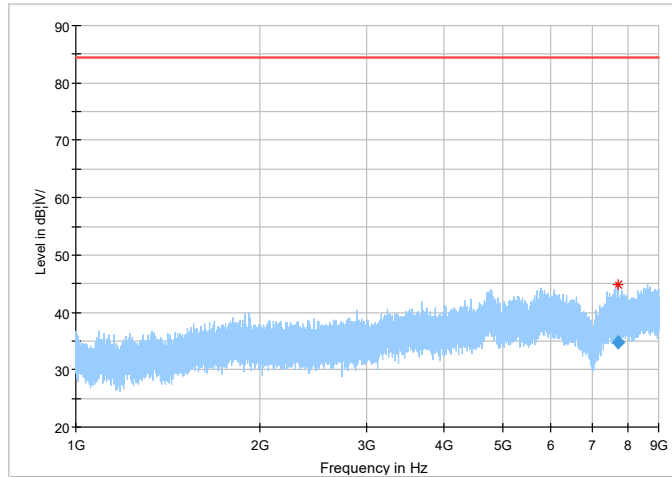


**1-9GHz, Horizontal**

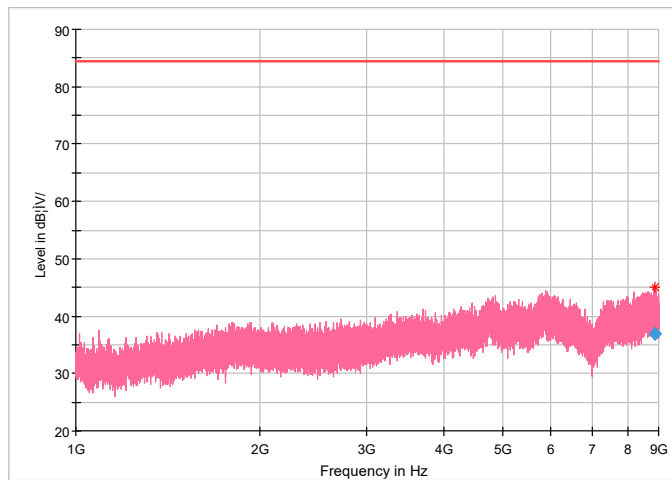
Full Spectrum



Frequency (MHz)	RMS (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
7742.800000	34.70	84.40	49.70	106.6	H	282.0	-21.0

**1-9GHz, Vertical**

Full Spectrum



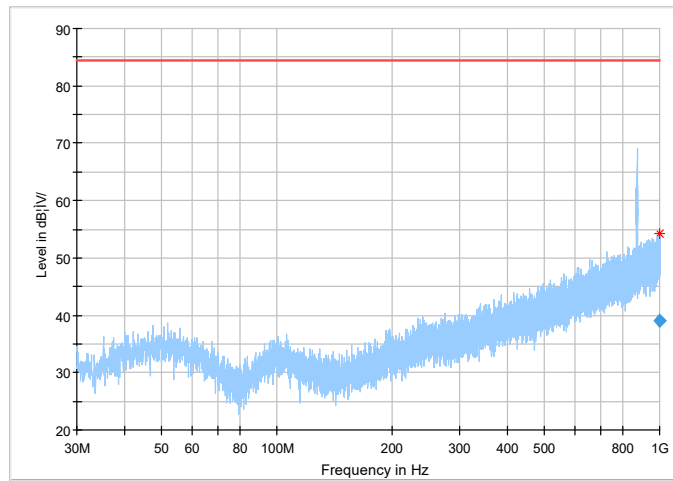
Frequency (MHz)	RMS (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
8855.600000	36.90	84.40	47.50	124.9	V	257.0	-19.8

## TEST REPORT

Configuration	Channel Position	Carrier	W Carrier Bandwidth (MHz)	GSM Carrier Bandwidth (MHz)	W & GSM Modulation
W+GSM-MC-1-UE	B	2 Carrier	5	0.2	QPSK
W+GSM-MC-1-UE	T	2 Carrier	5	0.2	QPSK

### 30-1000MHz, Horizontal

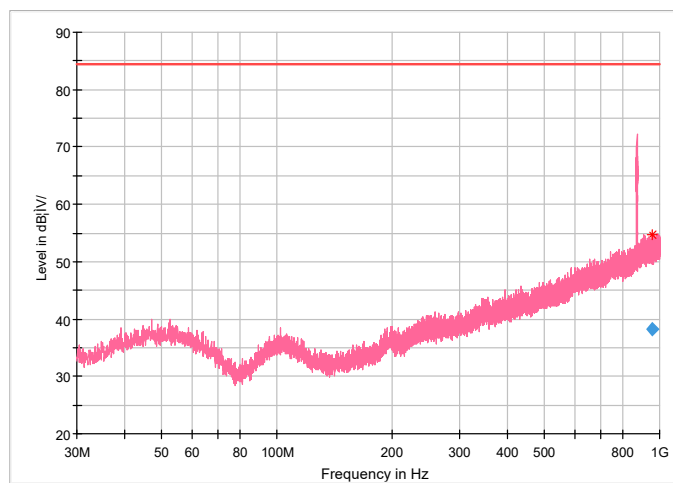
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
996.993000	39.05	84.40	45.35	101.5	H	-18.0	28.7

### 30-1000MHz, Vertical

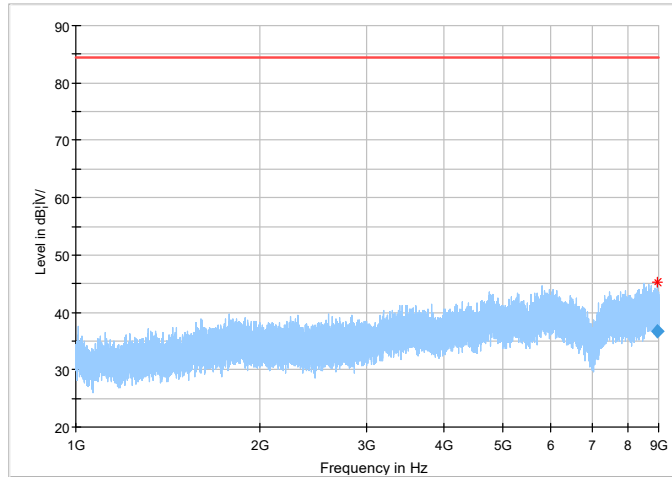
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
954.652500	38.27	84.40	46.13	100.7	V	1.0	28.0

