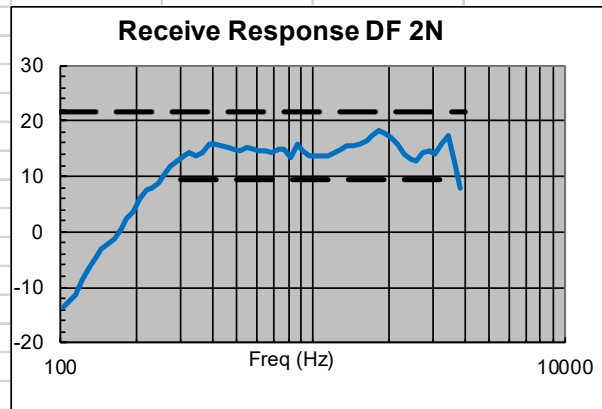
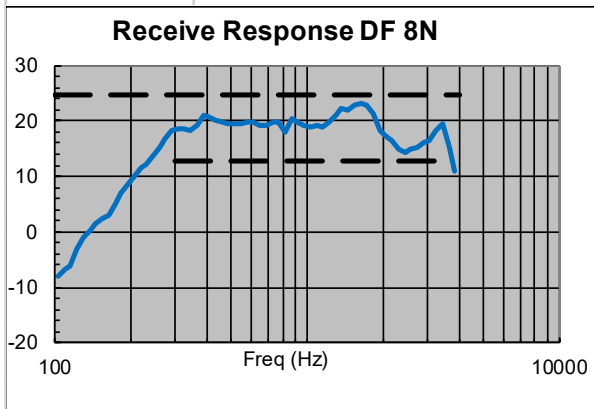
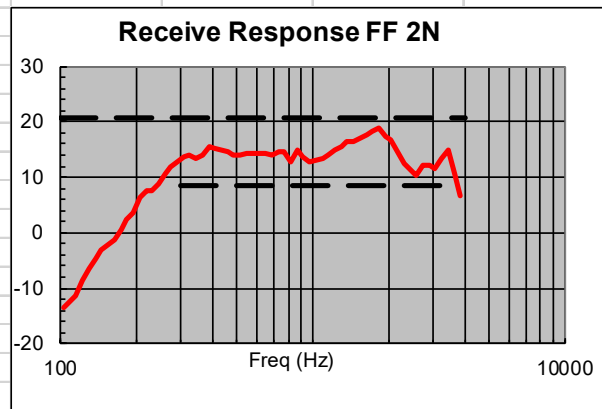
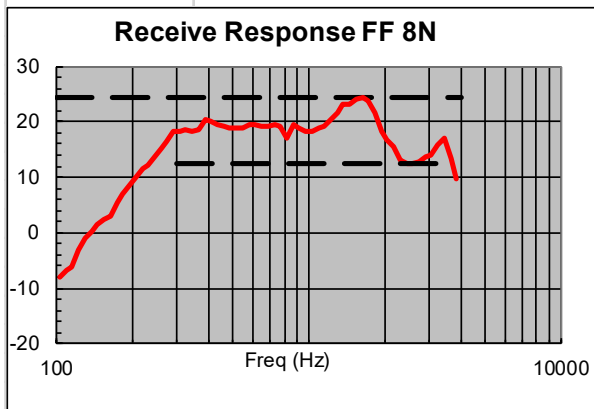


**LTE Band 25 EVS-NB: 9.6 kbps 1,0 RB QPSK**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B25 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/19/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.08 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.52 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.86 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.2 dB	Floating Limits	PASS	



**Output**

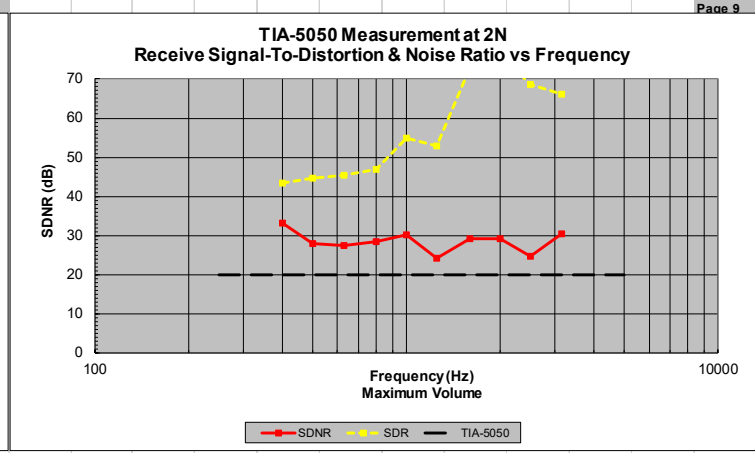
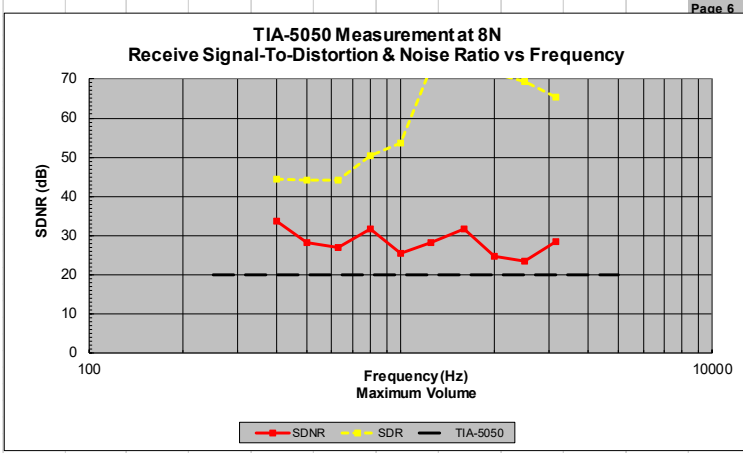
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	89.99 dB	info only		
	Recv conversational gain 8N	19.99 dB	18.00	PASS	
	Recv output level dB SPL 2N	85.03 dB	info only		
	Recv conversational gain 2N	15.03 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	3.6 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	4.19 dB	Absolute Limits	PASS	

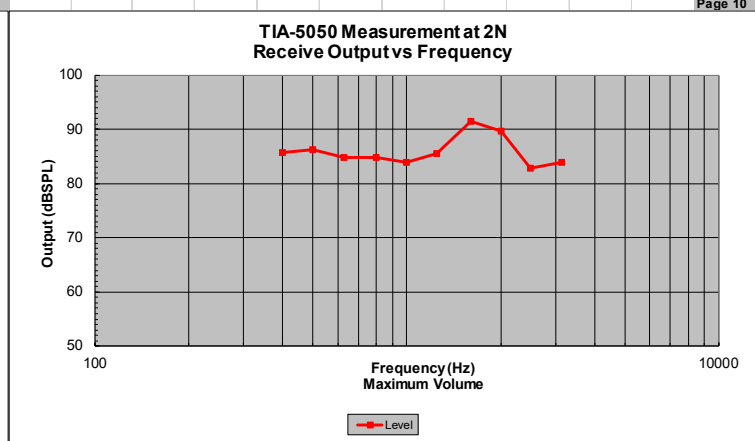
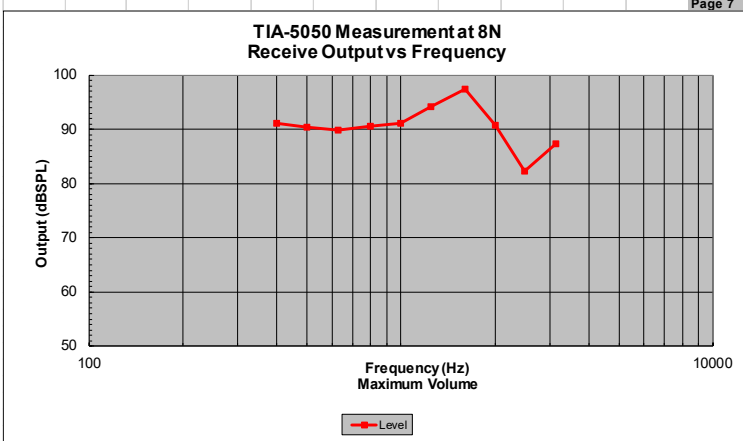
# LTE Band 25 EVS-NB: 9.6 kbps 1,0 RB QPSK

## Distortion Report



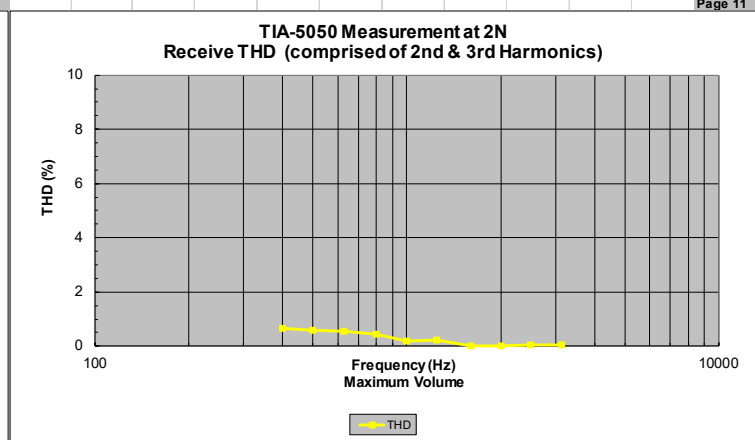
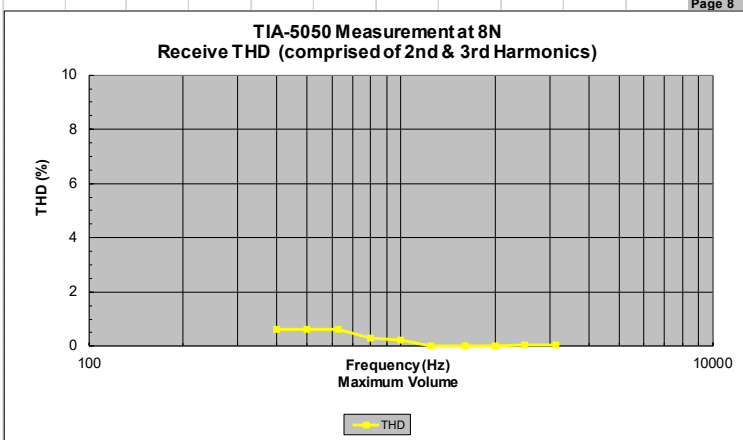
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	3.6 dB	Absolute Limits	PASS	9/19/2024 10:43
Note: SDNR includes noise and distortion products.		Stimulus level		-20 dBPa
SDR includes only 2nd and 3rd harmonic distortion.		Sentence conditioning		-20 dBPa
		Short conditioning		-99 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	4.19 dB	Absolute Limits	PASS	9/19/2024 10:43
Note: SDNR includes noise and distortion products.		Stimulus level		-20 dBPa
SDR includes only 2nd and 3rd harmonic distortion.		Sentence conditioning		-20 dBPa
		Short conditioning		-99 dBPa
Comments:	9.6 kbps			



Test Date	
9/19/2024 10:43	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/19/2024 10:43	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



Test Date	
9/19/2024 10:43	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/19/2024 10:43	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

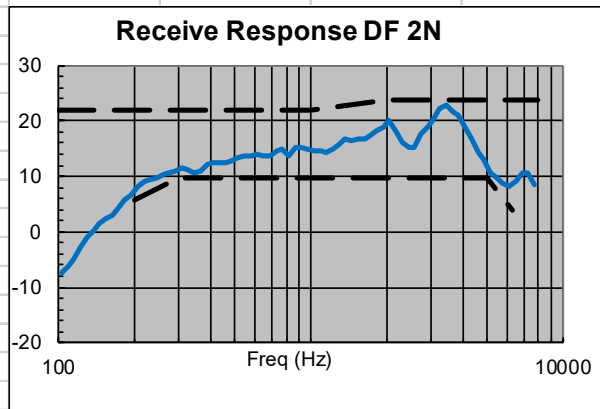
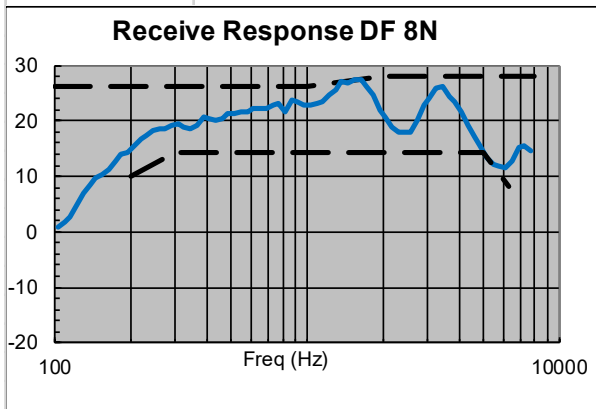
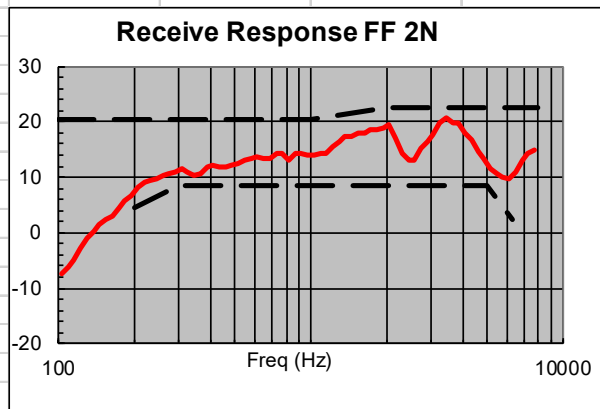
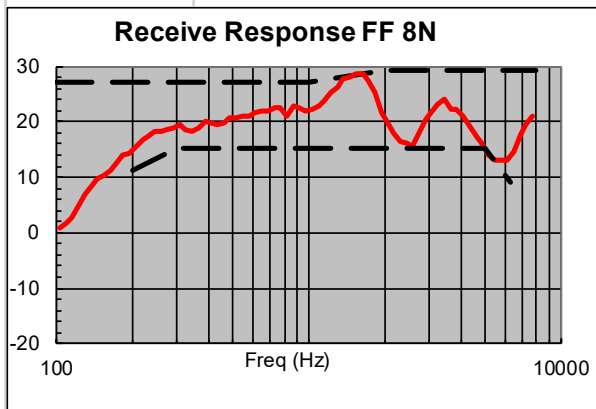
**LTE Band 25 EVS-WB: 24.4 kbps 1,0 RB QPSK  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B25 EVS-WB
<b>Bandwidth</b>	Wideband
<b>Test Date:</b>	9/19/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.21 dB	Floating Limits	FAIL	
	Recv resp DF 8N	0.1 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.94 dB	Floating Limits	PASS	
	Recv resp DF 2N	0.9 dB	Floating Limits	PASS	



**Output**

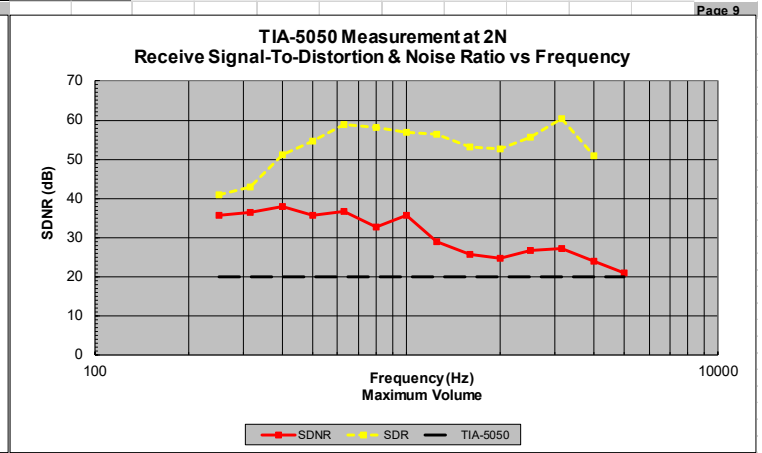
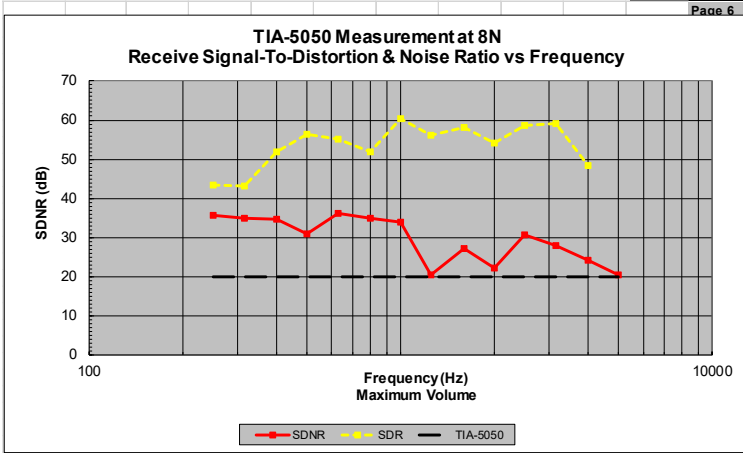
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	92.56 dB	info only		
	Recv conversational gain 8N	22.56 dB	18.00	PASS	
	Recv output level dB SPL 2N	84.45 dB	info only		
	Recv conversational gain 2N	14.45 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	0.5 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	0.89 dB	Absolute Limits	PASS	

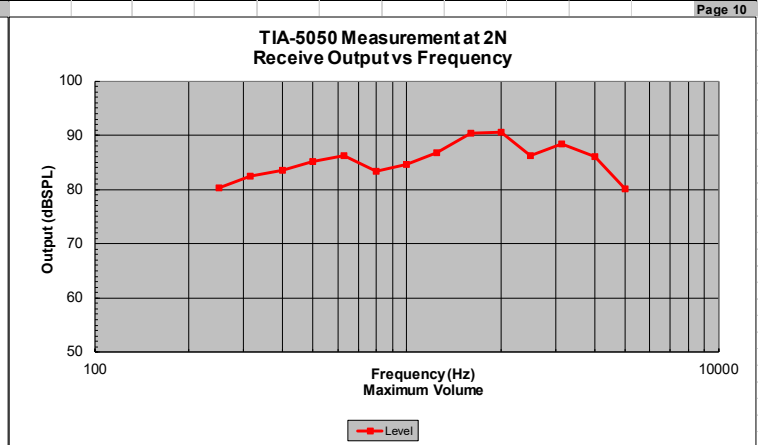
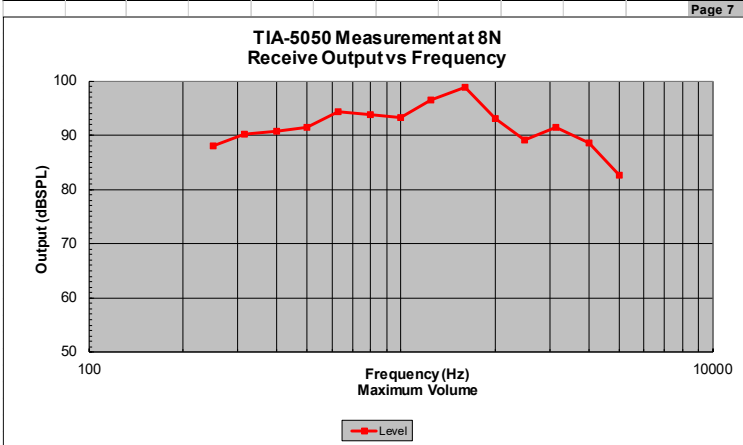
# LTE Band 25 EVS-WB: 24.4 kbps 1,0 RB QPSK

## Distortion Report



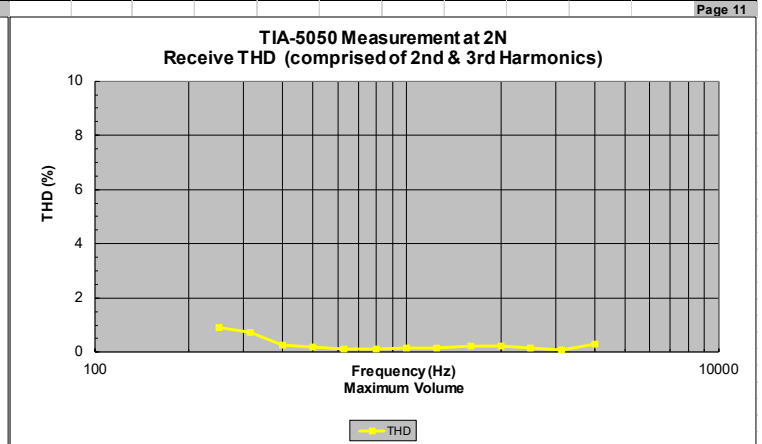
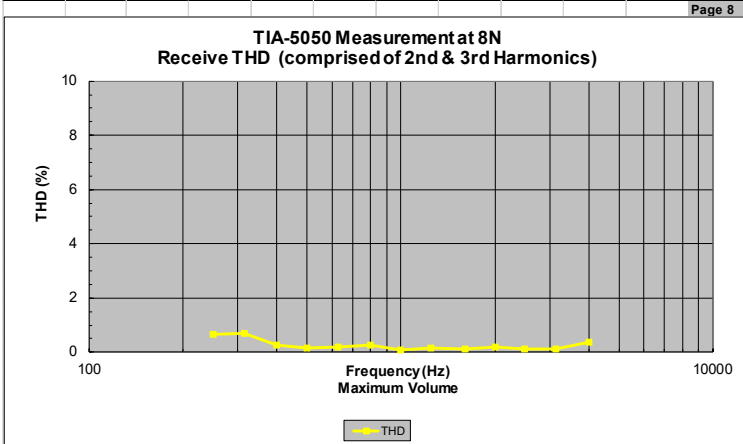
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	0.5 dB	Absolute Limits	PASS	9/19/2024 12:23
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-99 dBPa	
Comments:	24.4 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	0.89 dB	Absolute Limits	PASS	9/19/2024 12:23
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-99 dBPa	
Comments:	24.4 kbps			



Test Date	
9/19/2024 12:23	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	24.4 kbps

Test Date	
9/19/2024 12:23	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	24.4 kbps



Test Date	
9/19/2024 12:23	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	24.4 kbps

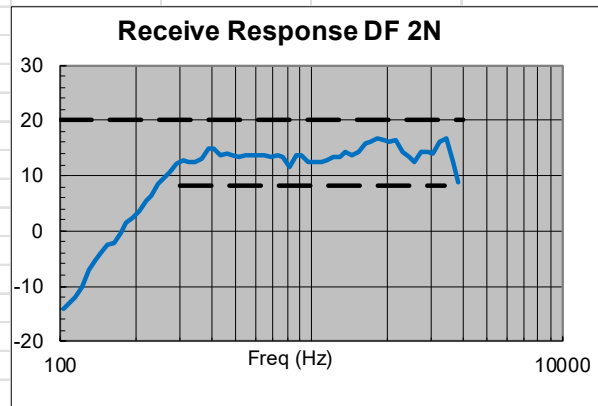
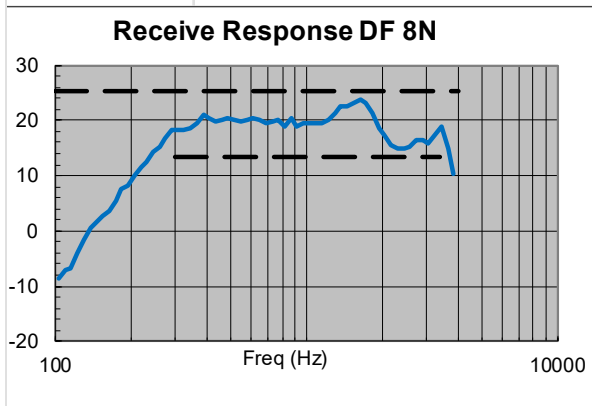
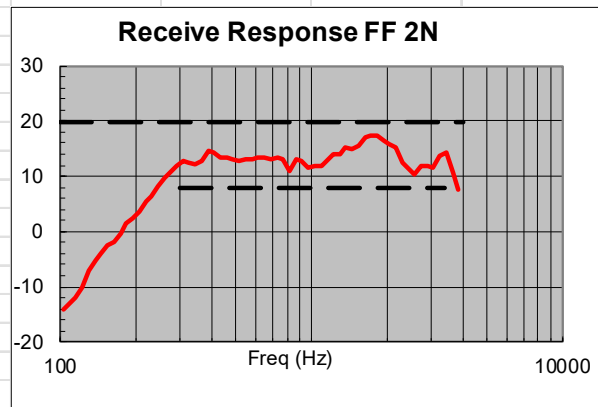
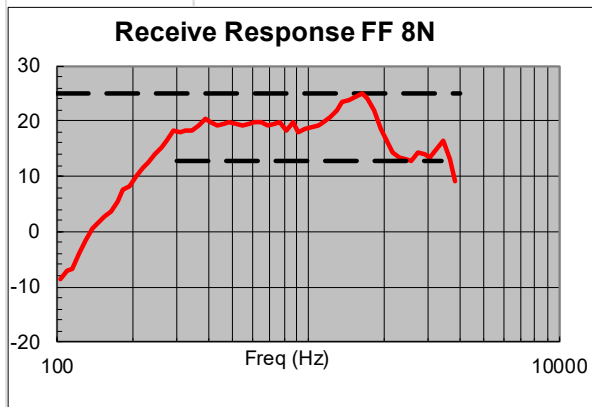
Test Date	
9/19/2024 12:23	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	24.4 kbps

**LTE Band 25 EVS-NB: 9.6 kbps 100,0 RB QPSK**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B25 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/19/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	0.03 dB	Floating Limits	PASS	
	Recv resp DF 8N	1.67 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.5 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.38 dB	Floating Limits	PASS	



**Output**

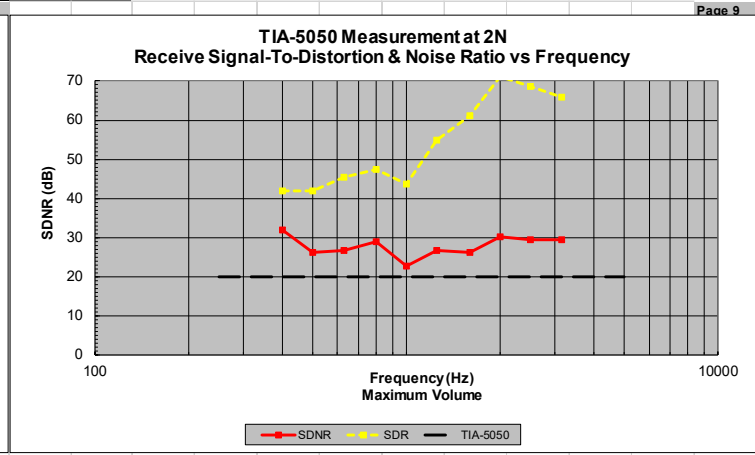
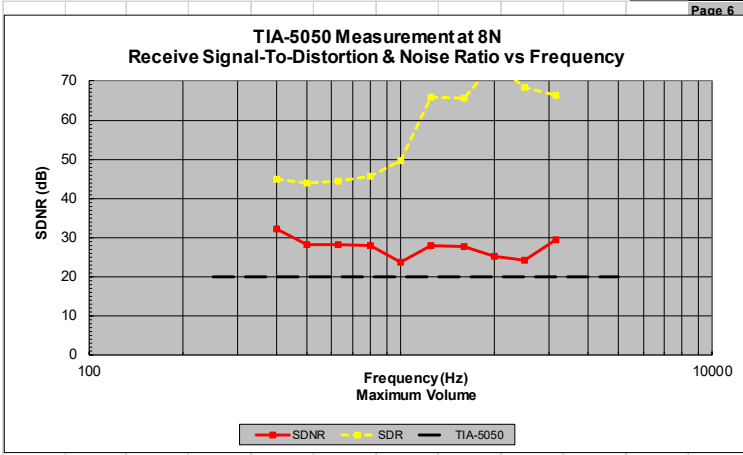
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	90.24 dB	info only		
	Recv conversational gain 8N	20.24 dB	18.00	PASS	
	Recv output level dB SPL 2N	83.91 dB	info only		
	Recv conversational gain 2N	13.91 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	3.7 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	2.7 dB	Absolute Limits	PASS	

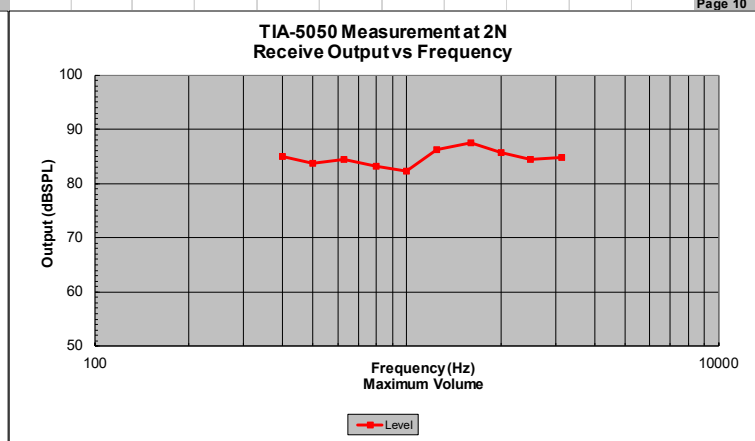
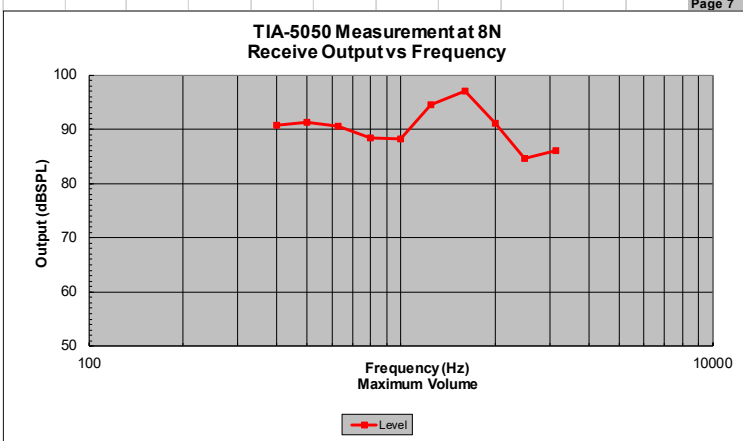
# LTE Band 25 EVS-NB: 9.6 kbps 100,0 RB QPSK

## Distortion Report



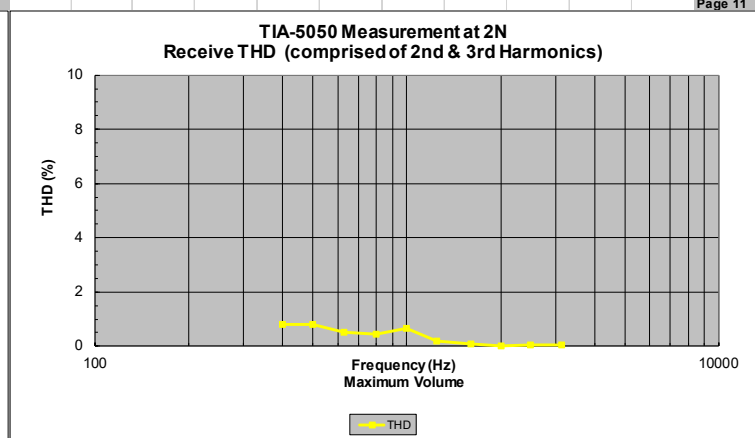
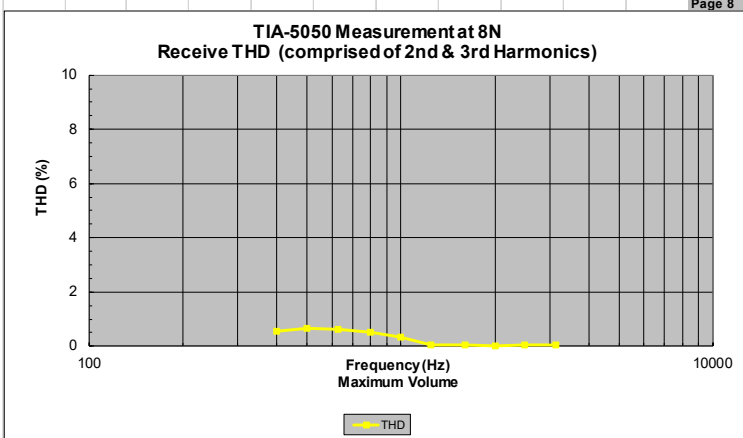
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	3.7 dB	Absolute Limits	PASS	9/19/2024 12:33
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	2.7 dB	Absolute Limits	PASS	9/19/2024 12:33
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			



Test Date	
9/19/2024 12:33	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/19/2024 12:33	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



Test Date	
9/19/2024 12:33	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

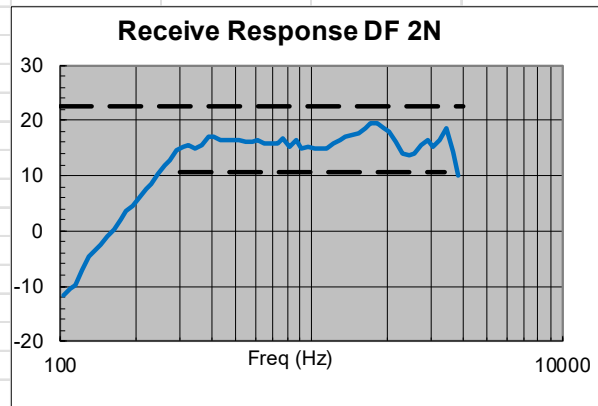
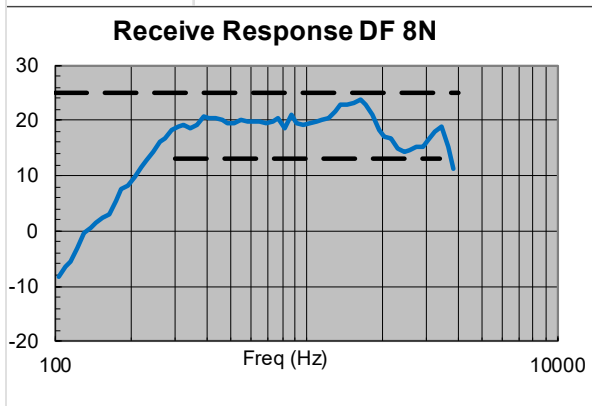
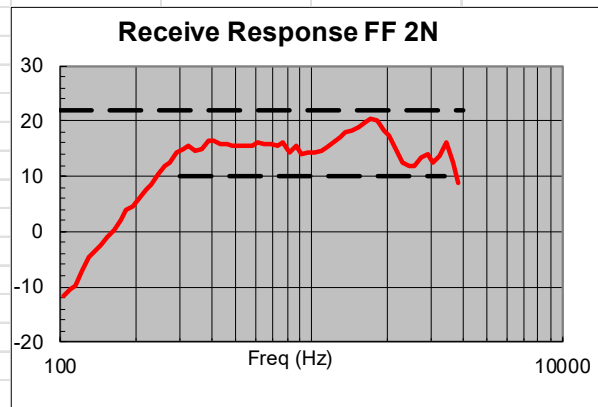
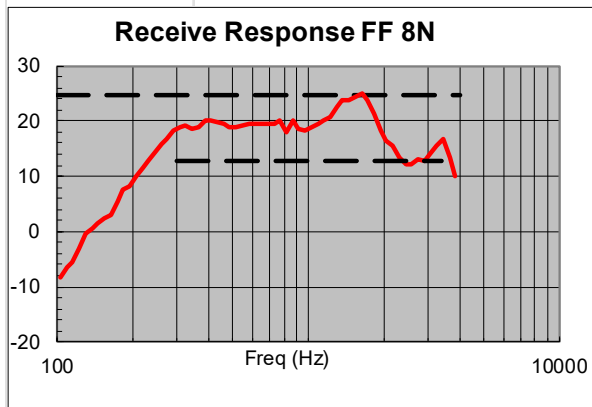
Test Date	
9/19/2024 12:33	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

**LTE Band 25 EVS-NB: 9.6 kbps 100,0 RB 16QAM**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B25 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/19/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.33 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.28 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.67 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.06 dB	Floating Limits	PASS	



**Output**

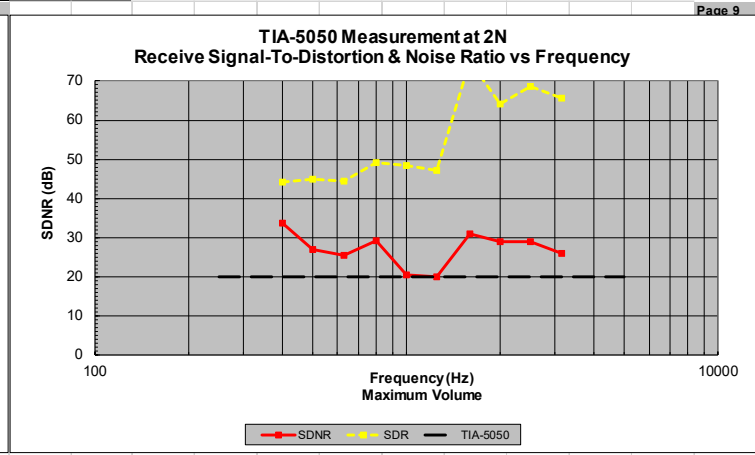
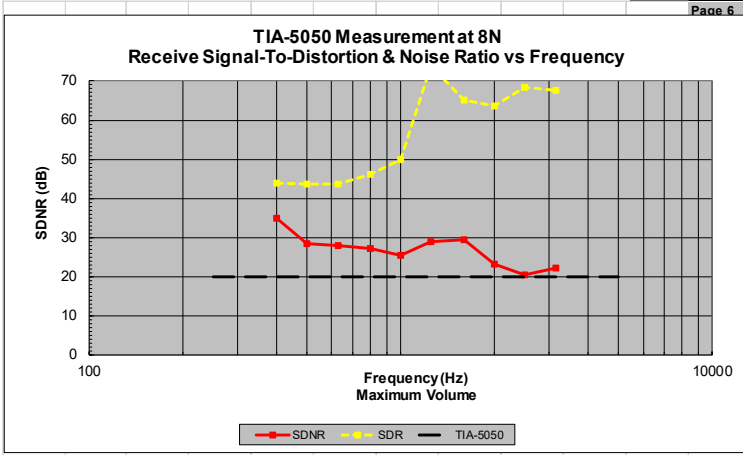
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	90.24 dB	info only		
	Recv conversational gain 8N	20.24 dB	18.00	PASS	
	Recv output level dB SPL 2N	86.38 dB	info only		
	Recv conversational gain 2N	16.38 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	0.4 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	0.03 dB	Absolute Limits	PASS	

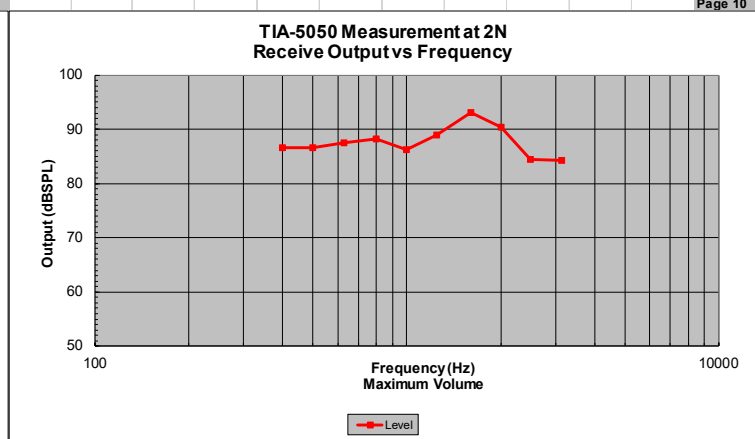
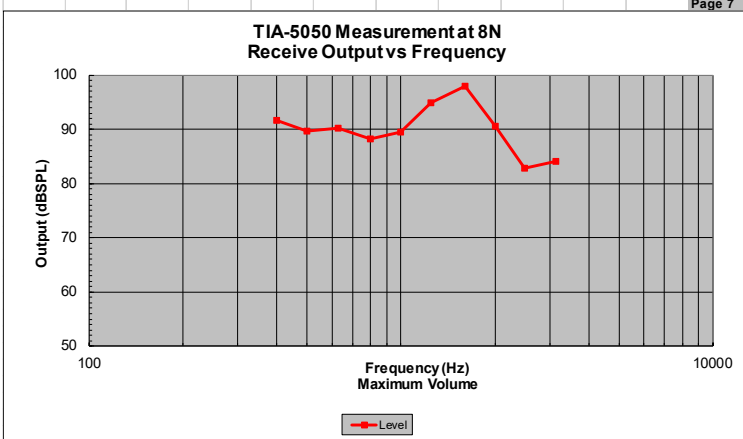
# LTE Band 25 EVS-NB: 9.6 kbps 100,0 RB 16QAM

## Distortion Report



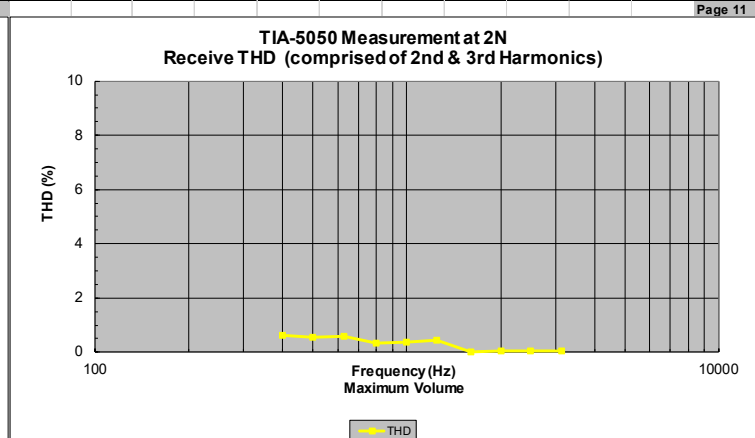
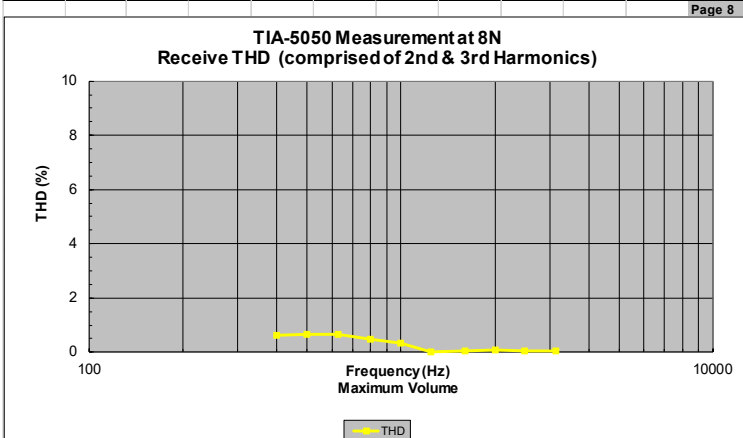
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	0.4 dB	Absolute Limits	PASS	9/19/2024 12:42
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-99 dBPa	
Comments:	9.6kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	0.03 dB	Absolute Limits	PASS	9/19/2024 12:42
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-99 dBPa	
Comments:	9.6kbps			



Test Date	
9/19/2024 12:42	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6kbps

Test Date	
9/19/2024 12:42	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6kbps



Test Date	
9/19/2024 12:42	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6kbps

Test Date	
9/19/2024 12:42	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6kbps

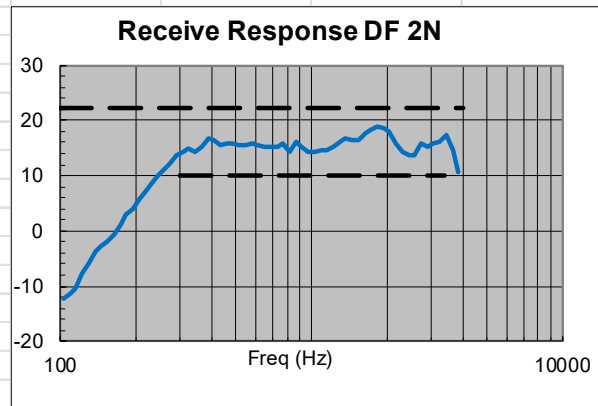
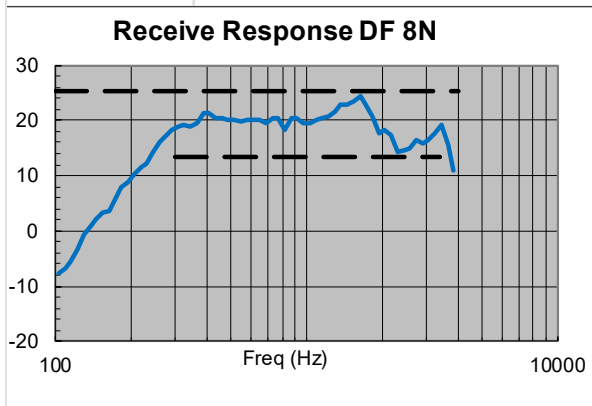
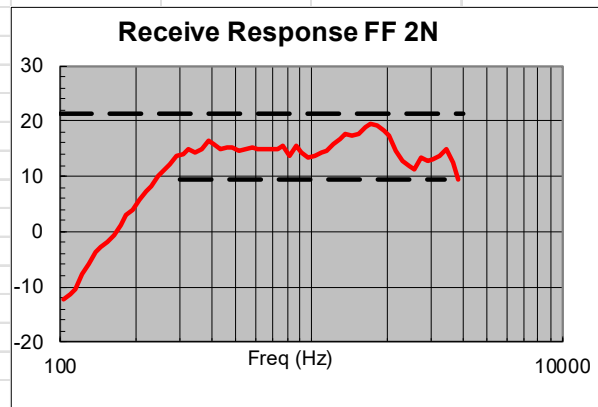
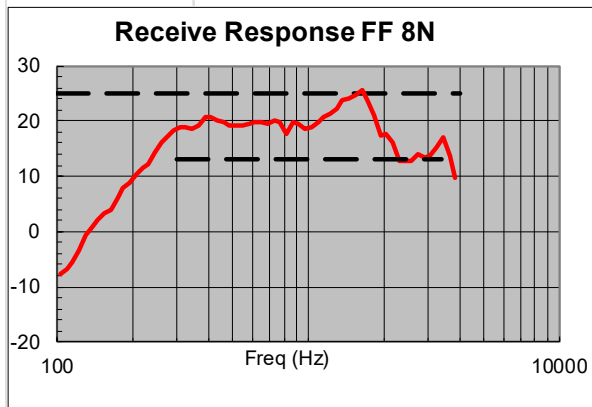


