



# RF Exposure Evaluation Report

APPLICANT : ZTE CORPORATION  
EQUIPMENT : HSPA/LTE CPE  
BRAND NAME : ZTE  
MODEL NAME : MF275R  
FCC ID : SRQ-MF275R  
STANDARD : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1091, and pass the limit. Without written approval of SPORTON INTERNATIONAL (KUNSHAN) INC., the test report shall not be reproduced except in full.

Prepared by: Mark Qu / Manager

Approved by: Jones Tsai / Manager

**SPORTON INTERNATIONAL (KUNSHAN) INC.**  
**No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China**



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**1. Administration Data**

**1.1. Testing Laboratory**

Testing Laboratory	
Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958

Applicant	
Company Name	ZTE CORPORATION
Address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P. R. China

Manufacturer	
Company Name	ZTE CORPORATION
Address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P. R. China



**2. Description of Equipment Under Test (EUT)**

Product Feature & Specification			
EUT Type	HSPA/LTE CPE		
Brand Name	ZTE		
Model Name	MF275R		
FCC ID	SRQ-MF275R		
IMEI Code	004401783465723		
Wireless Technology and Frequency Range	WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz LTE Band 12: 699.7 MHz ~ 715.3 MHz LTE Band 17: 706.5 MHz ~ 713.5 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 7: 2502.5 MHz ~ 2567.5 MHz LTE Band 5: 824.7 MHz ~ 848.3 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5GHz Band: 5180 MHz ~ 5240 MHz, 5745 MHz ~ 5825 MHz		
Mode	<ul style="list-style-type: none"> <li>• RMC12.2Kbps</li> <li>• HSDPA</li> <li>• HSUPA</li> <li>• DC-HSDPA</li> <li>• HSPA+(16QAM uplink is not supported)</li> <li>• LTE: QPSK, 16QAM</li> </ul>		
Antenna Type	WWAN: Monopole Antenna WLAN Chain Port 1: Monopole Antenna WLAN Chain Port 2: Monopole Antenna		
HW Version	dgpB		
SW Version	MF275R1.2.3		
Antenna Function Description		Chain Port 1	Chain Port 2
	802.11 b	V	V
	802.11 g	V	V
	802.11a	V	V
	802.11n SISO	V	V
	802.11n MIMO	V	V
EUT Stage	Identical Prototype		
<b>Remark:</b> The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.			



**3. Conducted RF Output Power (Unit: dBm)**

**<WCDMA Conducted Power>**

Band			WCDMA Band V			Tune up Limit (dBm)	WCDMA Band II			Tune up Limit (dBm)
TX Channel			4132	4182	4233		9262	9400	9538	
Rx Channel			4357	4407	4458	9662	9800	9938		
Frequency (MHz)			826.4	836.4	846.6	1852.4	1880	1907.6		
MPR (dB)	3GPP Rel 99	RMC 12.2Kbps	23.83	23.72	<b>23.85</b>	24.0	22.42	<b>22.53</b>	22.44	23.0
0	3GPP Rel 6	HSDPA Subtest-1	22.83	22.34	23.16	23.5	21.52	21.74	21.31	22.0
0	3GPP Rel 6	HSDPA Subtest-2	22.90	22.39	23.24	23.5	21.45	21.68	21.45	22.0
0.5	3GPP Rel 6	HSDPA Subtest-3	22.32	21.75	22.75	23.0	20.92	21.36	20.96	21.5
0.5	3GPP Rel 6	HSDPA Subtest-4	22.35	21.80	22.64	23.0	20.91	21.39	21.04	21.5
0	3GPP Rel 8	DC-HSDPA Subtest-1	22.83	22.30	23.28	23.5	21.56	21.28	21.33	22.0
0	3GPP Rel 8	DC-HSDPA Subtest-2	22.82	22.29	23.25	23.5	21.54	21.26	21.29	22.0
0.5	3GPP Rel 8	DC-HSDPA Subtest-3	22.38	21.65	22.74	23.0	20.97	21.37	20.64	21.5
0.5	3GPP Rel 8	DC-HSDPA Subtest-4	22.34	21.61	22.73	23.0	20.94	21.16	20.63	21.5
0	3GPP Rel 6	HSUPA Subtest-1	22.27	22.02	22.36	22.5	21.10	21.32	21.09	21.5
2	3GPP Rel 6	HSUPA Subtest-2	21.77	21.68	21.82	22.5	20.07	20.44	20.39	21.5
1	3GPP Rel 6	HSUPA Subtest-3	21.79	21.45	22.04	22.5	20.17	20.38	20.41	21.5
2	3GPP Rel 6	HSUPA Subtest-4	22.58	22.52	22.61	23.0	21.38	21.41	21.39	21.5
0	3GPP Rel 6	HSUPA Subtest-5	23.06	22.90	23.56	24.0	21.86	22.31	22.01	22.5



**<LTE Conducted Power>**

**<LTE Band 12>**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune up Limit (dBm)	MPR (dB)
Channel				23060	23095	23130		
Frequency (MHz)				704	707.5	711		
10	QPSK	1	0	21.75	21.65	21.72	23.0	0
10	QPSK	1	24	<b>22.06</b>	21.94	22.03		
10	QPSK	1	49	21.45	21.45	21.69		
10	QPSK	25	0	21.74	21.80	21.48	22.0	0-1
10	QPSK	25	12	21.86	21.72	21.30		
10	QPSK	25	24	21.85	21.37	21.39		
10	QPSK	50	0	21.76	21.58	21.41	22.0	0-1
10	16QAM	1	0	20.99	20.99	21.05		
10	16QAM	1	24	21.23	21.10	20.97		
10	16QAM	1	49	20.96	20.78	21.04	21.0	0-2
10	16QAM	25	0	20.86	20.99	20.63		
10	16QAM	25	12	20.91	20.89	20.45		
10	16QAM	25	24	20.91	20.53	20.52	21.0	0-2
10	16QAM	50	0	20.90	20.74	20.58		
Channel				23035	23095	23155		
Frequency (MHz)				701.5	707.5	713.5	Tune up Limit (dBm)	MPR (dB)
5	QPSK	1	0	21.72	21.85	21.14	23.0	0
5	QPSK	1	12	21.56	21.63	21.35		
5	QPSK	1	24	21.76	21.28	21.79		
5	QPSK	12	0	21.70	21.88	21.26	22.0	0-1
5	QPSK	12	6	21.66	21.74	21.43		
5	QPSK	12	11	21.70	21.57	21.65		
5	QPSK	25	0	21.69	21.69	21.47	22.0	0-1
5	16QAM	1	0	21.06	21.19	20.68		
5	16QAM	1	12	20.93	21.02	20.70		
5	16QAM	1	24	21.16	20.70	21.11	21.0	0-2
5	16QAM	12	0	20.84	20.98	20.38		
5	16QAM	12	6	20.81	20.92	20.54		
5	16QAM	12	11	20.85	20.75	20.75	21.0	0-2
5	16QAM	25	0	20.85	20.87	20.60		



BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune up Limit (dBm)	MPR (dB)
Channel				23025	23095	23165	23.0	0
Frequency (MHz)				700.5	707.5	714.5		
3	QPSK	1	0	21.76	21.92	21.37	23.0	0
3	QPSK	1	7	21.72	21.74	21.60		
3	QPSK	1	14	21.62	21.46	21.80		
3	QPSK	8	0	21.72	21.82	21.50	22.0	0-1
3	QPSK	8	4	21.67	21.69	21.68		
3	QPSK	8	7	21.63	21.57	21.78		
3	QPSK	15	0	21.67	21.70	21.65	22.0	0-1
3	16QAM	1	0	21.10	21.24	20.71		
3	16QAM	1	7	21.08	21.11	20.91		
3	16QAM	1	14	21.00	20.84	21.11	21.0	0-2
3	16QAM	8	0	20.91	20.95	20.64		
3	16QAM	8	4	20.90	20.90	20.82		
3	16QAM	8	7	20.86	20.78	20.91	21.0	0-2
3	16QAM	15	0	20.86	20.88	20.76		
Channel				23017	23095	23173	23.0	0
Frequency (MHz)				699.7	707.5	715.3		
1.4	QPSK	1	0	22.01	22.03	21.88	23.0	0
1.4	QPSK	1	2	21.92	21.98	22.00		
1.4	QPSK	1	5	21.95	21.94	21.92		
1.4	QPSK	3	0	21.98	21.96	21.92		
1.4	QPSK	3	1	21.93	21.86	21.97		
1.4	QPSK	3	2	21.89	22.02	21.98	22.0	0-1
1.4	QPSK	6	0	21.82	21.85	21.93		
1.4	16QAM	1	0	21.34	21.43	21.12	22.0	0-1
1.4	16QAM	1	2	21.18	21.42	21.29		
1.4	16QAM	1	5	21.15	21.21	21.23		
1.4	16QAM	3	0	21.18	21.17	21.00		
1.4	16QAM	3	1	21.22	21.17	21.07		
1.4	16QAM	3	2	21.41	21.12	21.06	21.0	0-2
1.4	16QAM	6	0	20.95	20.93	20.96		



**<LTE Band 17>**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune up Limit (dBm)	MPR (dB)
Channel				23780	23790	23800		
Frequency (MHz)				709	710	711		
10	QPSK	1	0	<b>22.92</b>	22.91	22.76	23.5	0
10	QPSK	1	24	22.82	22.32	22.18		
10	QPSK	1	49	22.54	22.46	22.67		
10	QPSK	25	0	21.99	22.04	22.09	22.5	0-1
10	QPSK	25	12	22.08	22.13	22.03		
10	QPSK	25	24	21.99	22.03	22.07		
10	QPSK	50	0	21.90	22.04	22.12	22.5	0-1
10	16QAM	1	0	22.25	22.17	22.06		
10	16QAM	1	24	22.00	21.65	21.53		
10	16QAM	1	49	21.80	21.76	22.00	21.5	0-2
10	16QAM	25	0	20.92	21.03	21.07		
10	16QAM	25	12	21.01	21.11	21.04		
10	16QAM	25	24	20.96	21.07	21.10	21.5	0-2
10	16QAM	25	24	20.96	21.07	21.10		
10	16QAM	50	0	20.90	21.05	21.08		
Channel				23755	23790	23825		
Frequency (MHz)				706.5	710	713.5		
5	QPSK	1	0	22.75	22.47	22.01	23.5	0
5	QPSK	1	12	22.67	22.09	22.22		
5	QPSK	1	24	22.29	22.01	22.63		
5	QPSK	12	0	22.02	22.05	22.04	22.5	0-1
5	QPSK	12	6	22.01	22.14	22.06		
5	QPSK	12	11	21.96	22.07	22.05		
5	QPSK	25	0	21.99	22.13	22.07	22.5	0-1
5	16QAM	1	0	22.09	21.79	21.36		
5	16QAM	1	12	22.05	21.45	21.56		
5	16QAM	1	24	21.71	21.35	21.96	21.5	0-2
5	16QAM	12	0	21.05	21.13	21.09		
5	16QAM	12	6	21.01	21.14	21.03		
5	16QAM	12	11	20.96	21.05	21.02	21.5	0-2
5	16QAM	12	11	20.96	21.05	21.02		
5	16QAM	25	0	20.98	21.12	21.04		



**<LTE Band 4>**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune up Limit (dBm)	MPR (dB)
Channel				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	22.77	<b>22.80</b>	22.55	23.5	0
20	QPSK	1	49	22.14	22.27	21.87		
20	QPSK	1	99	22.20	22.22	21.86		
20	QPSK	50	0	21.35	21.42	21.12	22.5	0-1
20	QPSK	50	24	21.08	21.11	20.87		
20	QPSK	50	49	21.14	22.08	20.99		
20	QPSK	100	0	21.10	21.17	20.93	22.5	0-1
20	16QAM	1	0	21.97	22.08	21.84		
20	16QAM	1	49	21.24	21.21	21.04		
20	16QAM	1	99	21.44	21.32	21.10	21.5	0-2
20	16QAM	50	0	20.25	20.39	20.10		
20	16QAM	50	24	20.10	20.17	19.87		
20	16QAM	50	49	20.12	20.11	19.97	21.5	0-2
20	16QAM	100	0	20.16	20.15	19.97		
Channel				20025	20175	20325	Tune up Limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1732.5	1747.5		
15	QPSK	1	0	22.47	22.17	22.36	23.5	0
15	QPSK	1	37	22.06	21.89	21.86		
15	QPSK	1	74	21.80	21.97	21.74		
15	QPSK	36	0	21.10	21.16	21.08	22.5	0-1
15	QPSK	36	18	20.99	20.92	20.82		
15	QPSK	36	37	20.87	20.87	20.76		
15	QPSK	75	0	21.02	20.97	20.90	22.5	0-1
15	16QAM	1	0	21.82	21.78	21.75		
15	16QAM	1	37	21.40	21.11	21.25		
15	16QAM	1	74	21.32	21.30	21.15	22.5	0-1
15	16QAM	36	0	20.11	20.10	20.08		
15	16QAM	36	18	20.02	19.88	19.82		
15	16QAM	36	37	19.87	19.81	19.68	21.5	0-2
15	16QAM	75	0	20.14	19.97	19.95		
Channel				20000	20175	20350	Tune up Limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1732.5	1750		
10	QPSK	1	0	22.21	21.88	21.89	23.5	0
10	QPSK	1	24	22.05	21.64	21.63		
10	QPSK	1	49	21.80	21.62	21.62		
10	QPSK	25	0	20.99	20.71	20.73	22.5	0-1
10	QPSK	25	12	20.86	20.67	20.62		
10	QPSK	25	24	20.80	20.57	20.54		
10	QPSK	50	0	20.91	20.70	20.67	22.5	0-1
10	16QAM	1	0	21.32	21.12	21.10		
10	16QAM	1	24	21.12	20.90	20.99		
10	16QAM	1	49	20.99	20.88	20.70	22.5	0-1
10	16QAM	25	0	20.04	19.75	19.77		
10	16QAM	25	12	19.86	19.65	19.65		
10	16QAM	25	24	19.85	19.54	19.56	21.5	0-2
10	16QAM	50	0	19.90	19.61	19.61		



BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune up Limit (dBm)	MPR (dB)
Channel				19975	20175	20375		
Frequency (MHz)				1712.5	1732.5	1752.5		
5	QPSK	1	0	21.97	21.72	21.75	23.5	0
5	QPSK	1	12	21.96	21.65	21.71		
5	QPSK	1	24	21.87	21.56	21.66		
5	QPSK	12	0	20.81	20.63	20.64	22.5	0-1
5	QPSK	12	6	20.90	20.66	20.72		
5	QPSK	12	11	20.85	20.62	20.66		
5	QPSK	25	0	20.86	20.63	20.72		
5	16QAM	1	0	21.22	20.91	21.13	22.5	0-1
5	16QAM	1	12	21.26	20.92	21.07		
5	16QAM	1	24	21.05	20.74	20.92		
5	16QAM	12	0	19.96	19.72	19.82	21.5	0-2
5	16QAM	12	6	19.93	19.65	19.79		
5	16QAM	12	11	19.87	19.68	19.73		
5	16QAM	25	0	19.89	19.65	19.71		
Channel				19965	20175	20385	Tune up Limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1732.5	1753.5		
3	QPSK	1	0	22.00	21.66	21.82	23.5	0
3	QPSK	1	7	22.13	21.53	21.92		
3	QPSK	1	14	21.93	21.56	21.68		
3	QPSK	8	0	20.87	20.74	20.73	22.5	0-1
3	QPSK	8	4	20.99	20.71	20.78		
3	QPSK	8	7	20.85	20.61	20.71		
3	QPSK	15	0	20.88	20.61	20.66		
3	16QAM	1	0	21.10	20.81	20.93	22.5	0-1
3	16QAM	1	7	21.31	20.93	21.14		
3	16QAM	1	14	21.21	20.72	20.86		
3	16QAM	8	0	19.96	19.80	19.81	21.5	0-2
3	16QAM	8	4	20.03	19.70	19.81		
3	16QAM	8	7	19.91	19.66	19.79		
3	16QAM	15	0	19.91	19.61	19.66		
Channel				19957	20175	20393	Tune up Limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1732.5	1754.3		
1.4	QPSK	1	0	21.93	21.69	21.65	23.5	0
1.4	QPSK	1	2	22.14	21.69	21.78		
1.4	QPSK	1	5	21.80	21.55	21.62		
1.4	QPSK	3	0	21.88	21.75	21.77		
1.4	QPSK	3	1	21.96	21.74	21.77		
1.4	QPSK	3	2	21.99	21.69	21.75	22.5	0-1
1.4	QPSK	6	0	20.77	20.62	20.65		
1.4	16QAM	1	0	21.29	20.94	20.98	22.5	0-1
1.4	16QAM	1	2	21.28	20.96	21.06		
1.4	16QAM	1	5	21.11	20.92	20.95		
1.4	16QAM	3	0	20.98	20.78	20.77		
1.4	16QAM	3	1	20.97	20.83	20.86		
1.4	16QAM	3	2	21.01	20.80	20.86		
1.4	16QAM	6	0	19.90	19.68	19.78	21.5	0-2



<LTE Band 2>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune up Limit (dBm)	MPR (dB)
Channel				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	22.31	22.74	23.04	23.5	0
20	QPSK	1	49	21.62	22.06	22.35		
20	QPSK	1	99	21.62	22.10	22.37		
20	QPSK	50	0	20.96	21.15	21.50	22.5	0-1
20	QPSK	50	24	20.68	21.09	21.35		
20	QPSK	50	49	20.65	21.06	21.38		
20	QPSK	100	0	20.78	21.19	21.39	22.5	0-1
20	16QAM	1	0	21.80	22.01	22.38		
20	16QAM	1	49	20.79	21.11	21.34		
20	16QAM	1	99	20.83	21.38	21.57	22.5	0-1
20	16QAM	50	0	19.92	20.12	20.46		
20	16QAM	50	24	19.68	20.08	20.34		
20	16QAM	50	49	19.70	20.06	20.35	21.5	0-2
20	16QAM	100	0	19.77	20.22	20.36		
Channel				18675	18900	19125	Tune up Limit (dBm)	MPR (dB)
Frequency (MHz)				1857.5	1880	1902.5		
15	QPSK	1	0	22.09	22.39	22.50	23.5	0
15	QPSK	1	37	21.64	21.89	22.05		
15	QPSK	1	74	21.67	22.02	22.11		
15	QPSK	36	0	20.94	21.04	21.29	22.5	0-1
15	QPSK	36	18	20.71	20.93	21.10		
15	QPSK	36	37	20.66	20.83	21.02		
15	QPSK	75	0	20.71	20.94	21.20	22.5	0-1
15	16QAM	1	0	21.56	21.73	21.96		
15	16QAM	1	37	20.91	21.18	21.46		
15	16QAM	1	74	20.95	21.36	21.54	22.5	0-1
15	16QAM	36	0	19.96	19.97	20.31		
15	16QAM	36	18	19.68	19.88	20.10		
15	16QAM	36	37	19.60	19.79	20.00	21.5	0-2
15	16QAM	75	0	19.74	19.98	20.20		
Channel				18650	18900	19150	Tune up Limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1880	1905		
10	QPSK	1	0	21.88	22.18	22.34	23.5	0
10	QPSK	1	24	21.54	21.98	22.24		
10	QPSK	1	49	21.50	21.93	22.14		
10	QPSK	25	0	20.68	20.93	21.00	22.5	0-1
10	QPSK	25	12	20.71	20.93	21.19		
10	QPSK	25	24	20.66	20.85	21.12		
10	QPSK	50	0	20.69	20.90	21.17	22.5	0-1
10	16QAM	1	0	21.20	21.41	21.54		
10	16QAM	1	24	21.03	21.33	21.48		
10	16QAM	1	49	20.84	21.34	21.49	22.5	0-1
10	16QAM	25	0	19.85	19.94	20.11		
10	16QAM	25	12	19.78	19.94	20.20		
10	16QAM	25	24	19.65	19.87	20.13	21.5	0-2
10	16QAM	50	0	19.64	19.86	20.16		



BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune up Limit (dBm)	MPR (dB)
Channel				18625	18900	19175		
Frequency (MHz)				1852.5	1880	1907.5		
5	QPSK	1	0	21.76	21.97	22.35	23.5	0
5	QPSK	1	12	21.57	21.91	22.20		
5	QPSK	1	24	21.57	21.82	22.14		
5	QPSK	12	0	20.56	20.77	21.12	22.5	0-1
5	QPSK	12	6	20.61	20.85	21.19		
5	QPSK	12	11	20.56	20.82	21.16		
5	QPSK	25	0	20.60	20.81	21.20		
5	16QAM	1	0	20.94	21.09	21.51	22.5	0-1
5	16QAM	1	12	20.95	21.09	21.57		
5	16QAM	1	24	20.88	21.14	21.49		
5	16QAM	12	0	19.65	19.87	20.26	21.5	0-2
5	16QAM	12	6	19.69	19.89	20.29		
5	16QAM	12	11	19.60	19.83	20.21		
5	16QAM	25	0	19.63	19.80	20.22		
Channel				18615	18900	19185	Tune up Limit (dBm)	MPR (dB)
Frequency (MHz)				1851.5	1880	1908.5		
3	QPSK	1	0	21.76	22.07	22.38	23.5	0
3	QPSK	1	7	21.83	22.28	22.60		
3	QPSK	1	14	21.67	21.87	22.31		
3	QPSK	8	0	20.62	20.90	21.28	22.5	0-1
3	QPSK	8	4	20.62	20.91	21.31		
3	QPSK	8	7	20.60	20.83	21.24		
3	QPSK	15	0	20.58	20.87	21.19		
3	16QAM	1	0	20.93	21.06	21.51	22.5	0-1
3	16QAM	1	7	20.91	21.44	21.49		
3	16QAM	1	14	20.87	21.16	21.43		
3	16QAM	8	0	19.71	19.98	20.31	21.5	0-2
3	16QAM	8	4	19.60	19.98	20.30		
3	16QAM	8	7	19.70	19.90	20.29		
3	16QAM	15	0	19.57	19.86	20.21		
Channel				18607	18900	19193	Tune up Limit (dBm)	MPR (dB)
Frequency (MHz)				1850.7	1880	1909.3		
1.4	QPSK	1	0	21.75	21.91	22.15	23.5	0
1.4	QPSK	1	2	21.80	21.96	22.34		
1.4	QPSK	1	5	21.69	21.69	22.11		
1.4	QPSK	3	0	21.74	21.83	22.21		
1.4	QPSK	3	1	21.70	21.87	22.23		
1.4	QPSK	3	2	21.72	21.83	22.25		
1.4	QPSK	6	0	20.58	20.79	21.14	22.5	0-1
1.4	16QAM	1	0	20.95	21.16	21.53	22.5	0-1
1.4	16QAM	1	2	20.72	21.19	21.63		
1.4	16QAM	1	5	20.88	21.07	21.44		
1.4	16QAM	3	0	21.01	20.85	21.28		
1.4	16QAM	3	1	20.70	20.96	21.39		
1.4	16QAM	3	2	20.87	20.96	21.36		
1.4	16QAM	6	0	19.83	19.88	20.26	21.5	0-2



**<LTE Band 7>**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune up Limit (dBm)	MPR (dB)
Channel				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	<b>23.00</b>	22.63	22.48	23.5	0
20	QPSK	1	49	22.63	22.84	22.64		
20	QPSK	1	99	22.32	22.24	22.31		
20	QPSK	50	0	21.68	21.74	21.60	22.5	0-1
20	QPSK	50	24	21.66	21.75	21.58		
20	QPSK	50	49	21.60	21.52	21.44		
20	QPSK	100	0	21.54	21.62	21.46	22.5	0-1
20	16QAM	1	0	22.06	21.94	21.94		
20	16QAM	1	49	21.74	21.95	21.83		
20	16QAM	1	99	21.45	21.56	21.41	21.5	0-2
20	16QAM	50	0	20.78	20.78	20.73		
20	16QAM	50	24	20.55	20.80	20.59		
20	16QAM	50	49	20.44	20.50	20.47		
20	16QAM	100	0	20.62	20.72	20.49		
Channel				20825	21100	21375	Tune up Limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	22.86	22.80	22.48	23.5	0
15	QPSK	1	37	22.87	22.99	22.95		
15	QPSK	1	74	22.28	22.56	22.26		
15	QPSK	36	0	21.73	21.78	21.62	22.5	0-1
15	QPSK	36	18	21.72	21.78	21.58		
15	QPSK	36	37	21.56	21.62	21.50		
15	QPSK	75	0	21.72	21.74	21.55	22.5	0-1
15	16QAM	1	0	22.16	22.04	21.95		
15	16QAM	1	37	22.01	22.13	21.85		
15	16QAM	1	74	21.52	21.85	21.65	21.5	0-2
15	16QAM	36	0	20.69	20.75	20.59		
15	16QAM	36	18	20.83	20.80	20.54		
15	16QAM	36	37	20.50	20.62	20.54		
15	16QAM	75	0	20.64	20.72	20.57		



BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune up Limit (dBm)	MPR (dB)
Channel				20800	21100	21400		
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	22.56	22.64	22.39	23.5	0
10	QPSK	1	24	22.55	22.71	22.42		
10	QPSK	1	49	22.41	22.64	22.41		
10	QPSK	25	0	21.62	21.55	21.40	22.5	0-1
10	QPSK	25	12	21.50	21.63	21.43		
10	QPSK	25	24	21.35	21.42	21.30		
10	QPSK	50	0	21.33	21.58	21.32		
10	16QAM	1	0	21.78	21.92	21.87	22.5	0-1
10	16QAM	1	24	21.62	22.02	21.66		
10	16QAM	1	49	21.61	21.68	21.56		
10	16QAM	25	0	20.41	20.53	20.39	21.5	0-2
10	16QAM	25	12	20.39	20.66	20.47		
10	16QAM	25	24	20.21	20.47	20.39		
10	16QAM	50	0	20.31	20.61	20.31		
Channel				20775	21100	21425	Tune up Limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	22.71	22.75	22.50	23.5	0
5	QPSK	1	12	22.69	22.83	22.46		
5	QPSK	1	24	22.35	22.62	22.42		
5	QPSK	12	0	21.66	21.47	21.23	22.5	0-1
5	QPSK	12	6	21.44	21.64	21.37		
5	QPSK	12	11	21.77	21.56	21.36		
5	QPSK	25	0	21.63	21.57	21.33		
5	16QAM	1	0	21.66	21.93	21.71	22.5	0-1
5	16QAM	1	12	21.73	22.11	21.65		
5	16QAM	1	24	21.60	21.87	21.58		
5	16QAM	12	0	20.36	20.66	20.48	21.5	0-2
5	16QAM	12	6	20.40	20.70	20.47		
5	16QAM	12	11	20.36	20.62	20.41		
5	16QAM	25	0	20.38	20.61	20.39		