**1-9GHz, Horizontal**

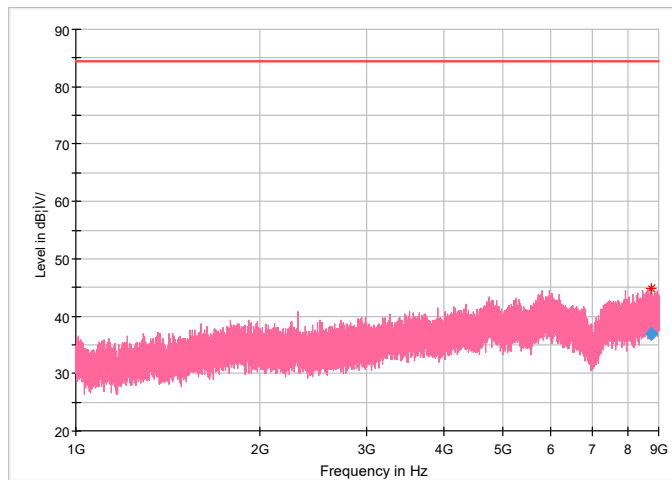
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
8941.600000	36.64	84.40	47.76	111.6	H	290.0	-19.8

**1-9GHz, Vertical**

Full Spectrum



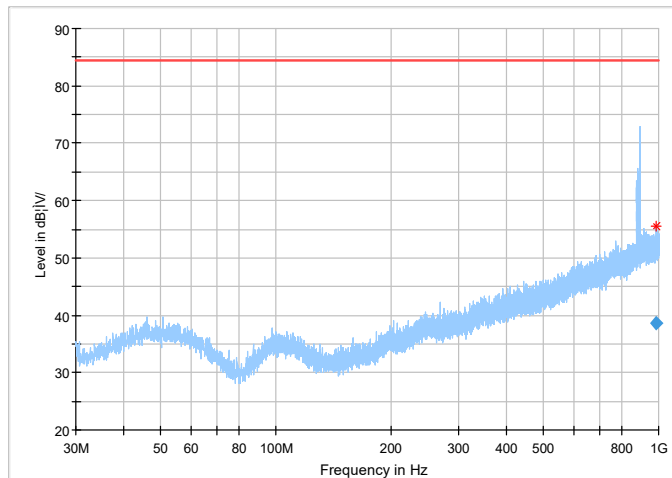
Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
8740.600000	36.91	84.40	47.49	124.9	V	307.0	-20.0

## TEST REPORT

Configuration	Channel Position	Carrier	W Carrier Bandwidth (MHz)	GSM Carrier Bandwidth (MHz)	W & GSM Modulation
W+GSM-MC-2-UE	B	6 Carrier	5	0.2	QPSK
W+GSM-MC-2-UE	T	6 Carrier	5	0.2	QPSK

### 30-1000MHz, Horizontal

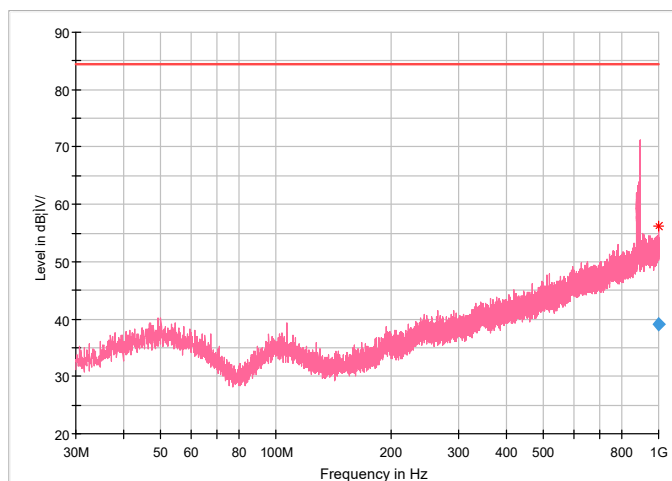
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
984.771000	38.69	84.40	45.71	119.7	H	-20.0	28.4

### 30-1000MHz, Vertical

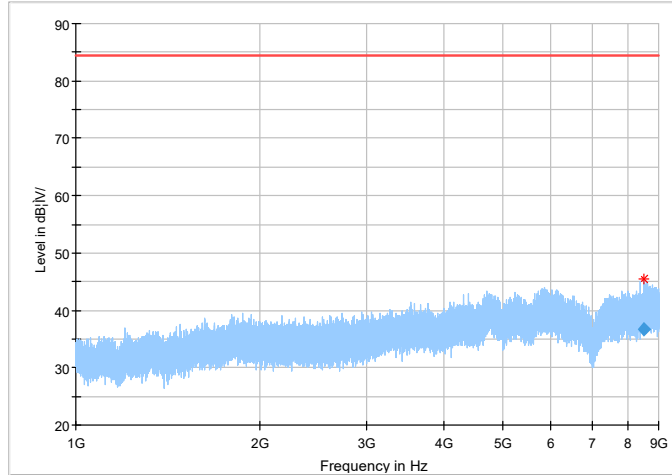
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
998.108500	39.09	84.40	45.31	99.8	V	-18.0	28.7

**1-9GHz, Horizontal**

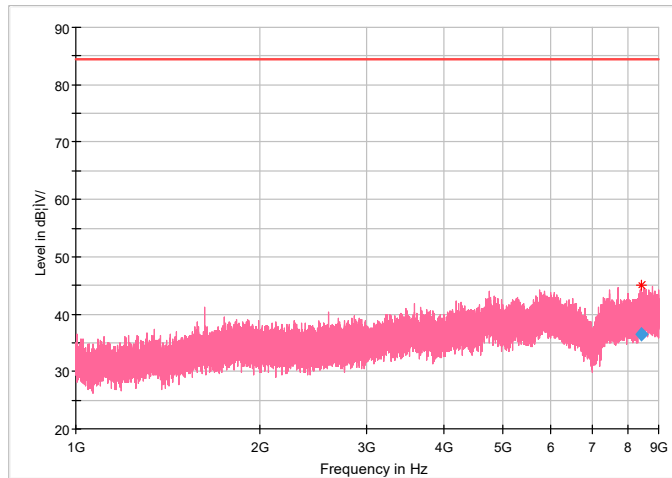
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
8503.800000	36.64	84.40	47.76	124.9	H	307.0	-20.0

