



<FR1 n41_HPUE_Ant MIMO2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				509202	518598	528000	27.5
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	26.09	26.28	26.14	
100	PI/2 BPSK	1	137	25.93	26.16	25.98	24.5
100	PI/2 BPSK	1	271	25.89	26.18	26.00	
100	PI/2 BPSK	135	0	23.44	23.73	23.53	
100	PI/2 BPSK	135	69	25.98	26.17	26.02	24.5
100	PI/2 BPSK	135	138	23.41	23.66	23.42	
100	PI/2 BPSK	270	0	23.43	23.64	23.50	
100	QPSK	1	1	26.03	26.24	26.04	27.5
100	QPSK	1	137	25.80	26.09	25.88	
100	QPSK	1	271	25.90	26.12	25.91	
100	QPSK	135	0	23.02	23.23	23.06	24.5
100	QPSK	135	69	25.90	26.11	25.95	
100	QPSK	135	138	23.01	23.22	23.06	
100	QPSK	270	0	22.85	23.14	22.96	26.5
100	16QAM	1	1	25.45	25.66	25.46	
100	64QAM	1	1	23.80	24.00	23.76	
100	256QAM	1	1	21.37	21.65	21.45	23.0
Channel				508200	518598	528996	27.5
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	1	1	25.94	26.13	26.01	
Channel				507204	518598	529998	27.5
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	25.93	26.16	25.98	
Channel				506202	518598	531000	27.5
Frequency (MHz)				2531.01	2592.99	2655	
70	PI/2 BPSK	1	1	25.89	26.12	26.02	
Channel				505200	518598	531996	27.5
Frequency (MHz)				2526	2592.99	2659.98	
60	PI/2 BPSK	1	1	25.90	26.18	25.95	
Channel				504204	518598	532998	27.5
Frequency (MHz)				2521.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	25.92	26.12	26.04	
Channel				503202	518598	534000	27.5
Frequency (MHz)				2516.01	2592.99	2670	
40	PI/2 BPSK	1	1	25.92	26.14	26.02	
Channel				502200	518598	534996	27.5
Frequency (MHz)				2511	2592.99	2674.98	
30	PI/2 BPSK	1	1	25.90	26.08	26.04	
Channel				501702	518598	535500	27.5
Frequency (MHz)				2508.51	2592.99	2677.5	
25	PI/2 BPSK	1	1	25.99	26.12	25.99	
Channel				501204	518598	535998	27.5
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	25.96	26.12	25.94	
Channel				500700	518598	536496	27.5
Frequency (MHz)				2503.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	25.92	26.13	25.96	
Channel				500202	518598	537000	27.5
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	25.89	26.09	26.02	



<FR1 n41_HPUE_Ant Aux_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				509202	518598	528000	
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	25.69	25.86	25.76	
100	PI/2 BPSK	1	137	25.71	25.79	25.66	27.5
100	PI/2 BPSK	1	271	25.57	25.67	25.74	
100	PI/2 BPSK	135	0	23.23	23.25	23.10	
100	PI/2 BPSK	135	69	25.66	25.76	25.65	27.5
100	PI/2 BPSK	135	138	23.11	23.10	23.02	24.5
100	PI/2 BPSK	270	0	23.16	23.27	23.19	
100	QPSK	1	1	25.62	25.82	25.62	
100	QPSK	1	137	25.58	25.58	25.62	27.5
100	QPSK	1	271	25.64	25.61	25.68	
100	QPSK	135	0	22.57	22.71	22.64	
100	QPSK	135	69	25.59	25.74	25.63	27.5
100	QPSK	135	138	22.66	22.60	22.67	24.5
100	QPSK	270	0	22.54	22.83	22.66	
100	16QAM	1	1	24.66	24.83	24.72	
100	64QAM	1	1	23.28	23.34	23.33	25.0
100	256QAM	1	1	21.13	21.29	21.12	23.0
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	1	1	25.56	25.68	25.60	
Channel				507204	518598	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	25.52	25.75	25.58	
Channel				506202	518598	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2592.99	2655	
70	PI/2 BPSK	1	1	25.55	25.70	25.56	
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	PI/2 BPSK	1	1	25.52	25.73	25.63	
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	25.57	25.72	25.58	
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	PI/2 BPSK	1	1	25.59	25.75	25.57	
Channel				502200	518598	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2592.99	2674.98	
30	PI/2 BPSK	1	1	25.52	25.68	25.62	
Channel				501702	518598	535500	Tune-up limit (dBm)
Frequency (MHz)				2508.51	2592.99	2677.5	
25	PI/2 BPSK	1	1	25.52	25.73	25.65	
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	25.59	25.73	25.56	
Channel				500700	518598	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	25.54	25.72	25.62	
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	25.52	25.75	25.63	



