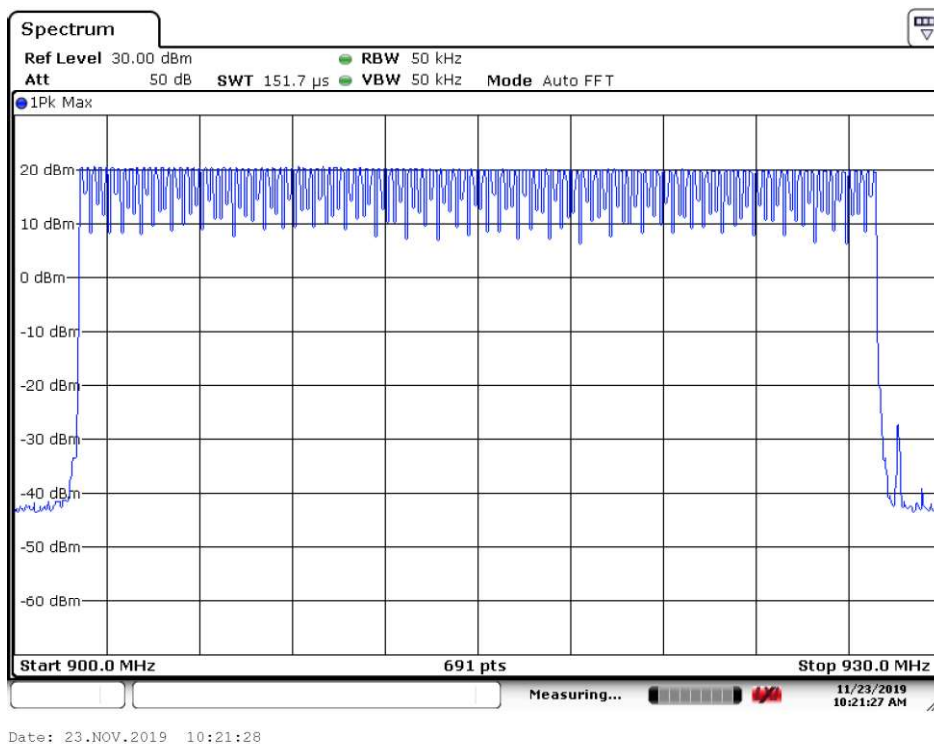


Prüfbericht - Nr.: 50321015 001
Test Report No.:

Seite 66 von 118
Page 66 of 118

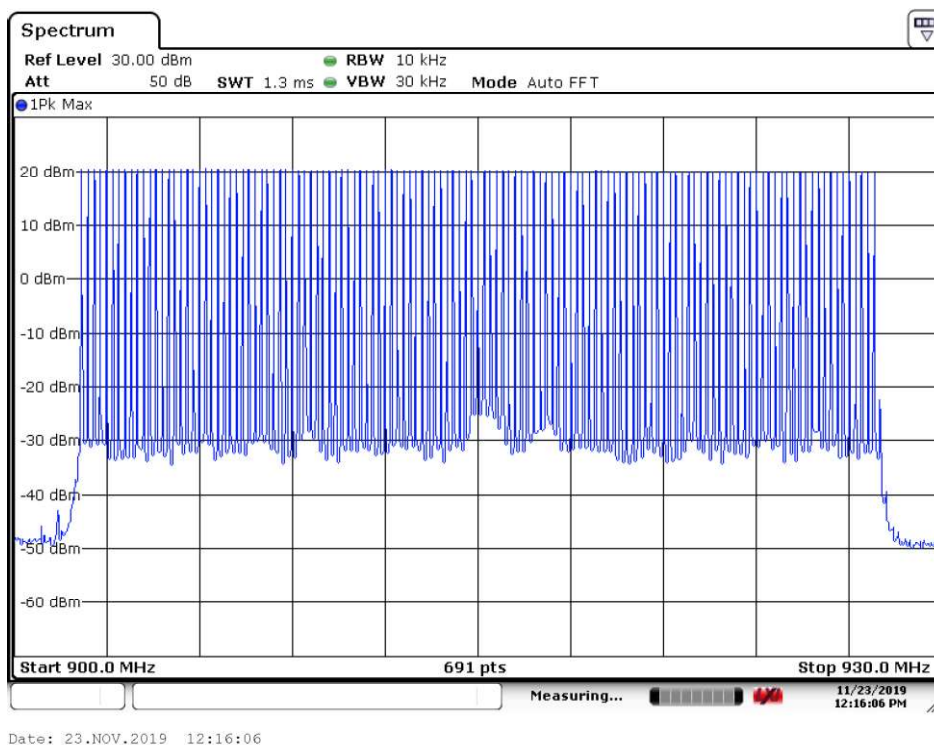
5. FSK 50Kbps FHSS, 902.2MHz~927.8MHz

Channel Number: 129



6. FSK 5Kbps FHSS, 902.2MHz~927.8MHz

Channel Number: 129



Prüfbericht - Nr.: 50321015 001

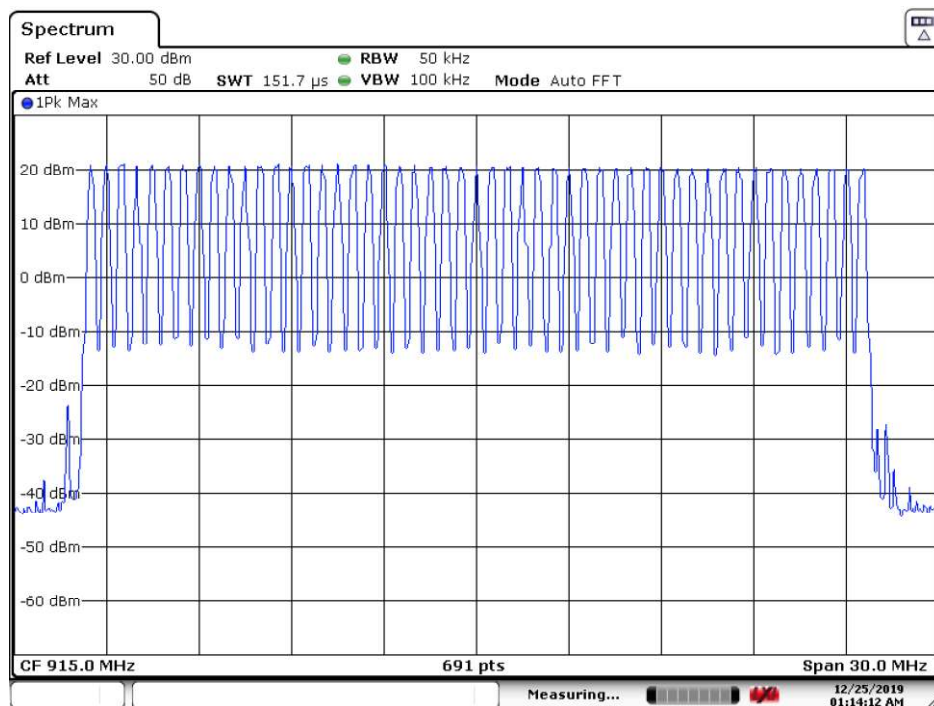
Test Report No.:

Seite 67 von 118

Page 67 of 118

7. FSK 250Kbps FHSS, 902.5MHz~927.5MHz

Channel Number: 51



Date: 25.DEC.2019 01:14:12

Prüfbericht - Nr.: 50321015 001
Test Report No.:

Seite 68 von 118
Page 68 of 118

4.1.10 Dwell Time

Result:

Pass

Test Specification

Test standard : FCC Part 15.247(f)
RSS-247 Issue 2 February 2017 Clause 5.1(c)

Basic standard : ANSI C63.10: 2013

Limits : Not more than 0.4s

Kind of test site : Shielded Room

Test Setup

Date of testing : 27.11.2019~25.12.2019

Input voltage : AC 120V, 60Hz

Operational mode : Test mode of LoRa FHSS, FSK FHSS

Temperature : 20.1°C

Relative humidity : 57%

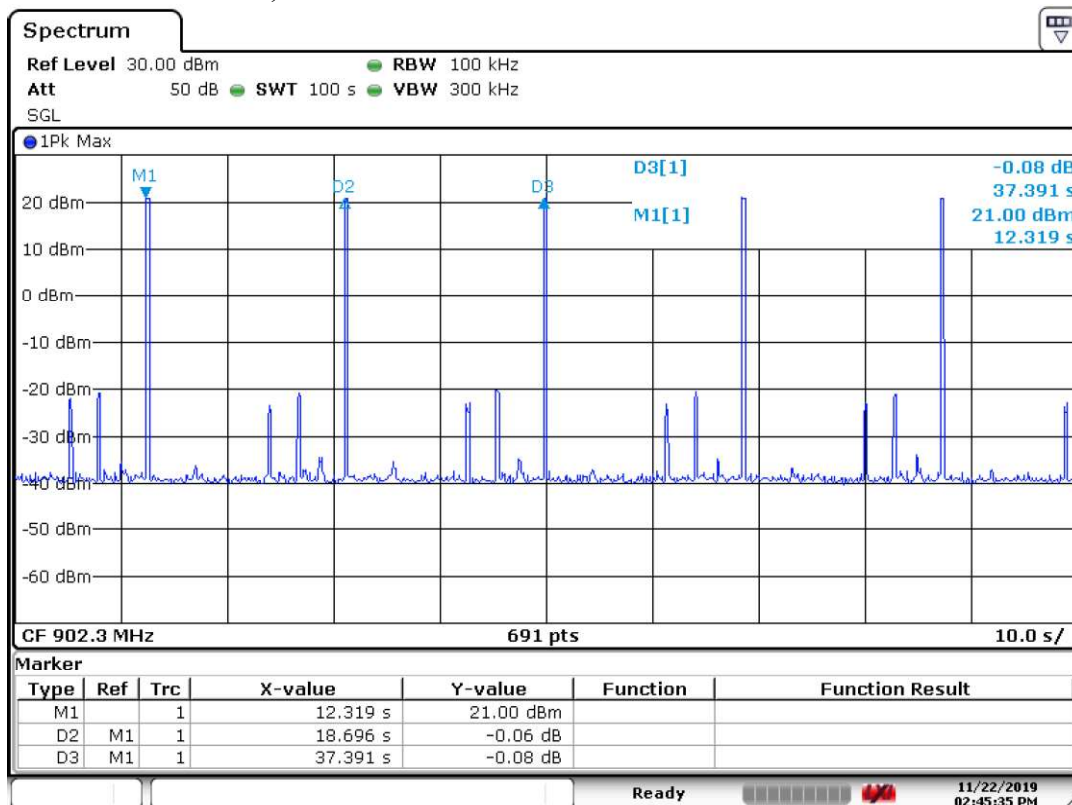
Atmospheric pressure : 101 kPa

Table 8: Test result of Dwell time for LoRa FHSS and FSK FHSS

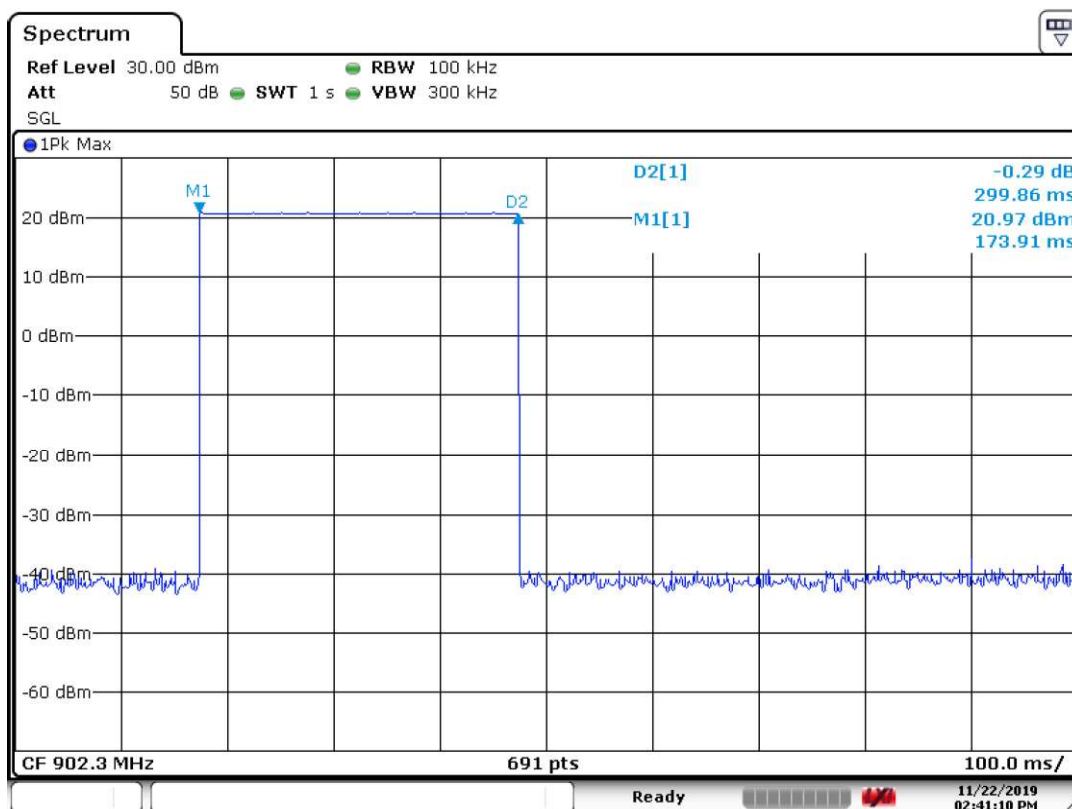
Modulation Type and Operation band	20dB Bandwidth(KHz)	Period (s)	Dwell time(s)	Limit (s)	Result
LoRa 250KHz FHSS 902.3MHz~926.7MHz	$250 \leq 20\text{dB Bandwidth} \leq 500$	10	0.29986	0.4	Pass
LoRa 125KHz FHSS 902.3MHz~914.9MHz	$20\text{dB Bandwidth} \leq 250$	20	0.34203	0.4	Pass
LoRa 125KHz FHSS 902.2MHz~927.8MHz	$20\text{dB Bandwidth} \leq 250$	20	0.34348	0.4	Pass
FSK 150Kbps FHSS 902.4MHz~927.6MHz	$20\text{dB Bandwidth} \leq 250$	20	0.34202	0.4	Pass
FSK 50Kbps FHSS 902.2MHz~927.8MHz	$20\text{dB Bandwidth} \leq 250$	20	0.33478	0.4	Pass
FSK 5Kbps FHSS 902.2MHz~927.8MHz	$20\text{dB Bandwidth} \leq 250$	20	0.21738	0.4	Pass
FSK 250Kbps FHSS 902.5MHz~927.5MHz	$250 \leq 20\text{dB Bandwidth} \leq 500$	10	0.31159	0.4	Pass

