

NR Band n41 (SRS1)

BW (MHz)	Frequency (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)
70	2531.01	11.47	H	5.28	9.94	16.13	41.02	33.00	-16.87
	2592.99	11.91	H	5.34	9.91	16.49	44.57	33.00	-16.51
	2655.00	13.23	H	5.41	9.87	17.69	58.75	33.00	-15.31

NR Band n41 (SRS2)

BW (MHz)	Frequency (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)
70	2531.01	9.67	H	5.28	9.94	14.34	27.16	33.00	-18.66
	2592.99	11.69	H	5.34	9.91	16.26	42.27	33.00	-16.74
	2655.00	12.63	H	5.41	9.87	17.09	51.17	33.00	-15.91

NR Band n41 (SRS3)

BW (MHz)	Frequency (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)
60	2526.00	6.89	H	5.27	9.95	11.58	14.39	33.00	-21.42
	2592.99	8.33	H	5.34	9.91	12.91	19.54	33.00	-20.09
	2659.98	9.34	H	5.41	9.87	13.80	23.99	33.00	-19.20

NR Band n66 (DFT-OFDM) (Antenna A, Main 1)

BW (MHz)	Modulation	Frequency (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
40	QPSK	1730.00	16.54	V	4.33	9.59	21.80	151.36	30.00	-8.20	1/108
		1745.00	15.87	V	4.35	9.66	21.18	131.22	30.00	-8.82	1/108
		1760.00	16.06	V	4.37	9.68	21.38	137.40	30.00	-8.62	1/108
	16-QAM	1730.00	15.41	V	4.33	9.59	20.67	116.68	30.00	-9.33	1/108
		1745.00	15.30	V	4.35	9.66	20.61	115.08	30.00	-9.39	1/108
		1760.00	14.95	V	4.37	9.68	20.27	106.41	30.00	-9.73	1/108
35	QPSK	1727.50	16.47	V	4.33	9.58	21.73	148.94	30.00	-8.27	1/186
		1745.00	15.93	V	4.35	9.66	21.24	133.05	30.00	-8.76	1/186
		1762.50	16.01	V	4.37	9.68	21.32	135.52	30.00	-8.68	1/93
	16-QAM	1727.50	15.24	V	4.33	9.58	20.50	112.20	30.00	-9.50	1/186
		1745.00	15.19	V	4.35	9.66	20.50	112.20	30.00	-9.50	1/186
		1762.50	14.77	V	4.37	9.68	20.08	101.86	30.00	-9.92	1/93
30	QPSK	1725.00	16.41	V	4.32	9.57	21.66	146.55	30.00	-8.34	1/158
		1745.00	15.95	V	4.35	9.66	21.26	133.66	30.00	-8.74	1/158
		1765.00	16.23	V	4.37	9.68	21.54	142.56	30.00	-8.46	1/80
	16-QAM	1725.00	15.15	V	4.32	9.57	20.40	109.65	30.00	-9.60	1/158
		1745.00	15.30	V	4.35	9.66	20.61	115.08	30.00	-9.39	1/158
		1765.00	14.99	V	4.37	9.68	20.30	107.15	30.00	-9.70	1/80
25	QPSK	1722.50	16.23	V	4.32	9.56	21.47	140.28	30.00	-8.53	1/131
		1745.00	15.90	V	4.35	9.66	21.21	132.13	30.00	-8.79	1/131
		1767.50	16.17	V	4.38	9.68	21.48	140.60	30.00	-8.52	1/1
	16-QAM	1722.50	15.05	V	4.32	9.56	20.29	106.91	30.00	-9.71	1/131
		1745.00	15.20	V	4.35	9.66	20.51	112.46	30.00	-9.49	1/131
		1767.50	14.90	V	4.38	9.68	20.21	104.95	30.00	-9.79	1/1
20	QPSK	1720.00	16.22	V	4.32	9.55	21.45	139.64	30.00	-8.55	1/1
		1745.00	15.92	V	4.35	9.66	21.23	132.74	30.00	-8.77	1/104
		1770.00	16.14	V	4.38	9.68	21.45	139.64	30.00	-8.55	1/1
	16-QAM	1720.00	14.99	V	4.32	9.55	20.22	105.20	30.00	-9.78	1/1
		1745.00	15.18	V	4.35	9.66	20.49	111.94	30.00	-9.51	1/104
		1770.00	14.96	V	4.38	9.68	20.27	106.41	30.00	-9.73	1/1
15	QPSK	1717.50	16.18	V	4.31	9.53	21.40	138.04	30.00	-8.60	1/1
		1745.00	15.83	V	4.35	9.66	21.14	130.02	30.00	-8.86	1/77
		1772.50	16.11	V	4.38	9.68	21.41	138.36	30.00	-8.59	1/77
	16-QAM	1717.50	15.01	V	4.31	9.53	20.23	105.44	30.00	-9.77	1/1
		1745.00	15.15	V	4.35	9.66	20.46	111.17	30.00	-9.54	1/77
		1772.50	14.94	V	4.38	9.68	20.24	105.68	30.00	-9.76	1/77
10	QPSK	1715.00	16.19	V	4.31	9.52	21.40	138.04	30.00	-8.60	1/1
		1745.00	15.82	V	4.35	9.66	21.13	129.72	30.00	-8.87	1/26
		1775.00	16.15	V	4.38	9.68	21.45	139.64	30.00	-8.55	1/26
	16-QAM	1715.00	15.03	V	4.31	9.52	20.24	105.68	30.00	-9.76	1/26
		1745.00	15.25	V	4.35	9.66	20.56	113.76	30.00	-9.44	1/26
		1775.00	14.96	V	4.38	9.68	20.26	106.17	30.00	-9.74	1/26
5	QPSK	1712.50	16.07	V	4.31	9.51	21.27	133.97	30.00	-8.73	1/1
		1745.00	15.79	V	4.35	9.66	21.10	128.82	30.00	-8.90	1/1
		1777.50	16.15	V	4.39	9.68	21.44	139.32	30.00	-8.56	1/23
	16-QAM	1712.50	14.94	V	4.31	9.51	20.14	103.28	30.00	-9.86	1/1
		1745.00	15.16	V	4.35	9.66	20.47	111.43	30.00	-9.53	1/1
		1777.50	14.90	V	4.39	9.68	20.19	104.47	30.00	-9.81	1/23

NR Band n66 (DFT-OFDM) (Antenna F, Sub 2)

