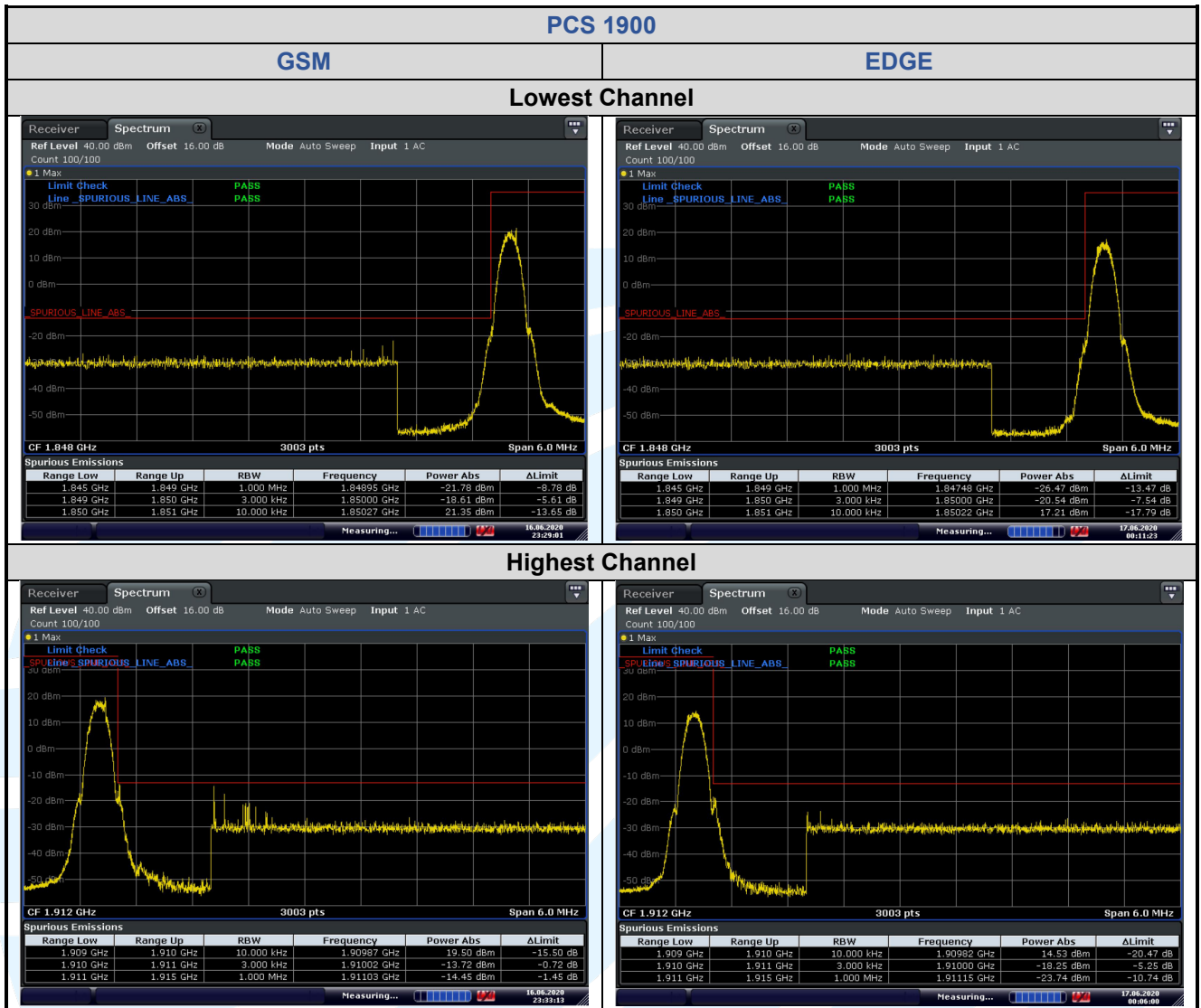
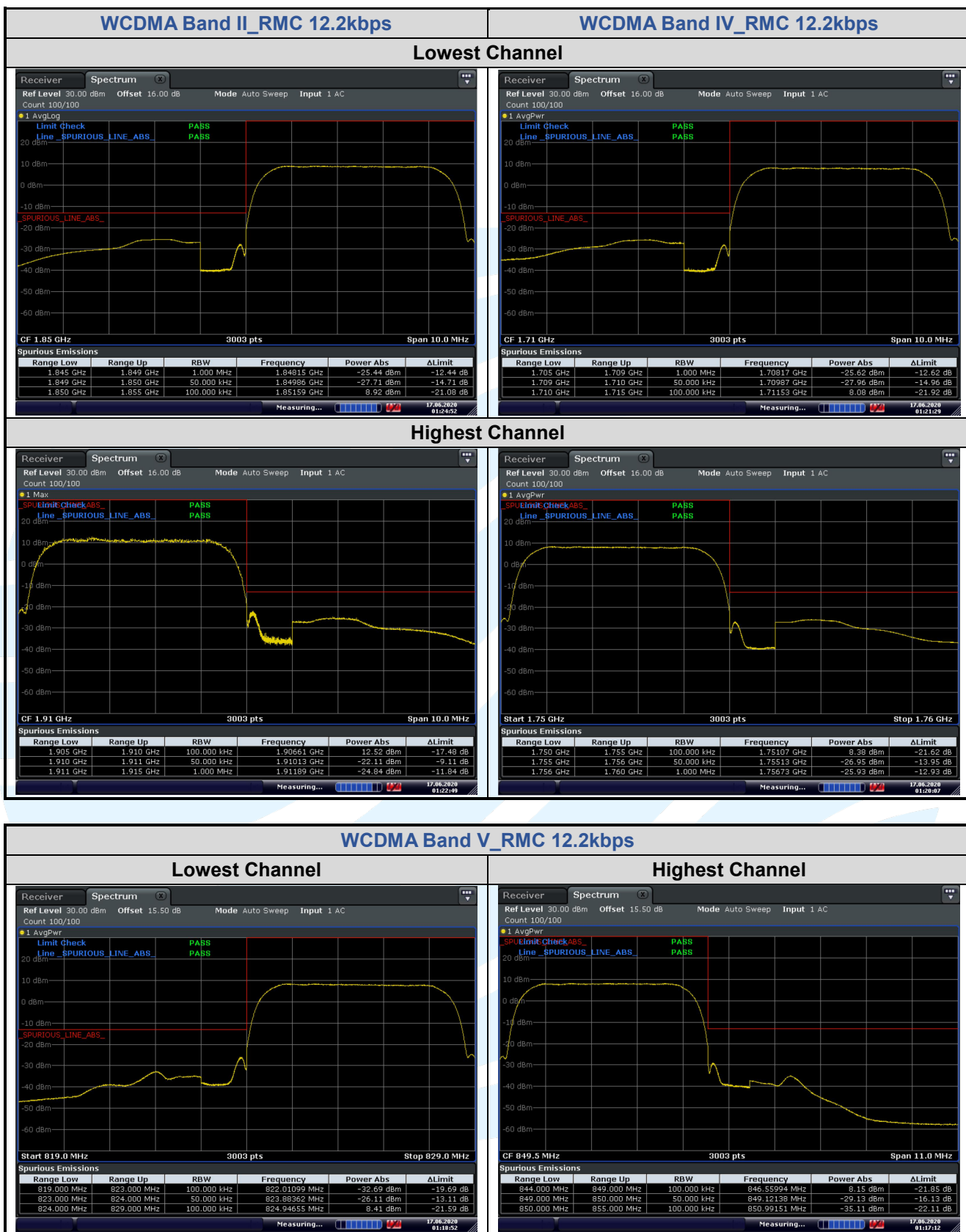






5.7 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Test Requirement: FCC 47 CFR Part 2.1051,
FCC 47 CFR Part 22.917(a)(b),
FCC 47 CFR Part 24.238(a)(b),
FCC 47 CFR Part 27.53(h)(1)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Limit:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13 dBm.