Figure 8: Dwell time

1. LoRa 250KHz FHSS, 902.3MHz~926.7MHz



Date: 22.NOV.2019 14:45:35

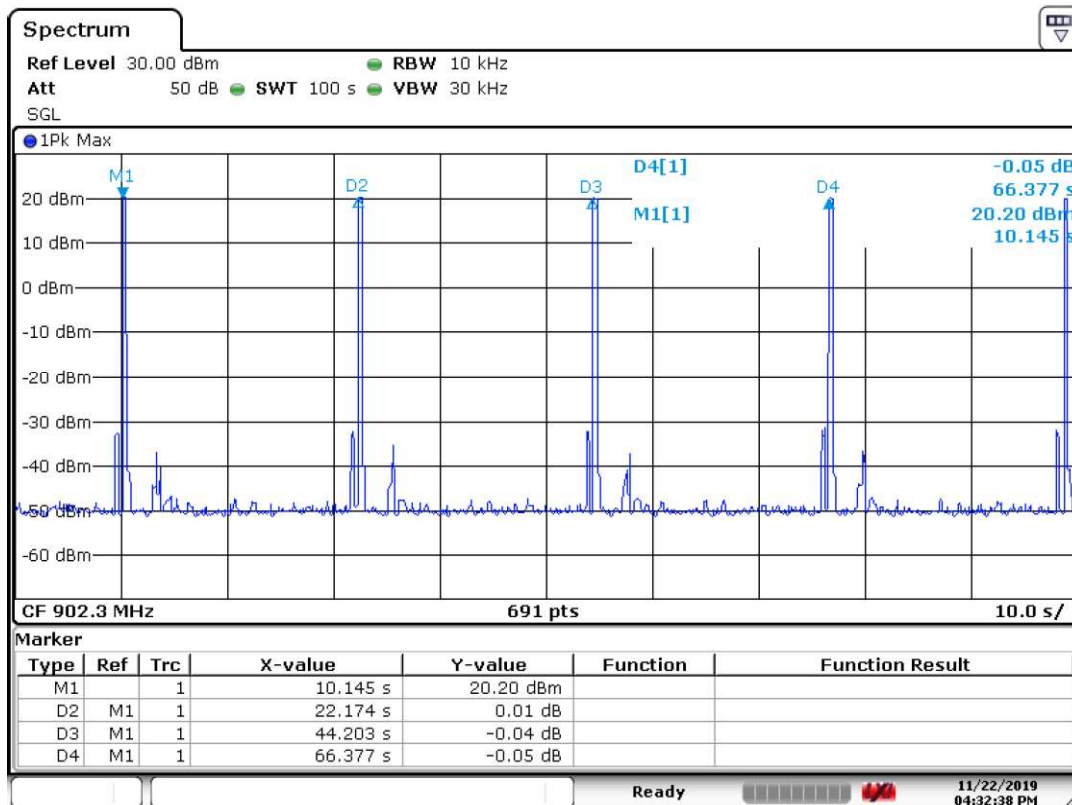


Date: 22.NOV.2019 14:41:10

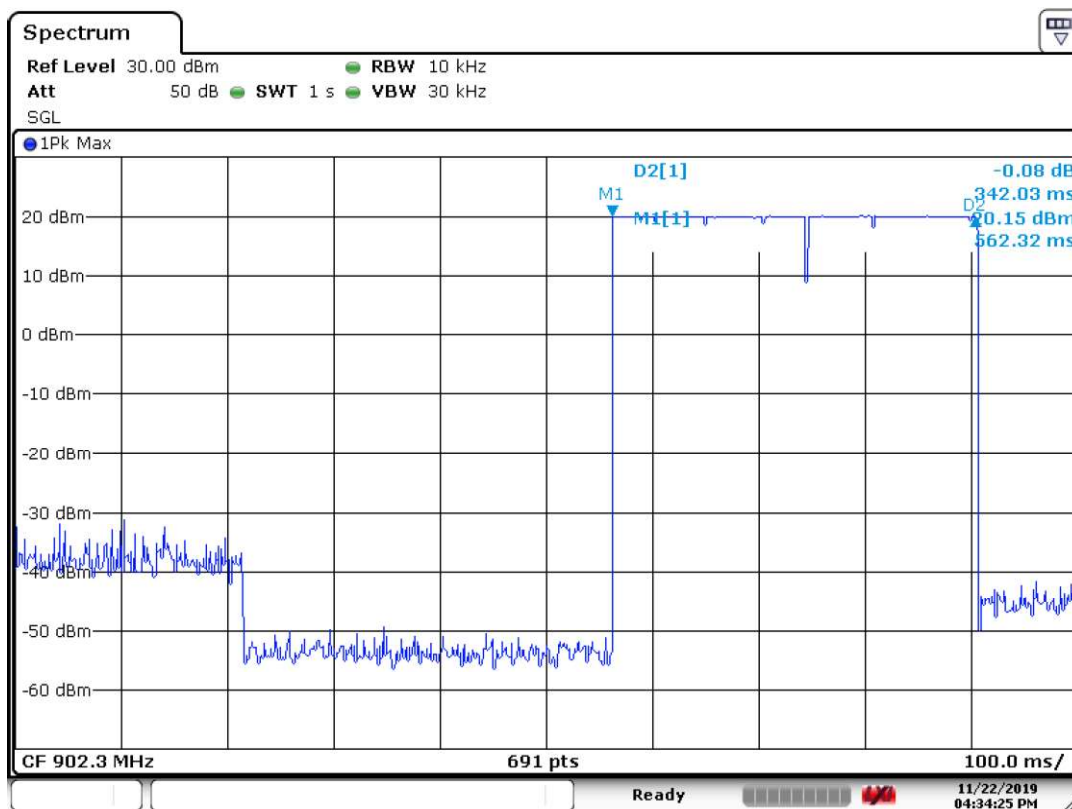
Prüfbericht - Nr.: 50321015 001
Test Report No.:

Seite 70 von 118
Page 70 of 118

2. LoRa 125KHz FHSS, 902.3MHz~914.9MHz



Date: 22.NOV.2019 16:32:38

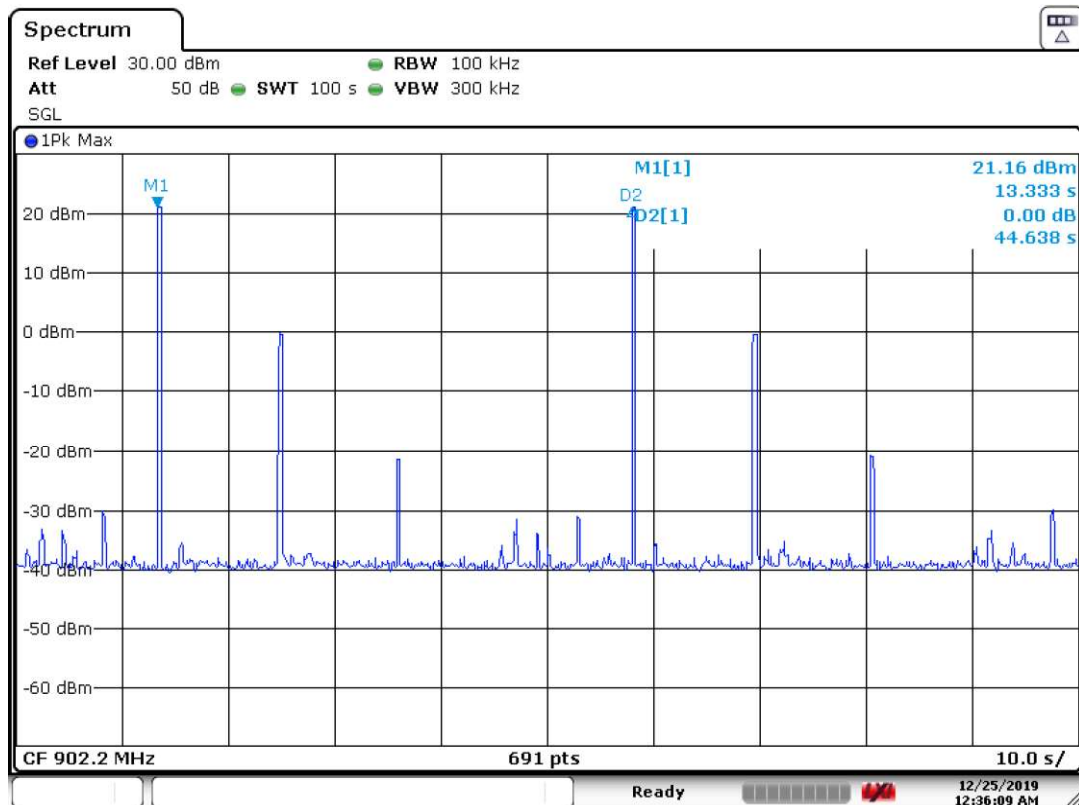


Date: 22.NOV.2019 16:34:25

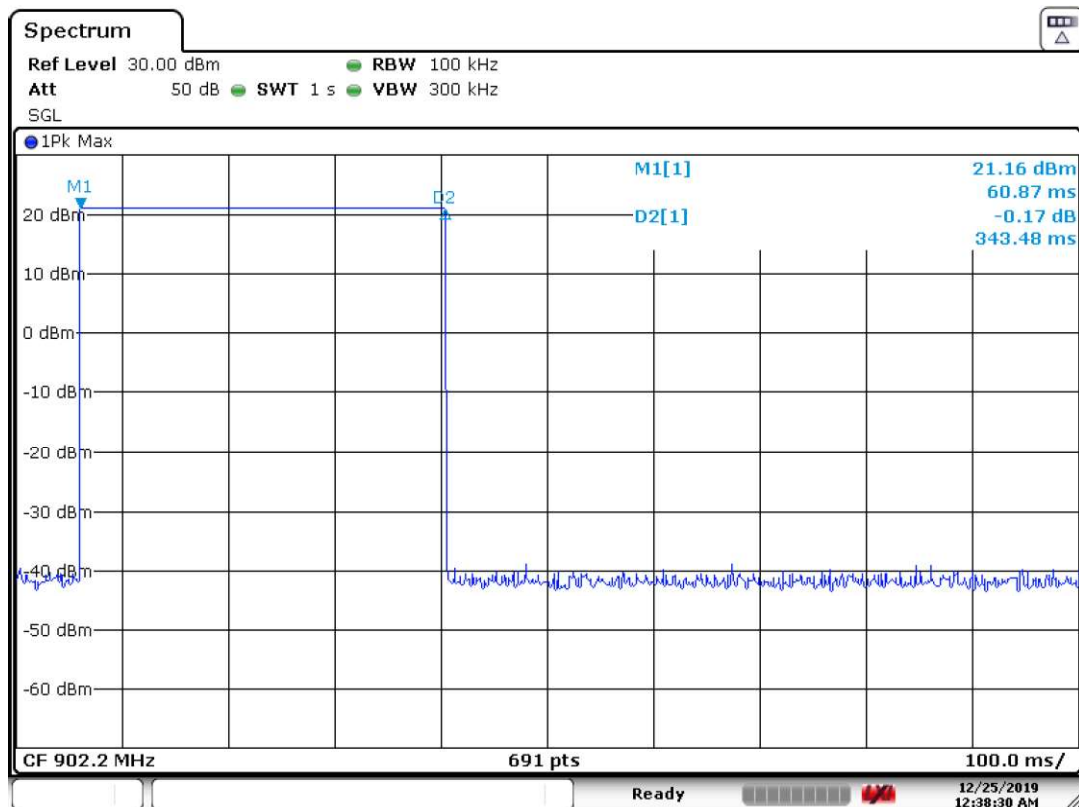
Prüfbericht - Nr.: 50321015 001
Test Report No.:

