Testing data Clause 27.53 and RSS-139, 4.2 Radiated spurious emissions FCC Part 27, RSS-139, Issue 3





Radiated emissions

PK+_MAXH -13 dBm equiv 82.23 dBuV FCC Part 15 and ICES - Class B 3m Q-Peak Limit





Radiated emissions

PK+_MAXH -13 dBm equiv 82.23 dBuV FCC Part 15 and ICES - Class B 3m Q-Peak Limit

Figure 8.3-14: Radiated emissions spectral plot, WCDMA, mid channel (30 to 1000 MHz)

Testing data Clause 27.53 and RSS-139, 4.2 Radiated spurious emissions FCC Part 27, RSS-139, Issue 3





Radiated emissions

PK+_MAXH -13 dBm equiv 82.23 dBuV FCC Part 15 and ICES - Class B 3m Q-Peak Limit

Figure 8.3-15: Radiated emissions spectral plot, WCDMA, high channel (30 to 1000 MHz)



Radiated emissions PK+_MAXH -13 dBm equiv 82.23 dBuV FCC Part 15 and ICES - Class B 3m Q-Peak Limit

Figure 8.3-16: Radiated emissions spectral plot, WCDMA, two carriers (30 to 1000 MHz)





Radiated emissions Preview Result 1-PK+ FCC Part 15 and ICES - Class B 3m Q-Peak Limit Final_Result QPK

The spectral plot is a summation of a vertical and horizontal scan. The spectral scan has been corrected with the associated transducer factors (i.e. antenna factors, cable loss, amplifier gains, and attenuators.

Figure 8.3-17: Radiated emissions spectral plot (30 to 1000 MHz) WCDMA

Frequency (MHz)	Quasi-Peak field strength ¹ (dBµV/m)	3 m Quasi- Peak limit ³ (dBµV/m)	Margin (dB)	Measurement time (ms)	Bandwidth (kHz)	Antenna height (cm)	Pol. (V/H)	Turn table position (°)	Correction factor ² (dB)
68.430000	28.73	40.00	11.27	100	120	362.4	Н	55.0	9.6
87.060000	31.92	40.00	8.08	100	120	305.0	V	0.0	9.0
82.500000	32.22	40.00	7.78	100	120	109.7	V	80.0	8.9
40.560000	26.11	40.00	13.89	100	120	108.8	V	111.0	14.5
32.850000	29.54	40.00	10.46	100	120	106.3	V	168.0	20.6
46.410000	24.61	40.00	15.39	100	120	115.8	V	162.0	11.3
835.050000	25.79	46.00	20.21	100	120	405.0	Н	30.0	25.3

Table 8.3-4: Radiated emissions (Quasi-Peak) results for WCDMA

Notes:

 1 Field strength (dBµV/m) = receiver/spectrum analyzer value (dBµV) + correction factor (dB)

² Correction factor = antenna factor ACF (dB) + cable loss (dB)

³ Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions have been recorded.

Sample calculation: 28.73 dBµV/m (field strength) = 19.13 dBµV (receiver reading) + 9.6 dB (Correction factor)

Testing data Clause 27.53 and RSS-139, 4.2 Radiated spurious emissions FCC Part 27, RSS-139, Issue 3





Radiated emissions

AVG_MAXH PK+_MAXH -13 dBm equiv 82.23 dBuV FCC Part 15 and ICES - Class B 3m Average Limit

Figure 8.3-18: Radiated emissions spectral plot, WCDMA, low channel (1–18 GHz)



Radiated emissions

AVG_MAXH PK+_MAXH -13 dBm equiv 82.23 dBuV FCC Part 15 and ICES - Class B 3m Average Limit

Figure 8.3-19: Radiated emissions spectral plot, WCDMA, mid channel (1–18 GHz)





Radiated emissions

AVG_MAXH PK+,MAXH -13 dBm equiv 82.23 dBuV FCC Part 15 and ICES - Class B 3m Average Limit

Figure 8.3-20: Radiated emissions spectral plot, WCDMA, high channel (1–18 GHz)



Radiated emissions

AVG_MAXH PK+_MAXH -13 dBm equiv 82.23 dBuV FCC Part 15 and ICES - Class B 3m Average Limit

Figure 8.3-21: Radiated emissions spectral plot, WCDMA, two carriers (1–18 GHz)





Radiated emissions

Preview Result 1-PK+

FCC Part 15 and ICES - Class B 3m Average Limit

FCC Part 15 and ICES-Class B 3m Peak Limit Final_Result PK+

Final_Result CAV

The spectral plot is a summation of a vertical and horizontal scan. The spectral scan has been corrected with the associated transducer factors (i.e. antenna factors, cable loss, amplifier gains, and attenuators.

Figure 8.3-22: Radiated emissions spectral plot (1 to 18 GHz) WCDMA

Table 8.3-5: Radiated emissions (Peak) results for WCDMA

Frequency (MHz)	Peak field strength (dBμV/m)	3 m Peak limit (dBµV/m)	Margin (dB)	Measurement time (ms)	Bandwidth (kHz)	Antenna height (cm)	Pol. (V/H)	Turn table position (°)	Correction factor ² (dB)
4237.346429	45.44	74.00	28.56	100	1000	129.2	V	20.0	-7.7
8457.278571	52.09	74.00	21.91	100	1000	203.0	Н	300.0	-1.9
16538.635714	52.22	74.00	21.78	100	1000	337.7	V	164.0	12.4

Table 8.3-6: Radiated emissions (CAverage) results for WCDMA

Frequency (MHz)	CAverage field strength ¹ (dBµV/m)	3 m CAverage limit (dBµV/m)	Margin (dB)	Measurement time (ms)	Bandwidth (kHz)	Antenna height (cm)	Pol. (V/H)	Turn table position (°)	Correction factor ² (dB)
4237.346429	30.11	54.00	23.89	100	1000	129.2	V	20.0	-7.7
8457.278571	35.64	54.00	18.36	100	1000	203.0	Н	300.0	-1.9
16538.635714	39.51	54.00	14.49	100	1000	337.7	V	164.0	12.4
Notes: 1 Eield strength (dBuV/m) = receiver/spectrum analyzer value (dBuV) + correction factor (dB)									

¹ Field strength (dB μ V/m) = receiver/spectrum analyzer value (dB μ V) + correction factor (dB) ² Correction factor = antenna factor ACF (dB) + cable loss (dB) – amplifier gain (dB)

Sample calculation: 30.11 dB μ V/m (field strength) = 37.81 dB μ V (receiver reading) + (-7.7) dB (Correction factor)