**1-9GHz, Vertical**

Full Spectrum



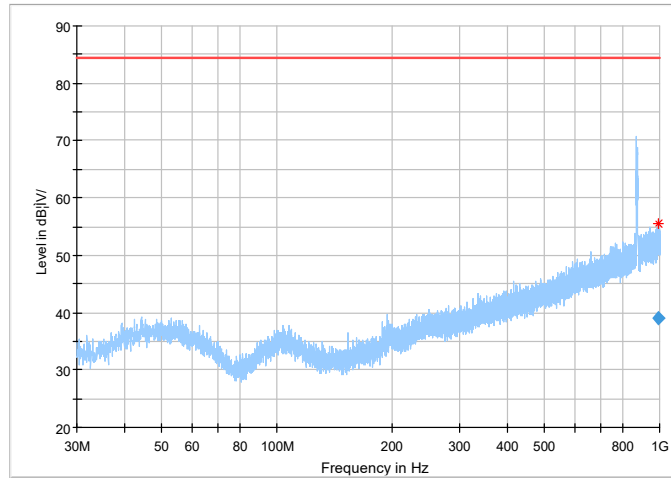
Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
8449.600000	36.53	84.40	47.87	100.9	V	307.0	-20.2

## TEST REPORT

Configuration	Channel Position	Carrier	Carrier Bandwidth	Modulation
NR ESS IB-1C-UE	B	1 Carrier	10MHz	QPSK
NR ESS IB-1C-UE	T	1 Carrier	10MHz	QPSK

### 30-1000MHz, Horizontal

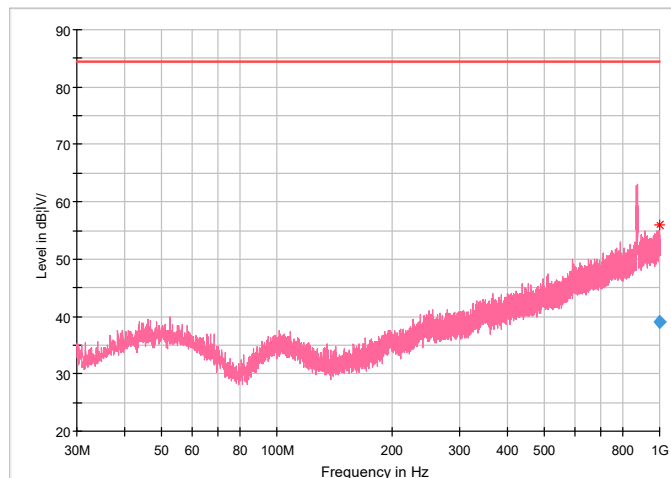
Full Spectrum



Frequency (MHz)	RMS (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
993.889000	38.98	84.40	45.42	124.8	H	166.0	28.7

### 30-1000MHz, Vertical

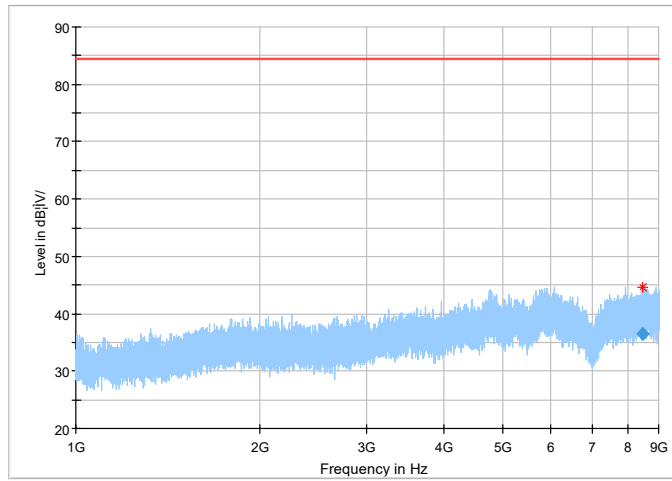
Full Spectrum



Frequency (MHz)	RMS (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1000.000000	39.05	84.40	45.35	106.8	V	281.0	28.7

**1-9GHz, Horizontal**

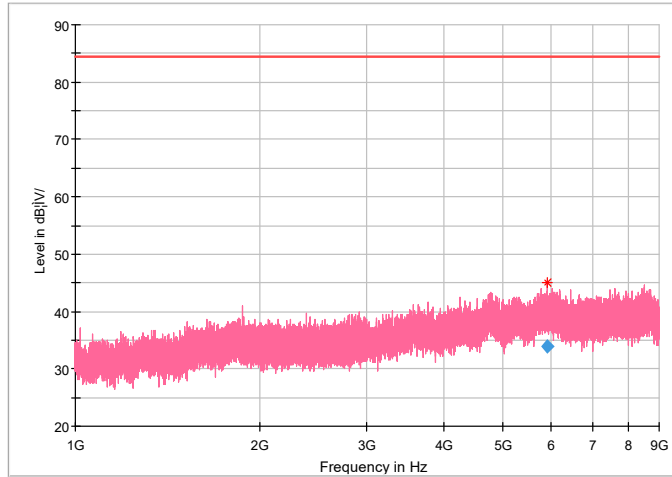
Full Spectrum



Frequency (MHz)	RMS (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
8468.200000	36.58	84.40	47.82	100.7	H	257.0	-20.1

