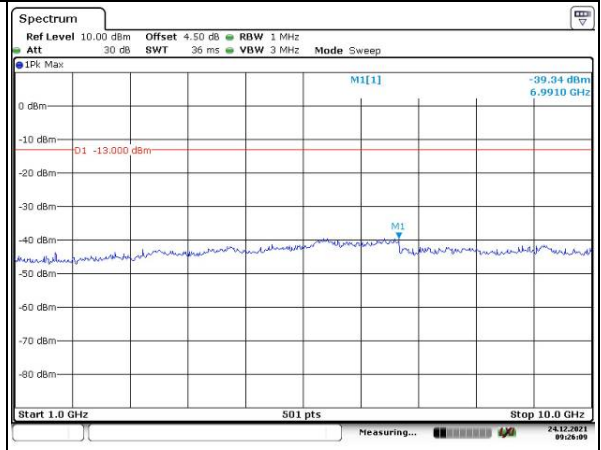
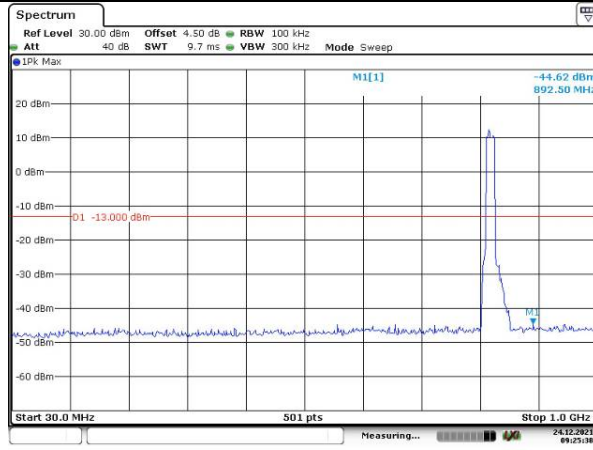


### Spurious Emissions at Antenna Terminal

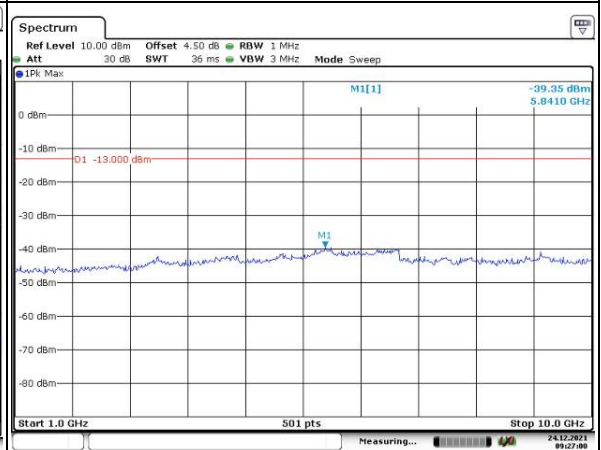
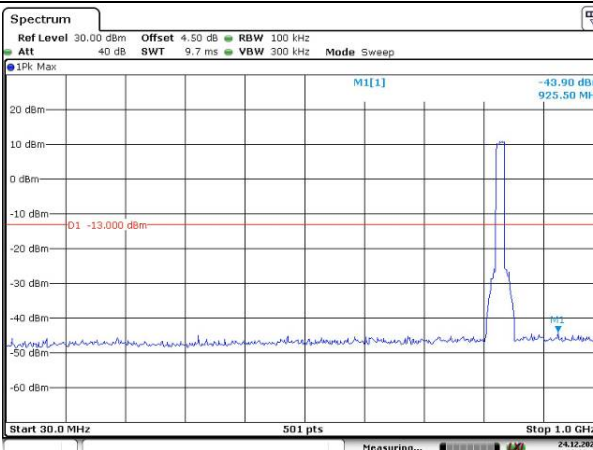
Channel

15MHz Bandwidth QPSK

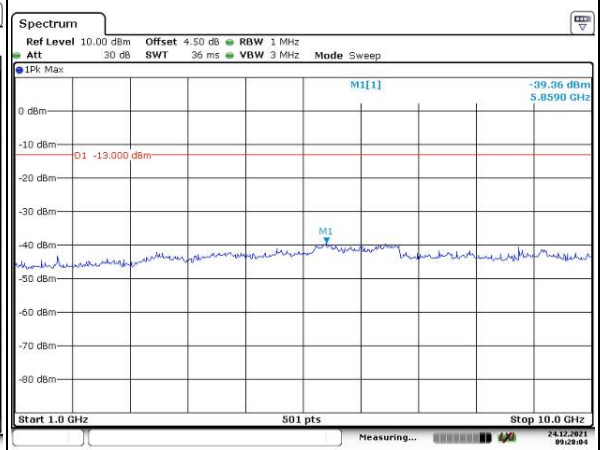
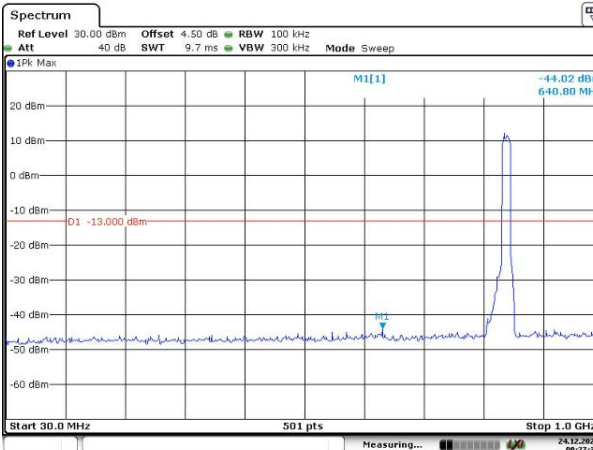
Lowest