**LTE Band 25 EVS-NB: 9.6 kbps 100,0 RB 64QAM**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B25 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/19/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.45 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.04 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.98 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.42 dB	Floating Limits	PASS	



**Output**

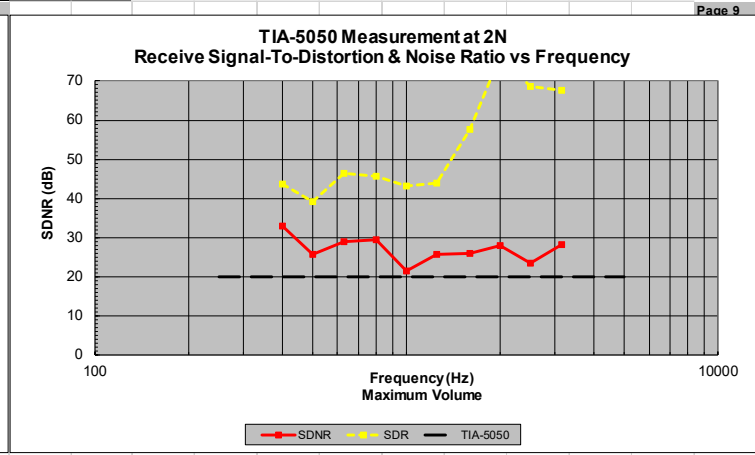
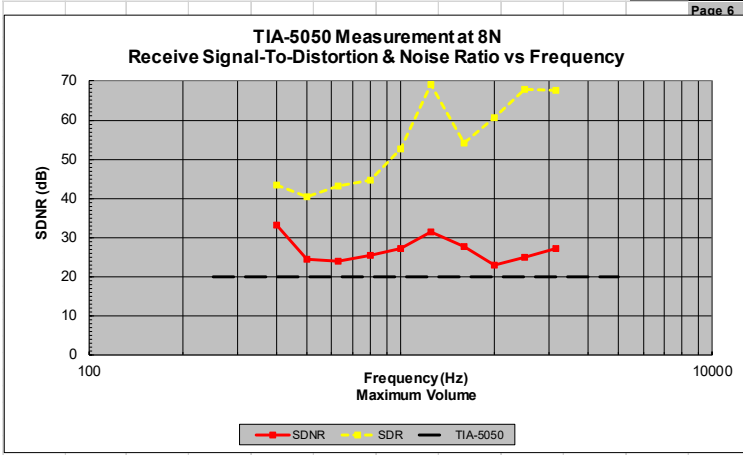
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	90.5 dB	info only		
	Recv conversational gain 8N	20.5 dB	18.00	PASS	
	Recv output level dB SPL 2N	85.77 dB	info only		
	Recv conversational gain 2N	15.77 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	3 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	1.41 dB	Absolute Limits	PASS	

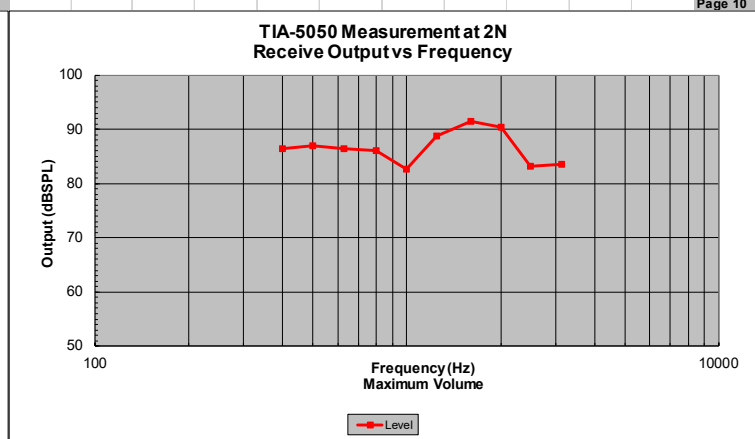
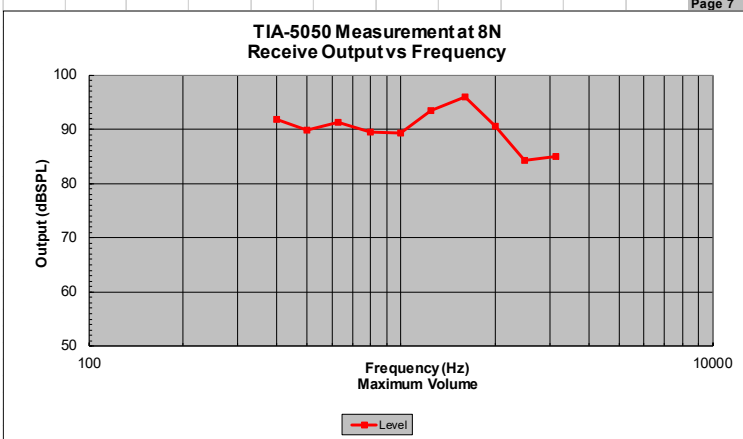
# LTE Band 25 EVS-NB: 9.6 kbps 100,0 RB 64QAM

## Distortion Report



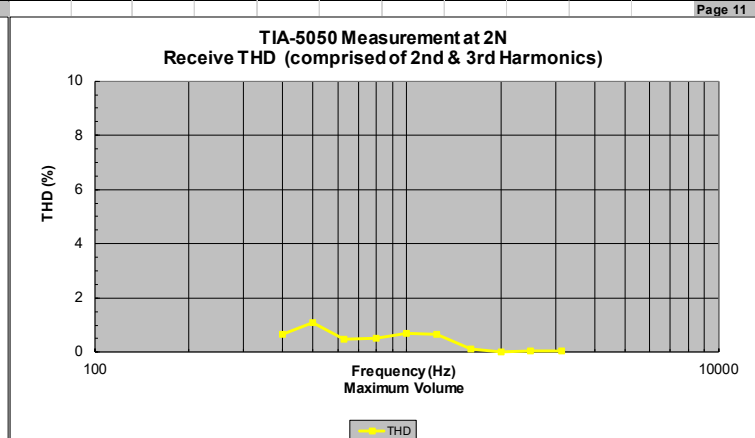
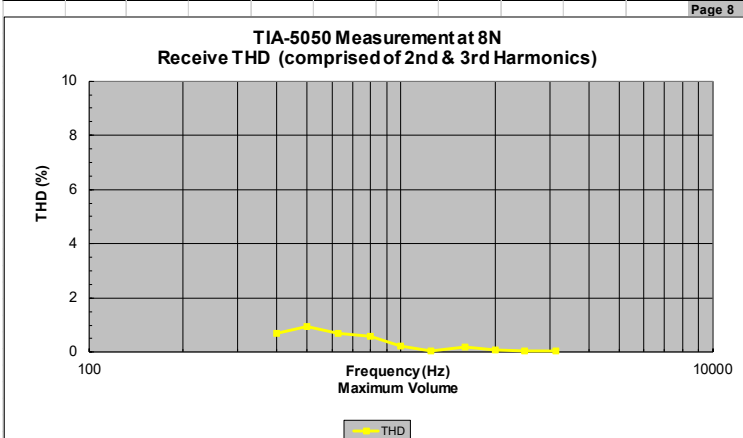
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	3 dB	Absolute Limits	PASS	9/19/2024 14:16
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	1.41 dB	Absolute Limits	PASS	9/19/2024 14:16
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			



Test Date	
9/19/2024 14:16	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/19/2024 14:16	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



Test Date	
9/19/2024 14:16	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

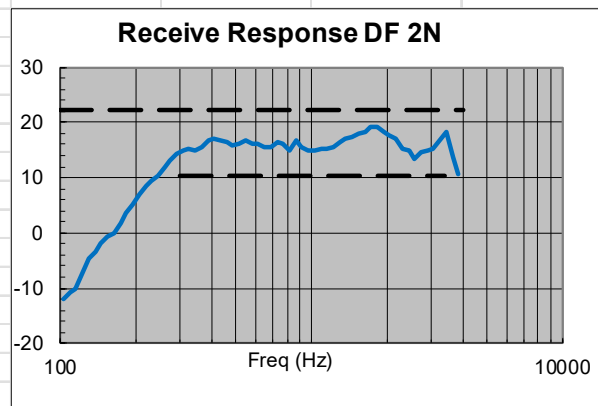
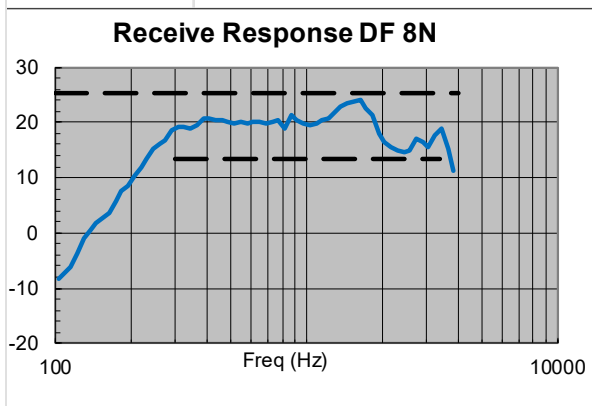
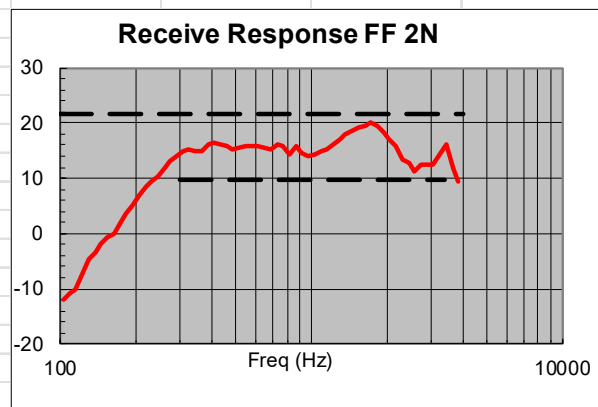
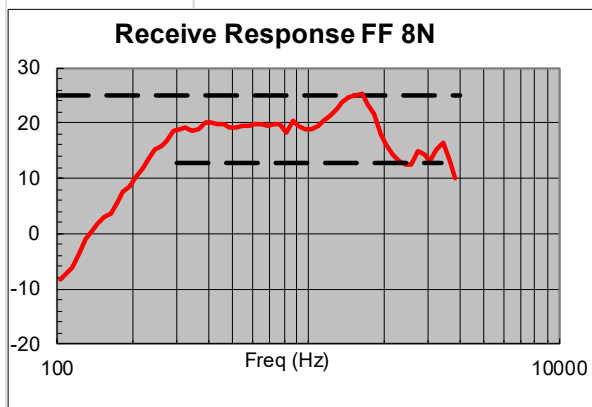
Test Date	
9/19/2024 14:16	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

**LTE Band 25 EVS-NB: 9.6 kbps 100,0 RB 256QAM**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B25 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/19/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.35 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.25 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.59 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.14 dB	Floating Limits	PASS	



**Output**

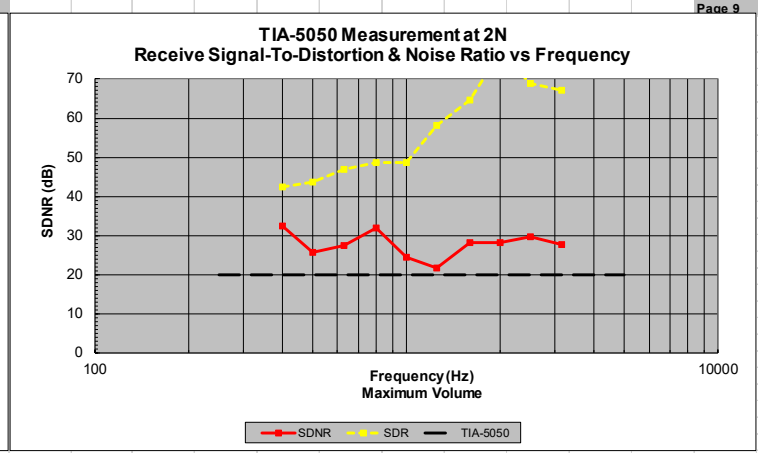
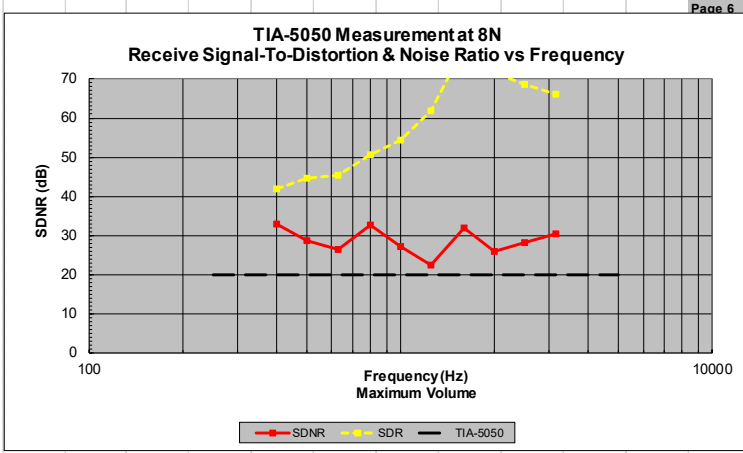
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	90.46 dB	info only		
	Recv conversational gain 8N	20.46 dB	18.00	PASS	
	Recv output level dB SPL 2N	86.36 dB	info only		
	Recv conversational gain 2N	16.36 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	2.6 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	1.77 dB	Absolute Limits	PASS	

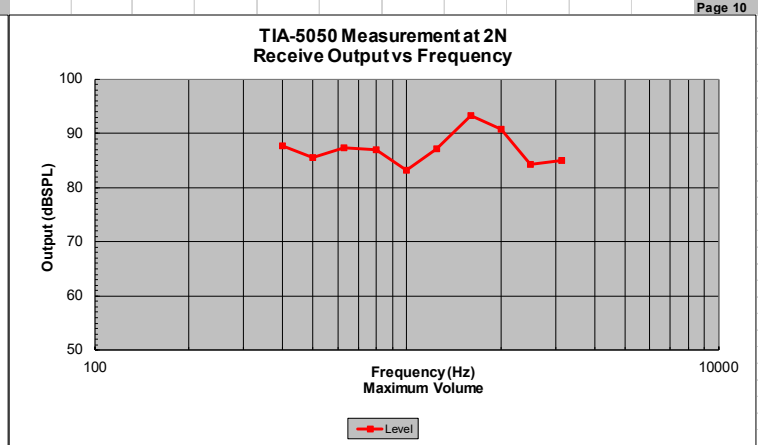
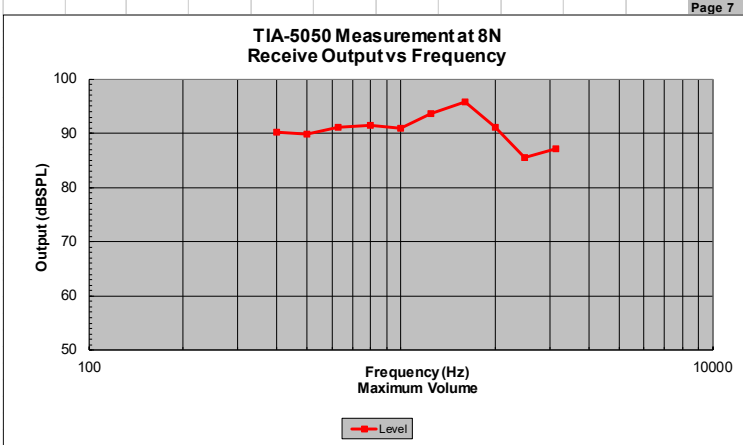
# LTE Band 25 EVS-NB: 9.6 kbps 100,0 RB 256QAM

## Distortion Report



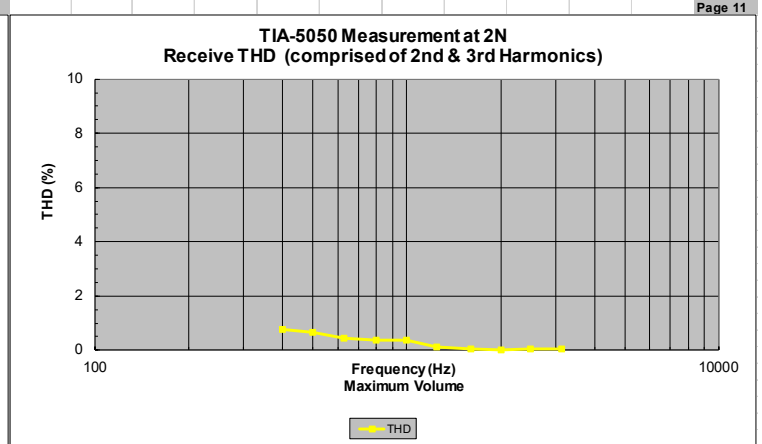
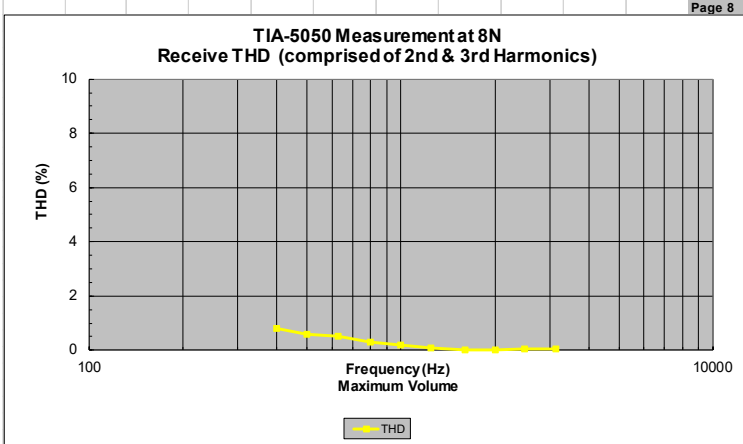
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	2.6 dB	Absolute Limits	PASS	9/19/2024 14:29
<small>Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.</small>				
Stimulus level		-20 dBPa		
Sentence conditioning		-20 dBPa		
Short conditioning		-99 dBPa		
Comments:	9.6kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	1.77 dB	Absolute Limits	PASS	9/19/2024 14:29
<small>Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.</small>				
Stimulus level		-20 dBPa		
Sentence conditioning		-20 dBPa		
Short conditioning		-99 dBPa		
Comments:	9.6kbps			



Test Date	
9/19/2024 14:29	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6kbps

Test Date	
9/19/2024 14:29	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6kbps



Test Date	
9/19/2024 14:29	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6kbps

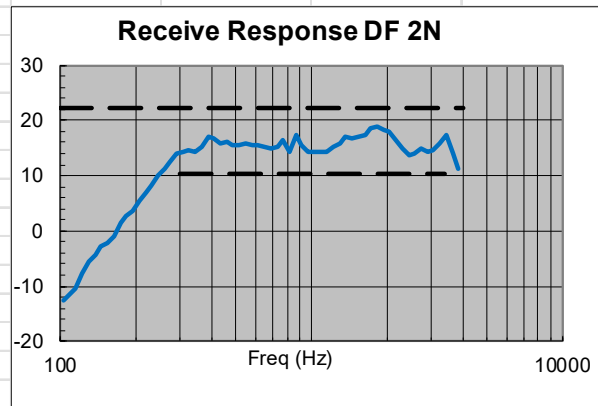
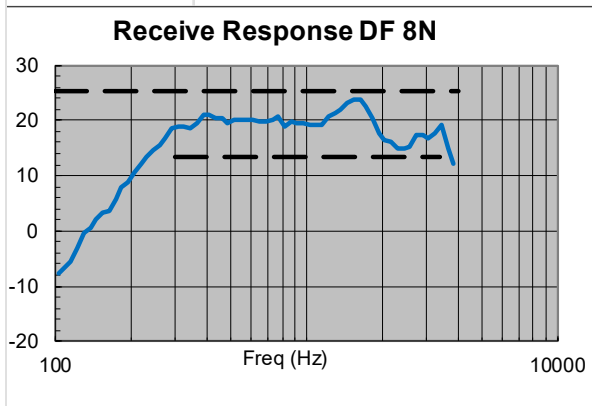
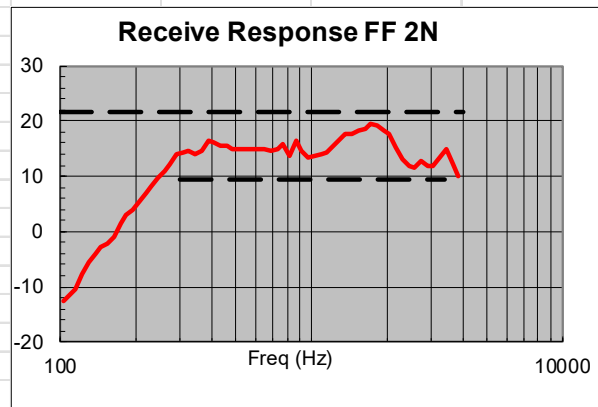
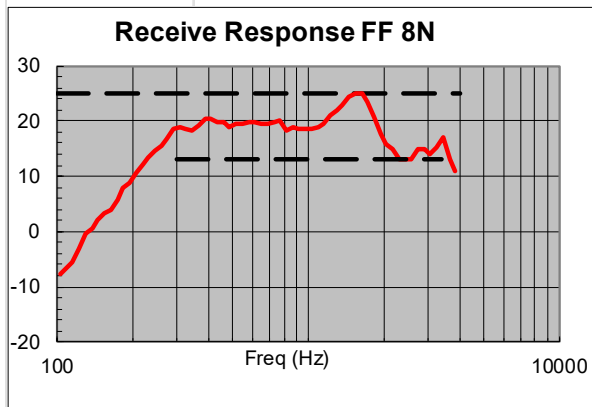
Test Date	
9/19/2024 14:29	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6kbps

**LTE Band 25 EVS-NB: 9.6 kbps 1,0 RB 1.4 MHz QPSK**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B25 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/19/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.06 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.51 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.06 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.41 dB	Floating Limits	PASS	



**Output**

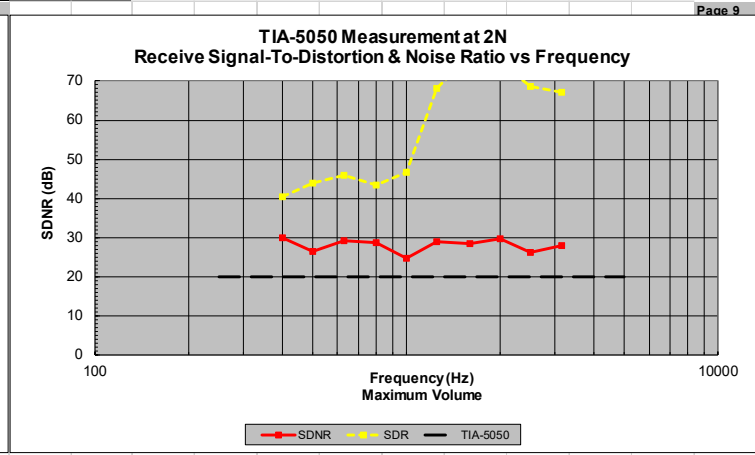
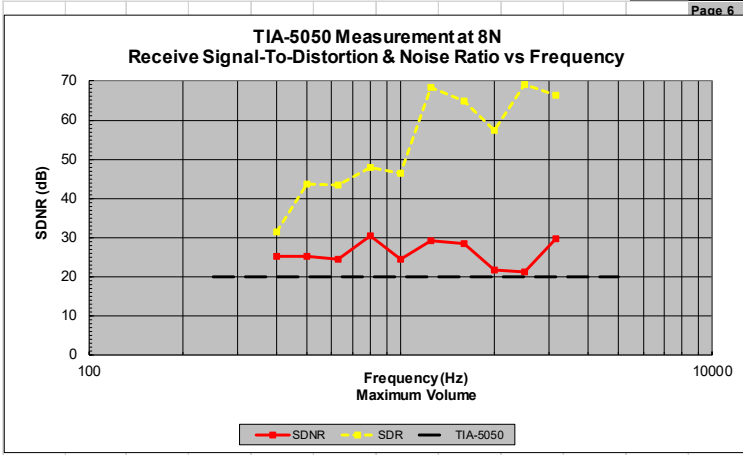
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	90.36 dB	info only		
	Recv conversational gain 8N	20.36 dB	18.00	PASS	
	Recv output level dB SPL 2N	85.81 dB	info only		
	Recv conversational gain 2N	15.81 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	1.2 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	4.79 dB	Absolute Limits	PASS	

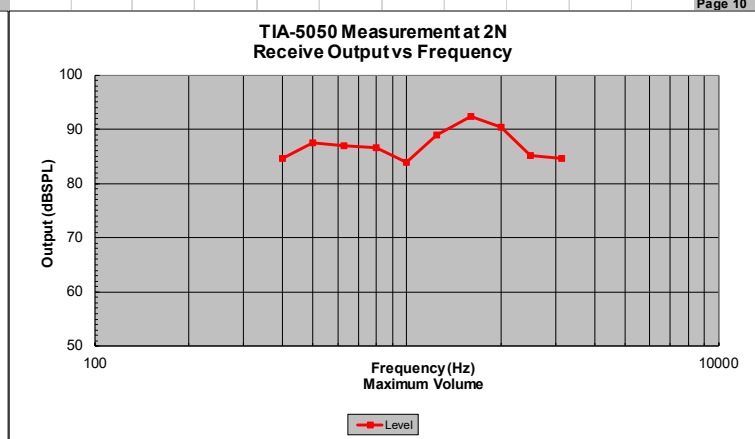
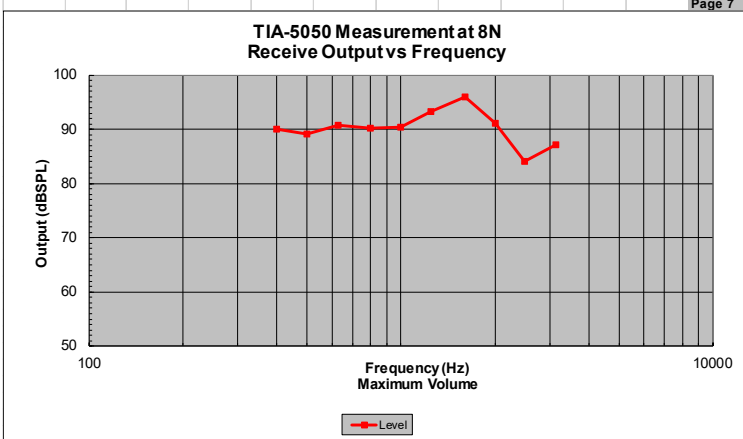
# LTE Band 25 EVS-NB: 9.6 kbps 1,0 RB 1.4 MHz QPSK

## Distortion Report



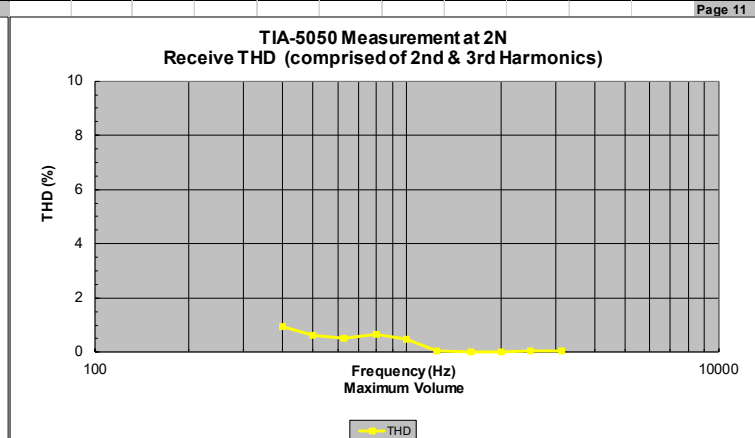
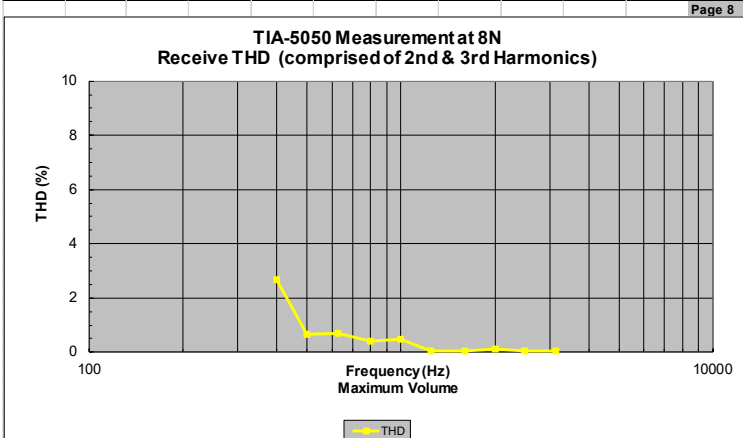
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	1.2 dB	Absolute Limits	PASS	9/19/2024 14:40
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	4.79 dB	Absolute Limits	PASS	9/19/2024 14:40
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			



Test Date	
9/19/2024 14:40	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/19/2024 14:40	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



Test Date	
9/19/2024 14:40	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/19/2024 14:40	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

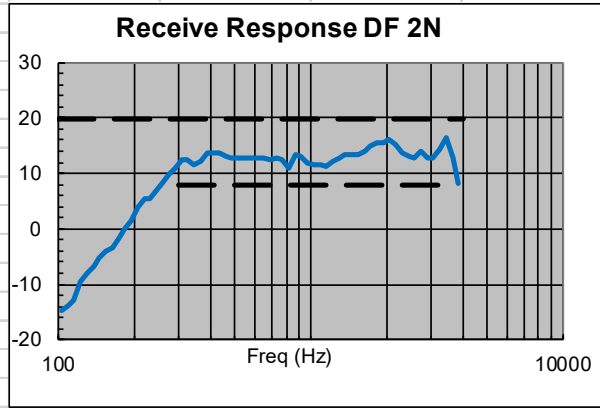
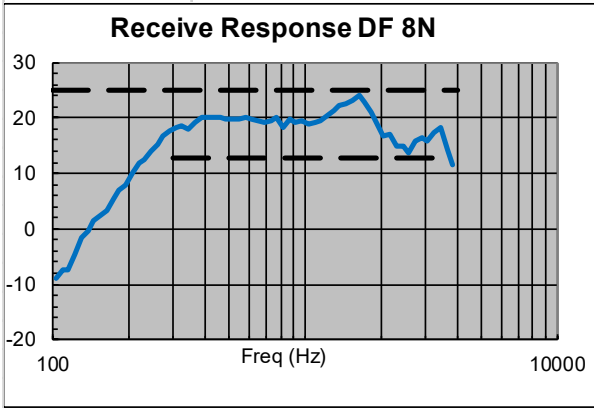
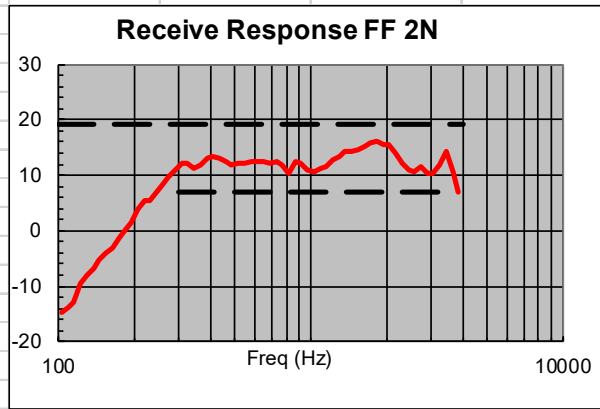
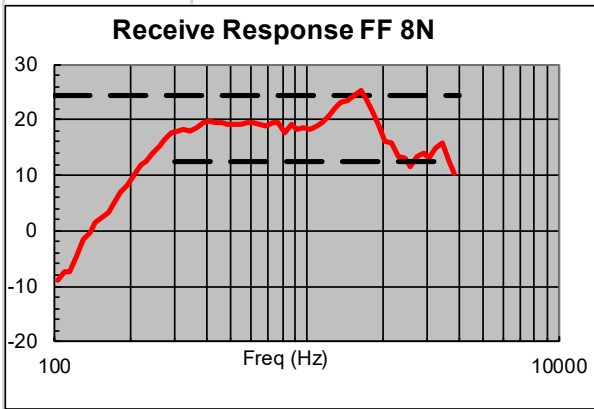
**LTE Band 7 EVS-NB: 9.6 kbps 100,0 RB QPSK  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B7 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/19/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.94 dB	Floating Limits	FAIL	
	Recv resp DF 8N	0.8 dB	Floating Limits	PASS	
	Recv resp FF 2N	3.13 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.29 dB	Floating Limits	PASS	



**Output**

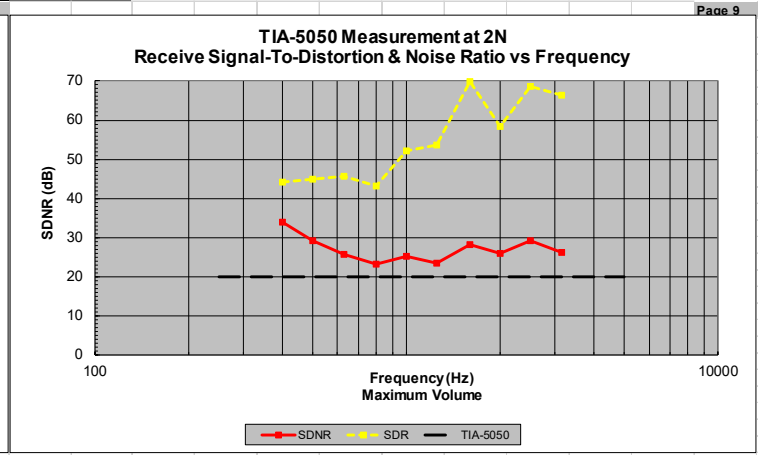
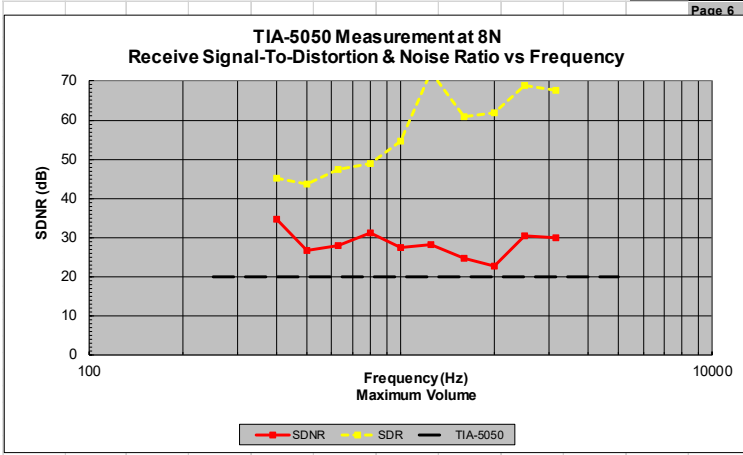
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	90.08 dB	info only		
	Recv conversational gain 8N	20.08 dB	18.00	PASS	
	Recv output level dB SPL 2N	83.06 dB	info only		
	Recv conversational gain 2N	13.06 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	2.7 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	3.24 dB	Absolute Limits	PASS	

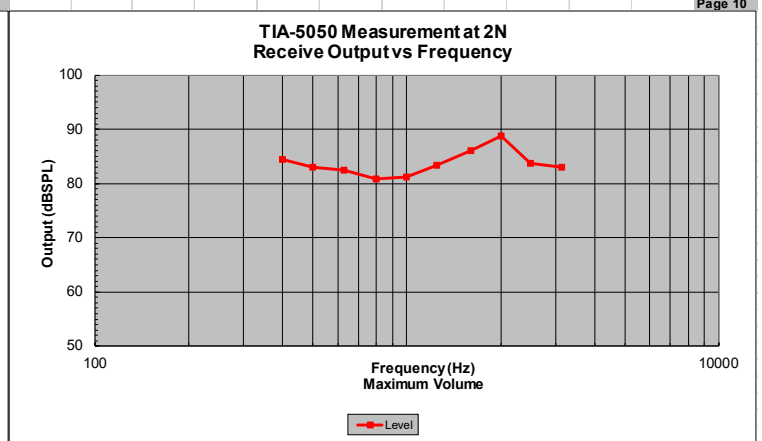
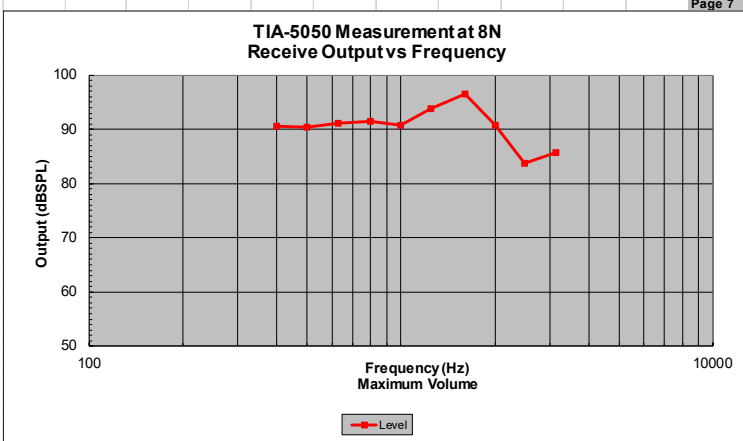
# LTE Band 7 EVS-NB: 9.6 kbps 100,0 RB QPSK

## Distortion Report



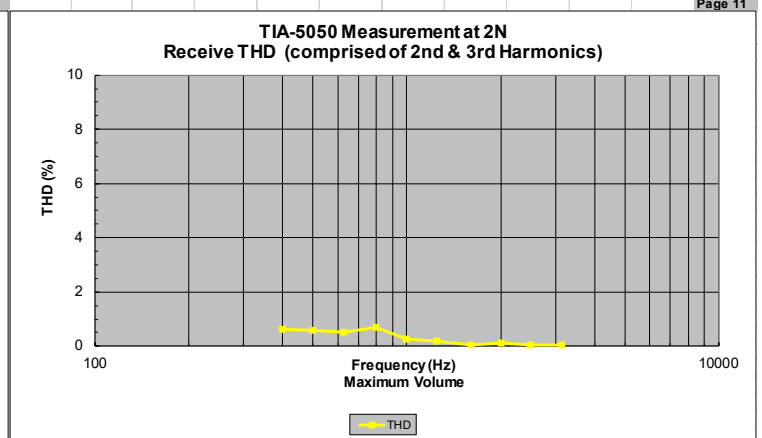
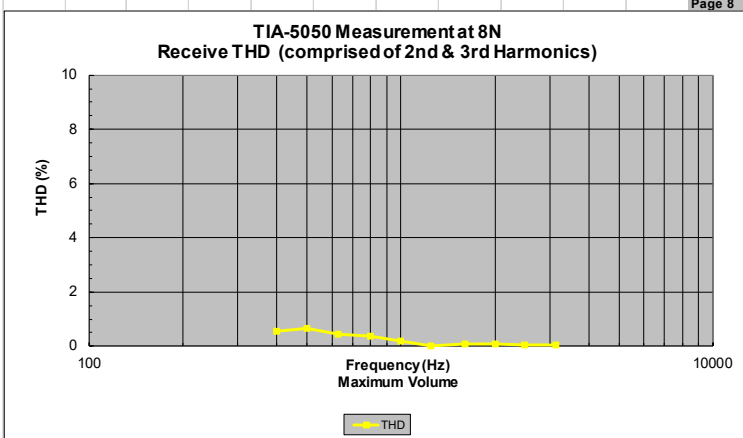
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	2.7 dB	Absolute Limits	PASS	9/19/2024 14:56
<small>Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.</small>				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	3.24 dB	Absolute Limits	PASS	9/19/2024 14:56
<small>Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.</small>				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			



Test Date	
9/19/2024 14:56	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/19/2024 14:56	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



Test Date	
9/19/2024 14:56	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/19/2024 14:56	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



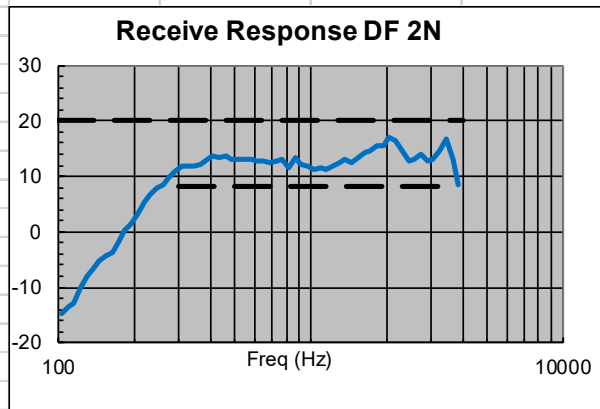
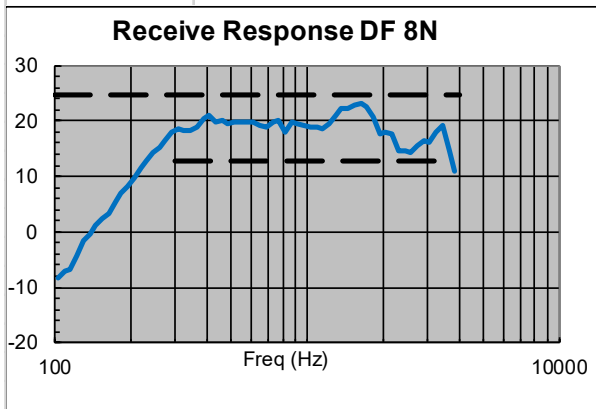
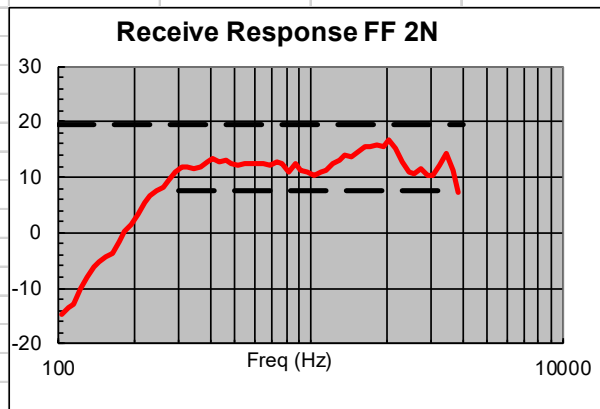
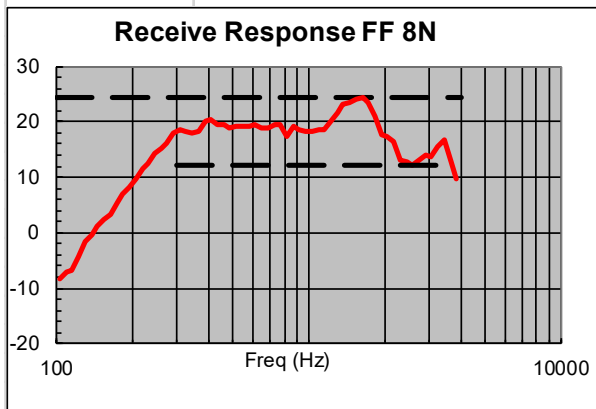
**LTE Band 12 EVS-NB: 9.6 kbps 50,0 RB QPSK  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B12 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/19/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.13 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.61 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.87 dB	Floating Limits	PASS	
	Recv resp DF 2N	2.99 dB	Floating Limits	PASS	



**Output**

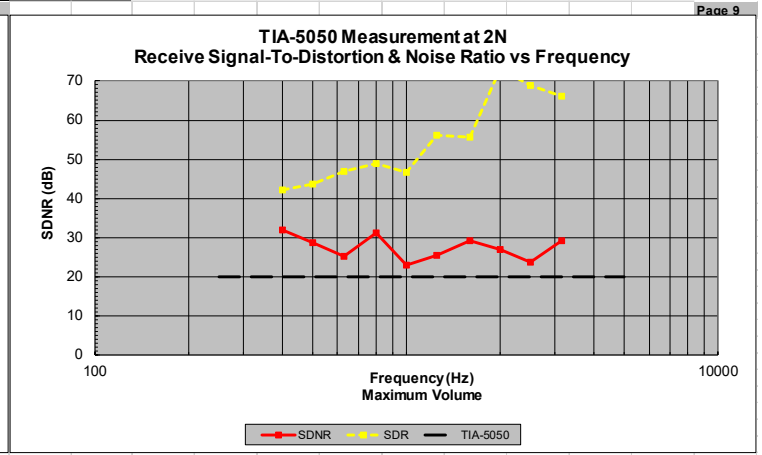
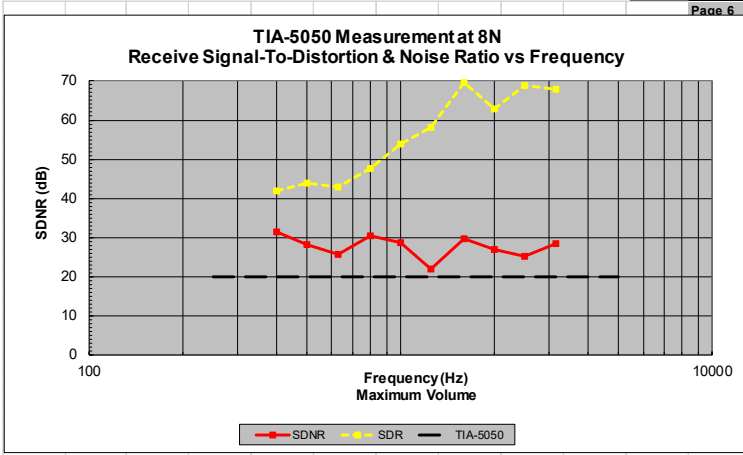
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	89.95 dB	info only		
	Recv conversational gain 8N	19.95 dB	18.00	PASS	
	Recv output level dB SPL 2N	83.08 dB	info only		
	Recv conversational gain 2N	13.08 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	2 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	2.98 dB	Absolute Limits	PASS	