**1-9GHz, Vertical**

Full Spectrum



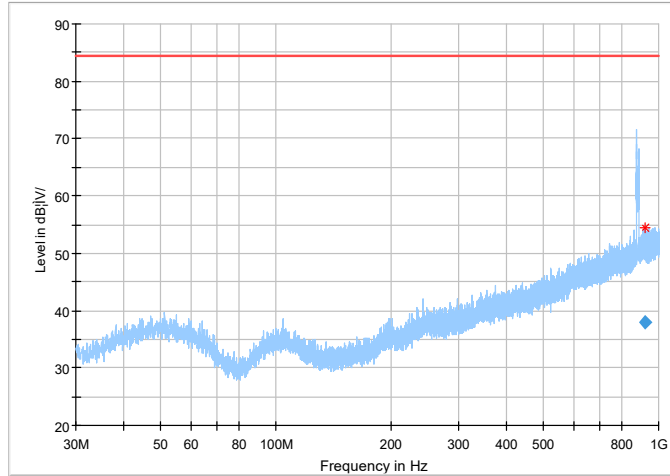
Frequency (MHz)	RMS (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
5896.200000	33.86	84.40	50.54	112.8	V	257.0	-20.3

## TEST REPORT

Configuration	Channel Position	Carrier	Carrier Bandwidth	Modulation
NR ESS IB-1C-UE	B	1 Carrier	15MHz	QPSK
NR ESS IB-1C-UE	T	1 Carrier	15MHz	QPSK

### 30-1000MHz, Horizontal

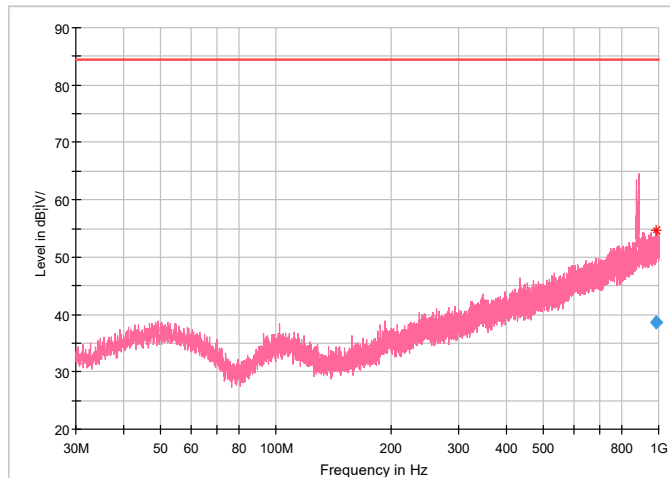
Full Spectrum



Frequency (MHz)	RMS (dB <sub>i</sub>  V/m)	Limit (dB <sub>i</sub>  V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
921.090500	38.08	84.40	46.32	124.9	H	26.0	27.9

### 30-1000MHz, Vertical

Full Spectrum

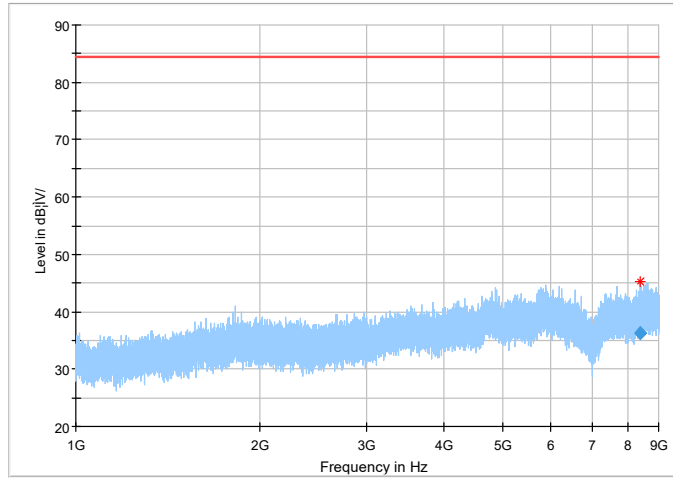


Frequency (MHz)	RMS (dB <sub>i</sub>  V/m)	Limit (dB <sub>i</sub>  V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
983.267500	38.56	84.40	45.84	106.2	V	1.0	28.3



**1-9GHz, Horizontal**

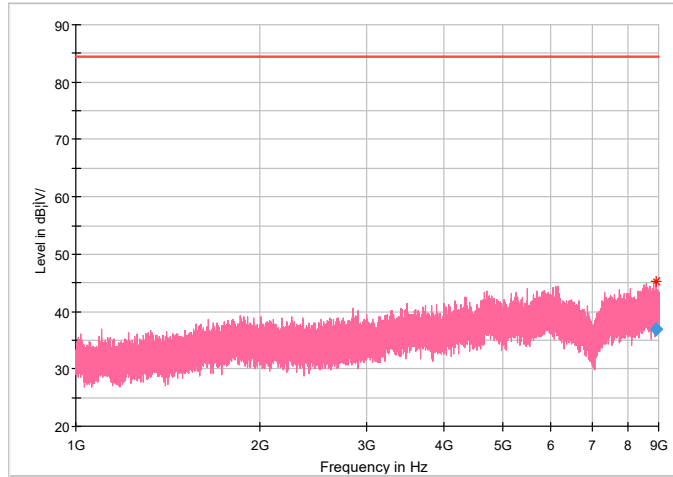
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
8396.200000	36.34	84.40	48.06	108.1	H	265.0	-20.3

**1-9GHz, Vertical**

Full Spectrum

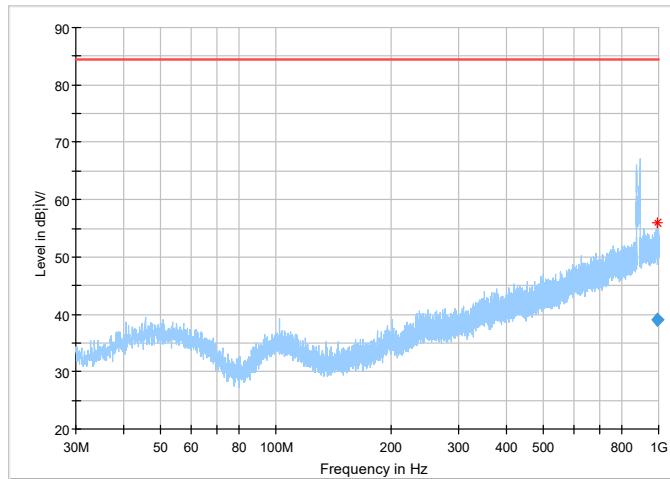


Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
8906.800000	36.84	84.40	47.56	118.0	V	260.0	-19.8

