHz Low Channel 730.5 MHz High Channel 743.5 MHz High Channel 743.5 MHz High Channel 743.5 MHz vidth S6-QAM Modulation Low Channel 733 MHz Low Channel 733 MHz High Channel 741 MHz High Channel 741 MHz	2 1 2	727.9 746.0 746.1 728.0 727.9	-21.6 -25.8 -21.8 -28.7 -24.2	-19 -19 -19 -19	Pass Pass Pass Pass Pass		
	5 MHz Bandwi 2 10 MHz Bandw 2 15 MHz Bandw	56-QAM Modulation Low Channel 730.5 MHz Low Channel 730.5 MHz High Channel 743.5 MHz High Channel 743.5 MHz width 56-QAM Modulation Low Channel 733 MHz High Channel 741 MHz High Channel 741 MHz vidth 56-QAM Modulation	2 1 2 1 2	727.9 746.0 746.1 728.0 727.9 746.0 746.1	-21.6 -25.8 -21.8 -28.7 -24.2 -28.1 -23.2	-19 -19 -19 -19 -19 -19 -19	Pass Pass Pass Pass Pass Pass Pass		
	5 MHz Bandwi 2 10 MHz Bandw 2 15 MHz Bandw	Low Channel 730.5 MHz Low Channel 730.5 MHz Low Channel 730.5 MHz High Channel 743.5 MHz High Channel 743.5 MHz vidth S6-QAM Modulation Low Channel 733 MHz Low Channel 733 MHz High Channel 741 MHz High Channel 741 MHz width Low Channel 741 MHz Low Mannel 741 MHz Low Channel 741 MHz	2 1 2 1 2 1 2	727.9 746.0 746.1 728.0 727.9 746.0 746.1	-21.6 -25.8 -21.8 -28.7 -24.2 -28.1 -23.2	-19 -19 -19 -19 -19 -19 -19	Pass Pass Pass Pass Pass Pass Pass		
	5 MHz Bandwi 2 10 MHz Bandw 2 15 MHz Bandw	56-QAM Modulation Low Channel 730.5 MHz Low Channel 730.5 MHz High Channel 743.5 MHz High Channel 743.5 MHz vidth 56-QAM Modulation Low Channel 733 MHz High Channel 733 MHz High Channel 741 MHz High Channel 741 MHz vidth 56-QAM Modulation Low Channel 735.5 MHz Low Channel 735.5 MHz	2 1 2 1 2	727.9 746.0 746.1 728.0 727.9 746.0 746.1	-21.6 -25.8 -21.8 -28.7 -24.2 -28.1 -23.2 -30.2 -25.4	-19 -19 -19 -19 -19 -19 -19 -19	Pass Pass Pass Pass Pass Pass Pass Pass		
	5 MHz Bandwi 2 10 MHz Bandw 2 15 MHz Bandw	Low Channel 730.5 MHz Low Channel 730.5 MHz Low Channel 730.5 MHz High Channel 743.5 MHz High Channel 743.5 MHz vidth S6-QAM Modulation Low Channel 733 MHz Low Channel 733 MHz High Channel 741 MHz High Channel 741 MHz width Low Channel 741 MHz Low Mannel 741 MHz Low Channel 741 MHz	2 1 2 1 2 1 2	727.9 746.0 746.1 728.0 727.9 746.0 746.1	-21.6 -25.8 -21.8 -28.7 -24.2 -28.1 -23.2	-19 -19 -19 -19 -19 -19 -19	Pass Pass Pass Pass Pass Pass Pass Pass		

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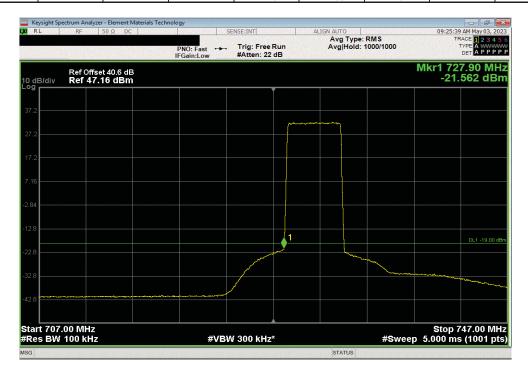


Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Low Channel 730.5 MHz

Frequency
Measured
Max Value
Limit
Range
Freq (MHz) (dBm) < (dBm) Result
1 728 -25.71 -19 Pass



	Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Low Channel 730.5 MHz							
		Frequency		Measured	Max Value	Limit		
_		Range		Freq (MHz)	(dBm)	< (dBm)	Result	
i [2		727.9	-21.56	-19	Pass	



Report No. NOKI0058.0 87/111

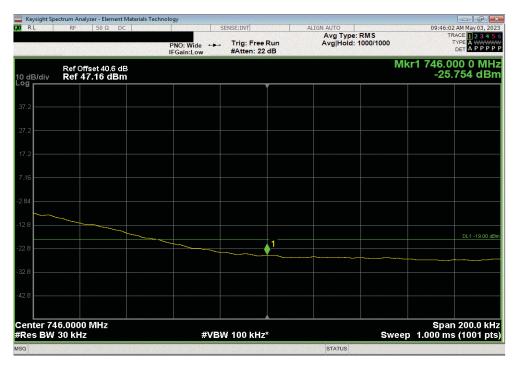


Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 5 MHz Bandwidth, 256-QAM Modulation, High Channel 743.5 MHz

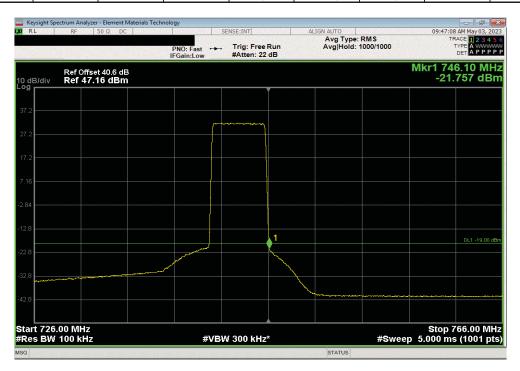
Frequency Measured Max Value Limit

Range Freq (MHz) (dBm) < (dBm) Result

1 746 -25.75 -19 Pass



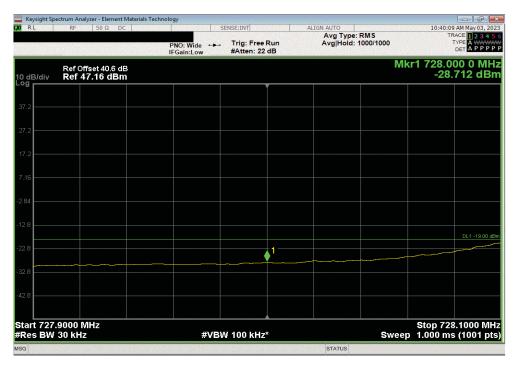
	Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 5 MHz Bandwidth, 256-QAM Modulation, High Channel 743.5 MHz							
		Frequency		Measured	Max Value	Limit		
_		Range		Freq (MHz)	(dBm)	< (dBm)	Result	
		2		746.1	-21.76	-19	Pass	



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| Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Low Channel 733 MHz
Frequency	Measured	Max Value	Limit	
Range	Freq (MHz)	(dBm)	< (dBm)	Result
1	728	-28.71	-19	Pass



	Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Low Channel 733 MHz							
		Frequency		Measured	Max Value	Limit		
_		Range		Freq (MHz)	(dBm)	< (dBm)	Result	
i [2		727.9	-24.16	-19	Pass	