<LTE Band 5>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20450	20525	20600		
Frequency (MHz)				829	836.5	844		
10	QPSK	1	0	23.90	23.91	23.88	24.5	0
10	QPSK	1	25	23.76	23.84	23.81		
10	QPSK	1	49	23.62	23.81	23.76		
10	QPSK	25	0	22.86	22.90	22.89	23.5	0-1
10	QPSK	25	12	22.84	22.89	22.87		
10	QPSK	25	25	22.80	22.79	22.83		
10	QPSK	50	0	22.80	22.91	22.86	23.5	0-1
10	16QAM	1	0	23.13	23.19	23.28		
10	16QAM	1	25	22.98	23.09	23.08		
10	16QAM	1	49	22.97	23.13	23.04	22.5	0-2
10	16QAM	25	0	21.78	21.90	21.82		
10	16QAM	25	12	21.83	21.89	21.84		
10	16QAM	25	25	21.78	21.79	21.84	22.5	0-2
10	16QAM	25	25	21.78	21.79	21.84		
10	16QAM	50	0	21.82	21.90	21.85	22.5	0-2
10	16QAM	50	0	21.82	21.90	21.85		
Channel				20425	20525	20625	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	0	23.78	23.92	24.01	24.5	0
5	QPSK	1	12	23.95	23.87	23.90		
5	QPSK	1	24	23.81	23.82	23.87		
5	QPSK	12	0	22.91	22.92	22.88	23.5	0-1
5	QPSK	12	7	22.83	22.88	22.87		
5	QPSK	12	13	22.86	22.84	22.94		
5	QPSK	25	0	22.78	22.85	22.84	23.5	0-1
5	16QAM	1	0	23.08	23.24	23.17		
5	16QAM	1	12	23.17	23.11	23.09		
5	16QAM	1	24	23.05	23.13	23.11	23.5	0-1
5	16QAM	12	0	21.93	21.91	21.91		
5	16QAM	12	7	21.83	21.88	21.89		
5	16QAM	12	13	21.85	21.84	21.92	22.5	0-2
5	16QAM	12	13	21.85	21.84	21.92		
5	16QAM	25	0	21.79	21.85	21.88	22.5	0-2
5	16QAM	25	0	21.79	21.85	21.88		
Channel				20415	20525	20635	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				825.5	836.5	847.5		
3	QPSK	1	0	23.67	23.77	23.93	24.5	0
3	QPSK	1	8	23.94	23.88	24.02		
3	QPSK	1	14	23.78	23.71	23.88		
3	QPSK	8	0	22.75	22.79	22.88	23.5	0-1
3	QPSK	8	4	22.81	22.72	22.92		
3	QPSK	8	7	22.69	22.71	22.86		
3	QPSK	15	0	22.76	22.76	22.93	23.5	0-1
3	16QAM	1	0	22.88	23.03	23.14		
3	16QAM	1	8	23.18	23.15	23.28		
3	16QAM	1	14	23.01	22.90	23.12	23.5	0-1
3	16QAM	8	0	21.80	21.83	21.91		
3	16QAM	8	4	21.85	21.83	21.99		
3	16QAM	8	7	21.75	21.80	21.93	22.5	0-2
3	16QAM	8	7	21.75	21.80	21.93		
3	16QAM	15	0	21.80	21.74	21.93	22.5	0-2
3	16QAM	15	0	21.80	21.74	21.93		



Channel				20407	20525	20643	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				824.7	836.5	848.3		
1.4	QPSK	1	0	23.64	23.76	23.86	24.5	0
1.4	QPSK	1	3	23.68	23.82	23.90		
1.4	QPSK	1	5	23.60	23.67	23.84		
1.4	QPSK	3	0	23.76	23.75	23.96		
1.4	QPSK	3	1	23.78	23.74	23.94		
1.4	QPSK	3	3	23.74	23.74	23.93		
1.4	QPSK	6	0	22.62	22.65	22.81	23.5	0-1
1.4	16QAM	1	0	22.84	23.00	23.21	23.5	0-1
1.4	16QAM	1	3	23.04	23.06	23.13		
1.4	16QAM	1	5	22.91	22.97	23.15		
1.4	16QAM	3	0	22.74	22.71	22.92		
1.4	16QAM	3	1	22.79	22.73	22.90		
1.4	16QAM	3	3	22.75	22.73	22.97		
1.4	16QAM	6	0	21.75	21.76	21.91	22.5	0-2



<WLAN Conducted Power>

<WLAN 2.4GHz>

2.4GHz 802.11b Average Power (dBm)								Tune up Limit (dBm)
Power vs. Channel				Power vs. Data Rate				
Channel	Frequency (MHz)	Chain Port	Data Rate 1Mbps	Channel	2Mbps	5.5Mbps	11Mbps	
CH 01	2412	1	15.23	CH 06	15.99	16.14	16.08	16.5
CH 06	2437	1	16.15					
CH 11	2462	1	14.42					
CH 01	2412	2	19.81	CH 06	20.09	20.25	20.23	20.5
CH 06	2437	2	20.26					
CH 11	2462	2	19.48					

2.4GHz 802.11g Average Power (dBm)												Tune up Limit (dBm)
Power vs. Channel				Power vs. Data Rate								
Channel	Frequency (MHz)	Chain Port	Data Rate 6Mbps	Channel	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps	
CH 01	2412	1	14.42	CH 06	15.31	15.37	15.33	15.18	15.11	15.15	15.36	15.5
CH 06	2437	1	15.39									
CH 11	2462	1	14.12									
CH 01	2412	2	15.75	CH 06	16.24	16.21	16.31	16.15	16.28	16.29	16.32	16.5
CH 06	2437	2	16.35									
CH 11	2462	2	15.58									