Middle



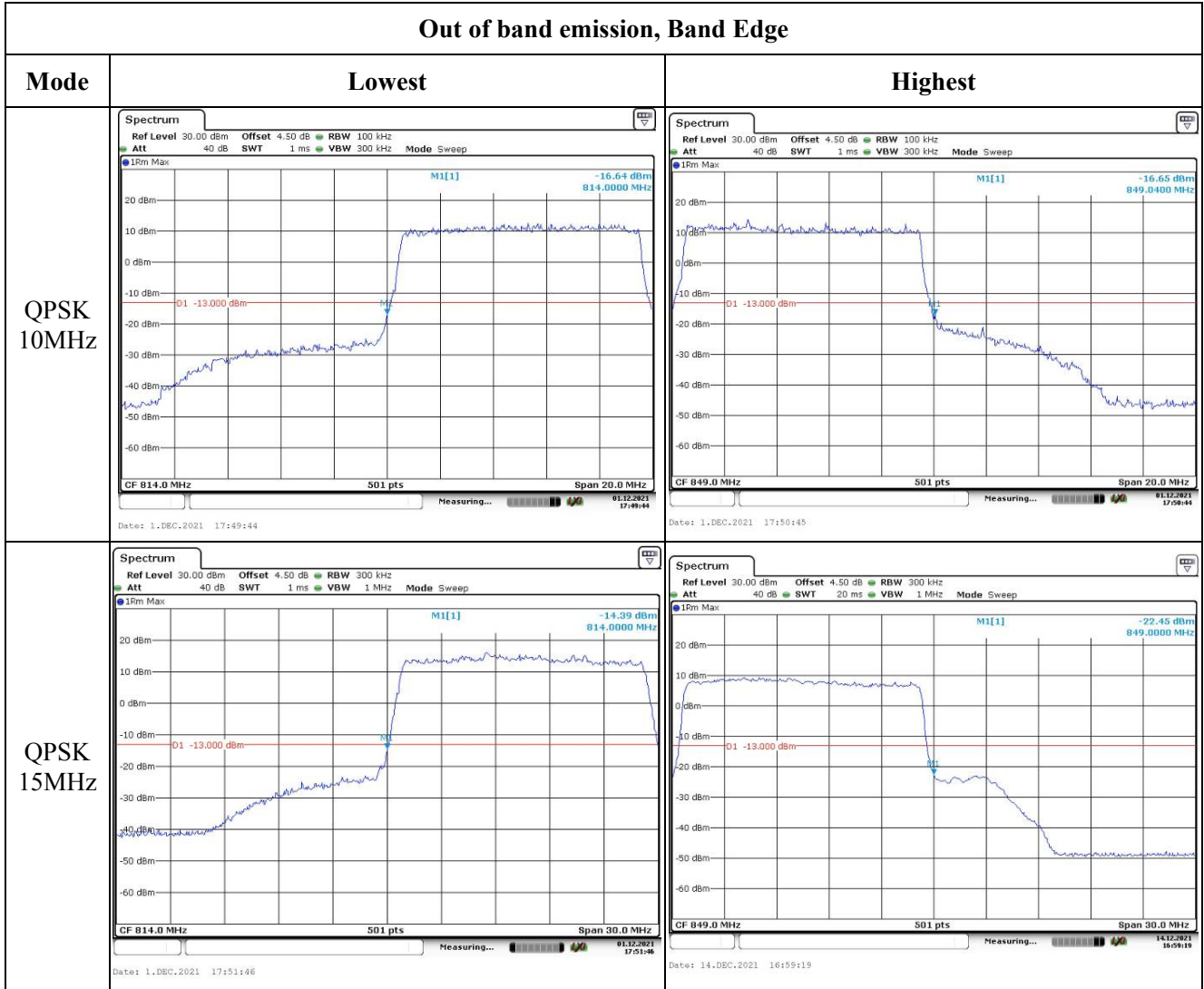
Highest



Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 1.4MHz	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep M1[1] -16.21 dBm 813.96410 MHz D1 -13.000 dBm CF 814.0 MHz 501 pts Span 3.0 MHz Date: 1.DEC.2021 17:49:04</p>	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 10 ms VBW 100 kHz Mode Sweep M1[1] -15.11 dBm 849.00000 MHz D1 -13.000 dBm CF 849.0 MHz 501 pts Span 3.0 MHz Date: 14.DEC.2021 16:48:59</p>
QPSK 3MHz	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep M1[1] -17.23 dBm 814.00000 MHz D1 -13.000 dBm CF 814.0 MHz 501 pts Span 6.0 MHz Date: 1.DEC.2021 17:46:26</p>	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep M1[1] -16.29 dBm 849.00000 MHz D1 -13.000 dBm CF 849.0 MHz 501 pts Span 6.0 MHz Date: 1.DEC.2021 17:47:07</p>
QPSK 5MHz	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 20 ms VBW 300 kHz Mode Sweep M1[1] -18.39 dBm 814.00000 MHz D1 -13.000 dBm CF 814.0 MHz 501 pts Span 10.0 MHz Date: 14.DEC.2021 16:54:03</p>	<p>Spectrum Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 20 ms VBW 300 kHz Mode Sweep M1[1] -17.01 dBm 849.00000 MHz D1 -13.000 dBm CF 849.0 MHz 501 pts Span 10.0 MHz Date: 14.DEC.2021 16:55:18</p>