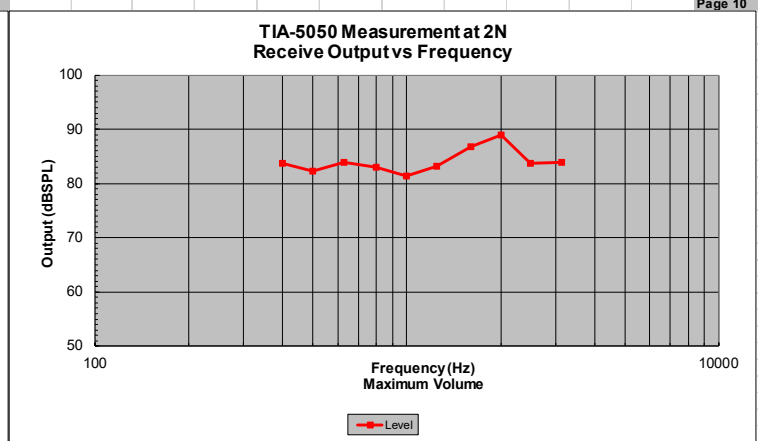
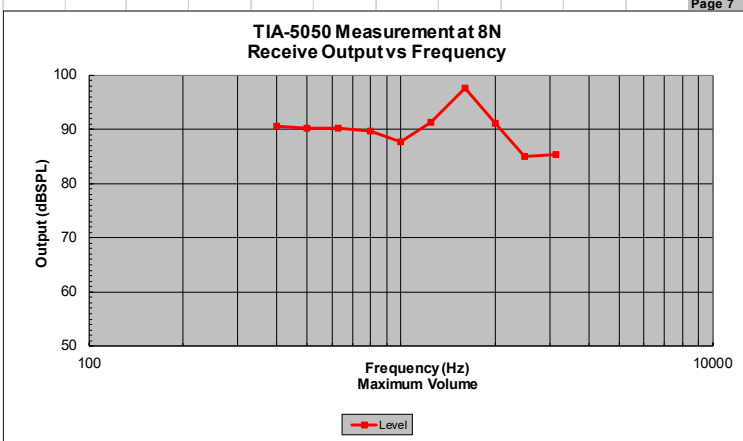
# LTE Band 12 EVS-NB: 9.6 kbps 50,0 RB QPSK

## Distortion Report



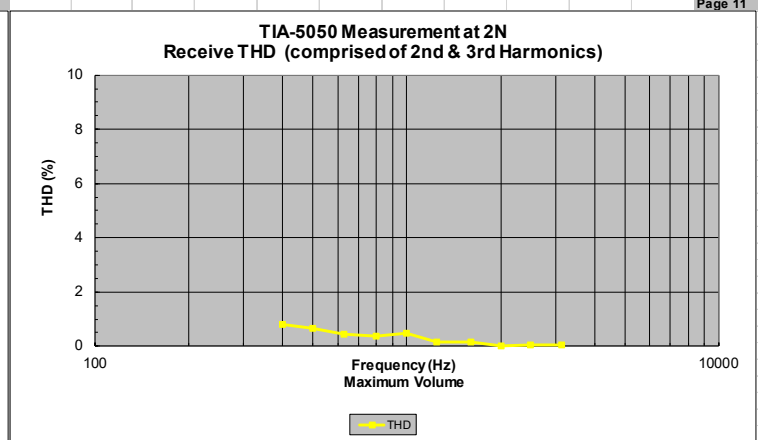
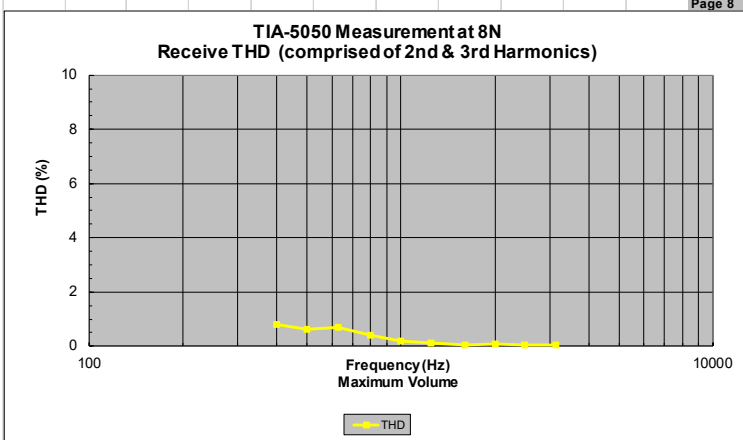
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	2 dB	Absolute Limits	PASS	9/19/2024 15:23
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	2.98 dB	Absolute Limits	PASS	9/19/2024 15:23
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			



Test Date	
9/19/2024 15:23	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/19/2024 15:23	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



Test Date	
9/19/2024 15:23	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/19/2024 15:23	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

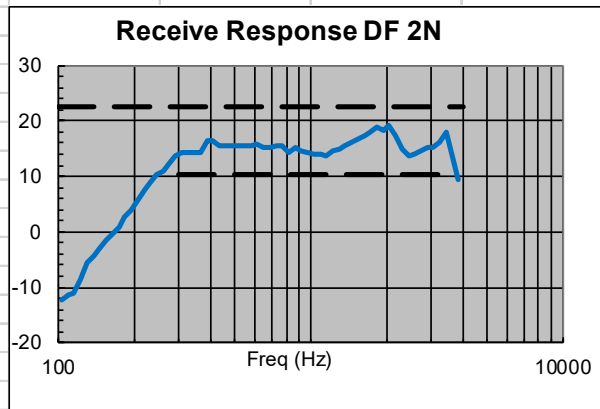
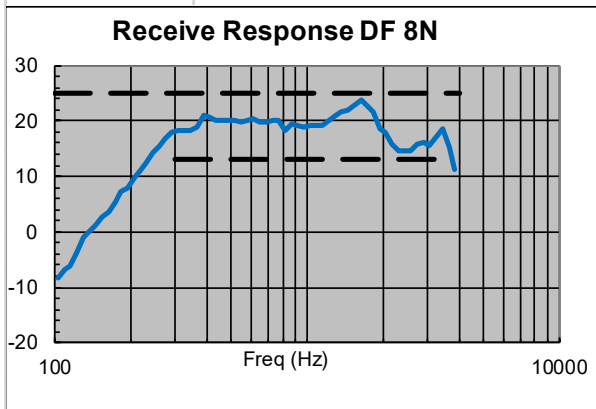
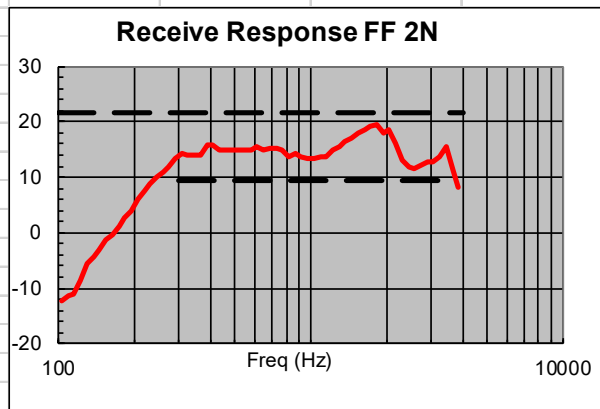
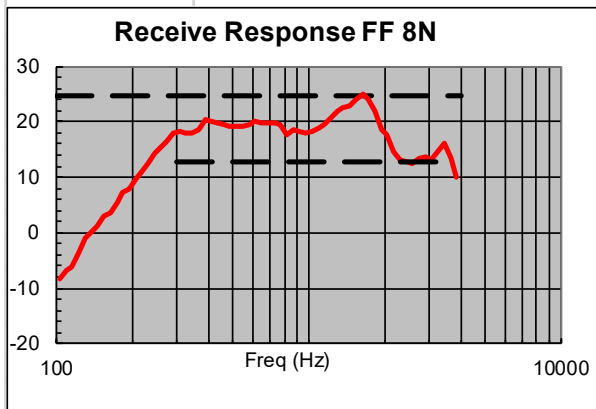
**LTE Band 13 EVS-NB: 9.6 kbps 50,0 RB QPSK  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B13 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/19/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.2 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.48 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.1 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.3 dB	Floating Limits	PASS	



**Output**

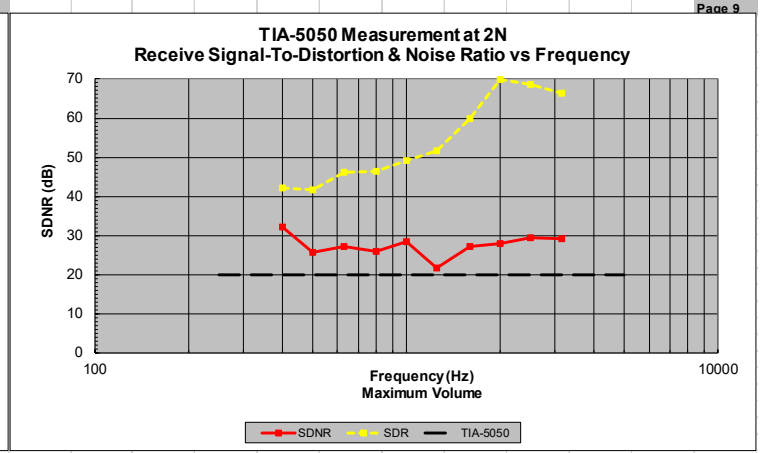
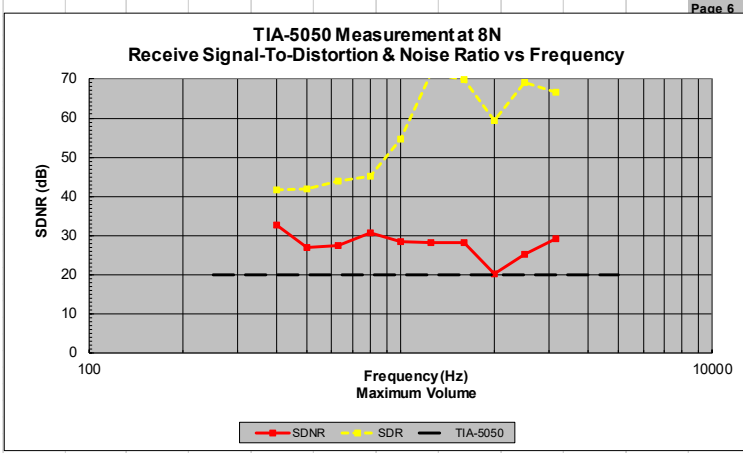
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	90.17 dB	info only		
	Recv conversational gain 8N	20.17 dB	18.00	PASS	
	Recv output level dB SPL 2N	85.61 dB	info only		
	Recv conversational gain 2N	15.61 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	0.3 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	1.64 dB	Absolute Limits	PASS	

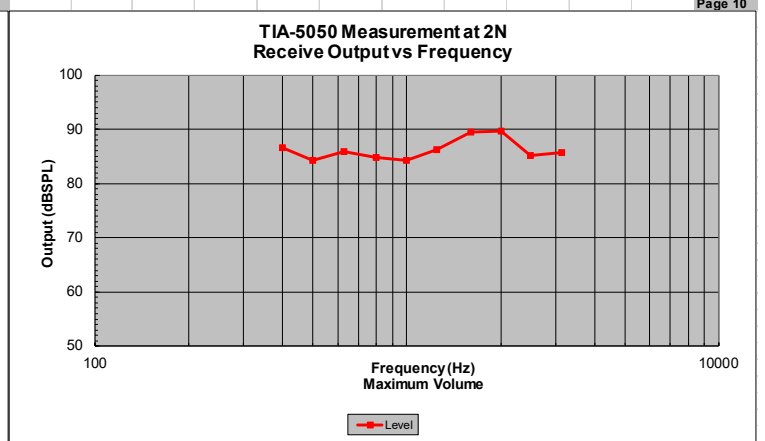
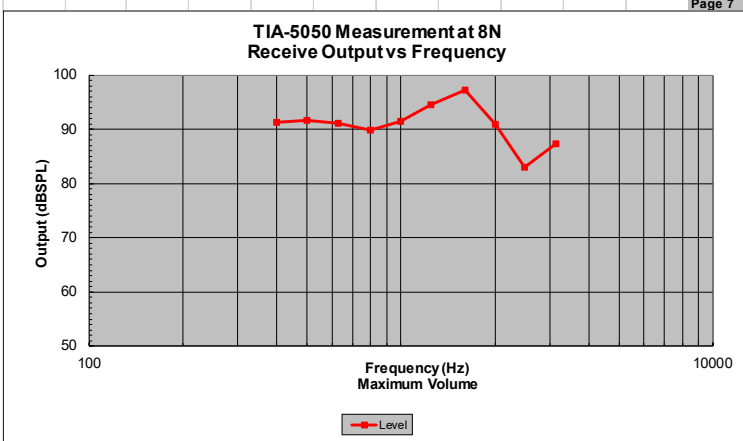
# LTE Band 13 EVS-NB: 9.6 kbps 50,0 RB QPSK

## Distortion Report



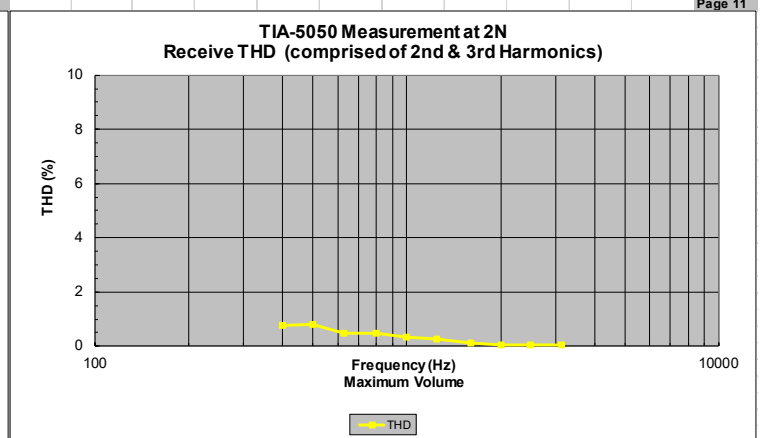
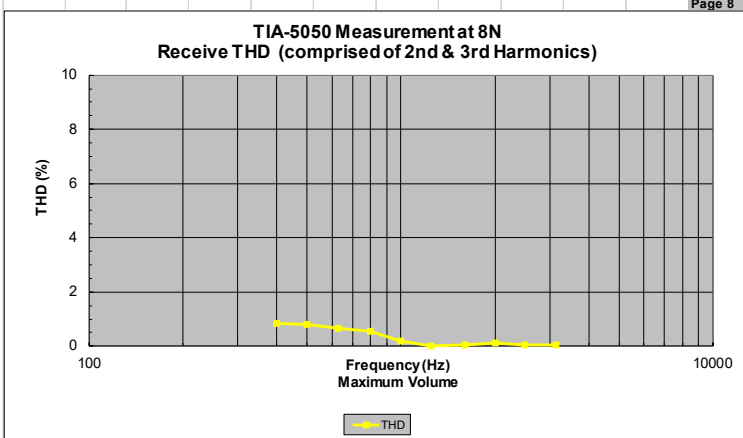
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	0.3 dB	Absolute Limits	PASS	9/19/2024 15:34
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	1.64 dB	Absolute Limits	PASS	9/19/2024 15:34
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			



Test Date	
9/19/2024 15:34	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/19/2024 15:34	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



Test Date	
9/19/2024 15:34	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/19/2024 15:34	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

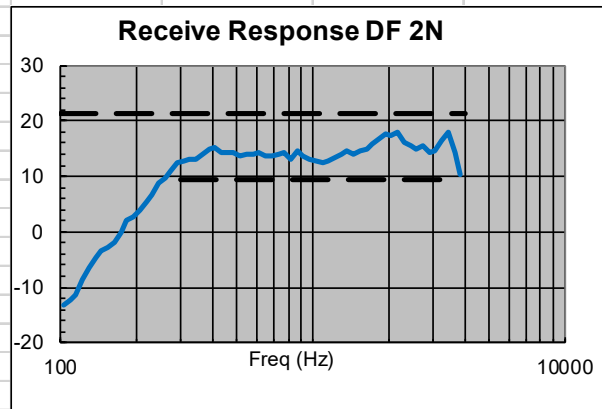
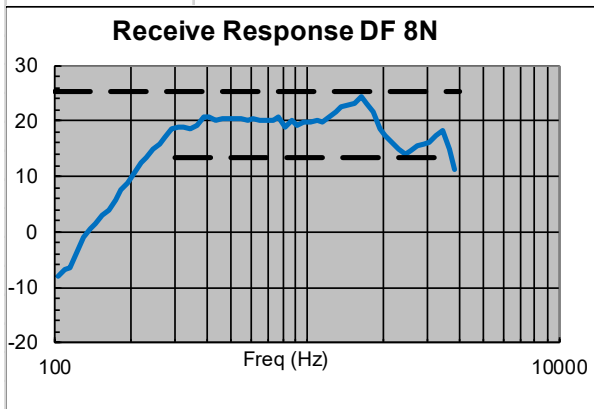
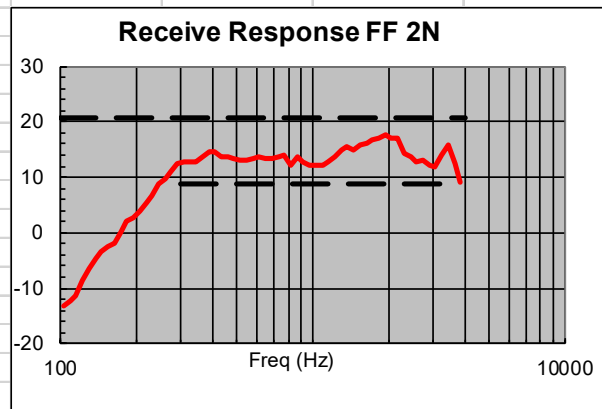
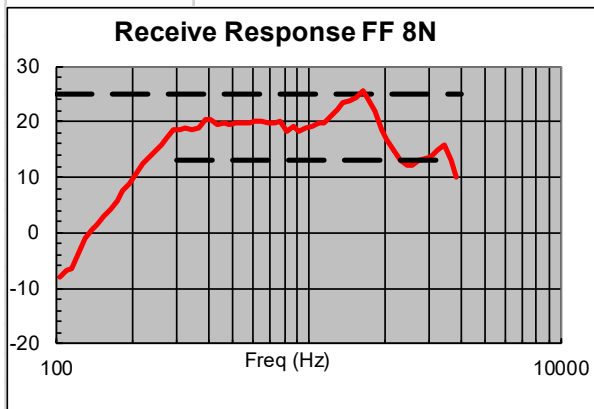
**LTE Band 26 EVS-NB: 9.6 kbps 50,0 RB QPSK  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B26 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/19/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.79 dB	Floating Limits	FAIL	
	Recv resp DF 8N	0.81 dB	Floating Limits	PASS	
	Recv resp FF 2N	3.16 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.22 dB	Floating Limits	PASS	



**Output**

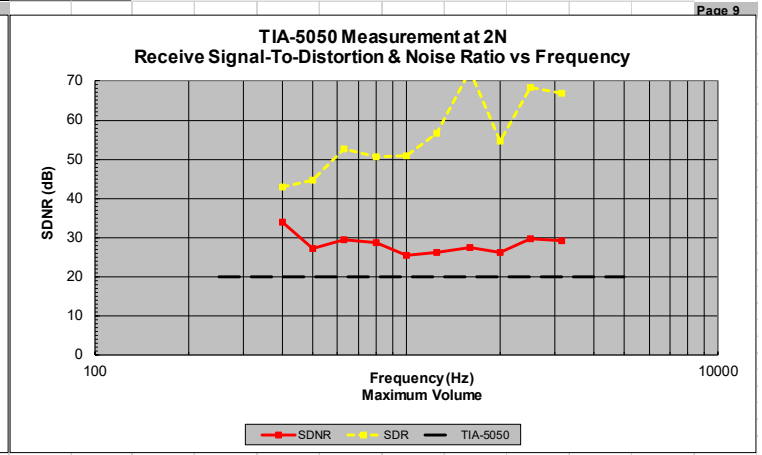
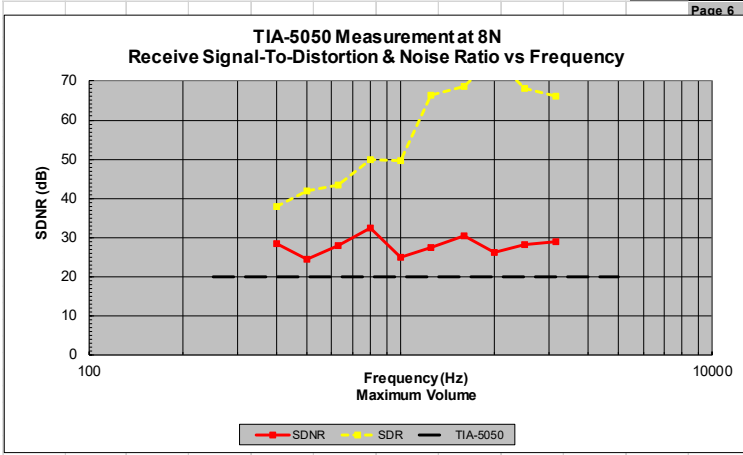
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	90.53 dB	info only		
	Recv conversational gain 8N	20.53 dB	18.00	PASS	
	Recv output level dB SPL 2N	84.23 dB	info only		
	Recv conversational gain 2N	14.23 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	4.5 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	5.56 dB	Absolute Limits	PASS	

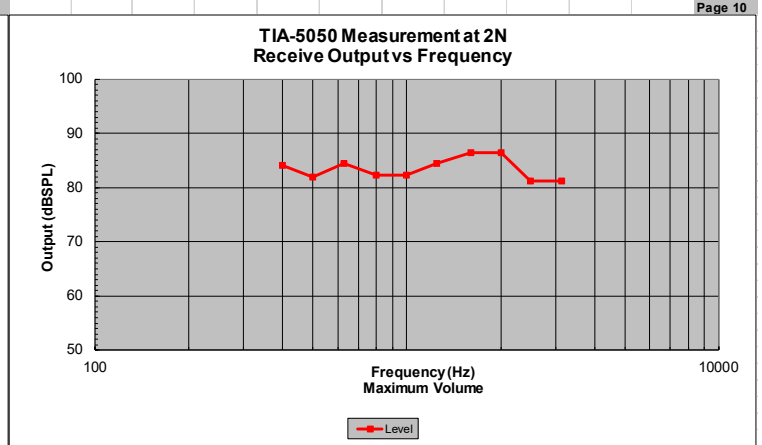
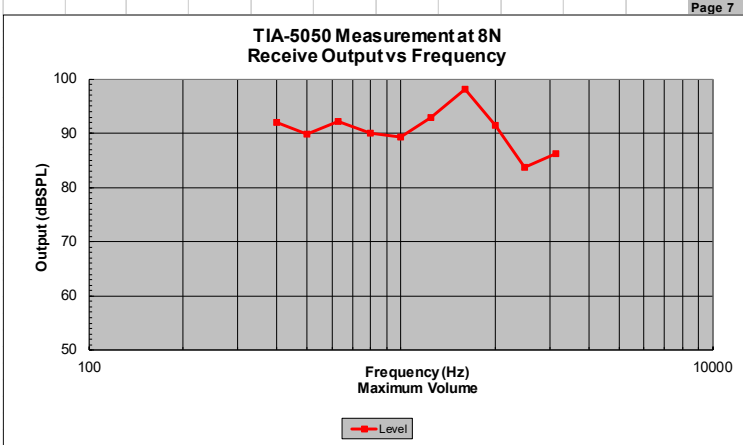
# LTE Band 26 EVS-NB: 9.6 kbps 50,0 RB QPSK

## Distortion Report



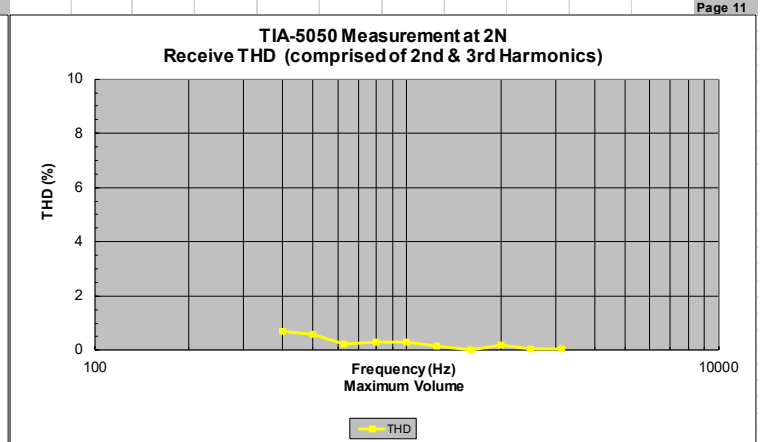
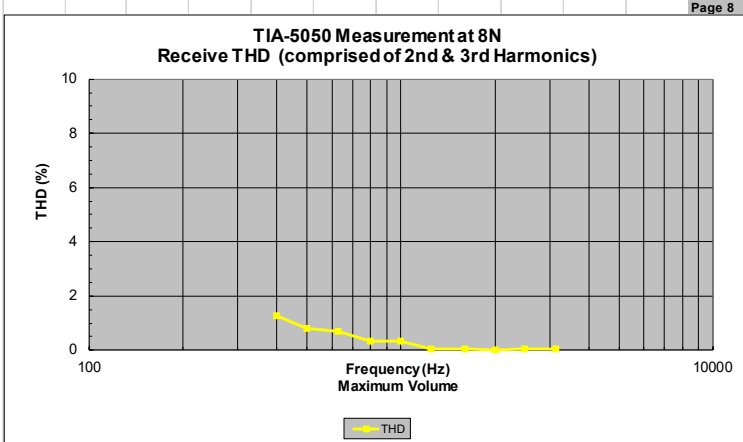
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	4.5 dB	Absolute Limits	PASS	9/19/2024 16:33
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-99 dBPa	
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	5.56 dB	Absolute Limits	PASS	9/19/2024 16:33
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-99 dBPa	
Comments:	9.6 kbps			



Test Date	
9/19/2024 16:33	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/19/2024 16:33	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



Test Date	
9/19/2024 16:33	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

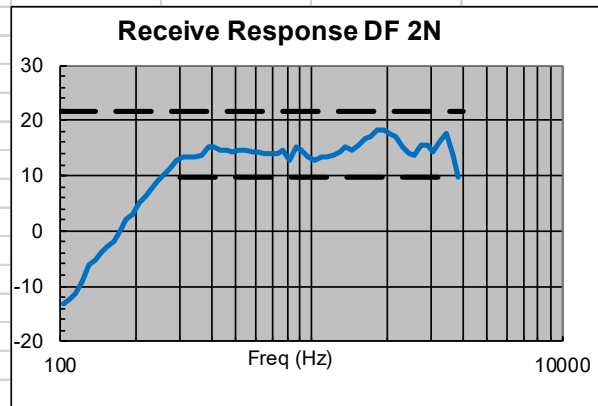
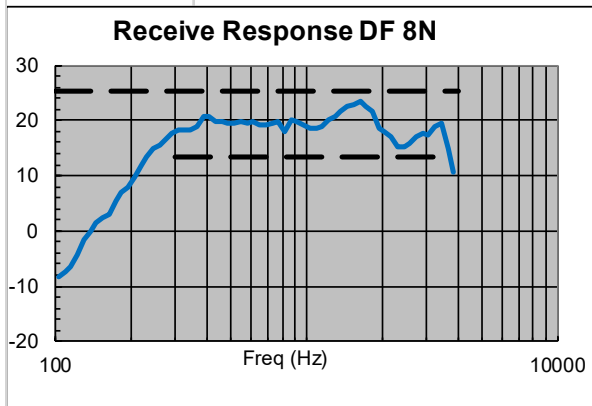
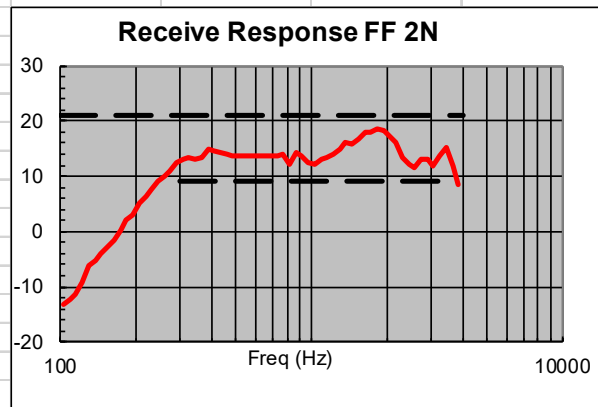
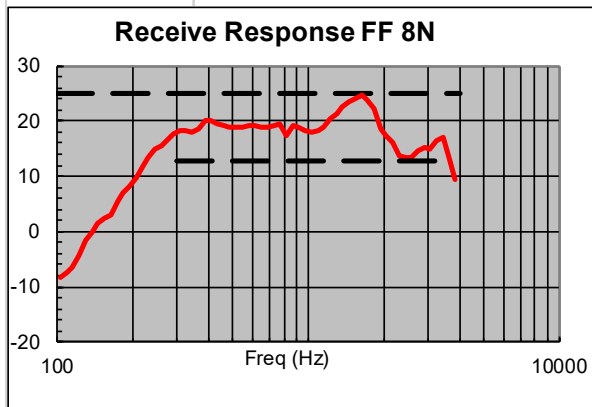
Test Date	
9/19/2024 16:33	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

**LTE Band 30 EVS-NB: 9.6 kbps 50,0 RB QPSK**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B30 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/23/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	0.33 dB	Floating Limits	PASS	
	Recv resp DF 8N	1.94 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.39 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.3 dB	Floating Limits	PASS	



**Output**

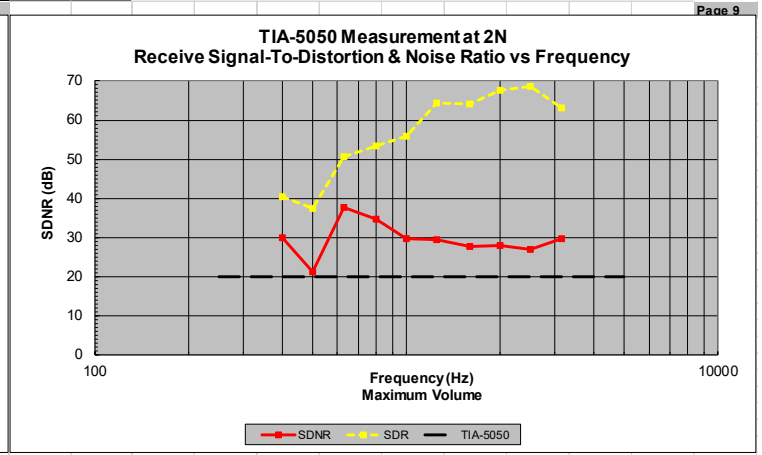
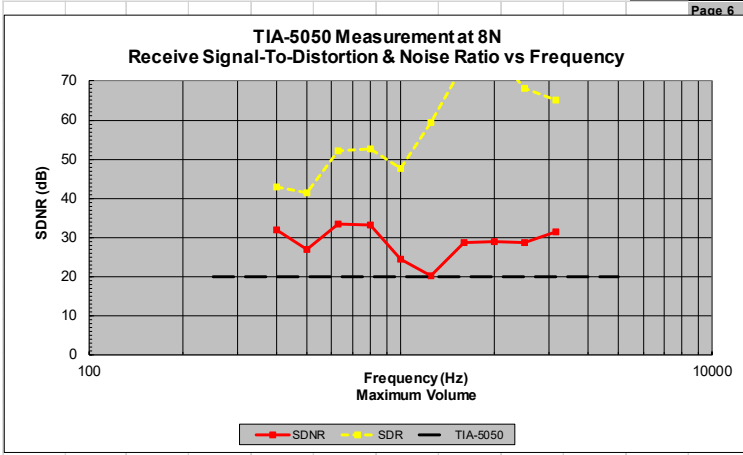
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	89.91 dB	info only		
	Recv conversational gain 8N	19.91 dB	18.00	PASS	
	Recv output level dB SPL 2N	84.65 dB	info only		
	Recv conversational gain 2N	14.65 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	0.2 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	1.33 dB	Absolute Limits	PASS	

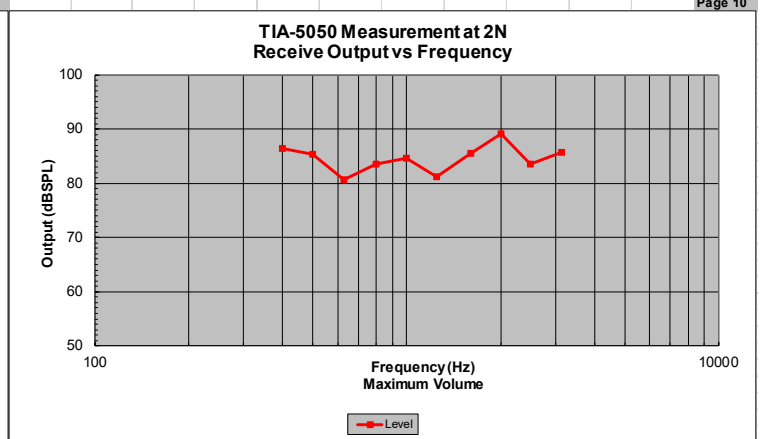
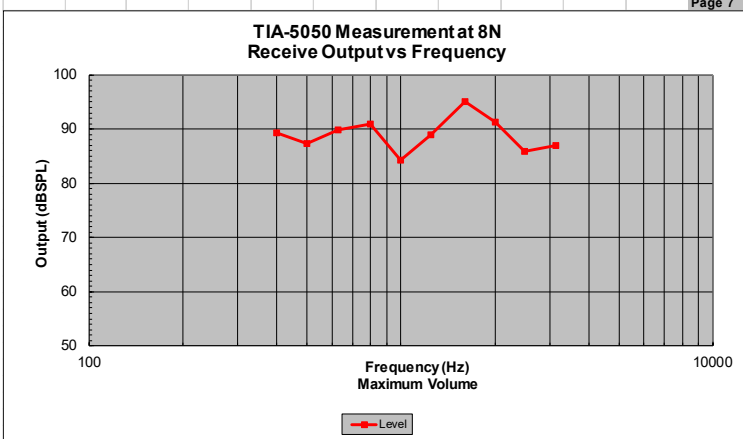
# LTE Band 30 EVS-NB: 9.6 kbps 50,0 RB QPSK

## Distortion Report



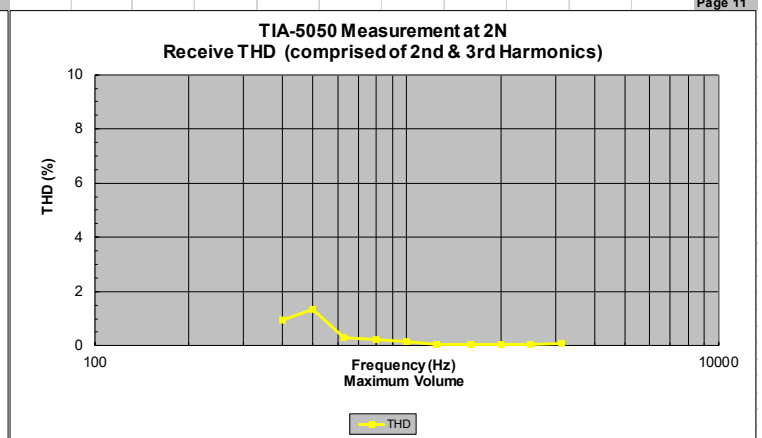
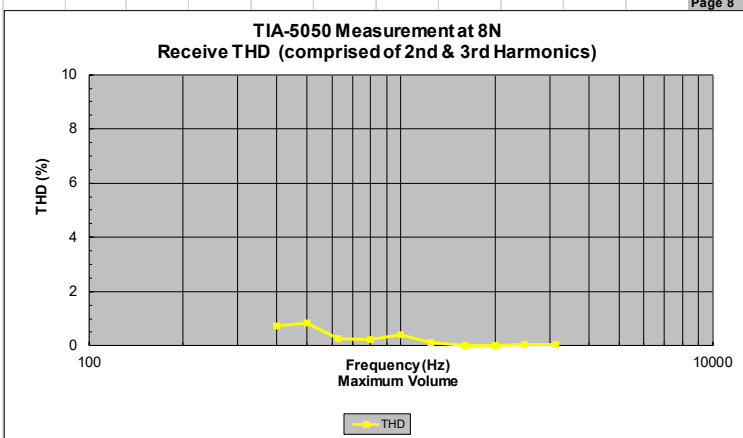
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	0.2 dB	Absolute Limits	PASS	9/23/2024 19:26
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	1.33 dB	Absolute Limits	PASS	9/23/2024 19:26
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			



Test Date	
9/23/2024 19:26	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
9/23/2024 19:26	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps



Test Date	
9/23/2024 19:26	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
9/23/2024 19:26	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

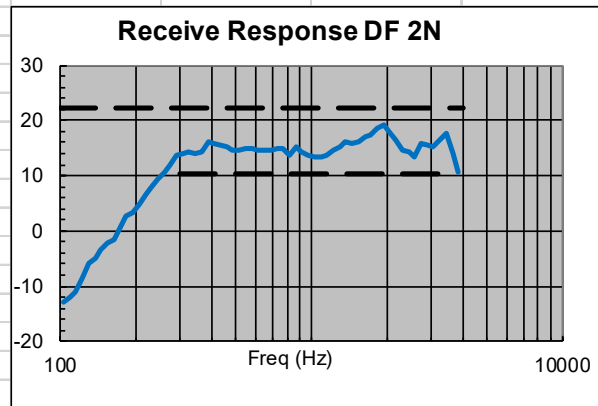
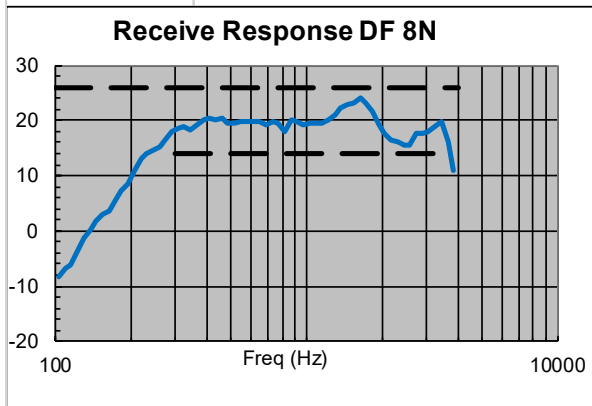
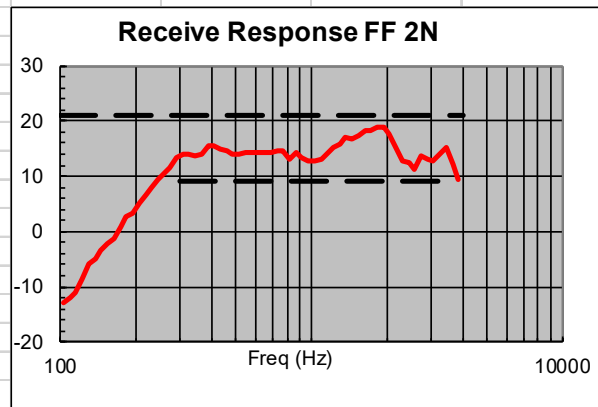
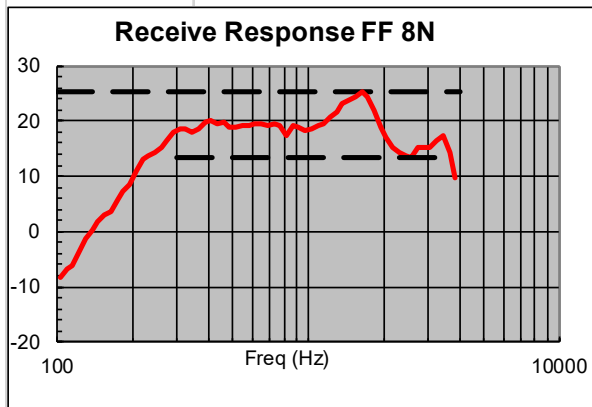


**LTE Band 41 PC3 EVS-NB: 9.6 kbps 100,0 RB QPSK**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B41 PC3 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/23/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.04 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.66 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.13 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.14 dB	Floating Limits	PASS	



**Output**

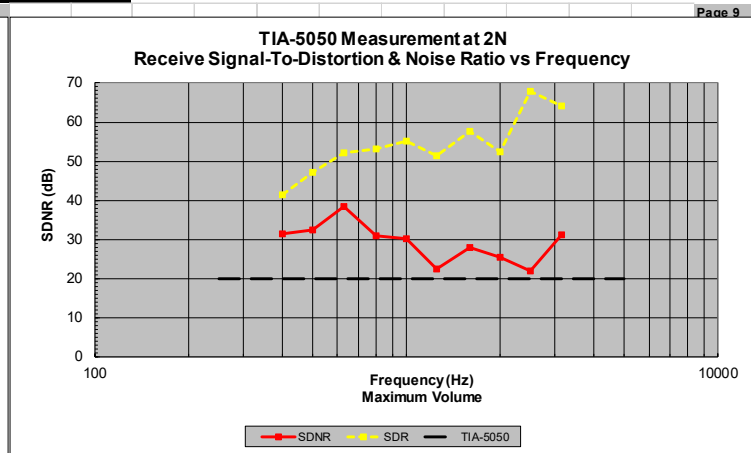
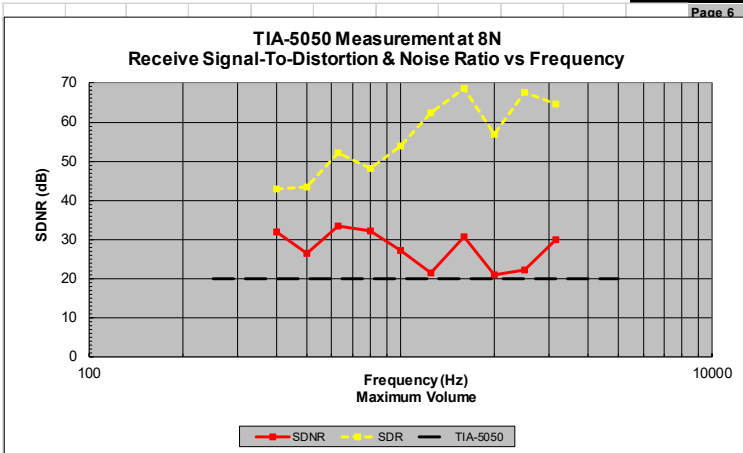
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	90.15 dB	info only		
	Recv conversational gain 8N	20.15 dB	18.00	PASS	
	Recv output level dB SPL 2N	85.16 dB	info only		
	Recv conversational gain 2N	15.16 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	1 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	2.04 dB	Absolute Limits	PASS	

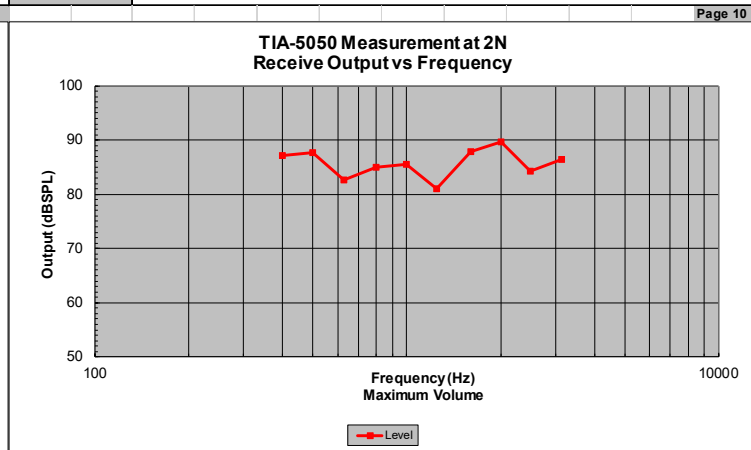
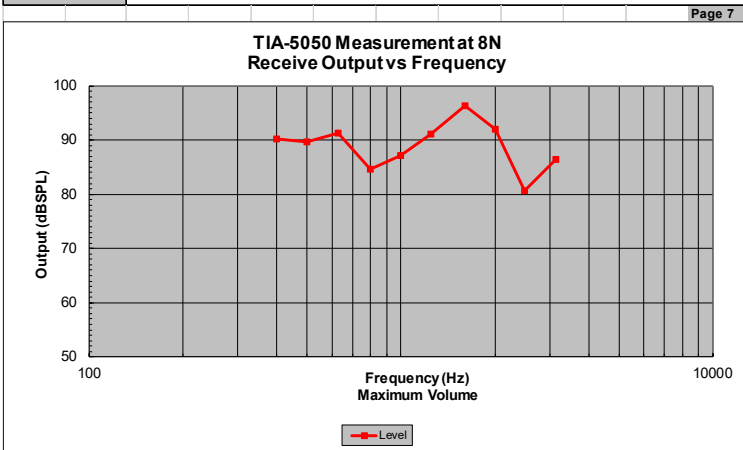
# LTE Band 41 PC3 EVS-NB: 9.6 kbps 100,0 RB QPSK