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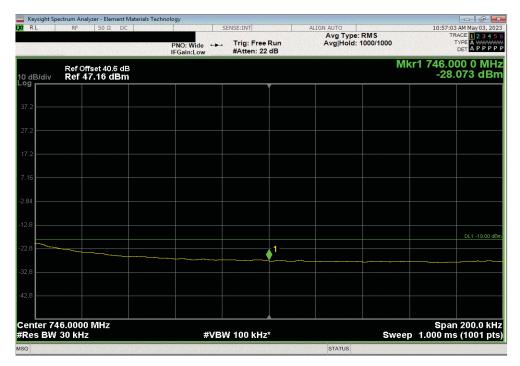


Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 10 MHz Bandwidth, 256-QAM Modulation, High Channel 741 MHz

Frequency Measured Max Value Limit

Range Freq (MHz) (dBm) < (dBm) Result

1 746 -28.07 -19 Pass



Band n85	Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 10 MHz Bandwidth, 256-QAM Modulation, High Channel 741 MHz							
	Frequency		Measured	Max Value	Limit			
	Range		Freq (MHz)	(dBm)	< (dBm)	Result		
	2		746.1	-23.2	-19	Pass		

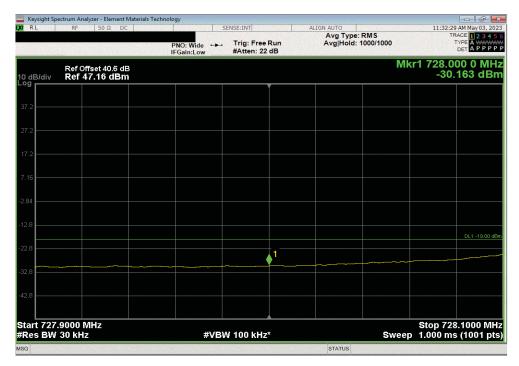


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Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Low Channel 735.5 MHz

Frequency Measured Max Value Limit
Range Freq (MHz) (dBm) < (dBm) Result
1 728 -30.16 -19 Pass



	Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Low Channel 735.5 MHz							
		Frequency		Measured	Max Value	Limit		
_		Range		Freq (MHz)	(dBm)	< (dBm)	Result	
1 [2		727.9	-25.41	-19	Pass	



Report No. NOKI0058.0 91/111

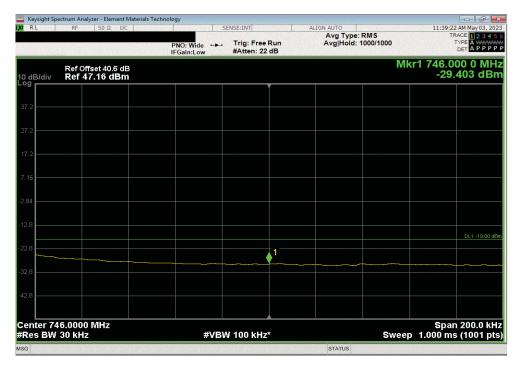


Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 15 MHz Bandwidth, 256-QAM Modulation, High Channel 738.5 MHz

Frequency Measured Max Value Limit

Range Freq (MHz) (dBm) < (dBm) Result

1 746 -29.4 -19 Pass



	Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 15 MHz Bandwidth, 256-QAM Modulation, High Channel 738.5 MHz							
		Frequency		Measured	Max Value	Limit		
_		Range		Freq (MHz)	(dBm)	< (dBm)	Result	
. [2		746.1	-24.5	-19	Pass	



Report No. NOKI0058.0 92/111



XMit 2023.02.14.0

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
Block - DC	Fairview Microwave	SD3379	AMM	2022-09-09	2023-09-09
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFQ	2023-02-09	2024-02-09
Generator - Signal	Agilent	N5173B	TIW	2020-07-17	2023-07-17

TEST DESCRIPTION

The antenna port spurious emissions were measured at the RF output terminal of the EUT through 3 different attenuation configurations which continues through to the RF input of the spectrum analyzer. Analyzer plots utilizing a resolution bandwidth called out by the client's test plan were made for each modulation type from 9 KHz to 8 GHz. The peak conducted power of spurious emissions, up to the 10th harmonic of the transmit frequency, were investigated to ensure they were less than the limits also called out by the client's test plan shown below

The measurement methods are detailed in KDB971168 D01v03 section 6 and ANSI C63.26-2015. Per FCC 2.1057(a)(1) RSS Gen 6.13, the upper level of measurement is the 10th harmonic of the highest fundamental frequency.

Per section 27.53(g) and RSS 130 4.7, the power of any emission outside of the authorized operating frequency range cannot exceed - 13 dBm. The limit is adjusted to -19 dBm [-13 dBm -10 log (4)] per FCC KDB 662911D01 v02r01 because the BTS may operate as a 4 port MIMO transmitter.

Multicarrier test cases have been developed as shown below: Notes: Max port power (60watts is shared between Bands n71/n85)

Multi-Carrier Test Case 1): 3GPP Band n71 Multicarrier In the Band n71 _Three NR5 carriers using two carriers (with minimum spacing between carrier frequencies) at the lower band edge (619.5 & 624.5MHz) and a third carrier with maximum spacing between the other two carrier frequencies (649.5MHz) at the upper band edge. The NR 5MHz channel bandwidth was selected to maximize carrier power spectral density. The carriers are operated at maximum power for a total port power of 60 watts (~20W/Band n71 carriers). 3GPP Band n85 carrier is not enable.

Multi-Carrier Test Case 2): 3GPP Band n71 Multicarrier: In the Band n71 One NR 20MHz carriers and one NR 15MHz carriers (with minimum spacing between carrier frequencies) at the lower band edge (627.0 & 644.5MHz). The largest channel bandwidth is selected to maximize carrier OBW. The carriers are operated at maximum power for a total port power of 60 watts (~30W/Band n71 carriers). 3GPP Band n85 carrier is not enable.

Multi-Carrier Test Case 3): 3GPP Band n85 Multicarrier: In the Band n85 _Two NR5 carriers using one carrier at the lower band edge (730.5MHz) and a second carrier at maximum spacing at the upper band edge (743.5MHz). The NR5 channel bandwidth was selected to maximize carrier power spectral density. The carriers are operated at maximum power for a total port power of 60 watts (~30W/Band n85 carrier). 3GPP Band n71 carrier is not enable.

Multi-Carrier Test Case 4): 3GPP Band n71 and Band n85 Multicarrier Multiband: Three NR 5MHz carriers using two carriers (with minimum spacing between carrier frequencies) at the Band n71 lower band edge (619.5 & 624.5MHz) and a third carrier with maximum spacing between the other two carrier frequencies (743.5MHz) at the Band n85 upper band edge. The smallest channel bandwidth was selected to maximize carrier power spectral density. The carriers were operated at maximum power (~20/ Band n71 carrier and ~20W Band n85 carrier) for a total port power of 60 watts.

The limit for the 9kHz to 150kHz frequency range was adjusted to –39dBm to correct for a spectrum analyzer RBW of 1kHz versus required RBW of 100kHz [i.e.: -39dBm = -19dBm -10log(100kHz/1kHz)]. The limit for the 150kHz to 20MHz frequency range was adjusted to –29dBm to correct for a spectrum analyzer RBW of 10kHz versus required RBW of 100kHz [i.e.: -29dBm = -19dBm - 10log(100kHz/10kHz)]. The required limit of -19dBm with a RBW of > 100kHz was used for all other frequency ranges.