Test Procedure:

The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range. b. Measuring frequency range is from 30 MHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower. Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

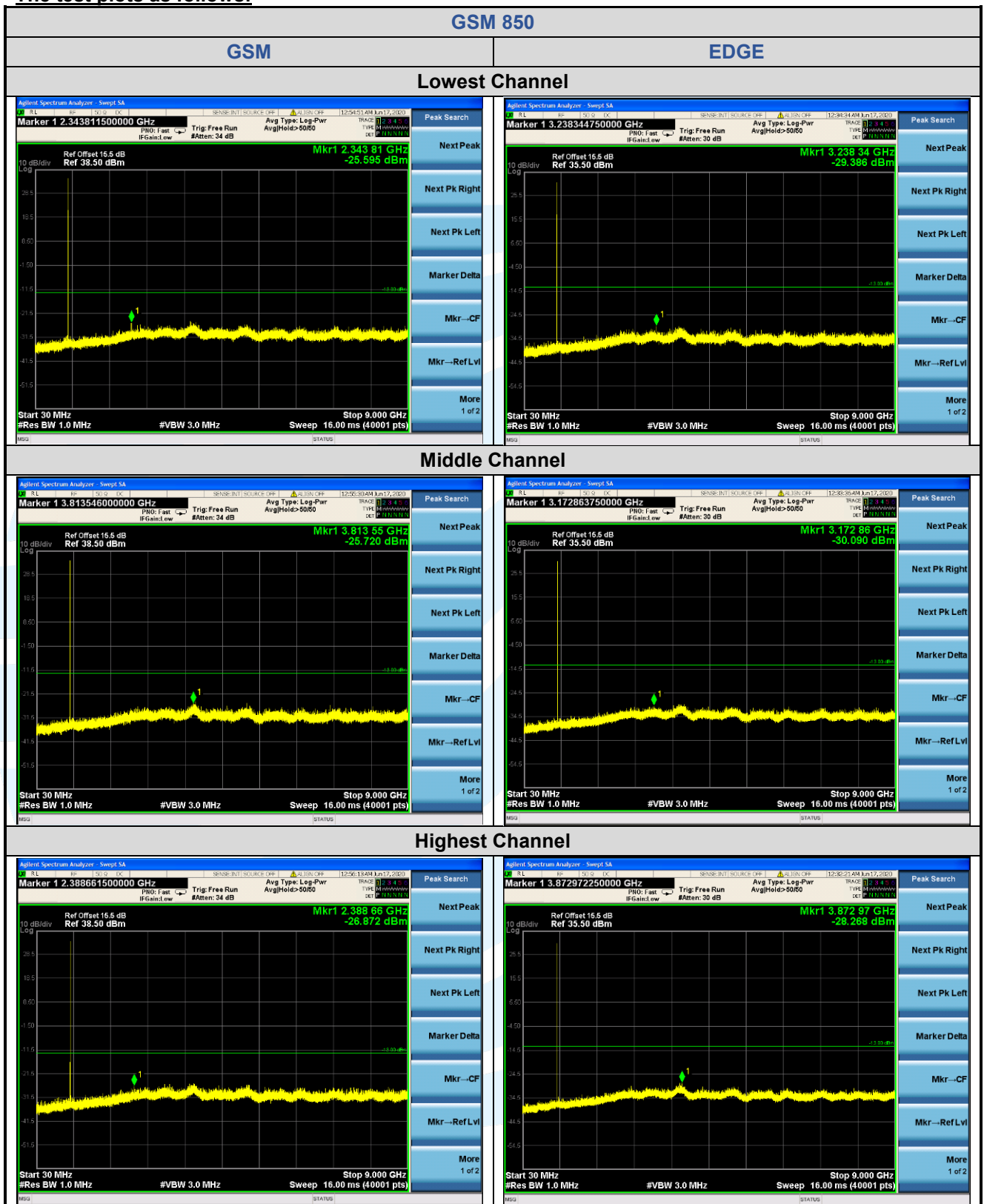
Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

The test plots as follows:



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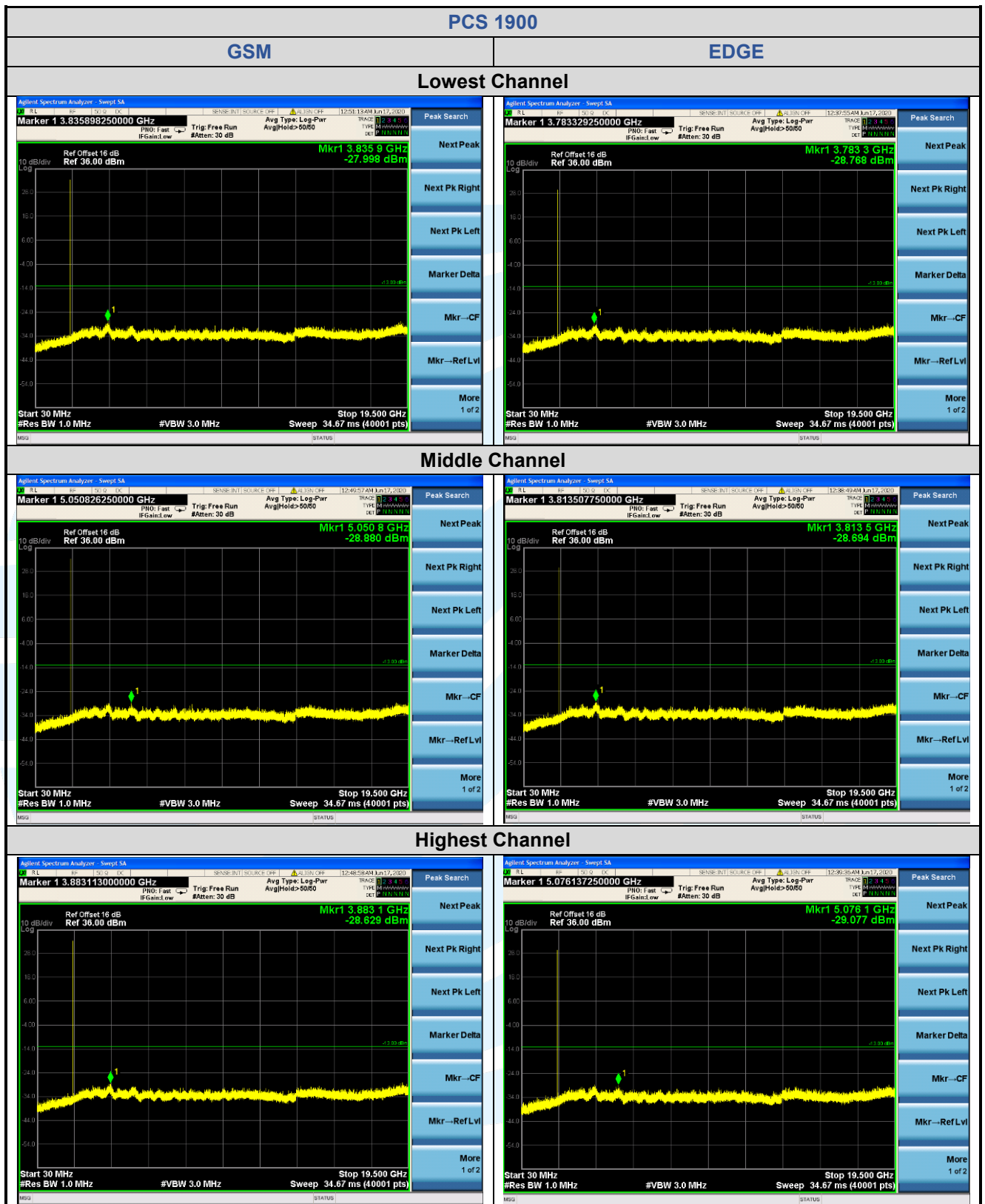
Tel: +86-755-28230888

