



RF EXPOSURE REPORT

Product: OBU

Model Name: AT41

FCC ID: 2AHR8-AT41

Applicant: OCTO Telematics S.p:A

Address: Via Lamaro 51 Rome RM 00173 Italy

Manufacturer: Gosuncn Technology Group Co., Ltd.

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Report No.: SA180302W006

Received Date: Mar. 02, 2018

Test Date: Mar. 02, 2018 ~ Mar. 13, 2018

Issued Date: Mar. 15, 2018

This report should not be used by the client to claim product certification, approval, or endorsement by A2LA or any government agencies.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA180302W006	Original release	Mar. 15, 2018

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1 CERTIFICATION

PRODUCT: OBU

BRAND NAME: OCTO

MODEL NAME: AT41

APPLICANT: OCTO Telematics S.p:A

TESTED: Mar. 02, 2018 ~ Mar. 13, 2018

TEST SAMPLE: Identical Prototype

STANDARDS: FCC Part 2 (Section 2.1091)

FCC OET Bulletin 65, Supplement C (01-01)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1

The above equipment has been tested by **Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch** and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : _______, DATE: _______, Mar. 15, 2018

(Roger Li/ Engineer)

(Sam Tung / Manager)

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2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	OBU				
MODEL NAME	AT41				
NOMINAL VOLTAGE	DC 12V 3.7Vdc (Li-ion, batte	ery)			
OPERATING TEMPERATURE RANGE	-30 ~ 75℃				
	WLAN	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM			
MODULATION TYPE	GSM	GMSK			
	WCDMA	BPSK/QPSK			
	LTE	QPSK/16QAM			
	WLAN	2412 ~ 2462MHz for 11b/g/n(HT20)			
	GSM	824.2MHz ~ 848.8MHz (FOR GSM 850) 1850.2MHz ~ 1909.8MHz (FOR GSM 1900)			
OPERATING FREQUENCY	WCDMA	1852.4MHz ~ 1907.6MHz (FOR WCDMA Band 2) 826.4MHz ~ 846.6MHz (FOR WCDMA Band 5)			
	LTE	1850.7MHz ~ 1909.3MHz (FOR LTE Band2) 1710.7MHz ~ 1754.3MHz (FOR LTE Band4) 824.7MHz ~ 848.3MHz (FOR LTE Band5) 699MHz ~ 716MHz (FOR LTE Band12)			
ANTENNA TYPE	Fixed Internal Anter	nna			
ANTENNA GAIN		WCDMA V/ LTE B5 00/ WCDMA II/ LTE B2			
HW VERSION	AT41_MB_B				
SW VERSION	ME3631U1AV1.0B06				
I/O PORTS	Refer to user's man	ual			
CABLE SUPPLIED	N/A				

NOTE:

- 1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- 2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

3 RF EXPOSURE

3.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm²)	AVERAGE TIME (minutes)					
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE									
300-1500			F/1500	30					
1500-100,000			1.0	30					

F = Frequency in MHz

3.2 MPE CALCULATION FORMULA

Pd = (Pout*G) / (4*pi*r2)

where

Pd = power density in mW/cm2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

3.3 CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile device**.



3.4 CONDUCTED POWER

Band		GSM850	
Channel	128	189	251
Frequency (MHz)	824.2	836.4	848.8
GPRS 8	33.65	33.54	32.94
GPRS 10	33.33	33.22	32.62
GPRS 11	33.00	32.89	32.29
GPRS 12	32.61	32.50	31.90
EDGE 8 (MCS9)	26.50	26.39	25.79
EDGE 10 (MCS9)	26.28	26.17	25.57
EDGE 11 (MCS9)	25.97	25.86	25.26
EDGE 12 (MCS9)	25.65	25.54	24.94

Band		GSM1900	
Channel	512	661	810
Frequency (MHz)	1850.2	1880.0	1909.8
GPRS 8	29.73	29.57	29.50
GPRS 10	29.65	29.49	29.42
GPRS 11	29.59	29.43	29.36
GPRS 12	29.46	29.30	29.23
EDGE 8 (MCS9)	25.74	25.58	25.51
EDGE 10 (MCS9)	25.60	25.44	25.37
EDGE 11 (MCS9)	25.48	25.32	25.25
EDGE 12 (MCS9)	25.31	25.15	25.08