Section 8 Test name Specification Testing data Clause 27.53 and RSS-139, 4.2 Radiated spurious emissions FCC Part 27, RSS-139, Issue 3







Date: 28.JUL.2017 15:47:27









Date: 28.JUL.2017 15:54:34

Date: 28.JUL.2017 15:39:47

Figure 8.3-8: Radiated emissions spectral plot, WCDMA, high channel (18–26 GHz)

Date: 28.JUL.2017 16:00:48

Figure 8.3-9: Radiated emissions spectral plot, WCDMA, two carriers (18–26 GHz) Testing data Clause 27.53 and RSS-139, 4.2 Radiated spurious emissions FCC Part 27, RSS-139, Issue 3





Radiated emissions

PK+_MAXH -13 dBm equiv 82.23 dBuV FCC Part 15 and ICES - Class B 3m Q-Peak Limit

Figure 8.3-10: Radiated emissions spectral plot, WCDMA and LTE mixed mode (30–1000 MHz)



Radiated emissions

AVG_MAXH PK+,MAXH -13 dBm equiv 82.23 dBuV FCC Part 15 and ICES - Class B 3m Average Limit

Figure 8.3-11: Radiated emissions spectral plot, WCDMA and LTE mixed mode (1-18 GHz)

Testing data Clause 27.53 and RSS-139, 4.2 Radiated spurious emissions FCC Part 27, RSS-139, Issue 3





Date: 28.JUL.2017 16:09:09

Figure 8.3-12: Radiated emissions spectral plot, WCDMA and LTE mixed mode (18–26 GHz)

Section 8 Test name Specification Testing data Clause 27.53 and RSS-139, 4.2 Radiated spurious emissions FCC Part 27, RSS-139, Issue 3





Figure 8.3-13: Set-up for Radiated Spurious Emission



Figure 8.3-14: Set-up for Radiated Spurious Emission



8.4 FCC 27.54 and RSS-139, Section 6.4 Frequency stability

8.4.1 Definitions and limits

FCC:

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

RSS-139, Section 6.4:

The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block when tested to the temperature and supply voltage variations specified in RSS-Gen.

8.4.2 Test summary

Test date	July 14, 2017	Temperature	23 °C
Test engineer	Andrey Adelberg	Air pressure	1010 mbar
Verdict	Pass	Relative humidity	33 %

8.4.3 Observations, settings and special notes

26 dBc points including frequency tolerance were assessed to remain within assigned band. Spectrum analyzer settings:

Detector mode	Peak
Resolution bandwidth	300 Hz
Video bandwidth	RBW × 3
Trace mode	Max Hold

8.4.4 Test data

Table 8.4-1: Frequency error results

Temperature, °C	Voltage, V _{DC}	Frequency error, Hz
+50	54	+3.04
+40	54	-4.17
+30	54	-4.75
+20	54	+3.82
+20	48	-3.76
+20	40	-3.17
+10	54	-3.28
0	54	-4.04
-10	54	+3.73
-20	54	-4.19
-30	54	-3.03

Max negative drift: 4.75 Hz, Max positive drift: 3.82 Hz



Table 8.4-2: Frequency stability within the authorized bands, LTE results

BW, MHz/ Channel	Port	26 dB band edge, MHz	Max. drift, Hz	Corrected BE, MHz	Limit, MHz	Margin, kHz
5, Low	А	2110.129	-4.750	2110.129	2110.000	128.995
5, High	А	2179.861	+3.820	2179.861	2180.000	138.996
5, Low	В	2110.139	-4.750	2110.139	2110.000	138.995
5, High	В	2179.863	+3.820	2179.863	2180.000	136.996
10, Low	А	2110.324	-4.750	2110.324	2110.000	323.995
10, High	А	2179.683	+3.820	2179.683	2180.000	316.996
10, Low	В	2110.337	-4.750	2110.337	2110.000	336.995
10, High	В	2179.666	+3.820	2179.666	2180.000	333.996
15, Low	А	2110.540	-4.750	2110.540	2110.000	539.995
15, High	А	2179.450	+3.820	2179.450	2180.000	549.996
15, Low	В	2110.560	-4.750	2110.560	2110.000	559.995
15 <i>,</i> High	В	2179.425	+3.820	2179.425	2180.000	574.996
20, Low	А	2110.765	-4.750	2110.765	2110.000	764.995
20, High	А	2179.215	+3.820	2179.215	2180.000	784.996
20, Low	В	2110.790	-4.750	2110.790	2110.000	789.995
20, High	В	2179.225	+3.820	2179.225	2180.000	774.996

Table 8.4-3: Frequency stability within the authorized bands, WCDMA results

BW, MHz/ Channel	Port	26 dB band edge, MHz	Max. drift, Hz	Corrected BE, MHz	Limit, MHz	Margin, kHz
5, Low	А	2110.168	-4.750	2110.168	2110.000	167.995
5 <i>,</i> High	А	2154.833	+3.820	2154.833	2155.000	166.996
5, Low	В	2110.170	-4.750	2110.170	2110.000	169.995
5, High	В	2154.827	+3.820	2154.827	2155.000	172.996



8.5 FCC Part 2.1049 and RSS-Gen, 6.6 Occupied bandwidth

8.5.1 Definitions and limits

FCC:

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

RSS-Gen, 6.6

The emission bandwidth (×dB) is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated × dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3× the resolution bandwidth.

When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth, as calculated or measured.

The transmitter shall be operated at its maximum carrier power measured under normal test conditions.

The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.

The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the occupied bandwidth (OBW) and video bandwidth (VBW) shall be approximately 3×RBW.

The trace data points are recovered and are directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded.

The difference between the two recorded frequencies is the 99% occupied bandwidth.