Configuration	Channel Position	Carrier	Carrier Bandwidth	Modulation
NR ESS IB-1C-UE	B	1 Carrier	20MHz	QPSK
NR ESS IB-1C-UE	T	1 Carrier	20MHz	QPSK

### 30-1000MHz, Horizontal

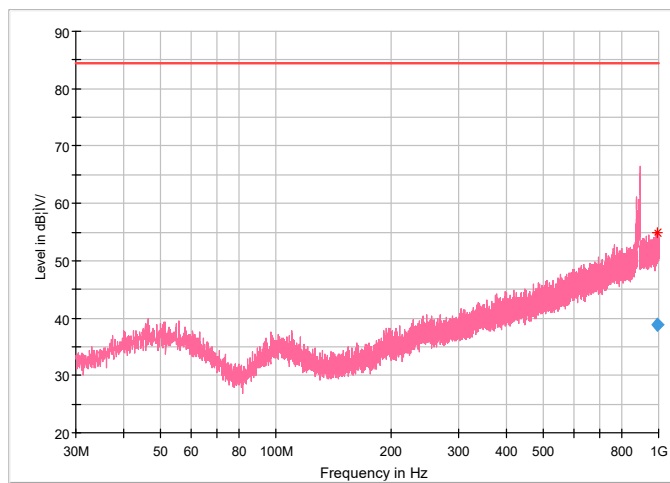
Full Spectrum



Frequency (MHz)	RMS (dB <sub>i</sub>  V/m)	Limit (dB <sub>i</sub>  V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
994.616500	39.05	84.40	45.35	118.4	H	-20.0	28.7

### 30-1000MHz, Vertical

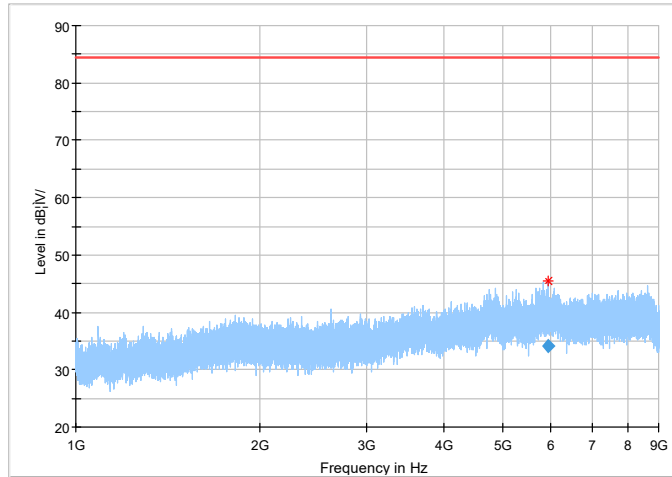
Full Spectrum



Frequency (MHz)	RMS (dB <sub>i</sub>  V/m)	Limit (dB <sub>i</sub>  V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
990.251500	38.79	84.40	45.61	99.8	V	26.0	28.5

**1-9GHz, Horizontal**

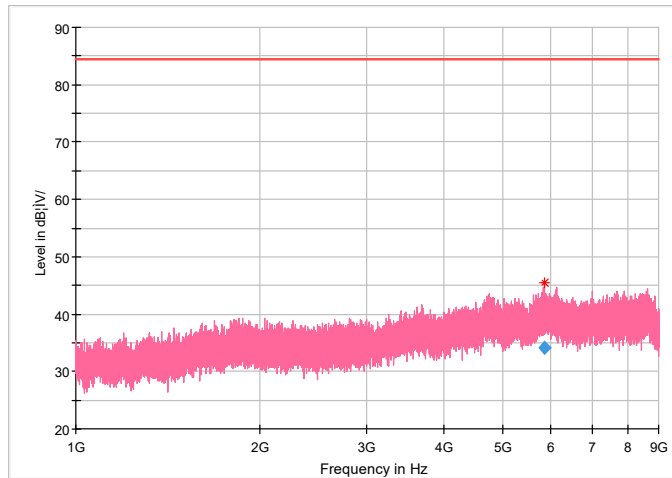
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
5926.200000	34.04	84.40	50.36	118.0	H	257.0	-20.4

**1-9GHz, Vertical**

Full Spectrum



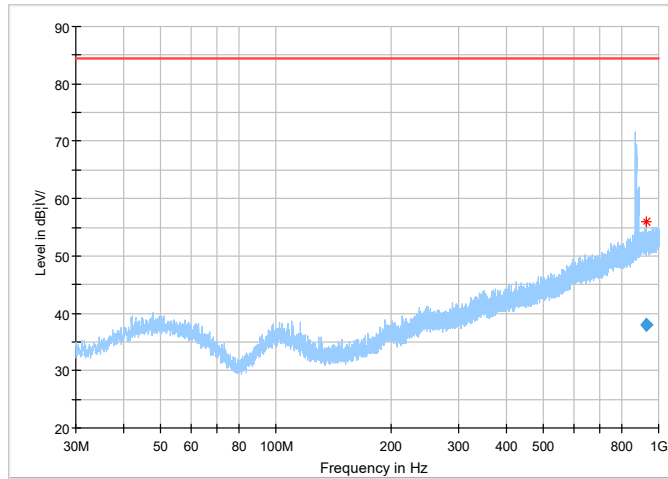
Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
5852.000000	34.10	84.40	50.30	112.4	V	257.0	-20.1

## TEST REPORT

Configuration	Channel Position	Carrier	L Carrier Bandwidth (MHz)	NR Carrier Bandwidth (MHz)	L & NR Modulation
G+L+NR-MC-1-UE	B	3 Carrier	10	10	QPSK
G+L+NR-MC-1-UE	T	3 Carrier	10	10	QPSK