Band		WCDMA II	
Channel	9262	9400	9538
Frequency (MHz)	1852.4	1880.0	1907.6
RMC 12.2K	22.75	23.01	22.94
	HSPA		
HSDPA Subtest-1	21.86	22.12	22.05
HSDPA Subtest-2	21.83	22.09	22.02
HSDPA Subtest-3	21.42	21.68	21.61
HSDPA Subtest-4	21.37	21.63	21.56
HSUPA Subtest-1	21.80	22.06	21.99
HSUPA Subtest-2	19.95	20.21	20.14
HSUPA Subtest-3	20.92	21.18	21.11
HSUPA Subtest-4	19.92	20.18	20.11
HSUPA Subtest-5	21.92	22.18	22.11

Band	WCDMA V				
Channel	4132	4182	4233		
Frequency (MHz)	826.4	836.4	846.6		
RMC 12.2K	23.98	22.62	23.74		
	HSPA				
HSDPA Subtest-1	23.07	21.71	22.83		
HSDPA Subtest-2	23.04	21.68	22.80		
HSDPA Subtest-3	22.65	21.29	22.41		
HSDPA Subtest-4	22.60	21.24	22.36		
HSUPA Subtest-1	23.01	21.65	22.77		
HSUPA Subtest-2	21.14	19.78	20.90		
HSUPA Subtest-3	22.08	20.72	21.84		
HSUPA Subtest-4	21.10	19.74	20.86		
HSUPA Subtest-5	23.25	21.89	23.01		

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LTE BAND 2

LTE BANI	D 2									
LTE Band 2										
BW	Modulation	RB	RB	Low CH 18607	Mid CH 18900	High CH 19193	3GPP MPR			
DW.		Size	Offset	Frequency 1850.7 MHz	Frequency 1880 MHz	Frequency 1909.3 MHz	(dB)			
		1	0	22.17	22.56	22.60	0			
		1	2	22.07	22.46	22.50	0			
		1	5	22.04	22.43	22.47	0			
	QPSK	3	0	22.16	22.55	22.59	0			
		3	1	22.06	22.45	22.49	0			
		3	3	22.03	22.42	22.46	0			
4 45511-		6	0	21.01	21.40	21.44	1			
1.4MHz		1	0	20.93	21.32	21.36	1			
		1	2	20.91	21.30	21.34	1			
		1	5	20.82	21.21	21.25	1			
	16QAM	3	0	20.91	21.30	21.34	1			
		3	1	20.89	21.28	21.32	1			
		3	3	20.80	21.19	21.23	1			
		6	0	20.06	20.45	20.49	2			
			RB Offset	Low CH	Mid CH	High CH	3GPP			
BW	Modulation	RB Size		18615 Frequency	18900 Frequency	19185 Frequency	MPR			
		Size		1851.5 MHz	1880 MHz	1908.5 MHz	(dB)			
		1	0	22.20	22.59	22.63	0			
		1	7	22.10	22.49	22.53	0			
		1	14	22.07	22.46	22.50	0			
	QPSK	8	0	21.20	21.59	21.63	1			
		8	3	21.16	21.55	21.59	1			
		8	7	21.14	21.53	21.57	1			
2 MII-		15	0	21.04	21.43	21.47	1			
3 MHz		1	0	20.96	21.35	21.39	1			
		1	7	20.94	21.33	21.37	1			
		1	14	20.85	21.24	21.28	1			
	16QAM	8	0	20.33	20.72	20.76	2			
		8	3	20.29	20.68	20.72	2			
		8	7	20.26	20.65	20.69	2			
İ		15	0	20.09	20.48	20.52	2			