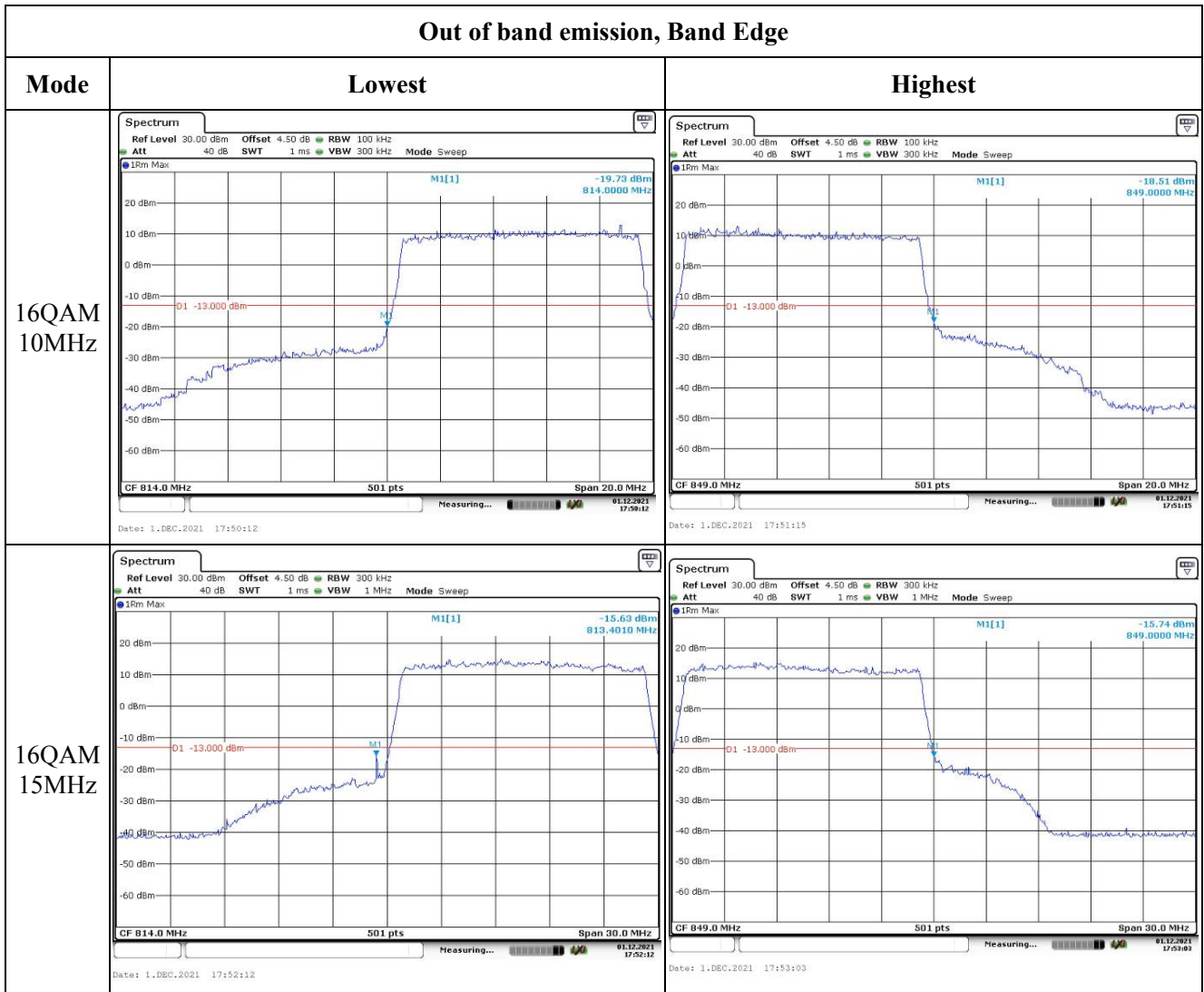
Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 1.4MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep M1[1] -15.17 dBm 814.0000 MHz -13.000 dBm CF 814.0 MHz 501 pts Span 3.0 MHz Date: 1.DEC.2021 17:45:18</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep M1[1] -16.62 dBm 849.0000 MHz -13.000 dBm CF 849.0 MHz 501 pts Span 3.0 MHz Date: 1.DEC.2021 17:46:02</p>
16QAM 3MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep M1[1] -17.39 dBm 814.0000 MHz -13.000 dBm CF 814.0 MHz 501 pts Span 6.0 MHz Date: 1.DEC.2021 17:46:46</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz Att 40 dB SWT 1.1 ms VBW 100 kHz Mode Sweep M1[1] -16.52 dBm 849.0000 MHz -13.000 dBm CF 849.0 MHz 501 pts Span 6.0 MHz Date: 1.DEC.2021 17:47:24</p>
16QAM 5MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 20 ms VBW 300 kHz Mode Sweep M1[1] -16.77 dBm 814.0000 MHz -13.000 dBm CF 814.0 MHz 501 pts Span 10.0 MHz Date: 14.DEC.2021 16:54:41</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 20 ms VBW 300 kHz Mode Sweep M1[1] -17.91 dBm 849.0000 MHz -13.000 dBm CF 849.0 MHz 501 pts Span 10.0 MHz Date: 14.DEC.2021 16:55:45</p>

Out of band emission, Band Edge



**4.14 Spurious Emissions**

Serial Number:	CR21110087-S1	Test Date:	2021-12-03~2021-12-09
Test Site:	966-2, 966-1	Test Mode:	Transmitting
Tester:	Carl Liang, Tommy Luo	Test Result:	Pass

**Environmental Conditions:**

Temperature: (°C)	17.8~21.9	Relative Humidity: (%)	35~55	ATM Pressure: (kPa)	101.6~101.8
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**Test Equipment List and Details:**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2020-10-19	2023-10-18
R&S	EMI Test Receiver	ESR3	102724	2021-07-22	2022-07-21
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2021-07-18	2022-07-17
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2021-07-18	2022-07-17
Sonoma	Amplifier	310N	186165	2021-07-18	2022-07-17
EMCO	Adjustable Dipole Antenna	3121C	9109-753	N/A	N/A
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2021-07-25	2022-07-24
Agilent	Signal Generator	E8247C	MY43321350	2021-04-25	2022-04-24
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020-10-13	2023-10-12
PASTERNAK	Horn Antenna	PE9852/2F-20	112002	2021-02-05	2024-02-04
R&S	Spectrum Analyzer	FSV40	101591	2021-07-22	2022-07-21
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2021-08-08	2022-08-07
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2021-08-08	2022-08-07
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2021-08-08	2022-08-07
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2021-11-10	2022-11-09
AH	Preamplifier	PAM-1840VH	190	2020-11-20	2021-11-19
AH	Double Ridge Guide Horn Antenna	SAS-571	1396	2021-10-18	2023-10-17
PASTERNAK	Horn Antenna	PE9852/2F-20	112001	2021-02-05	2024-02-04
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2021-07-25	2022-07-24

Mini Circuits	High Pass Filter	VHF-6010+	31119	2021-08-08	2022-08-07
Mini Circuits	High Pass Filter	VHF-3100+	31251	2021-08-08	2022-08-07
<i>* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).</i>					

**Test Data:**

Please refer to the below table and plots.