## Distortion Report



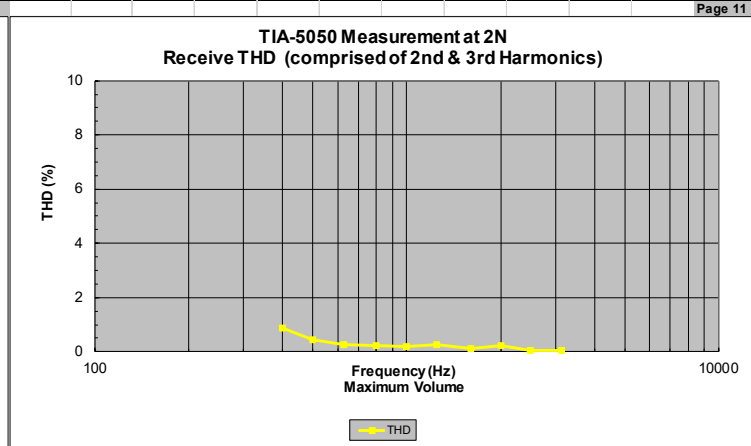
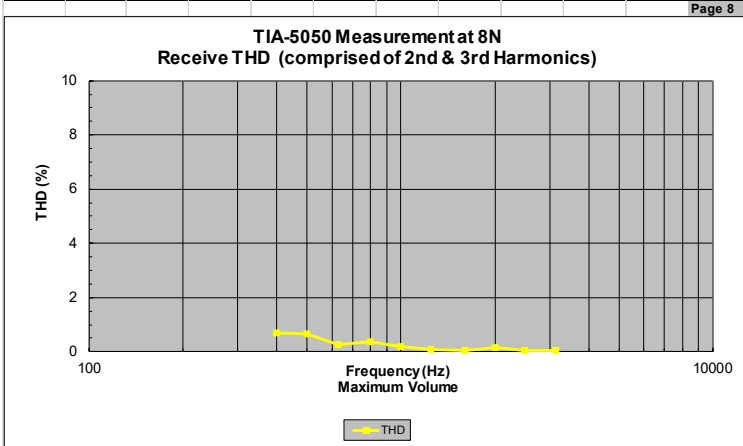
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	1 dB	Absolute Limits	PASS	9/23/2024 20:00
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-20 dBPa	
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	2.04 dB	Absolute Limits	PASS	9/23/2024 20:00
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-20 dBPa	
Comments:	9.6 kbps			



Test Date		
9/23/2024 20:00		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-20 dBPa	
Comments:	9.6 kbps	

Test Date		
9/23/2024 20:00		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-20 dBPa	
Comments:	9.6 kbps	



Test Date		
9/23/2024 20:00		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-20 dBPa	
Comments:	9.6 kbps	

Test Date		
9/23/2024 20:00		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-20 dBPa	
Comments:	9.6 kbps	

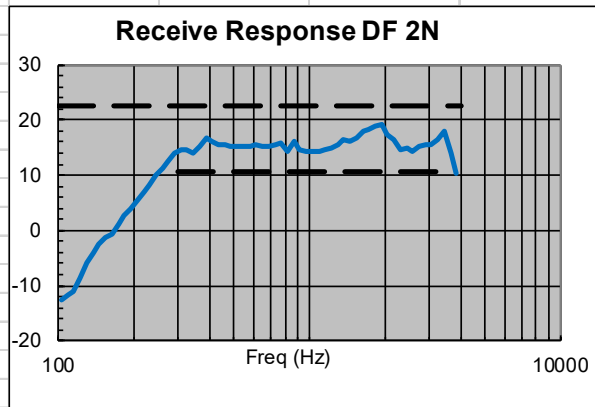
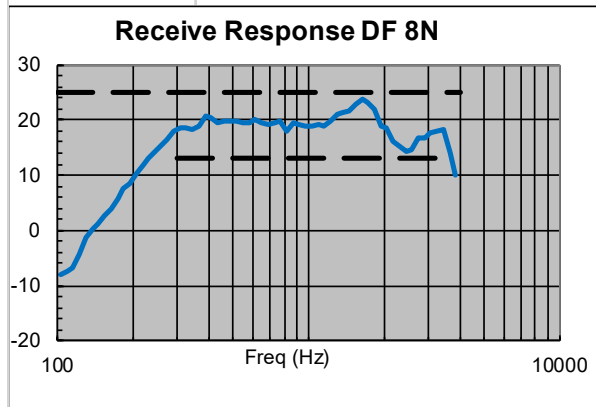
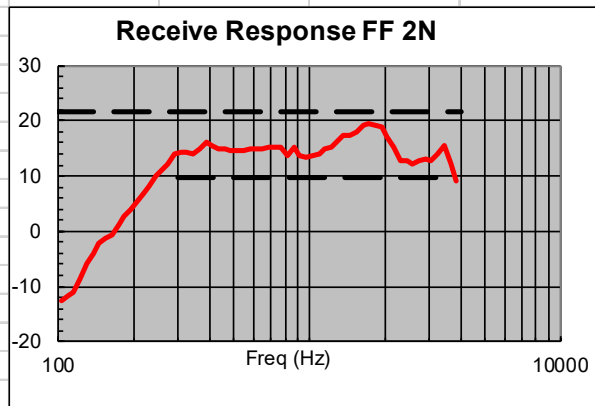
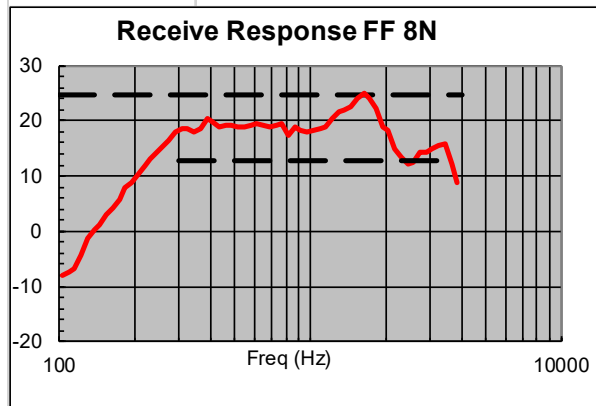
# LTE Band 41 PC2 EVS-NB: 9.6 kbps 100,0 RB QPSK

## Conversational Gain & Frequency Response Report

<b>Device Under Test:</b>	LTE B41 PC2 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/23/2024

### Frequency Response

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.37 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.24 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.33 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.51 dB	Floating Limits	PASS	



### Output

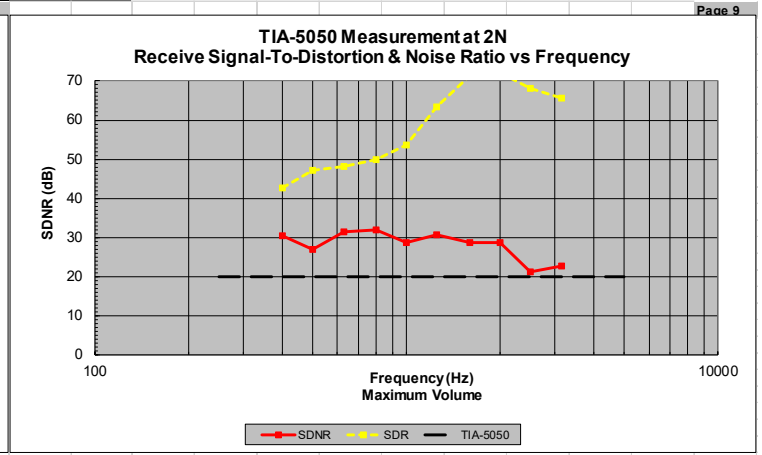
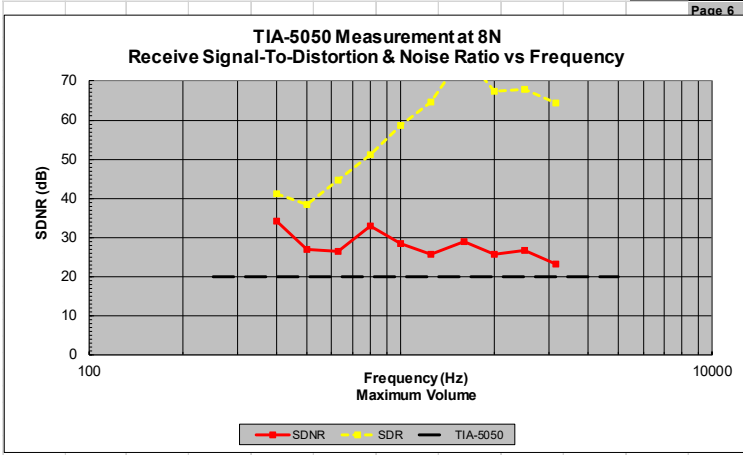
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	89.93 dB	info only		
	Recv conversational gain 8N	19.93 dB	18.00	PASS	
	Recv output level dB SPL 2N	85.65 dB	info only		
	Recv conversational gain 2N	15.65 dB	6.00	PASS	

### Distortion

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	3.3 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	1.33 dB	Absolute Limits	PASS	

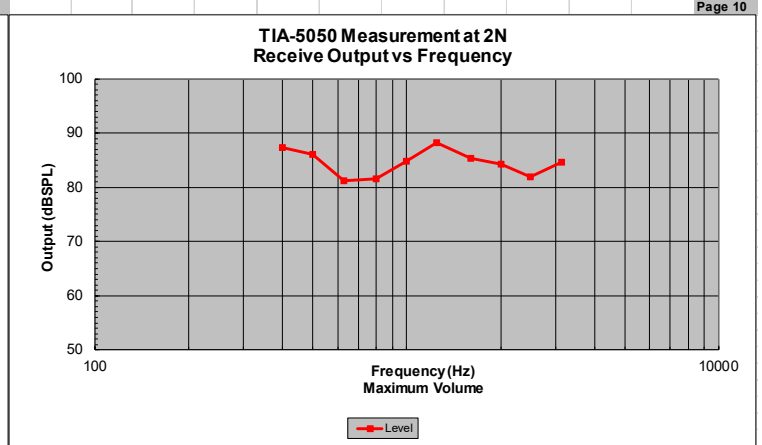
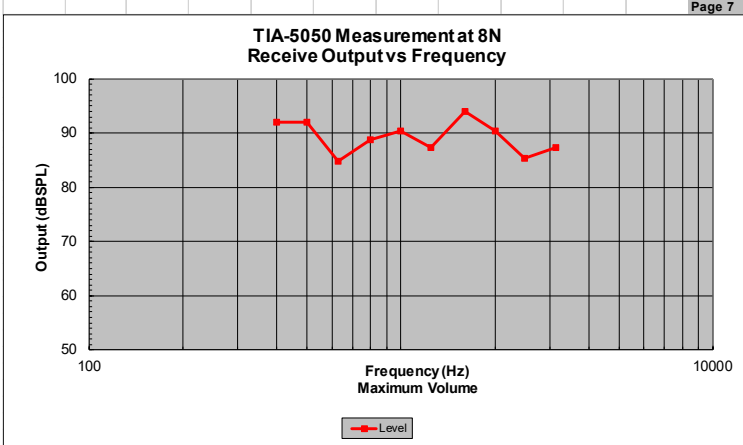
# LTE Band 41 PC2 EVS-NB: 9.6 kbps 100,0 RB QPSK

## Distortion Report



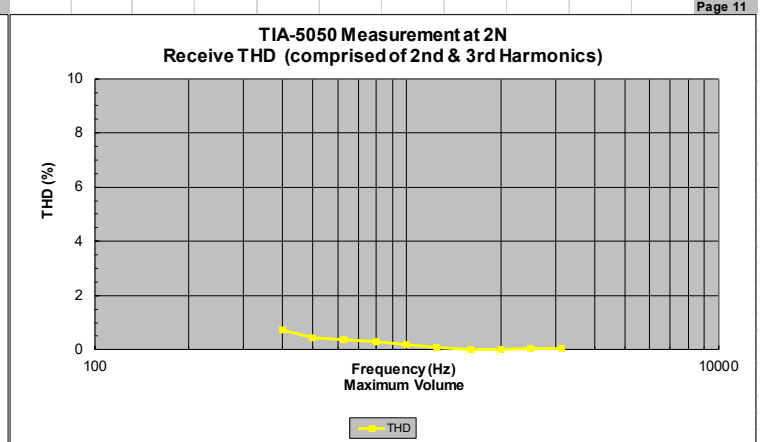
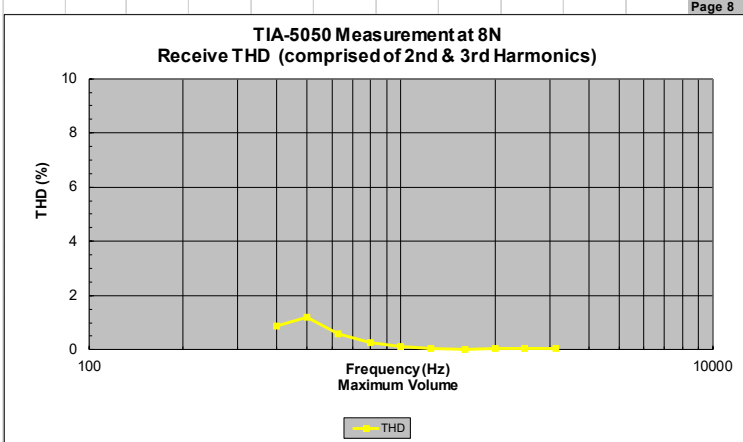
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	3.3 dB	Absolute Limits	PASS	9/23/2024 20:24
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-20 dBPa	
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	1.33 dB	Absolute Limits	PASS	9/23/2024 20:24
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-20 dBPa	
Comments:	9.6 kbps			



Test Date	
9/23/2024 20:24	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
9/23/2024 20:24	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps



Test Date	
9/23/2024 20:24	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
9/23/2024 20:24	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

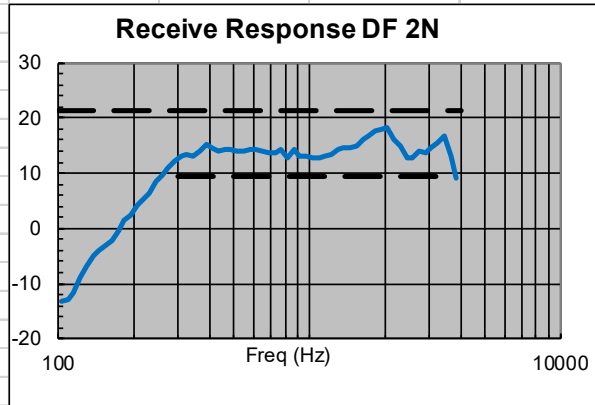
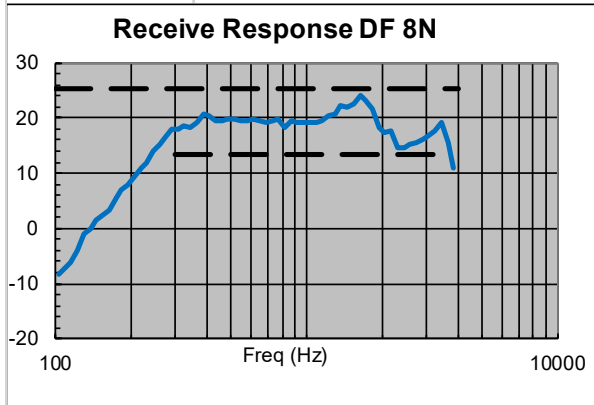
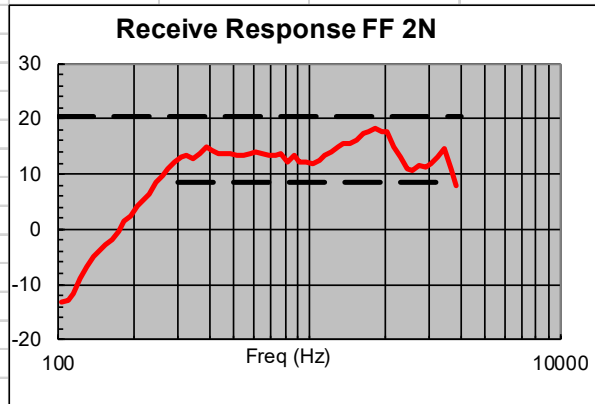
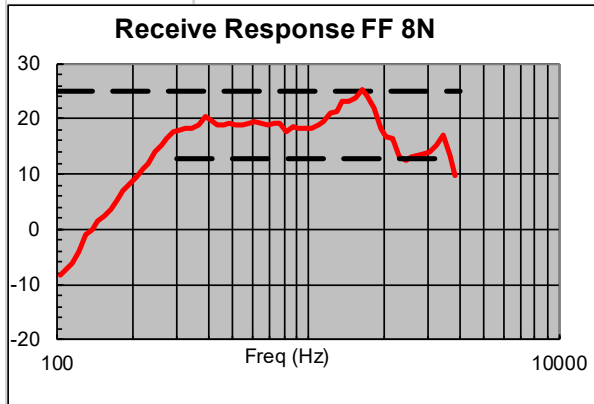
# LTE Band 48 PC3 EVS-NB: 9.6 kbps 100,0 RB QPSK

## Conversational Gain & Frequency Response Report

<b>Device Under Test:</b>	LTE B48 PC3 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/23/2024

### Frequency Response

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.36 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.25 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.2 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.23 dB	Floating Limits	PASS	



### Output

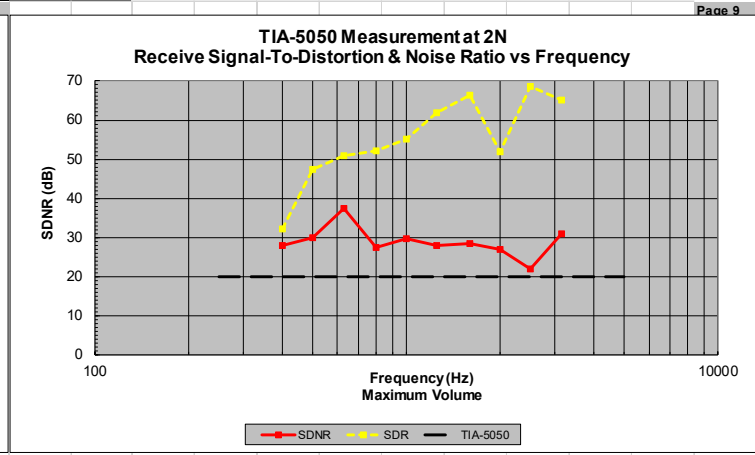
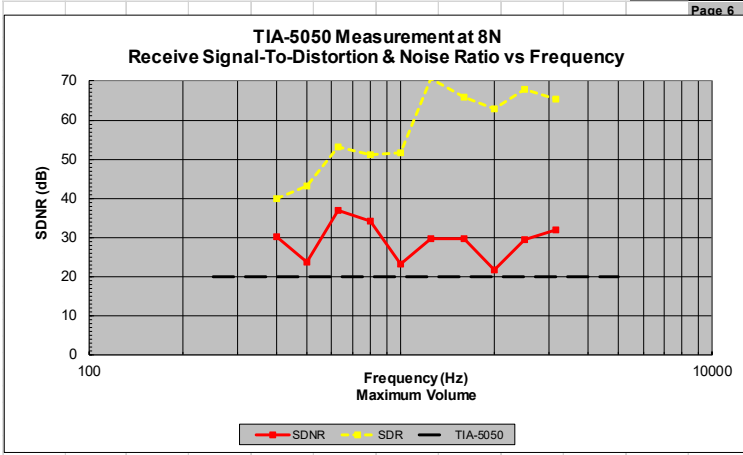
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	89.95 dB	info only		
	Recv conversational gain 8N	19.95 dB	18.00	PASS	
	Recv output level dB SPL 2N	84.33 dB	info only		
	Recv conversational gain 2N	14.33 dB	6.00	PASS	

### Distortion

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	1.8 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	1.93 dB	Absolute Limits	PASS	

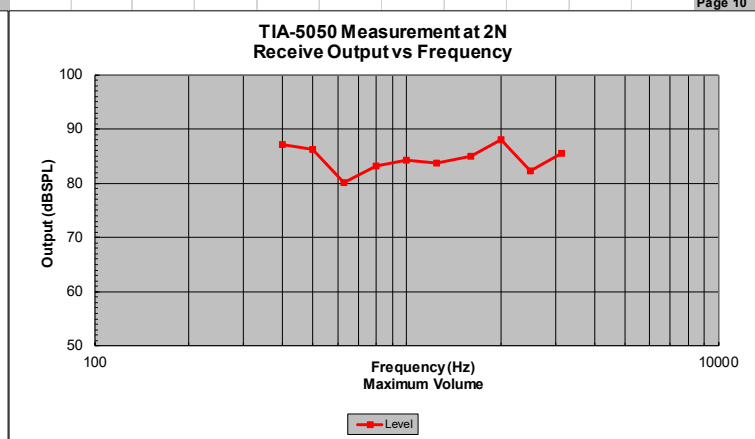
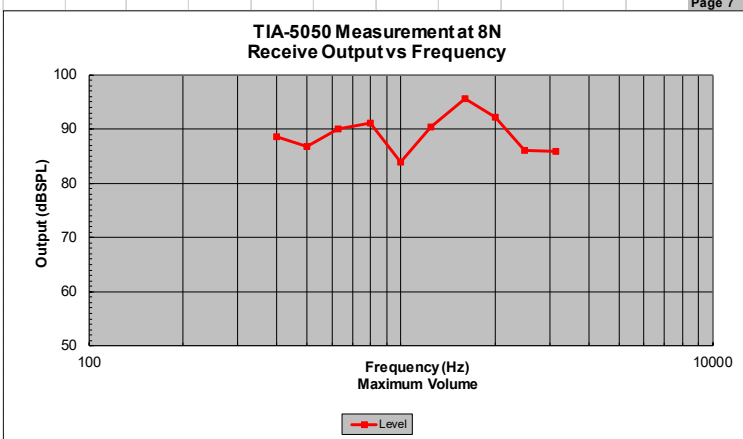
# LTE Band 48 PC3 EVS-NB: 9.6 kbps 100,0 RB QPSK

## Distortion Report



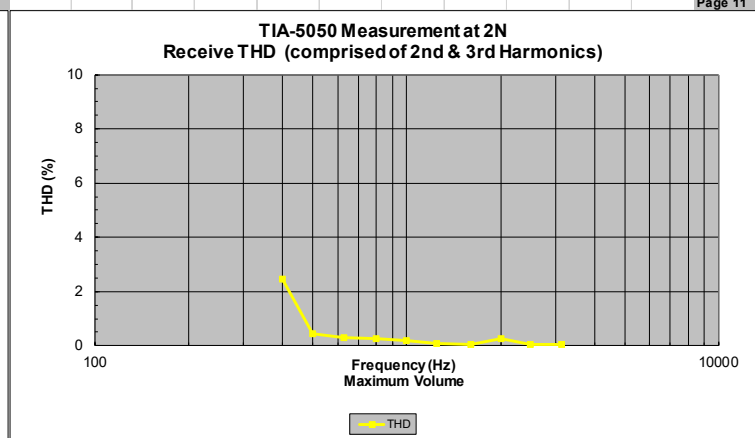
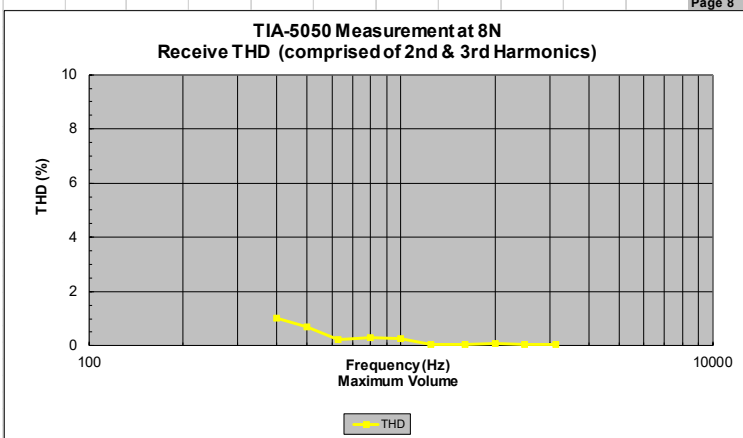
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	1.8 dB	Absolute Limits	PASS	9/23/2024 20:45
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	1.93 dB	Absolute Limits	PASS	9/23/2024 20:45
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			



Test Date	
9/23/2024 20:45	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
9/23/2024 20:45	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps



Test Date	
9/23/2024 20:45	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

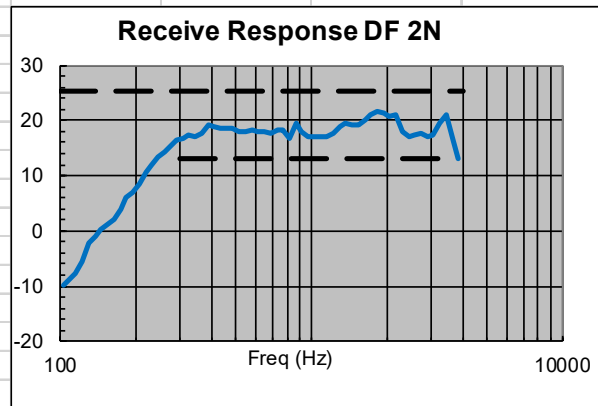
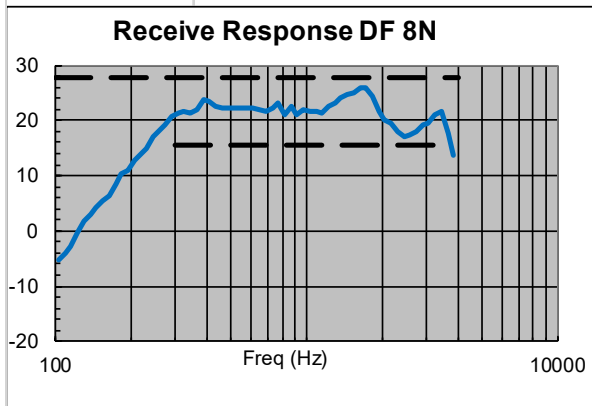
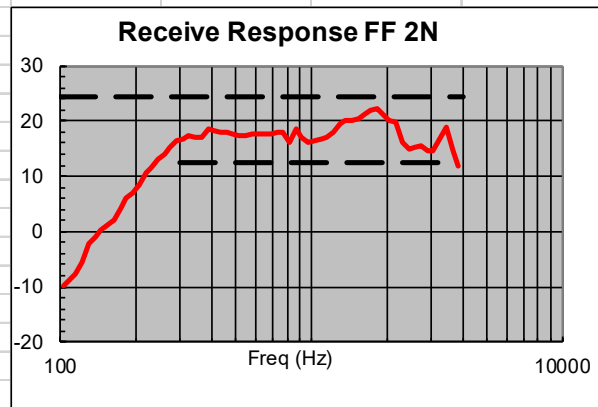
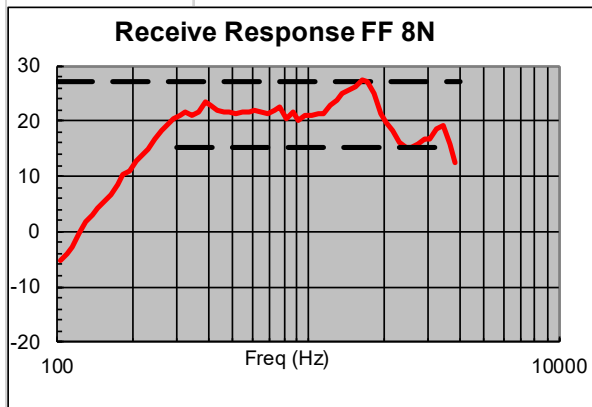
Test Date	
9/23/2024 20:45	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

**LTE Band 53 PC3 EVS-NB: 9.6 kbps 50,0 RB QPSK**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B53 PC3 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/23/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.04 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.57 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.17 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.51 dB	Floating Limits	PASS	



**Output**

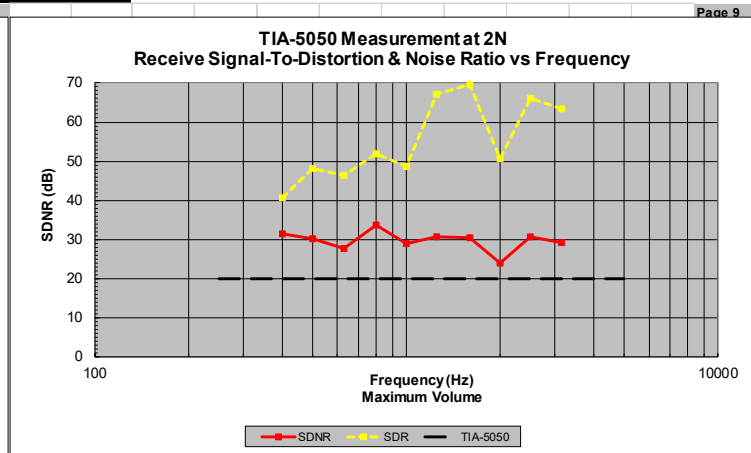
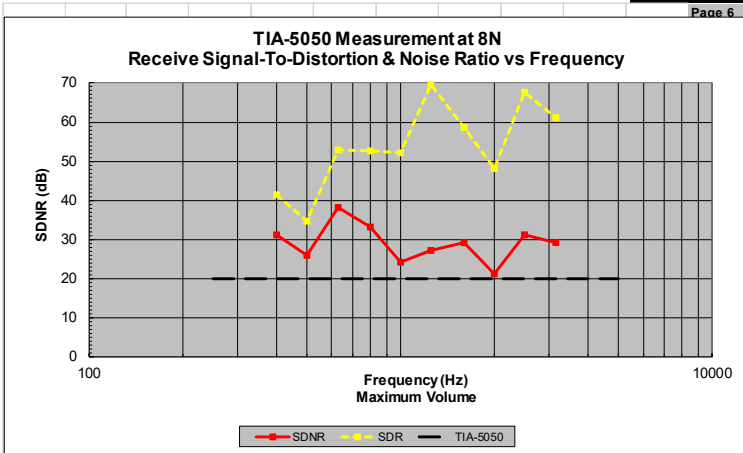
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	92.61 dB	info only		
	Recv conversational gain 8N	22.61 dB	18.00	PASS	
	Recv output level dB SPL 2N	88.45 dB	info only		
	Recv conversational gain 2N	18.45 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	1.3 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	3.87 dB	Absolute Limits	PASS	

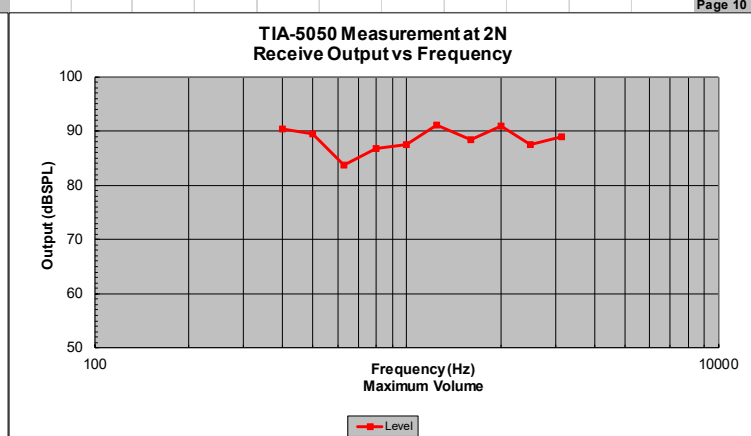
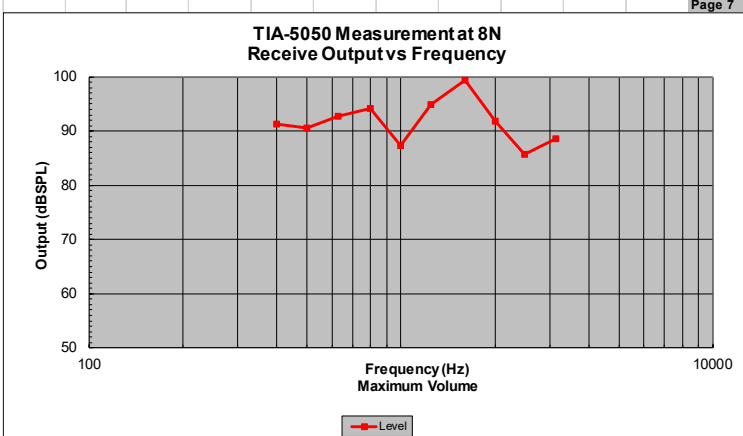
# LTE Band 53 PC3 EVS-NB: 9.6 kbps 50,0 RB QPSK

## Distortion Report



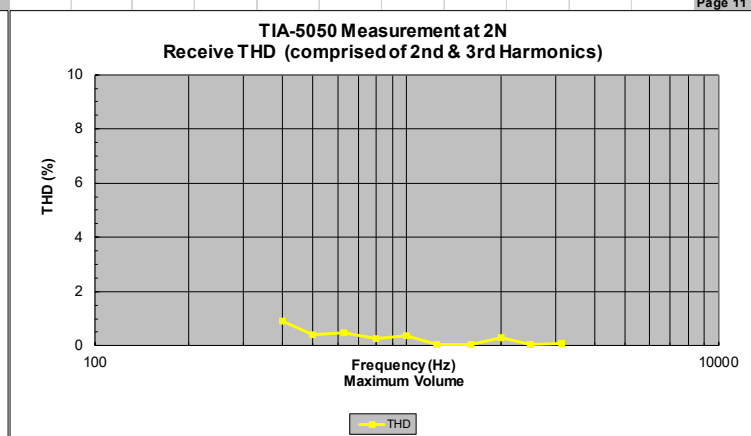
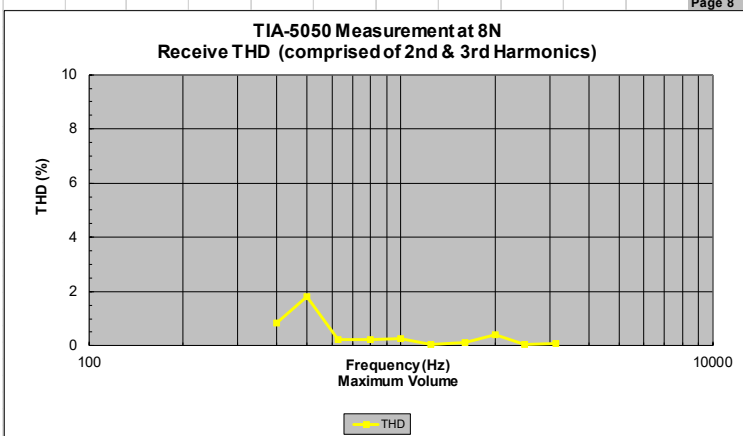
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	1.3 dB	Absolute Limits	PASS	9/23/2024 21:34
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	3.87 dB	Absolute Limits	PASS	9/23/2024 21:34
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments:	9.6 kbps			



Test Date
9/23/2024 21:34
Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments: 9.6 kbps

Test Date
9/23/2024 21:34
Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments: 9.6 kbps



Test Date
9/23/2024 21:34
Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments: 9.6 kbps

Test Date
9/23/2024 21:34
Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments: 9.6 kbps



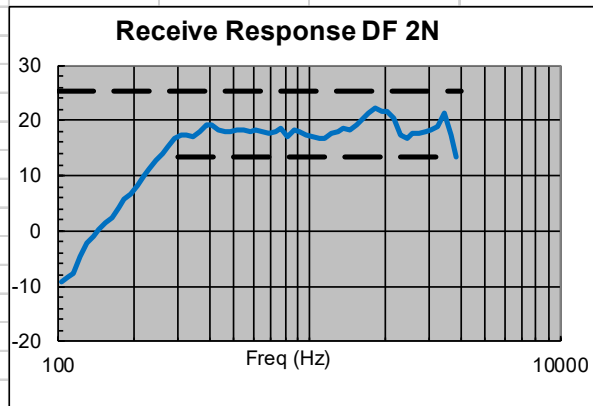
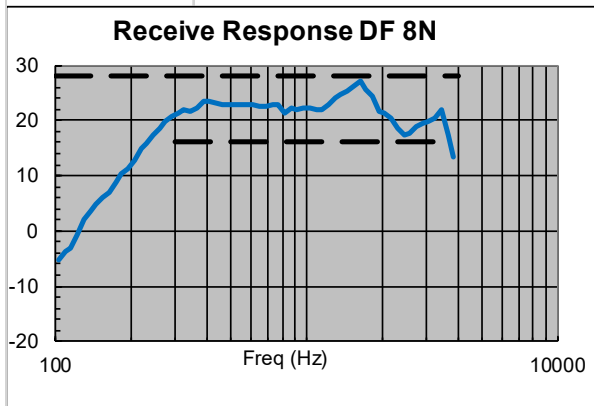
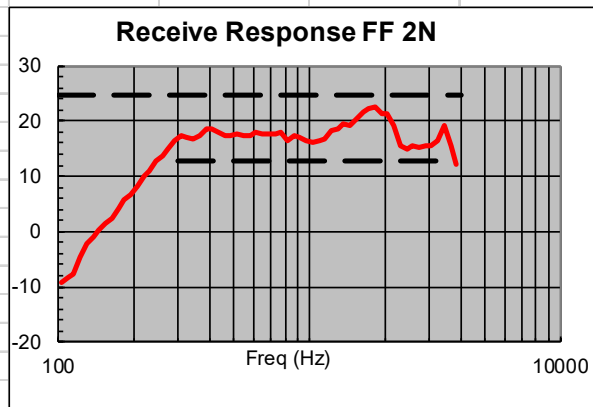
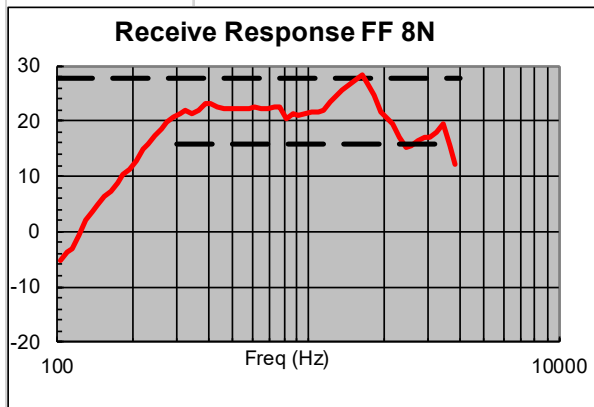
**LTE Band 66 EVS-NB: 9.6 kbps 100,0 RB QPSK  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	LTE B66 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/23/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.48 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.13 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.09 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.22 dB	Floating Limits	PASS	



**Output**

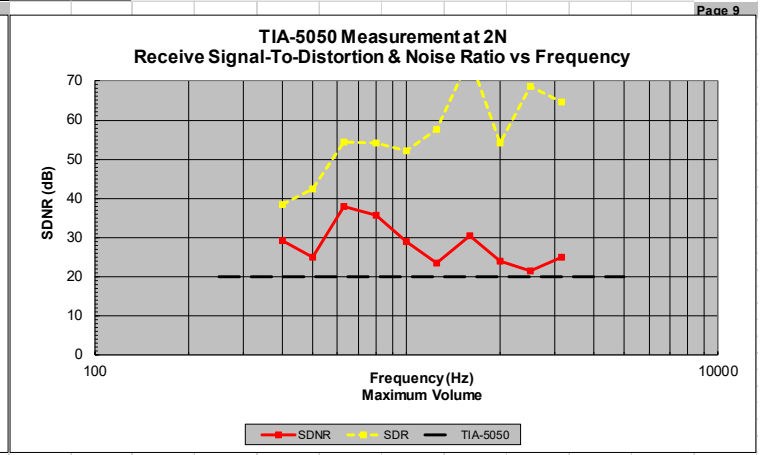
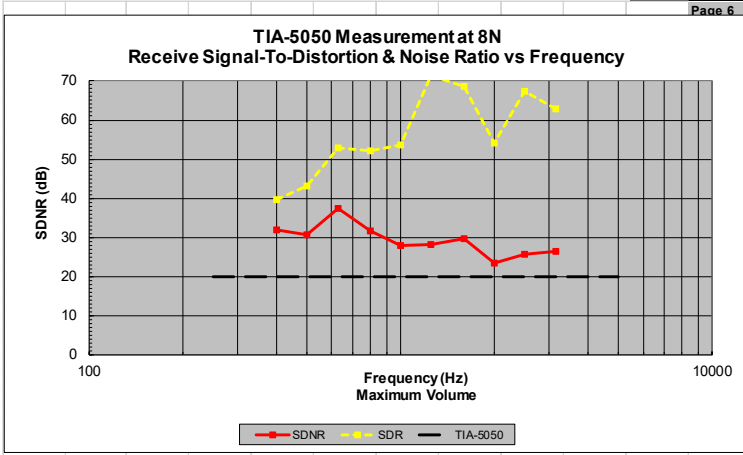
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	93.09 dB	info only		
	Recv conversational gain 8N	23.09 dB	18.00	PASS	
	Recv output level dB SPL 2N	88.38 dB	info only		
	Recv conversational gain 2N	18.38 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	3.4 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	1.59 dB	Absolute Limits	PASS	

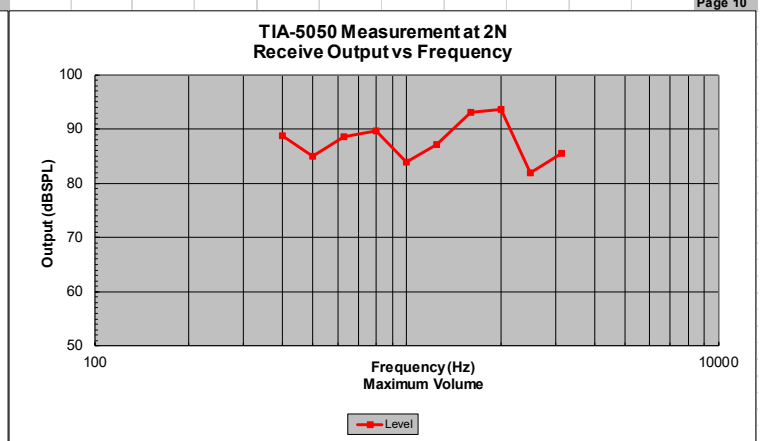
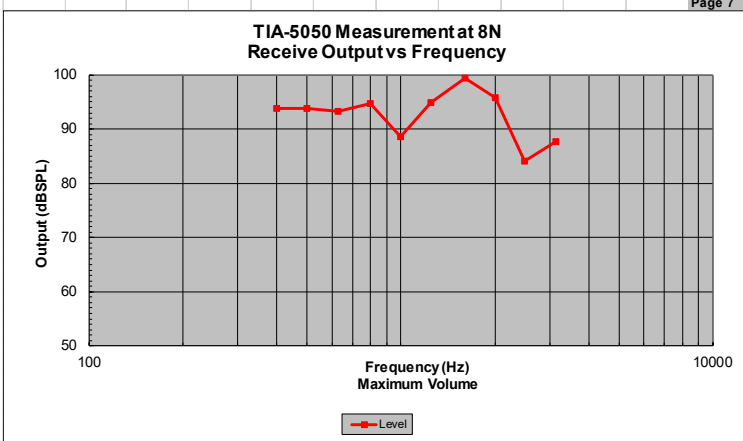
# LTE Band 66 EVS-NB: 9.6 kbps 100,0 RB QPSK

## Distortion Report



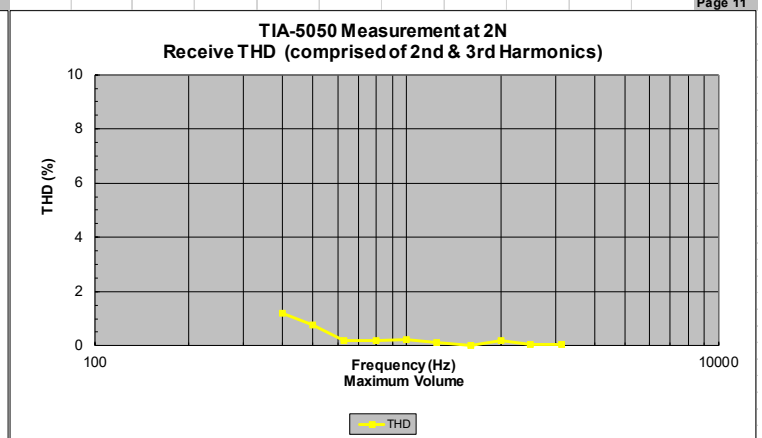
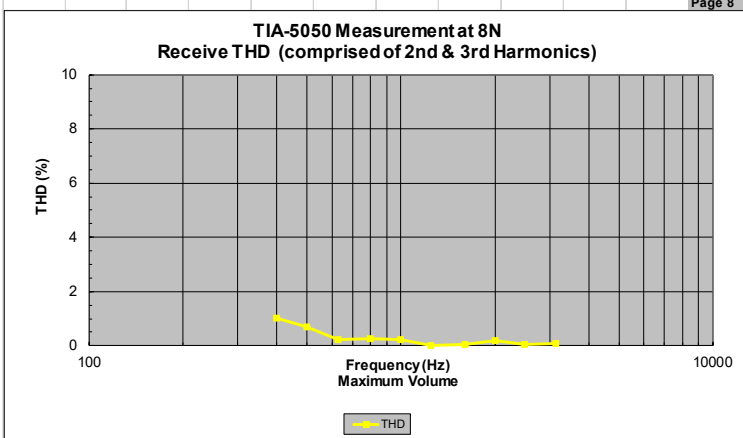
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Recv PN-SDNR 8N	3.4 dB	Absolute Limits	PASS	9/23/2024 21:50
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	1.59 dB	Absolute Limits	PASS	9/23/2024 21:50
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			



Test Date	
9/23/2024 21:50	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
9/23/2024 21:50	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps



Test Date	
9/23/2024 21:50	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

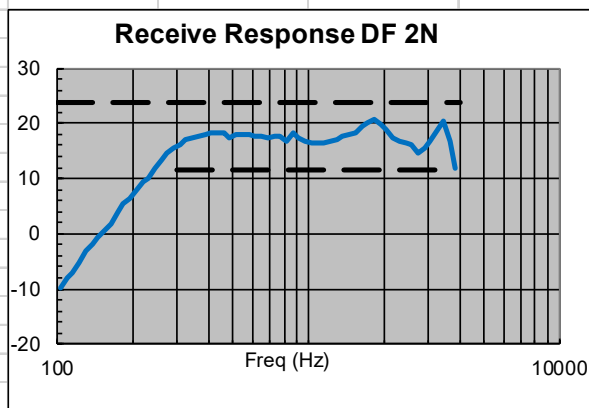
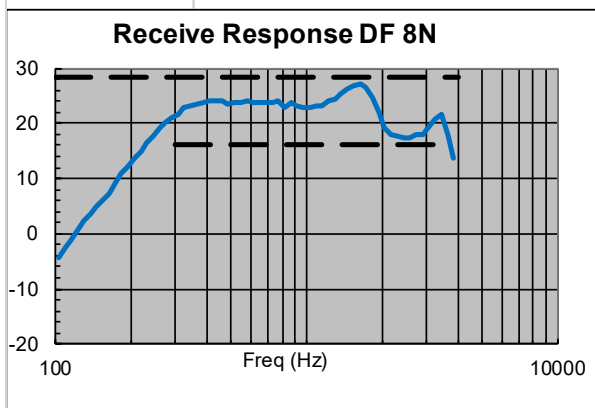
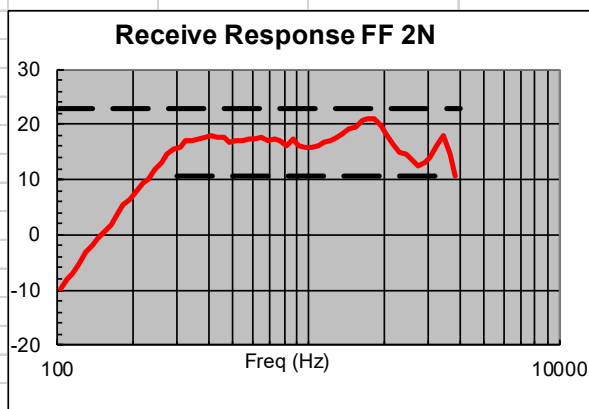
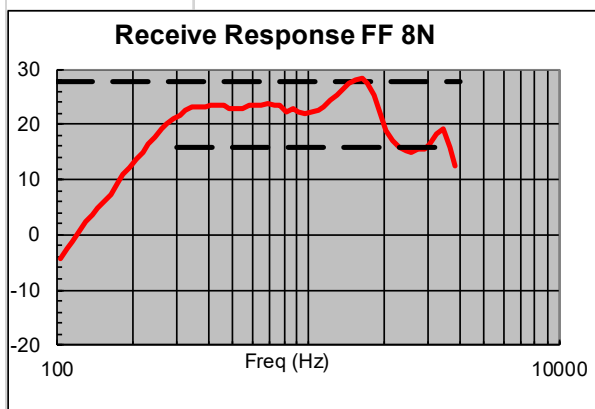
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Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

**NR n25 EVS-NB: 9.6 kbps 1,1 RB  $\pi/2$  BPSK**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	NR n25 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	10/9/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.69 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.06 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.65 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.04 dB	Floating Limits	PASS	



**Output**

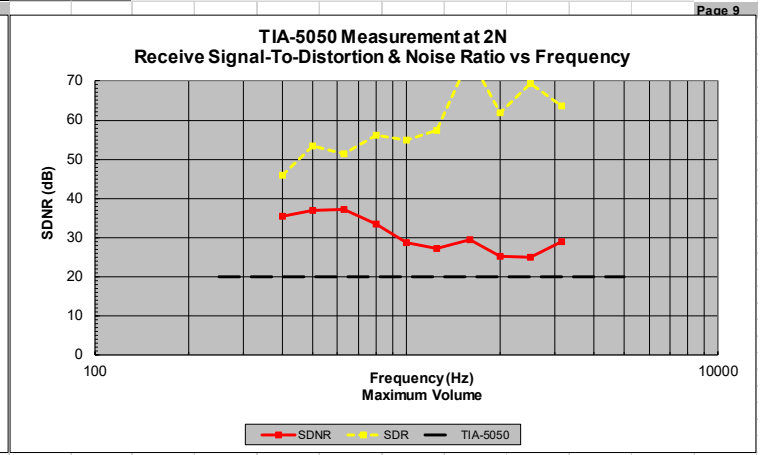
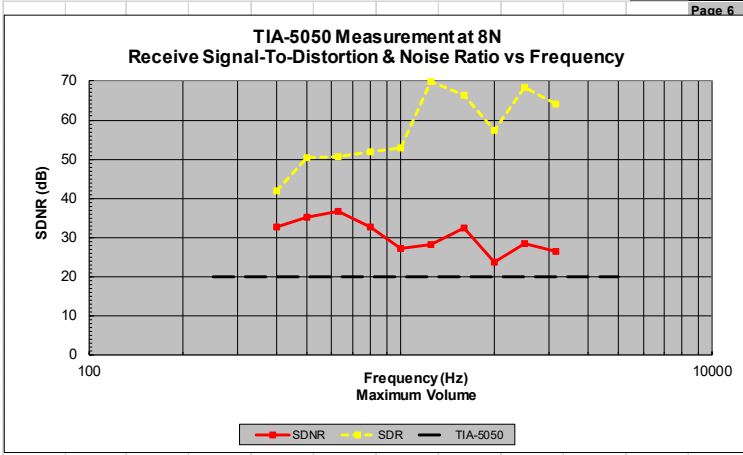
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	93.93 dB	info only		
	Recv conversational gain 8N	23.93 dB	18.00	PASS	
	Recv output level dB SPL 2N	87.9 dB	info only		
	Recv conversational gain 2N	17.9 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	3.7 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	4.86 dB	Absolute Limits	PASS	

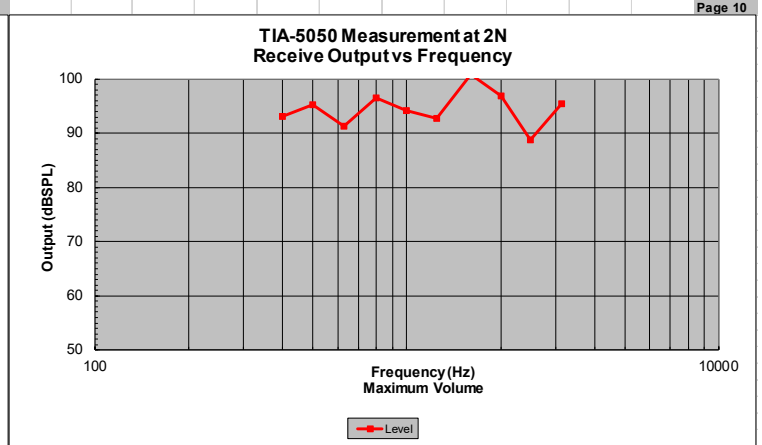
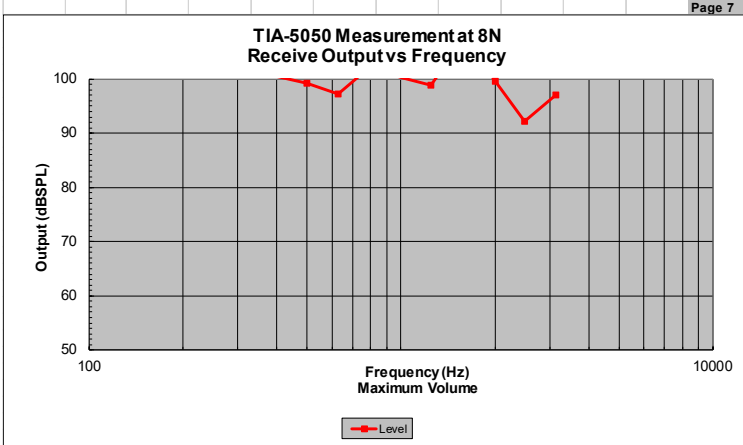
# NR n25 EVS-NB: 9.6 kbps 1,1 RB $\pi/2$ BPSK

## Distortion Report



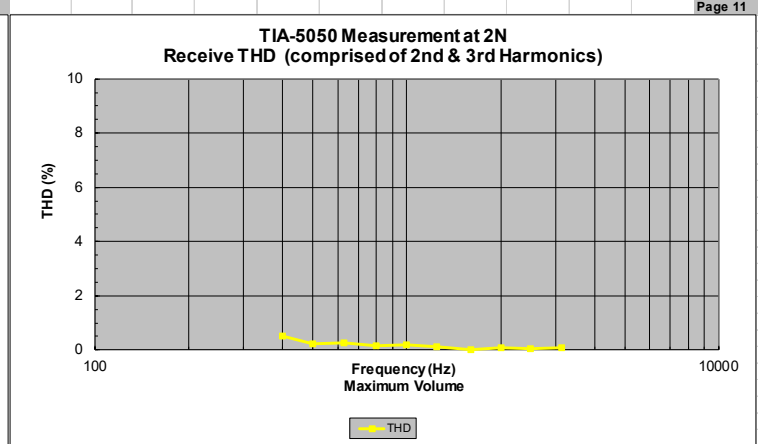
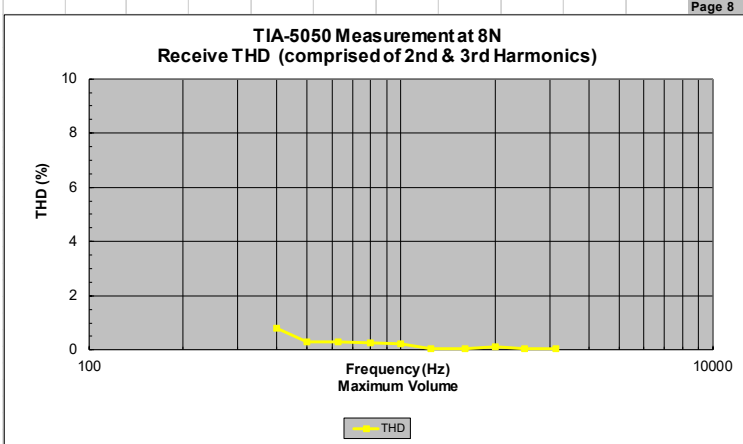
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	3.7 dB	Absolute Limits	PASS	10/9/2024 19:21
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	4.86 dB	Absolute Limits	PASS	10/9/2024 19:21
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments:	9.6 kbps			



Test Date
10/9/2024 19:21
Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments: 9.6 kbps

Test Date
10/9/2024 19:21
Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments: 9.6 kbps



Test Date
10/9/2024 19:21
Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments: 9.6 kbps

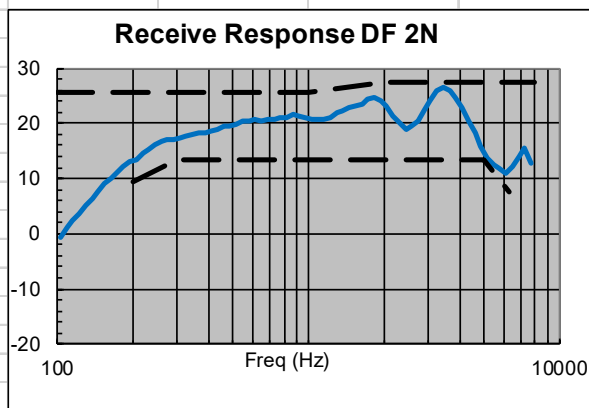
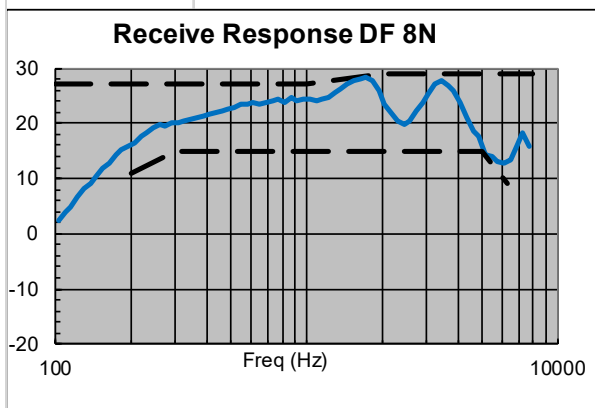
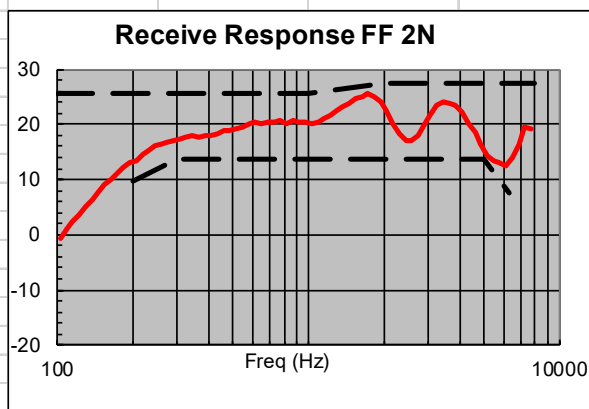
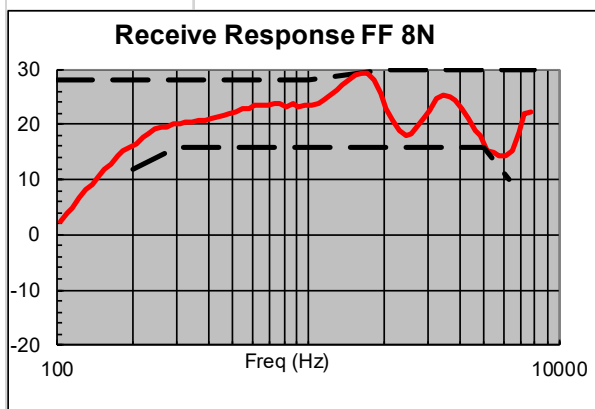
Test Date
10/9/2024 19:21
Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments: 9.6 kbps

**NR n25 EVS-WB: 24.4 kbps 1,1 RB  $\pi/2$  BPSK**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	NR n25 EVS-WB
<b>Bandwidth:</b>	Wideband
<b>Test Date:</b>	10/9/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	0.02 dB	Floating Limits	PASS	
	Recv resp DF 8N	0.2 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.66 dB	Floating Limits	PASS	
	Recv resp DF 2N	1 dB	Floating Limits	PASS	



**Output**

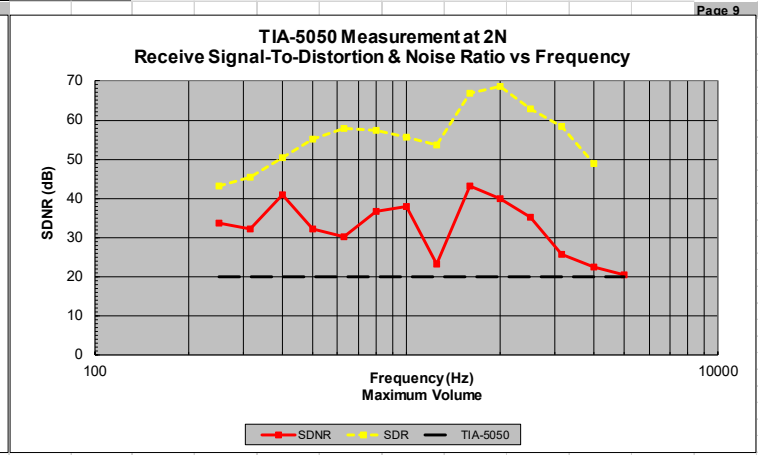
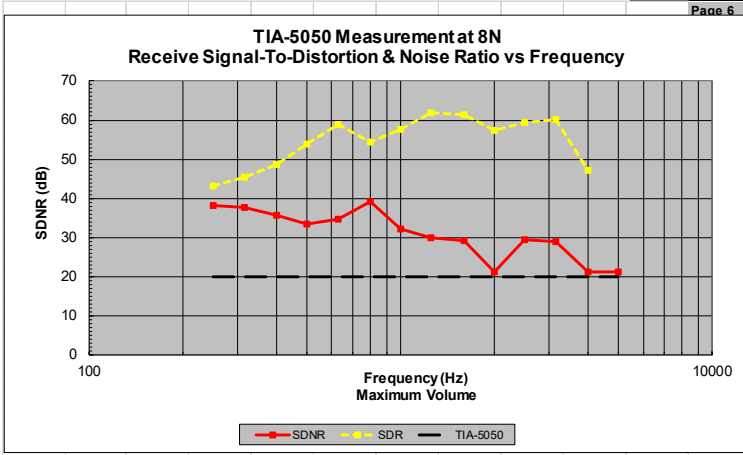
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	93.81 dB	info only		
	Recv conversational gain 8N	23.81 dB	18.00	PASS	
	Recv output level dB SPL 2N	90.69 dB	info only		
	Recv conversational gain 2N	20.69 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	1.1 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	0.41 dB	Absolute Limits	PASS	

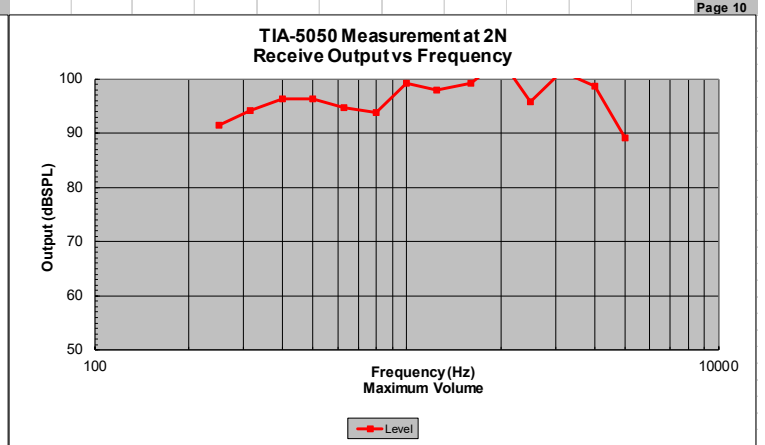
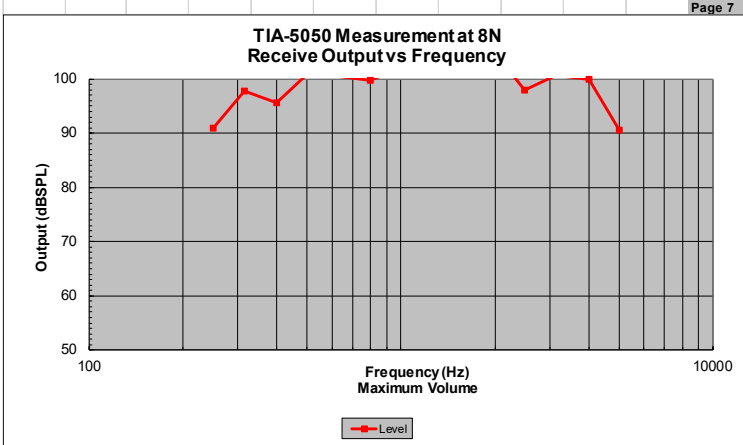
# NR n25 EVS-WB: 24.4 kbps 1,1 RB $\pi/2$ BPSK

## Distortion Report



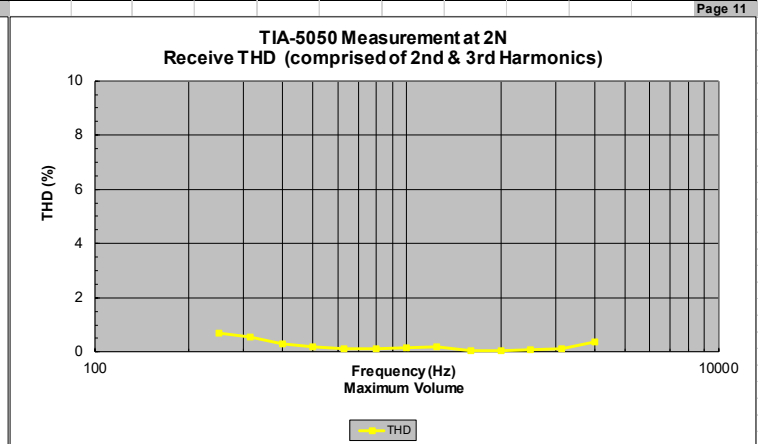
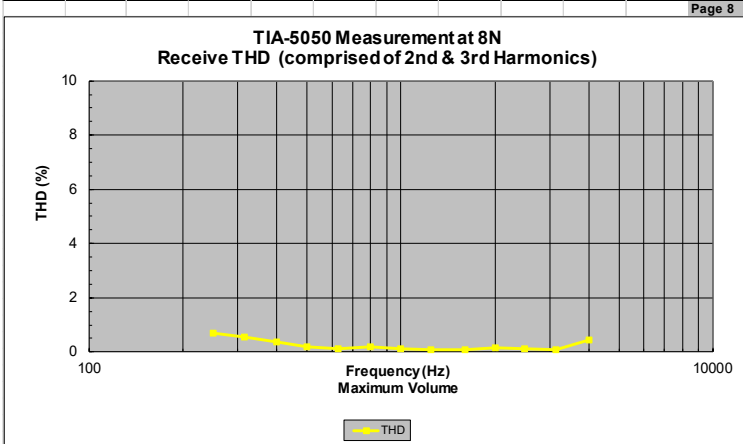
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	1.1 dB	Absolute Limits	PASS	10/9/2024 19:58
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-20 dBPa	
Comments:	24.4 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	0.41 dB	Absolute Limits	PASS	10/9/2024 19:58
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-20 dBPa	
Comments:	24.4 kbps			



Test Date	
10/9/2024 19:58	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	24.4 kbps

Test Date	
10/9/2024 19:58	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	24.4 kbps



Test Date	
10/9/2024 19:58	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	24.4 kbps

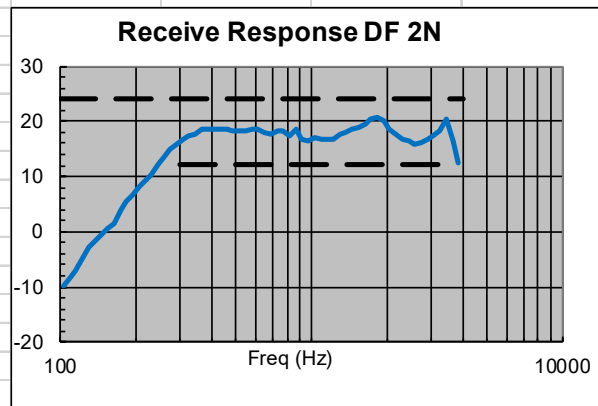
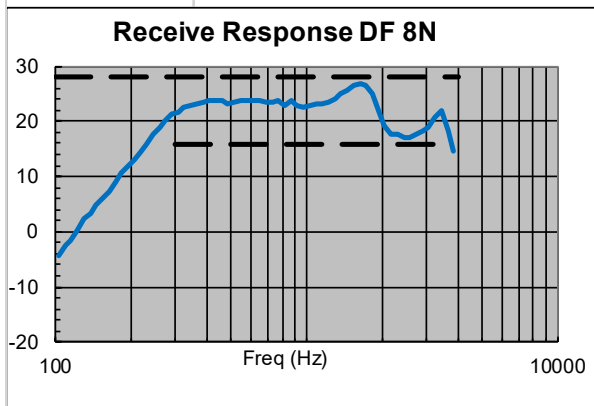
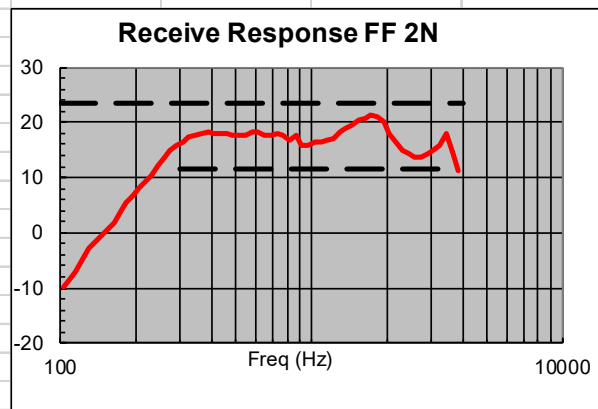
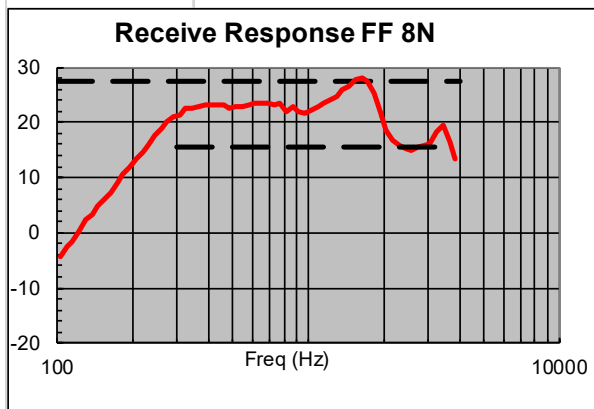
Test Date	
10/9/2024 19:58	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	24.4 kbps

**NR n7 EVS-NB: 9.6 kbps 1,1 RB  $\pi/2$  BPSK**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	NR n7 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	10/9/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.61 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.13 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.1 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.59 dB	Floating Limits	PASS	



**Output**

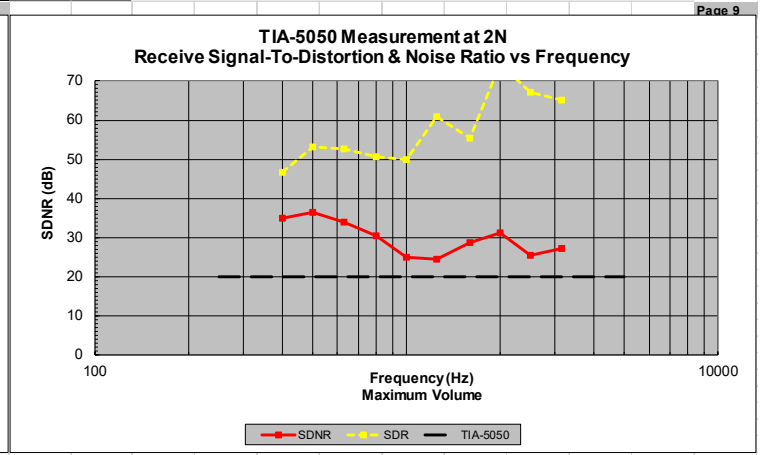
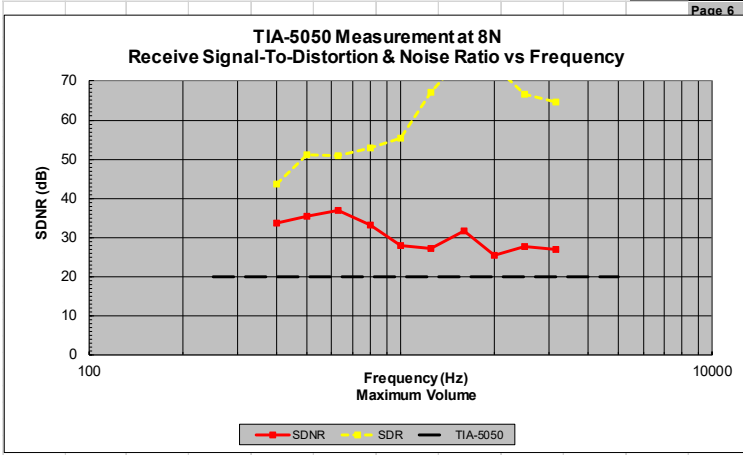
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	93.75 dB	info only		
	Recv conversational gain 8N	23.75 dB	18.00	PASS	
	Recv output level dB SPL 2N	88.33 dB	info only		
	Recv conversational gain 2N	18.33 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	5.6 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	4.47 dB	Absolute Limits	PASS	

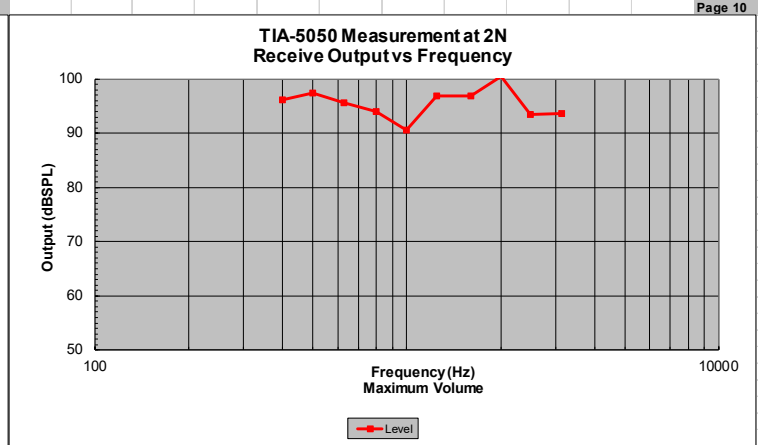
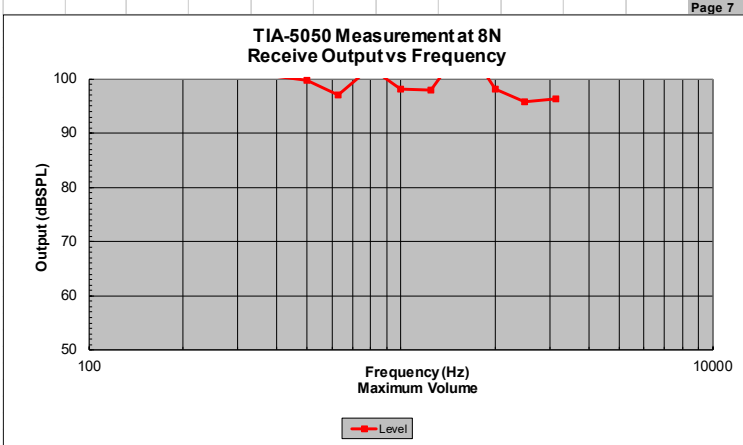
# NR n7 EVS-NB: 9.6 kbps 1,1 RB $\pi/2$ BPSK

## Distortion Report



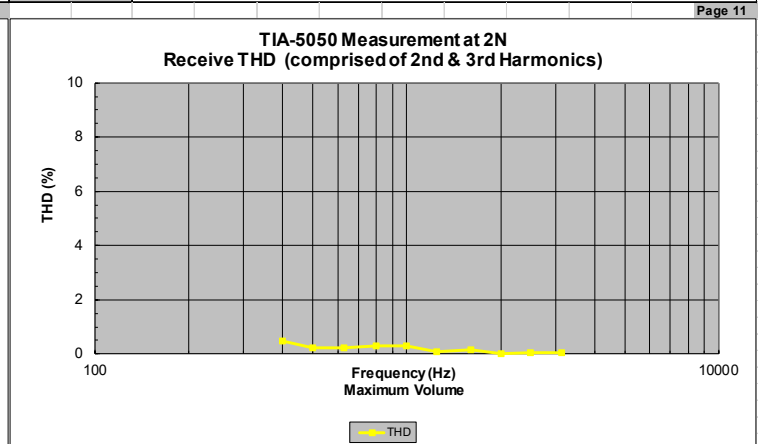
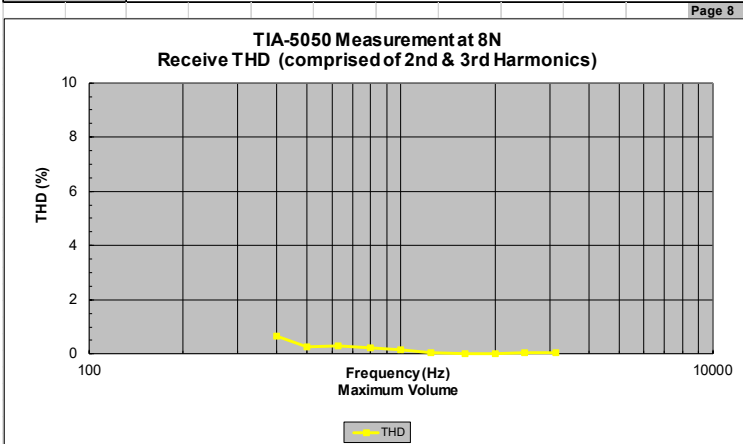
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	5.6 dB	Absolute Limits	PASS	10/9/2024 20:23
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	4.47 dB	Absolute Limits	PASS	10/9/2024 20:23
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			



Test Date	
10/9/2024 20:23	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
10/9/2024 20:23	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps



Test Date	
10/9/2024 20:23	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
10/9/2024 20:23	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

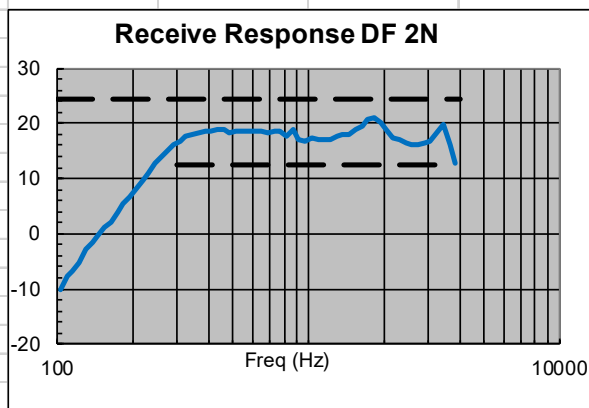
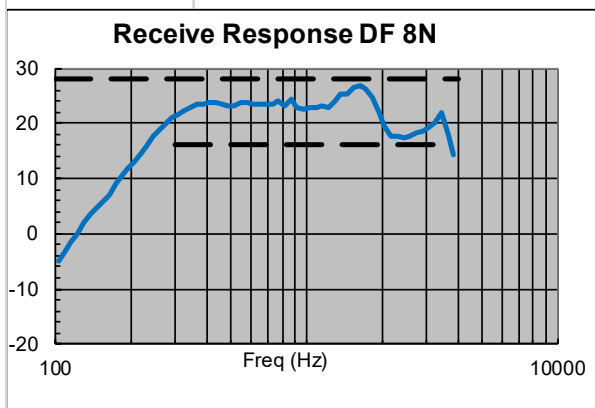
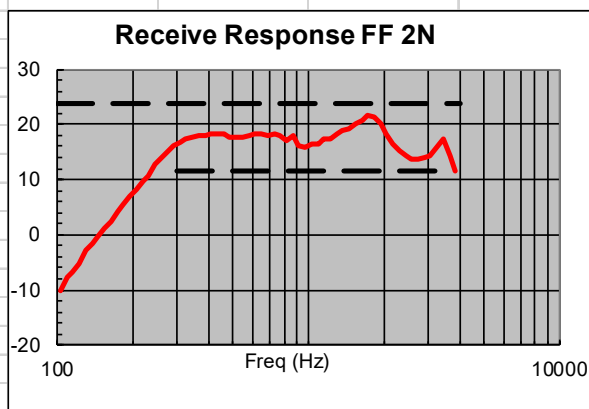
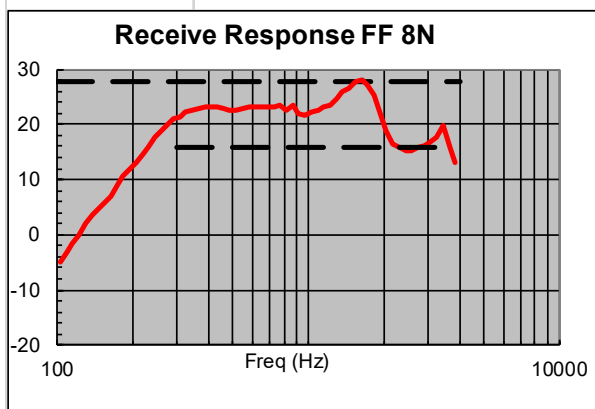


**NR n12 EVS-NB: 9.6 kbps 1,1 RB  $\pi/2$  BPSK**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	NR n12 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	10/9/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.46 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.17 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.09 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.59 dB	Floating Limits	PASS	



**Output**

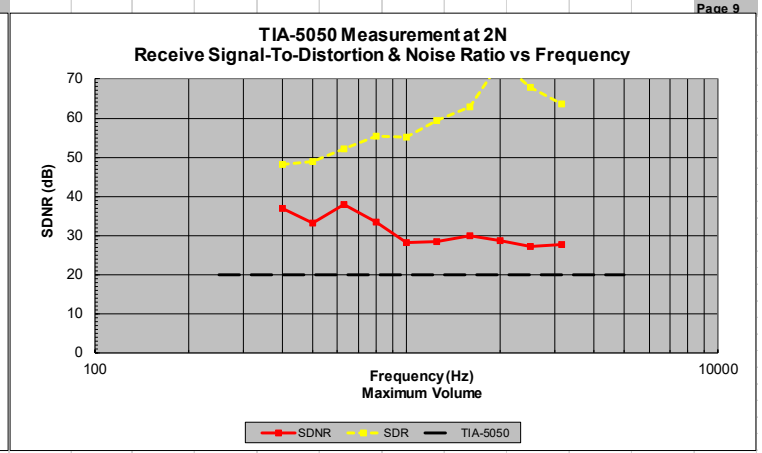
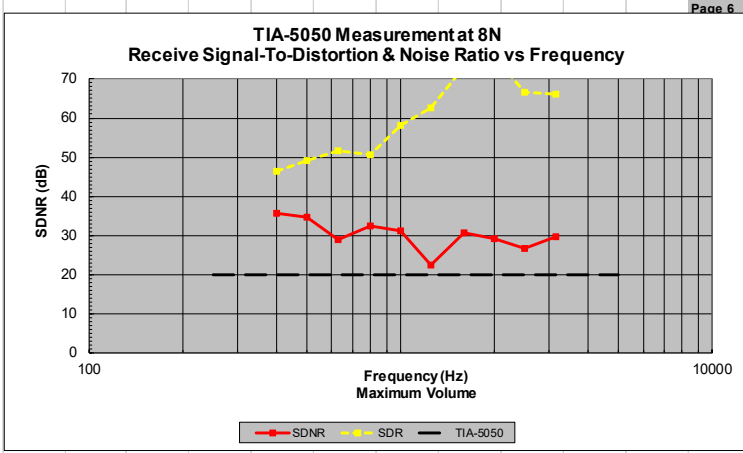
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	93.64 dB	info only		
	Recv conversational gain 8N	23.64 dB	18.00	PASS	
	Recv output level dB SPL 2N	88.46 dB	info only		
	Recv conversational gain 2N	18.46 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	2.5 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	7.23 dB	Absolute Limits	PASS	

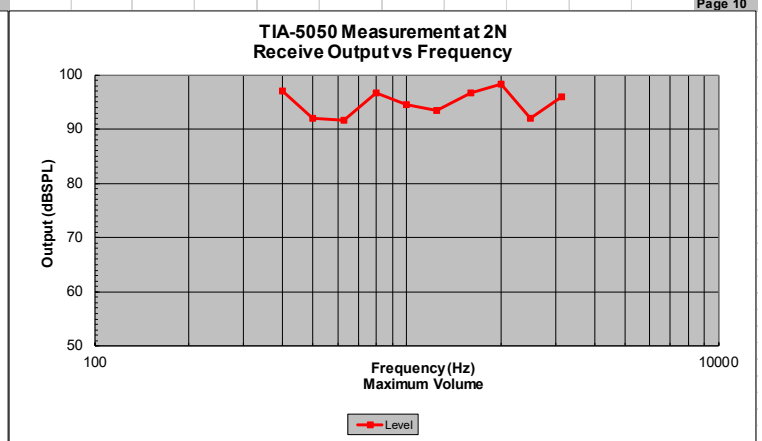
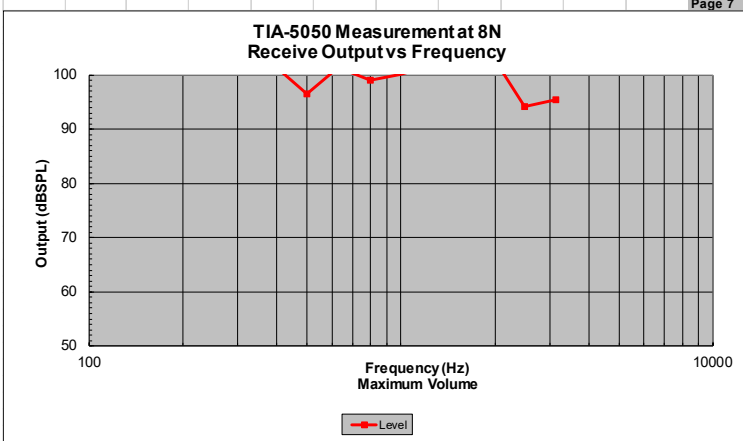
# NR n12 EVS-NB: 9.6 kbps 1,1 RB $\pi/2$ BPSK

## Distortion Report



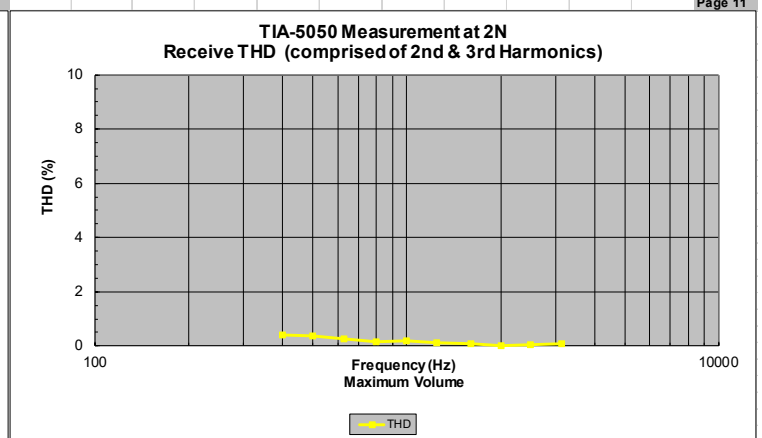
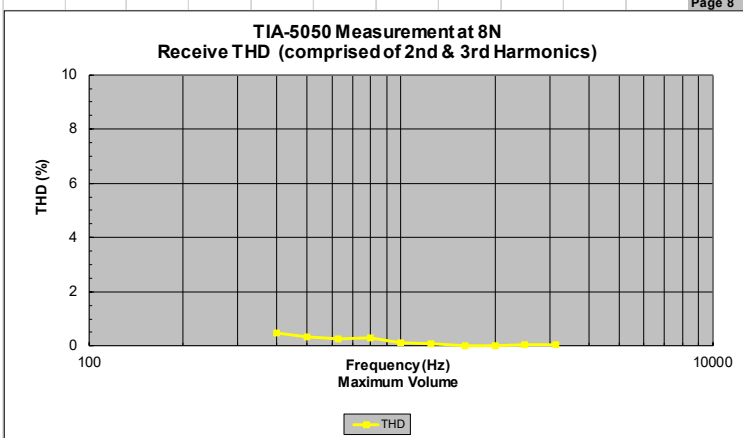
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	2.5 dB	Absolute Limits	PASS	10/9/2024 20:31
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-20 dBPa	
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	7.23 dB	Absolute Limits	PASS	10/9/2024 20:31
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-20 dBPa	
Comments:	9.6 kbps			



Test Date		
10/9/2024 20:31		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-20 dBPa	
Comments:	9.6 kbps	

Test Date		
10/9/2024 20:31		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-20 dBPa	
Comments:	9.6 kbps	



Test Date		
10/9/2024 20:31		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-20 dBPa	
Comments:	9.6 kbps	

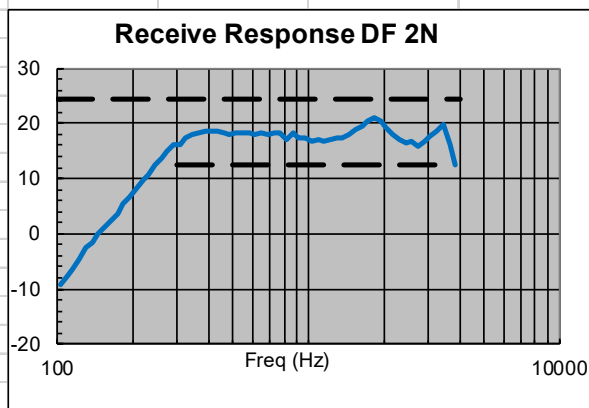
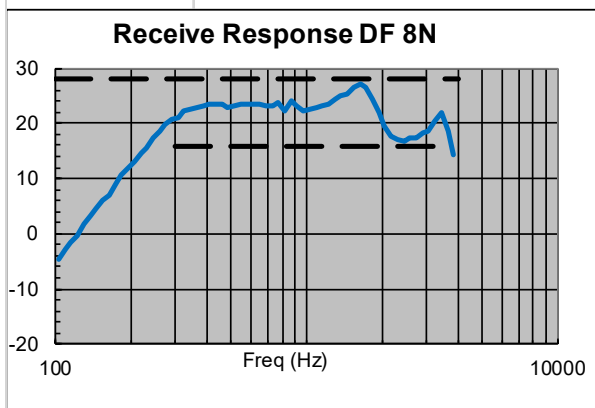
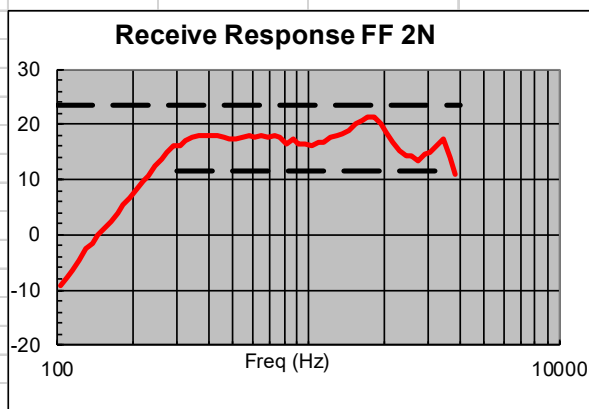
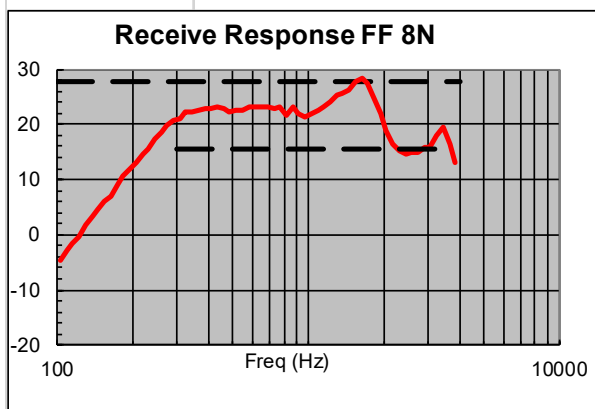
Test Date		
10/9/2024 20:31		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-20 dBPa	
Comments:	9.6 kbps	

**NR n30 EVS-NB: 9.6 kbps 1,1 RB  $\pi/2$  BPSK**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	NR n30 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	10/9/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.84 dB	Floating Limits	FAIL	
	Recv resp DF 8N	0.76 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.97 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.36 dB	Floating Limits	PASS	