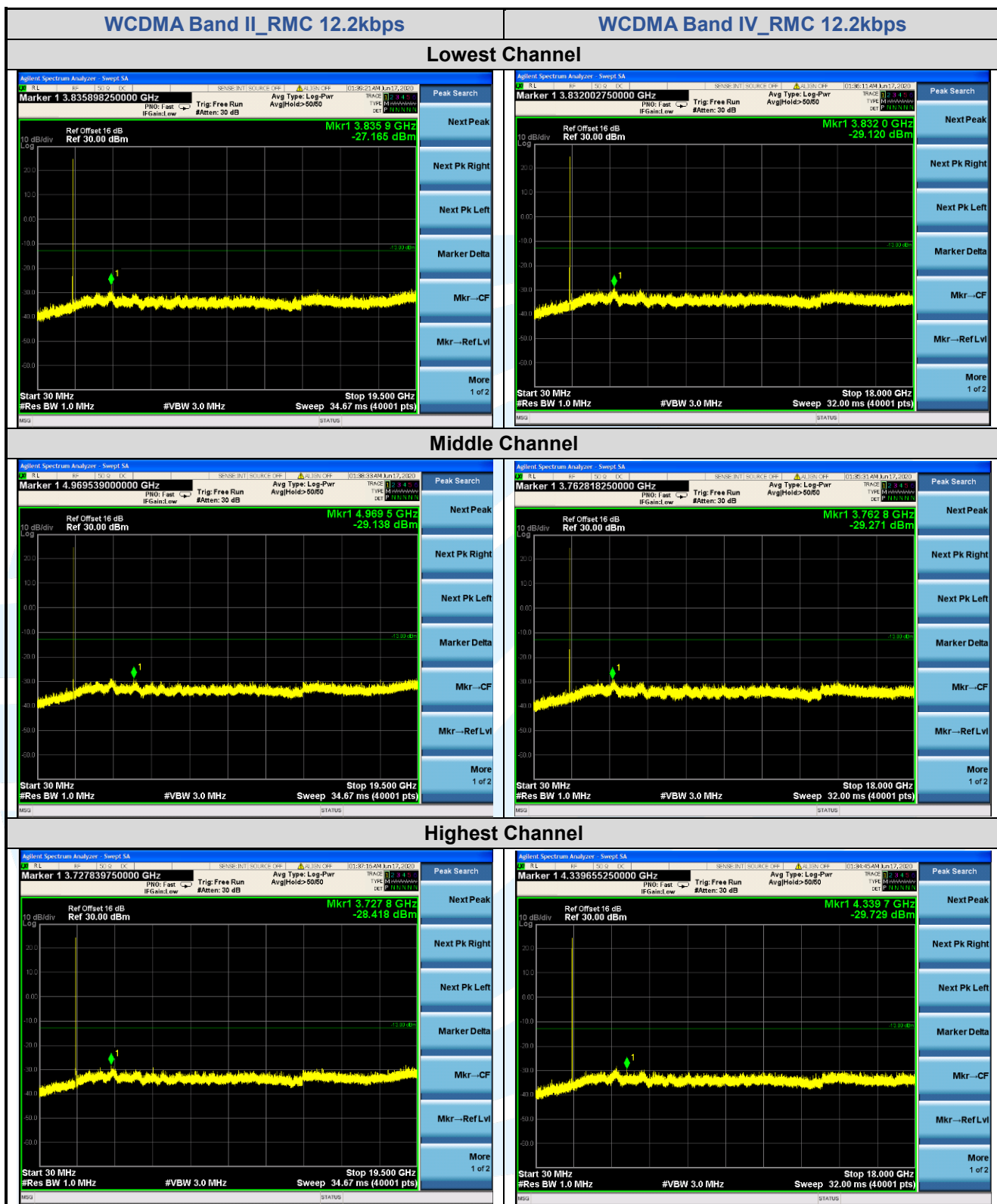
Fax: +86-755-28230886

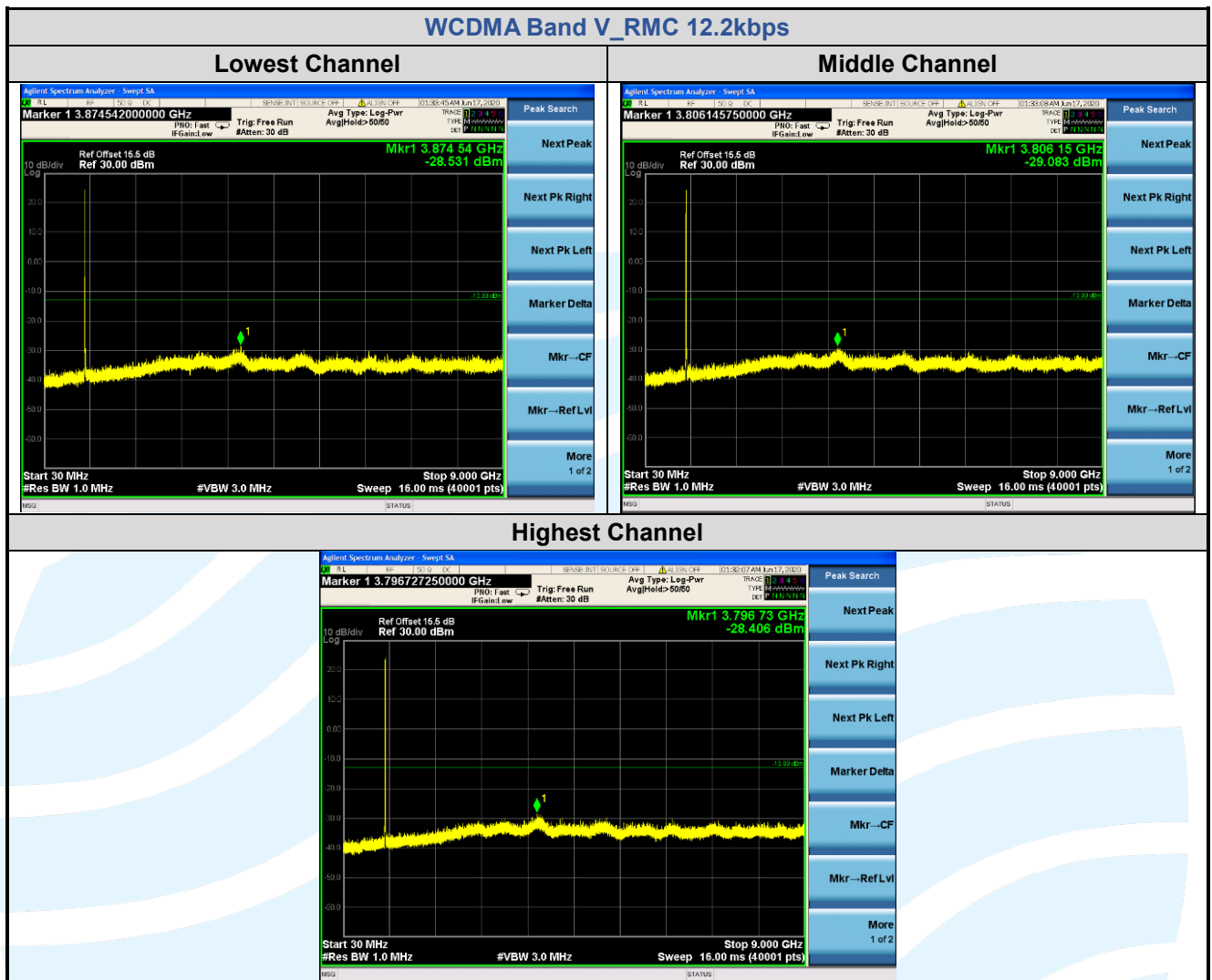
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Remark:

1) All the above radiation data, the fundamental frequency is not marked, it may exceed the limit, please ignore it.

5.8 FIELD STRENGTH OF SPURIOUS RADIATION

Test Requirement: FCC 47 CFR Part 2.1053,
FCC 47 CFR Part 22.917(a)(b),
FCC 47 CFR Part 24.238(a)(b),
FCC 47 CFR Part 27.53(h)(1)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01 Section 7

Limits:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13 dBm.

Test Setup: Refer to section 4.2.1 for details.

Test Procedures: KDB 971168 D01v03r01 Section 7

Equipment Used: Refer to section 3 for details.

Test Result: Pass

The measurement data as follows:

Below 1G

GSM 850

No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
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GPRS_Lowest Channel

1	39.737	-90.59	33.60	-56.99	-13.00	-43.99	Horizontal
2	298.593	-88.81	37.22	-51.59	-13.00	-38.59	Horizontal
3	689.051	-87.96	47.33	-40.63	-13.00	-27.63	Horizontal
4	30.425	-92.48	38.68	-53.80	-13.00	-40.80	Vertical
5	182.578	-88.90	33.49	-55.41	-13.00	-42.41	Vertical
6	703.731	-88.22	46.44	-41.78	-13.00	-28.78	Vertical

GPRS_Middle Channel

1	32.411	-91.58	37.40	-54.18	-13.00	-41.18	Horizontal
2	189.108	-89.98	33.32	-56.66	-13.00	-43.66	Horizontal
3	804.252	-88.57	48.11	-40.46	-13.00	-27.46	Horizontal
4	31.292	-92.23	38.12	-54.11	-13.00	-41.11	Vertical
5	358.450	-89.04	39.38	-49.66	-13.00	-36.66	Vertical
6	554.171	-88.40	44.51	-43.89	-13.00	-30.89	Vertical

GPRS_Highest Channel

1	32.411	-92.25	37.40	-54.85	-13.00	-41.85	Horizontal
2	202.875	-90.12	33.85	-56.27	-13.00	-43.27	Horizontal
3	821.387	-87.87	47.99	-39.88	-13.00	-26.88	Horizontal
4	34.527	-91.57	36.01	-55.56	-13.00	-42.56	Vertical
5	144.790	-88.45	32.12	-56.33	-13.00	-43.33	Vertical
6	713.692	-89.02	46.32	-42.70	-13.00	-29.70	Vertical

PCS 1900							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
GPRS_ Lowest Channel							
1	47.703	-73.31	1.57	-71.74	-13.00	-58.74	Horizontal
2	101.893	-76.55	2.97	-73.58	-13.00	-60.58	Horizontal
3	952.000	-81.74	22.57	-59.17	-13.00	-46.17	Horizontal
4	36.014	-79.62	6.05	-73.57	-13.00	-60.57	Vertical
5	204.305	-79.85	5.48	-74.37	-13.00	-61.37	Vertical
6	986.044	-82.70	22.15	-60.55	-13.00	-47.55	Vertical
GPRS_ Middle Channel							
1	47.703	-73.39	1.57	-71.82	-13.00	-58.82	Horizontal
2	69.230	-73.81	0.81	-73.00	-13.00	-60.00	Horizontal
3	945.334	-81.96	22.27	-59.69	-13.00	-46.69	Horizontal
4	31.292	-81.19	9.08	-72.11	-13.00	-59.11	Vertical
5	158.640	-79.91	4.23	-75.68	-13.00	-62.68	Vertical
6	804.252	-81.97	18.04	-63.93	-13.00	-50.93	Vertical
GPRS_ Highest Channel							
1	51.900	-71.64	0.56	-71.08	-13.00	-58.08	Horizontal
2	104.798	-77.44	2.93	-74.51	-13.00	-61.51	Horizontal
3	787.475	-80.39	18.47	-61.92	-13.00	-48.92	Horizontal
4	35.016	-79.35	6.69	-72.66	-13.00	-59.66	Vertical
5	427.292	-79.48	12.81	-66.67	-13.00	-53.67	Vertical
6	965.474	-82.07	21.49	-60.58	-13.00	-47.58	Vertical

WCDMA Band II							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	47.703	-72.85	1.57	-71.28	-13.00	-58.28	Horizontal
2	104.064	-77.09	2.94	-74.15	-13.00	-61.15	Horizontal
3	938.714	-80.95	21.86	-59.09	-13.00	-46.09	Horizontal
4	31.073	-81.28	9.21	-72.07	-13.00	-59.07	Vertical
5	159.759	-80.07	4.26	-75.81	-13.00	-62.81	Vertical
6	703.731	-81.41	17.01	-64.40	-13.00	-51.40	Vertical
RMC 12.2kbps_ Middle Channel							
1	47.703	-73.28	1.57	-71.71	-13.00	-58.71	Horizontal
2	103.335	-76.48	2.94	-73.54	-13.00	-60.54	Horizontal
3	938.714	-81.21	21.86	-59.35	-13.00	-46.35	Horizontal
4	32.640	-80.37	8.21	-72.16	-13.00	-59.16	Vertical
5	278.331	-81.03	8.61	-72.42	-13.00	-59.42	Vertical
6	938.714	-82.36	20.77	-61.59	-13.00	-48.59	Vertical
RMC 12.2kbps_ Highest Channel							
1	54.135	-71.90	0.40	-71.50	-13.00	-58.50	Horizontal
2	105.537	-77.30	2.92	-74.38	-13.00	-61.38	Horizontal
3	693.910	-81.08	18.00	-63.08	-13.00	-50.08	Horizontal
4	33.807	-80.51	7.46	-73.05	-13.00	-60.05	Vertical
5	124.925	-78.76	2.68	-76.08	-13.00	-63.08	Vertical
6	833.013	-81.55	18.46	-63.09	-13.00	-50.09	Vertical