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

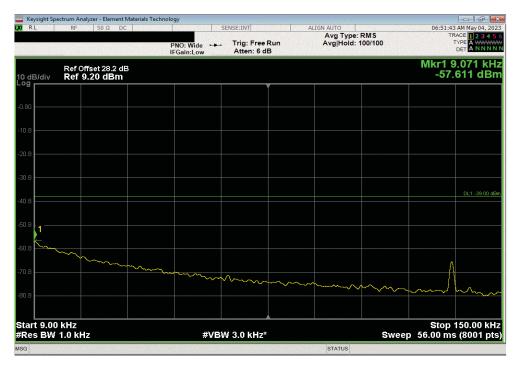
Report No. NOKI0058.0



					TbtTx 2022.05.02.0	XMit 2023			
	AHLOA (FCC/ISED C2PC)			Work Order:					
Serial Number:	K9180540675				05/03/2023				
Customer:	Nokia Solutions and Networks			Temperature:	22.2°C				
Attendees:	John Rattanavong, Mitchel Hill			Humidity:	41.1%				
Project:	None		Barometric Pres.: 1014 mbar						
Tested by:	Brandon Hobbs	Power: 54 VDC	Job Site: TX07						
ST SPECIFICATI	IONS	Test Method							
C 27:2023		ANSI C63.26:2015							
S-130 Issue 2:20	119	ANSI C63.26:2015							
DMMENTS		·							
losses in the me	easurement path were accounted for: attenuators, cab	oles, DC block and filter when in use. Bands n85/n71 carriers	are enabled at maximun	power (60 watts/	port). The following	is the outpu			
	nts at the radio's single output port.				. ,	,			
	M TEST STANDARD								
ne									
	NOKI0058-1 NOKI0058-	7-1							
onfiguration #	2 NOKI0058-3	The total							
	Signature Signature	, , , , , , , , , , , , , , , , , , ,							
		Frequency	Measured	Max Value	Limit	D14			
+ 4 FO ND M.:IE	O-miles On souther	Range	Freq (MHz)	(dBm)	< (dBm)	Result			
	Carrier Operation QPSK Modulation								
	QPSK Modulation								
	T4 O 4 040 F MUL 74 NDF 4 004	5 MILE 74 NIDE 040 5 MILE 74 NIDE OF							
		5 MHz n71 NR5, 649.5 MHz n71 NR5 Channels	0.04	F7.6	20	Deen			
	Middle	9 kHz - 150 kHz	0.01	-57.6	-39	Pass			
	Middle Middle	9 kHz - 150 kHz 150 kHz - 20 MHz	0.15	-57.9	-29	Pass			
	Middle Middle Middle	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz	0.15 729.77	-57.9 -26.2	-29 -19	Pass Pass			
	Middle Middle Middle Middle Middle	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz	0.15	-57.9	-29	Pass			
	Middle Middle Middle Middle Test Case 2, 627 MHz n71 NR20 and 644.	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n71 NR15 Channels	0.15 729.77 4014.29	-57.9 -26.2 -41.5	-29 -19 -19	Pass Pass Pass			
	Middle Middle Middle Middle Test Case 2, 627 MHz n71 NR20 and 644.5 Middle	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n71 NR15 Channels 9 kHz - 150 kHz	0.15 729.77 4014.29 0.13	-57.9 -26.2 -41.5	-29 -19 -19	Pass Pass Pass			
	Middle Middle Middle Middle Middle Middle Test Case 2, 627 MHz n71 NR20 and 644.5 Middle Middle	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n71 NR15 Channels 9 kHz - 150 kHz 150 kHz - 20 MHz	0.15 729.77 4014.29 0.13 0.27	-57.9 -26.2 -41.5 -56.9 -55.7	-29 -19 -19 -39 -29	Pass Pass Pass Pass Pass			
	Middle Middle Middle Middle Middle Middle Test Case 2, 627 MHz n71 NR20 and 644.5 Middle Middle Middle Middle	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n71 NR15 Channels 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz	0.15 729.77 4014.29 0.13 0.27 730.05	-57.9 -26.2 -41.5 -56.9 -55.7 -19.3	-29 -19 -19 -39 -29 -19	Pass Pass Pass Pass Pass Pass			
	Middle Middle Middle Middle Middle Test Case 2, 627 MHz n71 NR20 and 644.5 Middle Middle Middle Middle Middle Middle	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n71 NR15 Channels 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz	0.15 729.77 4014.29 0.13 0.27	-57.9 -26.2 -41.5 -56.9 -55.7	-29 -19 -19 -39 -29	Pass Pass Pass Pass Pass			
	Middle	9 kHz - 150 kHz 150 kHz -20 MHz 20 MHz -1.2 GHz 1.2 GHz - 8 GHz 5 MHz n71 NR15 Channels 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz	0.15 729.77 4014.29 0.13 0.27 730.05 4015.65	-57.9 -26.2 -41.5 -56.9 -55.7 -19.3 -41.4	-29 -19 -19 -39 -29 -19	Pass Pass Pass Pass Pass Pass Pass			
	Middle	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 1.2 GHz - 8 GHz 5 MHz n71 NR15 Channels 9 kHz - 150 kHz 20 MHz - 12 GHz 1.2 GHz - 8 GHz 5 MHz n85 NR5 Channels 9 kHz - 150 kHz 9 kHz - 150 kHz	0.15 729.77 4014.29 0.13 0.27 730.05 4015.65	-57.9 -26.2 -41.5 -56.9 -55.7 -19.3 -41.4	-29 -19 -19 -39 -29 -19 -19	Pass Pass Pass Pass Pass Pass			
	Middle Middle Middle Middle Middle Test Case 2, 627 MHz n71 NR20 and 644.5 Middle	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n71 NR15 Channels 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n85 NR5 Channels 9 kHz - 150 kHz 150 kHz - 20 MHz	0.15 729.77 4014.29 0.13 0.27 730.05 4015.65	-57.9 -26.2 -41.5 -56.9 -55.7 -19.3 -41.4 -58.1 -58.9	-29 -19 -19 -39 -29 -19 -19	Pass Pass Pass Pass Pass Pass Pass Pass			
	Middle Middle Middle Middle Middle Middle Test Case 2, 627 MHz n71 NR20 and 644.5 Middle	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n71 NR15 Channels 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n85 NR5 Channels 9 kHz - 150 kHz 1.2 GHz 1.5 MHz n85 NR5 Channels 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz	0.15 729.77 4014.29 0.13 0.27 730.05 4015.65 0.01 0.15 900.87	-57.9 -26.2 -41.5 -56.9 -55.7 -19.3 -41.4 -58.1 -58.9 -31.4	-29 -19 -19 -39 -29 -19 -19 -39 -29 -19	Pass Pass Pass Pass Pass Pass Pass Pass			
	Middle Middle Middle Middle Middle Middle Test Case 2, 627 MHz n71 NR20 and 644.5 Middle	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n71 NR15 Channels 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz	0.15 729.77 4014.29 0.13 0.27 730.05 4015.65	-57.9 -26.2 -41.5 -56.9 -55.7 -19.3 -41.4 -58.1 -58.9	-29 -19 -19 -39 -29 -19 -19	Pass Pass Pass Pass Pass Pass Pass Pass			
	Middle Middle Middle Middle Middle Test Case 2, 627 MHz n71 NR20 and 644.5 Middle	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n71 NR15 Channels 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1,2 GHz - 8 GHz 5 MHz n85 NR5 Channels 9 kHz - 150 kHz 1,2 GHz - 8 GHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 3 MHz n85 NR5 Channels	0.15 729.77 4014.29 0.13 0.27 730.05 4015.65 0.01 0.15 900.87 4014.52	-57.9 -26.2 -41.5 -56.9 -55.7 -19.3 -41.4 -58.1 -58.9 -31.4 -41.2	-29 -19 -19 -39 -29 -19 -19 -39 -29 -19 -19	Pass Pass Pass Pass Pass Pass Pass Pass			
	Middle Middle Middle Middle Middle Middle Middle Test Case 2, 627 MHz n71 NR20 and 644.5 Middle	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n71 NR15 Channels 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n85 NR5 Channels 9 kHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n85 NR5 Channels 9 kHz - 150 kHz 20 MHz 1.2 GHz - 8 GHz 5 MHz n85 NR5 Channels 9 kHz - 150 kHz 20 MHz 1.50 kHz 150 kHz	0.15 729.77 4014.29 0.13 0.27 730.05 4015.65 0.01 0.15 900.87 4014.52	-57.9 -26.2 -41.5 -56.9 -55.7 -19.3 -41.4 -58.1 -58.9 -31.4 -41.2	-29 -19 -19 -39 -29 -19 -19 -29 -19 -19 -39	Pass Pass Pass Pass Pass Pass Pass Pass			
	Middle Middle Middle Middle Middle Test Case 2, 627 MHz n71 NR20 and 644.5 Middle	9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1.2 GHz - 8 GHz 5 MHz n71 NR15 Channels 9 kHz - 150 kHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 1,2 GHz - 8 GHz 5 MHz n85 NR5 Channels 9 kHz - 150 kHz 1,2 GHz - 8 GHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 150 kHz - 20 MHz 20 MHz - 1.2 GHz 3 MHz n85 NR5 Channels	0.15 729.77 4014.29 0.13 0.27 730.05 4015.65 0.01 0.15 900.87 4014.52	-57.9 -26.2 -41.5 -56.9 -55.7 -19.3 -41.4 -58.1 -58.9 -31.4 -41.2	-29 -19 -19 -39 -29 -19 -19 -39 -29 -19 -19	Pass Pass Pass Pass Pass Pass Pass Pass			