8.5.2 Test summary

Test date	July 12, 2017	Temperature	22 °C
Test engineer	Andrey Adelberg	Air pressure	1009 mbar
Verdict	Pass	Relative humidity	33 %

8.5.3 Observations, settings and special notes

Spectrum analyzer settings:

Detector mode	Peak
Resolution bandwidth	≥1 % of span
Video bandwidth	RBW × 3
Trace mode	Max Hold



8.5.4 Test data

Table 8.5-1: Occupied bandwidth, LTE results

Remarks	Frequency, MHz	99% OBW, MHz	26 dB BW, MHz
5 MHz, QPSK, Port A	2112.5	4.4782	4.743
5 MHz, QPSK, Port A	2145.0	4.4772	4.734
5 MHz, QPSK, Port A	2177.5	4.4758	4.721
5 MHz, QPSK, Port B	2112.5	4.4762	4.723
5 MHz, QPSK, Port B	2145.0	4.4775	4.715
5 MHz, QPSK, Port B	2177.5	4.4772	4.726
10 MHz, QPSK, Port A	2115.0	8.9317	9.352
10 MHz, QPSK, Port A	2145.0	8.9330	9.380
10 MHz, QPSK, Port A	2175.0	8.9270	9.366
10 MHz, QPSK, Port B	2115.0	8.9312	9.327
10 MHz, QPSK, Port B	2145.0	8.9281	9.339
10 MHz, QPSK, Port B	2175.0	8.9279	9.331
15 MHz, QPSK, Port A	2117.5	13.382	13.920
15 MHz, QPSK, Port A	2145.0	13.380	13.940
15 MHz, QPSK, Port A	2172.5	13.387	13.900
15 MHz, QPSK, Port B	2117.5	13.383	13.880
15 MHz, QPSK, Port B	2145.0	13.384	13.940
15 MHz, QPSK, Port B	2172.5	13.386	13.850
20 MHz, QPSK, Port A	2120.0	17.835	18.470
20 MHz, QPSK, Port A	2145.0	17.839	18.440
20 MHz, QPSK, Port A	2170.0	17.841	18.430
20 MHz, QPSK, Port B	2120.0	17.838	18.420
20 MHz, QPSK, Port B	2145.0	17.842	18.450
20 MHz, QPSK, Port B	2170.0	17.841	18.450

Table 8.5-2: Occupied bandwidth, WCDMA results

Remarks	Frequency, MHz	99% OBW, MHz	26 dB BW, MHz
5 MHz, QPSK, Port A	2112.5	4.1690	4.664
5 MHz, QPSK, Port A	2132.5	4.1690	4.667
5 MHz, QPSK, Port A	2152.5	4.1678	4.665
5 MHz, QPSK, Port B	2112.5	4.1754	4.660
5 MHz, QPSK, Port B	2132.5	4.1589	4.659
5 MHz, QPSK, Port B	2152.5	4.1685	4.654



Keysight Spectrum Analyzer - Occupied BW								
RF 50 Ω DC		_	SENSE:INT	ALI	GN AUTO		10:55 Dadie Std	11 AM Jul 12, 201
pan 10.000 MHz			Trig: Free R	un	Avg Hold:>10	0/100	Radio Stu	None
	#IFGa	in:Low	#Atten: 6 dE	3			Radio Dev	ice: BTS
dB/div Ref 40.00 dBm								
pg						1		
0.0			hanne			~		-
0.0						1		
0.0						-1	_	
on	_/					1		
	1					1		
1.0						1		
1.0						have		_
.0								and the second s
enter 2.113 GHz							5	pan 10 MH
Res BW 51 kHz			#VB	N 150 KHZ				Sweep 5 m
Occupied Bandwidth			Total Po	wor	46.2 dB	n		
Occupied Bandwidt			Totarre		40.2 08			
4.4	1782 M	Ηz						
Transmit Freq Error	5.242	kHz	% of OB	W Power	99.00	%		
v dB Bondwidth	4 7 4 2	MU	u dB		26.00 4	•		
	4.743	WINZ	A UB		-20.00 a	D		

Figure 8.5-1: Occupied bandwidth, QPSK, LTE, 5 MHz, Port A, Low channel

Keysight Spectrum Analyzer - Occupied BW		cruce-turi		- 6
Span 10.000 MHz		Center Freq: 2.17750000) GHz	Radio Std: None
	#IFGain:Low	#Atten: 6 dB	Avginoid:>100/100	Radio Device: BTS
10 dB/div Ref 45.00 dBm	ı			
Log 36.0				
25.0				
15.0				
5.00				
5.00	-/			
15.0	1			
35.0	and I			
45.0				
Center 2 178 GHz				Spap 10 MH
#Res BW 51 kHz		#VBW 150 kH	z	Sweep 5 m
Occupied Bandwidt	h	Total Power	46.2 dBm	
4.4	4758 MHz			
Transmit Freq Error	2.513 kHz	% of OBW Power	99.00 %	
x dB Bandwidth	4.721 MHz	x dB	-26.00 dB	
ISG			K STATUS	

Figure 8.5-3: Occupied bandwidth, QPSK, LTE, 5 MHz, Port A, High channel

RF 50 Q DC		SENSE:INT ALL	SN AUTO	11:01:58 AM Jul 12, 201
an 10.000 MHz		Center Freq: 2.145000000	GHz	Radio Std: None
	#IFGain:Low	#Atten: 6 dB	Avg Hold:>100/100	Radio Device: BTS
dB/div Ref 45.00 dBm	1			
9				
,				
	1			
1				
nter 2.145 GHz				Span 10 Mi
es BW 51 kHz		#VBW 150 kHz		Sweep 5 r
Occupied Bandwidt	h	Total Power	46.2 dBm	
4 4	4772 MHz			
ranomit Erog Error	2 520 642		00.00.%	
ransmit Frey Error	3.329 KHZ	% OF OBVY FOWER	99.00 %	
dB Bandwidth	4.734 MHz	x dB	-26.00 dB	
			1	
			STATUS	

Figure 8.5-2: Occupied bandwidth, QPSK, LTE, 5 MHz, Port A, Mid channel

Keysight Spectrum Analyzer - Occupied BW		CENCE INT	N AUTO	10/57/40 MM Jul 12, 20
pan 10.000 MHz		Center Freq: 2.112500000	GHz	Radio Std: None
	#IFGain:Low	#Atten: 6 dB	Avg Hold:>100/100	Radio Device: BTS
dBidiy Ref 40.00 dBm				
Pg g				
3.0				
1.0	1			
1.0				
00				
1.0				
0.0				
0.0				
0.0				
0.0				
anter 2 112 CHz				Enon 10 M
Res BW 51 kHz		#VBW 150 kHz		Sweep 5
	L.	Total Bower	46.1 dBm	
Occupied Bandwidti	n 	Total Fower	40.1 UBII	
4.4	4762 MHZ			
Transmit Freq Error	3.328 kHz	% of OBW Power	99.00 %	
x dB Bandwidth	4.723 MHz	x dB	-26.00 dB	
1		1	STATUS	
			•	