<FR1 n41_HPUE_Ant Main_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				509202	518598	528000	18.0
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	16.85	17.17	17.01	
100	PI/2 BPSK	1	137	16.54	16.92	16.74	18.0
100	PI/2 BPSK	1	271	16.54	16.89	16.67	
100	PI/2 BPSK	135	0	16.36	16.76	16.52	
100	PI/2 BPSK	135	69	16.57	16.92	16.70	18.0
100	PI/2 BPSK	135	138	16.50	16.87	16.70	18.0
100	PI/2 BPSK	270	0	16.45	16.87	16.62	
100	QPSK	1	1	16.30	16.68	16.45	
100	QPSK	1	137	16.50	16.91	16.70	18.0
100	QPSK	1	271	16.80	17.14	16.89	
100	QPSK	135	0	16.47	16.79	16.59	
100	QPSK	135	69	16.56	16.88	16.70	18.0
100	QPSK	135	138	16.54	16.93	16.67	18.0
100	QPSK	270	0	16.53	16.90	16.68	
100	16QAM	1	1	16.06	16.42	16.24	
100	64QAM	1	1	16.64	17.04	16.85	18.0
100	256QAM	1	1	16.46	16.85	16.61	18.0
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	1	1	16.55	16.58	16.65	
Channel				507204	518598	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	16.52	16.49	16.64	
Channel				506202	518598	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2592.99	2655	
70	PI/2 BPSK	1	1	16.52	16.59	16.65	
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	PI/2 BPSK	1	1	16.49	16.50	16.61	
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	16.48	16.54	16.69	
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	PI/2 BPSK	1	1	16.53	16.57	16.69	
Channel				502200	518598	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2592.99	2674.98	
30	PI/2 BPSK	1	1	16.46	16.54	16.61	
Channel				501702	518598	535500	Tune-up limit (dBm)
Frequency (MHz)				2508.51	2592.99	2677.5	
25	PI/2 BPSK	1	1	16.53	16.56	16.65	
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	16.45	16.53	16.71	
Channel				500700	518598	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	16.75	17.04	16.84	
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	16.68	16.99	16.85	



<FR1 n41_HPUE_Ant MIMO2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				509202	518598	528000	17.0
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	16.20	16.48	16.35	
100	PI/2 BPSK	1	137	16.00	16.37	16.23	17.0
100	PI/2 BPSK	1	271	16.16	16.45	16.22	
100	PI/2 BPSK	135	0	15.90	16.28	16.08	
100	PI/2 BPSK	135	69	16.04	16.36	16.21	17.0
100	PI/2 BPSK	135	138	16.00	16.33	16.12	17.0
100	PI/2 BPSK	270	0	15.94	16.30	16.09	
100	QPSK	1	1	16.00	16.29	16.07	
100	QPSK	1	137	16.09	16.38	16.15	17.0
100	QPSK	1	271	16.10	16.38	16.18	
100	QPSK	135	0	15.99	16.28	16.07	
100	QPSK	135	69	16.06	16.35	16.16	17.0
100	QPSK	135	138	15.96	16.34	16.18	17.0
100	QPSK	270	0	15.92	16.28	16.13	
100	16QAM	1	1	15.81	16.10	15.95	
100	64QAM	1	1	16.16	16.44	16.29	17.0
100	256QAM	1	1	16.12	16.43	16.30	17.0
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	1	1	16.00	16.06	16.23	
Channel				507204	518598	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	16.06	16.06	16.24	
Channel				506202	518598	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2592.99	2655	
70	PI/2 BPSK	1	1	16.03	16.08	16.15	
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	PI/2 BPSK	1	1	16.03	16.08	16.23	
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	16.07	16.16	16.23	
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	PI/2 BPSK	1	1	16.01	16.11	16.23	
Channel				502200	518598	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2592.99	2674.98	
30	PI/2 BPSK	1	1	16.04	16.16	16.15	
Channel				501702	518598	535500	Tune-up limit (dBm)
Frequency (MHz)				2508.51	2592.99	2677.5	
25	PI/2 BPSK	1	1	16.03	16.16	16.19	
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	16.09	16.08	16.23	
Channel				500700	518598	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	16.05	16.36	16.16	
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	16.03	16.30	16.18	