**Output**

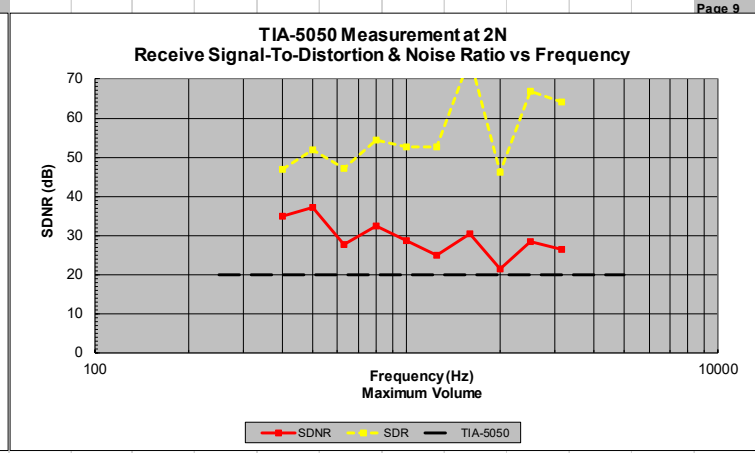
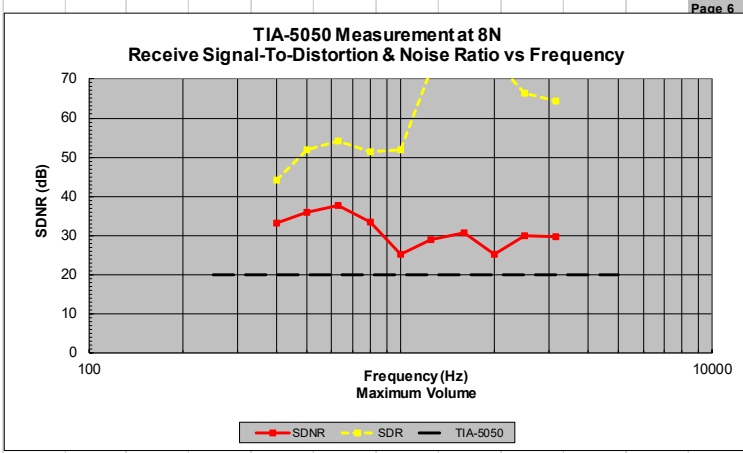
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	93.54 dB	info only		
	Recv conversational gain 8N	23.54 dB	18.00	PASS	
	Recv output level dB SPL 2N	88.25 dB	info only		
	Recv conversational gain 2N	18.25 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	5.3 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	1.49 dB	Absolute Limits	PASS	

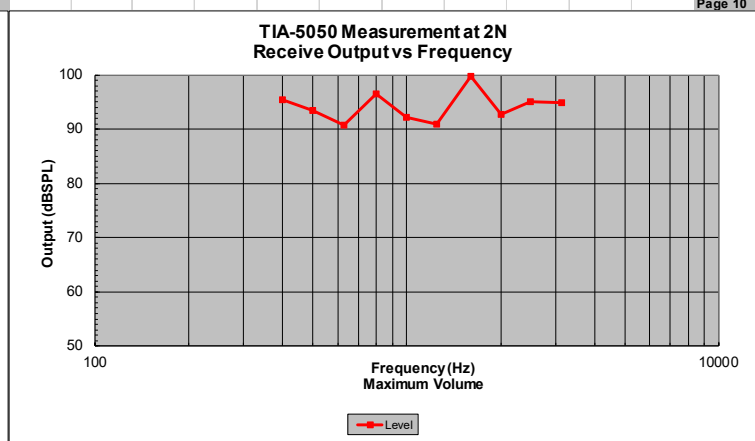
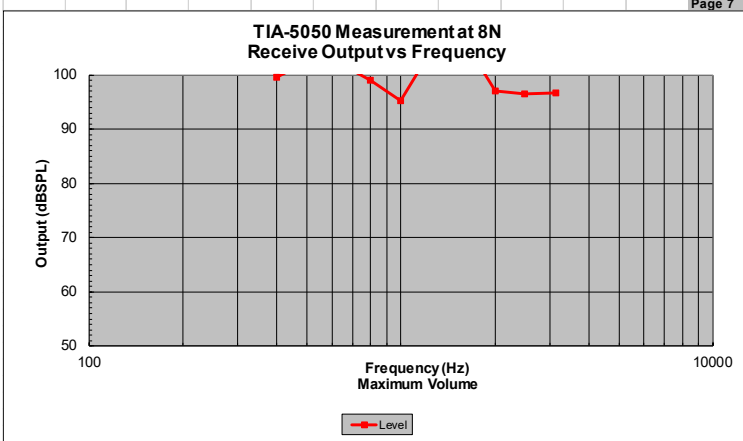
# NR n30 EVS-NB: 9.6 kbps 1,1 RB $\pi/2$ BPSK

## Distortion Report



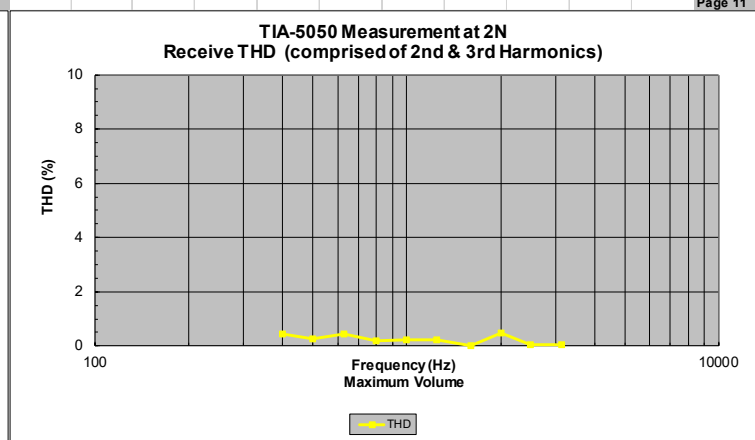
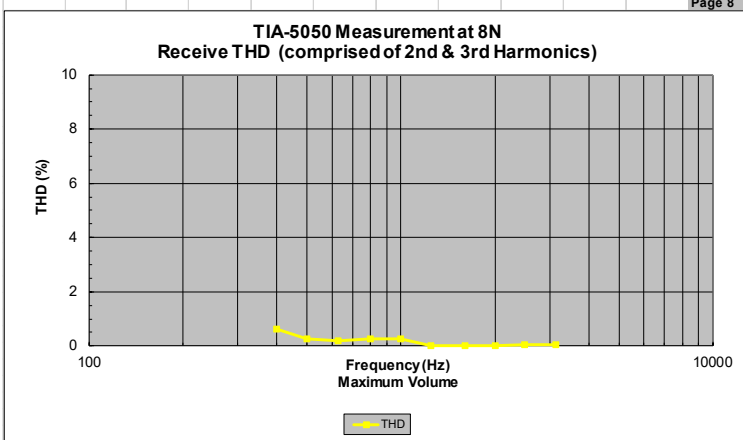
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	5.3 dB	Absolute Limits	PASS	10/9/2024 20:48
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	1.49 dB	Absolute Limits	PASS	10/9/2024 20:48
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			



Test Date	
10/9/2024 20:48	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
10/9/2024 20:48	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps



Test Date	
10/9/2024 20:48	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
10/9/2024 20:48	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

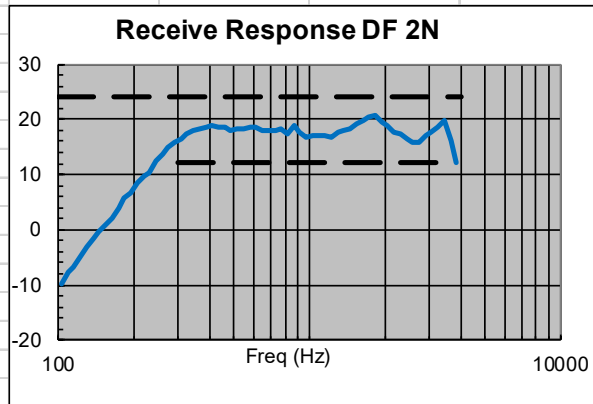
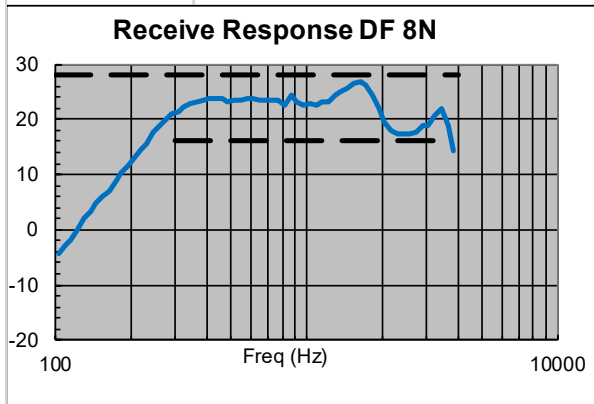
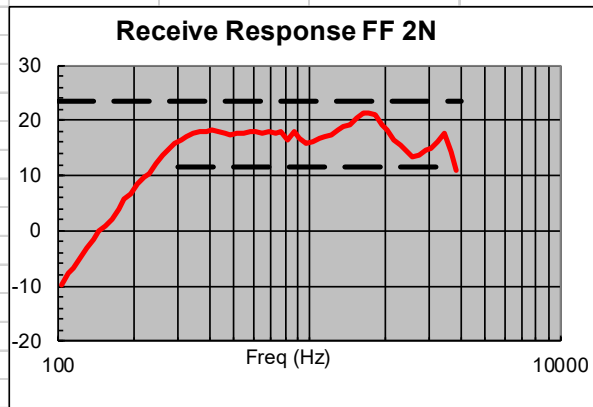
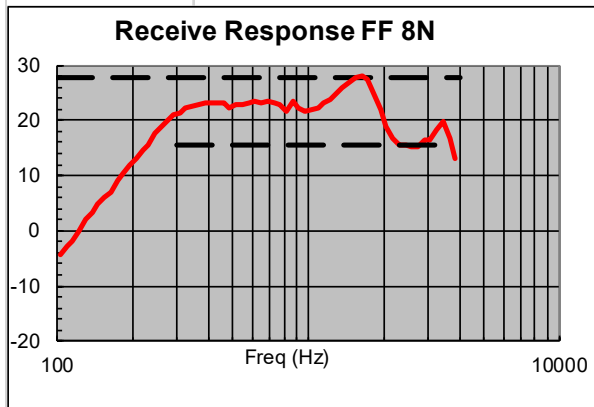
**NR n41 PC3 EVS-NB: 9.6 kbps 1,1 RB  $\pi/2$  BPSK  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	NR n41 PC3 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	10/9/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.5 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.19 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.12 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.58 dB	Floating Limits	PASS	



**Output**

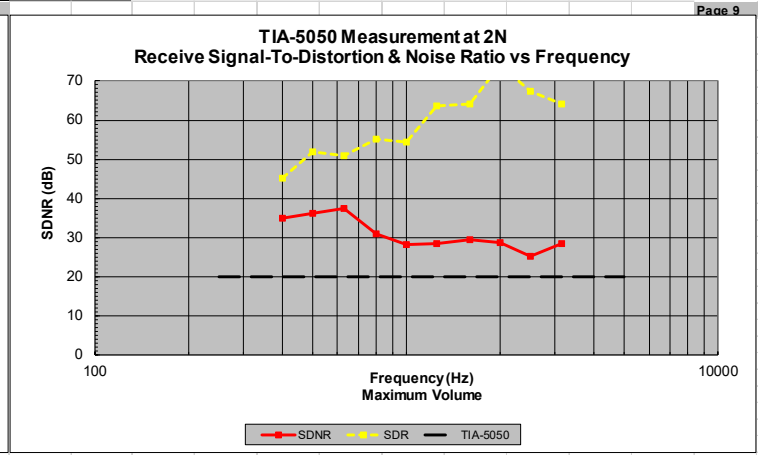
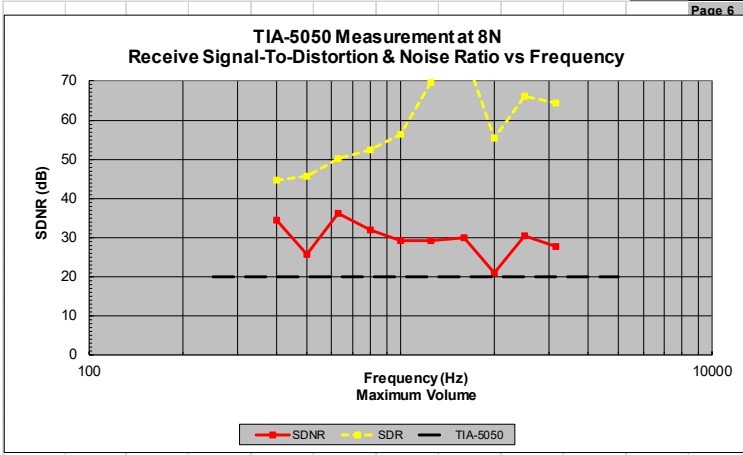
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	93.63 dB	info only		
	Recv conversational gain 8N	23.63 dB	18.00	PASS	
	Recv output level dB SPL 2N	88.29 dB	info only		
	Recv conversational gain 2N	18.29 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	1.1 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	5.14 dB	Absolute Limits	PASS	

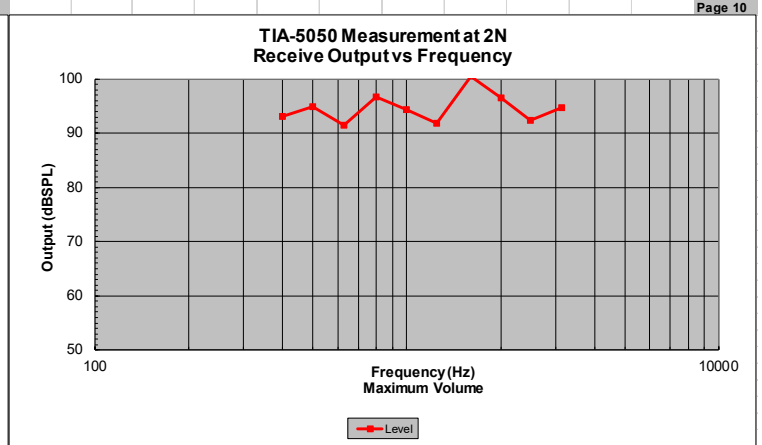
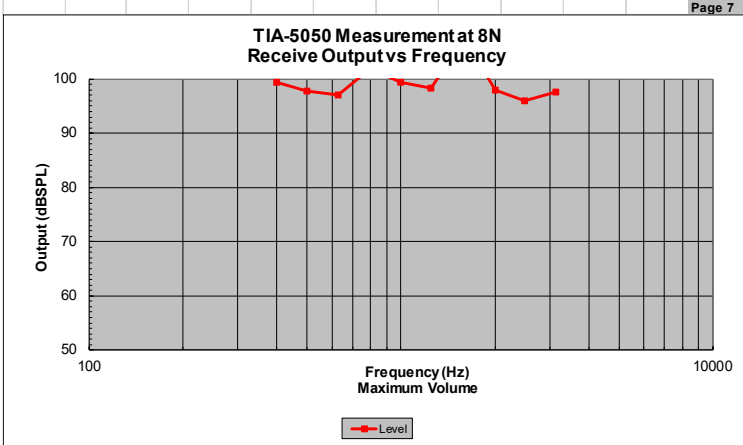
# NR n41 PC3 EVS-NB: 9.6 kbps 1,1 RB $\pi/2$ BPSK

## Distortion Report



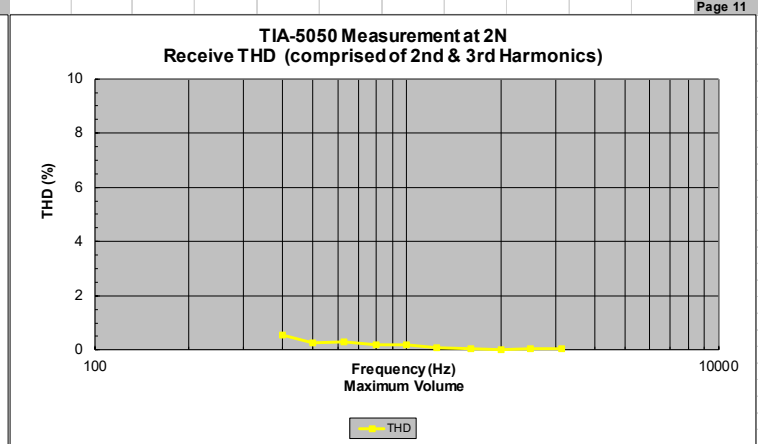
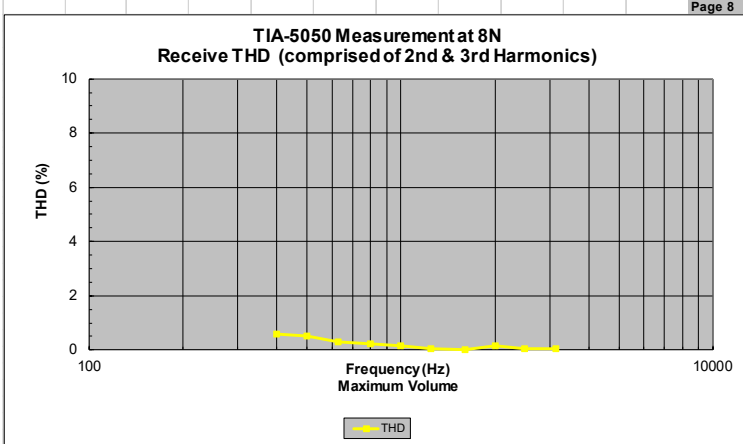
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	1.1 dB	Absolute Limits	PASS	10/9/2024 21:03
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-20 dBPa	
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	5.14 dB	Absolute Limits	PASS	10/9/2024 21:03
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-20 dBPa	
Comments:	9.6 kbps			



Test Date	
10/9/2024 21:03	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
10/9/2024 21:03	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps



Test Date	
10/9/2024 21:03	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
10/9/2024 21:03	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

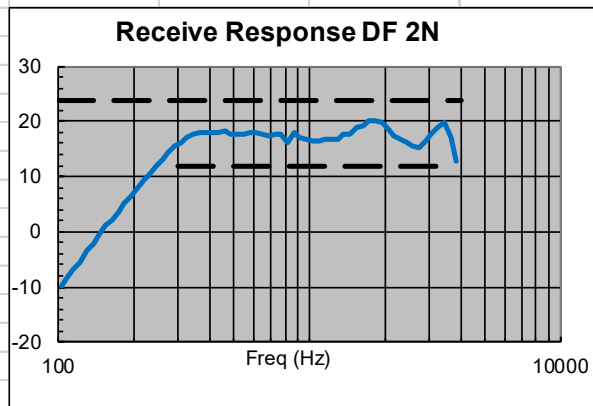
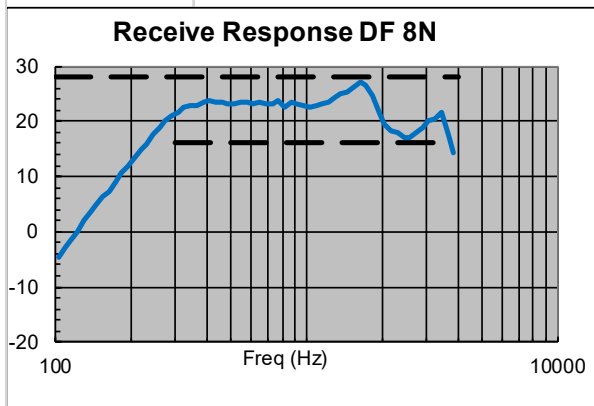
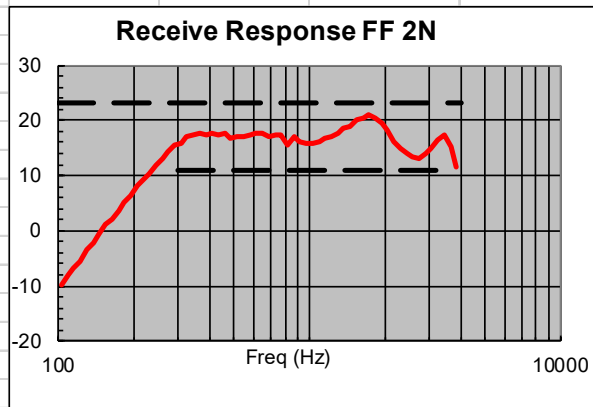
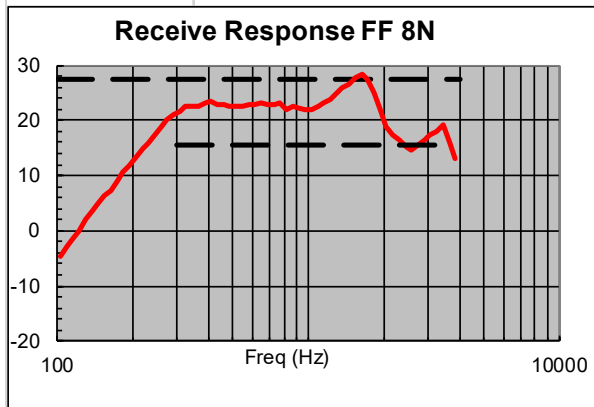
**NR n41 PC2 EVS-NB: 9.6 kbps 1,1 RB  $\pi/2$  BPSK  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	NR n41 PC2 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	10/9/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.84 dB	Floating Limits	FAIL	
	Recv resp DF 8N	0.9 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.95 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.61 dB	Floating Limits	PASS	



**Output**

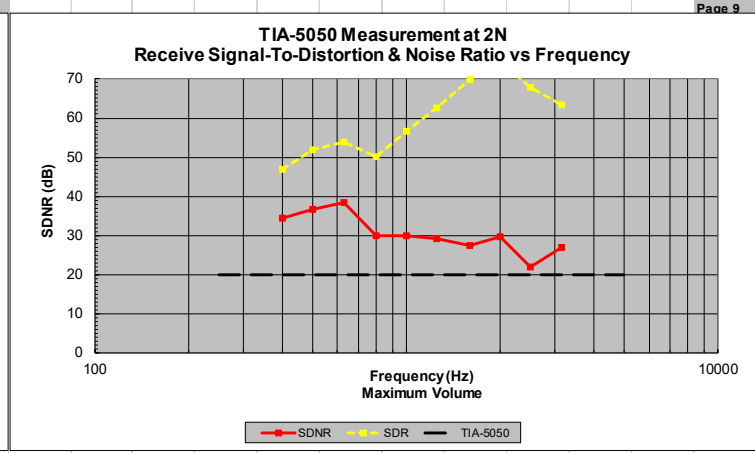
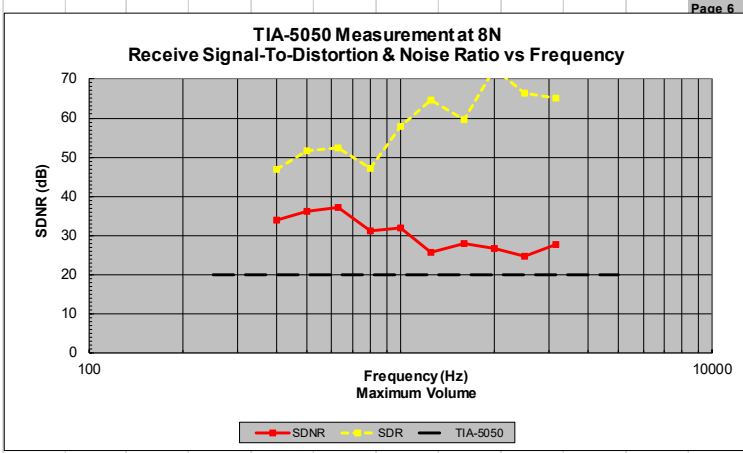
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	93.59 dB	info only		
	Recv conversational gain 8N	23.59 dB	18.00	PASS	
	Recv output level dB SPL 2N	87.88 dB	info only		
	Recv conversational gain 2N	17.88 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	4.7 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	2.08 dB	Absolute Limits	PASS	

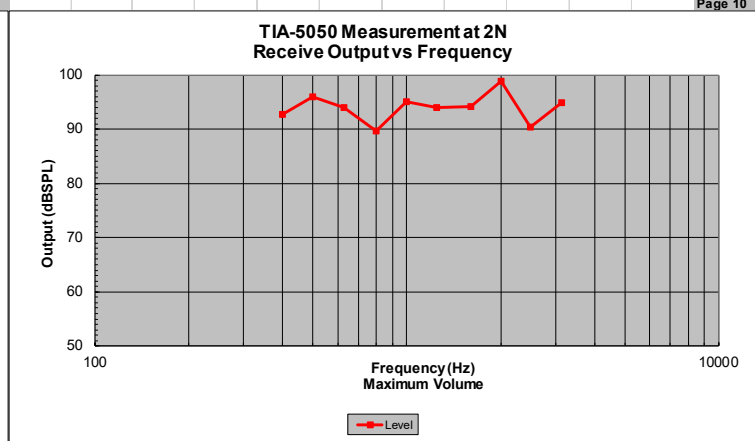
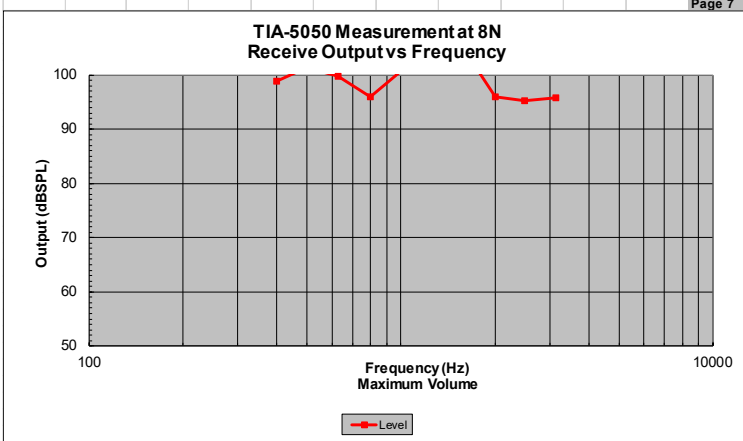
# NR n41 PC2 EVS-NB: 9.6 kbps 1,1 RB $\pi/2$ BPSK

## Distortion Report



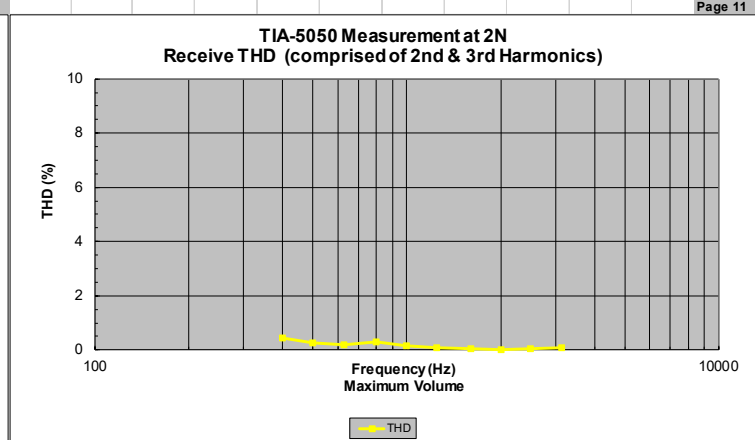
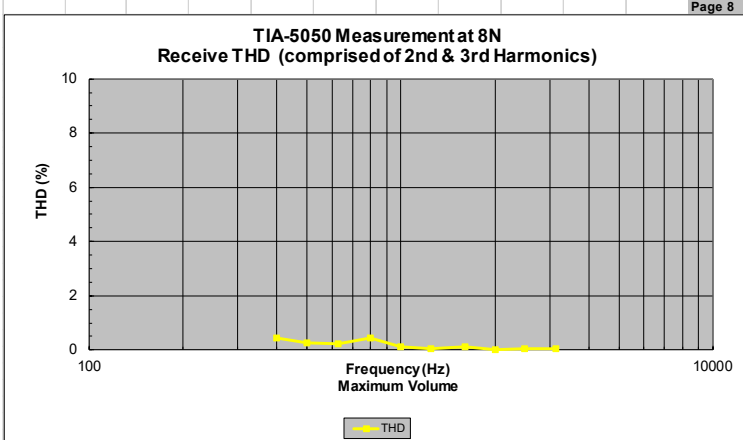
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	4.7 dB	Absolute Limits	PASS	10/9/2024 21:18
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	2.08 dB	Absolute Limits	PASS	10/9/2024 21:18
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			



Test Date	
10/9/2024 21:18	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
10/9/2024 21:18	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps



Test Date	
10/9/2024 21:18	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
10/9/2024 21:18	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps



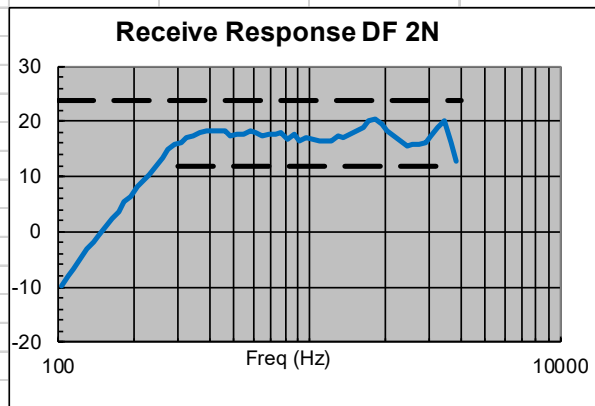
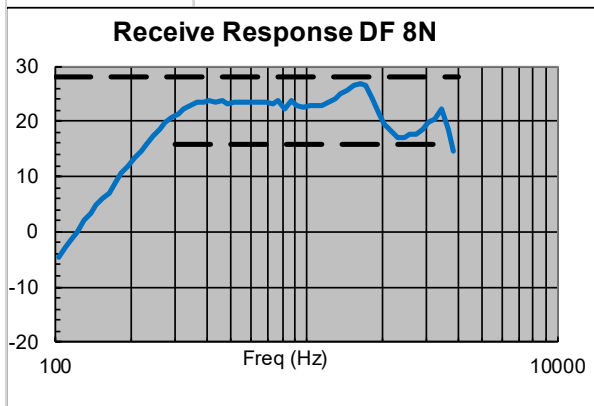
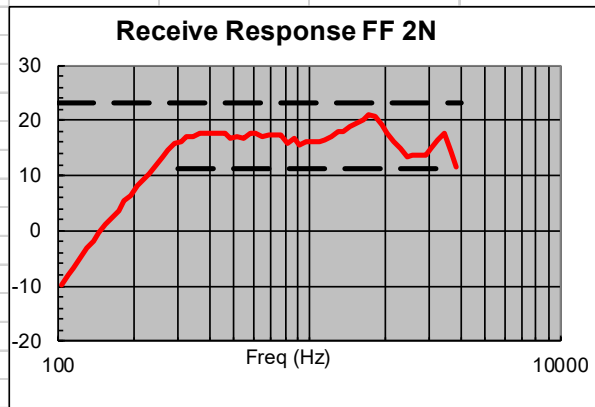
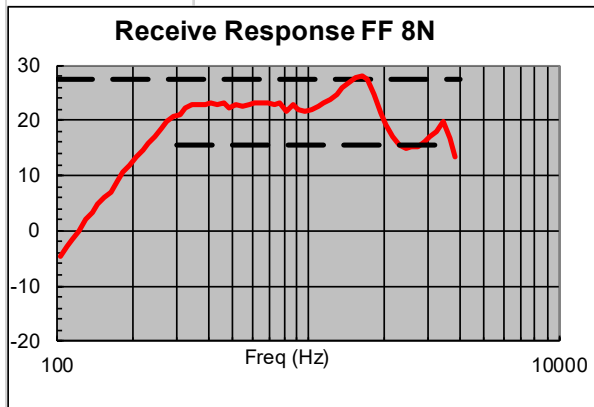
**NR n77 Block C PC2 EVS-NB: 9.6 kbps 1,1 RB  $\pi/2$  BPSK  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	NR n77 PC2 EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	10/9/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.56 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.05 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.18 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.54 dB	Floating Limits	PASS	



**Output**

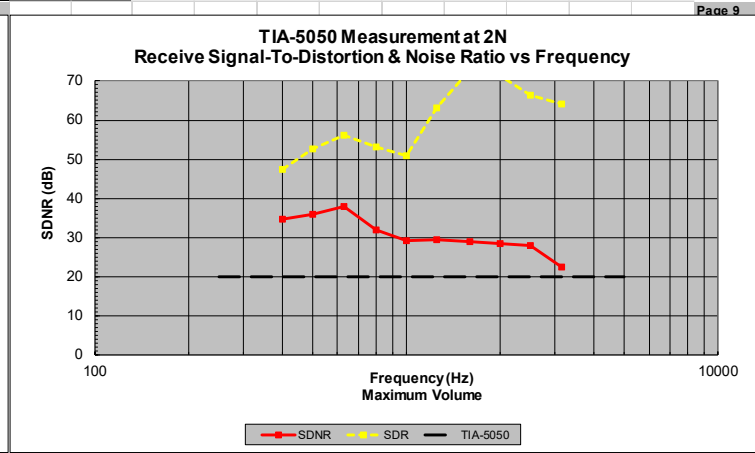
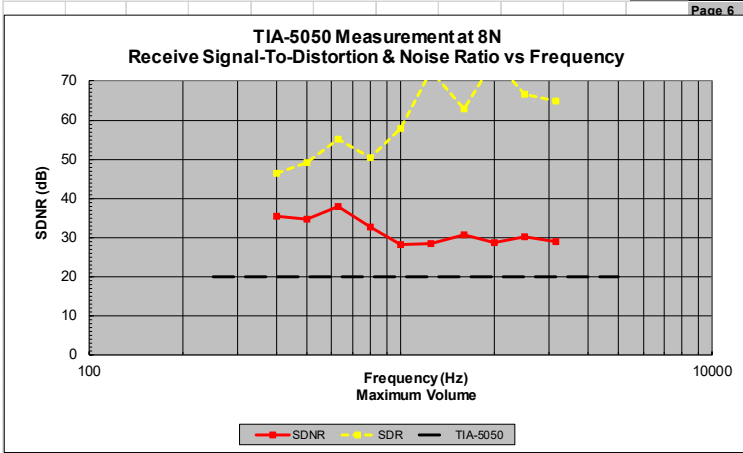
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	93.57 dB	info only		
	Recv conversational gain 8N	23.57 dB	18.00	PASS	
	Recv output level dB SPL 2N	87.85 dB	info only		
	Recv conversational gain 2N	17.85 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	8.1 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	2.51 dB	Absolute Limits	PASS	

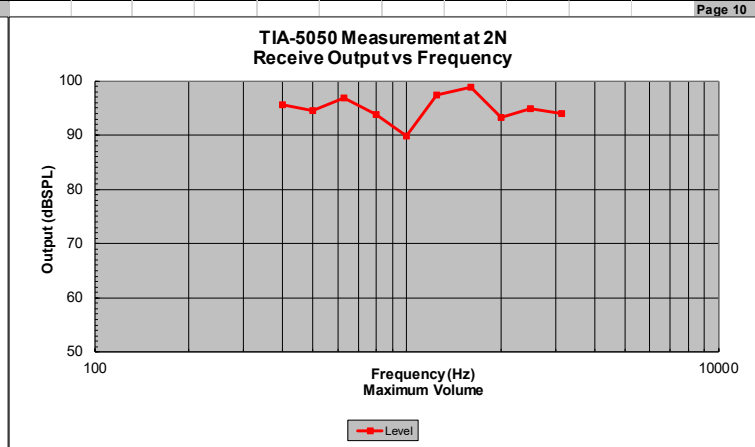
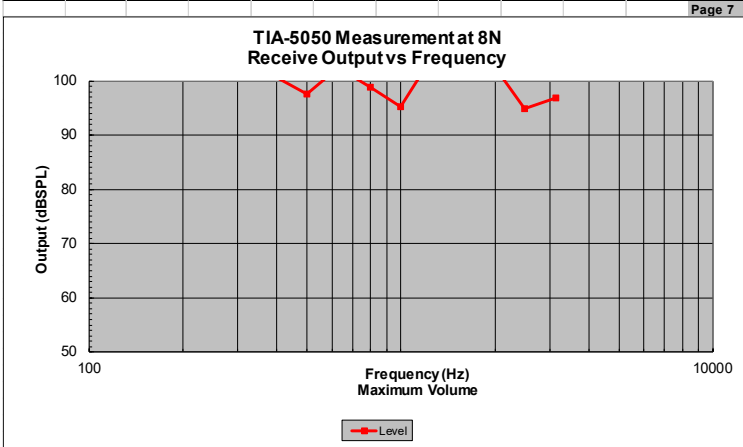
# NR n77 Block C PC3 EVS-NB: 9.6 kbps 1,1 RB $\pi/2$ BPSK

## Distortion Report



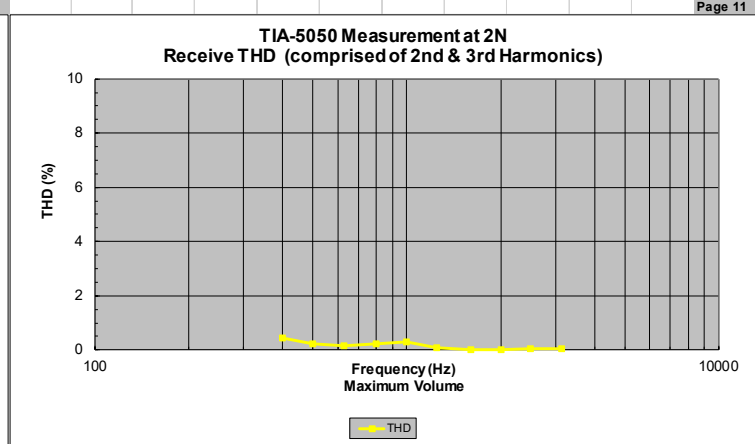
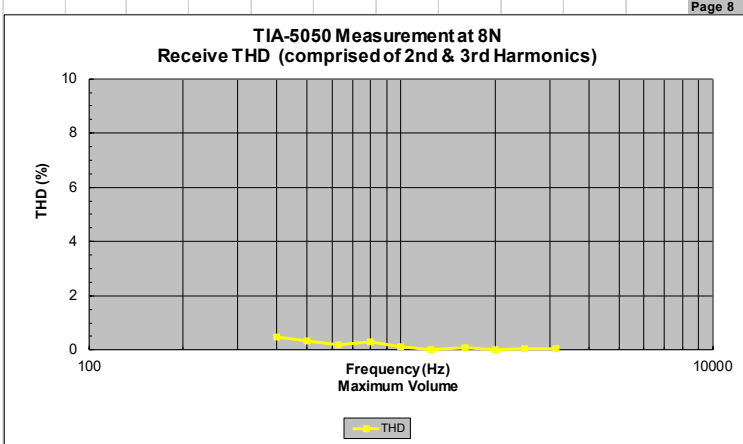
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	8.1 dB	Absolute Limits	PASS	10/9/2024 21:28
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	2.51 dB	Absolute Limits	PASS	10/9/2024 21:28
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			



Test Date	
10/9/2024 21:28	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
10/9/2024 21:28	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps



Test Date	
10/9/2024 21:28	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
10/9/2024 21:28	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

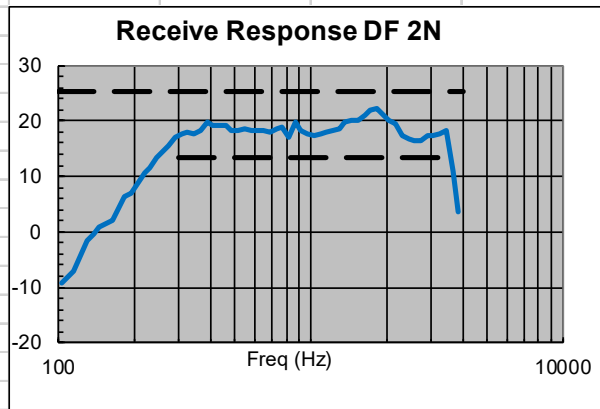
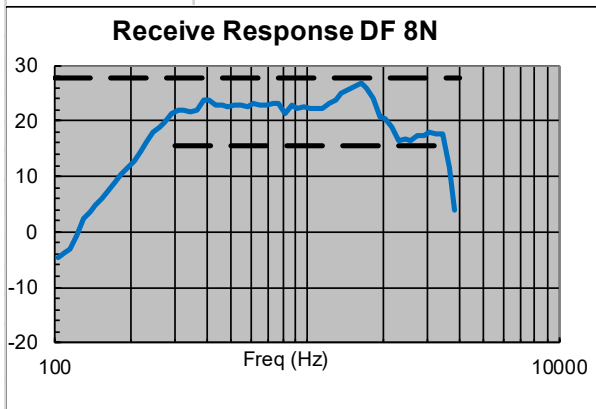
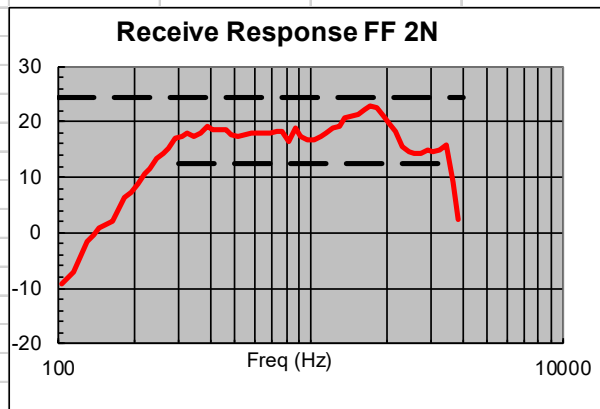
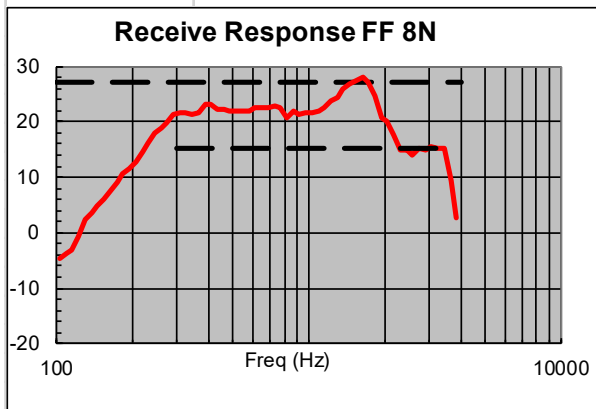
**Wi-Fi 2.4 GHz EVS-NB: 9.6 kbps CCK 5.5 Mbps  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	802.11b EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/27/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-1 dB	Floating Limits	FAIL	
	Recv resp DF 8N	0.74 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.69 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.13 dB	Floating Limits	PASS	



**Output**

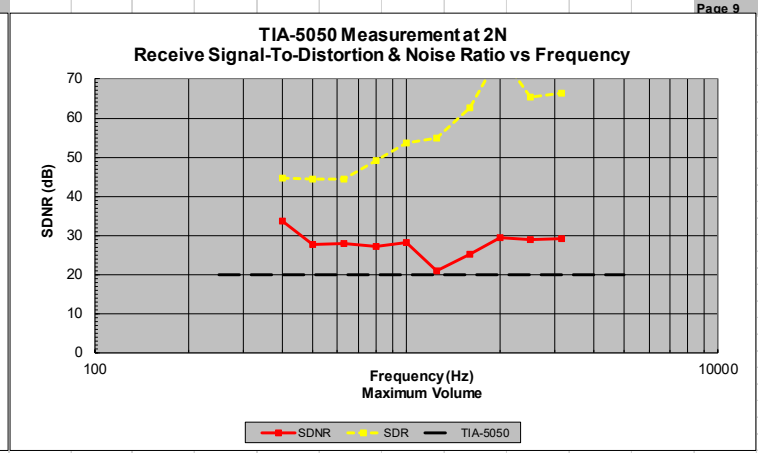
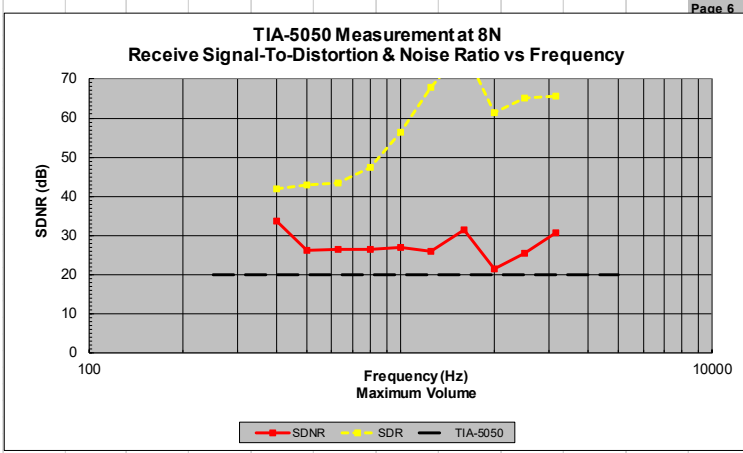
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	93.13 dB	info only		
	Recv conversational gain 8N	23.13 dB	18.00	PASS	
	Recv output level dB SPL 2N	88.82 dB	info only		
	Recv conversational gain 2N	18.82 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	1.4 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	0.98 dB	Absolute Limits	PASS	