BW (MHz)	Modulation	Frequency (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
40	QPSK	1730.00	17.57	H	4.33	9.59	22.84	192.31	30.00	-7.16	1/214
		1745.00	17.42	H	4.35	9.66	22.73	187.50	30.00	-7.27	1/108
		1760.00	17.61	H	4.37	9.68	22.92	195.88	30.00	-7.08	0.00
	16-QAM	1730.00	16.74	H	4.33	9.59	22.01	158.85	30.00	-7.99	1/108
		1745.00	16.34	H	4.35	9.66	21.65	146.22	30.00	-8.35	1/108
		1760.00	16.79	H	4.37	9.68	22.10	162.18	30.00	-7.90	1/108
30	QPSK	1725.00	17.50	H	4.32	9.57	22.75	188.36	30.00	-7.25	1/80
		1745.00	17.39	H	4.35	9.66	22.70	186.21	30.00	-7.30	1/158
		1765.00	17.77	H	4.37	9.68	23.08	203.24	30.00	-6.92	1/80
	16-QAM	1725.00	16.54	H	4.32	9.57	21.79	151.01	30.00	-8.21	1/80
		1745.00	16.23	H	4.35	9.66	21.54	142.56	30.00	-8.46	1/80
		1765.00	16.59	H	4.37	9.68	21.90	154.88	30.00	-8.10	1/80
25	QPSK	1722.50	17.30	H	4.32	9.56	22.54	179.47	30.00	-7.46	1/131
		1745.00	17.44	H	4.35	9.66	22.75	188.36	30.00	-7.25	1/131
		1767.50	17.79	H	4.38	9.68	23.10	204.17	30.00	-6.90	1/1
	16-QAM	1722.50	16.37	H	4.32	9.56	21.61	144.88	30.00	-8.39	1/131
		1745.00	16.28	H	4.35	9.66	21.59	144.21	30.00	-8.41	1/131
		1767.50	16.72	H	4.38	9.68	22.03	159.59	30.00	-7.97	1/131
20	QPSK	1720.00	17.43	H	4.32	9.55	22.66	184.50	30.00	-7.34	1/104
		1745.00	17.54	H	4.35	9.66	22.85	192.75	30.00	-7.15	1/104
		1770.00	17.94	H	4.38	9.68	23.25	211.35	30.00	-6.75	1/104
	16-QAM	1720.00	16.48	H	4.32	9.55	21.71	148.25	30.00	-8.29	1/104
		1745.00	16.48	H	4.35	9.66	21.79	151.01	30.00	-8.21	1/104
		1770.00	16.84	H	4.38	9.68	22.15	164.06	30.00	-7.85	1/104
15	QPSK	1717.50	17.30	H	4.31	9.53	22.52	178.65	30.00	-7.48	1/77
		1745.00	17.40	H	4.35	9.66	22.71	186.64	30.00	-7.29	1/77
		1772.50	17.90	H	4.38	9.68	23.20	206.93	30.00	-6.80	1/77
	16-QAM	1717.50	16.29	H	4.31	9.53	21.51	141.58	30.00	-8.49	1/77
		1745.00	16.28	H	4.35	9.66	21.59	144.21	30.00	-8.41	1/77
		1772.50	16.77	H	4.38	9.68	22.07	161.06	30.00	-7.93	1/77
10	QPSK	1715.00	17.23	H	4.31	9.52	22.44	175.39	30.00	-7.56	1/50
		1745.00	17.32	H	4.35	9.66	22.63	183.23	30.00	-7.37	1/50
		1775.00	17.99	H	4.38	9.68	23.29	213.30	30.00	-6.71	1/50
	16-QAM	1715.00	16.39	H	4.31	9.52	21.60	144.54	30.00	-8.40	1/26
		1745.00	16.15	H	4.35	9.66	21.46	139.96	30.00	-8.54	1/50
		1775.00	16.91	H	4.38	9.68	22.21	166.34	30.00	-7.79	1/26
5	QPSK	1712.50	17.04	H	4.31	9.51	22.25	167.88	30.00	-7.75	1/23
		1745.00	17.27	H	4.35	9.66	22.58	181.13	30.00	-7.42	1/23
		1777.50	18.04	H	4.39	9.68	23.34	215.77	30.00	-6.66	1/23
	16-QAM	1712.50	16.02	H	4.31	9.51	21.23	132.74	30.00	-8.77	1/23
		1745.00	16.14	H	4.35	9.66	21.45	139.64	30.00	-8.55	1/23
		1777.50	16.96	H	4.39	9.68	22.26	168.27	30.00	-7.74	1/23

NR Band n77 (PC2, 3450-3550 MHz) (DFT-OFDM) (Antenna F, Sub 2)

BW (MHz)	Modulation	Frequency (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
100	BPSK	3499.98	19.06	H	6.21	10.67	23.52	224.91	30.00	-6.48	1/137
	16-QAM	3499.98	18.64	H	6.21	10.67	23.10	204.17	30.00	-6.90	1/1
90	BPSK	3495.00	19.17	H	6.21	10.66	23.62	230.14	30.00	-6.38	1/123
		3499.98	19.11	H	6.21	10.67	23.57	227.51	30.00	-6.43	1/123
		3504.99	20.42	H	6.21	10.68	24.89	308.32	30.00	-5.11	1/123
	16-QAM	3495.00	18.68	H	6.21	10.66	23.13	205.59	30.00	-6.87	1/1
		3499.98	18.44	H	6.21	10.67	22.90	194.98	30.00	-7.10	1/1
		3504.99	19.87	H	6.21	10.68	24.34	271.64	30.00	-5.66	1/1
80	BPSK	3490.02	19.26	H	6.20	10.66	23.72	235.50	30.00	-6.28	1/109
		3499.98	19.20	H	6.21	10.67	23.66	232.27	30.00	-6.34	1/109
		3510.00	19.38	H	6.22	10.69	23.84	242.10	30.00	-6.16	1/109
	16-QAM	3490.02	18.78	H	6.20	10.66	23.24	210.86	30.00	-6.76	1/1
		3499.98	18.67	H	6.21	10.67	23.13	205.59	30.00	-6.87	1/1
		3510.00	18.90	H	6.22	10.69	23.36	216.77	30.00	-6.64	1/1
70	BPSK	3485.01	19.30	H	6.20	10.65	23.75	237.14	30.00	-6.25	1/96
		3499.98	20.45	H	6.21	10.67	24.91	309.74	30.00	-5.09	1/96
		3514.98	19.84	H	6.22	10.70	24.31	269.77	30.00	-5.69	1/1
	16-QAM	3485.01	18.68	H	6.20	10.65	23.13	205.59	30.00	-6.87	1/1
		3499.98	20.00	H	6.21	10.67	24.46	279.25	30.00	-5.54	1/1
		3514.98	19.34	H	6.22	10.70	23.81	240.44	30.00	-6.19	1/1
60	BPSK	3480.00	19.25	H	6.19	10.65	23.71	234.96	30.00	-6.29	1/81
		3499.98	19.41	H	6.21	10.67	23.87	243.78	30.00	-6.13	1/81
		3519.99	20.21	H	6.23	10.71	24.69	294.44	30.00	-5.31	1/1
	16-QAM	3480.00	18.86	H	6.19	10.65	23.32	214.78	30.00	-6.68	1/1
		3499.98	19.00	H	6.21	10.67	23.46	221.82	30.00	-6.54	1/1
		3514.98	19.70	H	6.23	10.71	24.18	261.82	30.00	-5.82	1/1
50	BPSK	3475.02	19.26	H	6.18	10.64	23.72	235.50	30.00	-6.28	1/131
		3499.98	20.43	H	6.21	10.67	24.89	308.32	30.00	-5.11	1/67
		3525.00	20.25	H	6.23	10.71	24.73	297.17	30.00	-5.27	1/1
	16-QAM	3475.02	18.69	H	6.18	10.64	23.15	206.54	30.00	-6.85	1/1
		3499.98	19.83	H	6.21	10.67	24.29	268.53	30.00	-5.71	1/1
		3525.00	19.78	H	6.23	10.71	24.26	266.69	30.00	-5.74	1/1
40	BPSK	3470.01	19.30	H	6.18	10.63	23.75	237.14	30.00	-6.25	1/104
		3499.98	20.10	H	6.21	10.67	24.56	285.76	30.00	-5.44	1/53
		3529.98	20.30	H	6.23	10.72	24.78	300.61	30.00	-5.22	1/1
	16-QAM	3470.01	18.72	H	6.18	10.63	23.17	207.49	30.00	-6.83	1/1
		3499.98	19.57	H	6.21	10.67	24.03	252.93	30.00	-5.97	1/1
		3529.98	19.80	H	6.23	10.72	24.28	267.92	30.00	-5.72	1/1
30	BPSK	3465.00	19.36	H	6.17	10.63	23.81	240.44	30.00	-6.19	1/76
		3499.98	20.25	H	6.21	10.67	24.71	295.80	30.00	-5.29	1/39
		3535.02	20.24	H	6.24	10.73	24.73	297.17	30.00	-5.27	1/1
	16-QAM	3465.00	18.84	H	6.17	10.63	23.29	213.30	30.00	-6.71	1/1
		3499.98	19.61	H	6.21	10.67	24.07	255.27	30.00	-5.93	1/1
		3535.02	19.70	H	6.24	10.73	24.19	262.42	30.00	-5.81	1/1
25	BPSK	3462.51	19.25	H	6.17	10.62	23.71	234.96	30.00	-6.29	1/63
		3499.98	20.30	H	6.21	10.67	24.76	299.23	30.00	-5.24	1/1
		3537.48	19.76	H	6.24	10.74	24.26	266.69	30.00	-5.74	1/1
	16-QAM	3462.51	18.80	H	6.17	10.62	23.26	211.84	30.00	-6.74	1/1
		3499.98	19.70	H	6.21	10.67	24.16	260.62	30.00	-5.84	1/1
		3537.48	19.12	H	6.24	10.74	23.62	230.14	30.00	-6.38	1/1
20	BPSK	3460.02	19.53	H	6.17	10.62	23.98	250.03	30.00	-6.02	1/49
		3499.98	20.43	H	6.21	10.67	24.89	308.32	30.00	-5.11	1/26
		3540.00	20.27	H	6.24	10.74	24.77	299.92	30.00	-5.23	1/1
	16-QAM	3460.02	19.14	H	6.17	10.62	23.59	228.56	30.00	-6.41	1/1
		3499.98	19.95	H	6.21	10.67	24.41	276.06	30.00	-5.59	1/1
		3540.00	19.83	H	6.24	10.74	24.33	271.02	30.00	-5.67	1/1
15	BPSK	3457.50	19.56	H	6.17	10.62	24.01	251.77	30.00	-5.99	1/36
		3499.98	20.47	H	6.21	10.67	24.93	311.17	30.00	-5.07	1/19
		3542.49	20.17	H	6.24	10.75	24.68	293.76	30.00	-5.32	1/1
	16-QAM	3457.50	18.98	H	6.17	10.62	23.43	220.29	30.00	-6.57	1/1
		3499.98	19.95	H	6.21	10.67	24.41	276.06	30.00	-5.59	1/1
		3542.49	19.76	H	6.24	10.75	24.27	267.30	30.00	-5.73	1/1
10	BPSK	3455.01	19.59	H	6.16	10.61	24.04	253.51	30.00	-5.96	1/22
		3499.98	20.32	H	6.21	10.67	24.78	300.61	30.00	-5.22	1/12
		3544.98	20.01	H	6.24	10.75	24.51	282.49	30.00	-5.49	1/1
	16-QAM	3455.01	18.85	H	6.16	10.61	23.30	213.80	30.00	-6.70	1/1
		3499.98	19.90	H	6.21	10.67	24.36	272.90	30.00	-5.64	1/1
		3544.98	19.57	H	6.24	10.75	24.07	255.27	30.00	-5.93	1/1