				LTE Band 2			
DW/	Modulation	RB	RB	Low CH 18625	Mid CH 18900	High CH 19175	3GPP
BW		Size	Offset	Frequency 1852.5 MHz	Frequency 1880 MHz	Frequency 1907.5 MHz	MPR (dB)
		1	0	22.23	22.62	22.66	0
		1	12	22.13	22.52	22.56	0
		1	24	22.10	22.49	22.53	0
	QPSK	12	0	21.23	21.62	21.66	1
		12	6	21.19	21.58	21.62	1
		12	13	21.17	21.56	21.60	1
5 NALL-		25	0	21.07	21.46	21.50	1
5 MHz		1	0	20.99	21.38	21.42	1
		1	12	20.97	21.36	21.40	1
		1	24	20.88	21.27	21.31	1
	16QAM	12	0	20.36	20.75	20.79	2
		12	6	20.32	20.71	20.75	2
		12	13	20.29	20.68	20.72	2
		25	0	20.12	20.51	20.55	2
DW.	Modulation	RB R	RB	Low CH 18650	Mid CH 18900	High CH 19150	3GPP
BW		Size	Offset	Frequency 1855 MHz	Frequency 1880 MHz	Frequency 1905 MHz	MPR (dB)
		1	0	22.25	22.64	22.68	0
		1	24	22.15	22.54	22.58	0
		1	49	22.12	22.51	22.55	0
	QPSK	25	0	21.25	21.64	21.68	1
		25	12	21.21	21.60	21.64	1
		25	25	21.19	21.58	21.62	1
40 MH-		50	0	21.09	21.48	21.52	1
10 MHz		1	0	21.01	21.40	21.44	1
		1	24	20.99	21.38	21.42	1
		1	49	20.90	21.29	21.33	1
	16QAM	25	0	20.38	20.77	20.81	2
		25	12	20.34	20.73	20.77	2
		25	25	20.31	20.70	20.74	2
		50	0	20.14	20.53	20.57	2

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		LTE Band 2									
BW	Modulation	RB	RB		Mid CH 18900	High CH 19125	3GPP MPR				
BW		Size	Offset	Frequency 1857.5 MHz	Frequency 1880 MHz	Frequency 1902.5 MHz	(dB)				
		1	0	22.28	22.67	22.71	0				
		1	37	22.18	22.57	22.61	0				
		1	74	22.15	22.54	22.58	0				
	QPSK	36	0	21.28	21.67	21.71	1				
		36	19	21.24	21.63	21.67	1				
		36	39	21.22	21.61	21.65	1				
45.500		75	0	21.12	21.51	21.55	1				
15 MHz		1	0	21.04	21.43	21.47	1				
		1	37	21.02	21.41	21.45	1				
		1	74	20.93	21.32	21.36	1				
	16QAM	36	0	20.41	20.80	20.84	2				
		36	19	20.37	20.76	20.80	2				
		36	39	20.34	20.73	20.77	2				
		75	0	20.17	20.56	20.60	2				
	Modulation	RB	RB	Low CH 18700	Mid CH 18900	High CH 19100	3GPP				
BW		Size	Offset	Frequency 1860 MHz	Frequency 1880 MHz	Frequency 1900 MHz	MPR (dB)				
		1	0	22.33	22.72	22.76	0				
		1	50	22.23	22.62	22.66	0				
		1	99	22.20	22.59	22.63	0				
	QPSK	50	0	21.33	21.72	21.76	1				
		50	25	21.29	21.68	21.72	1				
		50	50	21.27	21.66	21.70	1				
		100	0	21.17	21.56	21.60	1				
20MHz		1	0	21.09	21.48	21.52	1				
		1	50	21.07	21.46	21.50	1				
		1	99	20.98	21.37	21.41	1				
	16QAM	50	0	20.46	20.85	20.89	2				
		50	25	20.42	20.81	20.85	2				
		50	50	20.39	20.78	20.82	2				
		100	0	20.22	20.61	20.65	2				