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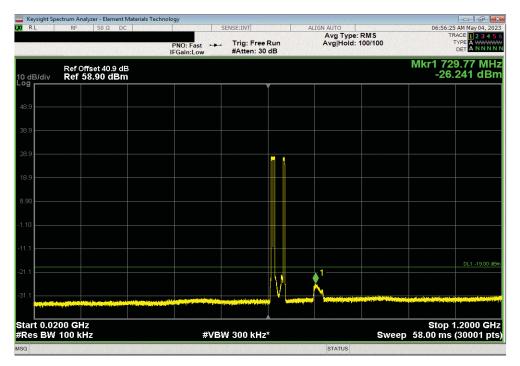


Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 1,	619.5 MHz n7	1 NR5 and 624.5 N	1Hz n71 NR5, 64	19.5 MHz n71 NR	5 Channels, Middle
Frequency	Measured	Max Value	Limit		
Range	Freq (MHz)	(dBm)	< (dBm)	Result	
150 kHz - 20 MHz	0.15	-57.86	-29	Pass	

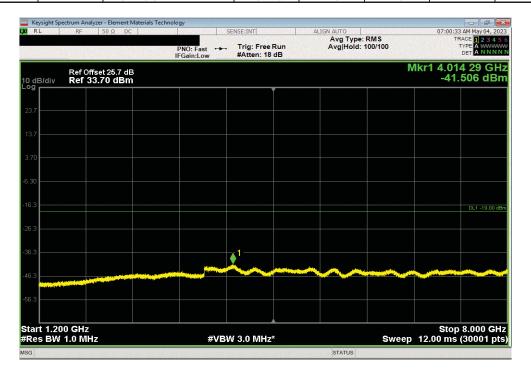


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Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 1	, 619.5 MHz n7	1 NR5 and 624.5 N	/IHz n71 NR5, 64	49.5 MHz n71 NR	5 Channels, Middle
Frequency	Measured	Max Value	Limit		
Range	Freq (MHz)	(dBm)	< (dBm)	Result	
1.2 GHz - 8 GHz	4014.29	-41.51	-19	Pass	



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Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 2, 627 MHz n71 NR20 and 644.5 MHz n71 NR15 Channels, Middle

Frequency

Measured

Max Value

Limit

Range

Freq (MHz)

(dBm)

(dBm)

Result

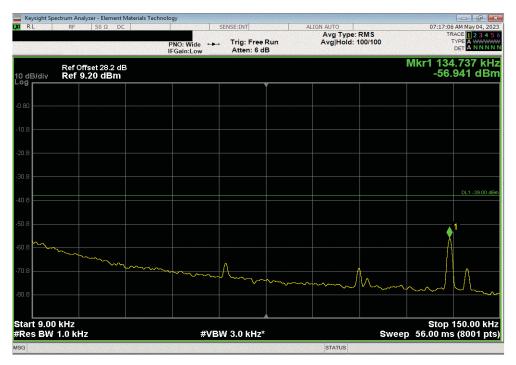
9 kHz - 150 kHz

0.13

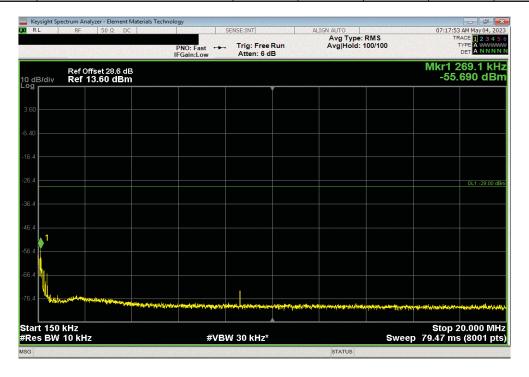
-56.94

-39

Pass



Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 2, 627 MHz n71 NR20 and 644.5 MHz n71 NR15 Channels, Middle							
	Frequency	Measured	Max Value	Limit			
	Range	Freq (MHz)	(dBm)	< (dBm)	Result		
	150 kHz - 20 MHz	0.27	-55.69	-29	Pass		



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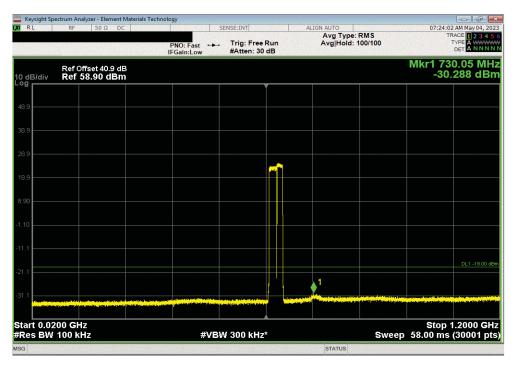


 Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 2, 627 MHz n71 NR20 and 644.5 MHz n71 NR15 Channels, Middle