Note: The device can be mounted in multiple orientations, test was performed with X,Y, Z Axis, the worst orientation was photographed and it's data was recorded.

**Test Data:****Cellular Band (PART 22H)****30 MHz-10 GHz:**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
GSM 850 Frequency:824.2MHz								
1648.40	H	53.28	-51.05	8.68	0.80	-43.17	-13.00	30.17
1648.40	V	48.94	-55.47	8.68	0.80	-47.59	-13.00	34.59
2472.60	H	45.99	-54.79	9.38	1.00	-46.41	-13.00	33.41
2472.60	V	45.08	-55.65	9.38	1.00	-47.27	-13.00	34.27
3296.80	H	38.81	-57.87	10.32	1.15	-48.70	-13.00	35.70
3296.80	V	38.01	-58.43	10.32	1.15	-49.26	-13.00	36.26
512.00	H	20.65	-54.94	0.00	0.45	-55.39	-13.00	42.39
512.00	V	24.51	-47.09	0.00	0.45	-47.54	-13.00	34.54
GSM 850 Frequency:836.6MHz								
1673.20	H	50.15	-54.16	8.71	0.85	-46.30	-13.00	33.30
1673.20	V	50.16	-54.25	8.71	0.85	-46.39	-13.00	33.39
2509.80	H	47.48	-53.13	9.42	1.01	-44.72	-13.00	31.72
2509.80	V	46.78	-53.84	9.42	1.01	-45.43	-13.00	32.43
3346.40	H	38.87	-58.30	10.34	1.16	-49.12	-13.00	36.12
3346.40	V	42.85	-54.18	10.34	1.16	-45.00	-13.00	32.00
425.00	H	20.57	-56.79	0.00	0.39	-57.18	-13.00	44.18
425.00	V	24.51	-50.05	0.00	0.39	-50.44	-13.00	37.44
GSM 850 Frequency:848.8MHz								
1697.60	H	51.19	-53.10	8.74	0.90	-45.26	-13.00	32.26
1697.60	V	47.19	-57.23	8.74	0.90	-49.39	-13.00	36.39
2546.40	H	46.94	-53.39	9.47	1.01	-44.93	-13.00	31.93
2546.40	V	49.29	-50.99	9.47	1.01	-42.53	-13.00	29.53
3395.20	H	40.02	-57.67	10.36	1.19	-48.50	-13.00	35.50
3395.20	V	44.81	-52.85	10.36	1.19	-43.68	-13.00	30.68
39.51	H	21.54	-31.14	-26.16	0.11	-57.41	-13.00	44.41
39.50	V	22.69	-36.14	-26.16	0.11	-62.41	-13.00	49.41



Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA Band 5 Frequency:826.4 MHz								
1652.80	H	37.64	-66.69	8.68	0.81	-58.82	-13.00	45.82
1652.80	V	38.17	-66.24	8.68	0.81	-58.37	-13.00	45.37
2479.20	H	36.03	-64.73	9.39	1.01	-56.35	-13.00	43.35
2479.20	V	35.66	-65.07	9.39	1.01	-56.69	-13.00	43.69
3305.60	H	35.86	-60.87	10.32	1.15	-51.70	-13.00	38.70
3305.60	V	36.05	-60.45	10.32	1.15	-51.28	-13.00	38.28
84.00	H	40.15	-70.93	0.00	0.17	-71.10	-13.00	58.10
79.00	V	46.02	-61.96	-0.50	0.16	-62.62	-13.00	49.62
WCDMA Band 5 Frequency:836.6MHz								
1673.20	H	36.82	-67.49	8.71	0.85	-59.63	-13.00	46.63
1673.20	V	36.97	-67.44	8.71	0.85	-59.58	-13.00	46.58
2509.80	H	35.84	-64.77	9.42	1.01	-56.36	-13.00	43.36
2509.80	V	36.19	-64.43	9.42	1.01	-56.02	-13.00	43.02
3346.40	H	35.76	-61.41	10.34	1.16	-52.23	-13.00	39.23
3346.40	V	35.60	-61.43	10.34	1.16	-52.25	-13.00	39.25
83.00	H	40.68	-70.08	0.00	0.17	-70.25	-13.00	57.25
78.00	V	46.39	-61.00	-1.00	0.16	-62.16	-13.00	49.16
WCDMA Band 5 Frequency:846.6MHz								
1693.20	H	39.45	-64.85	8.73	0.89	-57.01	-13.00	44.01
1693.20	V	38.14	-66.28	8.73	0.89	-58.44	-13.00	45.44
2539.80	H	36.04	-64.34	9.46	1.01	-55.89	-13.00	42.89
2539.80	V	35.88	-64.46	9.46	1.01	-56.01	-13.00	43.01
3386.40	H	35.23	-62.36	10.35	1.18	-53.19	-13.00	40.19
3386.40	V	35.15	-62.39	10.35	1.18	-53.22	-13.00	40.22
84.00	H	41.36	-69.72	0.00	0.17	-69.89	-13.00	56.89
79.00	V	45.58	-62.40	-0.50	0.16	-63.06	-13.00	50.06