Figure 8.5-4: Occupied bandwidth, QPSK, LTE, 5 MHz, Port B, Low channel



Keysight Spectrum Analyzer - Occupied BW				
RF 50 Ω DC		SENSE:INT AL	IGN AUTO	11:02:17 AM Jul 12, 2017
pan 10.000 MHz		Trig: Free Run	Avg Hold:>100/100	Radio std. None
	#IFGain:Low	#Atten: 6 dB		Radio Device: BTS
0 dB/div Ref 45.00 dBm				
og				
35.0				
25.0				
15.0				
5.00				
5.00	/		1	
15.0				
50				
5.0]			~~~~
15.0				
enter 2.145 GHz				Span 10 MH:
Res BW 51 kHz		#VBW 150 kHz	2	Sweep 5 ms
Occupied Bandwidth		Total Power	46.1 dBm	
A A.	775 MU-			
4.4				
Transmit Freq Error	3.287 kHz	% of OBW Power	99.00 %	
x dB Bandwidth	4.715 MHz	x dB	-26.00 dB	
10			1 eranue	
10			Oomo	

Figure 8.5-5: Occupied bandwidth, QPSK, LTE, 5 MHz, Port B, Mid channel

Keysight Spectrum Analyzer - Occupied BW		CENCE-INT AL 10	SN AUTO	10-50-15 MI 3-112, 2017
Center Freq 2.115000000	GHz	Center Freq: 2.115000000	GHz AvaiHold:>100/100	Radio Std: None
	#IFGain:Low	#Atten: 6 dB		Radio Device: BTS
10 dB/div Ref 40.00 dBm				
Log 30.0				
20.0				
10.0				
0.00				
10.0				
20.0				
40.0	~		5	~~~~~
50.0				
Center 2 115 GHz				Spap 20 MH:
Res BW 51 kHz		#VBW 150 kHz		Sweep 9.533 m
Occupied Bandwidth	h	Total Power	46.2 dBm	
8.9	9317 MHz			
Transmit Freq Error	5.958 kHz	% of OBW Power	99.00 %	
x dB Bandwidth	9.352 MHz	x dB	-26.00 dB	
sq		l.	STATUS	

Figure 8.5-7: Occupied bandwidth, QPSK, LTE, 10 MHz, Port A, Low channel

	SENSE:INT ALIO	IN AUTO	11:08:14 AM Jul 12, 20
	Center Freq: 2.177500000 Trig: Free Run	GHz Avg Hold:>100/100	Radio Std: None
#IFGain:Low	#Atten: 6 dB	•	Radio Device: BTS
mann		~~	
		1	
-			
			and a star a
			Span 10 M
	#VBW 150 kHz		Sweep 5
1	Total Power	46.1 dBm	
1772 MHz			
*/ / <u>Z</u> IVII IZ			
1.853 kHz	% of OBW Power	99.00 %	
4.726 MHz	x dB	-26.00 dB	
		A	
	#FGainLow	Conter Free 2.1750000 Genter Free 2.1750000 FrGainLow F	Image: Solution of the

Figure 8.5-6: Occupied bandwidth, QPSK, LTE, 5 MHz, Port B, High channel

Keysight Spectrum Analyzer - Occupied BW		CENCE INT	IGN AUTO	- @
an 20.000 MHz		Center Freq: 2.14500000) GHz	Radio Std: None
		Trig: Free Run	Avg Hold:>100/100	Padio Davios: BTS
	#IFGain:Low	#Atten: 0 db		Radio Device. D13
dB/div Ref 45.00 dBm				
i.0				
i.0	And and a second se		1000 mm - 1000 mm	
50				
m				
10	/			
	1		}	
10	1			
	j l		1	
	100		~~~	
enter 2.145 GHz				Span 20 M
Res BW 51 kHz		#VBW 150 kHz	2	Sweep 9.533
Occupied Bandwidt	•	Total Power	46.2 dBm	
O COOLDICA Danamaa				
0.3				
Transmit Freq Error	2.289 kHz	% of OBW Power	99.00 %	
x dB Bandwidth	9.380 MHz	x dB	-26.00 dB	
			ri-	
4			No anno a	

Figure 8.5-8: Occupied bandwidth, QPSK, LTE, 10 MHz, Port A, Mid channel



Keysight Spectrum Analyzer	- Occupied BW					- 6
Center Freg 2.17	50 Ω DC		Center Freq: 2.17500000	GN AUTO GHz	Radio Std: No	M Jul 12, 2017
		#IFGain:Low	Trig: Free Run #Atten: 6 dB	Avg Hold:>100/100	Radio Device:	BTS
10 dB/div Ref 5	0.00 dBm					
40.0						
30.0						
20.0						
10.0						
0.00		[
-10.0	/					
-20.0						
-30.0						
-40.0						-
Center 2,175 GHz					Sna	n 20 MHz
#Res BW 51 kHz			#VBW 150 kHz		Sweep	9.533 ms
Occupied Ba	ndwidth		Total Power	46.2 dBm		
	8.927	0 MHz				
Transmit Freq	Error	3.720 kHz	% of OBW Power	99.00 %		
x dB Bandwidt	h 9	.366 MHz	x dB	-26.00 dB		
MSG				STATUS		
				-		

RF 50 Ω DC		SENSE:INT ALIO	IN AUTO	10:58:59 AM Jul 12, 2
nter Freq 2.115000000	GHZ	Trig: Free Run	Avg Hold:>100/100	Raulo atd: None
	#IFGain:Low	#Atten: 6 dB		Radio Device: BTS
dB/div Ref 40.00 dBm				
0				
0				
0				
0				
0	/			
	1			
0				
0			- the	
0 more thank a second and the				
0				
nter 2.115 GHz				Span 20 M
es BW 51 kHz		#VBW 150 kHz		Sweep 9.533
Occupied Bandwidth	•	Total Power	46.2 dBm	
0.3				
Transmit Freq Error	4.665 kHz	% of OBW Power	99.00 %	
x dB Bandwidth	9.327 MHz	x dB	-26.00 dB	
			4	

Figure 8.5-9: Occupied bandwidth, QPSK, LTE, 10 MHz, Port A, High channel

Reysignt spectrum Analyzer - Occupied BW		CENCE, INT ALL	CN AUTO	11/02/47 MI Jul 12, 20
ap 20 000 MHz		Center Freg: 2.14500000	GHz	Radio Std: None
an 20.000 MH2		Trig: Free Run	Avg Hold:>100/100	
	#IFGain:Low	#Atten: 6 dB		Radio Device: BTS
dB/div Ref 45.00 dBm	<u> </u>			
1				
,				
)				
,				
	_/			
	1 1		1	
Lumamenter				
Ater 2.145 GHZ				Span 20 W
es BW 51 KHZ		#VBW 150 KHZ		Sweep 9.533
Occupied Bandwidtl	h	Total Power	46.1 dBm	
beeupieu Bailuilla				
8.9	9281 MHZ			
Fransmit Freq Error	1.994 kHz	% of OBW Power	99.00 %	
dB Bandwidth	0.220 MHz	w dB	26.00 48	
de Bandwidth	9.339 MHZ	XUB	-20.00 08	
			- BTATHE	