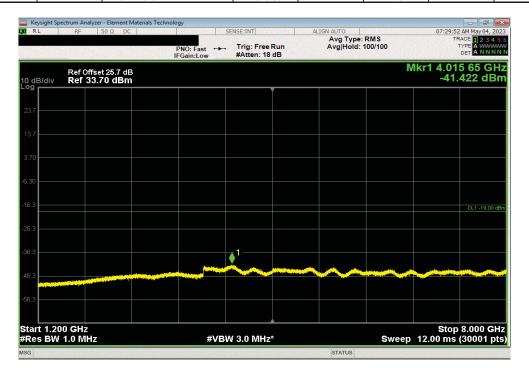
 Frequency
 Measured
 Max Value
 Limit

 Range
 Freq (MHz)
 (dBm)
 < (dBm)</th>
 Result

 20 MHz - 1.2 GHz
 730.05
 -19.29
 -19
 Pass

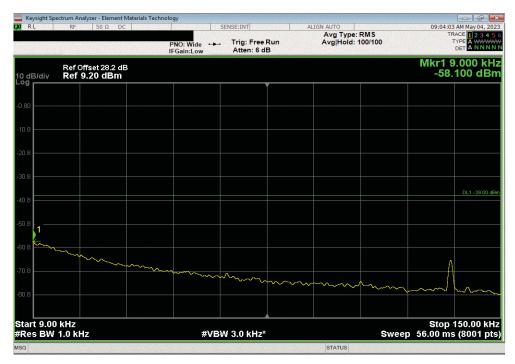


Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 2, 627 MHz n71 NR20 and 644.5 MHz n71 NR15 Channels, Middle						
Frequency	Measured	Max Value	Limit			
Range	Freq (MHz)	(dBm)	< (dBm)	Result		
1.2 GHz - 8 GHz	4015.65	-41.42	-19	Pass		

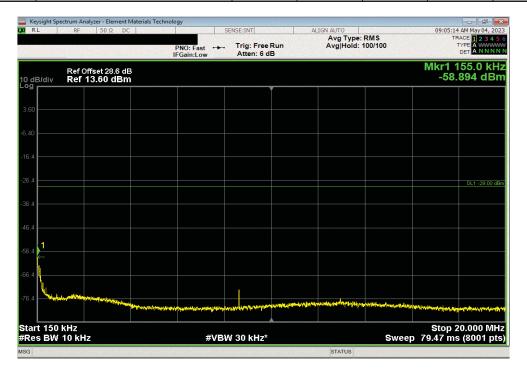


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Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 3, 730.5 MHz n85 NR5 and 743.5 MHz n85 NR5 Channels, Middle							
	Frequency	Measured	Max Value	Limit			
	Range	Freq (MHz)	(dBm)	< (dBm)	Result		
	150 kHz - 20 MHz	0.15	-58.89	-29	Pass		



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SPURIOUS CONDUCTED EMISSIONS - MULTICARRIER

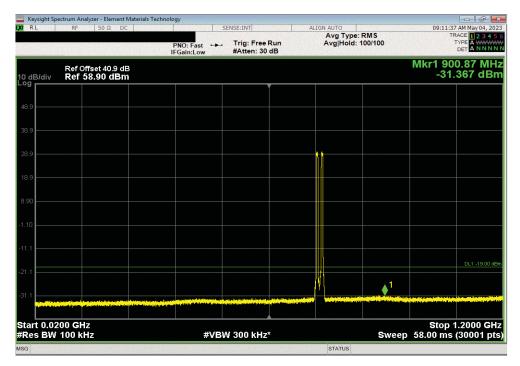


 Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 3, 730.5 MHz n85 NR5 and 743.5 MHz n85 NR5 Channels, Middle

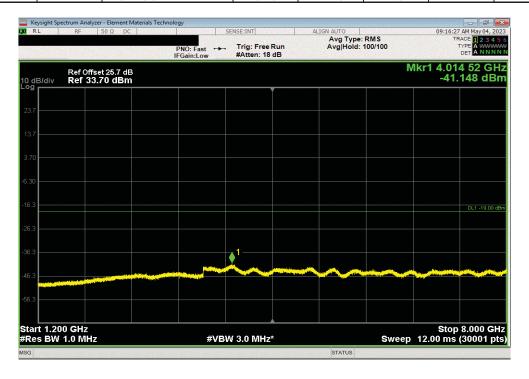
 Frequency
 Measured
 Max Value
 Limit

 Range
 Freq (MHz)
 (dBm)
 < (dBm)</th>
 Result

 20 MHz - 1.2 GHz
 900.87
 -31.37
 -19
 Pass



Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, To	est Case 3, 730.	5 MHz n85 NR5 a	nd 743.5 MHz n8	5 NR5 Channels	, Middle
Frequency	Measured	Max Value	Limit		
Range	Freq (MHz)	(dBm)	< (dBm)	Result	
1.2 GHz - 8 GHz	4014.52	-41.15	-19	Pass	

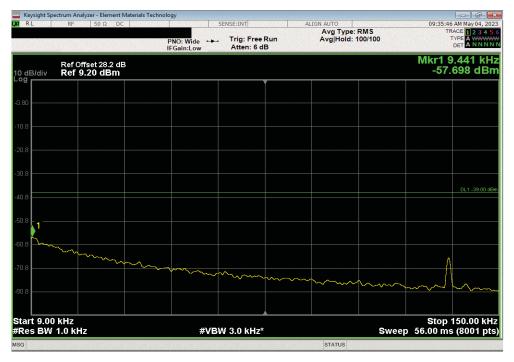


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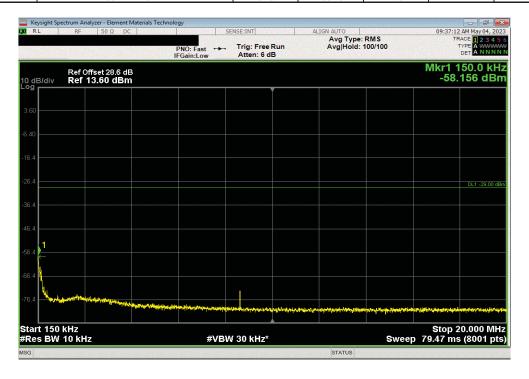
SPURIOUS CONDUCTED EMISSIONS - MULTICARRIER



| Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 4, 619.5 MHz n71 NR5 and 624.5 MHz n71 NR5, 743.5 MHz n85 NR5 Channels, Middle
| Frequency | Measured | Max Value | Limit |
| Range | Freq (MHz) | (dBm) | < (dBm) | Result |
| 9 kHz - 150 kHz | 0.01 | -57.7 | -39 | Pass



Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 4,	619.5 MHz n71	NR5 and 624.5 M	1Hz n71 NR5, 74	3.5 MHz n85 NR5	Channels, Middle
Frequency	Measured	Max Value	Limit		
Range	Freq (MHz)	(dBm)	< (dBm)	Result	
150 kHz - 20 MHz	0.15	-58.16	-29	Pass	



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SPURIOUS CONDUCTED EMISSIONS - MULTICARRIER

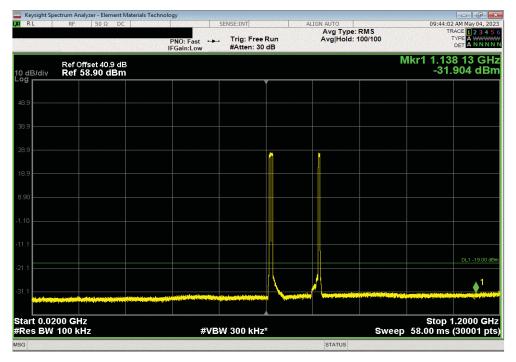


 Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 4, 619.5 MHz n71 NR5 and 624.5 MHz n71 NR5, 743.5 MHz n85 NR5 Channels, Middle