**PCS Band (PART 24E)****30 MHz-20 GHz:**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB $\mu$ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
GSM 1900 Frequency:1850.2MHz								
3700.40	H	36.28	-61.04	10.60	1.25	-51.69	-13.00	38.69
3700.40	V	36.42	-60.88	10.60	1.25	-51.53	-13.00	38.53
5550.60	H	34.44	-58.82	11.44	1.49	-48.87	-13.00	35.87
5550.60	V	34.33	-58.77	11.44	1.49	-48.82	-13.00	35.82
86.23	H	44.15	-67.65	0.00	0.17	-67.82	-13.00	54.82
78.64	V	45.07	-62.70	-0.68	0.16	-63.54	-13.00	50.54
GSM 1900 Frequency:1880MHz								
3760.00	H	35.47	-60.94	10.66	1.24	-51.52	-13.00	38.52
3760.00	V	35.41	-60.88	10.66	1.24	-51.46	-13.00	38.46
5640.00	H	34.75	-58.70	11.33	1.54	-48.91	-13.00	35.91
5640.00	V	35.00	-58.33	11.33	1.54	-48.54	-13.00	35.54
85.89	H	43.95	-67.74	0.00	0.17	-67.91	-13.00	54.91
77.25	V	46.32	-60.62	-1.38	0.16	-62.16	-13.00	49.16
GSM 1900 Frequency:1909.8MHz								
3819.60	H	36.63	-59.23	10.72	1.29	-49.80	-13.00	36.80
3819.60	V	36.80	-58.92	10.72	1.29	-49.49	-13.00	36.49
5729.40	H	35.29	-58.19	11.22	1.59	-48.56	-13.00	35.56
5729.40	V	35.33	-58.03	11.22	1.59	-48.40	-13.00	35.40
86.35	H	44.78	-67.06	0.00	0.17	-67.23	-13.00	54.23
77.54	V	45.97	-61.14	-1.23	0.16	-62.53	-13.00	49.53

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA Band II, Frequency:1852.4 MHz								
3704.80	H	40.10	-57.16	10.60	1.25	-47.81	-13.00	34.81
3704.80	V	37.46	-59.77	10.60	1.25	-50.42	-13.00	37.42
5557.20	H	37.68	-55.60	11.43	1.49	-45.66	-13.00	32.66
5557.20	V	39.48	-53.65	11.43	1.49	-43.71	-13.00	30.71
180.00	H	45.79	-66.70	0.00	0.25	-66.95	-13.00	53.95
79.00	V	48.49	-59.49	-0.50	0.16	-60.15	-13.00	47.15
WCDMA Band II, Frequency:1880 MHz								
3760.00	H	41.03	-55.38	10.66	1.24	-45.96	-13.00	32.96
3760.00	V	36.71	-59.58	10.66	1.24	-50.16	-13.00	37.16
5640.00	H	35.65	-57.80	11.33	1.54	-48.01	-13.00	35.01
5640.00	V	35.22	-58.11	11.33	1.54	-48.32	-13.00	35.32
184.00	H	44.95	-67.62	0.00	0.25	-67.87	-13.00	54.87
82.64	V	50.82	-57.96	0.00	0.17	-58.13	-13.00	45.13
WCDMA Band II, Frequency:1907.6MHz								
3815.20	H	39.92	-55.93	10.72	1.29	-46.50	-13.00	33.50
3815.20	V	39.19	-56.50	10.72	1.29	-47.07	-13.00	34.07
5722.80	H	35.59	-57.90	11.23	1.58	-48.25	-13.00	35.25
5722.80	V	36.30	-57.05	11.23	1.58	-47.40	-13.00	34.40
183.00	H	44.57	-67.98	0.00	0.25	-68.23	-13.00	55.23
81.00	V	48.75	-59.91	0.00	0.16	-60.07	-13.00	47.07

## AWS Band (PART 27)

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB $\mu$ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA Band IV, Frequency:1712.4 MHz								
3424.80	H	36.30	-61.47	10.37	1.17	-52.27	-13.00	39.27
3424.80	V	35.81	-61.93	10.37	1.17	-52.73	-13.00	39.73
5137.20	H	35.92	-57.70	11.28	1.46	-47.88	-13.00	34.88
5137.20	V	34.97	-58.53	11.28	1.46	-48.71	-13.00	35.71
184.00	H	43.62	-68.95	0.00	0.25	-69.20	-13.00	56.20
81.00	V	45.57	-63.09	0.00	0.16	-63.25	-13.00	50.25
WCDMA Band IV, Frequency:1732.6 MHz								
3465.20	H	37.84	-59.97	10.39	1.15	-50.73	-13.00	37.73
3465.20	V	36.39	-61.38	10.39	1.15	-52.14	-13.00	39.14
5197.80	H	35.13	-59.00	11.32	1.44	-49.12	-13.00	36.12
5197.80	V	35.16	-58.82	11.32	1.44	-48.94	-13.00	35.94
185.00	H	43.74	-68.85	0.00	0.25	-69.10	-13.00	56.10
79.52	V	47.36	-60.93	-0.24	0.16	-61.33	-13.00	48.33
WCDMA Band IV, Frequency:1752.6MHz								
3505.20	H	39.85	-57.98	10.41	1.18	-48.75	-13.00	35.75
3505.20	V	37.46	-60.31	10.41	1.18	-51.08	-13.00	38.08
5257.80	H	35.22	-58.51	11.35	1.47	-48.63	-13.00	35.63
5257.80	V	36.07	-57.44	11.35	1.47	-47.56	-13.00	34.56
184.00	H	44.67	-67.90	0.00	0.25	-68.15	-13.00	55.15
80.00	V	46.95	-61.63	0.00	0.16	-61.79	-13.00	48.79