Figure 8.5-11: Occupied bandwidth, QPSK, LTE, 10 MHz, Port B, Mid channel

Figure 8.5-10: Occupied bandwidth, QPSK, LTE, 10 MHz, Port B, Low channel

RF 50.0 DC		SENSE:INT	IGN AUTO	11:07:40 AM Jul 12: 2
nter Freg 2,175000000	GHz	Center Freq: 2.17500000	0 GHz	Radio Std: None
	<u> </u>	Trig: Free Run	Avg Hold:>100/100	
	#IFGain:Low	#Atten: 6 dB		Radio Device: BTS
dB/div Ref 50.00 dBm				
g				
.0				
.0				
.0				
0				
20				
0	1			
0				
.0				
0	~~~			
enter 2.175 GHz				Span 20 N
tes BW 51 kHz		#VBW 150 kH	Z	Sweep 9.533
Occupied Rendwidth	•	Total Power	46.1 dBm	
Occupied Ballowidi		i otari i ottori	40.1 0.01	
8.9	9279 MHz			
Transmit Freq Error	4.059 kHz	% of OBW Power	r 99.00 %	
x dB Bandwidth	0 331 MHz	x dB	-26 00 dB	
	0.001 1012		20100 00	
			STATUS	

Figure 8.5-12: Occupied bandwidth, QPSK, LTE, 10 MHz, Port B, High channel



8 X

Keysight Spec	trum Analyzer - Occupied B	N			- 6 ×
Center Fr	eg 2.117500000	GHz	SENSE:INT ALIO Center Freq: 2.117500000	GHZ	11:00:08 AM Jul 12, 2017 Radio Std: None
]	#IFGain:Low	Trig: Free Run #Atten: 6 dB	Avg Hold:>100/100	Radio Device: BTS
10 dB/div	Ref 40.00 dBr	n			
30.0					
20.0					
10.0					1
0.00					1
-10.0	///				
-20.0					
-30.0					
-40.0	una and				homenon
-50.0					
Center 2.	118 GHz				Span 20 MHz
#Res BW	51 kHz		#VBW 150 kHz		Sweep 9.533 ms
Occup	ied Bandwidt	th	Total Power	46.2 dBm	
	13	3.382 MHz			
Transm	nit Freq Error	2.532 kHz	% of OBW Power	99.00 %	
x dB Ba	andwidth	13.92 MHz	x dB	-26.00 dB	
MSG			٥	STATUS	

RF 50 Ω DC		SENSE:INT ALI Center Freq: 2.145000000	IGN AUTO	11:03:34 AM Jul 12, 2 Radio Std: None
	#IFGain:Low	#Atten: 6 dB	AvgiHold:>100/100	Radio Device: BTS
dB/div Ref 45.00 dBm				
.0				
0				franke, na ng
0				
				X
0				
nter 2 145 GHz				Spap 20 M
es BW 51 kHz		#VBW 150 kHz	2	Sweep 9.533
Occupied Bandwidth	1	Total Power	46.2 dBm	
13	.380 MHz			
Fransmit Freq Error	6.362 kHz	% of OBW Power	99.00 %	
x dB Bandwidth	13.94 MHz	x dB	-26.00 dB	
			1	

Figure 8.5-13: Occupied bandwidth, QPSK, LTE, 15 MHz, Port A, Low channel

Keysight Spectrum Analyzer - Occupied BW				
RF 50 Ω DC		SENSE:INT A	LIGN AUTO	11:06:50 AM Jul 12, 20
an 20.000 MHz	#IFGain:Low	Trig: Free Run #Atten: 6 dB	Avg Hold:>100/100	Radio Std: None Radio Device: BTS
dB/div Ref 50.00 dBm				
ő				
				- Company
nter 2.173 GHz es BW 51 kHz		#VBW 150 kH	z	Span 20 M Sweep 9.533 r
Occupied Bandwidth	ı	Total Power	46.2 dBm	
13	.387 MHz			
Fransmit Freq Error	2.966 kHz	% of OBW Powe	r 99.00 %	
dB Bandwidth	13.90 MHz	x dB	-26.00 dB	
a			K STATUS	

Figure 8.5-15: Occupied bandwidth, QPSK, LTE, 15 MHz, Port A, High channel

Figure 8.5-14: Occupied bandwidth, QPSK, LTE, 15 MHz, Port A, Mid channel

Keysight Spectrum Analyzer - Occupied BW				
RF 50 Ω DC	011-	SENSE:INT A	LIGN AUTO	11:00:20 AM Jul 12,
nter Freq 2.11/500000	GHZ	Trig: Free Run	Avg Hold:>100/100	Raulo ald: None
	#IFGain:Low	#Atten: 6 dB		Radio Device: BTS
Def 40.00 dB-				
aBidiv Ref 40.00 aBm				
0				
10				
0				
0				
0				
				0.000
les BW 51 kHz		#VBW 150 kH	z	Sweep 9.533
Occupied Bandwidth	,	Total Power	46.2 dBm	
Coccupied Ballamati				
13	.383 MHZ			
Transmit Freq Error	5.720 kHz	% of OBW Powe	r 99.00 %	
x dB Bandwidth	13.88 MHz	x dB	-26.00 dB	

Figure 8.5-16: Occupied bandwidth, QPSK, LTE, 15 MHz, Port B, Low channel



Keysight Sp	bectrum Analyzer - Occupied B	N			- 6 🗙
Span 20	.000 MHz		Center Freq: 2.145000000	GHz	Radio Std: None
		#IFGain:Low	Trig: Free Run #Atten: 6 dB	Avg Hold:>100/100	Radio Device: BTS
10 dB/div	Ref 45.00 dB	n			
35.0					
25.0					
15.0					
5.00					
-5.00	7				
15.0					
-25.0	1				
36.0					
45.0					
-45.0					
Center 2	2.145 GHz		#V/PW/ 150 kHz		Span 20 MHz
#Res DW			#VBW 130 KHZ		Sweep 9.555 ms
Occu	pied Bandwid	th	Total Power	46.1 dBm	
	1	3.384 MHz			
Trans	mit Freq Error	3.264 kHz	% of OBW Power	99.00 %	
x dB B	Bandwidth	13.94 MHz	x dB	-26.00 dB	
MSG			1	STATUS	

pan 20.000 MHz		SENSE:INT ALI Center Freq: 2.172500000 Trig: Free Run	GN AUTO GHz Avg Hold:>100/100	11:06:39 AM Jul 12, 20 Radio Std: None
	#IFGain:Low	#Atten: 6 dB		Radio Device: BTS
dB/div Ref 50.00 dBm				
9				
0				
0 0				
0				
• / /				1
0				
0				
°				
0				
enter 2.173 GHz		#VBW 150 kHz		Span 20 N Sween 9,533
		Total Power	46.1 dBm	
13	.386 MHz			
Transmit Freq Error	1.688 kHz	% of OBW Power	99.00 %	
x dB Bandwidth	13.85 MHz	x dB	-26.00 dB	
			STATUS	