2.4GHz 802.11n HT20 Average Power (dBm)												Tune up Limit (dBm)
Power vs. Channel				Power vs. MCS Index								
Channel	Frequency (MHz)	Chain Port	MCS Index MCS0	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	
CH 01	2412	1	18.51	CH 06	19.27	19.26	19.19	18.41	18.49	17.43	15.54	19.5
CH 06	2437	1	19.29									
CH 11	2462	1	17.69									
CH 01	2412	2	18.55	CH 06	19.37	19.39	19.36	18.33	18.26	17.45	15.70	19.5
CH 06	2437	2	19.41									
CH 11	2462	2	18.96									
CH 01	2412	1+2	18.76	CH 06	19.44	19.06	19.07	18.44	18.34	18.28	18.37	19.5
CH 06	2437	1+2	19.45									
CH 11	2462	1+2	18.30									



2.4GHz 802.11n HT40 Average Power (dBm)												Tune up Limit (dBm)
Power vs. Channel				Power vs. MCS Index								
Channel	Frequency (MHz)	Chain Port	MCS Index MCS0	MCS1	Channel	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	
CH 03	2422	1	17.42	18.06	CH 06	18.03	16.92	16.86	16.23	15.11	13.30	18.5
CH 06	2437	1	17.48	18.14								
CH 09	2452	1	16.76	17.40								
CH 03	2422	2	17.28	17.92	CH 06	18.43	17.18	17.28	17.67	17.65	17.61	18.5
CH 06	2437	2	17.67	18.45								
CH 09	2452	2	17.10	18.28								
CH 03	2422	1+2	17.71	18.54	CH 06	18.55	17.32	17.67	17.30	17.23	16.98	19.0
CH 06	2437	1+2	17.74	18.73								
CH 09	2452	1+2	17.35	18.31								

**<WLAN 5GHz>**

WLAN 5GHz 802.11a Average Power (dBm)												Tune up Limit (dBm)
Power vs. Channel				Power vs. Data Rate								
Channel	Frequency (MHz)	Chain Port	Data Rate 6Mbps	Channel	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps	
CH 36	5180	1	17.17	CH 36	17.01	16.98	16.99	17.04	17.10	16.97	17.14	17.5
CH 44	5220	1	15.68									
CH 48	5240	1	16.01									
CH 149	5745	1	12.23	CH 149	12.10	12.08	12.12	12.15	12.16	12.09	12.19	12.5
CH 157	5785	1	11.87									
CH 165	5825	1	11.53									
CH 36	5180	2	17.55	CH 36	17.33	17.37	17.44	17.42	17.50	17.52	17.53	18.0
CH 44	5220	2	16.35									
CH 48	5240	2	16.51									
CH 149	5745	2	15.15	CH 149	15.02	14.93	15.07	14.97	15.09	15.11	15.08	15.5
CH 157	5785	2	14.57									
CH 165	5825	2	14.11									



WLAN 5GHz 802.11n-HT20 Average Power (dBm)												
Power vs. Channel				Power vs. Data Rate								Tune up Limit (dBm)
Channel	Frequency (MHz)	Chain Port	MCS Index MCS0	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	
CH 36	5180	1	14.10	CH 44	14.36	14.32	14.39	14.43	14.45	14.54	14.55	15.0
CH 44	5220	1	14.58									
CH 48	5240	1	13.64									
CH 149	5745	1	14.57	CH 149	14.42	14.43	14.47	14.51	14.54	14.49	14.48	15.0
CH 157	5785	1	14.10									
CH 165	5825	1	13.64									
CH 36	5180	2	13.89	CH 48	14.15	14.19	14.23	14.30	14.24	14.28	14.33	14.5
CH 44	5220	2	13.98									
CH 48	5240	2	14.36									
CH 149	5745	2	13.86	CH 149	13.70	13.72	13.76	13.77	13.83	13.80	13.78	14.0
CH 157	5785	2	13.37									
CH 165	5825	2	13.10									
CH 36	5180	1+2	14.76	CH 44	14.89	14.91	14.96	14.85	14.87	14.82	14.88	15.5
CH 44	5220	1+2	15.12									
CH 48	5240	1+2	14.99									
CH 149	5745	1+2	14.94	CH 149	14.83	14.77	14.73	14.67	14.71	14.76	14.75	15.0
CH 157	5785	1+2	14.80									
CH 165	5825	1+2	14.08									

WLAN 5GHz 802.11n-HT40 Average Power (dBm)												
Power vs. Channel				Power vs. Data Rate								Tune up Limit (dBm)
Channel	Frequency (MHz)	Chain Port	MCS Index MCS0	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	
CH 38	5190	1	15.13	CH 38	14.61	14.77	14.96	15.00	15.04	15.03	15.06	15.5
CH 46	5230	1	14.55									
CH 151	5755	1	12.84									
CH 159	5795	1	12.36	CH 151	12.64	12.71	12.61	12.75	12.76	12.78	12.82	13.0
CH 38	5190	2	14.44									
CH 46	5230	2	15.18									
CH 151	5755	2	12.62	CH 151	12.27	12.31	12.35	12.52	12.59	12.55	12.60	13.0
CH 159	5795	2	12.11									
CH 38	5190	1+2	15.33									
CH 46	5230	1+2	15.22	CH 38	15.26	15.15	14.93	15.02	15.11	15.14	15.05	15.5
CH 151	5755	1+2	13.64									
CH 159	5795	1+2	13.44									
CH 151	5755	1+2	13.64	CH 151	13.52	13.37	13.38	13.29	13.33	13.42	13.44	14.0
CH 159	5795	1+2	13.44									

Summarized necessary items addressed in KDB 941225 D05 v02r05																																							
FCC ID	SRQ-MF275R																																						
EUT	HSPA/LTE CPE																																						
Operating Frequency Range of each LTE transmission band	LTE Band 12: 699.7 MHz ~ 715.3 MHz LTE Band 17: 706.5 MHz ~ 713.5 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 7: 2502.5 MHz ~ 2567.5 MHz TE Band 5: 824 MHz ~ 849 MHz																																						
Channel Bandwidth	LTE Band 12: 1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 4: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 2: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5: 1.4MHz, 3MHz, 5MHz, 10MHz																																						
Uplink modulations used	QPSK and 16QAM																																						
LTE MPR permanently built-in by design	<p align="center"><b>Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Modulation</th> <th colspan="6">Channel bandwidth / Transmission bandwidth (RB)</th> <th rowspan="2">MPR (dB)</th> </tr> <tr> <th>1.4 MHz</th> <th>3.0 MHz</th> <th>5 MHz</th> <th>10 MHz</th> <th>15 MHz</th> <th>20 MHz</th> </tr> </thead> <tbody> <tr> <td>QPSK</td> <td>&gt; 5</td> <td>&gt; 4</td> <td>&gt; 8</td> <td>&gt; 12</td> <td>&gt; 16</td> <td>&gt; 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>&gt; 5</td> <td>&gt; 4</td> <td>&gt; 8</td> <td>&gt; 12</td> <td>&gt; 16</td> <td>&gt; 18</td> <td>≤ 2</td> </tr> </tbody> </table>	Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)																																
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz																																	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1																																
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1																																
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2																																
LTE -MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI).																																						
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																						



Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 12												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	23017	699.7	23025	700.5	23035	701.5	23060	704				
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5				
H	23173	715.3	23165	714.5	23155	713.5	23130	711				
LTE Band 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq. (MHz)		Channel #		Freq. (MHz)					
L	23755		706.5		23780		709					
M	23790		710		23790		710					
H	23825		713.5		23800		711					
LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510				
M	21100	2535	21100	2535	21100	2535	21100	2535				
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560				
LTE Band 5												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	20407	824.7	20415	825.5	20425	826.5	20450	829				
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5				
H	20643	848.3	20635	847.5	20625	846.5	20600	844				



### 4. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposures</b>				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna



## **5. Radio Frequency Radiation Exposure Evaluation**

### **5.1. Standalone Power Density Calculation**

Band	Frequency (MHz)	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (W)	Average EIRP (mW)	Power Density at 20cm (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Power Density / Limit
WCDMA Band V	826.4	-0.03	24.0	23.970	0.249	31.405	0.006	0.551	0.011
WCDMA Band II	1852.4	0.57	23.0	23.570	0.228	28.642	0.006	1.000	0.006
LTE Band 12	699.7	-2.21	23.0	20.790	0.120	30.130	0.006	0.466	0.013
LTE Band 17	706.5	-1.72	23.5	21.780	0.151	56.494	0.011	0.471	0.024
LTE Band 4	1710.7	1.31	23.5	24.810	0.303	151.705	0.030	1.000	0.030
LTE Band 2	1850.7	0.57	23.5	24.070	0.255	32.137	0.006	1.000	0.006
LTE Band 7	2502.5	1.87	23.5	25.370	0.344	86.497	0.017	1.000	0.017
LTE Band 5	824.7	-0.03	24.5	24.470	0.280	70.307	0.014	0.550	0.025
WLAN 2.4GHz 802.11b Chain Port 1	2412.0	2.68	16.5	19.180	0.083	31.046	0.006	1.000	0.006
WLAN 2.4GHz 802.11b Chain Port 2	2412.0	4.51	20.5	25.010	0.317	158.855	0.032	1.000	0.032
WLAN 2.4GHz 802.11g Chain Port 1	2412.0	2.68	15.5	18.180	0.066	8.279	0.002	1.000	0.002
WLAN 2.4GHz 802.11g Chain Port 2	2412.0	4.51	16.5	21.010	0.126	15.885	0.003	1.000	0.003
WLAN 2.4GHz 802.11n HT20 Chain Port 1	2412.0	2.68	19.5	22.180	0.165	41.495	0.008	1.000	0.008
WLAN 2.4GHz 802.11n HT20 Chain Port 2	2412.0	4.51	19.5	24.010	0.252	94.406	0.019	1.000	0.019
WLAN 2.4GHz 802.11n HT20 Chain Port 1+2	2412.0	6.65	19.5	26.150	0.412	206.538	0.041	1.000	0.041
WLAN 2.4GHz 802.11n HT40 Chain Port 1	2412.0	2.68	18.5	21.180	0.131	16.520	0.003	1.000	0.003
WLAN 2.4GHz 802.11n HT40 Chain Port 2	2412.0	4.51	18.5	23.010	0.200	50.234	0.010	1.000	0.010
WLAN 2.4GHz 802.11n HT40 Chain Port 1+2	2412.0	6.65	19.0	25.650	0.367	137.721	0.027	1.000	0.027
WLAN 5.2GHz 802.11a Chain Port 1	5180.0	0.76	17.5	18.260	0.067	33.574	0.007	1.000	0.007
WLAN 5.2GHz 802.11a Chain Port 2	5180.0	1.61	18.0	19.610	0.091	91.411	0.018	1.000	0.018
WLAN 5.2GHz 802.11n HT20 Chain Port 1	5180.0	0.76	15.0	15.760	0.038	37.670	0.007	1.000	0.007
WLAN 5.2GHz 802.11n HT20 Chain Port 2	5180.0	1.61	14.5	16.110	0.041	40.832	0.008	1.000	0.008
WLAN 5.2GHz 802.11n HT20 Chain Port 1+2	5180.0	4.21	15.5	19.710	0.094	93.541	0.019	1.000	0.019
WLAN 5.2GHz 802.11n HT40 Chain Port 1	5190.0	0.76	15.5	16.260	0.042	42.267	0.008	1.000	0.008
WLAN 5.2GHz 802.11n HT40 Chain Port 2	5190.0	1.61	15.5	17.110	0.051	51.404	0.010	1.000	0.010
WLAN 5.2GHz 802.11n HT40 Chain Port 1+2	5190.0	4.21	15.5	19.710	0.094	93.541	0.019	1.000	0.019
WLAN 5.8GHz 802.11a Chain Port 1	5745.0	3.33	12.5	15.830	0.038	38.282	0.008	1.000	0.008
WLAN 5.8GHz 802.11a Chain Port 2	5745.0	0.27	15.5	15.770	0.038	37.757	0.008	1.000	0.008
WLAN 5.8GHz 802.11n HT20 Chain Port 1	5745.0	3.33	15.0	18.330	0.068	68.077	0.014	1.000	0.014
WLAN 5.8GHz 802.11n HT20 Chain Port 2	5745.0	0.27	14.0	14.270	0.027	26.730	0.005	1.000	0.005
WLAN 5.8GHz 802.11n HT20 Chain Port 1+2	5745.0	4.95	15.0	19.950	0.099	98.855	0.020	1.000	0.020
WLAN 5.8GHz 802.11n HT40 Chain Port 1	5755.0	3.33	13.0	16.330	0.043	42.954	0.009	1.000	0.009
WLAN 5.8GHz 802.11n HT40 Chain Port 2	5755.0	0.27	13.0	13.270	0.021	21.232	0.004	1.000	0.004
WLAN 5.8GHz 802.11n HT40 Chain Port 1+2	5755.0	4.95	14.0	18.950	0.079	78.524	0.016	1.000	0.016

**Note:** For conservativeness, the lowest uplink frequency of each band is used to determine the MPE limit of that band.



**5.2. Collocated Power Density Calculation**

Mode	Frequency	Maximum EIRP (dBm)	Calculated Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	WLAN Power Density / Limit	LTE B and 4 Power Density / Limit	Σ (Power Density / Limit) of WWAN+ WLAN 2.4GHz + WLAN 5GHz
WLAN2.4GHz	2412MHz ~ 2462MHz	26.150	0.041	1.000	0.041	0.030	0.091
WLAN5GHz	5745 MHz ~ 5825	19.950	0.020	1.000	0.020		

**Note:**

1. For collocation analysis, LTE Band 4 is chosen for summation due to the highest (power density/limit) among all WWAN wireless modes.
2. Σ (Power Density / Limit): This is a summation of [(power density for each transmitter/antenna included in the simultaneous transmission)/ (corresponding MPE limit)], for WWAN + WLAN 2.4GHz + WLAN 5GHz.