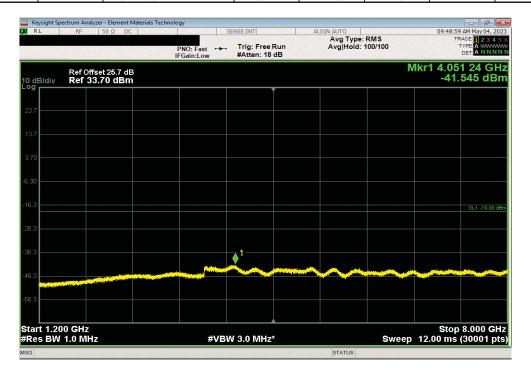
 Frequency
 Measured
 Max Value
 Limit

 Range
 Freq (MHz)
 (dBm)
 < (dBm)</th>
 Result

 20 MHz - 1.2 GHz
 1138.13
 -31.9
 -19
 Pass



Port 1, 5G NR Multi-Carrier Operation, QPSK Modulation, Test Case 4,	619.5 MHz n71	I NR5 and 624.5 N	1Hz n71 NR5, 74	3.5 MHz n85 NR5	Channels, Middle
Frequency	Measured	Max Value	Limit		
Range	Freq (MHz)	(dBm)	< (dBm)	Result	
1.2 GHz - 8 GHz	4051.24	-41.55	-19	Pass	



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XMit 2023.02.14.0

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
Block - DC	Fairview Microwave	SD3379	AMM	2022-09-09	2023-09-09
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFQ	2023-02-09	2024-02-09
Generator - Signal	Agilent	N5173B	TIW	2020-07-17	2023-07-17

TEST DESCRIPTION

The antenna port spurious emissions were measured at the RF output terminal of the EUT through 3 different attenuation configurations which continues through to the RF input of the spectrum analyzer. Analyzer plots utilizing a resolution bandwidth called out by the client's test plan were made for each modulation type from 9 KHz to 8 GHz. The peak conducted power of spurious emissions, up to the 10th harmonic of the transmit frequency, were investigated to ensure they were less than the limits also called out by the client's test plan shown below.

The measurement methods are detailed in KDB971168 D01v03 section 6 and ANSI C63.26-2015.

Per FCC 2.1057(a)(1) and RSS Gen 6.13, the upper level of measurement is the 10th harmonic of the highest fundamental frequency.

Per section 27.53(g) and RSS 130 4.7, the power of any emission outside of the authorized operating frequency range cannot exceed -13 dBm. The limit is adjusted to -19 dBm [-13 dBm -10 log (4)] per FCC KDB 662911D01 v02r01 because the BTS may operate as a 4 port MIMO transmitter.

The limit for the 9kHz to 150kHz frequency range was adjusted to –39dBm to correct for a spectrum analyzer RBW of 1kHz versus required RBW of 100kHz [i.e.: -39dBm = -19dBm -10log(100kHz/1kHz)]. The limit for the 150kHz to 20MHz frequency range was adjusted to –29dBm to correct for a spectrum analyzer RBW of 10kHz versus required RBW of 100kHz [i.e.: -29dBm = -19dBm -10log(100kHz/10kHz)]. The required limit of -19dBm with a RBW of > 100kHz was used for all other frequency ranges.

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

Report No. NOKI0058.0



EUT: IAHLOA (FCC/ISED C2PC) Work Order: NOKI0058 Serial Number: K9180540675 Customer: Nokia Solutions and Networks Temperature: 20.9°C Attendess: John Rattanavong, Mitchel Hill Project: None Barometric Pres: 1016 mbar Tested by: Brandon Hobbs Power: 54 VDC John Site: TX07 TEST SPECIFICATIONS Test Method FCC 27:2023 ANSI C63.26:2015 RSS-130 Issue 2:2019 ANSI C63.26:2015 COMMENTS All losses in the measurement path were accounted for: attenuators, cables, DC block and filter when in use. Band n85 carriers are enabled at maximum power (60 watts/carrier).	
Customer: Nokia Solutions and Networks Temperature: 20.9°C Attendees: John Rattanavong, Mitchel Hill Humildity: 42.5% Project: None Barometric Pres. 1016 mbar Tested by: Brandon Hobbs Power: 54 VDC Job Site: TX07 TEST SPECIFICATIONS Test Method ANSI C63.26:2015 SSS-130 Issue 2:2019 ANSI C63.26:2015 COMMENTS ANSI C63.26:2015 COMMENTS COMMENTS	
Attendees: John Rattanavong, Mitchel Hill Humidity: 42.5% Project: None Barometric Press: 1016 mbar Tested by: Brandon Hobbs Job Site: TX07 TEST SPECIFICATIONS Test Method ANSI C63.26:2015 FCC 27:2023 ANSI C63.26:2015 ANSI C63.26:2015 COMMENTS ANSI C63.26:2015 ANSI C63.26:2015	
Project: None Barometric Pres.: 1016 mbar Tested by: Brandon Hobbs Power: 54 VDC Job Site: TX07 TEST SPECIFICATIONS Test Method FCC 27:2023 ANSI C63.26:2015 RSS-130 Issue 2:2019 ANSI C63.26:2015 COMMENTS ANSI C63.26:2015	
Tested by: Brandon Hobbs Power: [54 VDC Job Site: TX07 TEST SPECIFICATIONS Test Method FCC 27:2023 ANSI C63.26:2015 RSS-130 Issue 2:2019 ANSI C63.26:2015 COMMENTS ANSI C63.26:2015	
TEST SPECIFICATIONS Test Method FCC 27:2023 ANSI C63.26:2015 RSSS-130 Issue 2:2019 ANSI C63.26:2015 COMMENTS ANSI C63.26:2015	
FCC 27:2023 ANSI C63.26:2015 RSS-130 Issue 2:2019 ANSI C63.26:2015 COMMENTS	
RSS-130 Issue 2:2019 ANSI C63.26:2015 COMMENTS	
COMMENTS	
All losses in the measurement path were accounted for: attenuators, cables, DC block and filter when in use. Band n85 carriers are enabled at maximum power (60 watts/carrier).	
DEVIATIONS FROM TEST STANDARD	
None	
NOKI0058-3	
Configuration # NOKI0058-2	
NOKI0058-1 Signature	
Frequency Measured Max Value Limit	
Range Freq (MHz) (dBm) < (dBm)	Result
Band n85 728 MHz - 746 MHz, 5G NR	
Port 1	
5 MHz Bandwidth	
256-QAM Modulation	
	Pass
Mid Channel 737 MHz 9 kHz - 150 kHz 0.01 -58.0 -39	
Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.4 -29	Pass
Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.4 -29 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1167.24 -31.7 -19	Pass Pass
Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.4 -29 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1167.24 -31.7 -19 Mid Channel 737 MHz 1.2 GHz - 8 GHz 4015.43 -41.5 -19	Pass
Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.4 -29 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1167.24 -31.7 -19 Mid Channel 737 MHz 1.2 GHz - 8 GHz 4015.43 -41.5 -19 10 MHz Bandwidth	Pass Pass
Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.4 -29 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1167.24 -31.7 -19 Mid Channel 737 MHz 1.2 GHz - 8 GHz 4015.43 -41.5 -19 10 MHz Bandwidth 256-QAM Modulation	Pass Pass Pass
Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.4 -29 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1167.24 -31.7 -19 Mid Channel 737 MHz 1.2 GHz - 8 GHz 4015.43 -41.5 -19 10 MHz Bandwidth 256-QAM Modulation Mid Channel 737 MHz 9 kHz - 150 kHz 0.01 -57.9 -39	Pass Pass Pass Pass
Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.4 -29 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1167.24 -31.7 -19 Mid Channel 737 MHz 1.2 GHz 8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 1.2 GHz - 8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 8 GHZ 8 GHZ 9 Mid Channel 737 MHz 9 KHz - 150 kHz 0.01 -57.9 -39 Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.7 -29	Pass Pass Pass Pass Pass
Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.4 -29 Mid Channel 737 MHz 20 MHz - 12 GHz 1167.24 -31.7 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 826-QAM Modulation 9 kHz - 150 kHz 0.01 -57.9 -39 Mid Channel 737 MHz 150 kHz -0 MHz 0.15 -58.7 -29 Mid Channel 737 MHz 20 MHz -1.2 GHz 1158.66 -32.0 -19	Pass Pass Pass Pass Pass Pass
Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.4 -29 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1167.24 -31.7 -19 Mid Channel 737 MHz 1.2 GHz 8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 8 Mid Channel 737 MHz 9 kHz - 150 kHz 0.01 -57.9 -39 Mid Channel 737 MHz 150 kHz 20 MHz 0.15 -58.7 -29 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1158.66 -32.0 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 3987.77 -41.5 -19	Pass Pass Pass Pass Pass
Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.4 -29 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1167.24 -31.7 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 826-QAM Modulation 9 kHz - 150 kHz 0.01 -57.9 -39 Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.7 -29 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1158.66 -32.0 -19	Pass Pass Pass Pass Pass Pass
Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.4 -29 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1167.24 -31.7 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 856-QAM Modulation -57.9 -39 Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.7 -29 Mid Channel 737 MHz 20 MHz -12 GHz 1158.66 -32.0 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 3987.77 -41.5 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 3987.77 -41.5 -19	Pass Pass Pass Pass Pass Pass
Mid Channel 737 MHz 150 kHz - 20 MHz 0.15 -58.4 -29 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1167.24 -31.7 -19 Mid Channel 737 MHz 1.2 GHz 8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 1.2 GHz 8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 826-QAM Modulation	Pass Pass Pass Pass Pass Pass Pass Pass
Mid Channel 737 MHz 150 kHz - 20 MHz 1167.24 -31.7 -19 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1167.24 -31.7 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 150 kHz - 20 MHz 0.01 -57.9 -39 Mid Channel 737 MHz 150 kHz -20 MHz 0.15 -58.7 -29 Mid Channel 737 MHz 20 MHz -1.2 GHz 1158.66 -32.0 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 3987.77 -41.5 -19 Mid Channel 737 MHz 150 kHz -10 KHz -	Pass Pass Pass Pass Pass Pass Pass
Mid Channel 737 MHz 150 kHz - 20 MHz 1.2 GHz 1167.24 -31.7 -19 Mid Channel 737 MHz 20 MHz - 1.2 GHz 1167.24 -31.7 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 1.2 GHz -8 GHz 4015.43 -41.5 -19 Mid Channel 737 MHz 56-QAM Modulation -19 Mid Channel 737 MHz 150 kHz - 20 MHz 150 kHz	Pass Pass Pass Pass Pass Pass Pass Pass