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LTE BAND 4

LTE BAN	5 4			LTE Band 4			
DW.	Ma dulation	RB	RB	Low CH 19957	Mid CH 20175	High CH 20393	мор
BW	Modulation	Size	Offset	Frequency 1710.7 MHz	Frequency 1732.5 MHz	Frequency 1754.3 MHz	MPR
		1	0	21.85	22.13	22.42	0
		1	2	21.83	22.11	22.40	0
		1	5	21.80	22.08	22.37	0
	QPSK	3	0	21.83	22.11	22.40	0
		3	1	21.81	22.09	22.38	0
		3	3	21.78	22.06	22.35	0
4 45511-		6	0	20.68	20.96	21.25	1
1.4MHz		1	0	20.61	20.89	21.18	1
		1	2	20.60	20.88	21.17	1
		1	5	20.41	20.69	20.98	1
	16QAM	3	0	20.60	20.88	21.17	1
		3	1	20.59	20.87	21.16	1
		3	3	20.40	20.68	20.97	1
		6	0	19.76	20.04	20.33	2
BW	Modulation	RB R	RB	Low CH 19965	Mid CH 20175	High CH 20385	MPR
DW		Size	Offset	Frequency 1711.5 MHz	Frequency 1732.5 MHz	Frequency 1753.5 MHz	IVIPR
		1	0	21.86	22.14	22.43	0
		1	7	21.84	22.12	22.41	0
		1	14	21.81	22.09	22.38	0
	QPSK	8	0	20.88	21.16	21.45	1
		8	3	20.79	21.07	21.36	1
		8	7	20.77	21.05	21.34	1
0.8411-		15	0	20.69	20.97	21.26	1
3 MHz		1	0	20.62	20.90	21.19	1
		1	7	20.61	20.89	21.18	1
		1	14	20.42	20.70	20.99	1
	16QAM	8	0	19.91	20.19	20.48	2
		8	3	19.85	20.13	20.42	2
		8	7	19.82	20.10	20.39	2
		15	0	19.77	20.05	20.34	2

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				LTE Band 4			
BW	Modulation	RB	RB	Low CH 19975	Mid CH 20175	High CH 20375	MPR
BW	Modulation	Size	Offset	Frequency 1712.5 MHz	Frequency 1732.5 MHz	Frequency 1752.5 MHz	IVIPR
		1	0	21.89	22.17	22.46	0
		1	12	21.87	22.15	22.44	0
		1	24	21.84 22.12		22.41	0
	QPSK	12	0	20.91	21.19	21.48	1
		12	6	20.82	21.10	21.39	1
		12	13	20.80	21.08	21.37	1
5 NALL-		25	0	20.72	21.00	21.29	1
5 MHz		1	0	20.65	20.93	21.22	1
	16QAM	1	12	20.64	20.92	21.21	1
		1	24	20.45	20.73	21.02	1
		12	0	19.94	20.22 20.51		2
		12	6	19.88	20.16	20.45	2
		12	13	19.85	20.13	20.42	2
		25	0	19.80	20.08	20.37	2
BW	Modulation	RB	RB	Low CH 20000	Mid CH 20175	High CH 20350	MPR
DW	Modulation	Size	Offset	Frequency 1715 MHz	Frequency 1732.5 MHz	Frequency 1750 MHz	WIFK
		1	0	21.93	22.21 22.50		0
		1	24	21.91	22.19	22.48	0
		1	49	21.88	22.16	22.45	0
	QPSK	25	0	20.95	21.23	21.52	1
		25	12	20.86	21.14	21.43	1
		25	25	20.84	21.12	21.41	1
40 MH-		50	0	20.76	21.04	21.33	1
10 MHz		1	0	20.69	20.97	21.26	1
		1	24	20.68	20.96	21.25	1
		1	49	20.49	20.77	21.06	1
	16QAM	25	0	19.98	20.26	20.55	2
		25	12	19.92	20.20	20.49	2
		25	25	19.89	20.17	20.46	2
		50	0	19.84	20.12	20.41	2

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				LTE Band 4			
BW	Modulation	RB	RB	Low CH 20025	Mid CH 20175	High CH 20325	MPR
DVV	Wiodulation	Size	Offset	Frequency 1717.5 MHz	Frequency 1732.5 MHz	Frequency 1747.5 MHz	IVIEK
		1	0	21.99	22.27	22.56	0
		1	37	21.97	22.25	22.54	0
		1	74 21.94 22.22		22.22	22.51	0
	QPSK	36	0	21.01	21.29	21.58	1
		36	19	20.92	21.20	21.49	1
		36	39	20.90	21.18	21.47	1
45 8011-		75	0	20.82	21.10	21.39	1
15 MHz		1	0	20.75	21.03	21.32	1
		1	37	20.74	21.02	21.31	1
		1	74	20.55	20.83	21.12	1
	16QAM	36	0	20.04	0.04 20.32 20.		2
		36	19	19.98	20.26 20.55		2
		36	39	19.95	20.23	20.52	2
		75	0	19.90	20.18	20.47	2
	Modulation	RB	RB	Low CH 20050	Mid CH 20175	High CH 20300	
BW		Size	Offset	Frequency 1720 MHz	Frequency 1732.5 MHz	Frequency 1745 MHz	MPR
		1	0	22.02	22.30	22.59	0
		1	50	22.00	22.28	22.57	0
		1	99	21.97	22.25	22.54	0
	QPSK	50	0	21.04	21.32	21.61	1
		50	25	20.95	21.23	21.52	1
		50	50	20.93	21.21	21.50	1
000411-		100	0	20.85	21.13	21.42	1
20MHz		1	0	20.78	21.06	21.35	1
		1	50	20.77	21.05	21.34	1
		1	99	20.58	20.86	21.15	1
	16QAM	50	0	20.07	20.35	20.64	2
		50	25	20.01	20.29	20.58	2
		50	50	19.98	20.26	20.55	2
		100	0	19.93	20.21	20.50	2