Figure 8.5-17: Occupied bandwidth, QPSK, LTE, 15 MHz, Port B, Mid channel

Figure 8.5-18: Occupied bandwidth, QPSK, LTE, 15 MHz, Port B, High channel

Keysight Spectrum Analyzer - Occupied BW				- 6
RF 50 Ω DC		SENSE:INT ALI Center Freg: 2.120000000	GN AUTO GHz	11:01:15 AM Jul 12, 20 Radio Std: None
an 30.000 MH2	#IFGain:Low	Trig: Free Run #Atten: 6 dB	Avg Hold:>100/100	Radio Device: BTS
dB/div Ref 40.00 dBm				
0				
	Contraction of the second second			
1				
nter 2.12 GHz es BW 51 kHz	·	#VBW 150 kHz		Span 30 M Sweep 14.27 i
Occupied Bandwidth	า	Total Power	46.2 dBm	
17	.835 MHz			
Fransmit Freq Error	6.469 kHz	% of OBW Power	99.00 %	
dB Bandwidth	18.47 MHz	x dB	-26.00 dB	
			STATUS	

Figure 8.5-19: Occupied bandwidth, QPSK, LTE, 20 MHz, Port A, Low channel

Keysight Spectrum Analyzer - Occupied Bi	N			
Span 30.000 MHz		Center Freq: 2.145000000	GHz	Radio Std: None
	#IFGain:Low	#Atten: 6 dB	Avg Hold:>100/100	Radio Device: BTS
10 dB/div Ref 45.00 dBr	n			
25.0				-
5.00				
-15.0				
-25.0				Lancemannen
-45.0				
Center 2.145 GHz #Res BW 51 kHz		#VBW 150 kHz		Span 30 MHz Sweep 14.27 ms
Occupied Bandwidt	th	Total Power	46.2 dBm	
17	7.839 MHz			
Transmit Freq Error	5.131 kHz	% of OBW Power	99.00 %	
x dB Bandwidth	18.44 MHz	x dB	-26.00 dB	
MSG		I	STATUS	

Figure 8.5-20: Occupied bandwidth, QPSK, LTE, 20 MHz, Port A, Mid channel



11:01:03 AM Jul 12, 2017

Keysight Spectrum Analyzer - Occupied BW				- <i>6</i>
RF 50 Ω DC	CH7	SENSE:INT A	IGN AUTO	11:05:25 AM Jul 12, 2017 Radio Std: None
	#IFGain:Low	Trig: Free Run #Atten: 6 dB	Avg Hold:>100/100	Radio Device: BTS
0 dB/div Ref 50.00 dBm				
40.0				
0.0				
0.0				
0.0				
.00				
0.0				
10				Lunnan
				On an 20 Mil
Res BW 51 kHz		#VBW 150 kH	z	Sweep 14.27 m
Occupied Bandwidth	า	Total Power	46.2 dBm	
17	.841 MHz			
Transmit Freq Error	2.950 kHz	% of OBW Power	r 99.00 %	
x dB Bandwidth	18.43 MHz	x dB	-26.00 dB	
a			K STATUS	

Figure 8.5-21: Occupied bandwidth, QPSK, LTE, 20 MHz, Port A, High

channel

	#IEGain:Low	Trig: Free Run #Atten: 6 dB	Avg Hold:>100/100	Radio Device: BTS
	#IFGalli.LOW	writen. v ub		Rualo Berlice. B ro
Def 40.00 dBm				
Islaiv Rei 40.00 abiii				1
J				
and the second				
ter 2.12 GHz				Span 30 MH
es BW 51 kHz		#VBW 150 kHz		Sweep 14.27 n
Occupied Bandwidth	า	Total Power	46.2 dBm	
17	838 MHz			
			00.00.00	
ransmit Freq Error	9.404 KHZ	% of OBW Power	99.00 %	
dB Bandwidth	18.42 MHz	x dB	-26.00 dB	
			STATUS	

Figure 8.5-22: Occupied bandwidth, QPSK, LTE, 20 MHz, Port B, Low channel

Keysight Spectrum Analyzer - Occupied BW				
RF 50 Ω DC		SENSE:INT ALI	SN AUTO	11:04:24 AM Jul 12, 20
an 30.000 MHz		Trig: Free Run	AvaiHold:>100/100	Radio Std: None
	#IFGain:Low	#Atten: 6 dB		Radio Device: BTS
dB/div Ref 45.00 dBm				
.0				
0	**			~
j / /				
1 amount				
1				
nter 2.145 GHz es BW 51 kHz		#VBW 150 kHz		Span 30 M Sweep 14.27 r
Occupied Bandwidth	1	Total Power	46.2 dBm	
17	.842 MHz			
Fransmit Freq Error	3.653 kHz	% of OBW Power	99.00 %	
dB Bandwidth	18.45 MHz	x dB	-26.00 dB	

Figure 8.5-23: Occupied bandwidth, QPSK, LTE, 20 MHz, Port B, Mid channel

Keysight Spectrum Analyzer - Occupied BV	v			- 6
RF 50 Ω DC		SENSE:INT ALIO	SN AUTO	11:05:45 AM Jul 12, 201
nter Freq 2.17000000	GHz	Center Freq: 2.170000000	GHz Availledus 100/100	Radio Std: None
	#IFGain:Low	#Atten: 6 dB	Avginoid.>100/100	Radio Device: BTS
	in dument			
dB/div Ref 50.00 dBn	n			
9				
0				
		****		~
0				
/				
0 /				
0				
1 million				Lonnon marine .
nter 2.17 GHz				Span 30 Mi
es BW 51 kHz		#VBW 150 kHz		Sweep 14.27 r
Occupied Bandwidt	h	Total Power	46.1 dBm	
Occupied Ballowidi				
17	.841 MHZ			
Transmit Freg Error	-536 Hz	% of OBW Power	99.00 %	
d D D and a light	40.45 100-		00 00 JB	
X dB Bandwidth	18.45 MHZ	xdB	-26.00 dB	