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WCDMA Band IV							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	47.703	-72.76	1.57	-71.19	-13.00	-58.19	Horizontal
2	101.893	-76.49	2.97	-73.52	-13.00	-60.52	Horizontal
3	809.924	-81.11	18.69	-62.42	-13.00	-49.42	Horizontal
4	153.163	-79.19	4.08	-75.11	-13.00	-62.11	Vertical
5	424.300	-81.84	12.84	-69.00	-13.00	-56.00	Vertical
6	798.620	-81.57	17.87	-63.70	-13.00	-50.70	Vertical
RMC 12.2kbps_ Middle Channel							
1	47.703	-72.77	1.57	-71.20	-13.00	-58.20	Horizontal
2	164.313	-79.04	4.65	-74.39	-13.00	-61.39	Horizontal
3	708.694	-81.35	17.94	-63.41	-13.00	-50.41	Horizontal
4	30.425	-82.05	9.63	-72.42	-13.00	-59.42	Vertical
5	158.640	-79.86	4.23	-75.63	-13.00	-62.63	Vertical
6	698.804	-80.77	16.98	-63.79	-13.00	-50.79	Vertical
RMC 12.2kbps_ Highest Channel							
1	47.703	-72.29	1.57	-70.72	-13.00	-57.72	Horizontal
2	104.798	-76.59	2.93	-73.66	-13.00	-60.66	Horizontal
3	833.013	-80.52	18.53	-61.99	-13.00	-48.99	Horizontal
4	43.845	-76.24	2.27	-73.97	-13.00	-60.97	Vertical
5	171.389	-79.40	4.35	-75.05	-13.00	-62.05	Vertical
6	809.924	-81.49	18.17	-63.32	-13.00	-50.32	Vertical

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WCDMA Band V							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	30.212	-91.86	38.54	-53.32	-13.00	-40.32	Horizontal
2	175.040	-88.40	33.19	-55.21	-13.00	-42.21	Horizontal
3	689.051	-89.00	47.33	-41.67	-13.00	-28.67	Horizontal
4	40.017	-90.85	32.45	-58.40	-13.00	-45.40	Vertical
5	172.598	-89.33	32.99	-56.34	-13.00	-43.34	Vertical
6	698.804	-89.82	46.41	-43.41	-13.00	-30.41	Vertical
RMC 12.2kbps_ Middle Channel							
1	30.855	-91.77	38.21	-53.56	-13.00	-40.56	Horizontal
2	248.732	-90.13	36.07	-54.06	-13.00	-41.06	Horizontal
3	787.475	-88.56	47.87	-40.69	-13.00	-27.69	Horizontal
4	31.959	-92.07	37.68	-54.39	-13.00	-41.39	Vertical
5	171.389	-89.58	32.90	-56.68	-13.00	-43.68	Vertical
6	776.485	-88.20	46.29	-41.91	-13.00	-28.91	Vertical
RMC 12.2kbps_ Highest Channel							
1	30.855	-92.48	38.21	-54.27	-13.00	-41.27	Horizontal
2	148.917	-89.09	32.51	-56.58	-13.00	-43.58	Horizontal
3	827.179	-88.07	47.94	-40.13	-13.00	-27.13	Horizontal
4	250.486	-89.03	36.16	-52.87	-13.00	-39.87	Vertical
5	424.300	-89.18	41.81	-47.37	-13.00	-34.37	Vertical
6	698.804	-88.65	46.41	-42.24	-13.00	-29.24	Vertical

Above 1G

GSM 850							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
GPRS_ Lowest Channel							
1	4121.000	-64.13	15.62	-48.51	-13.00	-35.51	Horizontal
2	5769.400	-63.75	17.12	-46.63	-13.00	-33.63	Horizontal
3	4121.000	-62.26	16.14	-46.12	-13.00	-33.12	Vertical
4	5769.400	-59.82	17.46	-42.36	-13.00	-29.36	Vertical
GPRS_ Middle Channel							
1	4183.000	-66.88	15.69	-51.19	-13.00	-38.19	Horizontal
2	6692.800	-64.50	18.51	-45.99	-13.00	-32.99	Horizontal
3	4183.000	-61.37	16.18	-45.19	-13.00	-32.19	Vertical
4	6692.800	-61.49	18.58	-42.91	-13.00	-29.91	Vertical
GPRS_ Highest Channel							
1	4244.000	-65.39	15.74	-49.65	-13.00	-36.65	Horizontal
2	6790.400	-64.87	18.44	-46.43	-13.00	-33.43	Horizontal
3	4244.000	-61.13	15.70	-45.43	-13.00	-32.43	Vertical
4	6790.400	-62.25	18.62	-43.63	-13.00	-30.63	Vertical

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PCS 1900							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
GPRS_ Lowest Channel							
1	5550.600	-64.58	16.38	-48.20	-13.00	-35.20	Horizontal
2	7400.800	-63.99	18.12	-45.87	-13.00	-32.87	Horizontal
3	5550.600	-55.15	16.87	-38.28	-13.00	-25.28	Vertical
4	7400.800	-56.48	18.22	-38.26	-13.00	-25.26	Vertical
GPRS_ Middle Channel							
1	5640.000	-64.73	16.56	-48.17	-13.00	-35.17	Horizontal
2	7520.000	-62.52	18.11	-44.41	-13.00	-31.41	Horizontal
3	5640.000	-50.44	17.04	-33.40	-13.00	-20.40	Vertical
4	7520.000	-54.25	18.21	-36.04	-13.00	-23.04	Vertical
GPRS_ Highest Channel							
1	5729.400	-58.02	16.95	-41.07	-13.00	-28.07	Horizontal
2	7639.200	-60.44	18.30	-42.14	-13.00	-29.14	Horizontal
3	5729.400	-52.62	17.40	-35.22	-13.00	-22.22	Vertical
4	7639.200	-56.77	18.40	-38.37	-13.00	-25.37	Vertical

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WCDMA Band II							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	5557.200	-68.24	16.38	-51.86	-13.00	-38.86	Horizontal
2	7409.600	-64.84	18.11	-46.73	-13.00	-33.73	Horizontal
3	5557.200	-66.29	16.87	-49.42	-13.00	-36.42	Vertical
4	7409.600	-59.21	18.21	-41.00	-13.00	-28.00	Vertical
RMC 12.2kbps_ Middle Channel							
1	5640.000	-68.19	16.56	-51.63	-13.00	-38.63	Horizontal
2	7520.000	-62.49	18.11	-44.38	-13.00	-31.38	Horizontal
3	5640.000	-65.10	17.04	-48.06	-13.00	-35.06	Vertical
4	7520.000	-58.74	18.21	-40.53	-13.00	-27.53	Vertical
RMC 12.2kbps_ Highest Channel							
1	5722.800	-67.23	16.92	-50.31	-13.00	-37.31	Horizontal
2	7630.400	-62.79	18.28	-44.51	-13.00	-31.51	Horizontal
3	5722.800	-66.65	17.37	-49.28	-13.00	-36.28	Vertical
4	7630.400	-59.01	18.38	-40.63	-13.00	-27.63	Vertical

WCDMA Band IV							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	5137.200	-66.22	15.82	-50.40	-13.00	-37.40	Horizontal
2	6849.600	-62.63	18.41	-44.22	-13.00	-31.22	Horizontal
3	5137.200	-65.93	16.17	-49.76	-13.00	-36.76	Vertical
4	6849.600	-61.24	18.57	-42.67	-13.00	-29.67	Vertical
RMC 12.2kbps_ Middle Channel							
1	5197.200	-66.83	16.02	-50.81	-13.00	-37.81	Horizontal
2	6929.600	-63.92	18.35	-45.57	-13.00	-32.57	Horizontal
3	5197.200	-66.46	16.40	-50.06	-13.00	-37.06	Vertical
4	6929.600	-62.91	18.47	-44.44	-13.00	-31.44	Vertical
RMC 12.2kbps_ Highest Channel							
1	5257.800	-68.23	16.12	-52.11	-13.00	-39.11	Horizontal
2	7010.400	-63.60	18.26	-45.34	-13.00	-32.34	Horizontal
3	5257.800	-66.88	16.52	-50.36	-13.00	-37.36	Vertical
4	7010.400	-58.32	18.36	-39.96	-13.00	-26.96	Vertical