**LTE Band 2 (30MHz-20GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 1850.7 MHz								
3701.40	H	40.70	-56.61	10.60	1.25	-47.26	-13.00	34.26
3701.40	V	39.19	-58.10	10.60	1.25	-48.75	-13.00	35.75
5552.10	H	37.28	-55.99	11.44	1.49	-46.04	-13.00	33.04
5552.10	V	39.40	-53.70	11.44	1.49	-43.75	-13.00	30.75
878.00	H	35.26	-64.71	0.00	0.59	-65.30	-13.00	52.30
603.00	V	42.35	-61.29	0.00	0.50	-61.79	-13.00	48.79
QPSK, Frequency: 1880 MHz								
3760.00	H	40.89	-55.52	10.66	1.24	-46.10	-13.00	33.10
3760.00	V	40.02	-56.27	10.66	1.24	-46.85	-13.00	33.85
5640.00	H	35.64	-57.81	11.33	1.54	-48.02	-13.00	35.02
5640.00	V	37.50	-55.83	11.33	1.54	-46.04	-13.00	33.04
219.00	H	38.21	-74.30	0.00	0.27	-74.57	-13.00	61.57
603.00	V	42.35	-61.29	0.00	0.50	-61.79	-13.00	48.79
QPSK, Frequency: 1909.3 MHz								
3818.60	H	40.24	-55.62	10.72	1.29	-46.19	-13.00	33.19
3818.60	V	39.99	-55.72	10.72	1.29	-46.29	-13.00	33.29
5727.90	H	36.70	-56.78	11.23	1.59	-47.14	-13.00	34.14
5727.90	V	38.20	-55.16	11.23	1.59	-45.52	-13.00	32.52
219.00	H	38.54	-73.97	0.00	0.27	-74.24	-13.00	61.24
603.00	V	43.26	-60.38	0.00	0.50	-60.88	-13.00	47.88

**LTE Band 4 (30MHz-20GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 1710.7 MHz								
3421.40	H	38.08	-59.68	10.37	1.17	-50.48	-13.00	37.48
3421.40	V	37.10	-60.63	10.37	1.17	-51.43	-13.00	38.43
5132.10	H	36.29	-57.28	11.28	1.47	-47.47	-13.00	34.47
5132.10	V	36.66	-56.80	11.28	1.47	-46.99	-13.00	33.99
85.00	H	43.95	-67.46	0.00	0.17	-67.63	-13.00	54.63
84.00	V	46.98	-61.90	0.00	0.17	-62.07	-13.00	49.07
QPSK, Frequency: 1732.5 MHz								
3465.00	H	40.23	-57.58	10.39	1.15	-48.34	-13.00	35.34
3465.00	V	38.33	-59.44	10.39	1.15	-50.20	-13.00	37.20
5197.50	H	36.82	-57.31	11.32	1.44	-47.43	-13.00	34.43
5197.50	V	36.90	-57.08	11.32	1.44	-47.20	-13.00	34.20
6930.00	H	40.37	-50.63	11.21	1.89	-41.31	-13.00	28.31
6930.00	V	40.96	-49.91	11.21	1.89	-40.59	-13.00	27.59
84.00	H	43.19	-67.89	0.00	0.17	-68.06	-13.00	55.06
79.00	V	44.95	-63.03	-0.50	0.16	-63.69	-13.00	50.69
QPSK, Frequency: 1754.3 MHz								
3508.60	H	40.52	-57.30	10.41	1.19	-48.08	-13.00	35.08
3508.60	V	38.04	-59.72	10.41	1.19	-50.50	-13.00	37.50
5262.90	H	35.77	-57.93	11.36	1.47	-48.04	-13.00	35.04
5262.90	V	37.09	-56.38	11.36	1.47	-46.49	-13.00	33.49
7017.20	H	39.85	-50.71	11.19	1.90	-41.42	-13.00	28.42
7017.20	V	40.40	-50.03	11.19	1.90	-40.74	-13.00	27.74
84.52	H	43.69	-67.56	0.00	0.17	-67.73	-13.00	54.73
77.00	V	48.62	-58.17	-1.50	0.16	-59.83	-13.00	46.83

**LTE Band 5(30MHz-10GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 824.7 MHz								
1649.40	H	40.72	-63.61	8.68	0.80	-55.73	-13.00	42.73
1649.40	V	37.43	-66.98	8.68	0.80	-59.10	-13.00	46.10
2474.10	H	38.41	-62.37	9.38	1.00	-53.99	-13.00	40.99
2474.10	V	35.32	-65.41	9.38	1.00	-57.03	-13.00	44.03
3298.80	H	34.89	-61.79	10.32	1.15	-52.62	-13.00	39.62
3298.80	V	35.05	-61.39	10.32	1.15	-52.22	-13.00	39.22
84.00	H	41.57	-69.51	0.00	0.17	-69.68	-13.00	56.68
80.00	V	46.85	-61.73	0.00	0.16	-61.89	-13.00	48.89
QPSK, Frequency: 836.5 MHz								
1673.00	H	41.40	-62.91	8.71	0.85	-55.05	-13.00	42.05
1673.00	V	38.79	-65.62	8.71	0.85	-57.76	-13.00	44.76
2509.50	H	39.62	-60.99	9.42	1.01	-52.58	-13.00	39.58
2509.50	V	36.98	-63.64	9.42	1.01	-55.23	-13.00	42.23
3346.00	H	35.61	-61.55	10.34	1.16	-52.37	-13.00	39.37
3346.00	V	35.64	-61.38	10.34	1.16	-52.20	-13.00	39.20
84.00	H	42.55	-68.53	0.00	0.17	-68.70	-13.00	55.70
79.00	V	46.81	-61.17	-0.50	0.16	-61.83	-13.00	48.83
QPSK, Frequency: 848.3 MHz								
1696.60	H	40.08	-64.21	8.74	0.89	-56.36	-13.00	43.36
1696.60	V	39.84	-64.58	8.74	0.89	-56.73	-13.00	43.73
2544.90	H	36.82	-63.52	9.47	1.01	-55.06	-13.00	42.06
2544.90	V	37.07	-63.23	9.47	1.01	-54.77	-13.00	41.77
3393.20	H	35.77	-61.90	10.36	1.19	-52.73	-13.00	39.73
3393.20	V	35.53	-62.10	10.36	1.19	-52.93	-13.00	39.93
86.00	H	43.95	-67.78	0.00	0.17	-67.95	-13.00	54.95
80.00	V	47.21	-61.37	0.00	0.16	-61.53	-13.00	48.53