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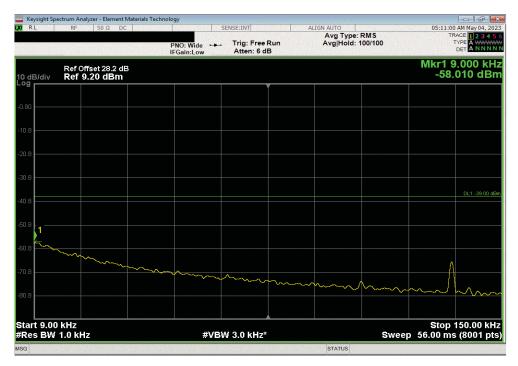


 Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Mid Channel 737 MHz

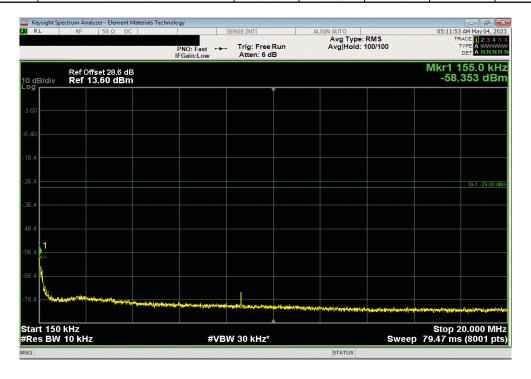
 Frequency
 Measured
 Max Value
 Limit

 Range
 Freq (MHz)
 (dBm)
 < (dBm)</th>
 Result

 9 kHz - 150 kHz
 0.01
 -58.01
 -39
 Pass



Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Mid Channel 737 MHz					
	Frequency	Measured	Max Value	Limit	
	Range	Freq (MHz)	(dBm)	< (dBm)	Result
	150 kHz - 20 MHz	0.15	-58.35	-29	Pass



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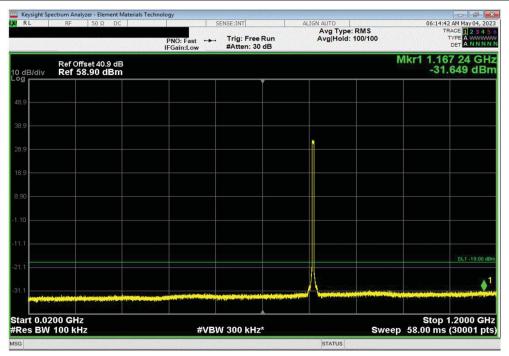


Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Mid Channel 737 MHz

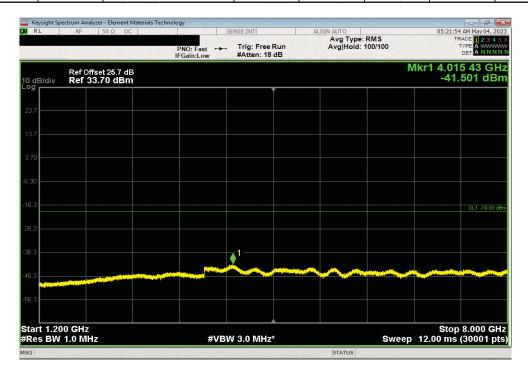
Frequency Measured Max Value Limit

Range Freq (MHz) (dBm) < (dBm) Result

20 MHz - 1.2 GHz 1167.24 -31.65 -19 Pass



	Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Mid Channel 737 MHz					
	Frequency	Measured	Max Value	Limit		
_	Range	Freq (MHz)	(dBm)	< (dBm)	Result	
ĺ	1.2 GHz - 8 GHz	4015.43	-41.5	-19	Pass	



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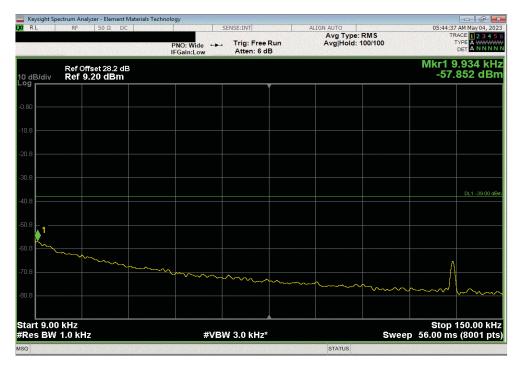


 Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Mid Channel 737 MHz

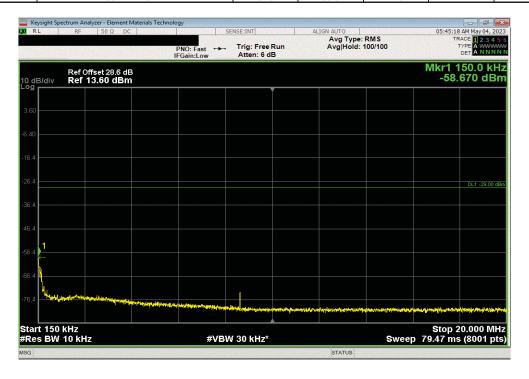
 Frequency
 Measured
 Max Value
 Limit

 Range
 Freq (MHz)
 (dBm)
 < (dBm)</th>
 Result

 9 kHz - 150 kHz
 0.01
 -57.85
 -39
 Pass



	Band n85 728 MHz - 746 MHz, 5G NR , Port 1,	10 MHz Bandwid	th, 256-QAM Mod	dulation, Mid Cha	nnel 737 MHz
	Frequency	Measured	Max Value	Limit	
	Range	Freq (MHz)	(dBm)	< (dBm)	Result
ι Γ	150 kHz - 20 MHz	0.15	-58.67	-29	Pass



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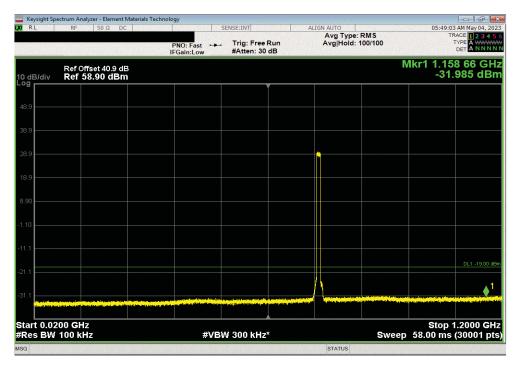


 Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Mid Channel 737 MHz

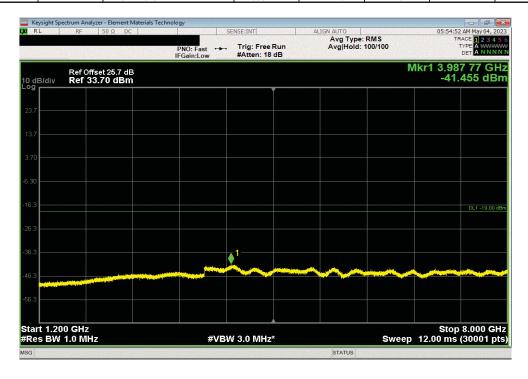
 Frequency
 Measured
 Max Value
 Limit

 Range
 Freq (MHz)
 (dBm)
 < (dBm)</th>
 Result

 20 MHz - 1.2 GHz
 1158.66
 -31.99
 -19
 Pass



	Band n85 728 MHz - 746 MHz, 5G NR , Port 1,	10 MHz Bandwid	th, 256-QAM Mod	dulation, Mid Cha	nnel 737 MHz
	Frequency	Measured	Max Value	Limit	
_	Range	Freq (MHz)	(dBm)	< (dBm)	Result
ı	1.2 GHz - 8 GHz	3987.77	-41.46	-19	Pass



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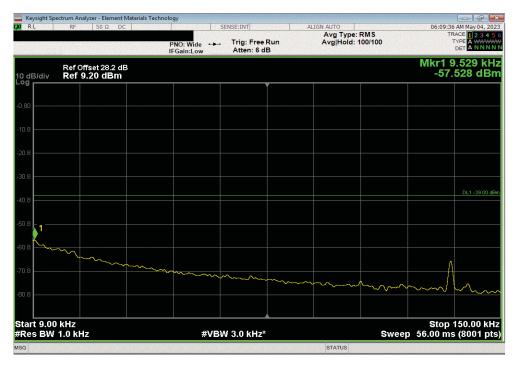


 Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Mid Channel 737 MHz

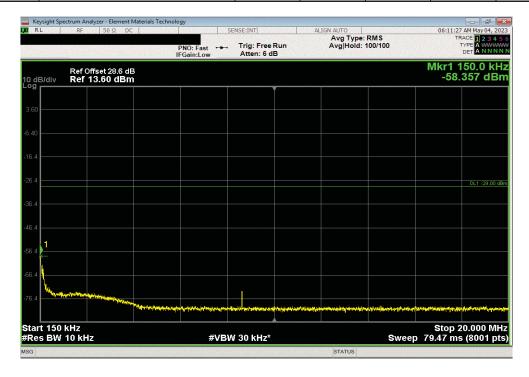
 Frequency
 Measured
 Max Value
 Limit

 Range
 Freq (MHz)
 (dBm)
 < (dBm)</th>
 Result

 9 kHz - 150 kHz
 0.01
 -57.53
 -39
 Pass



	Band n85 728 MHz - 746 MHz, 5G NR , Port 1,	15 MHz Bandwid	th, 256-QAM Mod	dulation, Mid Cha	nnel 737 MHz
	Frequency	Measured	Max Value	Limit	
_	Range	Freq (MHz)	(dBm)	< (dBm)	Result
ı	150 kHz - 20 MHz	0.15	-58.36	-29	Pass



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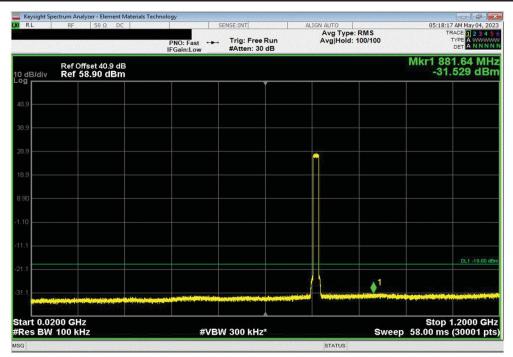


Band n85 728 MHz - 746 MHz, 5G NR , Port 1, 15 MHz Bandwidth, 256-QAM Modulation, Mid Channel 737 MHz

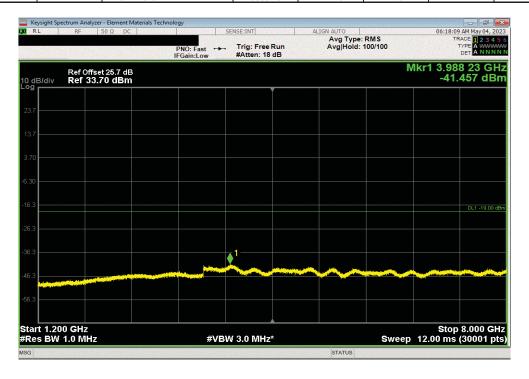
Frequency Measured Max Value Limit

Range Freq (MHz) (dBm) < (dBm) Result

20 MHz - 1.2 GHz 881.64 -31.53 -19 Pass



	Band n85 728 MHz - 746 MHz, 5G NR , Port 1,	15 MHz Bandwid	th, 256-QAM Mod	dulation, Mid Cha	nnel 737 MHz
	Frequency	Measured	Max Value	Limit	
_	Range	Freq (MHz)	(dBm)	< (dBm)	Result
ı	1.2 GHz - 8 GHz	3988.23	-41.46	-19	Pass



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End of Test Report

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