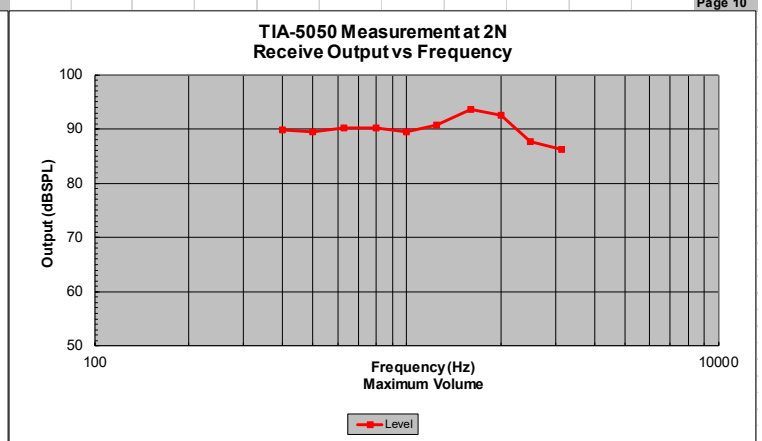
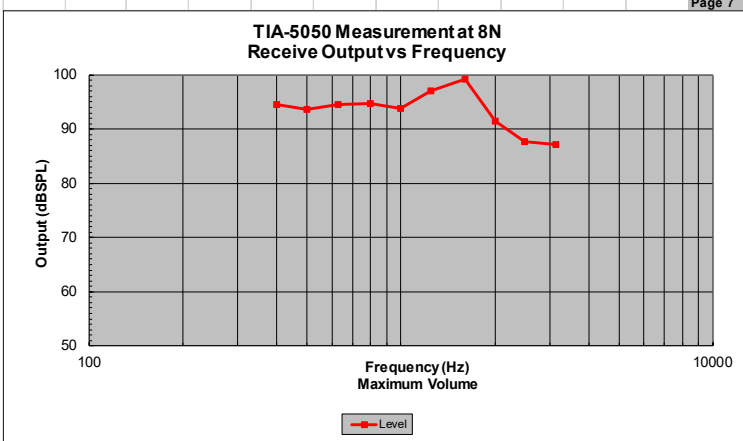
# Wi-Fi 2.4 GHz EVS-NB: 9.6 kbps CCK 5.5 Mbps

## Distortion Report



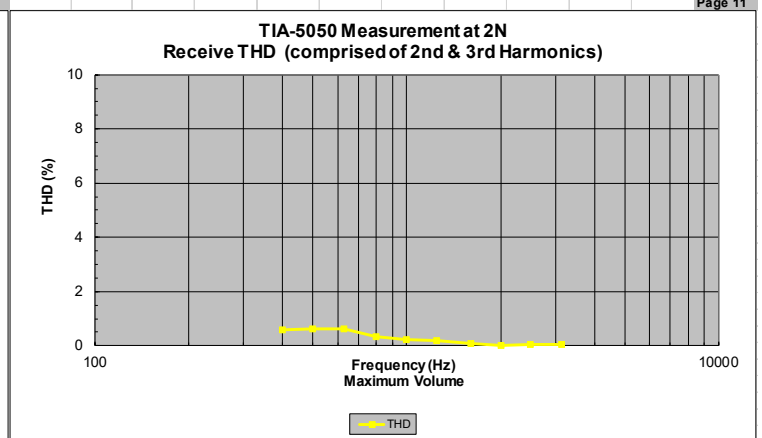
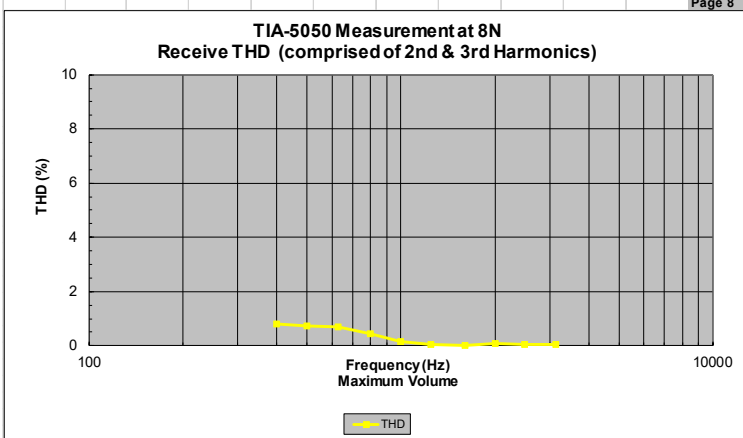
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	1.4 dB	Absolute Limits	PASS	9/27/2024 10:21
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-99 dBPa	
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	0.98 dB	Absolute Limits	PASS	9/27/2024 10:21
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-99 dBPa	
Comments:	9.6 kbps			



Test Date		
9/27/2024 10:21		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-99 dBPa	
Comments:	9.6 kbps	

Test Date		
9/27/2024 10:21		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-99 dBPa	
Comments:	9.6 kbps	



Test Date		
9/27/2024 10:21		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-99 dBPa	
Comments:	9.6 kbps	

Test Date		
9/27/2024 10:21		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-99 dBPa	
Comments:	9.6 kbps	

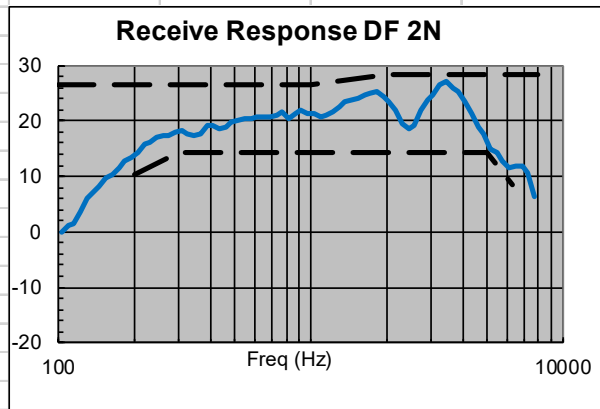
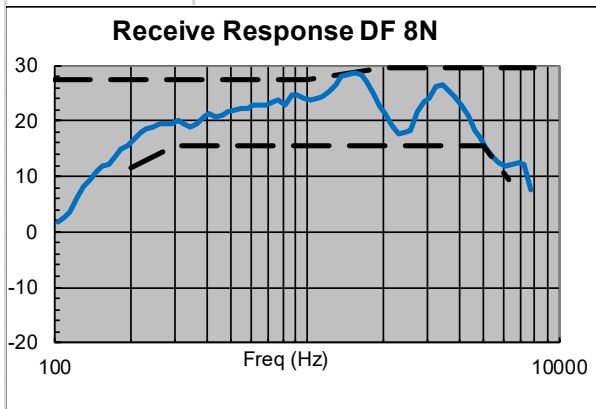
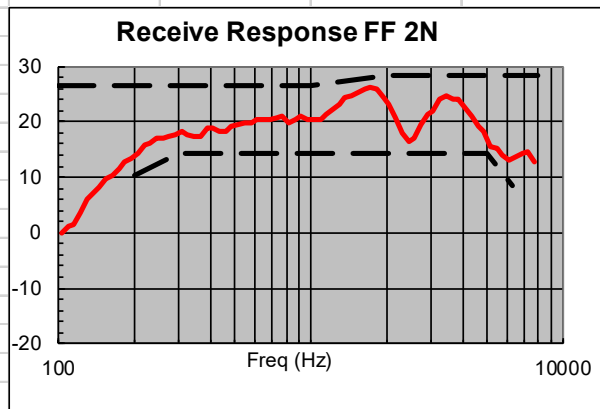
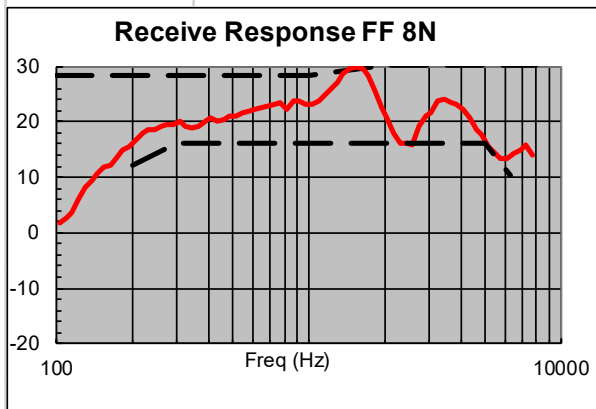
**Wi-Fi 2.4 GHz EVS-WB: 24.4 kbps CCK 11 Mbps  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	802.11b EVS-WB
<b>Bandwidth</b>	Wideband
<b>Test Date:</b>	9/27/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.35 dB	Floating Limits	FAIL	
	Recv resp DF 8N	0.2 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.93 dB	Floating Limits	PASS	
	Recv resp DF 2N	1.3 dB	Floating Limits	PASS	



**Output**

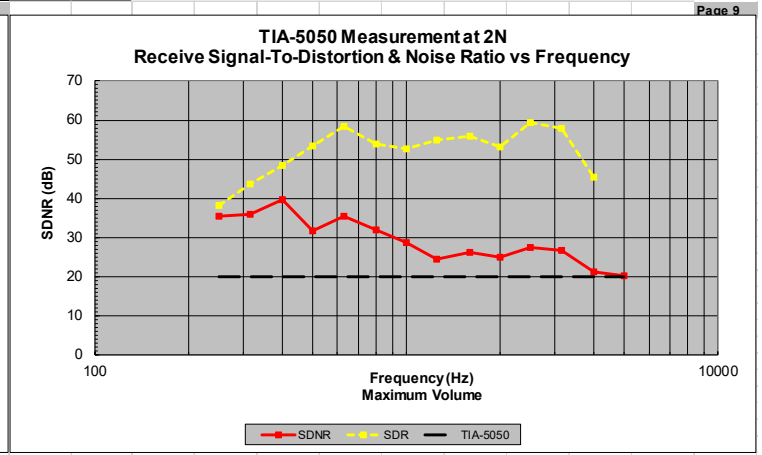
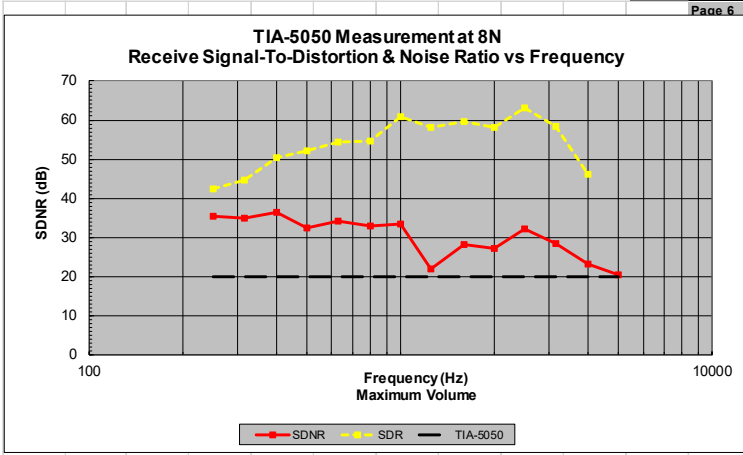
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	93.31 dB	info only		
	Recv conversational gain 8N	23.31 dB	18.00	PASS	
	Recv output level dB SPL 2N	91 dB	info only		
	Recv conversational gain 2N	21 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	0.6 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	0.16 dB	Absolute Limits	PASS	

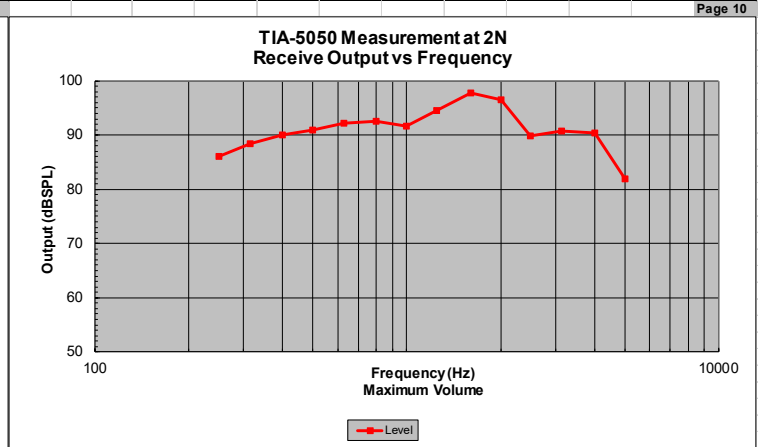
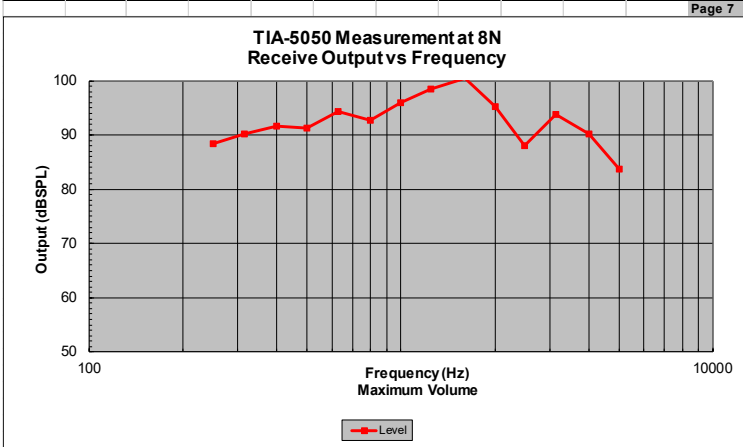
# Wi-Fi 2.4 GHz EVS-WB: 24.4 kbps CCK 11 Mbps

## Distortion Report



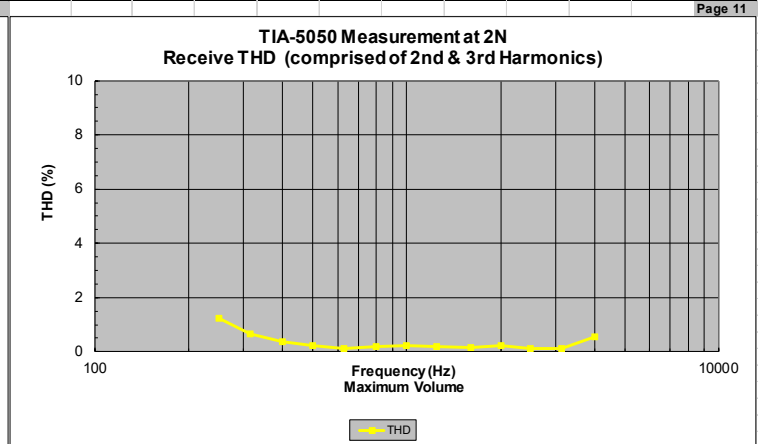
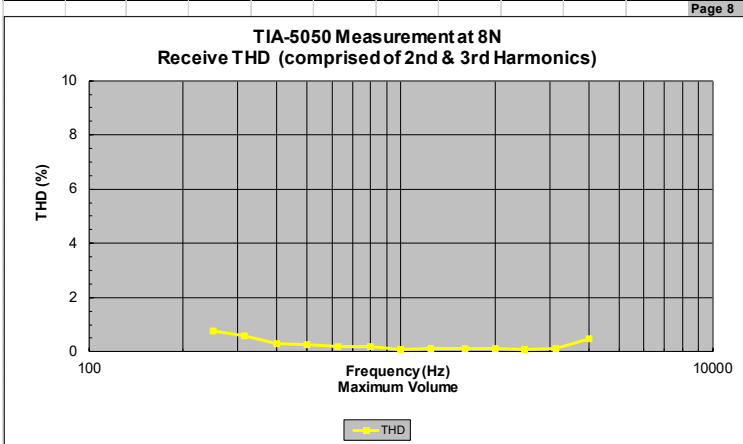
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	0.6 dB	Absolute Limits	PASS	9/27/2024 10:51
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-99 dBPa	
Comments:	24.4 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	0.16 dB	Absolute Limits	PASS	9/27/2024 10:51
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.		Stimulus level	-20 dBPa	
		Sentence conditioning	-20 dBPa	
		Short conditioning	-99 dBPa	
Comments:	24.4 kbps			



Test Date		
9/27/2024 10:51		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-99 dBPa	
Comments:	24.4 kbps	

Test Date		
9/27/2024 10:51		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-99 dBPa	
Comments:	24.4 kbps	



Test Date		
9/27/2024 10:51		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-99 dBPa	
Comments:	24.4 kbps	

Test Date		
9/27/2024 10:51		
Stimulus level	-20 dBPa	
Sentence conditioning	-20 dBPa	
Short conditioning	-99 dBPa	
Comments:	24.4 kbps	

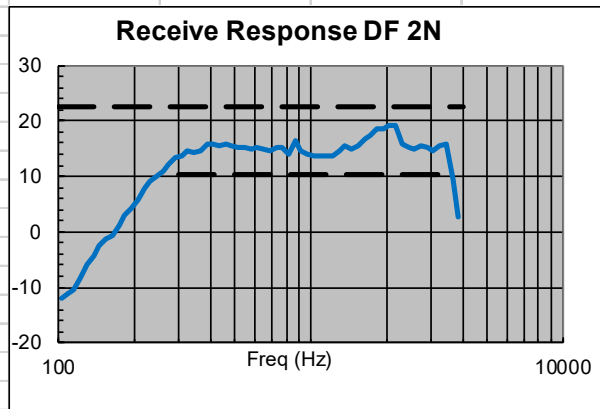
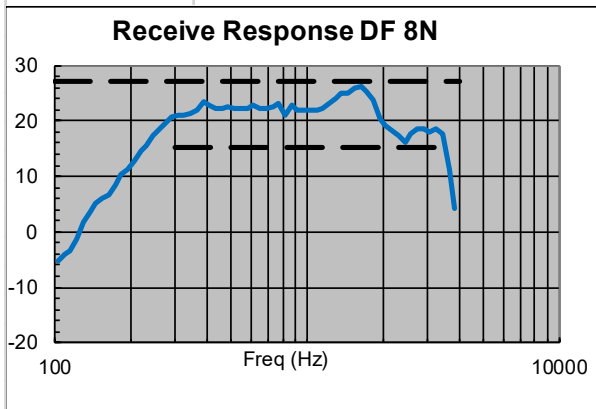
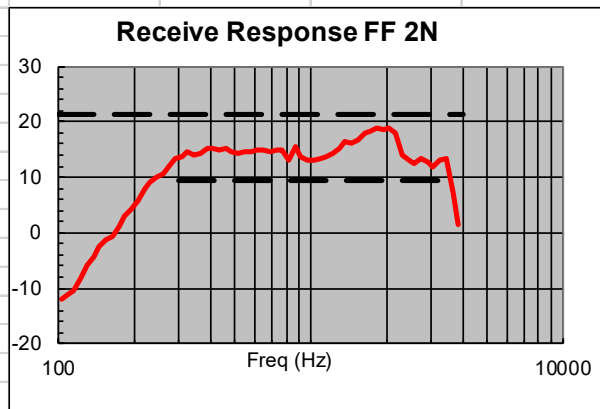
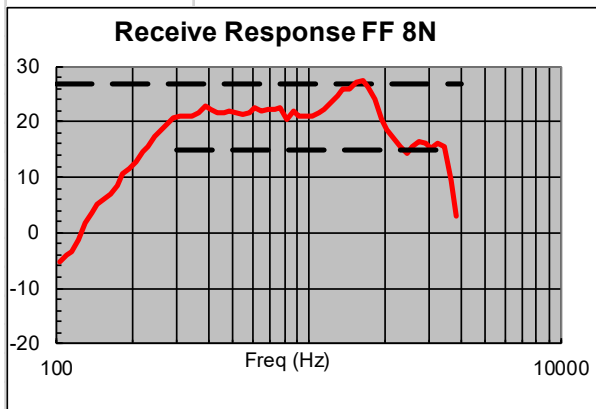
**Wi-Fi 2.4 GHz EVS-NB: 9.6 kbps QPSK 12 Mbps  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	802.11g EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/27/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.63 dB	Floating Limits	FAIL	
	Recv resp DF 8N	0.97 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.46 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.18 dB	Floating Limits	PASS	



**Output**

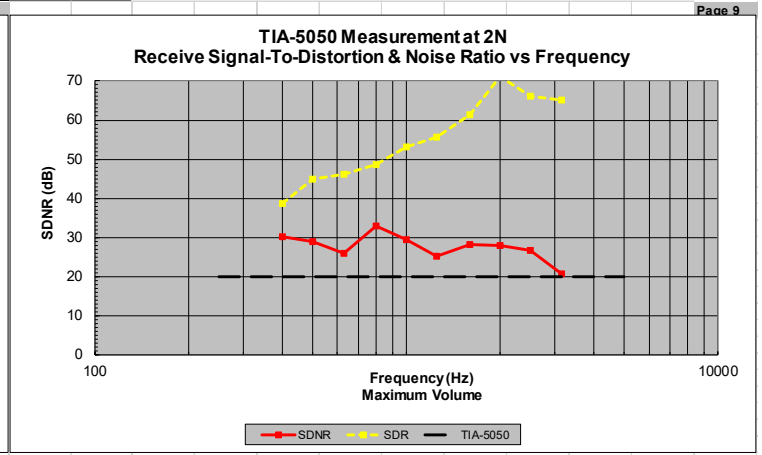
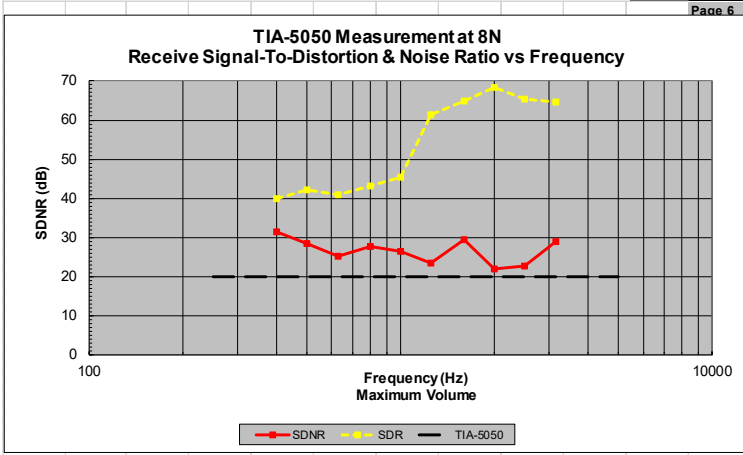
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	92.68 dB	info only		
	Recv conversational gain 8N	22.68 dB	18.00	PASS	
	Recv output level dB SPL 2N	85.33 dB	info only		
	Recv conversational gain 2N	15.33 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	1.9 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	0.62 dB	Absolute Limits	PASS	

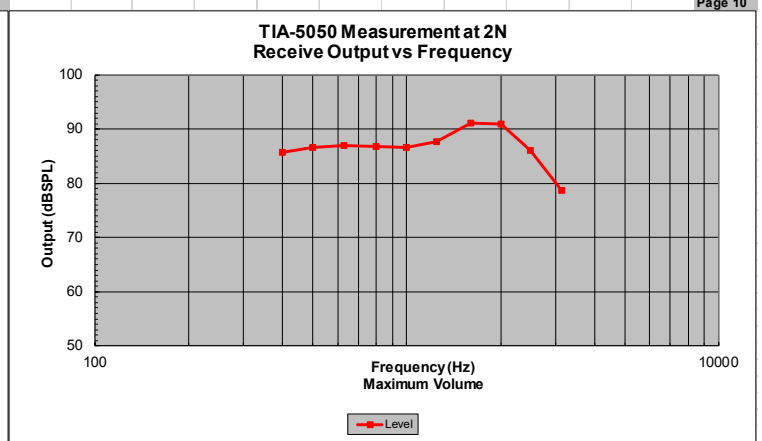
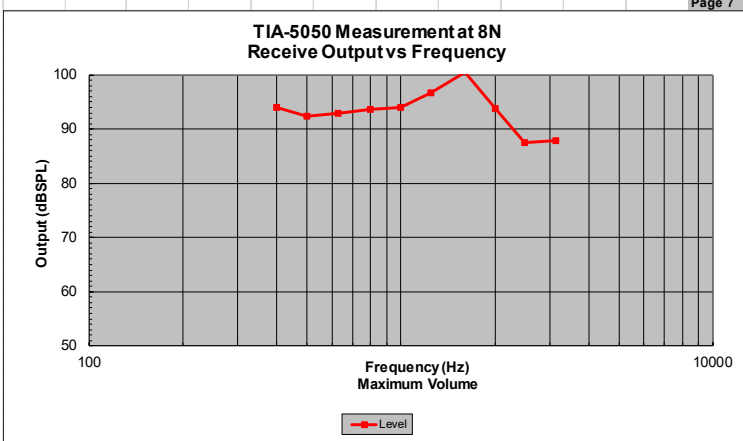
# Wi-Fi 2.4 GHz EVS-NB: 9.6 kbps QPSK 12 Mbps

## Distortion Report



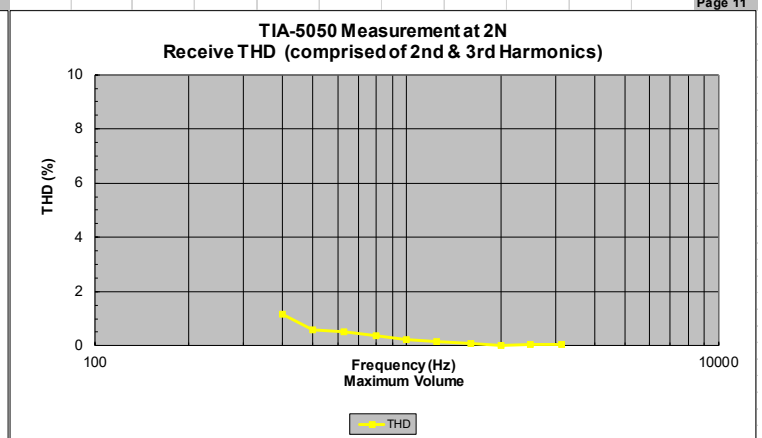
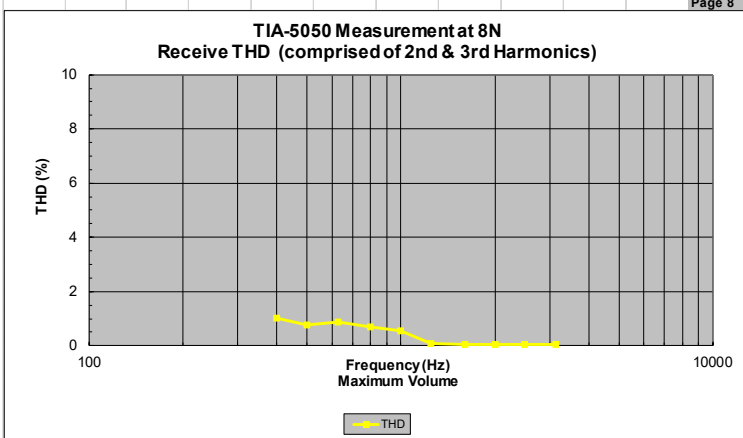
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	1.9 dB	Absolute Limits	PASS	9/27/2024 11:34
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	0.62 dB	Absolute Limits	PASS	9/27/2024 11:34
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			



Test Date	
9/27/2024 11:34	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/27/2024 11:34	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



Test Date	
9/27/2024 11:34	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/27/2024 11:34	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



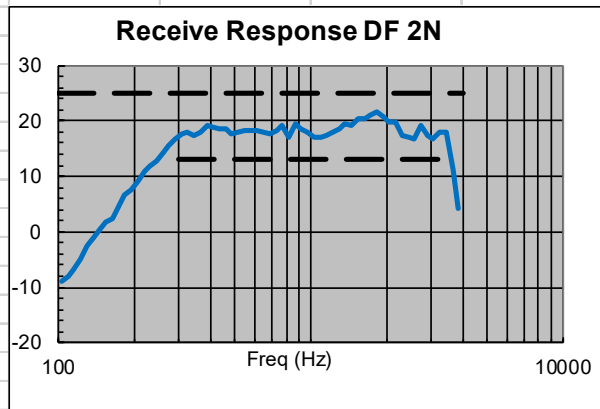
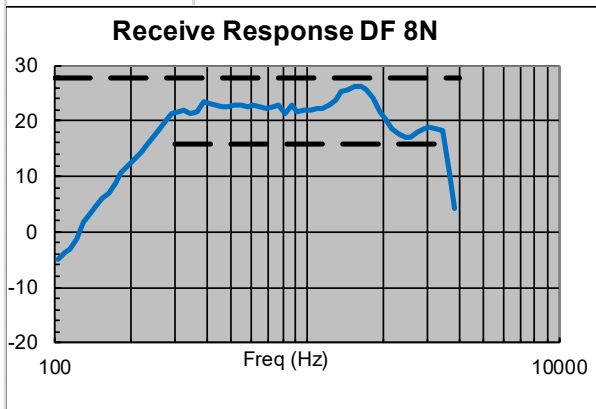
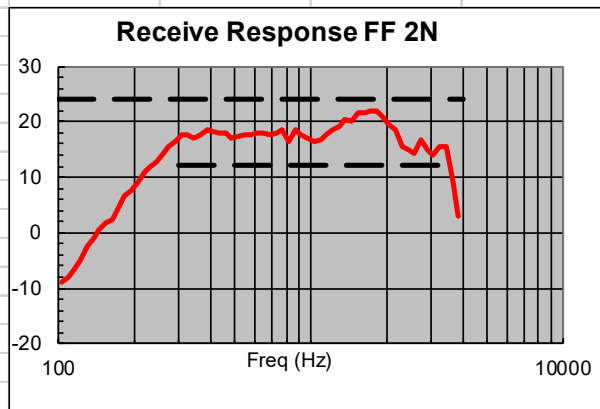
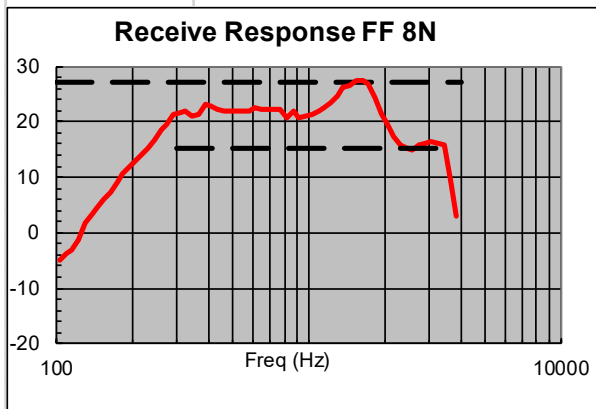
**Wi-Fi 2.4 GHz EVS-NB: 9.6 kbps MCS3 26 Mbps  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	802.11n EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/27/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.39 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.36 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.07 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.6 dB	Floating Limits	PASS	



**Output**

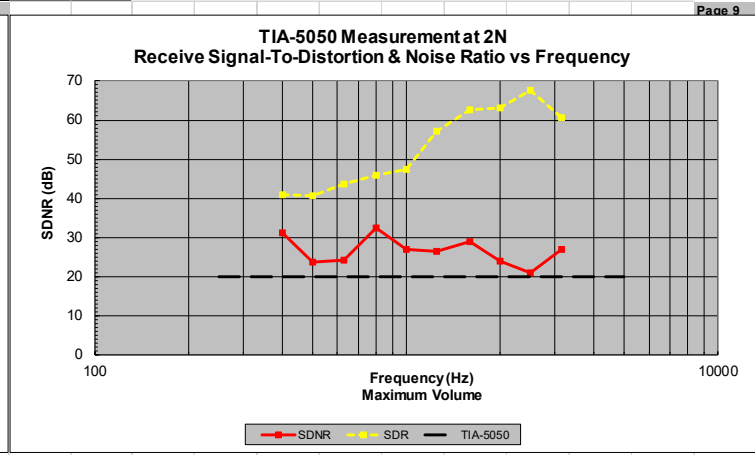
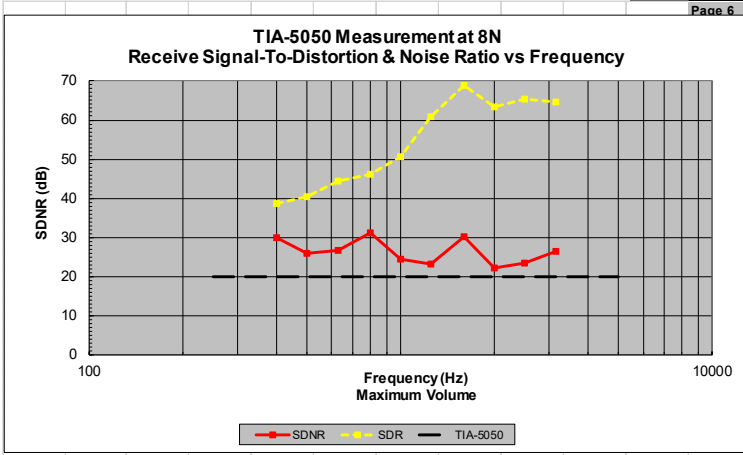
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	92.97 dB	info only		
	Recv conversational gain 8N	22.97 dB	18.00	PASS	
	Recv output level dB SPL 2N	88.51 dB	info only		
	Recv conversational gain 2N	18.51 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	2.3 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	1.11 dB	Absolute Limits	PASS	

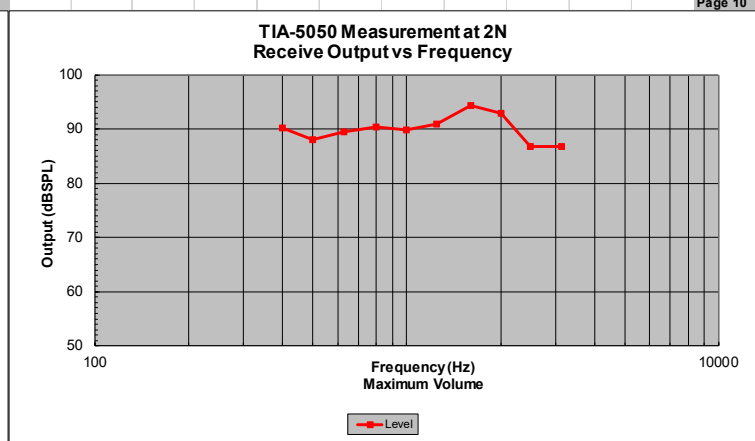
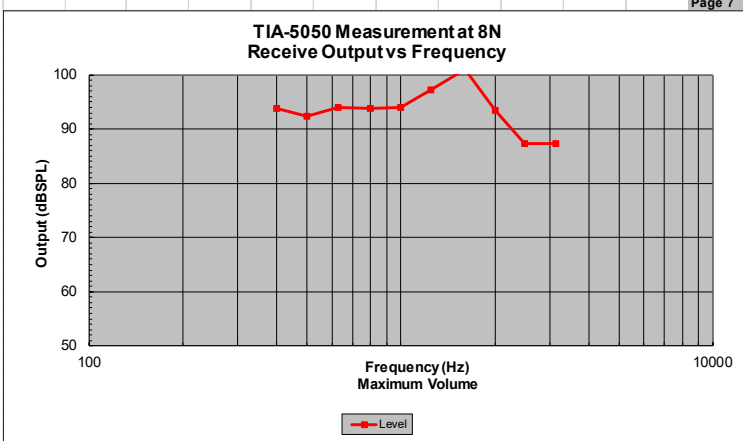
# Wi-Fi 2.4 GHz EVS-NB: 9.6 kbps MCS3 26 Mbps

## Distortion Report



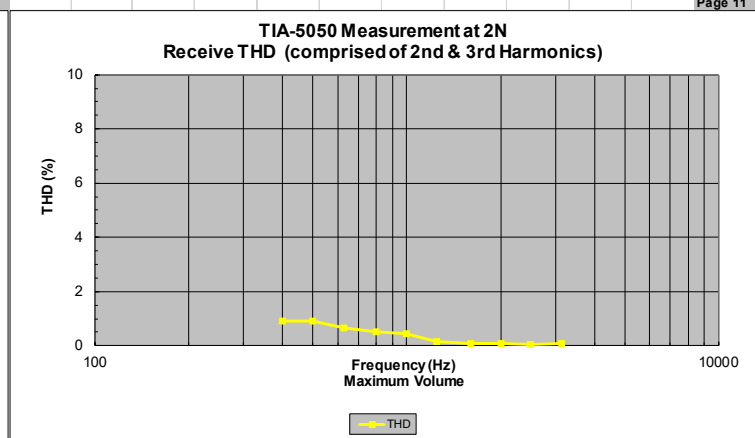
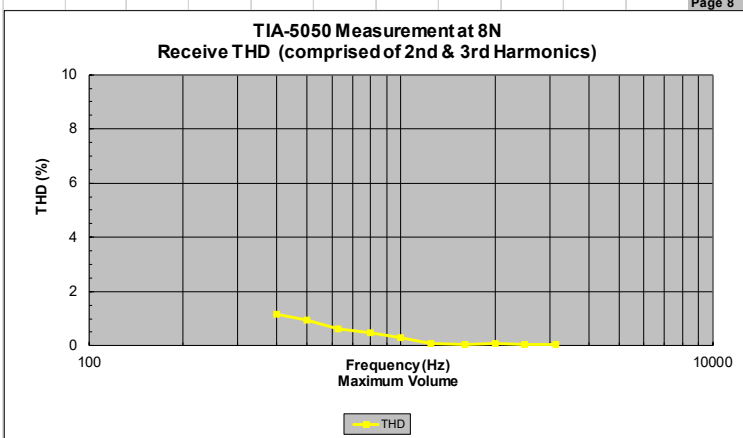
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	2.3 dB	Absolute Limits	PASS	9/27/2024 11:52
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	1.11 dB	Absolute Limits	PASS	9/27/2024 11:52
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			



Test Date	
9/27/2024 11:52	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/27/2024 11:52	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



Test Date	
9/27/2024 11:52	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

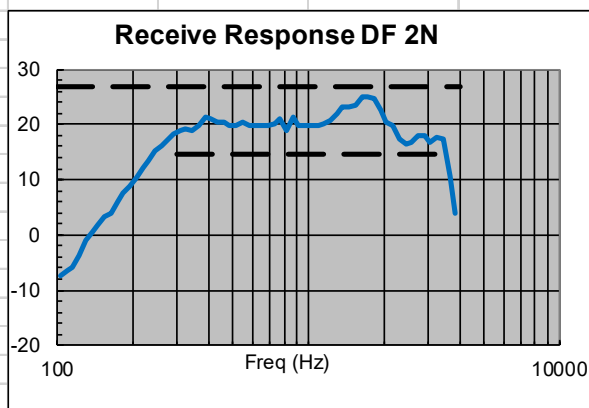
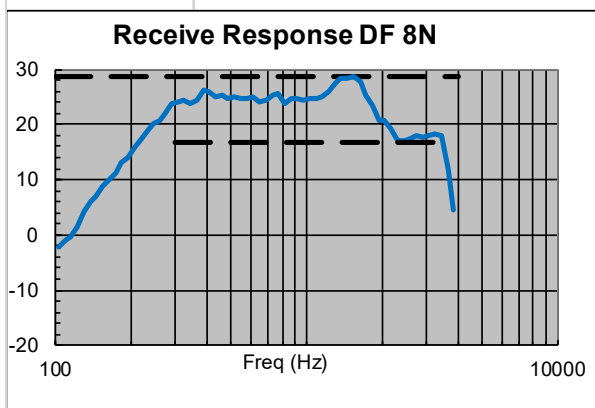
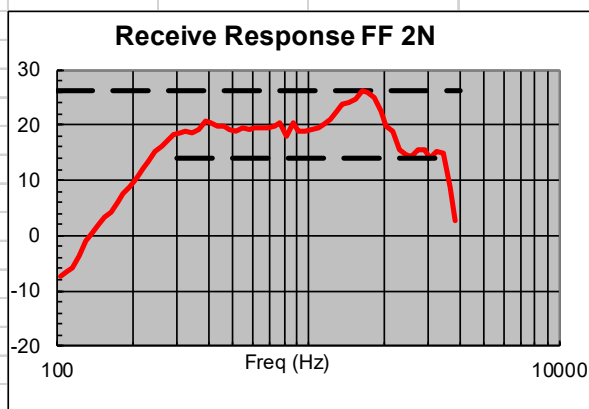
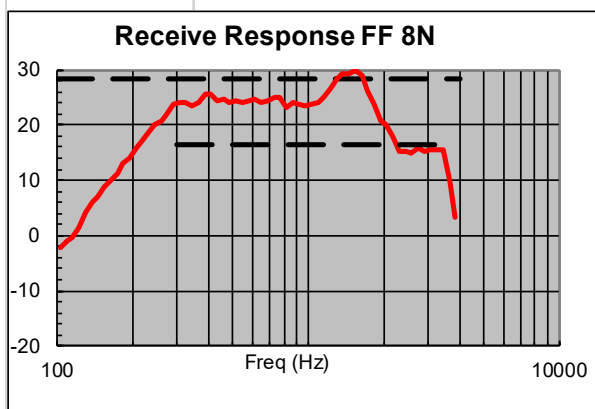
Test Date	
9/27/2024 11:52	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

**Wi-Fi 2.4 GHz EVS-NB: 9.6 kbps MCS5 58.5 Mbps  
Conversational Gain & Frequency Response Report  
TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	802.11ax EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/27/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-1.38 dB	Floating Limits	FAIL	
	Recv resp DF 8N	0.2 dB	Floating Limits	PASS	
	Recv resp FF 2N	0.03 dB	Floating Limits	PASS	
	Recv resp DF 2N	1.73 dB	Floating Limits	PASS	



**Output**

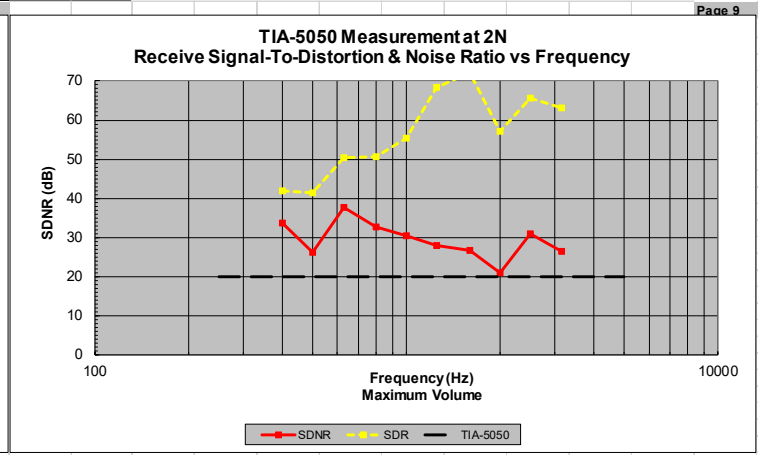
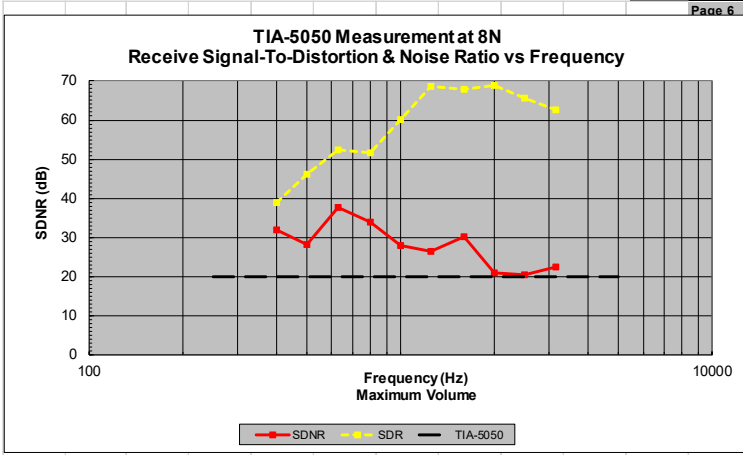
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	95.26 dB	info only		
	Recv conversational gain 8N	25.26 dB	18.00	PASS	
	Recv output level dB SPL 2N	90.61 dB	info only		
	Recv conversational gain 2N	20.61 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	0.4 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	0.88 dB	Absolute Limits	PASS	

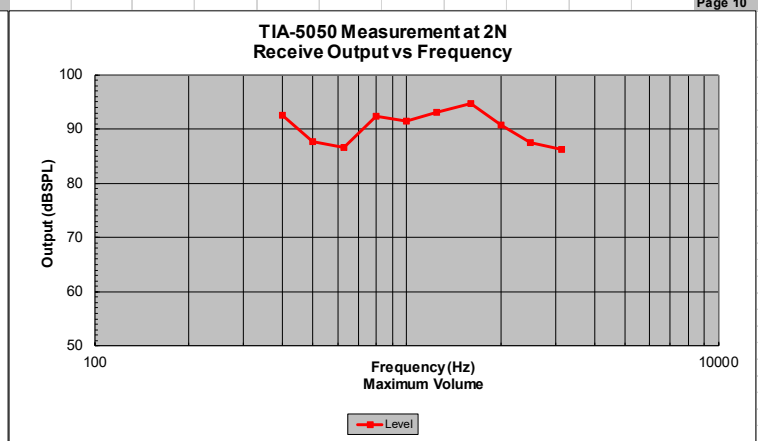
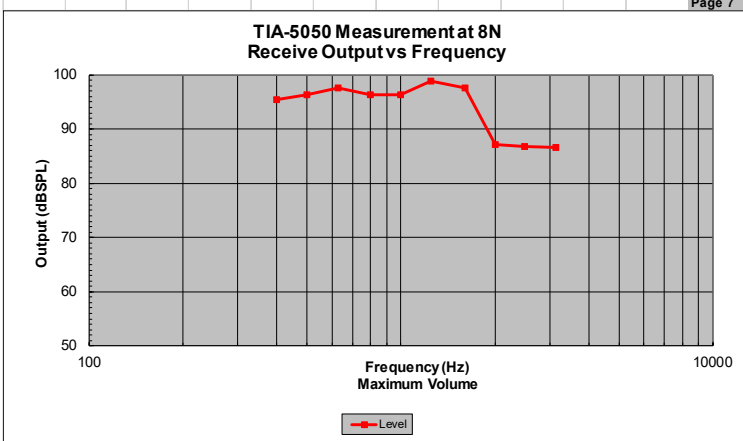
# Wi-Fi 2.4 GHz EVS-NB: 9.6 kbps MCS5 58.5 Mbps