NR Band n77 (3700-3980 MHz) (DFT-OFDM) (Antenna F, Sub 2)

BW (MHz)	Modulation	Frequency (MHz)	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm)	Delta (dB)	RB
100	BPSK	3750.00	19.00	H	6.43	10.69	23.26	211.84	30.00	-6.74	1/271
		3840.00	19.55	H	6.50	10.58	23.62	230.14	30.00	-6.38	1/271
		3930.00	20.86	H	6.58	10.48	24.76	299.23	30.00	-5.24	1/271
	16-QAM	3750.00	18.52	H	6.43	10.69	22.78	189.67	30.00	-7.22	1/271
		3840.00	18.82	H	6.50	10.58	22.89	194.54	30.00	-7.11	1/1
		3930.00	20.33	H	6.58	10.48	24.23	264.85	30.00	-5.77	1/137
90	BPSK	3745.02	18.39	H	6.43	10.70	22.67	184.93	30.00	-7.33	1/243
		3840.00	19.08	H	6.50	10.58	23.15	206.54	30.00	-6.85	1/1
		3934.98	20.90	H	6.59	10.48	24.79	301.30	30.00	-5.21	1/243
	16-QAM	3745.02	17.86	H	6.43	10.70	22.13	163.31	30.00	-7.87	1/1
		3840.00	18.53	H	6.50	10.58	22.60	181.97	30.00	-7.40	1/1
		3934.98	20.33	H	6.59	10.48	24.21	263.63	30.00	-5.79	1/1
80	BPSK	3740.01	17.55	H	6.42	10.70	21.84	152.76	30.00	-8.16	1/215
		3840.00	18.45	H	6.50	10.58	22.52	178.65	30.00	-7.48	1/1
		3939.99	20.81	H	6.59	10.47	24.49	281.19	30.00	-5.51	1/109
	16-QAM	3740.01	17.00	H	6.42	10.70	21.29	134.59	30.00	-8.71	1/1
		3840.00	17.91	H	6.50	10.58	21.98	157.76	30.00	-8.02	1/1
		3939.99	20.07	H	6.59	10.47	23.95	248.31	30.00	-6.05	1/1
70	BPSK	3735.00	17.99	H	6.41	10.71	22.28	169.04	30.00	-7.72	1/187
		3840.00	18.93	H	6.50	10.58	23.00	199.53	30.00	-7.00	1/1
		3945.00	20.81	H	6.60	10.47	24.69	294.44	30.00	-5.31	1/95
	16-QAM	3735.00	17.35	H	6.41	10.71	21.64	145.88	30.00	-8.36	1/1
		3840.00	18.37	H	6.50	10.58	22.44	175.39	30.00	-7.56	1/1
		3945.00	20.23	H	6.60	10.47	24.11	257.63	30.00	-5.89	1/1
60	BPSK	3730.02	17.70	H	6.41	10.72	22.01	158.85	30.00	-7.99	1/160
		3840.00	19.07	H	6.50	10.58	23.14	206.06	30.00	-6.86	1/1
		3949.98	20.73	H	6.60	10.47	24.60	288.40	30.00	-5.40	1/81
	16-QAM	3730.02	17.37	H	6.41	10.72	21.68	147.23	30.00	-8.32	1/1
		3840.00	18.64	H	6.50	10.58	22.71	186.64	30.00	-7.29	1/1
		3949.98	20.26	H	6.60	10.47	24.13	258.82	30.00	-5.87	1/1
50	BPSK	3725.01	16.99	H	6.41	10.72	21.31	135.21	30.00	-8.69	1/131
		3840.00	18.86	H	6.50	10.58	22.93	196.34	30.00	-7.07	1/131
		3954.99	20.64	H	6.60	10.47	24.50	281.84	30.00	-5.50	1/131
	16-QAM	3725.01	16.49	H	6.41	10.72	20.81	120.50	30.00	-9.19	1/1
		3840.00	18.38	H	6.50	10.58	22.45	175.79	30.00	-7.55	1/1
		3954.99	20.16	H	6.60	10.47	24.02	252.35	30.00	-5.98	1/1
40	BPSK	3720.02	16.69	H	6.40	10.73	21.01	126.18	30.00	-8.99	1/104
		3840.00	19.01	H	6.50	10.58	23.08	203.24	30.00	-6.92	1/1
		3960.00	20.71	H	6.60	10.47	24.57	286.42	30.00	-5.43	1/53
	16-QAM	3720.02	16.16	H	6.40	10.73	20.48	111.69	30.00	-9.52	1/1
		3840.00	18.44	H	6.50	10.58	22.51	178.24	30.00	-7.49	1/1
		3960.00	20.35	H	6.60	10.47	24.21	263.63	30.00	-5.79	1/1
30	BPSK	3715.02	16.72	H	6.40	10.73	21.05	127.35	30.00	-8.95	1/1
		3840.00	18.77	H	6.50	10.58	22.84	192.31	30.00	-7.16	1/1
		3964.98	20.60	H	6.61	10.46	24.45	278.61	30.00	-5.55	1/1
	16-QAM	3715.02	16.16	H	6.40	10.73	20.49	111.94	30.00	-9.51	1/1
		3840.00	18.51	H	6.50	10.58	22.58	181.13	30.00	-7.42	1/1
		3964.98	20.16	H	6.61	10.46	24.01	251.77	30.00	-5.99	1/1
25	BPSK	3712.50	16.71	H	6.40	10.74	21.05	127.35	30.00	-8.95	1/63
		3840.00	18.75	H	6.50	10.58	22.82	191.43	30.00	-7.18	1/1
		3967.50	20.73	H	6.61	10.46	24.58	287.08	30.00	-5.42	1/1
	16-QAM	3710.01	16.21	H	6.40	10.74	20.55	113.50	30.00	-9.45	1/1
		3840.00	18.37	H	6.50	10.58	22.44	175.39	30.00	-7.56	1/1
		3969.99	20.42	H	6.61	10.46	24.27	267.30	30.00	-5.73	1/1
20	BPSK	3710.01	16.36	H	6.39	10.74	20.70	117.49	30.00	-9.30	1/1
		3840.00	18.75	H	6.50	10.58	22.82	191.43	30.00	-7.18	1/1
		3969.99	20.72	H	6.61	10.46	24.57	286.42	30.00	-5.43	1/1
	16-QAM	3710.01	15.91	H	6.39	10.74	20.25	105.93	30.00	-9.75	1/1
		3840.00	18.24	H	6.50	10.58	22.31	170.22	30.00	-7.69	1/1
		3969.99	20.26	H	6.61	10.46	24.11	257.63	30.00	-5.89	1/1
15	BPSK	3707.52	16.59	H	6.39	10.74	20.94	124.17	30.00	-9.06	1/1
		3840.00	18.78	H	6.50	10.58	22.85	192.75	30.00	-7.15	1/1
		3972.48	21.04	H	6.62	10.46	24.89	308.32	30.00	-5.11	1/36
	16-QAM	3707.52	16.05	H	6.39	10.74	20.40	109.65	30.00	-9.60	1/1
		3840.00	18.32	H	6.50	10.58	22.39	173.38	30.00	-7.61	1/1
		3972.48	20.67	H	6.62	10.46	24.52	283.14	30.00	-5.48	1/1
10	BPSK	3705.00	16.59	H	6.39	10.74	20.95	124.45	30.00	-9.05	1/1
		3840.00	18.83	H	6.50	10.58	22.90	194.98	30.00	-7.10	1/22
		3975.00	21.07	H	6.62	10.46	24.90	309.03	30.00	-5.10	1/22
	16-QAM	3705.00	16.14	H	6.39	10.74	20.50	112.20	30.00	-9.50	1/1
		3840.00	18.42	H	6.50	10.58	22.49	177.42	30.00	-7.51	1/1
		3975.00	20.65	H	6.62	10.46	24.48	280.54	30.00	-5.52	1/1