Seite 71 von 118
Page 71 of 118

3. LoRa 125KHz FHSS, 902.2MHz~927.8MHz



Date: 25.DEC.2019 00:36:09

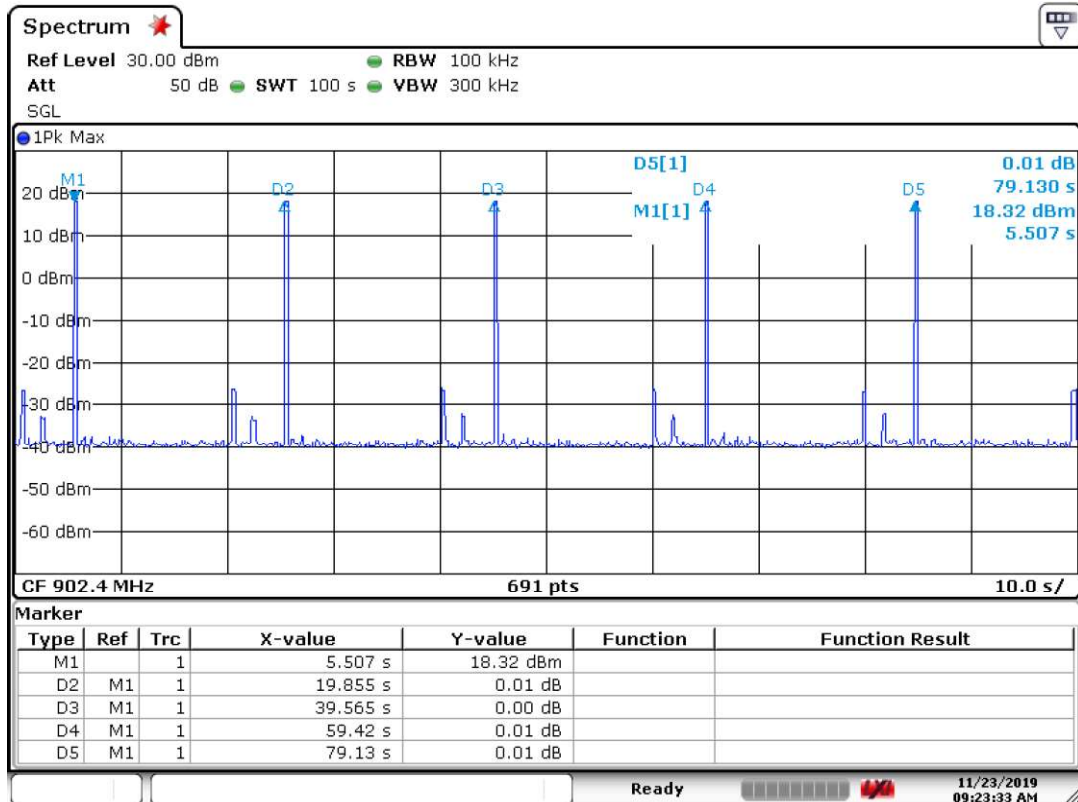


Date: 25.DEC.2019 00:38:30

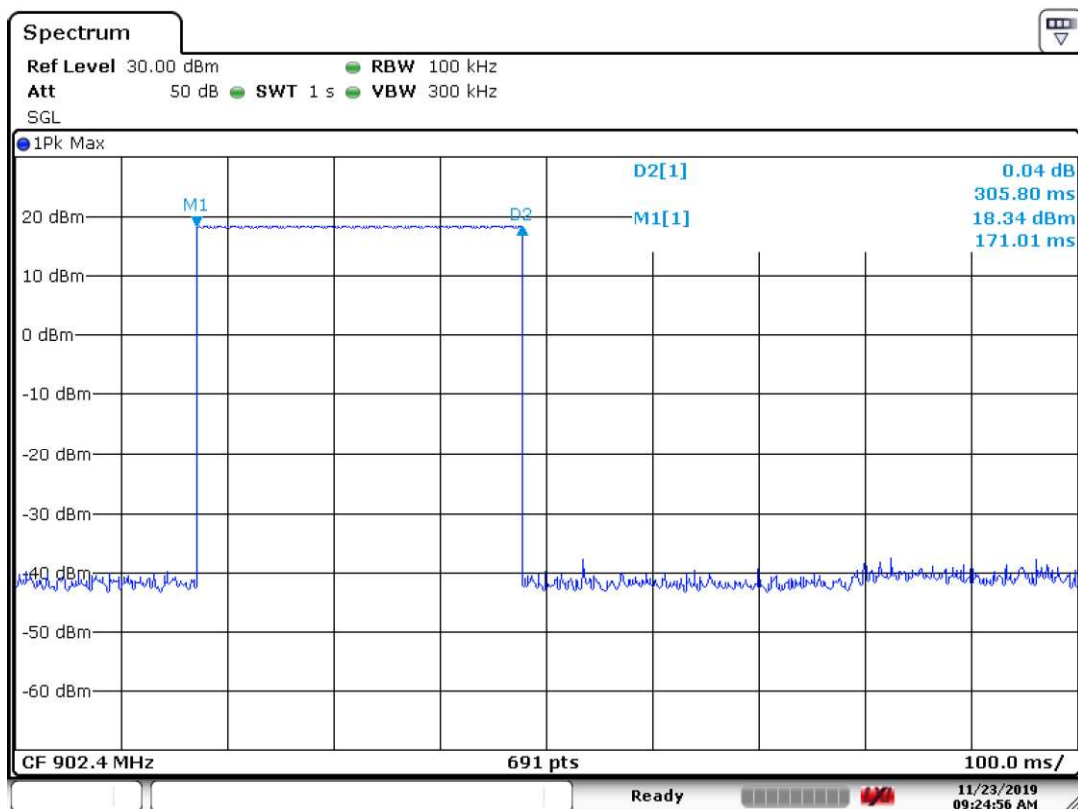
Prüfbericht - Nr.: 50321015 001
Test Report No.:

Seite 72 von 118
Page 72 of 118

4. FSK 150Kbps FHSS, 902.4MHz~927.6MHz



Date: 23.NOV.2019 09:23:33

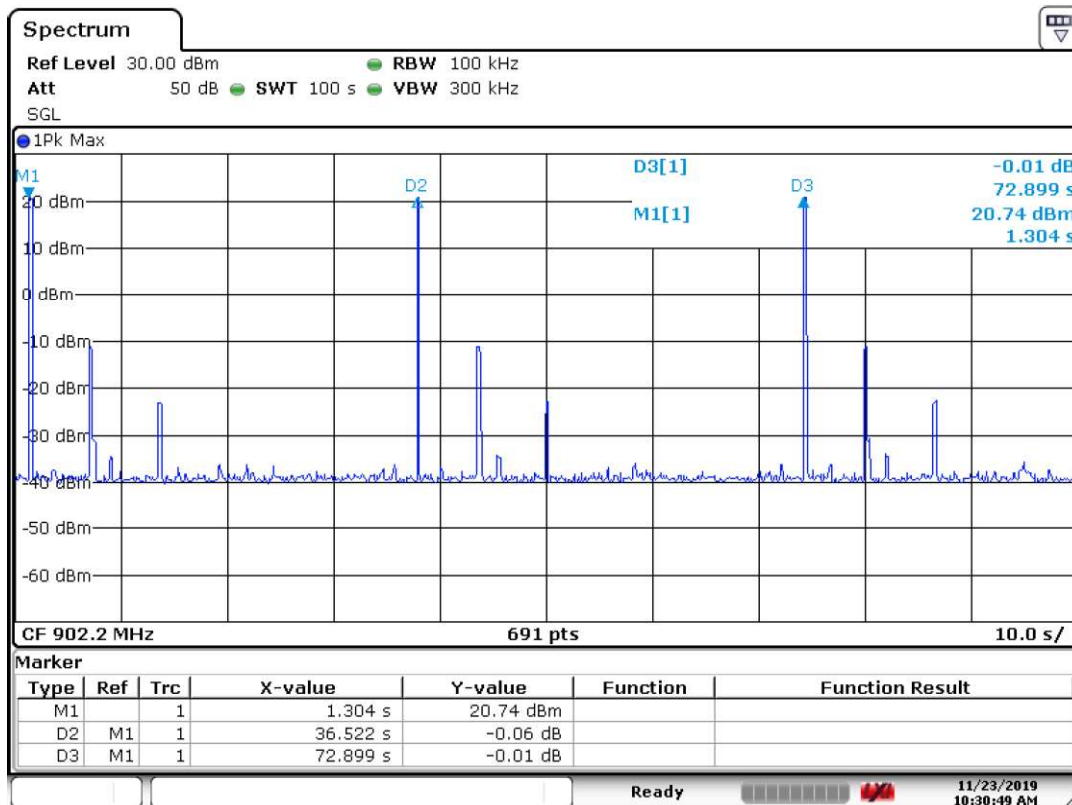


Date: 23.NOV.2019 09:24:57

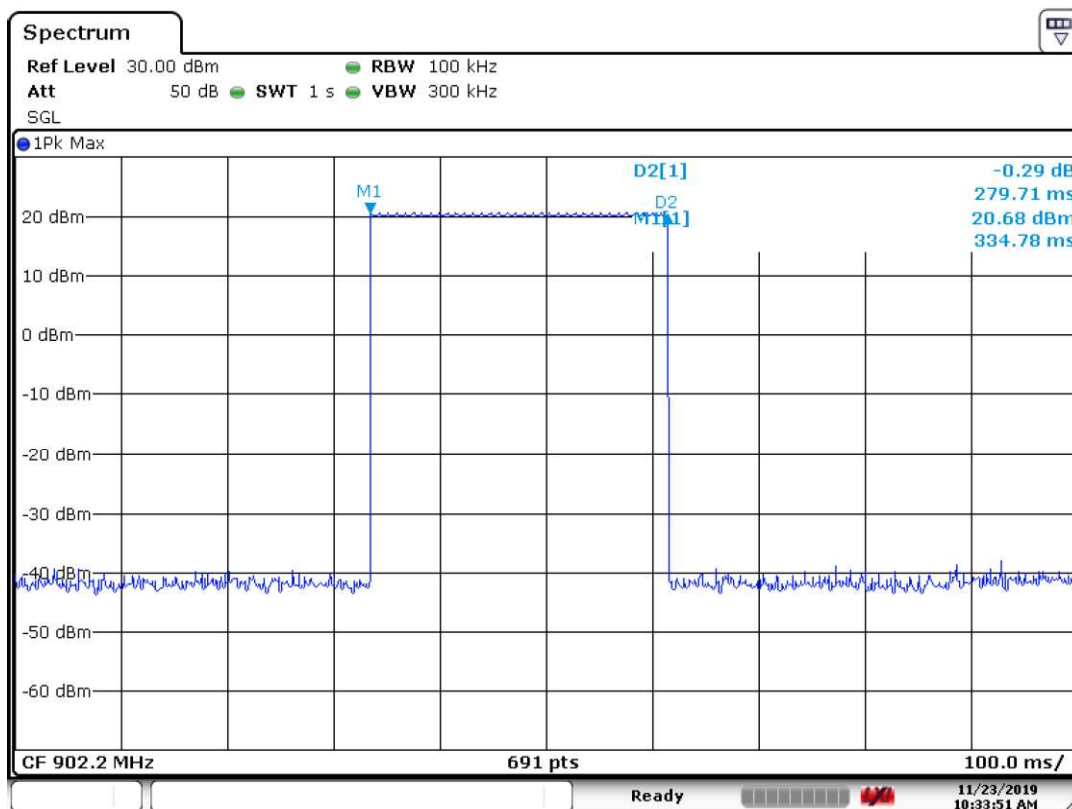
Prüfbericht - Nr.: 50321015 001
Test Report No.:

Seite 73 von 118
Page 73 of 118

5. FSK 50Kbps FHSS, 902.2MHz~927.8MHz



Date: 23.NOV.2019 10:30:49

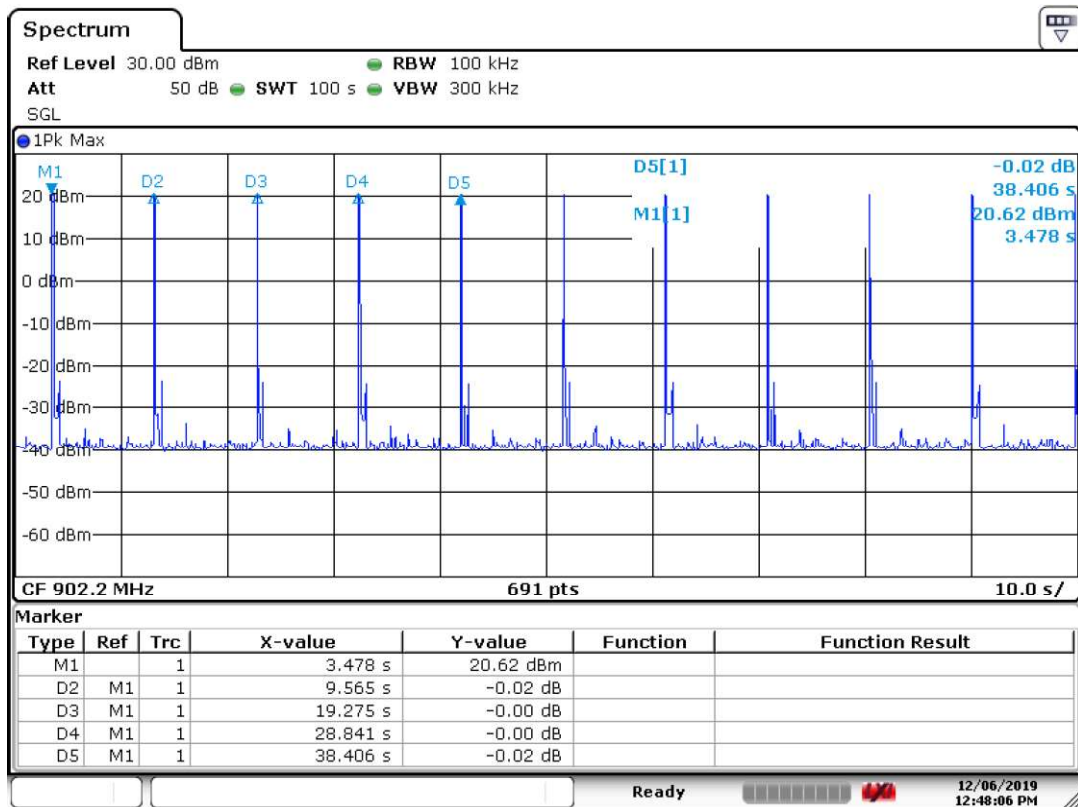


Date: 23.NOV.2019 10:33:52

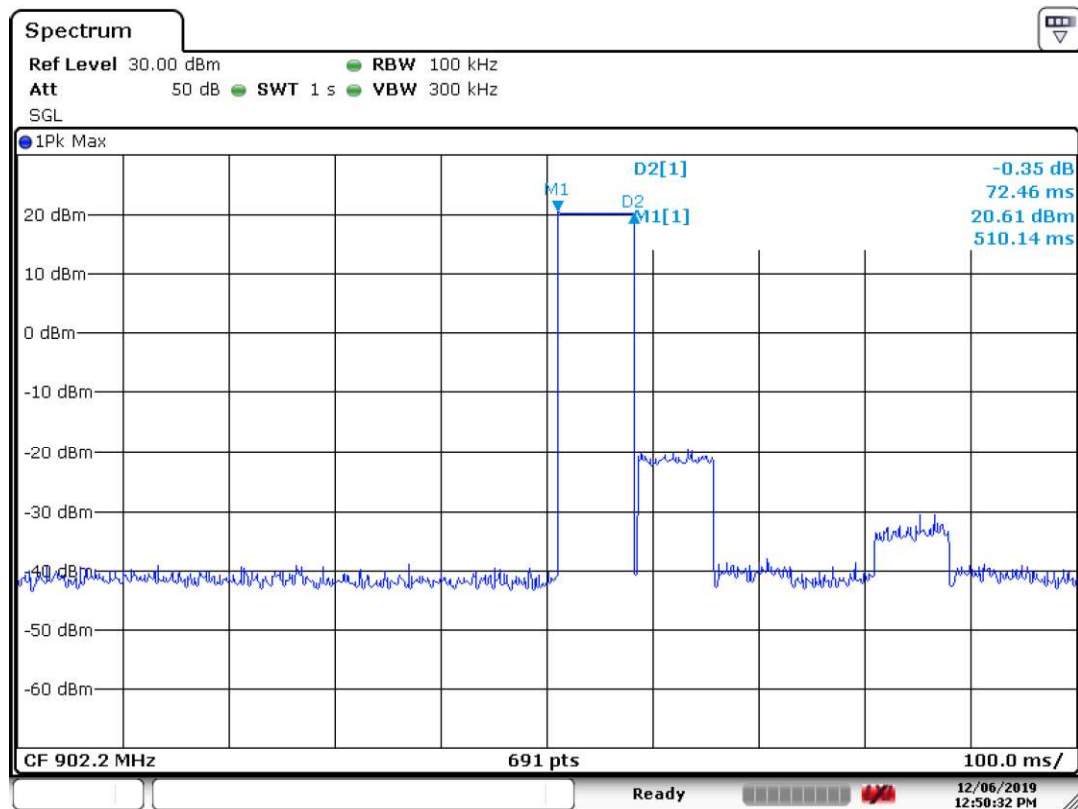
Prüfbericht - Nr.: 50321015 001
Test Report No.:

Seite 74 von 118
Page 74 of 118

6. FSK 5Kbps FHSS, 902.2MHz~927.8MHz



Date: 6.DEC.2019 12:48:06

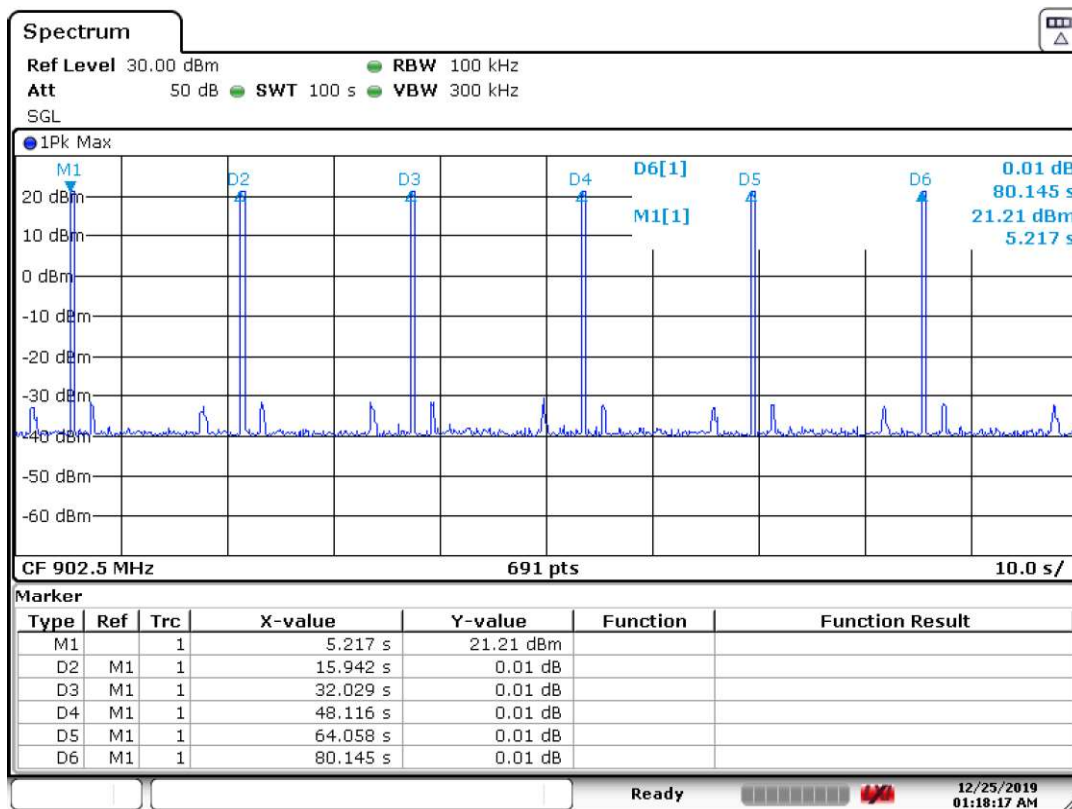


Date: 6.DEC.2019 12:50:32

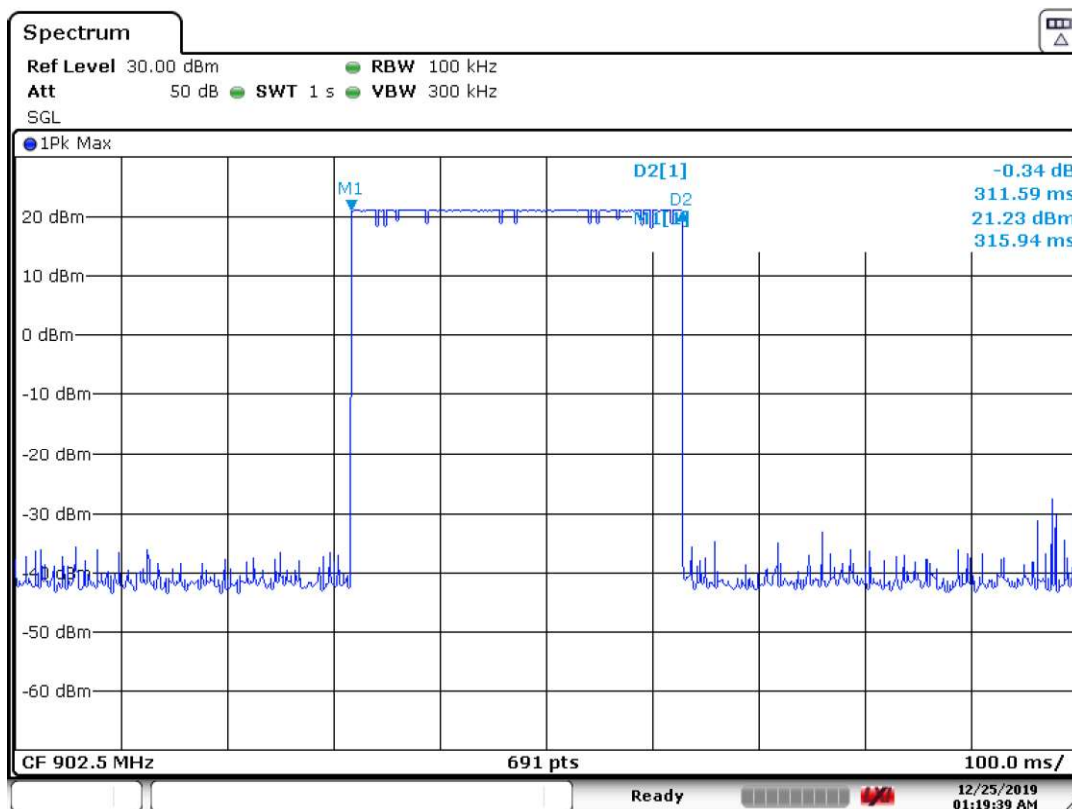
Prüfbericht - Nr.: 50321015 001
Test Report No.:

Seite 75 von 118
Page 75 of 118

7. FSK 250Kbps FHSS, 902.5MHz~927.5MHz



Date: 25.DEC.2019 01:18:17



Date: 25.DEC.2019 01:19:39

Prüfbericht - Nr.: 50321015 001
Test Report No.:

Seite 76 von 118
Page 76 of 118

4.1.11 Conducted Emission

Result:

Pass

Test Specification

Test standard : FCC Part 15.207
RSS-Gen Issue 5 March 2019
FCC Part 15, Subpart B:2018
ICES-003:2016 Class B

Basic standard : ANSI C63.10: 2013, ANSI C63.4:2014 and CISPR
16-1 series standards

Limits : Refer to 15.207(a) ; RSS Gen Issue 5 March 2019,
Clause 7.2 and clause 8.8; FCC Part 15, Subpart
B:2018; ICES-003:2016 Class B

Kind of test site : 3m Semi-anechoic Chamber

Test Setup

Date of testing : 29.11.2019

Input voltage : AC 120V, 60Hz

Operational mode : Normal Working(Light ON + Wireless Module
Operating)

Temperature : 20.1°C

Relative humidity : 56.7%

Atmospheric pressure : 101 kPa

The measurement result is calculated based on the following formula by the test software:
Emission Level = Reading level + Correction (LISN factor + cable loss).

Prüfbericht - Nr.: 50321015 001

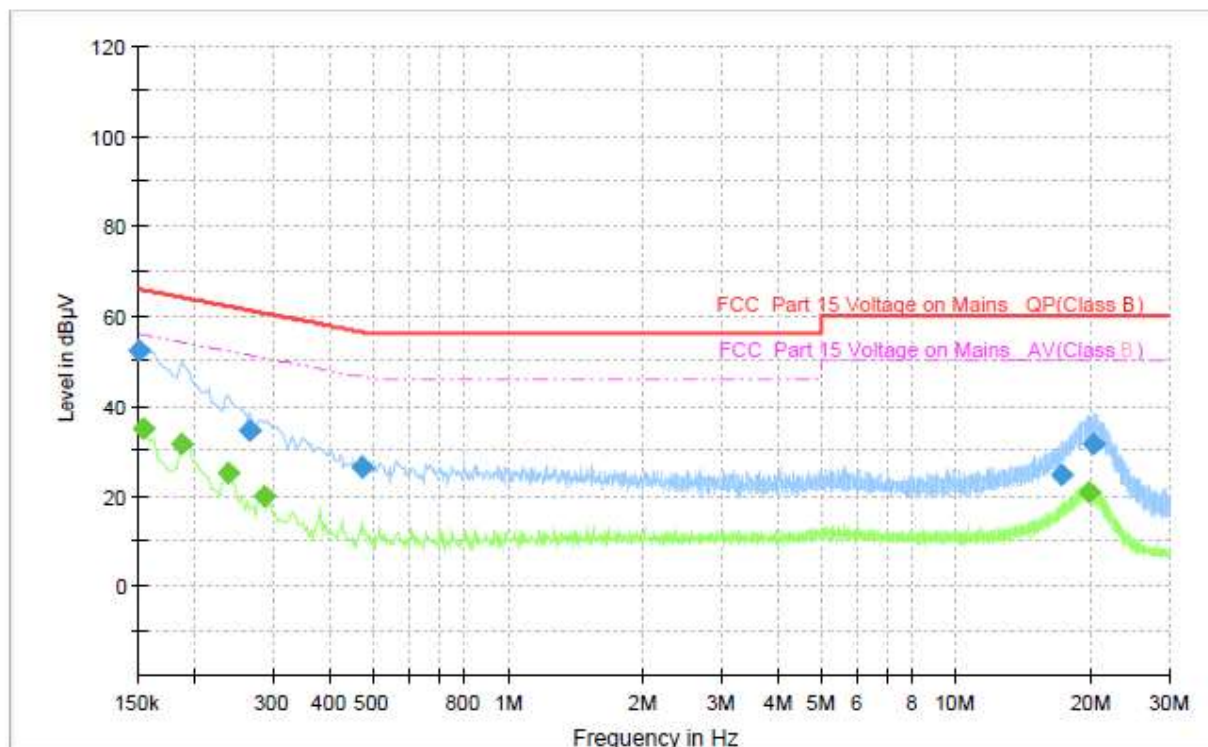
Test Report No.:

Seite 77 von 118

Page 77 of 118

Figure 9: Spectral Diagrams, Conducted Emission, 150kHz - 30MHz, L

Full Spectrum



Final Result

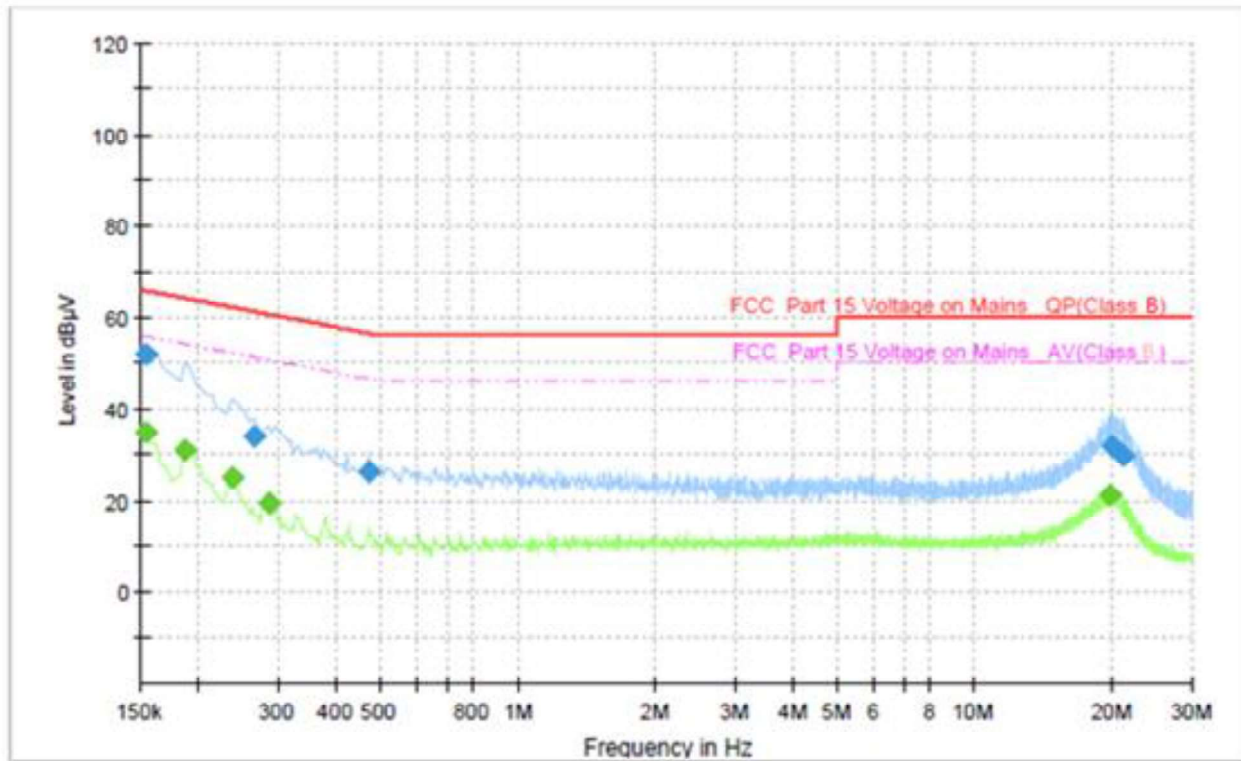
Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	52.22	---	66.00	13.78	1000.0	9.000	L1	ON	9.8
0.154000	---	34.60	55.78	21.18	1000.0	9.000	L1	ON	9.8
0.186000	---	31.17	54.21	23.05	1000.0	9.000	L1	ON	9.8
0.238000	---	24.97	52.17	27.20	1000.0	9.000	L1	ON	9.9
0.266000	34.24	---	61.24	27.00	1000.0	9.000	L1	ON	9.9
0.286000	---	19.76	50.64	30.88	1000.0	9.000	L1	ON	9.9
0.470000	26.16	---	56.51	30.36	1000.0	9.000	L1	ON	9.9
17.126000	24.53	---	60.00	35.47	1000.0	9.000	L1	ON	10.3
19.878000	---	20.69	50.00	29.31	1000.0	9.000	L1	ON	10.3
20.194000	31.40	---	60.00	28.60	1000.0	9.000	L1	ON	10.3

Prüfbericht - Nr.: 50321015 001
Test Report No.:

Seite 78 von 118
Page 78 of 118

Figure 10: Spectral Diagrams, Conducted Emission, 150kHz - 30MHz, N

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.154000	---	34.69	55.78	21.09	1000.0	9.000	N	ON	9.8
0.154000	51.74	---	65.78	14.04	1000.0	9.000	N	ON	9.8
0.186000	---	31.04	54.21	23.17	1000.0	9.000	N	ON	9.8
0.238000	---	24.78	52.17	27.39	1000.0	9.000	N	ON	9.9
0.266000	34.01	---	61.24	27.24	1000.0	9.000	N	ON	9.9
0.286000	---	19.45	50.64	31.19	1000.0	9.000	N	ON	9.9
0.470000	26.03	---	56.51	30.48	1000.0	9.000	N	ON	9.9
19.726000	---	20.89	50.00	29.11	1000.0	9.000	N	ON	10.4
20.062000	31.75	---	60.00	28.25	1000.0	9.000	N	ON	10.4
21.190000	29.80	---	60.00	30.20	1000.0	9.000	N	ON	10.4

Prüfbericht - Nr.: 50321015 001
Test Report No.:

Seite 79 von 118
Page 79 of 118

4.1.12 Radiated Emission

Result:

Pass

Test Specification	
Test standard	: FCC Part 15.209 RSS-Gen Issue 5 March 2019 FCC Part 15, Subpart B:2018 ICES-003:2016 Class B
Basic standard	: ANSI C63.10: 2013, ANSI C63.4:2014, CISPR 16-1 series standards
Limits	: Refer to 15.209(a) ; RSS Gen Issue 5 March 2019; FCC Part 15, Subpart B:2018; ICES-003:2016 Class B
Kind of test site	: 3m Semi-anechoic Chamber

Test Setup

Date of testing	: 27.11.2019~30.12.2019
Input voltage	: AC 120v, 60Hz
Operational mode	: Light On, Test mode of BLE, LoRa DTS, LoRa FHSS, FSK FHSS(Test mode: Receiver or Transmitter continuously operating, and the worst case recorded)
Test channel	: Lo, Mi, Hi
Temperature	: 19.9°C
Relative humidity	: 56.3%
Atmospheric pressure	: 101 kPa

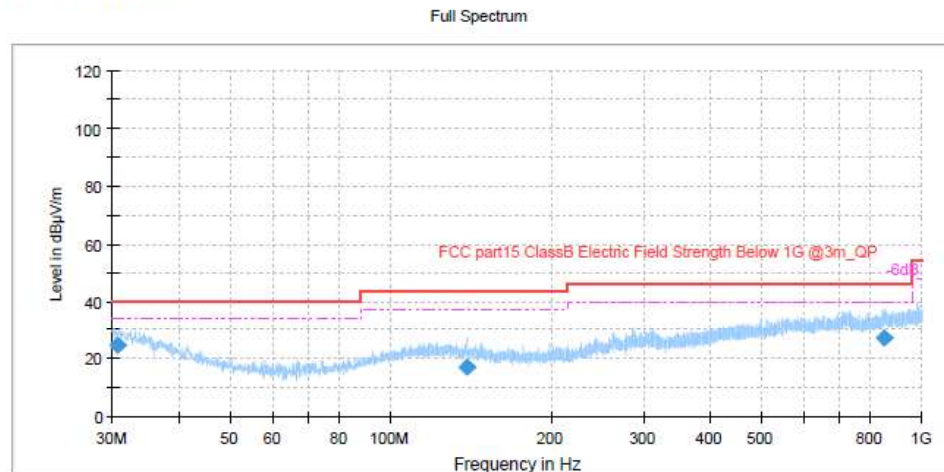
Remark:

Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case emissions configuration of the each mode were reported.

The measurement result is calculated based on the following formula by the test software:
Emission Level = Reading level + Correction (Antenna factor + Cable loss – Preamplifier)

Figure 11: Spectral Diagrams, Radiated Emission, 30MHz-1000MHz, Horizontal, for Light On mode

Full Spectrum

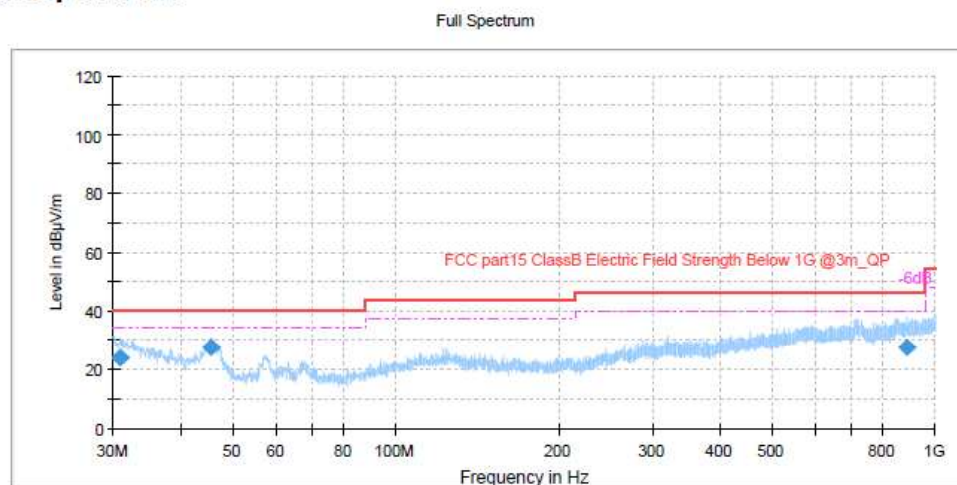


Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.642222	24.44	40.00	15.56	1000.0	120.000	150.0	H	4.0	25.0
139.037222	17.15	43.50	26.35	1000.0	120.000	104.0	H	15.0	18.5
846.963333	27.17	46.00	18.83	1000.0	120.000	100.0	H	294.0	29.4

Figure 12: Spectral Diagrams, Radiated Emission, 30MHz-1000MHz, Vertical, for Light ON mode

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.831667	24.31	40.00	15.69	1000.0	120.000	117.0	V	107.0	24.9
45.501667	27.84	40.00	12.16	1000.0	120.000	108.0	V	218.0	16.8
885.678333	27.58	46.00	18.42	1000.0	120.000	135.0	V	162.0	29.7

Table 9: BLE Test mode, Radiated Emission, below 1GHz, Horizontal, Channel 0

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.785000	24.25	40.00	15.75	1000.0	120.000	H	24.9
127.225000	18.53	43.50	24.97	1000.0	120.000	H	19.1
854.059444	27.14	46.00	18.86	1000.0	120.000	H	29.4

Table 10: BLE Test mode, Radiated Emission, below 1GHz, Vertical, Channel 0

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.842222	24.31	40.00	15.69	1000.0	120.000	V	24.9
131.936111	17.40	43.50	26.10	1000.0	120.000	V	18.8
846.318333	27.16	46.00	18.84	1000.0	120.000	V	29.4

Table 11: BLE Test mode, Radiated Emission, below 1GHz, Horizontal, Channel 19

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.545000	24.45	40.00	15.55	1000.0	120.000	H	25.0
129.917778	18.43	43.50	25.07	1000.0	120.000	H	18.9
845.800556	27.24	46.00	18.76	1000.0	120.000	H	29.4

Table 12: BLE Test mode, Radiated Emission, below 1GHz, Vertical, Channel 19

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.438889	24.51	40.00	15.49	1000.0	120.000	V	25.1
128.972222	17.58	43.50	25.92	1000.0	120.000	V	19.0
844.900000	27.28	46.00	18.72	1000.0	120.000	V	29.5

Table 13: BLE Test mode, Radiated Emission, below 1GHz, Horizontal, Channel 39

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.047222	24.16	40.00	15.84	1000.0	120.000	H	24.8
136.047222	18.17	43.50	25.33	1000.0	120.000	H	18.5
845.033889	28.16	46.00	17.84	1000.0	120.000	H	29.4

Table 14: BLE Test mode, Radiated Emission, below 1GHz, Vertical, Channel 39

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
32.149444	24.69	40.00	15.31	1000.0	120.000	V	24.2
115.244444	17.87	43.50	25.63	1000.0	120.000	V	19.4
845.251111	27.17	46.00	18.83	1000.0	120.000	V	29.4

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 82 von 118

Page 82 of 118

Table 15: LoRa 500KHz DTS, 902.5~926.5 MHz, Test mode Radiated Emission, Horizontal, CH 902.5

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.492778	25.65	40.00	14.35	1000.0	120.000	H	25.0
870.337222	41.82	46.00	4.18	1000.0	120.000	H	29.4
934.492778	40.97	46.00	5.03	1000.0	120.000	H	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
4401.060000	45.2	1000.0	1000.000	H	0.9	28.8	74.0
14592.560000	54.5	1000.0	1000.000	H	11.8	19.5	74.0
17998.405000	58.8	1000.0	1000.000	H	18.1	15.2	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
4401.060000	34.7	1000.0	1000.000	H	0.9	19.3	54.0
14592.560000	43.4	1000.0	1000.000	H	11.8	10.6	54.0
17998.405000	47.9	1000.0	1000.000	H	18.1	6.1	54.0

Table 16: LoRa 500KHz DTS, 902.5~926.5 MHz, Test mode, Radiated Emission, Vertical, CH 902.5

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.235000	25.16	40.00	14.84	1000.0	120.000	V	24.7
870.509444	41.85	46.00	4.15	1000.0	120.000	V	29.4
934.465000	44.25	46.00	1.75	1000.0	120.000	V	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1805.375000	42.9	1000.0	1000.000	V	-10.4	31.2	74.0
8321.685000	48.3	1000.0	1000.000	V	6.0	25.7	74.0
17969.185000	58.3	1000.0	1000.000	V	18.0	15.7	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1805.375000	39.5	1000.0	1000.000	V	-10.4	14.5	54.0
8321.685000	37.9	1000.0	1000.000	V	6.0	16.2	54.0
17969.185000	47.8	1000.0	1000.000	V	18.0	6.2	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 83 von 118

Page 83 of 118

Table 17: LoRa 500KHz DTS, 902.5~926.5 MHz, Test mode, Radiated Emission, Horizontal, CH 914.5

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.494444	25.71	40.00	14.29	1000.0	120.000	H	25.0
110.622222	18.61	43.50	24.89	1000.0	120.000	H	19.0
882.662222	40.36	46.00	5.64	1000.0	120.000	H	29.7

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
7970.530000	48.6	1000.0	1000.000	H	5.6	25.4	74.0
11090.560000	51.4	1000.0	1000.000	H	8.1	22.6	74.0
17989.375000	58.2	1000.0	1000.000	H	18.2	15.8	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
7970.530000	37.9	1000.0	1000.000	H	5.6	16.1	54.0
11090.560000	40.0	1000.0	1000.000	H	8.1	14.0	54.0
17989.375000	47.4	1000.0	1000.000	H	18.2	6.6	54.0

Table 18: LoRa 500KHz DTS, 902.5~926.5 MHz, Test mode, Radiated Emission, Vertical, CH 914.5

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.544444	24.19	40.00	15.81	1000.0	120.000	V	24.5
882.582222	43.83	46.00	2.17	1000.0	120.000	V	29.7
946.572778	44.27	46.00	1.73	1000.0	120.000	V	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1828.220000	43.2	1000.0	1000.000	V	-10.2	30.8	74.0
4343.685000	45.1	1000.0	1000.000	V	1.3	28.9	74.0
8801.405000	48.8	1000.0	1000.000	V	6.3	25.2	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1828.220000	39.0	1000.0	1000.000	V	-10.2	15.0	54.0
4343.685000	34.8	1000.0	1000.000	V	1.3	19.2	54.0
8801.405000	37.8	1000.0	1000.000	V	6.3	16.2	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 84 von 118

Page 84 of 118

Table 19: LoRa 500KHz DTS, 902.5~926.5 MHz, Test mode, Radiated Emission, Horizontal, CH 926.5

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.040000	25.93	40.00	14.07	1000.0	120.000	H	25.3
123.788333	18.87	43.50	24.63	1000.0	120.000	H	19.2
894.521111	37.82	46.00	8.18	1000.0	120.000	H	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1853.185000	40.9	1000.0	1000.000	H	-10.2	33.1	74.0
4283.655000	45.7	1000.0	1000.000	H	1.1	28.3	74.0
8017.810000	49.4	1000.0	1000.000	H	5.6	24.7	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1853.185000	35.7	1000.0	1000.000	H	-10.2	18.3	54.0
4283.655000	34.5	1000.0	1000.000	H	1.1	19.5	54.0
8017.810000	38.4	1000.0	1000.000	H	5.6	15.6	54.0

Table 20: LoRa 500KHz DTS, 902.5~926.5 MHz, Test mode, Radiated Emission, Vertical, CH 926.5

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.762222	25.43	40.00	14.57	1000.0	120.000	V	24.9
806.677222	30.12	46.00	15.88	1000.0	120.000	V	28.7
894.535000	38.62	46.00	7.38	1000.0	120.000	V	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1852.655000	43.1	1000.0	1000.000	V	-10.2	30.9	74.0
8761.030000	49.0	1000.0	1000.000	V	6.3	25.0	74.0
10024.875000	50.1	1000.0	1000.000	V	6.9	23.9	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1852.655000	39.4	1000.0	1000.000	V	-10.2	14.7	54.0
8761.030000	38.1	1000.0	1000.000	V	6.3	15.9	54.0
10024.875000	39.2	1000.0	1000.000	V	6.9	14.8	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 85 von 118

Page 85 of 118

Table 21: LoRa 500KHz DTS, 903~914.2MHz, Test mode, Radiated Emission, Horizontal, CH 903

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.654444	24.31	40.00	15.69	1000.0	120.000	H	25.0
129.405000	18.40	43.50	25.10	1000.0	120.000	H	18.9
871.034444	40.79	46.00	5.21	1000.0	120.000	H	29.4

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1805.905000	49.2	1000.0	1000.000	H	-10.4	24.8	74.0
9349.125000	49.9	1000.0	1000.000	H	6.4	24.1	74.0
17985.125000	58.5	1000.0	1000.000	H	18.2	15.5	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1805.905000	47.2	1000.0	1000.000	H	-10.4	6.9	54.0
9349.125000	39.1	1000.0	1000.000	H	6.4	14.9	54.0
17985.125000	47.7	1000.0	1000.000	H	18.2	6.3	54.0

Table 22: LoRa 500KHz DTS, 903~914.2 MHz, Test mode, Radiated Emission, Vertical, CH 903

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.273333	24.91	40.00	15.09	1000.0	120.000	V	24.6
870.810000	42.43	46.00	3.57	1000.0	120.000	V	29.4
935.097778	44.73	46.00	1.27	1000.0	120.000	V	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1805.905000	50.1	1000.0	1000.000	V	-10.4	23.9	74.0
9307.155000	50.1	1000.0	1000.000	V	6.4	23.9	74.0
17983.530000	58.5	1000.0	1000.000	V	18.1	15.6	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1805.905000	48.8	1000.0	1000.000	V	-10.4	5.3	54.0
9307.155000	39.4	1000.0	1000.000	V	6.4	14.6	54.0
17983.530000	47.5	1000.0	1000.000	V	18.1	6.5	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 86 von 118

Page 86 of 118

Table 23: LoRa 500KHz DTS, 903~914.2MHz, Test mode, Radiated Emission, Horizontal, CH 907.8

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.360000	24.48	40.00	15.52	1000.0	120.000	H	25.1
875.726111	41.32	46.00	4.68	1000.0	120.000	H	29.5
939.598333	42.65	46.00	3.35	1000.0	120.000	H	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1816.000000	47.5	1000.0	1000.000	H	-10.5	26.5	74.0
10603.935000	50.6	1000.0	1000.000	H	7.7	23.4	74.0
17677.000000	57.5	1000.0	1000.000	H	17.0	16.5	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1816.000000	45.7	1000.0	1000.000	H	-10.5	8.3	54.0
10603.935000	39.7	1000.0	1000.000	H	7.7	14.3	54.0
17677.000000	46.6	1000.0	1000.000	H	17.0	7.4	54.0