WCDMA Band V							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	1652.800	-65.90	4.54	-61.36	-13.00	-48.36	Horizontal
2	2479.200	-67.95	10.87	-57.08	-13.00	-44.08	Horizontal
3	1652.800	-65.93	3.76	-62.17	-13.00	-49.17	Vertical
4	2479.200	-66.88	10.47	-56.41	-13.00	-43.41	Vertical
RMC 12.2kbps_ Middle Channel							
1	1672.800	-66.36	4.68	-61.68	-13.00	-48.68	Horizontal
2	2509.200	-65.47	10.87	-54.60	-13.00	-41.60	Horizontal
3	1672.800	-66.14	3.92	-62.22	-13.00	-49.22	Vertical
4	2509.200	-65.19	10.46	-54.73	-13.00	-41.73	Vertical
RMC 12.2kbps_ Highest Channel							
1	1693.200	-66.76	4.83	-61.93	-13.00	-48.93	Horizontal
2	2539.800	-67.90	10.91	-56.99	-13.00	-43.99	Horizontal
3	1693.200	-65.53	4.08	-61.45	-13.00	-48.45	Vertical
4	2539.800	-67.94	10.48	-57.46	-13.00	-44.46	Vertical

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New change data
Below 1G

GSM 850

No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
GPRS_ Lowest Channel							
1	430.305	-88.37	34.99	-53.38	-13.00	-40.38	Horizontal
2	527.571	-88.32	37.49	-50.83	-13.00	-37.83	Horizontal
3	655.977	-87.36	39.53	-47.83	-13.00	-34.83	Horizontal
4	430.305	-87.75	35.42	-52.33	-13.00	-39.33	Vertical
5	586.217	-87.78	38.06	-49.72	-13.00	-36.72	Vertical
6	771.047	-86.81	39.40	-47.41	-13.00	-34.41	Vertical
GPRS_ Middle Channel							
1	458.399	-87.84	35.54	-52.30	-13.00	-39.30	Horizontal
2	520.208	-87.58	37.25	-50.33	-13.00	-37.33	Horizontal
3	624.490	-87.42	39.26	-48.16	-13.00	-35.16	Horizontal
4	478.139	-87.85	36.29	-51.56	-13.00	-38.56	Vertical
5	569.969	-88.57	38.29	-50.28	-13.00	-37.28	Vertical
6	698.804	-88.20	39.59	-48.61	-13.00	-35.61	Vertical
GPRS_ Highest Channel							
1	401.105	-87.82	35.07	-52.75	-13.00	-39.75	Horizontal
2	452.001	-87.82	35.32	-52.50	-13.00	-39.50	Horizontal
3	689.051	-87.75	40.52	-47.23	-13.00	-34.23	Horizontal
4	484.907	-87.48	36.46	-51.02	-13.00	-38.02	Vertical
5	578.036	-88.10	38.30	-49.80	-13.00	-36.80	Vertical
6	749.676	-86.19	38.86	-47.33	-13.00	-34.33	Vertical

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PCS 1900							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
GPRS_ Lowest Channel							
1	628.894	-80.75	9.82	-70.93	-13.00	-57.93	Horizontal
2	809.924	-80.40	12.01	-68.39	-13.00	-55.39	Horizontal
3	925.613	-80.98	13.82	-67.16	-13.00	-54.16	Horizontal
4	594.514	-80.64	8.35	-72.29	-13.00	-59.29	Vertical
5	781.961	-80.47	10.41	-70.06	-13.00	-57.06	Vertical
6	906.304	-80.67	13.01	-67.66	-13.00	-54.66	Vertical
GPRS_ Middle Channel							
1	679.435	-80.74	10.88	-69.86	-13.00	-56.86	Horizontal
2	815.635	-80.30	11.99	-68.31	-13.00	-55.31	Horizontal
3	958.714	-81.91	14.49	-67.42	-13.00	-54.42	Horizontal
4	760.287	-79.99	9.71	-70.28	-13.00	-57.28	Vertical
5	833.013	-80.97	11.80	-69.17	-13.00	-56.17	Vertical
6	958.714	-81.45	13.20	-68.25	-13.00	-55.25	Vertical
GPRS_ Highest Channel							
1	602.929	-80.56	9.43	-71.13	-13.00	-58.13	Horizontal
2	693.910	-81.41	11.18	-70.23	-13.00	-57.23	Horizontal
3	932.141	-80.91	14.05	-66.86	-13.00	-53.86	Horizontal
4	718.725	-80.63	10.04	-70.59	-13.00	-57.59	Vertical
5	821.387	-81.23	11.77	-69.46	-13.00	-56.46	Vertical
6	906.304	-80.59	13.01	-67.58	-13.00	-54.58	Vertical

WCDMA Band II							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	531.291	-81.15	7.99	-73.16	-13.00	-60.16	Horizontal
2	679.435	-80.74	10.88	-69.86	-13.00	-56.86	Horizontal
3	952.000	-80.80	14.62	-66.18	-13.00	-53.18	Horizontal
4	590.351	-80.53	8.47	-72.06	-13.00	-59.06	Vertical
5	833.013	-79.82	11.80	-68.02	-13.00	-55.02	Vertical
6	887.398	-80.37	12.56	-67.81	-13.00	-54.81	Vertical
RMC 12.2kbps_ Middle Channel							
1	401.105	-80.79	6.26	-74.53	-13.00	-61.53	Horizontal
2	827.179	-81.53	11.95	-69.58	-13.00	-56.58	Horizontal
3	965.474	-81.89	14.34	-67.55	-13.00	-54.55	Horizontal
4	461.631	-79.79	6.36	-73.43	-13.00	-60.43	Vertical
5	804.252	-79.67	11.36	-68.31	-13.00	-55.31	Vertical
6	952.000	-81.53	13.17	-68.36	-13.00	-55.36	Vertical
RMC 12.2kbps_ Highest Channel							
1	602.929	-80.51	9.43	-71.08	-13.00	-58.08	Horizontal
2	787.475	-80.61	11.77	-68.84	-13.00	-55.84	Horizontal
3	945.334	-81.92	14.50	-67.42	-13.00	-54.42	Horizontal
4	527.571	-80.63	7.95	-72.68	-13.00	-59.68	Vertical
5	703.731	-81.30	10.19	-71.11	-13.00	-58.11	Vertical
6	868.886	-80.49	12.07	-68.42	-13.00	-55.42	Vertical