9.2. RADIATED SPURIOUS EMISSION

RULE PART(S)

FCC: §2.1053, §27.53

LIMIT

Part 27.53:

(c)(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB.

(g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB.

(h) The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB.

(m) (4) For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

(l)(2) For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (l)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

(n)(2) For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (n)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

TEST PROCEDURE

ANSI / TIA / EIA 603 E Clause 2.2.12; ESU40 setting reference to 971168 D01 v03r01

For peak power measurement with a ESU40:

- a) Set the RBW = 100 kHz for emission below 1 GHz and 1 MHz for emissions above 1 GHz
- b) Set VBW $\geq 3 \times$ RBW;
- c) Set span ≥ 1.5 times the OBW;
- d) Sweep time = auto couple;
- e) Detector = rms;
- f) Ensure that the number of measurement points \geq span/RBW;
- g) Trace Mode = average(WCDMA, LTE FDD, 5G NR FDD), Maxhold(LTE TDD, 5G NR TDD);

NOTE1

5G NR: All Waveforms (CP-OFDM vs DFT-s_OFDM) and modulations ($\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM) were investigated to determine the worst case configuration. All Modes of operation were investigated and the worst case configuration results are reported in this section.

NOTE2

Please refer to section 5.4 for bandwidth and RB setting about LTE, 5G NR bands.

RESULTS

See the following pages.

9.2.1. SPURIOUS RADIATION RESULTS

WCDMA B4

		UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
		f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
REL99 Antenna A Main 1	Company: Samsung										
	Project #: 4791082054										
	Date: 2023-12-04										
	Test Engineer: 27089										
	Configuration: EUT / AC Adapter, Z-Position										
	Location: Chamber 2										
	Mode: Rel99 Band 4 Harmonics										
	Test Votage: AC 120 V, 60 Hz										
	Low Ch, 1712.4MHz										
		3424.80	-8.2	V	3.0	42.2	1.0	-49.4	-13.0	-36.4	
		5137.20	-9.0	V	3.0	42.9	1.0	-51.0	-13.0	-38.0	
		6849.60	-5.9	V	3.0	42.9	1.0	-47.7	-13.0	-34.7	
		3424.80	-7.9	H	3.0	42.2	1.0	-49.1	-13.0	-36.1	
		5137.20	-9.0	H	3.0	42.9	1.0	-51.0	-13.0	-38.0	
		6849.60	-6.3	H	3.0	42.9	1.0	-48.1	-13.0	-35.1	
	Mid Ch, 1732.6MHz										
		3465.20	-8.2	V	3.0	42.2	1.0	-49.5	-13.0	-36.5	
		5197.80	-8.7	V	3.0	43.0	1.0	-50.6	-13.0	-37.6	
		6930.40	-5.8	V	3.0	42.9	1.0	-47.6	-13.0	-34.6	
		3465.20	-7.7	H	3.0	42.2	1.0	-48.9	-13.0	-35.9	
		5197.80	-8.6	H	3.0	43.0	1.0	-50.6	-13.0	-37.6	
		6930.40	-6.3	H	3.0	42.9	1.0	-48.1	-13.0	-35.1	
	High Ch, 1752.6MHz										
		3505.20	-8.2	V	3.0	42.2	1.0	-49.4	-13.0	-36.4	
		5257.80	-8.7	V	3.0	43.0	1.0	-50.7	-13.0	-37.7	
		7010.40	-5.6	V	3.0	42.8	1.0	-47.4	-13.0	-34.4	
		3505.20	-7.9	H	3.0	42.2	1.0	-49.1	-13.0	-36.1	
		5257.80	-8.6	H	3.0	43.0	1.0	-50.6	-13.0	-37.6	
		7010.40	-6.0	H	3.0	42.8	1.0	-47.8	-13.0	-34.8	

LTE Band 12

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement											
10 MHz QPSK Antenna A Main 1		Company: Samsung Project #: 4791082054 Date: 2023-12-04 Test Engineer: 28775 Configuration: EUT / AC Adapter, Z-Position Location: Chamber 1 Mode: LTE_QPSK Band 12 Harmonics, 10MHz Bandwidth Test Votage: AC 120 V, 60 Hz									
		f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
		Low Ch, 704MHz									
		1408.00	-16.5	V	3.0	43.3	1.0	-58.7	-13.0	-45.7	
		2112.00	-13.2	V	3.0	43.4	1.0	-55.6	-13.0	-42.6	
		2816.00	-10.8	V	3.0	43.7	1.0	-53.5	-13.0	-40.5	
		1408.00	-17.8	H	3.0	43.3	1.0	-60.0	-13.0	-47.0	
		2112.00	-13.9	H	3.0	43.4	1.0	-56.3	-13.0	-43.3	
		2816.00	-10.7	H	3.0	43.7	1.0	-53.4	-13.0	-40.4	
		Mid Ch, 707.5MHz									
1415.00	-16.3	V	3.0	43.3	1.0	-58.5	-13.0	-45.5			
2122.50	-13.0	V	3.0	43.4	1.0	-55.5	-13.0	-42.5			
2830.00	-10.7	V	3.0	43.7	1.0	-53.4	-13.0	-40.4			
1415.00	-17.7	H	3.0	43.3	1.0	-60.0	-13.0	-47.0			
2122.50	-13.9	H	3.0	43.4	1.0	-56.3	-13.0	-43.3			
2830.00	-10.7	H	3.0	43.7	1.0	-53.4	-13.0	-40.4			
High Ch, 711MHz											
1422.00	-16.4	V	3.0	43.3	1.0	-58.6	-13.0	-45.6			
2133.00	-13.1	V	3.0	43.4	1.0	-55.6	-13.0	-42.6			
2844.00	-10.7	V	3.0	43.7	1.0	-53.4	-13.0	-40.4			
1422.00	-17.7	H	3.0	43.3	1.0	-60.0	-13.0	-47.0			
2133.00	-13.9	H	3.0	43.4	1.0	-56.3	-13.0	-43.3			
2844.00	-10.6	H	3.0	43.7	1.0	-53.3	-13.0	-40.3			

LTE Band 13

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement											
10 MHz QPSK Antenna A Main 1		Company: Samsung Project #: 4791082054 Date: 2023-12-04 Test Engineer: 28775 Configuration: EUT, Z-Position Location: Chamber 1 Mode: LTE_QPSK Band 13 Harmonics, 10MHz Bandwidth Test Votage: AC 120 V, 60 Hz									
		f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
		Mid Ch, 782MHz									
		1564.00	-25.3	V	3.0	43.3	1.0	-67.6	-40.0	-27.6	
		2346.00	-11.4	V	3.0	43.5	1.0	-54.0	-13.0	-41.0	
		3128.00	-9.8	V	3.0	43.8	1.0	-52.6	-13.0	-39.6	
		1564.00	-26.5	H	3.0	43.3	1.0	-68.8	-40.0	-28.8	
		2346.00	-11.3	H	3.0	43.5	1.0	-53.9	-13.0	-40.9	
		3128.00	-9.5	H	3.0	43.8	1.0	-52.4	-13.0	-39.4	