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LTE BAND 5

Band/BW	Modulation	RB	RB	Low CH 20407	Mid CH 20525	High CH 20643	3GPP MPR
Bana/BVV	Modulation	Size Offset Frequency 824.7 MHz		Frequency 824.7 MHz	Frequency 836.5 MHz	Frequency 848.3 MHz	(dB)
		1	0	21.90	22.73	22.51	0
	QPSK	1	2	21.86	22.69	22.47	0
		1	5	21.49	22.32	22.10	0
		3	0	21.88	22.71	22.49	0
		3	1	21.84	22.67	22.45	0
		3	3	21.47	22.30	22.08	0
5/1.4		6	0	20.97	21.80	21.58	1
3/1.4		1	0	20.40	21.23	21.01	1
		1	2	20.36	21.19	20.97	1
		1	5	19.39	20.22	20.00	1
	16QAM	3	0	20.39	21.22	21.00	1
		3	1	20.35	21.18	20.96	1
		3	3	19.38	20.21	19.99	1
		6	0	20.07	20.90	20.68	2

Band/BW	Modulation	RB	RB	Low CH 20415	Mid CH 20525	High CH 20635	3GPP MPR
Band/BW	Modulation	Size	Offset	Frequency 825.5 MHz	Frequency 836.5 MHz	Frequency 847.5 MHz	(dB)
		1	0	21.94	22.77	22.55	0
		1	7	21.90	22.73	22.51	0
		1	14	21.53	22.36	22.14	0
	QPSK	8	0	21.31	22.14	21.92	1
		8	3	21.26	22.09	21.87	1
		8	7	20.88	21.71	21.49	1
5/3		15	0	21.01	21.84	21.62	1
3/3		1	0	20.44	21.27	21.05	1
		1	7	20.40	21.23	21.01	1
		1	14	19.43	20.26	20.04	1
	16QAM	8	0	20.38	21.21	20.99	2
		8	3	20.37	21.20	20.98	2
		8	7	19.76	20.59	20.37	2
		15	0	20.11	20.94	20.72	2

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Band/BW	Modulation	RB	RB	Low CH 20425	Mid CH 20525	High CH 20625	3GPP MPR
BarrayBVV	Modulation	Size	Offset	Frequency 826.5 MHz	Frequency 836.5 MHz	Frequency 846.5 MHz	(dB)
		1	0	22.00	22.83	22.61	0
	QPSK	1	12	21.96	22.79	22.57	0
		1	24	21.59	22.42	22.20	0
		QPSK 12		21.37	22.20	21.98	1
		12	6	21.32	22.15	21.93	1
		12	13	20.94	21.77	21.55	1
E /E		25	0	21.07	21.90	21.68	1
5/5		1	0	20.50	21.33	21.11	1
		1	12	20.46	21.29	21.07	1
		1	24	19.49	20.32	20.10	1
	16QAM	12	0	20.44	21.27	21.05	2
		12	6	20.43	21.26	21.04	2
		12	13	19.82	20.65	20.43	2
		25	0	20.17	21.00	20.78	2

Band/BW	Modulation	RB	RB	Low CH 20450	Mid CH 20525	High CH 20600	3GPP MPR
Band/BVV	Wodulation	Size Offset Frequency 829 MHz		Frequency 829 MHz	Frequency 836.5 MHz	Frequency 844 MHz	(dB)
		1	0	22.03	22.86	22.64	0
		1	24	21.99	22.82	22.60	0
		1	49	21.62	22.45	22.23	0
	QPSK	25	0	21.40	22.23	22.01	1
		25	12	21.35	22.18	21.96	1
		25	25	20.97	21.80	21.58	1
5/10		50	0	21.10	21.93	21.71	1
5/10		1	0	20.53	21.36	21.14	1
		1	24	20.49	21.32	21.10	1
		1	49	19.52	20.35	20.13	1
	16QAM	25	0	20.47	21.30	21.08	2
		25	12	20.46	21.29	21.07	2
		25	25	19.85	20.68	20.46	2
		50	0	20.20	21.03	20.81	2