### 30-1000MHz, Horizontal

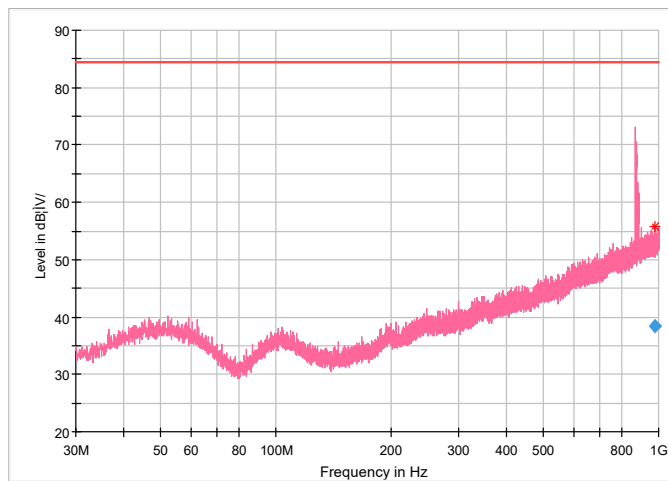
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
926.765000	38.01	84.40	46.39	112.4	H	291.0	27.9

### 30-1000MHz, Vertical

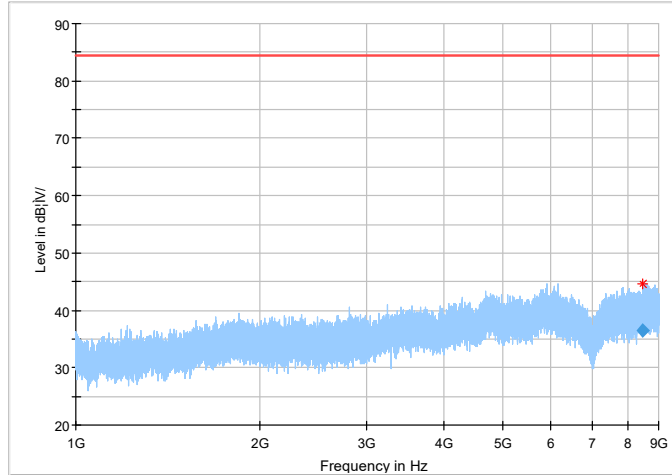
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
975.992500	38.33	84.40	46.07	99.8	V	0.0	28.1

**1-9GHz, Horizontal**

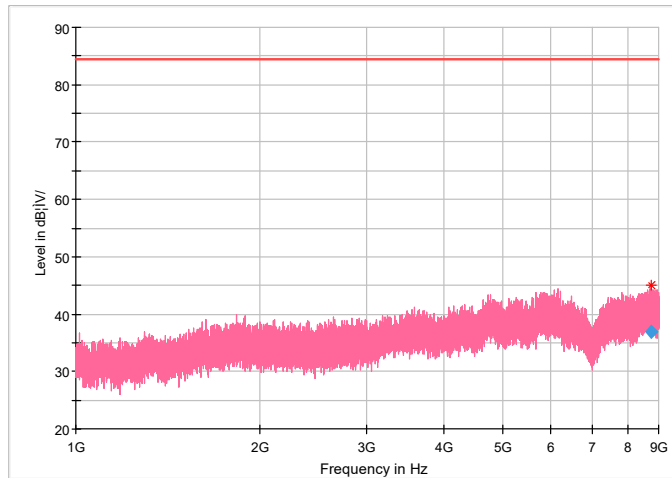
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
8465.400000	36.53	84.40	47.87	125.0	H	307.0	-20.1

**1-9GHz, Vertical**

Full Spectrum



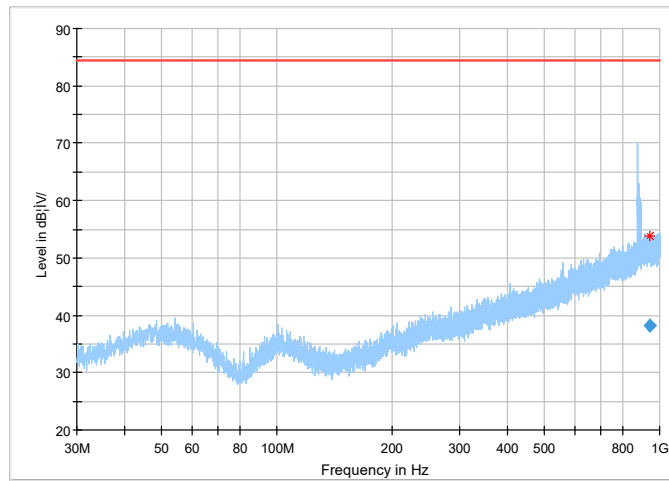
Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
8742.400000	36.94	84.40	47.46	101.8	V	1.0	-20.0

## TEST REPORT

Configuration	Channel Position	Carrier	L Carrier Bandwidth (MHz)	NR Carrier Bandwidth (MHz)	L & NR Modulation
G+L+NR-MC-2-UE	B	6 Carrier	3	5	QPSK
G+L+NR-MC-2-UE	T	6 Carrier	3	5	QPSK

### 30-1000MHz, Horizontal

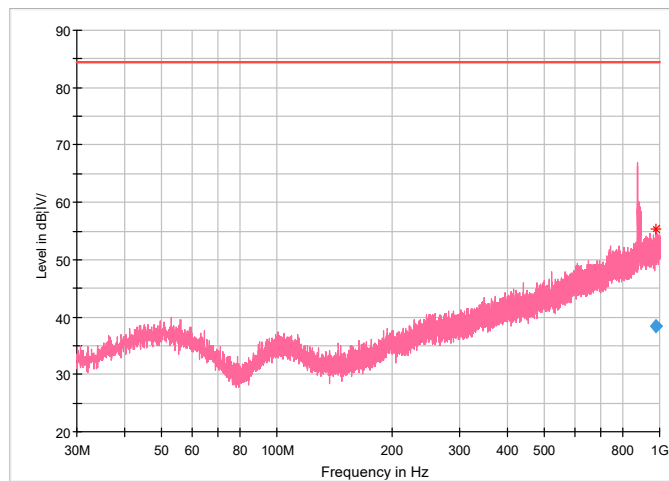
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
943.158000	38.27	84.40	46.13	99.8	H	79.0	27.9