LTE Band 41

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement											
10 MHz QPSK Antenna A Main 1		Company: Samsung Project #: 4791082054 Date: 2023-12-05 Test Engineer: 28775 Configuration: EUT / AC Adapter, Z-Position Location: Chamber 1 Mode: LTE_QPSK Band 41 Harmonics, 10MHz Bandwidth Test Votage: AC 120 V, 60 Hz									
		f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
		Low Ch, 2501MHz									
		5002.00	-2.6	V	3.0	44.8	1.0	-46.4	-25.0	-21.4	
		7503.00	-9.2	V	3.0	45.0	1.0	-53.1	-25.0	-28.1	
		10004.00	-9.5	V	3.0	43.6	1.0	-52.1	-25.0	-27.1	
		5002.00	-2.6	H	3.0	44.8	1.0	-46.3	-25.0	-21.3	
		7503.00	-3.0	H	3.0	45.0	1.0	-46.9	-25.0	-21.9	
		10004.00	-6.8	H	3.0	43.6	1.0	-49.4	-25.0	-24.4	
		Mid Ch, 2593MHz									
5186.00	1.5	V	3.0	44.8	1.0	-42.3	-25.0	-17.3			
7779.00	-10.1	V	3.0	44.8	1.0	-54.0	-25.0	-29.0			
10372.00	-10.9	V	3.0	43.5	1.0	-53.5	-25.0	-28.5			
5186.00	4.9	H	3.0	44.8	1.0	-38.9	-25.0	-13.9			
7779.00	-10.0	H	3.0	44.8	1.0	-53.8	-25.0	-28.8			
10372.00	-10.4	H	3.0	43.5	1.0	-52.9	-25.0	-27.9			
High Ch, 2685MHz											
5370.00	2.9	V	3.0	44.9	1.0	-41.0	-25.0	-16.0			
8055.00	-9.6	V	3.0	44.7	1.0	-53.3	-25.0	-28.3			
10740.00	-10.6	V	3.0	43.5	1.0	-53.0	-25.0	-28.0			
5370.00	3.6	H	3.0	44.9	1.0	-40.3	-25.0	-15.3			
8055.00	-7.7	H	3.0	44.7	1.0	-51.4	-25.0	-26.4			
10740.00	-10.3	H	3.0	43.5	1.0	-52.8	-25.0	-27.8			

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		Samsung							
Project #:		4791082054							
Date:		2024-01-08							
Test Engineer:		28775							
Configuration:		EUT, Z-Position							
Location:		Chamber 1							
Mode:		LTE_QPSK Band 41 Harmonics, 15MHz Bandwidth							
Test Voltage:		AC 120 V, 60 Hz							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2503.5MHz									
5007.00	0.8	V	3.0	44.8	1.0	-43.0	-25.0	-18.0	
7510.50	-8.9	V	3.0	44.9	1.0	-52.9	-25.0	-27.9	
10014.00	-1.3	V	3.0	43.6	1.0	-44.0	-25.0	-19.0	
12517.50	-7.3	V	3.0	43.5	1.0	-49.8	-25.0	-24.8	
15021.00	-2.4	V	3.0	44.8	1.0	-46.2	-25.0	-21.2	
5007.00	3.4	H	3.0	44.8	1.0	-40.3	-25.0	-15.3	
7510.50	-8.3	H	3.0	44.9	1.0	-52.2	-25.0	-27.2	
10014.00	2.5	H	3.0	43.6	1.0	-40.2	-25.0	-15.2	
12517.50	-4.8	H	3.0	43.5	1.0	-47.3	-25.0	-22.3	
15021.00	1.5	H	3.0	44.8	1.0	-42.4	-25.0	-17.4	
Mid Ch, 2593MHz									
5186.00	-6.7	V	3.0	44.8	1.0	-50.6	-25.0	-25.6	
7779.00	-10.7	V	3.0	44.8	1.0	-54.6	-25.0	-29.6	
10372.00	-1.5	V	3.0	43.5	1.0	-44.0	-25.0	-19.0	
12965.00	-8.4	V	3.0	43.7	1.0	-51.1	-25.0	-26.1	
15558.00	-5.0	V	3.0	44.7	1.0	-48.7	-25.0	-23.7	
5186.00	-4.1	H	3.0	44.8	1.0	-48.0	-25.0	-23.0	
7779.00	-8.0	H	3.0	44.8	1.0	-51.8	-25.0	-26.8	
10372.00	-1.5	H	3.0	43.5	1.0	-44.0	-25.0	-19.0	
12965.00	-5.7	H	3.0	43.7	1.0	-48.4	-25.0	-23.4	
15558.00	-3.9	H	3.0	44.7	1.0	-47.6	-25.0	-22.6	
High Ch, 2682.5MHz									
5365.00	-0.3	V	3.0	44.9	1.0	-44.2	-25.0	-19.2	
8047.50	-10.8	V	3.0	44.7	1.0	-54.5	-25.0	-29.5	
10730.00	-3.8	V	3.0	43.5	1.0	-46.3	-25.0	-21.3	
13412.50	-5.2	V	3.0	44.0	1.0	-48.1	-25.0	-23.1	
16095.00	-3.2	V	3.0	44.5	1.0	-46.7	-25.0	-21.7	
5365.00	-1.0	H	3.0	44.9	1.0	-44.9	-25.0	-19.9	
8047.50	-7.3	H	3.0	44.7	1.0	-51.0	-25.0	-26.0	
10730.00	-1.4	H	3.0	43.5	1.0	-43.9	-25.0	-18.9	
13412.50	-1.9	H	3.0	44.0	1.0	-44.9	-25.0	-19.9	
16095.00	-2.0	H	3.0	44.5	1.0	-45.5	-25.0	-20.5	