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LTE BAND 12

				LTE Band 12			
BW	Modulation	RB	RB	Low CH 23017	Mid CH 23095	High CH 23173	MPR
DVV	Wodulation	Size	Offset	Frequency 699.7 MHz	Frequency 707.5 MHz	Frequency 715.3 MHz	IVIPR
		1	0	23.08	23.29	23.17	0
		1	2	23.00	23.21	23.09	0
		1	5	22.91	23.12	23.00	0
	QPSK	3	0 23.06		23.27	23.15	0
		3	1	22.98	23.19	23.07	0
		3	3	22.89	23.10	22.98	0
1.4		6	0	22.02	22.23	22.11	1
MHz		1	0	21.70	21.91	21.79	1
		1	2	21.68	21.89	21.77	1
		1	5	21.28	21.49	21.37	1
	16QAM	3	0	21.69	9 21.90 2		1
		3	1	21.67	21.88 21.7		1
		3	3	21.27	21.48	21.36	1
		6	0	21.03	21.24	21.12	2
				LTE Band 12			•
		RB	RB	Low CH 23025	Mid CH 23095	High CH 23165	
BW	Modulation	Size	Offset	Frequency 700.5 MHz	Frequency 707.5 MHz	Frequency 714.5 MHz	MPR
		1	0	23.12	23.33	23.21	0
		1	7	00.04			
			,	23.04	23.25	23.13	0
		1	14	23.04	23.25 23.16	23.13 23.04	0
	QPSK	1 8					
	QPSK	-	14	22.95	23.16	23.04	0
	QPSK	8	14 0	22.95 22.16	23.16 22.37	23.04 22.25	0
	QPSK	8	14 0 3	22.95 22.16 22.13	23.16 22.37 22.34	23.04 22.25 22.22	0 1 1
3 MHz	QPSK	8 8	14 0 3 7	22.95 22.16 22.13 22.10	23.16 22.37 22.34 22.31	23.04 22.25 22.22 22.19	0 1 1 1
3 MHz	QPSK	8 8 8 15	14 0 3 7 0	22.95 22.16 22.13 22.10 22.06	23.16 22.37 22.34 22.31 22.27	23.04 22.25 22.22 22.19 22.15	0 1 1 1 1 1
3 MHz	QPSK	8 8 8 15	14 0 3 7 0	22.95 22.16 22.13 22.10 22.06 21.74	23.16 22.37 22.34 22.31 22.27 21.95	23.04 22.25 22.22 22.19 22.15 21.83	0 1 1 1 1
3 MHz	QPSK 16QAM	8 8 8 15 1	14 0 3 7 0 0 7	22.95 22.16 22.13 22.10 22.06 21.74 21.72	23.16 22.37 22.34 22.31 22.27 21.95 21.93	23.04 22.25 22.22 22.19 22.15 21.83 21.81	0 1 1 1 1 1
3 MHz		8 8 8 15 1 1	14 0 3 7 0 0 7	22.95 22.16 22.13 22.10 22.06 21.74 21.72 21.32	23.16 22.37 22.34 22.31 22.27 21.95 21.93 21.53	23.04 22.25 22.22 22.19 22.15 21.83 21.81 21.41	0 1 1 1 1 1 1
3 MHz		8 8 8 15 1 1 1 8	14 0 3 7 0 0 7 14	22.95 22.16 22.13 22.10 22.06 21.74 21.72 21.32 21.20	23.16 22.37 22.34 22.31 22.27 21.95 21.93 21.53 21.41	23.04 22.25 22.22 22.19 22.15 21.83 21.81 21.41 21.29	0 1 1 1 1 1 1 1 2