**Conclusion:**

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.



**Appendix A. Product Equality Declaration**

## ZTE CORPORATION

# Product Change Description

As the applicant of the below model, [ZTE Corporation] declares that the product,

[MF275R]

[ZTE Corporation]

is the variant of the initial certified product,

[MF275R]

[ZTE Corporation]

### SOFTWARE MODIFICATIONS:

Protocol Stack changes: NO

MMS/STK changes: NO

JAVA changes: NO

Other changes detailed: 1)change SSID name

2)change APN

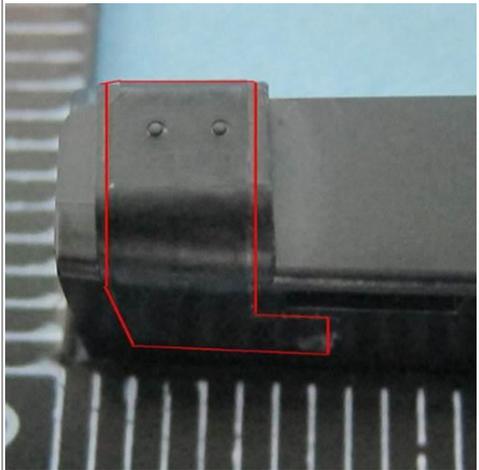
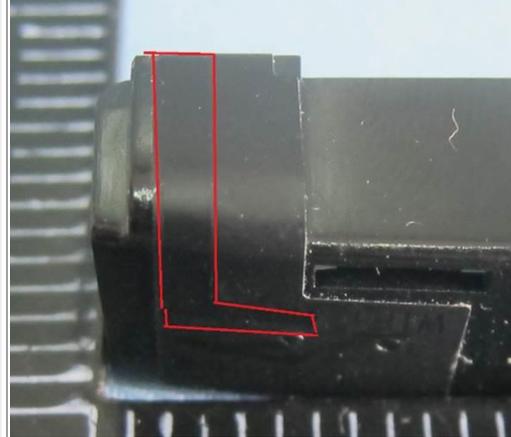
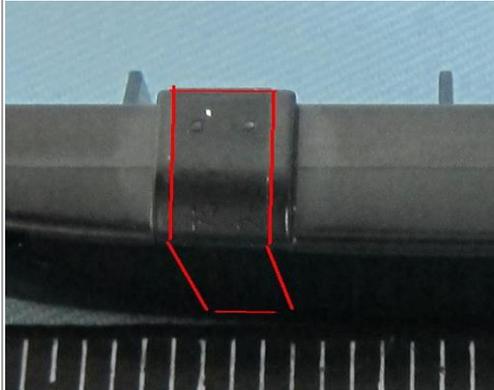
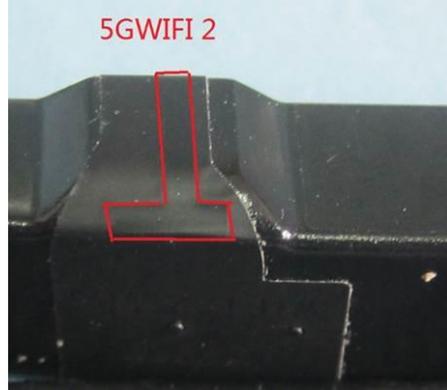
3)added the LTE Band V(Changed the VN)

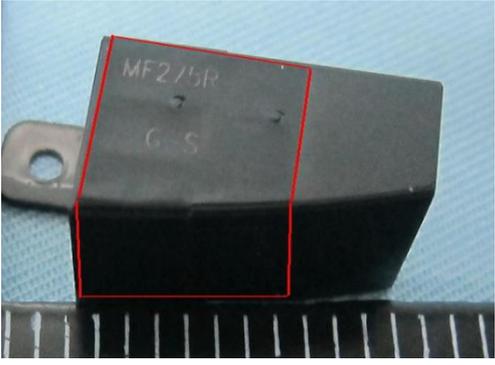
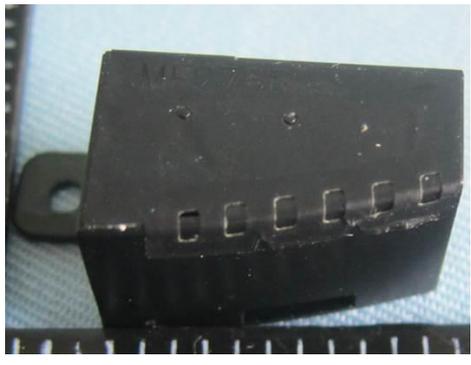
### HARDWARE MODIFICATION:

Band changes: NO

Power Amplifier changes: NO

Antenna changes: yes, Wifi and GPS antenna change

Original Wifi 2 Ant	Variant
 <p>A close-up photograph of a black antenna component. A red L-shaped outline highlights the top and right side of the component.</p>	 <p>A close-up photograph of a black antenna component, similar to the original but with a different top profile. A red L-shaped outline highlights the top and right side.</p>
Original 5G Wifi 2	Variant
 <p>A close-up photograph of a black antenna component. A red L-shaped outline highlights the top and right side.</p>	 <p>A close-up photograph of a black antenna component. A red L-shaped outline highlights the top and right side. The text "5GWIFI 2" is printed in red at the top of the image.</p>
Original 5G Wifi main	Variant
 <p>A close-up photograph of a black antenna component. A red rectangular outline highlights the top surface.</p>	 <p>A close-up photograph of a black antenna component with a different top profile. A red outline highlights the top surface. The text "5G WIFI 1" is printed in red at the top of the image.</p>

Original GPS Ant	Variant
	

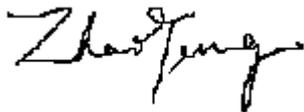
PCB Layout changes: NO  
Components on PCB changes: NO  
LCD changes: NO  
Speaker changes: NO  
Camera changes: NO  
Vibrator changes: NO  
Bluetooth changes: NO  
FM changes: NO  
Other changes:

## MECHANICAL MODIFICATIONS:

Use new metal front/back cover or keypad: NO  
Mechanical shell changes: NO  
Other changes detailed: NO

## ACCESSORY MODIFICATIONS:

Battery changes: NO  
AC Adaptor changes: NO  
Earphone changes: NO



APPROVED BY: zhaoyang

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