### 30-1000MHz, Vertical

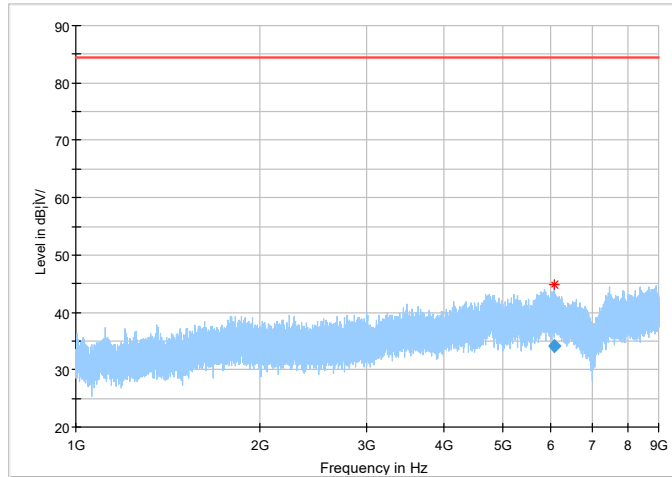
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
978.369000	38.35	84.40	46.05	124.8	V	80.0	28.1

**1-9GHz, Horizontal**

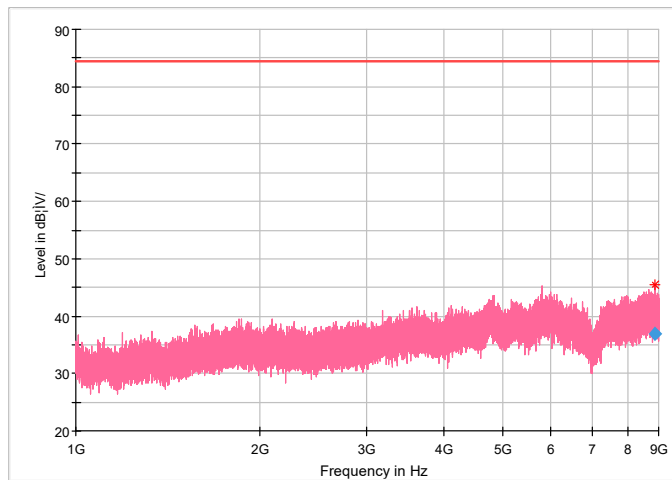
Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6066.400000	34.05	84.40	50.35	99.9	H	292.0	-20.4

**1-9GHz, Vertical**

Full Spectrum



Frequency (MHz)	RMS (dB V/m)	Limit (dB V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
8884.800000	36.97	84.40	47.43	99.9	V	276.0	-19.8

## 8 Frequency Stability

**Test result:**      **Tested**

### 8.1 Limit

The carrier frequency shall not depart from the reference frequency in excess of  $\pm 2.5$  ppm for mobile stations and  $\pm 1.5$  ppm for base stations.

In lieu of meeting the above stability values, the test report may show that the frequency stability is sufficient to ensure that the occupied bandwidth stays within each of the sub-bands (see Section 5.1) when tested to the temperature and supply voltage variations specified in RSS-Gen.

### 8.2 Measurement Procedure

#### Temperature Variation

The EUT was tested over the temperature range  $-30^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$  in  $10^{\circ}\text{C}$  steps with  $-48$  VDC Power Supply. At each temperature step, the Base Station was configured to transmit at maximum power on the middle channel of the operating band.

#### Voltage Variation

The EUT was tested at the supplied voltages varied from 85 to 115 percent of the nominal values of  $-48$  VDC. At  $+20^{\circ}\text{C}$ , the Base Station was configured to transmit at maximum power on the middle channel of the frequency block.



### 8.3 Measurement result

#### Frequency Error – Temperature Variation

W-1C, Channel Bandwidth: 5MHz

Antenna Port	Modulation	Temperature (°C)	Frequency Stability (Hz)		
			Channel Position B	Channel Position M	Channel Position T
D	QPSK	-40	1.14	1.04	0.71
		-30	1.21	1.03	1.11
		-20	0.82	1.25	1.25
		-10	1.31	1.07	1.12
		0	1.24	1.35	1.01
		10	1.09	1.29	1.31
		20	1.22	1.31	1.27
		30	1.27	1.19	1.31
		40	0.94	1.26	1.21
		50	1.04	1.17	1.33
		55	1.14	1.26	1.44

#### Frequency Error – Voltage Variation

W-1C, Channel Bandwidth: 5MHz

Antenna Port	Modulation	Temperature (°C)	Supply Voltage (V)	Frequency Stability (Hz)		
				Channel Position B	Channel Position M	Channel Position T
D	QPSK	20	-40.8	1.36	1.29	1.17
			-48.0	1.22	1.31	1.27
			-55.2	1.17	1.22	1.26

**TEST REPORT**

Frequency Error – Temperature Variation

NR-1C, Channel Bandwidth: 20MHz

Antenna Port	Modulation	Temperature (°C)	Frequency Stability (Hz)		
			Channel Position B	Channel Position M	Channel Position T
D	QPSK	-40	0.149	0.059	0.252
		-30	0.348	0.292	0.214
		-20	0.345	0.329	0.284
		-10	0.591	0.481	0.432
		0	0.336	0.359	0.307
		10	0.335	0.305	0.191
		20	0.333	0.342	0.233
		30	0.238	0.343	0.227
		40	0.265	0.323	0.262
		50	0.317	0.219	0.237
		55	0.227	0.188	0.247

Frequency Error – Voltage Variation

NR-1C, Channel Bandwidth: 20MHz

Antenna Port	Modulation	Temperature (°C)	Supply Voltage (V)	Frequency Stability (Hz)		
				Channel Position B	Channel Position M	Channel Position T
D	QPSK	20	-40.8	0.359	0.315	0.289
			-48.0	0.333	0.342	0.233
			-55.2	0.247	0.265	0.278