Table 24: LoRa 500KHz DTS, 903~914.2 MHz, Test mode, Radiated Emission, Vertical, CH 907.8

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.400000	24.48	40.00	15.52	1000.0	120.000	V	25.1
875.967778	43.66	46.00	2.34	1000.0	120.000	V	29.5
939.824444	44.51	46.00	1.49	1000.0	120.000	V	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1816.000000	48.2	1000.0	1000.000	V	-10.5	25.9	74.0
8016.220000	49.5	1000.0	1000.000	V	5.6	24.5	74.0
17992.030000	58.3	1000.0	1000.000	V	18.1	15.7	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1816.000000	46.5	1000.0	1000.000	V	-10.5	7.5	54.0
8016.220000	38.7	1000.0	1000.000	V	5.6	15.3	54.0
17992.030000	47.4	1000.0	1000.000	V	18.1	6.7	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 87 von 118

Page 87 of 118

Table 25: LoRa 500KHz DTS, 903~914.2MHz, Test mode, Radiated Emission, Horizontal, CH 914.2

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.543333	24.42	40.00	15.58	1000.0	120.000	H	25.0
882.140556	39.74	46.00	6.26	1000.0	120.000	H	29.7
946.103333	41.39	46.00	4.61	1000.0	120.000	H	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1828.750000	45.7	1000.0	1000.000	H	-10.2	28.3	74.0
8181.970000	48.5	1000.0	1000.000	H	5.8	25.6	74.0
18000.000000	58.4	1000.0	1000.000	H	18.1	15.6	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1828.750000	43.3	1000.0	1000.000	H	-10.2	10.7	54.0
8181.970000	37.5	1000.0	1000.000	H	5.8	16.5	54.0
18000.000000	47.1	1000.0	1000.000	H	18.1	6.9	54.0

Table 26: LoRa 500KHz DTS, 903~914.2 MHz, Test mode, Radiated Emission, Vertical, CH 914.2

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.291111	24.59	40.00	15.41	1000.0	120.000	V	25.1
882.337222	43.55	46.00	2.45	1000.0	120.000	V	29.7
946.143333	44.34	46.00	1.66	1000.0	120.000	V	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1828.220000	47.9	1000.0	1000.000	V	-10.2	26.1	74.0
8033.220000	49.8	1000.0	1000.000	V	5.7	24.2	74.0
17738.095000	57.5	1000.0	1000.000	V	17.1	16.5	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1828.220000	45.5	1000.0	1000.000	V	-10.2	10.7	54.0
8033.220000	38.6	1000.0	1000.000	V	5.8	16.5	54.0
17738.095000	46.8	1000.0	1000.000	V	18.1	6.9	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 88 von 118

Page 88 of 118

Table 27: LoRa 500KHz DTS, 923.3~926.9MHz, Test mode, Radiated Emission, Horizontal, CH 923.3

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.494444	24.45	40.00	15.55	1000.0	120.000	H	25.0
113.613889	18.61	43.50	24.89	1000.0	120.000	H	19.2
891.070556	40.06	46.00	5.94	1000.0	120.000	H	29.8

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1846.280000	46.0	1000.0	1000.000	H	-10.1	28.0	74.0
8033.750000	48.9	1000.0	1000.000	H	5.7	25.1	74.0
17967.060000	57.7	1000.0	1000.000	H	18.0	16.3	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1846.280000	43.7	1000.0	1000.000	H	-10.1	10.3	54.0
8033.750000	38.7	1000.0	1000.000	H	5.7	15.3	54.0
17967.060000	46.9	1000.0	1000.000	H	18.0	7.1	54.0

Table 28: LoRa 500KHz DTS, 923.3~926.9MHz, Test mode, Radiated Emission, Vertical, CH 923.3

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.748333	24.35	40.00	15.65	1000.0	120.000	V	24.9
845.868333	28.40	46.00	17.60	1000.0	120.000	V	29.4
891.432222	42.74	46.00	3.26	1000.0	120.000	V	29.8

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1845.750000	44.7	1000.0	1000.000	V	-10.1	29.3	74.0
7965.750000	48.5	1000.0	1000.000	V	5.5	25.5	74.0
17883.655000	58.0	1000.0	1000.000	V	17.6	16.0	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1845.750000	41.3	1000.0	1000.000	V	-10.1	12.7	54.0
7965.750000	38.0	1000.0	1000.000	V	5.5	16.0	54.0
17883.655000	47.0	1000.0	1000.000	V	17.6	7.0	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 89 von 118

Page 89 of 118

Table 29: LoRa 500KHz DTS, 923.3~926.9MHz, Test mode, Radiated Emission, Horizontal, CH 925.1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.131111	24.71	40.00	15.29	1000.0	120.000	H	25.2
134.015000	18.18	43.50	25.32	1000.0	120.000	H	18.7
892.932222	37.87	46.00	8.13	1000.0	120.000	H	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1850.530000	45.7	1000.0	1000.000	H	-10.2	28.3	74.0
8096.435000	49.5	1000.0	1000.000	H	5.8	24.5	74.0
17959.625000	57.6	1000.0	1000.000	H	17.9	16.4	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1850.530000	42.8	1000.0	1000.000	H	-10.2	11.2	54.0
8096.435000	38.4	1000.0	1000.000	H	5.8	15.6	54.0
17959.625000	46.7	1000.0	1000.000	H	17.9	7.4	54.0

Table 30: LoRa 500KHz DTS, 923.3~926.9MHz, Test mode, Radiated Emission, Vertical, CH 925.1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.262778	24.99	40.00	15.01	1000.0	120.000	V	24.6
127.670000	18.61	43.50	24.89	1000.0	120.000	V	19.0
893.210556	41.62	46.00	4.38	1000.0	120.000	V	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1850.530000	45.0	1000.0	1000.000	V	-10.2	29.0	74.0
9833.095000	50.3	1000.0	1000.000	V	6.6	23.7	74.0
17843.810000	58.2	1000.0	1000.000	V	17.5	15.8	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1850.530000	42.4	1000.0	1000.000	V	-10.2	11.6	54.0
9833.095000	38.8	1000.0	1000.000	V	6.6	15.2	54.0
17843.810000	46.8	1000.0	1000.000	V	17.5	7.2	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 90 von 118

Page 90 of 118

Table 31: LoRa 500KHz DTS, 923.3~926.9MHz, Test mode, Radiated Emission, Horizontal, CH 926.9

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.450556	24.88	40.00	15.12	1000.0	120.000	H	24.5
127.020000	18.55	43.50	24.95	1000.0	120.000	H	19.1
894.855000	41.64	46.00	4.36	1000.0	120.000	H	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1853.720000	45.3	1000.0	1000.000	H	-10.2	28.7	74.0
8114.500000	48.7	1000.0	1000.000	H	5.8	25.3	74.0
17974.500000	57.6	1000.0	1000.000	H	18.1	16.4	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1853.720000	43.2	1000.0	1000.000	H	-10.2	10.8	54.0
8114.500000	38.3	1000.0	1000.000	H	5.8	15.7	54.0
17974.500000	47.1	1000.0	1000.000	H	18.1	6.9	54.0

Table 32: LoRa 500KHz DTS, 923.3~926.9MHz, Test mode, Radiated Emission, Vertical, CH 926.9

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
32.106111	22.60	40.00	17.40	1000.0	120.000	V	24.2
127.558889	18.56	43.50	24.94	1000.0	120.000	V	19.0
895.124444	43.25	46.00	2.75	1000.0	120.000	V	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1853.185000	43.4	1000.0	1000.000	V	-10.2	30.6	74.0
8022.060000	49.2	1000.0	1000.000	V	5.6	24.8	74.0
17884.720000	57.6	1000.0	1000.000	V	17.7	16.4	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1853.185000	40.2	1000.0	1000.000	V	-10.2	13.8	54.0
8022.060000	38.6	1000.0	1000.000	V	5.6	15.4	54.0
17884.720000	46.7	1000.0	1000.000	V	17.7	7.3	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 91 von 118

Page 91 of 118

Table 33: LoRa 250KHz FHSS, 902.3~926.7MHz, Test mode, Radiated Emission, Horizontal, CH 902.3

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.040000	24.81	40.00	15.19	1000.0	120.000	H	25.3
136.370556	18.15	43.50	25.35	1000.0	120.000	H	18.6
870.257222	44.08	46.00	1.92	1000.0	120.000	H	29.4

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1804.845000	47.9	1000.0	1000.000	H	-10.4	26.1	74.0
2706.375000	46.4	1000.0	1000.000	H	-5.5	27.6	74.0
17703.030000	57.4	1000.0	1000.000	H	17.1	16.6	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1804.845000	46.0	1000.0	1000.000	H	-10.4	8.1	54.0
2706.375000	42.6	1000.0	1000.000	H	-5.5	11.4	54.0
17703.030000	46.8	1000.0	1000.000	H	17.1	7.2	54.0

Table 34: LoRa 250KHz FHSS, 902.3~926.7MHz, Test mode, Radiated Emission, Vertical, CH 902.3

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.343333	24.53	40.00	15.47	1000.0	120.000	V	25.1
870.417222	44.12	46.00	1.88	1000.0	120.000	V	29.4
934.171111	44.02	46.00	1.98	1000.0	120.000	V	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1804.845000	48.2	1000.0	1000.000	V	-10.4	25.8	74.0
8085.280000	50.4	1000.0	1000.000	V	5.8	23.7	74.0
17867.720000	57.6	1000.0	1000.000	V	17.6	16.5	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1804.845000	46.8	1000.0	1000.000	V	0.0	-10.4	7.2	54.0
8085.280000	38.3	1000.0	1000.000	V	0.0	5.8	15.7	54.0
17867.720000	46.8	1000.0	1000.000	V	0.0	17.6	7.2	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 92 von 118

Page 92 of 118

Table 35: LoRa 250KHz FHSS, 902.3~926.7MHz, Test mode, Radiated Emission, Horizontal, CH 914.3

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.087222	21.17	40.00	18.83	1000.0	120.000	H	24.7
882.206667	41.45	46.00	4.55	1000.0	120.000	H	29.7
946.200556	35.80	46.00	10.20	1000.0	120.000	H	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1828.220000	49.6	1000.0	1000.000	H	-10.2	24.4	74.0
8079.435000	49.8	1000.0	1000.000	H	5.8	24.2	74.0
17716.845000	57.5	1000.0	1000.000	H	17.1	16.5	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1828.220000	47.8	1000.0	1000.000	H	-10.2	6.3	54.0
8079.435000	38.7	1000.0	1000.000	H	5.8	15.3	54.0
17716.845000	46.8	1000.0	1000.000	H	17.1	7.2	54.0

Table 36: LoRa 250KHz FHSS, 902.3~926.7MHz, Test mode, Radiated Emission, Vertical, CH 914.3

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.280000	24.59	40.00	15.41	1000.0	120.000	V	25.1
130.211667	18.42	43.50	25.08	1000.0	120.000	V	18.9
882.286667	41.63	46.00	4.37	1000.0	120.000	V	29.7

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1828.750000	49.1	1000.0	1000.000	V	-10.2	24.9	74.0
7020.125000	48.1	1000.0	1000.000	V	4.8	25.9	74.0
17892.685000	57.2	1000.0	1000.000	V	17.7	16.8	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1828.750000	47.6	1000.0	1000.000	V	-10.2	6.4	54.0
7020.125000	37.4	1000.0	1000.000	V	4.8	16.7	54.0
17892.685000	46.8	1000.0	1000.000	V	17.7	7.2	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 93 von 118

Page 93 of 118

Table 37: LoRa 250KHz FHSS, 902.3~926.7MHz, Test mode, Radiated Emission, Horizontal, CH 926.7

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.562222	24.42	40.00	15.58	1000.0	120.000	H	25.0
134.550556	18.33	43.50	25.17	1000.0	120.000	H	18.7
894.815000	38.95	46.00	7.05	1000.0	120.000	H	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1853.185000	48.0	1000.0	1000.000	H	-10.2	26.0	74.0
8061.905000	49.9	1000.0	1000.000	H	5.7	24.1	74.0
17911.280000	58.3	1000.0	1000.000	H	17.8	15.7	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1853.185000	46.3	1000.0	1000.000	H	-10.2	7.7	54.0
8061.905000	38.8	1000.0	1000.000	H	5.7	15.2	54.0
17911.280000	46.9	1000.0	1000.000	H	17.8	7.1	54.0

Table 38: LoRa 250KHz FHSS, 902.3~926.7MHz, Test mode, Radiated Emission, Vertical, CH 926.7

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.120000	24.69	40.00	15.31	1000.0	120.000	V	25.2
129.432778	18.62	43.50	24.88	1000.0	120.000	V	18.9
894.735000	41.48	46.00	4.52	1000.0	120.000	V	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1853.720000	47.5	1000.0	1000.000	V	-10.2	26.6	74.0
8012.500000	49.4	1000.0	1000.000	V	5.6	24.6	74.0
17925.095000	58.1	1000.0	1000.000	V	17.8	15.9	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1853.720000	45.5	1000.0	1000.000	V	-10.2	8.5	54.0
8012.500000	38.9	1000.0	1000.000	V	5.6	15.1	54.0
17925.095000	47.2	1000.0	1000.000	V	17.8	6.8	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 94 von 118

Page 94 of 118

Table 39: LoRa 125KHz FHSS, 902.3~914.9MHz, Test mode, Radiated Emission, Horizontal, CH 902.3

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.810556	22.81	40.00	17.19	1000.0	120.000	H	24.3
870.255556	43.62	46.00	2.38	1000.0	120.000	H	29.4
934.275556	40.04	46.00	5.96	1000.0	120.000	H	29.9

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1804.310000	44.0	1000.0	1000.000	H	-10.3	30.0	74.0
8137.345000	48.9	1000.0	1000.000	H	5.8	25.1	74.0
17963.345000	57.8	1000.0	1000.000	H	18.0	16.2	74.0
17963.345000	57.8	1000.0	1000.000	H	18.0	16.2	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1804.310000	41.4	1000.0	1000.000	H	-10.3	12.6	54.0
8137.345000	38.2	1000.0	1000.000	H	5.8	15.8	54.0
17963.345000	47.2	1000.0	1000.000	H	18.0	6.8	54.0
17963.345000	47.2	1000.0	1000.000	H	18.0	6.8	54.0

Table 40: LoRa 125KHz FHSS, 902.3~914.9MHz, Test mode, Radiated Emission, Vertical, CH 902.3

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.515000	23.02	40.00	16.98	1000.0	120.000	V	24.5
870.323333	39.34	46.00	6.66	1000.0	120.000	V	29.4
934.343333	44.30	46.00	1.70	1000.0	120.000	V	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1804.845000	46.4	1000.0	1000.000	V	-10.4	27.6	74.0
8132.030000	49.9	1000.0	1000.000	V	5.8	24.1	74.0
17986.185000	57.5	1000.0	1000.000	V	18.2	16.5	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1804.845000	43.4	1000.0	1000.000	V	-10.4	10.6	54.0
8132.030000	38.5	1000.0	1000.000	V	5.8	15.5	54.0
17986.185000	47.0	1000.0	1000.000	V	18.2	7.1	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 95 von 118