15 MHz
 QPSK
 Antenna F
 Sub 2

LTE Band 66

		UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
		Company: Samsung Project #: 4791082054 Date: 2023-12-20 Test Engineer: 27089 Configuration: EUT, Z-Position Location: Chamber 2 Mode: LTE_QPSK Band 66 Harmonics, 3MHz Bandwidth Test Voltage: AC 120 V, 60 Hz									
		f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
3 MHz QPSK Antenna A Main 1	Low Ch, 1711.5MHz										
	3423.00	-8.0	V	3.0	42.2	1.0	-49.2	-13.0	-36.2		
	5134.50	-8.9	V	3.0	42.9	1.0	-50.8	-13.0	-37.8		
	6846.00	-5.8	V	3.0	42.9	1.0	-47.7	-13.0	-34.7		
	3423.00	-7.0	H	3.0	42.2	1.0	-48.2	-13.0	-35.2		
	5134.50	-7.8	H	3.0	42.9	1.0	-49.8	-13.0	-36.8		
	6846.00	-6.3	H	3.0	42.9	1.0	-48.1	-13.0	-35.1		
	Mid Ch, 1745MHz										
	3490.00	-7.9	V	3.0	42.2	1.0	-49.1	-13.0	-36.1		
	5235.00	-8.2	V	3.0	43.0	1.0	-50.2	-13.0	-37.2		
	6980.00	-5.8	V	3.0	42.8	1.0	-47.6	-13.0	-34.6		
	3490.00	-7.0	H	3.0	42.2	1.0	-48.2	-13.0	-35.2		
	5235.00	-6.3	H	3.0	43.0	1.0	-48.3	-13.0	-35.3		
	6980.00	-6.2	H	3.0	42.8	1.0	-48.0	-13.0	-35.0		
	High Ch, 1778.5MHz										
	3557.00	-6.6	V	3.0	42.2	1.0	-47.8	-13.0	-34.8		
	5335.50	-7.0	V	3.0	43.0	1.0	-49.0	-13.0	-36.0		
	7114.00	-5.5	V	3.0	42.8	1.0	-47.3	-13.0	-34.3		
	3557.00	-5.4	H	3.0	42.2	1.0	-46.6	-13.0	-33.6		
	5335.50	-5.6	H	3.0	43.0	1.0	-47.5	-13.0	-34.5		
	7114.00	-6.0	H	3.0	42.8	1.0	-47.8	-13.0	-34.8		
		Company: Samsung Project #: 4791082054 Date: 2023-12-21 Test Engineer: 27089 Configuration: EUT / AC Adapter, X-Position Location: Chamber 2 Mode: LTE_QPSK Band 66 Harmonics, 3MHz Bandwidth Test Voltage: AC 120 V, 60 Hz									
		f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
3 MHz QPSK Antenna F Sub 2	Low Ch, 1711.5MHz										
	3423.00	-8.3	V	3.0	42.2	1.0	-49.5	-13.0	-36.5		
	5134.50	-9.1	V	3.0	42.9	1.0	-51.0	-13.0	-38.0		
	6846.00	-5.8	V	3.0	42.9	1.0	-47.7	-13.0	-34.7		
	3423.00	-8.2	H	3.0	42.2	1.0	-49.4	-13.0	-36.4		
	5134.50	-9.2	H	3.0	42.9	1.0	-51.1	-13.0	-38.1		
	6846.00	-6.2	H	3.0	42.9	1.0	-48.1	-13.0	-35.1		
	Mid Ch, 1745MHz										
	3490.00	-8.1	V	3.0	42.2	1.0	-49.4	-13.0	-36.4		
	5235.00	-8.9	V	3.0	43.0	1.0	-50.9	-13.0	-37.9		
	6980.00	-5.8	V	3.0	42.8	1.0	-47.6	-13.0	-34.6		
	3490.00	-8.1	H	3.0	42.2	1.0	-49.3	-13.0	-36.3		
	5235.00	-9.0	H	3.0	43.0	1.0	-51.0	-13.0	-38.0		
	6980.00	-6.1	H	3.0	42.8	1.0	-48.0	-13.0	-35.0		
	High Ch, 1778.5MHz										
	3557.00	-7.1	V	3.0	42.2	1.0	-48.3	-13.0	-35.3		
	5335.50	-8.4	V	3.0	43.0	1.0	-50.3	-13.0	-37.3		
	7114.00	-5.5	V	3.0	42.8	1.0	-47.3	-13.0	-34.3		
	3557.00	-7.1	H	3.0	42.2	1.0	-48.3	-13.0	-35.3		
	5335.50	-8.5	H	3.0	43.0	1.0	-50.5	-13.0	-37.5		
	7114.00	-6.0	H	3.0	42.8	1.0	-47.8	-13.0	-34.8		

NR Band n41

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement											
80 MHz QPSK Antenna F Main 2		Company: Sasmsung Project #: 4791082054 Date: 2023-12-11 Test Engineer: 28775 Configuration: EUT / AC Adapter, Y-Position Location: Chamber 1 Mode: 5G NR_QPSK NR n41 Harmonics, 80MHz Bandwidth Test Votage: AC 120 V, 60 Hz									
		f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
		Low Ch, 2536.01MHz									
		5072.02	-14.7	V	3.0	44.8	1.0	-58.5	-25.0	-33.5	
		7608.03	-12.7	V	3.0	44.9	1.0	-56.6	-25.0	-31.6	
		10144.04	-2.8	V	3.0	43.6	1.0	-45.4	-25.0	-20.4	
		5072.02	-14.5	H	3.0	44.8	1.0	-58.2	-25.0	-33.2	
7608.03	-12.6	H	3.0	44.9	1.0	-56.5	-25.0	-31.5			
10144.04	-8.5	H	3.0	43.6	1.0	-51.1	-25.0	-26.1			
Mid Ch, 2592.99MHz											
5185.98	-14.7	V	3.0	44.8	1.0	-58.5	-25.0	-33.5			
7778.97	-12.2	V	3.0	44.8	1.0	-56.1	-25.0	-31.1			
10371.96	-8.2	V	3.0	43.5	1.0	-50.7	-25.0	-25.7			
5185.98	-15.0	H	3.0	44.8	1.0	-58.9	-25.0	-33.9			
7778.97	-11.8	H	3.0	44.8	1.0	-55.7	-25.0	-30.7			
10371.96	-9.2	H	3.0	43.5	1.0	-51.8	-25.0	-26.8			
High Ch, 2650MHz											
5300.00	-14.7	V	3.0	44.9	1.0	-58.6	-25.0	-33.6			
7950.00	-12.7	V	3.0	44.8	1.0	-56.5	-25.0	-31.5			
10600.00	-10.4	V	3.0	43.5	1.0	-52.9	-25.0	-27.9			
5300.00	-14.6	H	3.0	44.9	1.0	-58.5	-25.0	-33.5			
7950.00	-12.2	H	3.0	44.8	1.0	-56.0	-25.0	-31.0			
10600.00	-10.1	H	3.0	43.5	1.0	-52.6	-25.0	-27.6			

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement									
Company:		Samsung							
Project #:		4791082054							
Date:		2023-12-10							
Test Engineer:		28775							
Configuration:		EUT / AC Adapter, Z-Position							
Location:		Chamber 1							
Mode:		5G NR_QPSK NR n41 Harmonics, 80MHz Bandwidth							
Test Voltage:		AC 120 V, 60 Hz							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, 2536.01MHz									
5072.02	-7.9	V	3.0	44.8	1.0	-51.7	-25.0	-26.7	
7608.03	-11.1	V	3.0	44.9	1.0	-55.0	-25.0	-30.0	
10144.04	-3.6	V	3.0	43.6	1.0	-46.2	-25.0	-21.2	
12680.05	-6.2	V	3.0	43.6	1.0	-48.8	-25.0	-23.8	
15216.06	-6.5	V	3.0	44.8	1.0	-50.3	-25.0	-25.3	
5072.02	-0.5	H	3.0	44.8	1.0	-44.3	-25.0	-19.3	
7608.03	-10.3	H	3.0	44.9	1.0	-54.2	-25.0	-29.2	
10144.04	-0.8	H	3.0	43.6	1.0	-43.4	-25.0	-18.4	
12680.05	-3.9	H	3.0	43.6	1.0	-46.5	-25.0	-21.5	
15216.06	-3.8	H	3.0	44.8	1.0	-47.6	-25.0	-22.6	
Mid Ch, 2592.99MHz									
5185.98	-11.8	V	3.0	44.8	1.0	-55.6	-25.0	-30.6	
7778.97	-12.4	V	3.0	44.8	1.0	-56.3	-25.0	-31.3	
10371.96	-4.2	V	3.0	43.5	1.0	-46.8	-25.0	-21.8	
12964.95	-7.7	V	3.0	43.7	1.0	-50.5	-25.0	-25.5	
15557.94	-4.7	V	3.0	44.7	1.0	-48.4	-25.0	-23.4	
5185.98	-8.3	H	3.0	44.8	1.0	-52.1	-25.0	-27.1	
7778.97	-9.1	H	3.0	44.8	1.0	-53.0	-25.0	-28.0	
10371.96	-6.2	H	3.0	43.5	1.0	-48.7	-25.0	-23.7	
12964.95	-5.4	H	3.0	43.7	1.0	-48.2	-25.0	-23.2	
15557.94	-5.0	H	3.0	44.7	1.0	-48.6	-25.0	-23.6	
High Ch, 2650MHz									
5300.00	-13.0	V	3.0	44.9	1.0	-56.9	-25.0	-31.9	
7950.00	-11.6	V	3.0	44.8	1.0	-55.3	-25.0	-30.3	
10600.00	-2.9	V	3.0	43.5	1.0	-45.4	-25.0	-20.4	
13250.00	-8.8	V	3.0	43.9	1.0	-51.7	-25.0	-26.7	
15900.00	-6.6	V	3.0	44.6	1.0	-50.2	-25.0	-25.2	
5300.00	-10.0	H	3.0	44.9	1.0	-53.9	-25.0	-28.9	
7950.00	-9.2	H	3.0	44.8	1.0	-53.0	-25.0	-28.0	
10600.00	-2.8	H	3.0	43.5	1.0	-45.3	-25.0	-20.3	
13250.00	-8.0	H	3.0	43.9	1.0	-50.9	-25.0	-25.9	
15900.00	-6.3	H	3.0	44.6	1.0	-49.9	-25.0	-24.9	