WCDMA Band IV							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	728.897	-80.65	10.81	-69.84	-13.00	-56.84	Horizontal
2	809.924	-80.86	12.01	-68.85	-13.00	-55.85	Horizontal
3	925.613	-80.81	13.82	-66.99	-13.00	-53.99	Horizontal
4	573.988	-80.72	8.90	-71.82	-13.00	-58.82	Vertical
5	793.028	-81.03	10.93	-70.10	-13.00	-57.10	Vertical
6	932.141	-80.53	13.19	-67.34	-13.00	-54.34	Vertical
RMC 12.2kbps_ Middle Channel							
1	693.910	-81.38	11.18	-70.20	-13.00	-57.20	Horizontal
2	821.387	-80.91	11.97	-68.94	-13.00	-55.94	Horizontal
3	972.283	-81.59	14.21	-67.38	-13.00	-54.38	Horizontal
4	620.117	-80.60	8.37	-72.23	-13.00	-59.23	Vertical
5	875.013	-81.42	12.21	-69.21	-13.00	-56.21	Vertical
6	938.714	-81.40	13.19	-68.21	-13.00	-55.21	Vertical
RMC 12.2kbps_ Highest Channel							
1	523.876	-80.90	7.95	-72.95	-13.00	-59.95	Horizontal
2	703.731	-81.28	11.24	-70.04	-13.00	-57.04	Horizontal
3	938.714	-81.96	14.28	-67.68	-13.00	-54.68	Horizontal
4	554.171	-80.11	8.45	-71.66	-13.00	-58.66	Vertical
5	723.793	-80.79	9.98	-70.81	-13.00	-57.81	Vertical
6	893.656	-81.17	12.74	-68.43	-13.00	-55.43	Vertical

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WCDMA Band V							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	384.545	-88.09	33.81	-54.28	-13.00	-41.28	Horizontal
2	523.876	-88.16	37.44	-50.72	-13.00	-37.72	Horizontal
3	765.648	-87.35	40.69	-46.66	-13.00	-33.66	Horizontal
4	430.305	-88.10	35.42	-52.68	-13.00	-39.68	Vertical
5	542.610	-87.57	37.71	-49.86	-13.00	-36.86	Vertical
6	754.963	-87.00	38.98	-48.02	-13.00	-35.02	Vertical
RMC 12.2kbps_ Middle Channel							
1	401.105	-87.95	35.07	-52.88	-13.00	-39.88	Horizontal
2	523.876	-87.64	37.44	-50.20	-13.00	-37.20	Horizontal
3	693.910	-87.48	40.62	-46.86	-13.00	-33.86	Horizontal
4	495.238	-87.85	36.72	-51.13	-13.00	-38.13	Vertical
5	586.217	-88.21	38.06	-50.15	-13.00	-37.15	Vertical
6	703.731	-88.33	39.62	-48.71	-13.00	-35.71	Vertical
RMC 12.2kbps_ Highest Channel							
1	542.610	-88.52	37.46	-51.06	-13.00	-38.06	Horizontal
2	620.117	-87.77	39.19	-48.58	-13.00	-35.58	Horizontal
3	781.961	-87.41	41.05	-46.36	-13.00	-33.36	Horizontal
4	442.572	-87.41	35.20	-52.21	-13.00	-39.21	Vertical
5	546.437	-88.24	37.78	-50.46	-13.00	-37.46	Vertical
6	728.897	-86.76	39.32	-47.44	-13.00	-34.44	Vertical

Above 1G

GSM 850

No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
GPRS_ Lowest Channel							
1	2472.600	-53.10	3.62	-49.48	-13.00	-36.48	Horizontal
2	4121.000	-49.08	8.96	-40.12	-13.00	-27.12	Horizontal
3	2472.600	-55.55	3.62	-51.93	-13.00	-38.93	Vertical
4	4121.000	-58.90	8.96	-49.94	-13.00	-36.94	Vertical
GPRS_ Middle Channel							
1	2509.800	-49.73	3.70	-46.03	-13.00	-33.03	Horizontal
2	4183.000	-50.83	9.13	-41.70	-13.00	-28.70	Horizontal
3	2509.800	-55.15	3.70	-51.45	-13.00	-38.45	Vertical
4	4183.000	-59.55	9.13	-50.42	-13.00	-37.42	Vertical
GPRS_ Highest Channel							
1	3374.978	-54.30	6.34	-47.96	-13.00	-34.96	Horizontal
2	4230.371	-56.11	9.25	-46.86	-13.00	-33.86	Horizontal
3	3395.200	-59.04	6.46	-52.58	-13.00	-39.58	Vertical
4	4244.000	-61.92	9.30	-52.62	-13.00	-39.62	Vertical

PCS 1900

No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
GPRS_ Lowest Channel							
1	5550.600	-43.82	11.80	-32.02	-13.00	-19.02	Horizontal
2	9251.000	-49.89	17.78	-32.11	-13.00	-19.11	Horizontal
3	5550.600	-52.61	11.80	-40.81	-13.00	-27.81	Vertical
4	9251.000	-52.45	17.78	-34.67	-13.00	-21.67	Vertical
GPRS_ Middle Channel							
1	5640.000	-42.50	11.83	-30.67	-13.00	-17.67	Horizontal
2	13160.000	-54.32	23.40	-30.92	-13.00	-17.92	Horizontal
3	5640.000	-54.21	11.83	-42.38	-13.00	-29.38	Vertical
4	13160.000	-59.13	23.40	-35.73	-13.00	-22.73	Vertical
GPRS_ Highest Channel							
1	5729.400	-43.37	11.85	-31.52	-13.00	-18.52	Horizontal
2	13368.600	-55.28	23.79	-31.49	-13.00	-18.49	Horizontal
3	5729.400	-53.79	11.85	-41.94	-13.00	-28.94	Vertical
4	13368.600	-60.95	23.79	-37.16	-13.00	-24.16	Vertical

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WCDMA Band II							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	3704.800	-45.10	7.77	-37.33	-13.00	-24.33	Horizontal
2	5557.200	-35.38	11.81	-23.57	-13.00	-10.57	Horizontal
3	3704.800	-50.70	7.77	-42.93	-13.00	-29.93	Vertical
4	5557.200	-43.27	11.81	-31.46	-13.00	-18.46	Vertical
RMC 12.2kbps_ Middle Channel							
1	3760.000	-48.37	7.93	-40.44	-13.00	-27.44	Horizontal
2	5640.000	-36.98	11.83	-25.15	-13.00	-12.15	Horizontal
3	3760.000	-52.64	7.93	-44.71	-13.00	-31.71	Vertical
4	5640.000	-48.11	11.83	-36.28	-13.00	-23.28	Vertical
RMC 12.2kbps_ Highest Channel							
1	3815.200	-43.45	8.10	-35.35	-13.00	-22.35	Horizontal
2	5722.800	-35.77	11.86	-23.91	-13.00	-10.91	Horizontal
3	3815.200	-50.53	8.10	-42.43	-13.00	-29.43	Vertical
4	5722.800	-45.49	11.86	-33.63	-13.00	-20.63	Vertical

WCDMA Band IV							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	3424.800	-44.84	6.61	-38.23	-13.00	-25.23	Horizontal
2	5137.200	-33.26	10.57	-22.69	-13.00	-9.69	Horizontal
3	3424.800	-48.99	6.61	-42.38	-13.00	-29.38	Vertical
4	5137.200	-41.29	10.57	-30.72	-13.00	-17.72	Vertical
RMC 12.2kbps_ Middle Channel							
1	3464.800	-51.84	6.84	-45.00	-13.00	-32.00	Horizontal
2	5197.200	-41.64	10.68	-30.96	-13.00	-17.96	Horizontal
3	3464.800	-49.85	6.84	-43.01	-13.00	-30.01	Vertical
4	5197.200	-51.28	10.68	-40.60	-13.00	-27.60	Vertical
RMC 12.2kbps_ Highest Channel							
1	5257.800	-34.75	10.90	-23.85	-13.00	-10.85	Horizontal
2	8763.000	-57.54	16.75	-40.79	-13.00	-27.79	Horizontal
3	5257.800	-42.53	10.90	-31.63	-13.00	-18.63	Vertical
4	8763.000	-53.47	16.75	-36.72	-13.00	-23.72	Vertical