Frequency Error – Temperature Variation

**TEST REPORT**

LTE-1C, Channel Bandwidth: 20MHz

Antenna Port	Modulation	Temperature (°C)	Frequency Stability (Hz)		
			Channel Position B	Channel Position M	Channel Position T
D	QPSK	-40	0.564	0.476	0.784
		-30	0.792	0.513	0.561
		-20	0.972	0.679	0.716
		-10	0.782	0.666	1.060
		0	0.684	0.584	0.655
		10	0.655	0.711	0.587
		20	0.481	0.436	0.504
		30	0.459	0.511	0.568
		40	0.407	0.462	0.493
		50	0.467	0.488	0.529
		55	0.435	0.465	0.527

Frequency Error – Voltage Variation

LTE-1C, Channel Bandwidth: 20MHz

Antenna Port	Modulation	Temperature (°C)	Supply Voltage (V)	Frequency Stability (Hz)		
				Channel Position B	Channel Position M	Channel Position T
D	QPSK	20	-40.8	0.381	0.471	0.451
			-48.0	0.481	0.436	0.504
			-55.2	0.478	0.474	0.389

**TEST REPORT**

Frequency Error – Temperature Variation

GB-1C, Channel Bandwidth: 20MHz

Antenna Port	Modulation	Temperature (°C)	Frequency Stability (Hz)		
			Channel Position B	Channel Position M	Channel Position T
D	QPSK	-40	1.24	1.52	1.54
		-30	1.51	1.51	1.57
		-20	1.29	1.28	1.28
		-10	1.71	1.82	1.62
		0	1.75	1.71	1.65
		10	1.52	1.35	1.66
		20	1.58	1.49	1.68
		30	1.79	1.71	1.96
		40	1.59	1.77	1.67
		50	1.31	1.56	1.49
		55	1.69	1.75	1.68

Frequency Error – Voltage Variation

GB-1C, Channel Bandwidth: 20MHz

Antenna Port	Modulation	Temperature (°C)	Supply Voltage (V)	Frequency Stability (Hz)		
				Channel Position B	Channel Position M	Channel Position T
D	QPSK	20	-40.8	1.58	1.54	1.54
			-48.0	1.58	1.49	1.68
			-55.2	1.41	1.47	1.51

**TEST REPORT**

Frequency Error – Temperature Variation

IB-1C, Channel Bandwidth: 20MHz

Antenna Port	Modulation	Temperature (°C)	Frequency Stability (Hz)		
			Channel Position B	Channel Position M	Channel Position T
D	QPSK	-40	26.81	26.47	26.51
		-30	26.78	26.92	26.58
		-20	26.56	26.67	26.52
		-10	26.52	26.59	26.69
		0	26.58	26.61	26.55
		10	26.57	26.52	26.57
		20	26.49	26.81	26.48
		30	26.72	26.12	26.78
		40	26.39	26.46	26.64
		50	26.26	26.68	26.56
		55	26.42	26.26	26.62

Frequency Error – Voltage Variation

IB-1C, Channel Bandwidth: 20MHz

Antenna Port	Modulation	Temperature (°C)	Supply Voltage (V)	Frequency Stability (Hz)		
				Channel Position B	Channel Position M	Channel Position T
D	QPSK	20	-40.8	27.11	26.64	26.69
			-48.0	26.49	26.81	26.48
			-55.2	26.39	26.71	26.79

**TEST REPORT**

Frequency Error – Temperature Variation

SA-1C, Channel Bandwidth: 0.2MHz

Antenna Port	Modulation	Temperature (°C)	Frequency Stability (Hz)		
			Channel Position B	Channel Position M	Channel Position T
D	QPSK	-40	0.412	0.377	0.592
		-30	0.361	0.792	0.487
		-20	0.451	0.451	0.488
		-10	0.531	0.545	0.387
		0	0.475	0.522	0.467
		10	0.482	0.677	0.619
		20	0.486	0.563	0.488
		30	0.477	0.546	0.505
		40	0.457	0.572	0.465
		50	0.487	0.624	0.458
		55	0.487	0.625	0.465

Frequency Error – Voltage Variation

SA-1C, Channel Bandwidth: 0.2MHz

Antenna Port	Modulation	Temperature (°C)	Supply Voltage (V)	Frequency Stability (Hz)		
				Channel Position B	Channel Position M	Channel Position T
D	QPSK	20	-40.8	0.521	0.548	0.549
			-48.0	0.486	0.563	0.488
			-55.2	0.446	0.503	0.473

Frequency Error – Temperature Variation

NR ESS IB-1C, NR

Antenna Port	Modulation	Temperature (°C)	Frequency Stability (Hz)		
			Channel Position B	Channel Position M	Channel Position T
D	QPSK	-40	0.582	0.477	0.609
		-30	-	0.472	-
		-20	-	0.709	-
		-10	-	0.697	-
		0	-	0.637	-
		10	-	0.717	-
		20	0.299	0.321	0.314
		30	-	0.507	-
		40	-	0.417	-
		50	-	0.487	-
		55	0.504	0.504	0.505

Frequency Error – Voltage Variation

NR ESS IB-1C, NR

Antenna Port	Modulation	Temperature (°C)	Supply Voltage (V)	Frequency Stability (Hz)		
				Channel Position B	Channel Position M	Channel Position T
D	QPSK	20	-40.8	0.388	0.379	0.329
			-48.0	0.299	0.321	0.314
			-55.2	0.353	0.266	0.366

**TEST REPORT**

Frequency Error – Temperature Variation

NR ESS IB-1C, IB

Antenna Port	Modulation	Temperature (°C)	Frequency Stability (Hz)		
			Channel Position B	Channel Position M	Channel Position T
D	QPSK	-40	5.05	5.25	5.25
		-30	-	5.92	-
		-20	-	4.82	-
		-10	-	4.77	-
		0	-	5.12	-
		10	-	5.35	-
		20	4.89	4.47	4.79
		30	-	5.27	-
		40	-	5.33	-
		50	-	4.94	-
		55	5.32	4.53	4.94

Frequency Error – Voltage Variation

NR ESS IB-1C, IB

Antenna Port	Modulation	Temperature (°C)	Supply Voltage (V)	Frequency Stability (Hz)		
				Channel Position B	Channel Position M	Channel Position T
D	QPSK	20	-40.8	5.65	4.64	4.78
			-48.0	4.89	4.47	4.79
			-55.2	4.33	4.21	4.62

\*\*\*\*\* END \*\*\*\*\*