Figure 8.5-24: Occupied bandwidth, QPSK, LTE, 20 MHz, Port B, High channel



Keysight Spectrum Analyz	er - Occupied BW				
RF	50 Ω DC		SENSE:INT ALI Center Freq: 2.112400000	SN AUTO	10:04:45 AM Jul 13, 20: Radio Std: None
an 10.000 MH	2		Trig: Free Run	Avg Hold:>100/100	Radio Sta. None
PREA	MP	#IFGain:Low	#Atten: 28 dB		Radio Device: BTS
dB/div Ref	50.00 dBm				
3					
0					
				~~~~~	
		1			
·				\	
a 🚽 🚽					
ntor 2 112 CH					Spop 10 M
es BW 51 kHz	•		#VBW 150 kHz	Sweep 5 r	
Occupied Ba	andwidth		Total Power	46.2 dBm	
	4.16	90 MHz			
Fransmit Freq	Error	4.178 kHz	% of OBW Power	99.00 %	
dB Bandwid	th	4 664 MHz	x dB	-26 00 dB	
				STATUS	

RF 50 Ω DC		SENSE:INT A	LIGN AUTO	10:07:38 AM Jul 13, 20
enter Freq 2.132600000	GHz	Center Freq: 2.13260000	0 GHz	Radio Std: None
005 440		Trig: Free Kun	Avg Hold:>100/100	Padio Daviso: BTS
PREAMP	#IFGain:Low	#Atten: 20 db		Radio Device: B15
dB/div Ref 50.00 dBn	n .			
a				
0				
0				
0				
0				
0			l	
0	- [ ]			
	1			
	Charles -			and the second
0				
ntor 2 122 CHz				Enon 10 M
es BW 51 kHz		#VBW 150 kH	z	Sweep 5
			-	
Occupied Bandwidt	h	Total Power	46.2 dBm	
4	4000 MILL-			
4.				
Transmit Freg Error	3.922 kHz	% of OBW Powe	r 99.00 %	
k dB Bandwidth	4.667 MHz	x dB	-26.00 dB	
			-4	
			STATUS	

Figure 8.5-25: Occupied bandwidth, QPSK, WCDMA, 5 MHz, Port A, Low channel

RF 50 Ω DC	CH2	SENSE:INT ALI	GN AUTO	10:13:16 AM Jul 13, 201
PREAMP	#IFGain:Low	Trig: Free Run #Atten: 28 dB	Avg Hold:>100/100	Radio Device: BTS
0 dB/div Ref 45.00 dBm				
og 6.0				
15.0		+		
15.0	A		<u>N</u>	
i.00				
5.00				
15.0				
25.0			- ha	
35.0				
15.0				
enter 2.153 GHz Res BW 51 kHz		#VBW 150 kHz		Span 10 MH Sweep 5 m
Occupied Bandwidt	1	Total Power	46.1 dBm	
4.1	1678 MHz			
Transmit Freq Error	2.076 kHz	% of OBW Power	99.00 %	
x dB Bandwidth	4.665 MHz	x dB	-26.00 dB	
a			STATUS	

Figure 8.5-27: Occupied bandwidth, QPSK, WCDMA, 5 MHz, Port A, High channel

Figure 8.5-26: Occupied bandwidth, QPSK, WCDMA, 5 MHz, Port A, Mid channel

Keysight Spectrum Analyzer - Occupied BW		CENCE INT	ALTON AUTO	10-04-00 MM Jul 12, 20
an 10.000 MHz		Center Freq: 2.1124000	00 GHz	Radio Std: None
DDEAMD	#IEGain:Low	Trig: Free Run #Atten: 28 dB	Avg Hold:>100/100	Radio Device: BTS
FREAMP	WIFGdIII.LOW	Pritten: 20 00		Radio Device. D To
dB/div Ref 50.00 dBm				
.0				
0				
0				
0				
0				
0				
0	1			
0	1			
0				
enter 2.112 GHz				Span 10 M
es BW 51 kHz		#VBW 150 ki	Sweep 5	
Occupied Rendwidth	•	Total Power	46.2 dBm	
Occupied Ballowidu		10tur 1 ower	40.2 0.5	
4.1	1/54 MHZ			
Transmit Freq Error	4.547 kHz	% of OBW Powe	er 99.00 %	
v dB Bandwidth	4 660 MHz	x dB	-26 00 dB	
	4.000 11112		20.00 48	
			~	
			STATUS	

Figure 8.5-28: Occupied bandwidth, QPSK, WCDMA, 5 MHz, Port B, Low channel

Section 8 Test name Specification Testing data FCC Part 2.1049 and RSS-Gen, 6.6 Occupied bandwidth FCC Part 2, RSS-Gen, Issue 4



Keysight Spectrum Anal	lyzer - Occupied BW				
RF RF	50 Ω DC		SENSE:INT ALI	GN AUTO	10:07:56 AM Jul 13, 2017
Center Freq 2.	132600000 GH	<u> </u>	Trig: Free Run	Avg Hold:>100/100	Radio Std. None
PRE	AMP	#IFGain:Low	#Atten: 28 dB		Radio Device: BTS
10 dB/div Re	f 50.00 dBm				
Log				1	
40.0					
30.0			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	
20.0		A mark			
10.0		/			
0.00					
10.0		1			
-10.0					
-20.0					
-30.0	man have a series and				and the second sec
-40.0					
Contor 3 122 Cl					Spap 40 MHz
#Res BW( 51 kH	72		#VBM 150 kHz		Sween 5 ms
WIGS BW STRI	4		#*BW 100 KH2		04000 0113
Occupied E	Bandwidth		Total Power	46.2 dBm	
	4.15	39 MHz			
Transmit Fre	q Error	4.317 kHz	% of OBW Power	99.00 %	
x dB Bandwi	dth	4 659 MHz	x dB	-26 00 dB	
A an Danam					
				4	
ISG				STATUS	