Page 95 of 118

Table 41: LoRa 125KHz FHSS, 902.3~914.9MHz, Test mode, Radiated Emission, Horizontal, CH 908.5

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.000000	24.93	40.00	15.07	1000.0	120.000	H	25.3
729.188333	29.74	46.00	16.26	1000.0	120.000	H	28.1
940.486667	39.42	46.00	6.58	1000.0	120.000	H	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1817.060000	43.7	1000.0	1000.000	H	-10.5	30.4	74.0
8085.280000	49.3	1000.0	1000.000	H	5.8	24.7	74.0
17773.155000	56.8	1000.0	1000.000	H	17.2	17.2	74.0

Limit and Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1817.060000	39.9	1000.0	1000.000	H	-10.5	14.2	54.0
8085.280000	38.3	1000.0	1000.000	H	5.8	15.7	54.0
17773.155000	46.6	1000.0	1000.000	H	17.2	7.4	54.0

Table 42: LoRa 125KHz FHSS, 902.3~914.9MHz, Test mode, Radiated Emission, Vertical, CH 908.5

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.160000	24.76	40.00	15.24	1000.0	120.000	V	25.2
876.506667	42.14	46.00	3.86	1000.0	120.000	V	29.5
940.446667	42.04	46.00	3.96	1000.0	120.000	V	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1816.530000	44.2	1000.0	1000.000	V	-10.5	29.8	74.0
8045.970000	49.4	1000.0	1000.000	V	5.7	24.6	74.0
17966.530000	57.2	1000.0	1000.000	V	18.0	16.8	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1816.530000	41.8	1000.0	1000.000	V	-10.5	12.2	54.0
8045.970000	38.8	1000.0	1000.000	V	5.7	15.2	54.0
17966.530000	46.9	1000.0	1000.000	V	18.0	7.1	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 96 von 118

Page 96 of 118

Table 43: LoRa 125KHz FHSS, 902.3~914.9MHz, Test mode, Radiated Emission, Horizontal, CH 914.9

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.243889	24.00	40.00	16.00	1000.0	120.000	H	24.7
882.905556	41.42	46.00	4.58	1000.0	120.000	H	29.7
946.885556	40.38	46.00	5.62	1000.0	120.000	H	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1829.810000	48.1	1000.0	1000.000	H	-10.1	26.0	74.0
7993.905000	49.0	1000.0	1000.000	H	5.6	25.0	74.0
17175.500000	55.8	1000.0	1000.000	H	15.1	18.2	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1829.810000	45.9	1000.0	1000.000	H	-10.1	8.1	54.0
7993.905000	38.7	1000.0	1000.000	H	5.6	15.3	54.0
17175.500000	45.4	1000.0	1000.000	H	15.1	8.6	54.0

Table 44: LoRa 125KHz FHSS, 902.3~914.9MHz, Test mode, Radiated Emission, Vertical, CH 914.9

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.400556	24.57	40.00	15.43	1000.0	120.000	V	25.1
882.933333	42.31	46.00	3.69	1000.0	120.000	V	29.7
946.965556	40.26	46.00	5.74	1000.0	120.000	V	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1829.810000	48.9	1000.0	1000.000	V	-10.1	25.1	74.0
8090.060000	49.4	1000.0	1000.000	V	5.8	24.6	74.0
17878.345000	57.1	1000.0	1000.000	V	17.6	16.9	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1829.810000	47.2	1000.0	1000.000	V	-10.1	6.8	54.0
8090.060000	38.6	1000.0	1000.000	V	5.8	15.4	54.0
17878.345000	46.4	1000.0	1000.000	V	17.6	7.6	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 97 von 118

Page 97 of 118

Table 45: FSK 150Kbps FHSS, 902.4~927.6MHz, Test mode, Radiated Emission, Horizontal, CH 902.4

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
846.824444	35.03	46.00	10.97	1000.0	120.000	H	29.4
870.417222	44.28	46.00	1.72	1000.0	120.000	H	29.4
934.397222	40.74	46.00	5.26	1000.0	120.000	H	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
2706.905000	42.8	1000.0	1000.000	H	-5.5	31.2	74.0
4326.155000	45.9	1000.0	1000.000	H	1.2	28.1	74.0
8655.845000	49.0	1000.0	1000.000	H	6.1	25.0	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
2706.905000	35.7	1000.0	1000.000	H	-5.5	18.3	54.0
4326.155000	34.8	1000.0	1000.000	H	1.2	19.2	54.0
8655.845000	38.3	1000.0	1000.000	H	6.1	15.8	54.0

Table 46: FSK 150Kbps FHSS, 902.4~927.6MHz, Test mode, Radiated Emission, Vertical, CH 902.4

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.080000	25.89	40.00	14.11	1000.0	120.000	V	25.2
870.377222	40.19	46.00	5.81	1000.0	120.000	V	29.4
934.371111	40.40	46.00	5.60	1000.0	120.000	V	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1804.310000	42.1	1000.0	1000.000	V	-10.3	32.0	74.0
6492.060000	46.2	1000.0	1000.000	V	3.6	27.8	74.0
8671.780000	49.1	1000.0	1000.000	V	6.1	25.0	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1804.310000	37.2	1000.0	1000.000	V	-10.3	16.8	54.0
6492.060000	35.5	1000.0	1000.000	V	3.6	18.5	54.0
8671.780000	37.9	1000.0	1000.000	V	6.1	16.1	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 98 von 118

Page 98 of 118

Table 47: FSK 150Kbps FHSS, 902.4~927.6MHz, Test mode, Radiated Emission, Horizontal, CH 914.8

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.560000	25.55	40.00	14.45	1000.0	120.000	H	25.0
116.927222	18.97	43.50	24.53	1000.0	120.000	H	19.4
895.475556	40.46	46.00	5.54	1000.0	120.000	H	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
2744.625000	43.8	1000.0	1000.000	H	-5.5	30.2	74.0
4238.500000	45.2	1000.0	1000.000	H	0.8	28.8	74.0
8127.250000	49.3	1000.0	1000.000	H	5.8	24.7	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
2744.625000	37.9	1000.0	1000.000	H	-5.5	16.1	54.0
4238.500000	34.2	1000.0	1000.000	H	0.8	19.8	54.0
8127.250000	38.3	1000.0	1000.000	H	5.8	15.7	54.0

Table 48: FSK 150Kbps FHSS, 902.4~927.6MHz, Test mode, Radiated Emission, Vertical, CH 914.8

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.763889	25.44	40.00	14.56	1000.0	120.000	V	24.9
882.811667	44.52	46.00	1.48	1000.0	120.000	V	29.7
946.791667	43.76	46.00	2.24	1000.0	120.000	V	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1829.810000	44.0	1000.0	1000.000	V	-10.1	30.0	74.0
4356.970000	45.5	1000.0	1000.000	V	1.2	28.5	74.0
8025.250000	49.0	1000.0	1000.000	V	5.6	25.0	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1829.810000	40.6	1000.0	1000.000	V	-10.1	13.5	54.0
4356.970000	34.6	1000.0	1000.000	V	1.2	19.4	54.0
8025.250000	38.5	1000.0	1000.000	V	5.6	15.5	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 99 von 118

Page 99 of 118

Table 49: FSK 150Kbps FHSS, 902.4~927.6MHz, Test mode, Radiated Emission, Horizontal, CH 927.6

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.431667	25.01	40.00	14.99	1000.0	120.000	H	24.5
126.402778	18.77	43.50	24.73	1000.0	120.000	H	19.1
895.597222	42.95	46.00	3.05	1000.0	120.000	H	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1854.780000	39.4	1000.0	1000.000	H	-10.2	34.6	74.0
4282.595000	44.7	1000.0	1000.000	H	1.1	29.3	74.0
7535.435000	47.9	1000.0	1000.000	H	5.2	26.1	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1854.780000	32.0	1000.0	1000.000	H	-10.2	22.0	54.0
4282.595000	34.3	1000.0	1000.000	H	1.1	19.7	54.0
7535.435000	37.3	1000.0	1000.000	H	5.2	16.7	54.0

Table 50: FSK 150Kbps FHSS, 902.4~927.6MHz, Test mode, Radiated Emission, Vertical, CH 927.6

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.120000	25.86	40.00	14.14	1000.0	120.000	V	25.2
739.873889	27.97	46.00	18.03	1000.0	120.000	V	28.4
895.597222	43.15	46.00	2.85	1000.0	120.000	V	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1855.310000	42.6	1000.0	1000.000	V	-10.2	31.4	74.0
4483.935000	44.4	1000.0	1000.000	V	0.8	29.6	74.0
7492.405000	48.6	1000.0	1000.000	V	5.2	25.4	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1855.310000	38.3	1000.0	1000.000	V	-10.2	15.8	54.0
4483.935000	34.1	1000.0	1000.000	V	0.8	19.9	54.0
7492.405000	37.8	1000.0	1000.000	V	5.2	16.2	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 100 von 118

Page 100 of 118

Table 51: FSK 50Kbps FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Horizontal, CH 902.2

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.909444	25.88	40.00	14.12	1000.0	120.000	H	24.3
852.338333	35.97	46.00	10.03	1000.0	120.000	H	29.4
870.175556	45.18	46.00	0.82	1000.0	120.000	H	29.4

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
2706.375000	44.6	1000.0	1000.000	H	-5.5	29.4	74.0
4855.810000	46.1	1000.0	1000.000	H	1.4	27.9	74.0
7481.250000	48.8	1000.0	1000.000	H	5.2	25.2	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
2706.375000	38.7	1000.0	1000.000	H	-5.5	15.3	54.0
4855.810000	34.5	1000.0	1000.000	H	1.4	19.5	54.0
7481.250000	38.1	1000.0	1000.000	H	5.2	15.9	54.0

Table 52: FSK 50Kbps FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Vertical, CH 902.2

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
844.013333	31.03	46.00	14.97	1000.0	120.000	V	29.5
870.201667	43.28	46.00	2.72	1000.0	120.000	V	29.4
934.221667	42.34	46.00	3.66	1000.0	120.000	V	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1804.310000	47.6	1000.0	1000.000	V	-10.3	26.4	74.0
4298.000000	45.6	1000.0	1000.000	V	1.2	28.4	74.0
8542.685000	49.3	1000.0	1000.000	V	5.9	24.7	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
11804.310000	44.6	1000.0	1000.000	100.0	V	-10.3	9.4	54.0
4298.000000	34.7	1000.0	1000.000	100.0	V	1.2	19.3	54.0
8542.685000	37.9	1000.0	1000.000	100.0	V	5.9	16.1	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 101 von 118

Page 101 of 118

Table 53: FSK 50Kbps FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Horizontal, CH 915

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
869.662778	34.73	46.00	11.27	1000.0	120.000	H	29.4
883.027222	45.77	46.00	0.23	1000.0	120.000	H	29.7
946.967222	39.42	46.00	6.58	1000.0	120.000	H	30.0

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
2745.155000	42.7	1000.0	1000.000	H	-5.5	31.3	74.0
4285.780000	45.1	1000.0	1000.000	H	1.1	28.9	74.0
8013.560000	49.2	1000.0	1000.000	H	5.6	24.8	74.0

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
2745.155000	35.8	1000.0	1000.000	H	-5.5	18.2	54.0
4285.780000	34.6	1000.0	1000.000	H	1.1	19.4	54.0
8013.560000	38.3	1000.0	1000.000	H	5.6	15.7	54.0

Table 54: FSK 50Kbps FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Vertical, CH 915

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
729.508333	28.50	46.00	17.50	1000.0	120.000	V	28.1
882.987222	45.77	46.00	0.23	1000.0	120.000	V	29.7
946.967222	42.72	46.00	3.28	1000.0	120.000	V	30.0

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
1829.810000	44.3	1000.0	1000.000	V	-10.1	29.7	74.0
4386.185000	45.2	1000.0	1000.000	V	1.0	28.8	74.0
8064.030000	48.8	1000.0	1000.000	V	5.7	25.2	74.0

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
1829.810000	40.9	1000.0	1000.000	V	-10.1	13.1	54.0
4386.185000	34.8	1000.0	1000.000	V	1.0	19.2	54.0
8064.030000	38.3	1000.0	1000.000	V	5.7	15.7	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 102 von 118

Page 102 of 118

Table 55: FSK 50Kbps FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Horizontal, CH 927.8

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.280000	25.83	40.00	14.17	1000.0	120.000	H	25.1
781.436111	32.81	46.00	13.19	1000.0	120.000	H	28.7
895.812778	45.66	46.00	0.34	1000.0	120.000	H	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
2104.470000	38.1	1000.0	1000.000	H	-8.7	35.9	74.0
4313.405000	44.7	1000.0	1000.000	H	1.2	29.3	74.0
7528.000000	47.9	1000.0	1000.000	H	5.2	26.1	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
2104.470000	27.1	1000.0	1000.000	H	-8.7	26.9	54.0
4313.405000	34.6	1000.0	1000.000	H	1.2	19.4	54.0
7528.000000	37.1	1000.0	1000.000	H	5.2	16.9	54.0

Table 56: FSK 50Kbps FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Vertical, CH 927.8

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.612778	25.65	40.00	14.35	1000.0	120.000	V	25.0
735.830556	30.66	46.00	15.34	1000.0	120.000	V	28.3
895.812778	44.22	46.00	1.78	1000.0	120.000	V	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1855.845000	42.4	1000.0	1000.000	V	-10.2	31.6	74.0
4431.875000	45.3	1000.0	1000.000	V	0.8	28.7	74.0
7567.310000	48.7	1000.0	1000.000	V	5.3	25.3	74.0

Limit and Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1855.845000	38.3	1000.0	1000.000	V	-10.2	15.7	54.0
4431.875000	34.4	1000.0	1000.000	V	0.8	19.6	54.0
7567.310000	37.4	1000.0	1000.000	V	5.3	16.6	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 103 von 118

Page 103 of 118

Table 57: FSK 5Kbps FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Horizontal, CH 902.2

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.816111	24.27	40.00	15.73	1000.0	120.000	H	24.9
128.624444	18.69	43.50	24.81	1000.0	120.000	H	19.0
870.201667	41.75	46.00	4.25	1000.0	120.000	H	29.4

Limit and Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
1803.780000	44.5	1000.0	1000.000	H	-10.3	29.5	74.0
8093.250000	49.8	1000.0	1000.000	H	5.8	24.2	74.0
17905.435000	57.8	1000.0	1000.000	H	17.7	16.2	74.0

Limit and Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
1803.780000	41.7	1000.0	1000.000	H	-10.3	12.4	54.0
8093.250000	38.8	1000.0	1000.000	H	5.8	15.2	54.0
17905.435000	46.9	1000.0	1000.000	H	17.7	7.1	54.0