80 MHz
 QPSK
 Antenna F
 Sub 2

		UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement								
		Company:	Samsung							
		Project #:	4791082054							
		Date:	2024-01-02							
		Test Engineer:	28183							
		Configuration:	EUT, Y-Position							
		Location:	Chamber 1							
		Mode:	5G NR n41(SRS) Harmonics, 70MHz Bandwidth							
		Test Voltage:	AC 120 V, 60 Hz							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
70 MHz SRS1										
Low Ch, 2531.01MHz										
5062.02	-14.6	V	3.0	44.8	1.0	-58.4	-25.0	-33.4		
7593.03	-13.1	V	3.0	44.9	1.0	-57.1	-25.0	-32.1		
10124.04	-4.6	V	3.0	43.6	1.0	-47.2	-25.0	-22.2		
5062.02	-15.0	H	3.0	44.8	1.0	-58.8	-25.0	-33.8		
7593.03	-12.9	H	3.0	44.9	1.0	-56.8	-25.0	-31.8		
10124.04	-7.9	H	3.0	43.6	1.0	-50.5	-25.0	-25.5		
Mid Ch, 2592.99MHz										
5185.98	-15.1	V	3.0	44.8	1.0	-58.9	-25.0	-33.9		
7778.97	-12.4	V	3.0	44.8	1.0	-56.3	-25.0	-31.3		
10371.96	-0.1	V	3.0	43.5	1.0	-42.7	-25.0	-17.7		
5185.98	-14.7	H	3.0	44.8	1.0	-58.5	-25.0	-33.5		
7778.97	-12.5	H	3.0	44.8	1.0	-56.4	-25.0	-31.4		
10371.96	-6.4	H	3.0	43.5	1.0	-48.9	-25.0	-23.9		
High Ch, 2655MHz										
5310.00	-14.7	V	3.0	44.9	1.0	-58.5	-25.0	-33.5		
7965.00	-12.3	V	3.0	44.8	1.0	-56.1	-25.0	-31.1		
10620.00	-7.7	V	3.0	43.5	1.0	-50.2	-25.0	-25.2		
5310.00	-14.7	H	3.0	44.9	1.0	-58.6	-25.0	-33.6		
7965.00	-12.4	H	3.0	44.8	1.0	-56.2	-25.0	-31.2		
10620.00	-8.6	H	3.0	43.5	1.0	-51.1	-25.0	-26.1		
70 MHz SRS2										
UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement										
		Company:	Samsung							
		Project #:	4791082054							
		Date:	2024-01-02							
		Test Engineer:	28183							
		Configuration:	EUT, Y-Position							
		Location:	Chamber 1							
		Mode:	5G NR n41(SRS) Harmonics, 70MHz Bandwidth							
		Test Voltage:	AC 120 V, 60 Hz							
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
Low Ch, 2531.01MHz										
5062.02	-14.8	V	3.0	44.8	1.0	-58.6	-25.0	-33.6		
7593.03	-13.3	V	3.0	44.9	1.0	-57.2	-25.0	-32.2		
10124.04	-9.2	V	3.0	43.6	1.0	-51.8	-25.0	-26.8		
5062.02	-14.5	H	3.0	44.8	1.0	-58.3	-25.0	-33.3		
7593.03	-12.9	H	3.0	44.9	1.0	-56.9	-25.0	-31.9		
10124.04	-9.6	H	3.0	43.6	1.0	-52.2	-25.0	-27.2		
Mid Ch, 2592.99MHz										
5185.98	-15.1	V	3.0	44.8	1.0	-58.9	-25.0	-33.9		
7778.97	-12.5	V	3.0	44.8	1.0	-56.4	-25.0	-31.4		
10371.96	-10.6	V	3.0	43.5	1.0	-53.1	-25.0	-28.1		
5185.98	-16.3	H	3.0	44.8	1.0	-60.2	-25.0	-35.2		
7778.97	-12.6	H	3.0	44.8	1.0	-56.4	-25.0	-31.4		
10371.96	-10.3	H	3.0	43.5	1.0	-52.8	-25.0	-27.8		
High Ch, 2655MHz										
5310.00	-14.7	V	3.0	44.9	1.0	-58.6	-25.0	-33.6		
7965.00	-12.3	V	3.0	44.8	1.0	-56.1	-25.0	-31.1		
10620.00	-9.1	V	3.0	43.5	1.0	-51.6	-25.0	-26.6		
5310.00	-14.7	H	3.0	44.9	1.0	-58.6	-25.0	-33.6		
7965.00	-12.4	H	3.0	44.8	1.0	-56.2	-25.0	-31.2		
10620.00	-9.9	H	3.0	43.5	1.0	-52.3	-25.0	-27.3		

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement											
60 MHz SRS3		Company: Samsung Project #: 4791082054 Date: 2024-01-03 Test Engineer: 26460 Configuration: EUT / AC Adapter, Y-Position Location: Chamber 2 Mode: 5G NR n41(SRS) Harmonics, 60MHz Bandwidth Test Voltage: AC 120 V, 60 Hz									
		f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
		Low Ch, 2526MHz									
		5052.00	-18.6	V	3.0	42.9	1.0	-60.5	-25.0	-35.5	
		7578.00	-15.9	V	3.0	42.5	1.0	-57.4	-25.0	-32.4	
		10104.00	-12.1	V	3.0	41.0	1.0	-52.1	-25.0	-27.1	
		5052.00	-18.6	H	3.0	42.9	1.0	-60.5	-25.0	-35.5	
		7578.00	-16.5	H	3.0	42.5	1.0	-58.0	-25.0	-33.0	
		10104.00	-13.0	H	3.0	41.0	1.0	-53.0	-25.0	-28.0	
		Mid Ch, 2592.99MHz									
5185.98	-18.7	V	3.0	43.0	1.0	-60.6	-25.0	-35.6			
7778.97	-15.8	V	3.0	42.4	1.0	-57.2	-25.0	-32.2			
10371.96	-12.1	V	3.0	41.2	1.0	-52.3	-25.0	-27.3			
5185.98	-18.8	H	3.0	43.0	1.0	-60.8	-25.0	-35.8			
7778.97	-16.4	H	3.0	42.4	1.0	-57.9	-25.0	-32.9			
10371.96	-13.1	H	3.0	41.2	1.0	-53.2	-25.0	-28.2			
High Ch, 2659.98MHz											
5319.96	-17.8	V	3.0	43.0	1.0	-59.8	-25.0	-34.8			
7979.94	-15.3	V	3.0	42.3	1.0	-56.6	-25.0	-31.6			
10639.92	-12.1	V	3.0	41.3	1.0	-52.4	-25.0	-27.4			
5319.96	-18.1	H	3.0	43.0	1.0	-60.1	-25.0	-35.1			
7979.94	-15.9	H	3.0	42.3	1.0	-57.2	-25.0	-32.2			
10639.92	-13.1	H	3.0	41.3	1.0	-53.3	-25.0	-28.3			