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WCDMA Band V							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
RMC 12.2kbps_ Lowest Channel							
1	1652.800	-62.30	-0.42	-62.72	-13.00	-49.72	Horizontal
2	2479.200	-55.81	3.64	-52.17	-13.00	-39.17	Horizontal
3	1652.800	-61.75	-0.42	-62.17	-13.00	-49.17	Vertical
4	2479.200	-59.59	3.64	-55.95	-13.00	-42.95	Vertical
RMC 12.2kbps_ Middle Channel							
1	1672.800	-57.79	-0.22	-58.01	-13.00	-45.01	Horizontal
2	2509.200	-64.00	3.70	-60.30	-13.00	-47.30	Horizontal
3	1672.800	-58.61	-0.22	-58.83	-13.00	-45.83	Vertical
4	2509.200	-61.28	3.70	-57.58	-13.00	-44.58	Vertical
RMC 12.2kbps_ Highest Channel							
1	1693.200	-62.73	-0.01	-62.74	-13.00	-49.74	Horizontal
2	2539.800	-65.70	3.72	-61.98	-13.00	-48.98	Horizontal
3	1693.200	-59.18	-0.01	-59.19	-13.00	-46.19	Vertical
4	2539.800	-63.25	3.72	-59.53	-13.00	-46.53	Vertical

Remark:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit
4. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different modulations in exploratory test. Subsequently, only the worst case emissions are reported.

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5.9 FREQUENCY STABILITY

Test Requirement: FCC 47 CFR Part 2.1055 &
FCC 47 CFR Part 22.355 &
FCC 47 CFR Part 24.235 &
FCC 47 CFR Part 27.54

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Limits:

FCC 47 CFR Part 22.355,

The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations.

FCC 47 CFR Part 24.235, FCC 47 CFR Part 27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Setup: Refer to section 4.2.2 for details.

Test Procedures:

- 1) Use CMW 500 with Frequency Error measurement capability.
 - a) Temp. = -30° to $+50^{\circ}\text{C}$
 - b) Voltage = low voltage, 3.5 Vdc, Normal, 3.8 Vdc and High voltage, 4.2 Vdc.

- 2) Frequency Stability vs Temperature:

The EUT is placed inside a temperature chamber. The temperature is set to 20°C and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until $+50^{\circ}\text{C}$ is reached.

- 3) Frequency Stability vs Voltage:

The peak frequency error is recorded (worst-case).

Equipment Used: Refer to section 3 for details.

Test Result: Pass

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature ($^{\circ}\text{C}$)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Pass/ Fail
GSM 850 1Tx-slot							
GMSK	190 / 836.6	VL	TN	-14	-0.0167	± 2.5	Pass
		VN		9	0.0108	± 2.5	Pass
		VH		14	0.0167	± 2.5	Pass
		VN	50	9	0.0108	± 2.5	Pass
			40	-6	-0.0072	± 2.5	Pass
			30	-10	-0.0120	± 2.5	Pass
			20	9	0.0108	± 2.5	Pass
			10	10	0.0120	± 2.5	Pass
			0	14	0.0167	± 2.5	Pass
			-10	10	0.0120	± 2.5	Pass
			-20	21	0.0251	± 2.5	Pass
			-30	10	0.0120	± 2.5	Pass

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Pass/ Fail
EDGE 850 1Tx-slot							
8PSK	190 / 836.6	VL	TN	11	0.0131	± 2.5	Pass
		VN		10	0.0120	± 2.5	Pass
		VH		-11	-0.0131	± 2.5	Pass
		VN	50	9	0.0108	± 2.5	Pass
			40	-8	-0.0096	± 2.5	Pass
			30	14	0.0167	± 2.5	Pass
			20	11	0.0131	± 2.5	Pass
			10	10	0.0120	± 2.5	Pass
			0	-6	-0.0072	± 2.5	Pass
			-10	14	0.0167	± 2.5	Pass
			-20	11	0.0131	± 2.5	Pass
			-30	13	0.0155	± 2.5	Pass
Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Pass/ Fail
WCDMA Band V RMC 12.2Kbps							
BPSK	4182 / 836.4	VL	TN	13	0.0155	± 2.5	Pass
		VN		11	0.0132	± 2.5	Pass
		VH		10	0.0120	± 2.5	Pass
		VN	50	9	0.0108	± 2.5	Pass
			40	8	0.0096	± 2.5	Pass
			30	11	0.0132	± 2.5	Pass
			20	14	0.0167	± 2.5	Pass
			10	9	0.0108	± 2.5	Pass
			0	12	0.0143	± 2.5	Pass
			-10	14	0.0167	± 2.5	Pass
			-20	13	0.0155	± 2.5	Pass
			-30	-10	-0.0120	± 2.5	Pass
Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Pass/ Fail
GSM 1900 1Tx-slot							
GMSK	661 / 1880.0	VL	TN	13	0.0069	Note 1	Pass
		VN		10	0.0053		Pass
		VH		12	0.0064		Pass
		VN	50	9	0.0048		Pass
			40	13	0.0069		Pass
			30	12	0.0064		Pass
			20	11	0.0059		Pass
			10	10	0.0053		Pass
			0	14	0.0074		Pass
			-10	9	0.0048		Pass
			-20	13	0.0069		Pass
			-30	14	0.0074		Pass

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Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Pass/ Fail
EDGE 1900 1Tx-slot							
8PSK	661 / 1880.0	VL	TN	13	0.0069	Note 1	Pass
		VN		11	0.0059		Pass
		VH		11	0.0059		Pass
		VN	50	8	0.0043		Pass
			40	12	0.0064		Pass
			30	9	0.0048		Pass
			20	11	0.0059		Pass
			10	8	0.0043		Pass
			0	14	0.0074		Pass
			-10	11	0.0059		Pass
			-20	8	0.0043		Pass
			-30	14	0.0074		Pass
Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Pass/ Fail
WCDMA Band II RMC 12.2Kbps							
BPSK	9400 / 1880.0	VL	TN	-11	-0.0059	Note 1	Pass
		VN		-14	-0.0074		Pass
		VH		-8	-0.0043		Pass
		VN	50	-18	-0.0096		Pass
			40	-9	-0.0048		Pass
			30	-9	-0.0048		Pass
			20	-12	-0.0064		Pass
			10	-14	-0.0074		Pass
			0	-8	-0.0043		Pass
			-10	-8	-0.0043		Pass
			-20	-9	-0.0048		Pass
			-30	-12	-0.0064		Pass
Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Pass/ Fail
WCDMA Band IV RMC 12.2Kbps							
BMSK	1412 / 1732.4	VL	TN	11	0.0063	Note 1	Pass
		VN		13	0.0075		Pass
		VH		5	0.0029		Pass
		VN	50	9	0.0052		Pass
			40	10	0.0058		Pass
			30	7	0.0040		Pass
			20	-8	-0.0046		Pass
			10	11	0.0063		Pass
			0	13	0.0075		Pass
			-10	16	0.0092		Pass
			-20	9	0.0052		Pass
			-30	10	0.0058		Pass

Note1: The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

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APPENDIX 1 PHOTOS OF TEST SETUP

See test photos attached in Appendix 1 for the actual connections between Product and support equipment.

APPENDIX 2 PHOTOS OF EUT CONSTRUCTIONAL DETAILS

Refer to Appendix 2 for EUT external and internal photos.

*** End of Report ***

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of UnionTrust, this report can't be reproduced except in full.