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				LTE Band 12			
ВW	Modulation	RB	RB	Low CH 23035	Mid CH 23095	High CH 23155	MPR
		Size	Offset	Frequency 701.5 MHz	Frequency 707.5 MHz	Frequency 713.5 MHz	
		1	0	23.18	23.39	23.27	0
		1	12	23.10	23.31	23.19	0
		1	24	23.01	23.22	23.10	0
	QPSK	12	0	22.22	22.43	22.31	1
		12	6	22.19	22.40	22.28	1
		12	13	22.16	22.37	22.25	1
E MII-		25	0	22.12	22.33	22.21	1
5 MHz		1	0	21.80	22.01	21.89	1
		1	12	21.78	21.99	21.87	1
		1	24	21.38	21.59	21.47	1
	16QAM	12	0	0 21.26 21		21.35	2
		12	6	21.23	21.23 21.44 2°		2
		12	13	21.18	21.39	21.27	2
		25	0	21.13	21.34	21.22	2
				LTE Band 12			
		RB	RB	Low CH 23060	Mid CH 23095	High CH 23130	
BW	Modulation	Size	Offset	Frequency 704 MHz	Frequency 707.5 MHz	Frequency 711 MHz	MPR
		1	0	23.21	23.42	23.30	0
		1	24	23.13	23.34	23.22	0
		1	49	23.04	23.25	23.13	0
	QPSK	25	0	22.25	22.46	22.34	1
		25	12	22.22	22.43	22.31	1
		25	25	22.19	22.40	22.28	1
40 8411		50	0	22.15	22.36	22.24	1
10 MHz		50 1	0	22.15 21.83	22.36 22.04	22.24 21.92	1
10 MHz				+			
10 MHz		1	0	21.83	22.04	21.92	1
10 MHz	16QAM	1	0 24	21.83 21.81	22.04 22.02	21.92 21.90	1
10 MHz	16QAM	1 1 1	0 24 49	21.83 21.81 21.41	22.04 22.02 21.62	21.92 21.90 21.50	1 1 1
10 MHz	16QAM	1 1 1 25	0 24 49 0	21.83 21.81 21.41 21.29	22.04 22.02 21.62 21.50	21.92 21.90 21.50 21.38	1 1 1 2

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3.5 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

TUNE-UP POWER TABLE

Band	Frequency (MHz)	Operating Mode	Tune-Up Power And Tolerance (dBm)
GSM850	824.2	GPRS12	33.5 ± 0.5
PCS1900	1850.2	GPRS12	29.5 ± 0.5
WCDMA II	1880	RMC12.2K	23.0 ± 0.5
WCDMA V	826.4	RMC12.2K	24.0 ± 0.5
LTE Band2	1900	QPSK	22.5 ± 0.5
LTE Band4	1745	QPSK	22.5 ± 0.5
LTE Band5	836.5	QPSK	23.0 ± 0.5
LTE Band12	707.5	QPSK	23.5 ± 0.5

GSM

Band	Frequency (MHz)	Operating Mode	Antenna Gain (dBi)	Tune-up Power (dBm)	E.I.R.P Power (mW)/8	Power Density (mW/cm^2)	limit (mW/cm^2)	PASS / FAIL
GSM850	824.2	GPRS12	0	34.0	313.986	0.062	0.55	PASS
PCS1900	1850.2	GPRS12	3.1	30.0	255.217	0.051	1.00	PASS

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WCDMA

Band	Frequency (MHz)	Operating Mode	Antenna Gain (dBi)	Tune-up Power (dBm)	E.I.R.P Power (mW)	Power Density (mW/cm^2)	limit (mW/cm^2)	PASS / FAIL
WCDMA II	1880	RMC12.2K	3.1	23.5	457.088	0.091	1.00	PASS
WCDMA V	826.4	RMC12.2K	0	24.5	281.838	0.056	0.55	PASS

LTE

Band	Frequency (MHz)	Operating Mode	Antenna Gain (dBi)	Tune-up Power (dBm)	E.I.R.P Power (mW)	Power Density (mW/cm^2)	limit (mW/cm^2)	PASS/ FAIL
Band2	1900	QPSK	3.1	23.0	407.380	0.081	1.00	PASS
Band4	1745	QPSK	2.9	23.0	389.045	0.077	1.00	PASS
Band5	836.5	QPSK	0	23.5	223.872	0.045	0.56	PASS
Band12	707.5	QPSK	-1	24.0	199.526	0.040	0.47	PASS

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