NR Band n66

		UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement								
		Company: Samsung Project #: 4791082054 Date: 2023-12-05 Test Engineer: 27089 Configuration: EUT, Y-Position Location: Chamber 2 Mode: 5G NR_QPSK NR n66 Harmonics, 40MHz Bandwidth Test Voltage: AC 120 V, 60 Hz								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
40 MHz QPSK Antenna A Main 1	Low Ch, 1730MHz									
	3460.00	-7.5	V	3.0	42.2	1.0	-48.7	-13.0	-35.7	
	5190.00	-7.7	V	3.0	43.0	1.0	-49.6	-13.0	-36.6	
	6920.00	-5.9	V	3.0	42.9	1.0	-47.7	-13.0	-34.7	
	3460.00	-7.6	H	3.0	42.2	1.0	-48.8	-13.0	-35.8	
	5190.00	-8.0	H	3.0	43.0	1.0	-50.0	-13.0	-37.0	
	6920.00	-6.3	H	3.0	42.9	1.0	-48.1	-13.0	-35.1	
	Mid Ch, 1745MHz									
	3490.00	-7.3	V	3.0	42.2	1.0	-48.5	-13.0	-35.5	
	5235.00	-7.7	V	3.0	43.0	1.0	-49.6	-13.0	-36.6	
	6980.00	-5.8	V	3.0	42.8	1.0	-47.6	-13.0	-34.6	
	3490.00	-7.5	H	3.0	42.2	1.0	-48.7	-13.0	-35.7	
	5235.00	-7.7	H	3.0	43.0	1.0	-49.7	-13.0	-36.7	
	6980.00	-6.5	H	3.0	42.8	1.0	-48.3	-13.0	-35.3	
	High Ch, 1760MHz									
	3520.00	-6.0	V	3.0	42.2	1.0	-47.2	-13.0	-34.2	
	5280.00	-6.8	V	3.0	43.0	1.0	-48.7	-13.0	-35.7	
	7040.00	-5.6	V	3.0	42.8	1.0	-47.4	-13.0	-34.4	
	3520.00	-6.5	H	3.0	42.2	1.0	-47.7	-13.0	-34.7	
	5280.00	-7.6	H	3.0	43.0	1.0	-49.5	-13.0	-36.5	
7040.00	-6.0	H	3.0	42.8	1.0	-47.8	-13.0	-34.8		
		UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement								
		Company: Samsung Project #: 4791082054 Date: 2024-01-08 Test Engineer: 28775 Configuration: EUT / AC Adapter, Y-Position Location: Chamber 1 Mode: 5G NR_QPSK NR n66 Harmonics, 5MHz Bandwidth Test Voltage: AC 120 V, 60 Hz								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
5 MHz QPSK Antenna F Sub 2	Low Ch, 1712.5MHz									
	3425.00	-8.6	V	3.0	44.0	1.0	-51.6	-13.0	-38.6	
	5137.50	-5.8	V	3.0	44.8	1.0	-49.6	-13.0	-36.6	
	6850.00	-4.2	V	3.0	45.1	1.0	-48.3	-13.0	-35.3	
	3425.00	-8.4	H	3.0	44.0	1.0	-51.4	-13.0	-38.4	
	5137.50	-5.9	H	3.0	44.8	1.0	-49.7	-13.0	-36.7	
	6850.00	-4.1	H	3.0	45.1	1.0	-48.2	-13.0	-35.2	
	Mid Ch, 1745MHz									
	3490.00	-8.3	V	3.0	44.0	1.0	-51.3	-13.0	-38.3	
	5235.00	-5.3	V	3.0	44.8	1.0	-49.2	-13.0	-36.2	
	6980.00	-4.1	V	3.0	45.1	1.0	-48.3	-13.0	-35.3	
	3490.00	-8.0	H	3.0	44.0	1.0	-51.0	-13.0	-38.0	
	5235.00	-5.8	H	3.0	44.8	1.0	-49.7	-13.0	-36.7	
	6980.00	-4.1	H	3.0	45.1	1.0	-48.3	-13.0	-35.3	
	High Ch, 1777.5MHz									
	3555.00	-8.0	V	3.0	44.0	1.0	-51.1	-13.0	-38.1	
	5332.50	-6.1	V	3.0	44.9	1.0	-50.0	-13.0	-37.0	
	7110.00	-3.9	V	3.0	45.1	1.0	-48.0	-13.0	-35.0	
	3555.00	-7.7	H	3.0	44.0	1.0	-50.8	-13.0	-37.8	
	5332.50	-6.2	H	3.0	44.9	1.0	-50.1	-13.0	-37.1	
7110.00	-3.8	H	3.0	45.1	1.0	-47.9	-13.0	-34.9		

NR Band n77(PC2, 3450-3550 MHz)

		UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement								
		Company: Samsung Project #: 4791082054 Date: 2023-12-12 Test Engineer: 28775 Configuration: EUT / AC Adapter, X-Position Location: Chamber 1 Mode: 5G NR_BPSK NR n77 LO Harmonics, 15MHz Bandwidth Test Voltage: AC 120 V, 60 Hz								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
15 MHz BPSK Antenna F Sub 2	Low Ch, 3457.5MHz									
	6915.00	-1.5	V	3.0	45.1	1.0	-45.7	-13.0	-32.7	
	10372.50	3.4	V	3.0	43.5	1.0	-39.2	-13.0	-26.2	
	13830.00	6.4	V	3.0	44.2	1.0	-36.8	-13.0	-23.8	
	6915.00	-1.4	H	3.0	45.1	1.0	-45.5	-13.0	-32.5	
	10372.50	2.8	H	3.0	43.5	1.0	-39.7	-13.0	-26.7	
	13830.00	6.5	H	3.0	44.2	1.0	-36.7	-13.0	-23.7	
	Mid Ch, 3499.98MHz									
	6999.96	-1.2	V	3.0	45.1	1.0	-45.4	-13.0	-32.4	
	10499.94	3.2	V	3.0	43.5	1.0	-39.3	-13.0	-26.3	
	13999.92	6.5	V	3.0	44.3	1.0	-36.8	-13.0	-23.8	
	6999.96	-1.4	H	3.0	45.1	1.0	-45.5	-13.0	-32.5	
	10499.94	3.6	H	3.0	43.5	1.0	-38.9	-13.0	-25.9	
	13999.92	6.6	H	3.0	44.3	1.0	-36.7	-13.0	-23.7	
	High Ch, 3542.49MHz									
	7084.98	-1.4	V	3.0	45.1	1.0	-45.5	-13.0	-32.5	
	10627.47	3.2	V	3.0	43.5	1.0	-39.3	-13.0	-26.3	
	14169.96	6.6	V	3.0	44.4	1.0	-36.8	-13.0	-23.8	
	7084.98	-1.1	H	3.0	45.1	1.0	-45.2	-13.0	-32.2	
	10627.47	3.3	H	3.0	43.5	1.0	-39.2	-13.0	-26.2	
	14169.96	6.4	H	3.0	44.4	1.0	-37.0	-13.0	-24.0	

NR Band n77(PC2, 3700-3980 MHz)

UL Verification Services, Inc. Above 1GHz High Frequency Substitution Measurement											
10 MHz BPSK Antenna F Sub 2		Company: Samsung Project #: 4791082054 Date: 2023-12-13 Test Engineer: 28183 Configuration: EUT / AC Adapter, Y-Position Location: Chamber 1 Mode: 5G NR_BPSK NR n77 UP Harmonics, 10MHz Bandwidth Test Voltage: AC 120 V, 60 Hz									
		f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
		Low Ch, 3705MHz									
		7410.00	-1.3	V	3.0	45.0	1.0	-45.2	-13.0	-32.2	
		11115.00	4.2	V	3.0	43.4	1.0	-38.2	-13.0	-25.2	
		14820.00	7.7	V	3.0	44.7	1.0	-36.1	-13.0	-23.1	
		7410.00	-0.9	H	3.0	45.0	1.0	-44.9	-13.0	-31.9	
		11115.00	4.1	H	3.0	43.4	1.0	-38.3	-13.0	-25.3	
		14820.00	7.4	H	3.0	44.7	1.0	-36.3	-13.0	-23.3	
		Mid Ch, 3840MHz									
7680.00	-0.6	V	3.0	44.9	1.0	-44.5	-13.0	-31.5			
11520.00	4.4	V	3.0	43.3	1.0	-37.9	-13.0	-24.9			
15360.00	8.0	V	3.0	44.7	1.0	-35.7	-13.0	-22.7			
7680.00	-0.7	H	3.0	44.9	1.0	-44.6	-13.0	-31.6			
11520.00	4.1	H	3.0	43.3	1.0	-38.2	-13.0	-25.2			
15360.00	8.1	H	3.0	44.7	1.0	-35.6	-13.0	-22.6			
High Ch, 3975MHz											
7950.00	-0.5	V	3.0	44.8	1.0	-44.3	-13.0	-31.3			
11925.00	4.4	V	3.0	43.2	1.0	-37.8	-13.0	-24.8			
15900.00	9.1	V	3.0	44.6	1.0	-34.5	-13.0	-21.5			
7950.00	-0.4	H	3.0	44.8	1.0	-44.2	-13.0	-31.2			
11925.00	4.6	H	3.0	43.2	1.0	-37.6	-13.0	-24.6			
15900.00	9.0	H	3.0	44.6	1.0	-34.6	-13.0	-21.6			

END OF REPORT