## Distortion Report



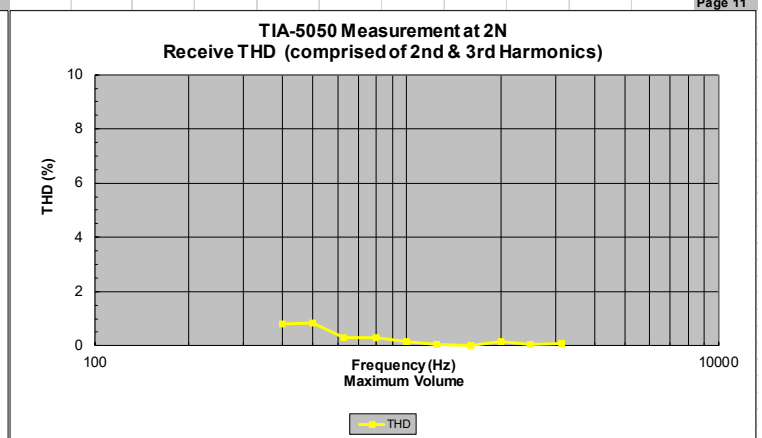
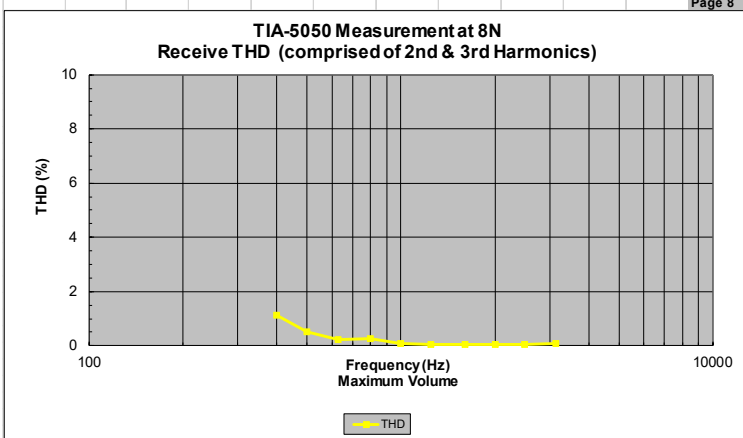
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	0.4 dB	Absolute Limits	PASS	9/27/2024 18:21
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	0.88 dB	Absolute Limits	PASS	9/27/2024 18:21
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments:	9.6 kbps			



Test Date
9/27/2024 18:21
Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments:

Test Date
9/27/2024 18:21
Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments:



Test Date
9/27/2024 18:21
Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments:

Test Date
9/27/2024 18:21
Stimulus level -20 dBPa Sentence conditioning -20 dBPa Short conditioning -20 dBPa
Comments:

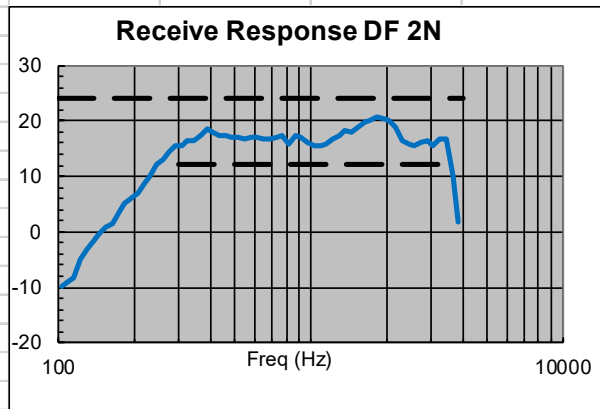
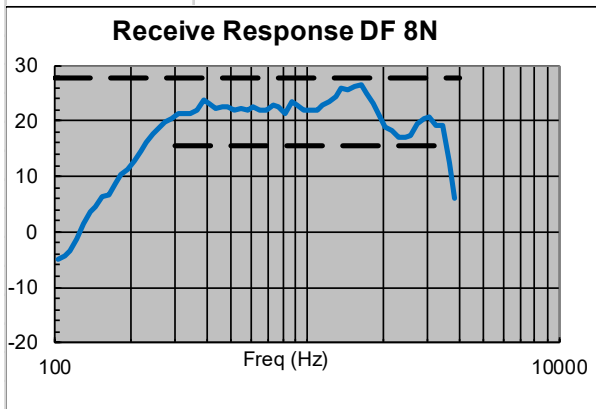
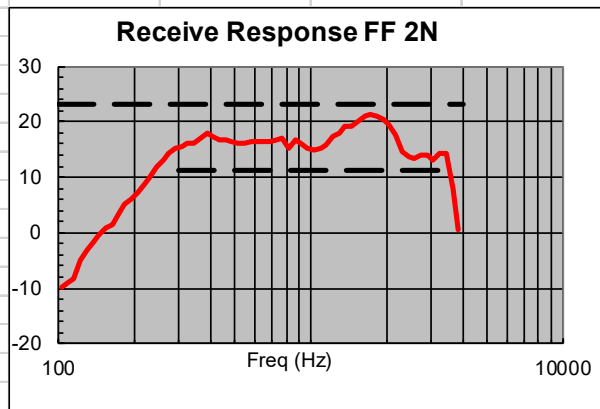
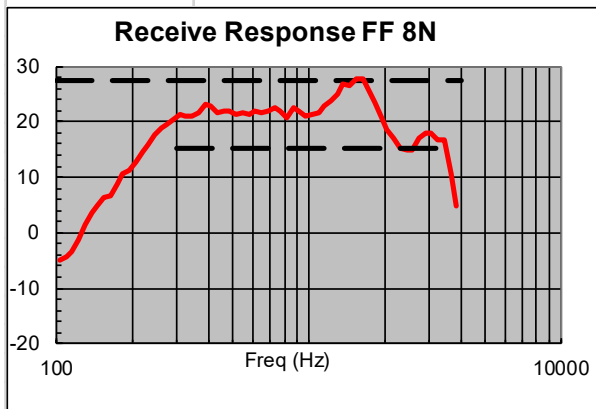
**Wi-Fi 5 GHz EVS-NB: 9.6 kbps QPSK 18 Mbps  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	802.11a 20MHz EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/27/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.36 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.25 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.89 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.44 dB	Floating Limits	PASS	



**Output**

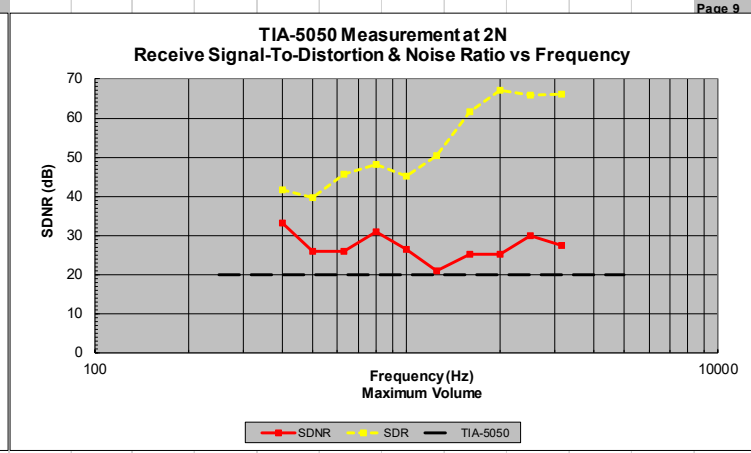
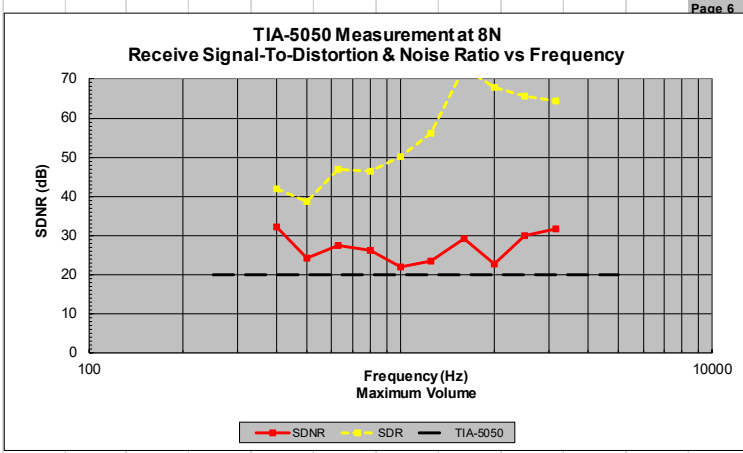
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	92.76 dB	info only		
	Recv conversational gain 8N	22.76 dB	18.00	PASS	
	Recv output level dB SPL 2N	87.34 dB	info only		
	Recv conversational gain 2N	17.34 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	1.9 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	1.1 dB	Absolute Limits	PASS	

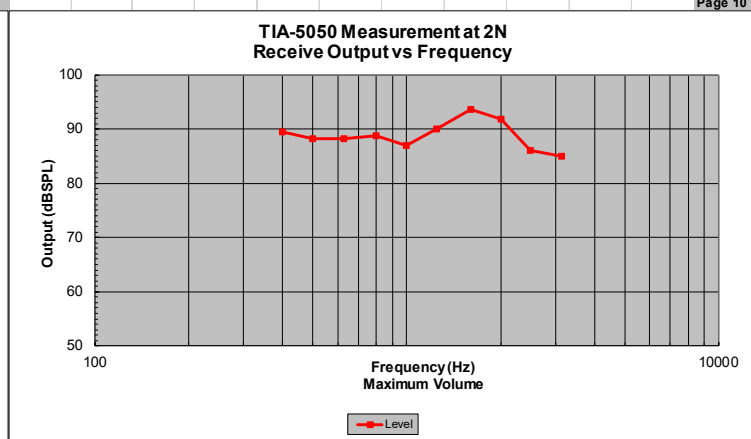
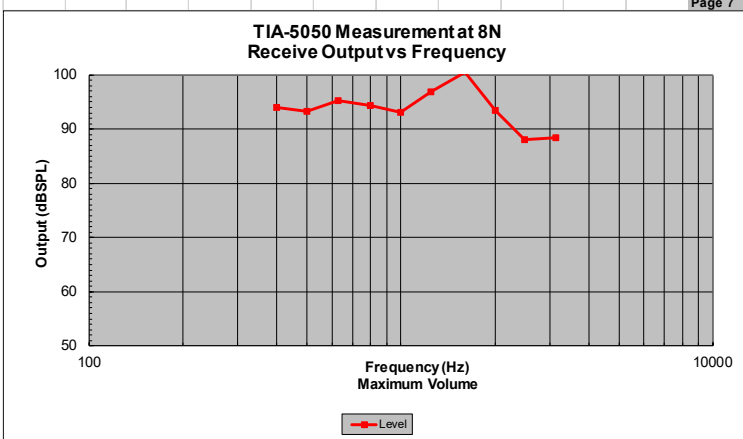
# Wi-Fi 5 GHz EVS-NB: 9.6 kbps QPSK 18 Mbps

## Distortion Report



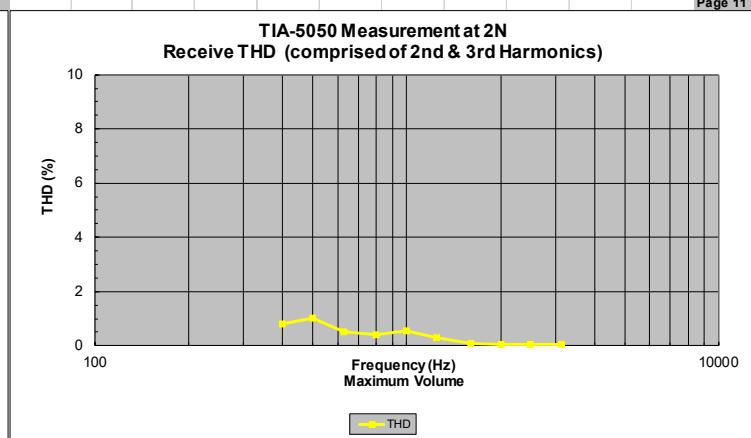
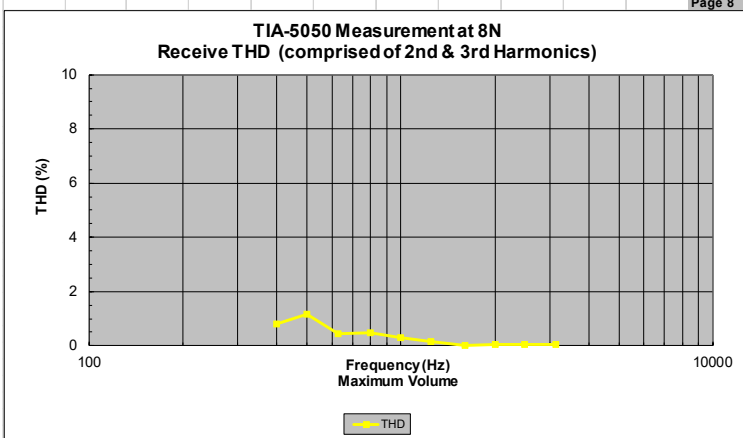
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	1.9 dB	Absolute Limits	PASS	9/27/2024 14:41
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	1.1 dB	Absolute Limits	PASS	9/27/2024 14:41
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			



Test Date	
9/27/2024 14:41	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/27/2024 14:41	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



Test Date	
9/27/2024 14:41	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/27/2024 14:41	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

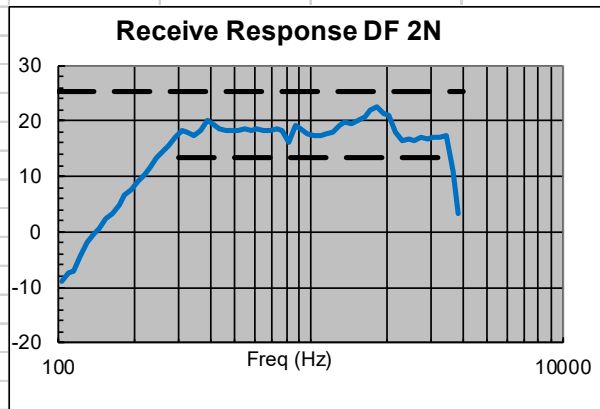
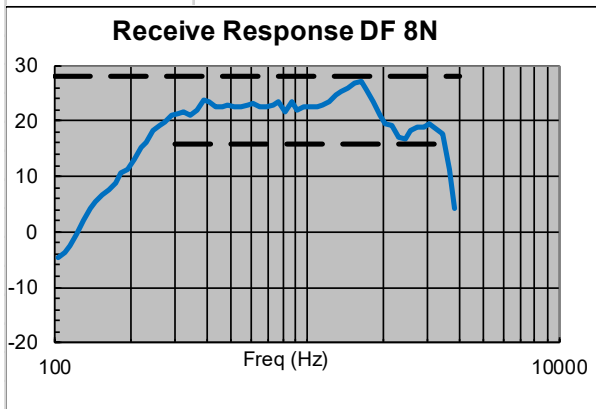
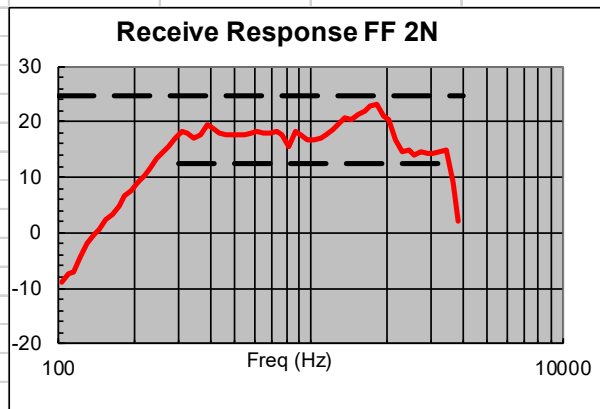
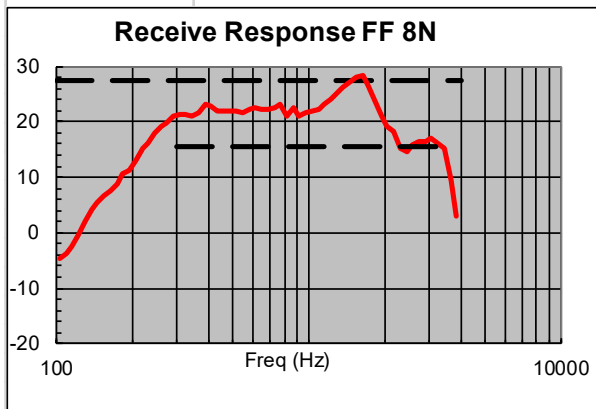
**Wi-Fi 5 GHz EVS-NB: 9.6 kbps MCS3 54 Mbps  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	802.11n 40MHz EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/27/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.9 dB	Floating Limits	FAIL	
	Recv resp DF 8N	0.7 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.55 dB	Floating Limits	PASS	
	Recv resp DF 2N	2.82 dB	Floating Limits	PASS	



**Output**

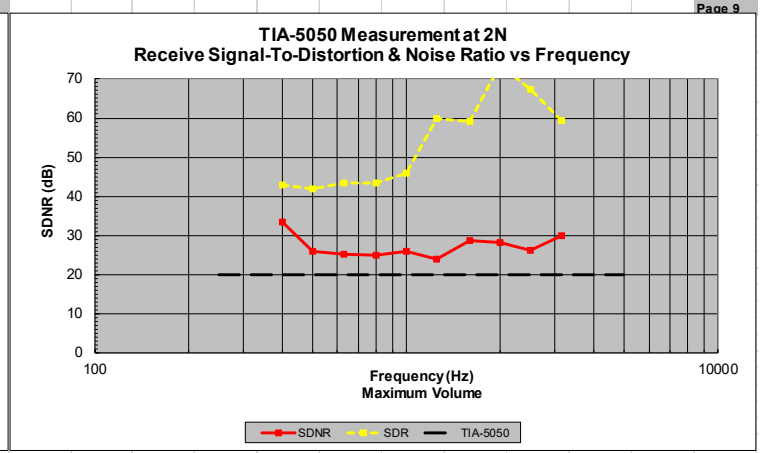
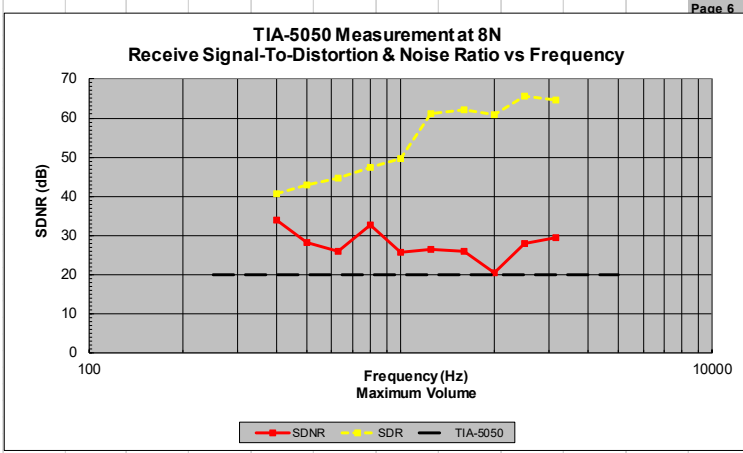
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	93.12 dB	info only		
	Recv conversational gain 8N	23.12 dB	18.00	PASS	
	Recv output level dB SPL 2N	88.76 dB	info only		
	Recv conversational gain 2N	18.76 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	0.4 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	3.9 dB	Absolute Limits	PASS	

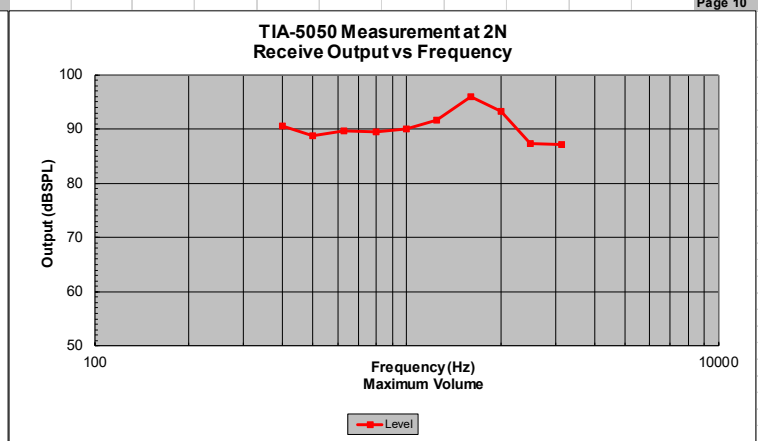
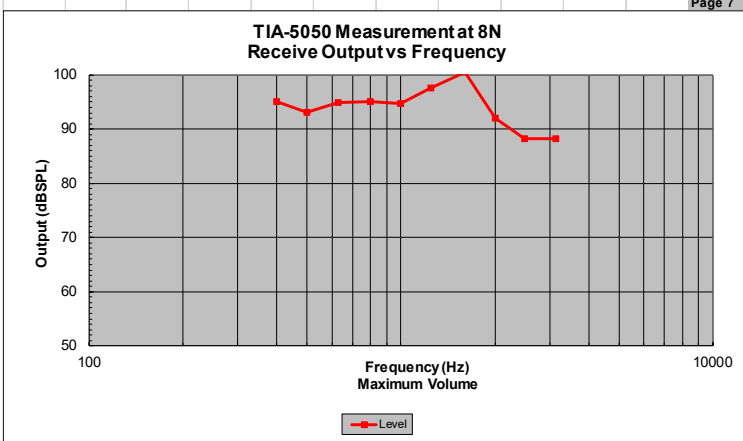
# Wi-Fi 5 GHz EVS-NB: 9.6 kbps MCS3 54 Mbps

## Distortion Report



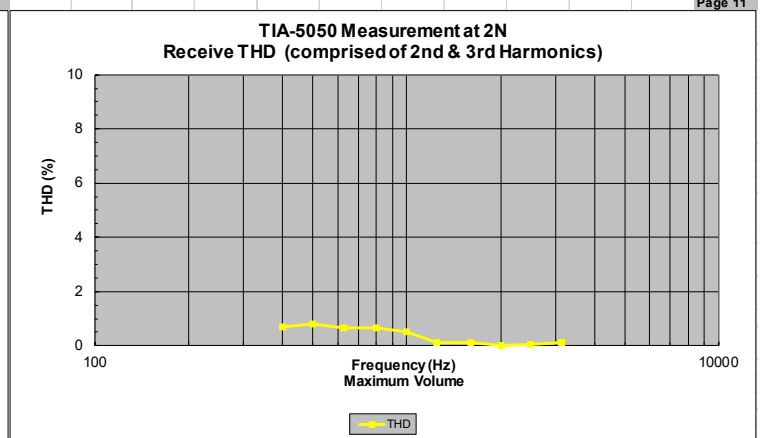
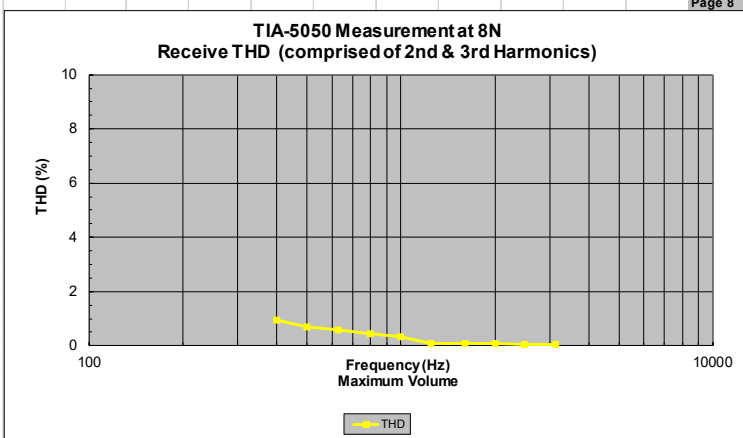
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	0.4 dB	Absolute Limits	PASS	9/27/2024 15:30
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	3.9 dB	Absolute Limits	PASS	9/27/2024 15:30
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			



Test Date	
9/27/2024 15:30	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/27/2024 15:30	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



Test Date	
9/27/2024 15:30	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/27/2024 15:30	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



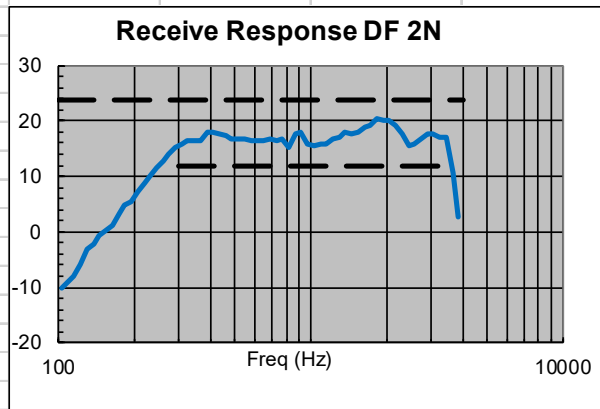
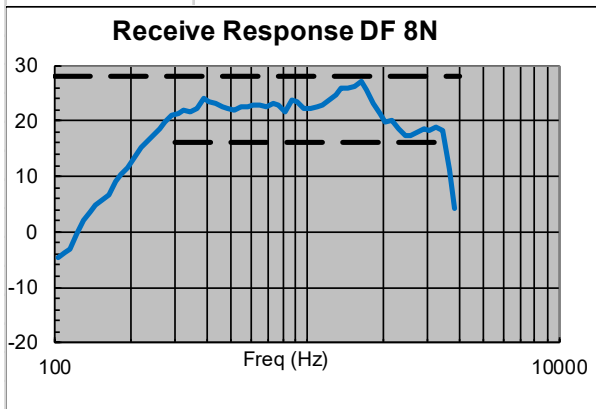
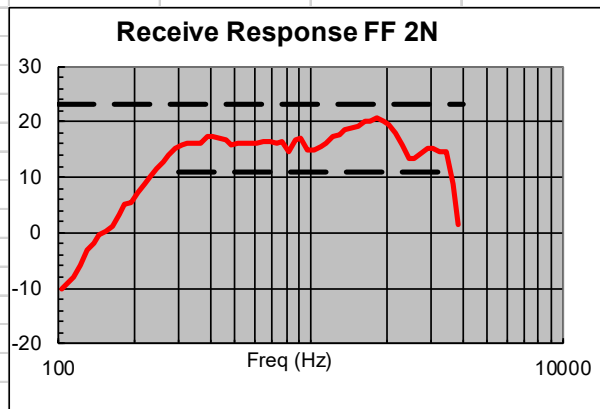
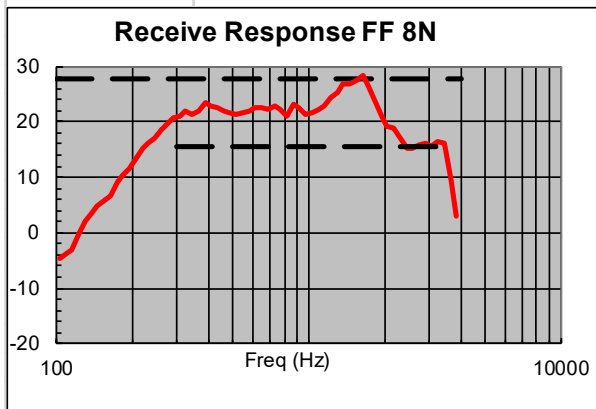
**Wi-Fi 5 GHz EVS-NB: 9.6 kbps MCS5 234 Mbps  
Conversational Gain & Frequency Response Report**

**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	802.11ac 80MHz EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/27/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-0.57 dB	Floating Limits	FAIL	
	Recv resp DF 8N	1.13 dB	Floating Limits	PASS	
	Recv resp FF 2N	2.33 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.43 dB	Floating Limits	PASS	



**Output**

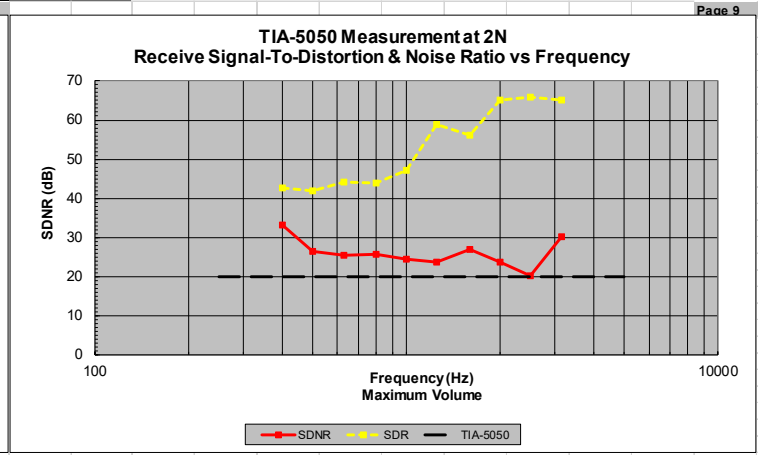
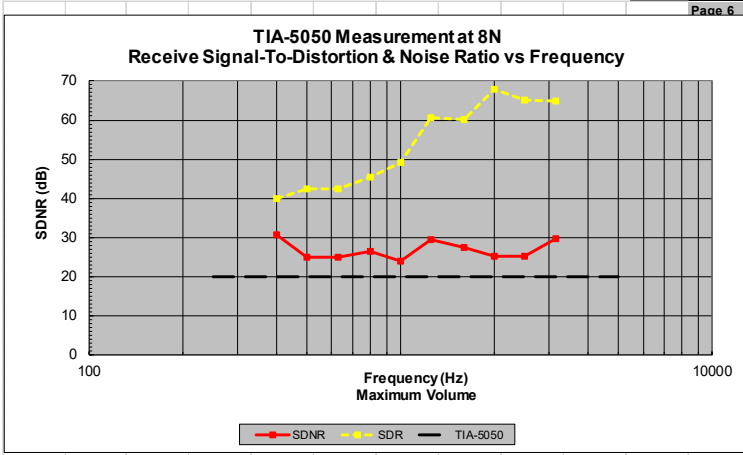
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	93.09 dB	info only		
	Recv conversational gain 8N	23.09 dB	18.00	PASS	
	Recv output level dB SPL 2N	87.15 dB	info only		
	Recv conversational gain 2N	17.15 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	3.9 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	0.35 dB	Absolute Limits	PASS	

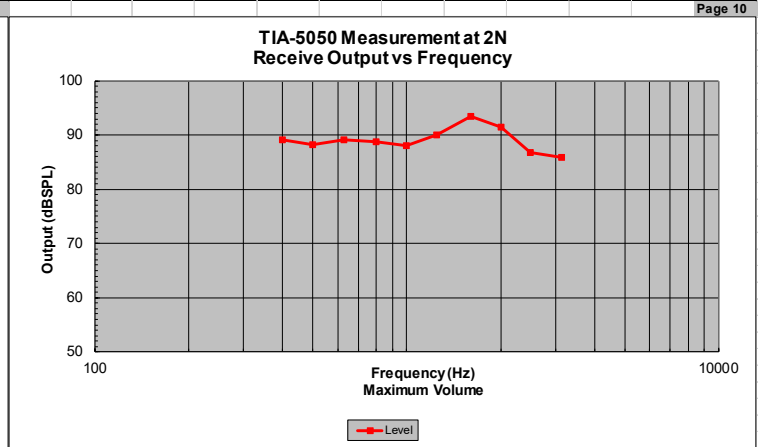
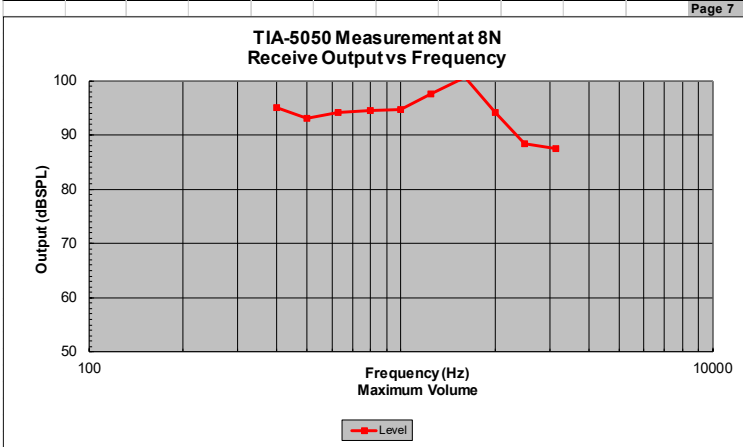
# Wi-Fi 5 GHz EVS-NB: 9.6 kbps MCS5 234 Mbps

## Distortion Report



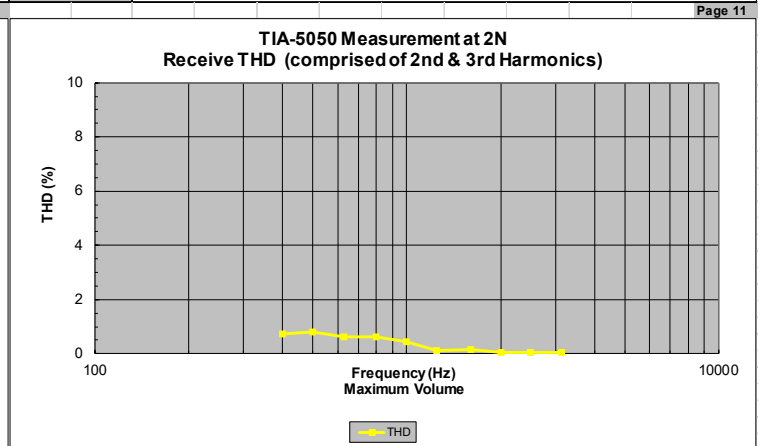
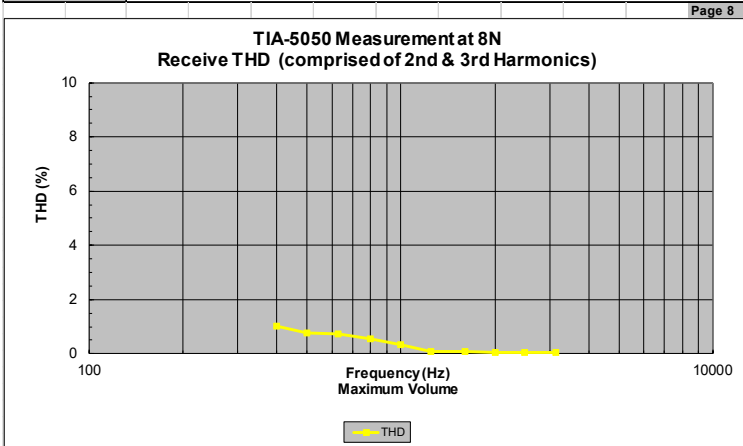
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	3.9 dB	Absolute Limits	PASS	9/27/2024 16:25
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	0.35 dB	Absolute Limits	PASS	9/27/2024 16:25
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-99 dBPa
Comments:	9.6 kbps			



Test Date	
9/27/2024 16:25	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

Test Date	
9/27/2024 16:25	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps



Test Date	
9/27/2024 16:25	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

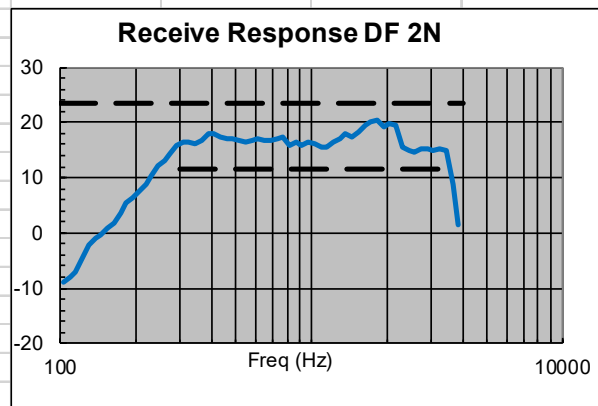
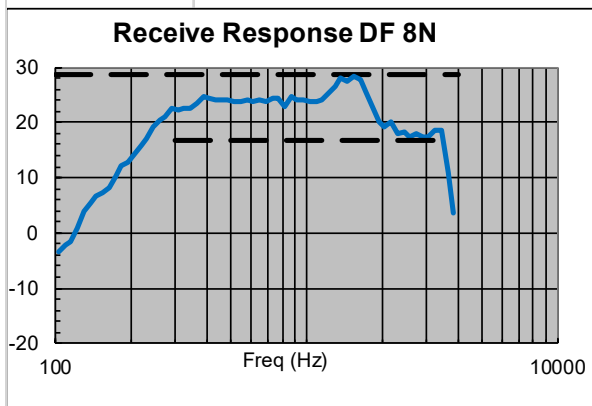
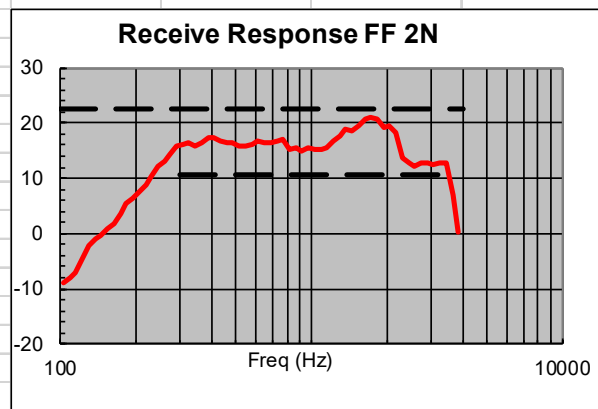
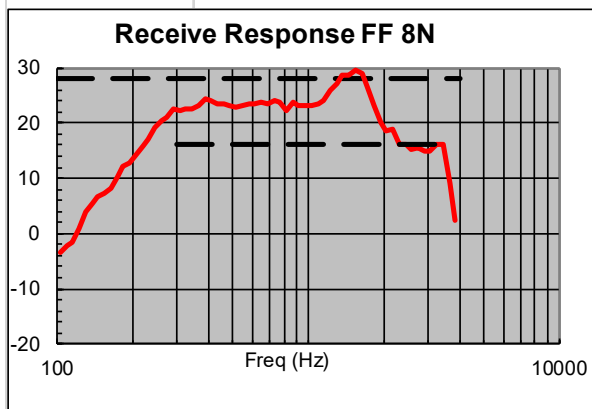
Test Date	
9/27/2024 16:25	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-99 dBPa
Comments:	9.6 kbps

**Wi-Fi 5 GHz EVS-NB: 9.6 kbps MCS6 324.3 Mbps**  
**Conversational Gain & Frequency Response Report**  
**TIA-5050 Receive Volume Control Measurements**

<b>Device Under Test:</b>	802.11ax 80MHz EVS-NB
<b>Bandwidth</b>	Narrowband
<b>Test Date:</b>	9/27/2024

**Frequency Response**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.3	Recv resp FF 8N	-1.36 dB	Floating Limits	FAIL	
	Recv resp DF 8N	0.53 dB	Floating Limits	PASS	
	Recv resp FF 2N	1.55 dB	Floating Limits	PASS	
	Recv resp DF 2N	3.07 dB	Floating Limits	PASS	



**Output**

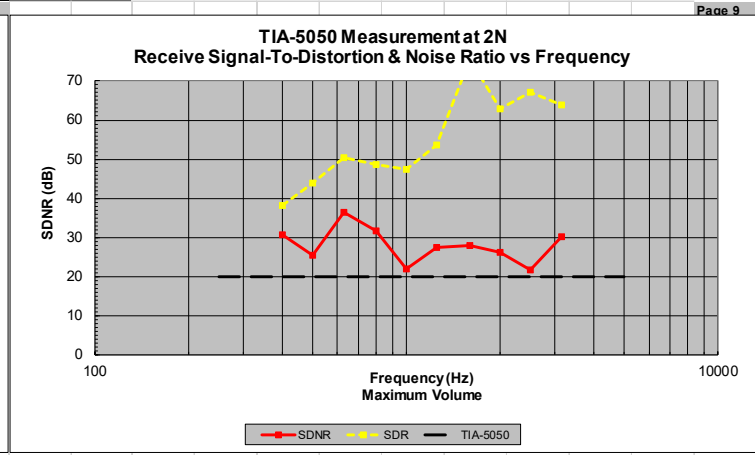
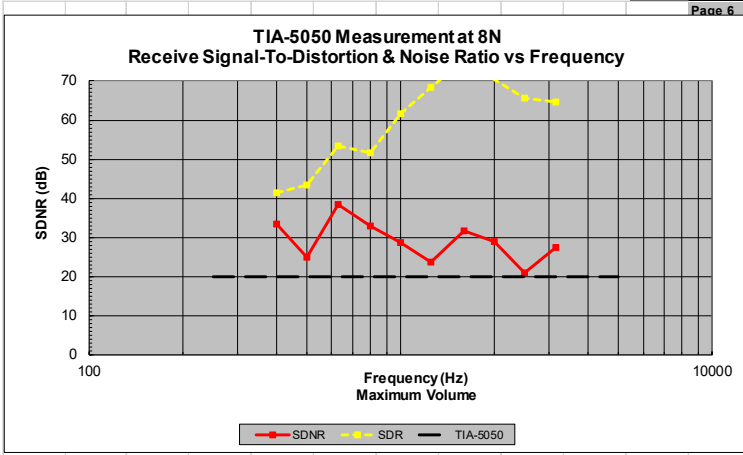
TIA-5050	Test	Measured	Limits	Result	Reference
Clause 5.1	Recv output level dB SPL 8N	94.37 dB	info only		
	Recv conversational gain 8N	24.37 dB	18.00	PASS	
	Recv output level dB SPL 2N	87.2 dB	info only		
	Recv conversational gain 2N	17.2 dB	6.00	PASS	

**Distortion**

TIA-5050	Test	Margin	Limits	Result	Reference
Clause 5.2	Recv PN-SDNR 8N	1 dB	Absolute Limits	PASS	
	Recv PN-SDNR 2N	1.77 dB	Absolute Limits	PASS	

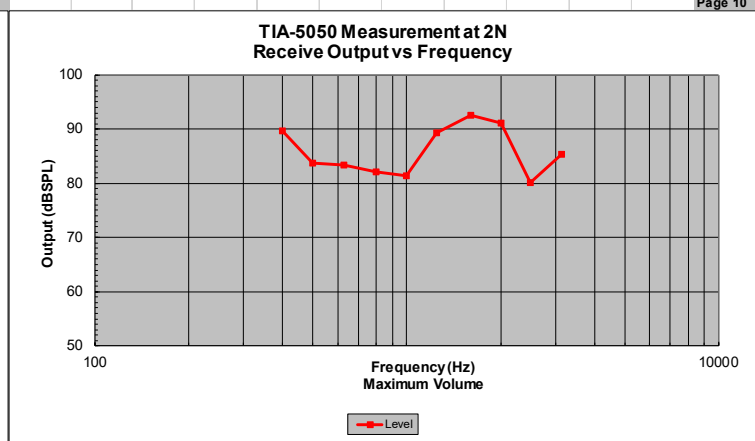
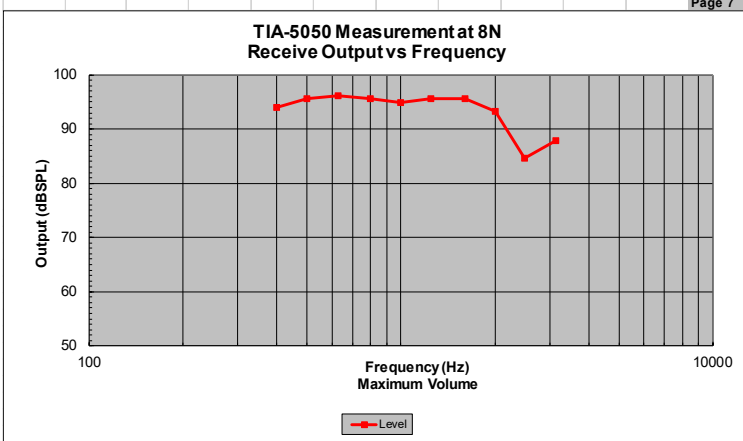
# Wi-Fi 5 GHz EVS-NB: 9.6 kbps MCS6 648.5 Mbps

## Distortion Report



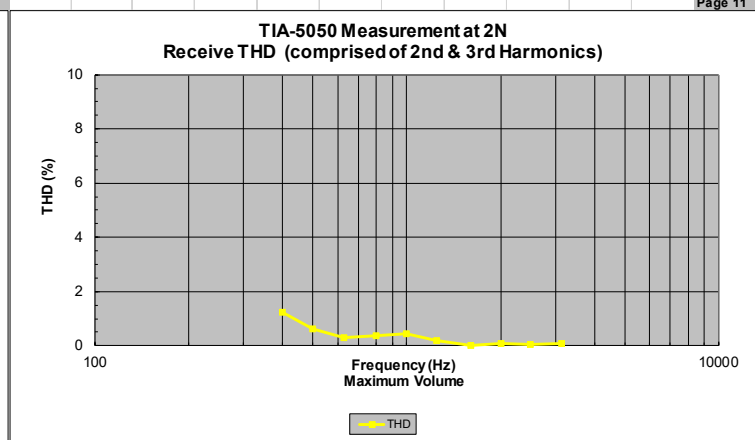
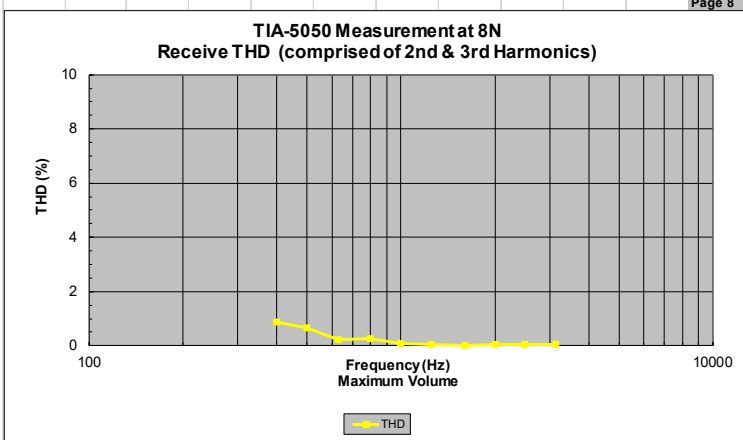
Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 8N	1 dB	Absolute Limits	PASS	9/27/2024 17:27
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			

Test	Margin	Limits	Result	Test Date
Recv PN-SDNR 2N	1.77 dB	Absolute Limits	PASS	9/27/2024 17:27
Note: SDNR includes noise and distortion products. SDR includes only 2nd and 3rd harmonic distortion.				
Stimulus level				-20 dBPa
Sentence conditioning				-20 dBPa
Short conditioning				-20 dBPa
Comments:	9.6 kbps			



Test Date	
9/27/2024 17:27	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
9/27/2024 17:27	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps



Test Date	
9/27/2024 17:27	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps

Test Date	
9/27/2024 17:27	
Stimulus level	-20 dBPa
Sentence conditioning	-20 dBPa
Short conditioning	-20 dBPa
Comments:	9.6 kbps