**LTE Band 7(30MHz-26.5GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB $\mu$ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 2502.5 MHz								
5005.00	H	35.28	-57.68	11.20	1.47	-47.95	-25.00	22.95
5005.00	V	35.85	-56.97	11.20	1.47	-47.24	-25.00	22.24
7507.50	H	38.63	-51.16	10.90	1.95	-42.21	-25.00	17.21
7507.50	V	41.56	-48.73	10.90	1.95	-39.78	-25.00	14.78
878.00	H	35.69	-64.28	0.00	0.59	-64.87	-25.00	39.87
603.00	V	42.77	-60.87	0.00	0.50	-61.37	-25.00	36.37
QPSK, Frequency: 2535 MHz								
5070.00	H	35.69	-57.50	11.24	1.47	-47.73	-25.00	22.73
5070.00	V	35.75	-57.34	11.24	1.47	-47.57	-25.00	22.57
7605.00	H	40.87	-48.60	10.88	2.01	-39.73	-25.00	14.73
7605.00	V	44.58	-45.61	10.88	2.01	-36.74	-25.00	11.74
878.00	H	36.94	-63.03	0.00	0.59	-63.62	-25.00	38.62
603.00	V	42.45	-61.19	0.00	0.50	-61.69	-25.00	36.69
QPSK, Frequency: 2567.5 MHz								
5135.00	H	36.97	-56.63	11.28	1.47	-46.82	-25.00	21.82
5135.00	V	35.52	-57.97	11.28	1.47	-48.16	-25.00	23.16
7702.50	H	38.69	-50.83	10.86	1.97	-41.94	-25.00	16.94
7702.50	V	44.95	-45.23	10.86	1.97	-36.34	-25.00	11.34
878.00	H	37.09	-62.88	0.00	0.59	-63.47	-25.00	38.47
878.00	V	41.09	-55.85	0.00	0.59	-56.44	-25.00	31.44



**LTE Band 12(30MHz-10GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 699.7 MHz								
1399.40	H	44.36	-59.34	8.22	0.71	-51.83	-13.00	38.83
1399.40	V	41.06	-62.69	8.22	0.71	-55.18	-13.00	42.18
2099.10	H	37.52	-64.36	9.16	0.91	-56.11	-13.00	43.11
2099.10	V	36.31	-65.52	9.16	0.91	-57.27	-13.00	44.27
2798.80	H	39.25	-60.68	9.88	1.04	-51.84	-13.00	38.84
2798.80	V	40.19	-59.61	9.88	1.04	-50.77	-13.00	37.77
85.69	H	42.97	-68.66	0.00	0.17	-68.83	-13.00	55.83
78.69	V	49.85	-57.95	-0.66	0.16	-58.77	-13.00	45.77
QPSK, Frequency:707.5 MHz								
1415.00	H	52.91	-50.76	8.26	0.72	-43.22	-13.00	30.22
1415.00	V	46.50	-57.22	8.26	0.72	-49.68	-13.00	36.68
2122.50	H	36.98	-65.01	9.17	0.92	-56.76	-13.00	43.76
2122.50	V	36.96	-65.01	9.17	0.92	-56.76	-13.00	43.76
2830.00	H	43.13	-56.67	9.93	1.06	-47.80	-13.00	34.80
2830.00	V	42.55	-57.18	9.93	1.06	-48.31	-13.00	35.31
219.00	H	44.58	-67.93	0.00	0.27	-68.20	-13.00	55.20
78.69	V	48.57	-59.23	-0.66	0.16	-60.05	-13.00	47.05
QPSK, Frequency: 715.3 MHz								
1430.60	H	54.39	-49.24	8.31	0.73	-41.66	-13.00	28.66
1430.60	V	49.45	-54.24	8.31	0.73	-46.66	-13.00	33.66
2145.90	H	37.57	-64.53	9.19	0.93	-56.27	-13.00	43.27
2145.90	V	39.04	-63.07	9.19	0.93	-54.81	-13.00	41.81
2861.20	H	49.11	-50.54	9.98	1.07	-41.63	-13.00	28.63
2861.20	V	45.69	-53.98	9.98	1.07	-45.07	-13.00	32.07
84.99	H	42.58	-68.82	0.00	0.17	-68.99	-13.00	55.99
79.35	V	46.79	-61.40	-0.33	0.16	-61.89	-13.00	48.89