Figure 8.5-29: Occupied bandwidth, QPSK, WCDMA, 5 MHz, Port B, Mid channel

RF 50 Ω DC	GHz	SENSE:INT ALI Center Freq: 2.152600000	GN AUTO GHz	10:09:01 AM Jul 13, 20 Radio Std: None
PREAMP	#IFGain:Low	Trig: Free Run #Atten: 28 dB	Avg Hold:>100/100	Radio Device: BTS
dB/div Ref 45.00 dBm				
.0				
0				
0				
0				
	- /			
I				
			~~~~	
,				
es BW 51 kHz		#VBW 150 kHz		Sweep 5
Occupied Bandwidth	1	Total Power	46.1 dBm	
4.1	1685 MHz			
Fransmit Freq Error	2.520 kHz	% of OBW Power	99.00 %	
k dB Bandwidth	4.654 MHz	x dB	-26.00 dB	

Figure 8.5-30: Occupied bandwidth, QPSK, WCDMA, 5 MHz, Port B, High channel



8.6 RSS-Gen, 7.1.3 Receiver conducted limits

8.6.1 Definitions and limits

If the receiver has a detachable antenna of known impedance, an antenna-conducted spurious emissions measurement is permitted as an alternative to radiated measurement. However, the radiated method of Section 7.1.2 is preferred.

The antenna-conducted test shall be performed with the antenna disconnected and with the receiver antenna terminals connected to a measuring instrument having equal impedance to that specified for the antenna.

The receiver-spurious emissions measured at the antenna terminals by the antenna-conducted method shall then comply with the following limits:

Receiver-spurious emissions at any discrete frequency shall not exceed 2 nW in the band 30–1000 MHz, nor 5 nW above 1000 MHz.

8.6.2 Test summary

Test date	July 13, 2017	Temperature	22 °C
Test engineer	Andrey Adelberg	Air pressure	1009 mbar
Verdict	Pass	Relative humidity	33 %

8.6.3 Observations, settings and special notes

Spectrum analyzer settings:

Detector mode	Peak
Resolution bandwidth	120 kHz (below 1 GHz), 1 MHz (above 1 GHz)
Video bandwidth	RBW × 3
Trace mode	Max Hold

8.6.4 Test data

🔤 Key	rsight Sp	pectrum	Analyzer	- Swept S	A												9	×	🔤 Key	sight Spectr	um Analyze	r - Swept	SA										0	9 X
<mark>M</mark> arl	ker 1	R 97	5.747	⁵⁷⁴⁷	57 M	Hz	PNO	: Fast n:Low	SENSE:INT Trig: Free R #Atten: 10 d	un IB	ALIGN AUTO Avg T Avg H	Type: Volta old:>1/1	age	(13:05:16 TR 1	ACE 1 2 TYPE MW DET P N	3,201 34 NN	7 6 4 N	Marl	(er 1 9	RF 43.540 PREAM	50 Ω 1354(IP	DC 035 N	IHz	PNO: IFGair	Fast n:Lov	SENSE:INT Trig: Free Ru #Atten: 10 dB	ALIGN AUT Avg Avg	Type: Volt Hold:>1/1	age	03	:05:51 F TRA TY D	M Jul 13 PE M W ET P N	,2017 3 4 5 6 WWW NNN
10 dE Log	3/div	Re Re	f Offsel f -20.	4 dB 00 dB	m									Mkr	1 97 -87.	5.75 716 (dB	z n	10 dE Log	div F	Ref Offse Ref -20	et 4 dB .00 dl	Bm			_		-			Mkr1	943 88.7	.54 28 (MHz 1Bm
-30.0							_	+		_									-30.0						_	+								
-40.0		_					+	+		-							+		-40.0			-	-	-	+	+						_	_	-
-50.0																DL1-5	7.00 d	èn.	-50.0							+							DL1 -5	7.00 dBm
-60.0								1											-60.0		-				+	t								
-70.0																			-70.0															
-90.0					h Loo				to a structure of the		anna ar ar daoile in	un de se tières		ور القرول			u		-90.0										the state	41.1			-	\$
-100		marand	~~~~	NALLAN W		1 m - 49 p			a suffragent of the subject of the										-100	NR MUNIAN	(siblewaya)	haartadii k	11.16.15.16	polinija je k		-	unite of the second							
-110							_	+											-110		-				_	+								
Star	t 0.03	300 0	SHz											s	top 1	1.0000	GH	z	Star	0.0300	GHz										St	op 1.	0000	GHz
#Res	s BW	(CIS	PR) 1	20 kH	lz			;	#VBW 300 kHz		4		Sweep	4.000) ḿs	(1000	0 pt	s)	#Res	BW (C	ISPR)	120 k	Hz				#VBW 300 kHz			Sweep	4.000	ms (1	000) pts)

Figure 8.6-1: Receiver spurious emissions at port A, below 1 GHz

Figure 8.6-2: Receiver spurious emissions at Port B, below 1 GHz

Section 8Testing dataTest nameRSS-Gen, 7.1.3 Receiver conducted limitsSpecificationRSS-Gen, Issue 4



Keysight Spectrum Analyzer - Swept SA												
RF 50 Ω DC		SENSE:1	NT		ALIGN /	AUTO				03:0	17:58 PM Jul 13,	2017
Display Line -53.00 dBm	I DNO F	. Tri	a: Free Ru	n	Á	Avg Ty valHo	pe: V ld:>1/	oltag 1	e		TYPE NW	3456
PREAMP	IFGain:Lo	w #At	tten: 10 dB								DET P N I	NNN
Ref Offeet 4 dB									M	kr1 17	.553 9 0	GHz
10 dB/div Ref -31.00 dBm	1									-7	76.956 d	Bm
Log									•			
** 8												
-41.0												
E1 0												
-51.0											DC1-53	00.00%
-61.0												
-01.0												
.71.0												
.81.0		فيغيث ألتحد بالتقرر	استعتمت		السلامينا	فسلق	تبريها	فالباطة	in des a	الدائر بعد تصاداه	وعصعاً ومشاولا ومن	كقعريان
والمحمد والمعادية والمجار والمجار والمعاد والمعاد والمعاد والمعادة و	Pith-Withday American	a a shirth a she			and the second	1.00		1.464.63			SIAD STREET	
-91.0												
-101												
-111												
-121					<u> </u>	<u> </u>						+
START 1.00 GHZ #Res BW (CISPR) 1 MHz		#VBW 3 (MHz					8	ween	35 33 n	op 22.00 ns (10000	GHZ
		#• DW 3.0			r'-			3	neeh	55.55 H	15 (10000	pr5)
Maka					40	SIATUS						

Figure 8.6-3: Receiver spurious emissions at port A, above 1 GHz



Figure 8.6-4: Receiver spurious emissions at Port B, above 1 GHz



Section 9. Block diagrams of test set-ups

9.1 Radiated emissions set-up for frequencies below 1 GHz



9.2 Radiated emissions set-up for frequencies above 1 GHz





9.3 Conducted emissions set-up