Table 58: FSK 5Kbps FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Vertical, CH 902.2

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.280000	24.66	40.00	15.34	1000.0	120.000	V	25.1
870.215556	44.02	46.00	1.98	1000.0	120.000	V	29.4
934.221667	41.66	46.00	4.34	1000.0	120.000	V	29.9

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth d(deg)	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
1804.845000	46.7	1000.0	1000.000	V	0.0	-10.4	27.3	74.0
10524.250000	51.0	1000.0	1000.000	V	0.0	7.6	23.0	74.0
17718.435000	57.5	1000.0	1000.000	V	0.0	17.1	16.5	74.0

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
1804.845000	43.9	1000.0	1000.000	V	-10.4	10.1	54.0
10524.250000	40.3	1000.0	1000.000	V	7.6	13.7	54.0
17718.435000	46.6	1000.0	1000.000	V	17.1	7.4	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 104 von 118

Page 104 of 118

Table 59: FSK 5Kbps FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Horizontal, CH 915

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.842222	24.28	40.00	15.72	1000.0	120.000	H	24.9
883.027222	44.81	46.00	1.19	1000.0	120.000	H	29.7
946.993333	44.87	46.00	1.13	1000.0	120.000	H	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1829.810000	46.2	1000.0	1000.000	H	-10.1	27.8	74.0
8080.500000	48.9	1000.0	1000.000	H	5.8	25.2	74.0
17973.435000	57.7	1000.0	1000.000	H	18.0	16.3	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1829.810000	43.8	1000.0	1000.000	H	-10.1	10.2	54.0
8080.500000	38.3	1000.0	1000.000	H	5.8	15.8	54.0
17973.435000	46.9	1000.0	1000.000	H	18.0	7.1	54.0

Table 60: FSK 5Kbps FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Vertical, CH 915

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.358889	21.59	40.00	18.41	1000.0	120.000	V	25.1
882.987222	44.17	46.00	1.83	1000.0	120.000	V	29.7
947.007222	45.27	46.00	0.73	1000.0	120.000	V	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1829.810000	47.2	1000.0	1000.000	V	-10.1	26.8	74.0
7499.845000	49.0	1000.0	1000.000	V	5.2	25.0	74.0
17977.155000	57.5	1000.0	1000.000	V	18.1	16.5	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1829.810000	45.5	1000.0	1000.000	V	-10.1	8.5	54.0
7499.845000	37.8	1000.0	1000.000	V	5.2	16.2	54.0
17977.155000	46.8	1000.0	1000.000	V	18.1	7.2	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 105 von 118

Page 105 of 118

Table 61: FSK 5Kbps FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Horizontal, CH 927.8

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.508333	24.45	40.00	15.55	1000.0	120.000	H	25.0
123.771111	18.70	43.50	24.80	1000.0	120.000	H	19.2
895.798889	44.51	46.00	1.49	1000.0	120.000	H	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1855.845000	45.2	1000.0	1000.000	H	-10.2	28.8	74.0
8005.595000	49.9	1000.0	1000.000	H	5.6	24.2	74.0
17924.560000	57.9	1000.0	1000.000	H	17.8	16.1	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1855.845000	42.6	1000.0	1000.000	H	-10.2	11.5	54.0
8005.595000	38.9	1000.0	1000.000	H	5.6	15.1	54.0
17924.560000	47.1	1000.0	1000.000	H	17.8	6.9	54.0

Table 62: FSK 5Kbps FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Vertical, CH 927.8

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.625000	24.46	40.00	15.54	1000.0	120.000	V	25.0
882.987222	44.13	46.00	1.87	1000.0	120.000	V	29.7
947.007222	41.88	46.00	4.12	1000.0	120.000	V	30.0

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1855.310000	44.7	1000.0	1000.000	V	-10.2	29.3	74.0
8082.095000	49.3	1000.0	1000.000	V	5.8	24.7	74.0
17734.905000	57.2	1000.0	1000.000	V	17.1	16.8	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1855.310000	41.5	1000.0	1000.000	V	-10.2	12.5	54.0
8082.095000	38.4	1000.0	1000.000	V	5.8	15.6	54.0
17734.905000	46.3	1000.0	1000.000	V	17.1	7.7	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 106 von 118

Page 106 of 118

Table 63: LoRa 125KHz FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Horizontal, CH 902.2

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.005556	20.69	40.00	19.31	1000.0	120.000	H	24.8
870.241667	41.39	46.00	4.61	1000.0	120.000	H	29.4
934.221667	37.92	46.00	8.08	1000.0	120.000	H	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1804.310000	45.0	1000.0	1000.000	H	-10.3	29.0	74.0
4860.595000	45.7	1000.0	1000.000	H	1.4	28.3	74.0
8668.060000	49.3	1000.0	1000.000	H	6.1	24.7	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1804.310000	41.4	1000.0	1000.000	H	-10.3	12.6	54.0
4860.595000	35.1	1000.0	1000.000	H	1.4	18.9	54.0
8668.060000	38.6	1000.0	1000.000	H	6.1	15.4	54.0

Table 64: LoRa 125KHz FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Vertical, CH 902.2

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.976111	24.83	40.00	15.17	1000.0	120.000	V	24.8
870.241667	39.66	46.00	6.34	1000.0	120.000	V	29.4
934.181667	38.82	46.00	7.18	1000.0	120.000	V	29.9

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1803.780000	45.8	1000.0	1000.000	V	-10.3	28.2	74.0
4293.220000	46.4	1000.0	1000.000	V	1.1	27.6	74.0
8458.220000	49.2	1000.0	1000.000	V	5.9	24.8	74.0

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1803.780000	43.2	1000.0	1000.000	V	-10.3	10.8	54.0
4293.220000	35.3	1000.0	1000.000	V	1.1	18.7	54.0
8458.220000	38.6	1000.0	1000.000	V	5.9	15.4	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 107 von 118

Page 107 of 118

Table 65: LoRa 125KHz FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Horizontal, CH 915

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.543333	24.46	40.00	15.54	1000.0	120.000	H	25.0
882.250556	41.74	46.00	4.26	1000.0	120.000	H	29.7
946.154333	42.49	46.00	3.51	1000.0	120.000	H	30.0

Limit and Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1829.280000	40.3	1000.0	1000.000	H	-10.2	33.7	74.0
5125.685000	45.8	1000.0	1000.000	H	1.2	28.2	74.0
8004.530000	49.9	1000.0	1000.000	H	5.6	24.1	74.0

Limit and Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1829.280000	34.2	1000.0	1000.000	H	-10.2	19.9	54.0
5125.685000	35.1	1000.0	1000.000	H	1.2	18.9	54.0
8004.530000	38.9	1000.0	1000.000	H	5.6	15.1	54.0

Table 66: LoRa 125KHz FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Vertical, CH 915

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.280000	21.59	40.00	18.41	1000.0	120.000	V	25.1
883.027222	42.56	46.00	3.44	1000.0	120.000	V	29.7
946.993333	39.22	46.00	6.78	1000.0	120.000	V	30.0

Limit and Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1829.810000	48.4	1000.0	1000.000	V	-10.1	25.6	74.0
4377.685000	45.7	1000.0	1000.000	V	1.1	28.3	74.0
8452.375000	49.1	1000.0	1000.000	V	5.9	24.9	74.0

Limit and Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1829.810000	46.5	1000.0	1000.000	V	-10.1	7.5	54.0
4377.685000	35.2	1000.0	1000.000	V	1.1	18.9	54.0
8452.375000	38.6	1000.0	1000.000	V	5.9	15.4	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 108 von 118

Page 108 of 118

Table 67: LoRa 125KHz FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Horizontal, CH 927.8

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.131111	25.34	40.00	14.66	1000.0	120.000	H	25.2
892.932222	37.87	46.00	8.13	1000.0	120.000	H	29.9
957.050500	38.18	43.50	5.32	1000.0	120.000	H	18.7

Limit and Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1855.310000	44.9	1000.0	1000.000	H	-10.2	29.1	74.0
4349.000000	46.2	1000.0	1000.000	H	1.3	27.9	74.0
8745.095000	49.4	1000.0	1000.000	H	6.2	24.6	74.0

Limit and Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1855.310000	41.6	1000.0	1000.000	H	-10.2	12.4	54.0
4349.000000	35.2	1000.0	1000.000	H	1.3	18.8	54.0
8745.095000	38.4	1000.0	1000.000	H	6.2	15.6	54.0

Table 68: LoRa 125KHz FHSS, 902.2~927.8MHz, Test mode, Radiated Emission, Vertical, CH 927.8

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
31.262778	24.77	40.00	15.23	1000.0	120.000	V	24.6
956.888887	40.59	43.50	12.91	1000.0	120.000	V	19.0
893.210556	41.62	46.00	4.38	1000.0	120.000	V	29.9

Limit and Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1855.310000	48.0	1000.0	1000.000	V	-10.2	26.0	74.0
6853.845000	47.4	1000.0	1000.000	V	4.4	26.6	74.0
8143.185000	49.4	1000.0	1000.000	V	5.9	24.6	74.0

Limit and Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1855.310000	45.5	1000.0	1000.000	V	-10.2	8.5	54.0
6853.845000	37.2	1000.0	1000.000	V	4.4	16.8	54.0
8143.185000	38.3	1000.0	1000.000	V	5.9	15.7	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 109 von 118

Page 109 of 118

Table 69: FSK 250Kbps FHSS, 902.5~927.5MHz, Test mode, Radiated Emission, Horizontal, CH 902.5

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.211111	24.52	40.00	15.48	1000.0	120.000	H	25.2
870.471111	44.18	46.00	1.82	1000.0	120.000	H	29.4
934.505000	39.99	46.00	6.01	1000.0	120.000	H	29.9

Limit and Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1804.845000	44.4	1000.0	1000.000	H	-10.4	29.6	74.0
4295.875000	46.1	1000.0	1000.000	H	1.2	27.9	74.0
8006.125000	49.9	1000.0	1000.000	H	5.6	24.1	74.0

Limit and Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1804.845000	41.0	1000.0	1000.000	H	-10.4	13.0	54.0
4295.875000	35.3	1000.0	1000.000	H	1.2	18.7	54.0
8006.125000	38.9	1000.0	1000.000	H	5.6	15.1	54.0

Table 70: FSK 250Kbps FHSS, 902.5~927.5MHz, Test mode, Radiated Emission, Vertical, CH 902.5

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.910000	21.11	40.00	18.89	1000.0	120.000	V	24.8
870.485000	44.58	46.00	1.42	1000.0	120.000	V	29.4
934.505000	41.55	46.00	4.45	1000.0	120.000	V	29.9

Limit and Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1804.845000	48.0	1000.0	1000.000	V	-10.4	26.0	74.0
6470.280000	47.7	1000.0	1000.000	V	3.6	26.4	74.0
8113.970000	50.1	1000.0	1000.000	V	5.8	23.9	74.0

Limit and Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1804.845000	46.0	1000.0	1000.000	V	-10.4	8.0	54.0
6470.280000	36.1	1000.0	1000.000	V	3.6	17.9	54.0
8113.970000	38.5	1000.0	1000.000	V	5.8	15.5	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 110 von 118

Page 110 of 118

Table 71: FSK 250Kbps FHSS, 902.5~927.5MHz, Test mode, Radiated Emission, Horizontal, CH 915

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.732778	24.22	40.00	15.78	1000.0	120.000	H	24.9
882.987222	43.25	46.00	2.75	1000.0	120.000	H	29.7
947.007222	37.68	46.00	8.32	1000.0	120.000	H	30.0

Limit and Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1829.280000	43.6	1000.0	1000.000	H	-10.2	30.4	74.0
4449.405000	45.8	1000.0	1000.000	H	0.7	28.2	74.0
8066.685000	49.4	1000.0	1000.000	H	5.7	24.6	74.0

Limit and Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1829.280000	39.4	1000.0	1000.000	H	-10.2	14.6	54.0
4449.405000	34.6	1000.0	1000.000	H	0.7	19.4	54.0
8066.685000	38.9	1000.0	1000.000	H	5.7	15.1	54.0

Table 72: FSK 250Kbps FHSS, 902.5~927.5MHz, Test mode, Radiated Emission, Vertical, CH 915

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.343333	24.48	40.00	15.52	1000.0	120.000	V	25.1
883.013333	42.13	46.00	3.87	1000.0	120.000	V	29.7
947.007222	40.15	46.00	5.85	1000.0	120.000	V	30.0

Limit and Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1829.810000	47.2	1000.0	1000.000	V	-10.1	26.8	74.0
4305.970000	46.1	1000.0	1000.000	V	1.2	27.9	74.0
8766.875000	48.8	1000.0	1000.000	V	6.3	25.2	74.0

Limit and Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1829.810000	44.6	1000.0	1000.000	V	-10.1	9.4	54.0
4305.970000	35.4	1000.0	1000.000	V	1.2	18.7	54.0
8766.875000	38.2	1000.0	1000.000	V	6.3	15.8	54.0

Prüfbericht - Nr.: 50321015 001

Test Report No.:

Seite 111 von 118

Page 111 of 118

Table 73: FSK 250Kbps FHSS, 902.5~927.5MHz, Test mode, Radiated Emission, Horizontal, CH 927.5

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.143333	24.60	40.00	15.40	1000.0	120.000	H	25.2
805.251667	33.31	46.00	12.69	1000.0	120.000	H	28.7
895.489444	41.37	46.00	4.63	1000.0	120.000	H	29.9

Limit and Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1854.780000	47.4	1000.0	1000.000	H	-10.2	26.6	74.0
7121.595000	47.9	1000.0	1000.000	H	4.9	26.1	74.0
8491.685000	48.5	1000.0	1000.000	H	5.9	25.5	74.0

Limit and Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1854.780000	44.7	1000.0	1000.000	H	-10.2	9.3	54.0
7121.595000	37.3	1000.0	1000.000	H	4.9	16.7	54.0
8491.685000	38.2	1000.0	1000.000	H	5.9	15.8	54.0

Table 74: FSK 250Kbps FHSS, 902.5~927.5MHz, Test mode, Radiated Emission, Vertical, CH 927.5

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)
30.546667	24.33	40.00	15.67	1000.0	120.000	V	25.0
803.701111	31.27	46.00	14.73	1000.0	120.000	V	28.7
895.489444	40.95	46.00	5.05	1000.0	120.000	V	29.9

Limit and Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1854.780000	50.3	1000.0	1000.000	V	-10.2	23.7	74.0
7036.595000	48.3	1000.0	1000.000	V	4.8	25.7	74.0
8047.560000	49.8	1000.0	1000.000	V	5.7	24.2	74.0

Limit and Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1854.780000	44.7	1000.0	1000.000	H	-10.2	9.3	54.0
7121.595000	37.3	1000.0	1000.000	H	4.9	16.7	54.0
8491.685000	38.2	1000.0	1000.000	H	5.9	15.8	54.0