**LTE Band 13(30MHz-10GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 779.5 MHz								
1559.00	H	42.26	-61.73	8.57	0.80	-53.96	-40.00	13.96
1559.00	V	38.35	-65.70	8.57	0.80	-57.93	-40.00	17.93
2338.50	H	36.38	-65.21	9.30	0.97	-56.88	-13.00	43.88
2338.50	V	35.86	-65.50	9.30	0.97	-57.17	-13.00	44.17
3118.00	H	36.04	-61.45	10.25	1.13	-52.33	-13.00	39.33
3118.00	V	36.16	-61.19	10.25	1.13	-52.07	-13.00	39.07
878.00	H	42.38	-57.59	0.00	0.59	-58.18	-13.00	45.18
603.00	V	37.84	-65.80	0.00	0.50	-66.30	-13.00	53.30
QPSK, Frequency: 782 MHz								
1564.00	H	42.01	-62.03	8.58	0.80	-54.25	-40.00	14.25
1564.00	V	37.95	-66.14	8.58	0.80	-58.36	-40.00	18.36
2346.00	H	37.93	-63.59	9.31	0.97	-55.25	-13.00	42.25
2346.00	V	35.76	-65.53	9.31	0.97	-57.19	-13.00	44.19
3128.00	H	34.96	-62.48	10.25	1.13	-53.36	-13.00	40.36
3128.00	V	35.12	-62.17	10.25	1.13	-53.05	-13.00	40.05
878.00	H	42.35	-57.62	0.00	0.59	-58.21	-13.00	45.21
43.00	V	38.59	-55.12	-22.44	0.12	-77.68	-13.00	64.68
QPSK, Frequency: 784.5 MHz								
1569.00	H	42.76	-61.32	8.58	0.81	-53.55	-40.00	13.55
1569.00	V	38.09	-66.04	8.58	0.81	-58.27	-40.00	18.27
2353.50	H	37.41	-64.04	9.31	0.97	-55.70	-13.00	42.70
2353.50	V	36.73	-64.49	9.31	0.97	-56.15	-13.00	43.15
3138.00	H	36.22	-61.18	10.26	1.14	-52.06	-13.00	39.06
3138.00	V	35.37	-61.86	10.26	1.14	-52.74	-13.00	39.74
878.00	H	42.38	-57.59	0.00	0.59	-58.18	-13.00	45.18
79.35	V	46.79	-61.40	-0.33	0.16	-61.89	-13.00	48.89

**LTE Band 25(30MHz-20GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 1850.7 MHz								
3701.40	H	41.94	-55.37	10.60	1.25	-46.02	-13.00	33.02
3701.40	V	39.74	-57.55	10.60	1.25	-48.20	-13.00	35.20
5552.10	H	38.10	-55.17	11.44	1.49	-45.22	-13.00	32.22
5552.10	V	39.65	-53.45	11.44	1.49	-43.50	-13.00	30.50
878.00	H	42.35	-57.62	0.00	0.59	-58.21	-13.00	45.21
603.00	V	38.75	-64.89	0.00	0.50	-65.39	-13.00	52.39
QPSK, Frequency: 1882.5 MHz								
3765.00	H	40.52	-55.81	10.67	1.25	-46.39	-13.00	33.39
3765.00	V	40.47	-55.74	10.67	1.25	-46.32	-13.00	33.32
5647.50	H	40.25	-53.20	11.32	1.55	-43.43	-13.00	30.43
5647.50	V	39.18	-54.15	11.32	1.55	-44.38	-13.00	31.38
878.00	H	41.36	-58.61	0.00	0.59	-59.20	-13.00	46.20
37.00	V	43.26	-43.63	-24.96	0.12	-68.71	-13.00	55.71
QPSK, Frequency: 1914.3 MHz								
3828.60	H	40.19	-55.71	10.73	1.28	-46.26	-13.00	33.26
3828.60	V	39.23	-56.54	10.73	1.28	-47.09	-13.00	34.09
5742.90	H	41.12	-52.36	11.21	1.60	-42.75	-13.00	29.75
5742.90	V	39.28	-54.08	11.21	1.60	-44.47	-13.00	31.47
878.00	H	41.73	-58.24	0.00	0.59	-58.83	-13.00	45.83
30.00	V	38.49	-41.43	-26.30	0.10	-67.83	-13.00	54.83

**LTE Band 26(30MHz-10GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 814.7 MHz								
1629.40	H	42.19	-62.16	8.66	0.81	-54.31	-13.00	41.31
1629.40	V	42.25	-62.16	8.66	0.81	-54.31	-13.00	41.31
2444.10	H	38.43	-62.46	9.37	1.00	-54.09	-13.00	41.09
2444.10	V	39.19	-61.56	9.37	1.00	-53.19	-13.00	40.19
3258.80	H	35.41	-61.45	10.30	1.17	-52.32	-13.00	39.32
3258.80	V	35.06	-61.55	10.30	1.17	-52.42	-13.00	39.42
903.00	H	57.34	-41.87	0.00	0.58	-42.45	-13.00	29.45
903.00	V	50.85	-45.51	0.00	0.58	-46.09	-13.00	33.09
QPSK, Frequency:531.5 MHz								
1663.00	H	40.87	-63.45	8.70	0.83	-55.58	-13.00	42.58
1663.00	V	38.55	-65.86	8.70	0.83	-57.99	-13.00	44.99
2494.50	H	36.21	-64.49	9.40	1.01	-56.10	-13.00	43.10
2494.50	V	35.24	-65.47	9.40	1.01	-57.08	-13.00	44.08
3326.00	H	35.46	-61.49	10.33	1.16	-52.32	-13.00	39.32
3326.00	V	35.77	-61.00	10.33	1.16	-51.83	-13.00	38.83
219.00	H	39.36	-73.15	0.00	0.27	-73.42	-13.00	60.42
30.00	V	38.49	-41.43	-26.30	0.10	-67.83	-13.00	54.83
QPSK, Frequency: 848.3 MHz								
1696.60	H	42.95	-61.34	8.74	0.89	-53.49	-13.00	40.49
1696.60	V	38.47	-65.95	8.74	0.89	-58.10	-13.00	45.10
2544.90	H	36.33	-64.01	9.47	1.01	-55.55	-13.00	42.55
2544.90	V	37.26	-63.04	9.47	1.01	-54.58	-13.00	41.58
3393.20	H	36.59	-61.08	10.36	1.19	-51.91	-13.00	38.91
3393.20	V	35.14	-62.49	10.36	1.19	-53.32	-13.00	40.32
159.00	H	31.52	-80.12	0.00	0.23	-80.35	-13.00	67.35
30.00	V	39.52	-40.40	-26.30	0.10	-66.80	-13.00	53.80

Note:

- 1) The unit of Antenna Gain is dBd for frequency below 1GHz, and the unit of Antenna Gain is dBi for frequency above 1GHz.
- 2) Absolute Level = Substituted Level - Cable loss + Antenna Gain
- 3) Margin = Limit-Absolute Level

**\*\*\*\*\* END OF REPORT \*\*\*\*\***