<FR1 n41_HPUE_Ant MIMO1_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				509202	518598	528000	21.5
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	20.98	21.20	20.91	
100	PI/2 BPSK	1	137	20.80	20.84	20.75	21.5
100	PI/2 BPSK	1	271	20.93	21.02	20.81	
100	PI/2 BPSK	135	0	20.74	20.81	20.72	
100	PI/2 BPSK	135	69	20.75	20.85	20.76	21.5
100	PI/2 BPSK	135	138	20.68	20.83	20.71	21.5
100	PI/2 BPSK	270	0	20.66	20.76	20.58	
100	QPSK	1	1	20.82	20.99	20.81	
100	QPSK	1	137	20.67	20.76	20.65	21.5
100	QPSK	1	271	20.94	20.94	20.77	
100	QPSK	135	0	20.65	20.82	20.77	
100	QPSK	135	69	20.83	20.84	20.84	21.5
100	QPSK	135	138	20.80	20.87	20.85	21.5
100	QPSK	270	0	20.72	20.80	20.73	
100	16QAM	1	1	21.18	21.19	21.19	
100	64QAM	1	1	21.03	21.08	20.95	21.5
100	256QAM	1	1	20.90	20.95	20.77	21.5
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	1	1	20.80	21.04	20.77	
Channel				507204	518598	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	20.98	21.17	20.72	
Channel				506202	518598	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2592.99	2655	
70	PI/2 BPSK	1	1	20.85	21.04	20.64	
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	PI/2 BPSK	1	1	20.92	21.01	20.62	
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	20.93	21.19	20.67	
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	PI/2 BPSK	1	1	20.84	21.17	20.75	
Channel				502200	518598	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2592.99	2674.98	
30	PI/2 BPSK	1	1	20.94	21.17	20.68	
Channel				501702	518598	535500	Tune-up limit (dBm)
Frequency (MHz)				2508.51	2592.99	2677.5	
25	PI/2 BPSK	1	1	20.92	21.02	20.67	
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	20.86	21.14	20.73	
Channel				500700	518598	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	20.79	21.03	20.74	
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	20.88	21.00	20.80	



FCC SAR TEST REPORT

Report No. : FA482101

<FR1 n41_HPUE_Ant Aux_Sensor
ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				509202	518598	528000	
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	19.37	19.39	19.33	20.0
100	PI/2 BPSK	1	137	19.22	19.30	19.17	
100	PI/2 BPSK	1	271	19.14	19.17	19.11	
100	PI/2 BPSK	135	0	19.22	19.24	19.14	20.0
100	PI/2 BPSK	135	69	19.27	19.30	19.18	20.0
100	PI/2 BPSK	135	138	19.17	19.25	19.16	20.0
100	PI/2 BPSK	270	0	19.16	19.22	19.06	
100	QPSK	1	1	19.20	19.28	19.13	20.0
100	QPSK	1	137	19.20	19.25	19.17	
100	QPSK	1	271	19.04	19.11	19.01	
100	QPSK	135	0	19.13	19.24	19.15	20.0
100	QPSK	135	69	19.25	19.27	19.11	20.0
100	QPSK	135	138	19.15	19.24	19.09	20.0
100	QPSK	270	0	19.09	19.21	19.15	
100	16QAM	1	1	19.25	19.33	19.27	20.0
100	64QAM	1	1	19.18	19.30	19.17	20.0
100	256QAM	1	1	19.33	19.37	19.24	20.0
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	1	1	19.24	19.25	19.15	20.0
Channel				507204	518598	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	19.29	19.33	19.33	20.0
Channel				506202	518598	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2592.99	2655	
70	PI/2 BPSK	1	1	19.32	19.28	19.26	20.0
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	PI/2 BPSK	1	1	19.20	19.27	19.19	20.0
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	19.36	19.23	19.19	20.0
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	PI/2 BPSK	1	1	19.37	19.33	19.19	20.0
Channel				502200	518598	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2592.99	2674.98	
30	PI/2 BPSK	1	1	19.20	19.31	19.24	20.0
Channel				501702	518598	535500	Tune-up limit (dBm)
Frequency (MHz)				2508.51	2592.99	2677.5	
25	PI/2 BPSK	1	1	19.26	19.33	19.31	20.0
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	19.29	19.36	19.17	20.0
Channel				500700	518598	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2592.99	2682.48	
15	PI/2 BPSK	1	1	19.23	19.26	19.14	20.0
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	PI/2 BPSK	1	1	19.24	19.22	19.17	20.0



<FR1 n48_Ant Main_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	22.0
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	21.12	21.13	21.05	
40	PI/2 BPSK	1	53	20.88	21.00	20.90	21.5
40	PI/2 BPSK	1	104	20.88	21.04	20.91	
40	PI/2 BPSK	50	0	20.57	20.58	20.41	
40	PI/2 BPSK	50	28	21.00	21.01	20.91	21.5
40	PI/2 BPSK	50	56	20.27	20.45	20.36	
40	PI/2 BPSK	100	0	20.41	20.52	20.51	
40	QPSK	1	1	21.10	21.10	20.99	22.0
40	QPSK	1	53	20.99	21.03	20.85	
40	QPSK	1	104	20.88	21.06	20.94	
40	QPSK	50	0	19.94	20.00	19.97	21.0
40	QPSK	50	28	20.89	21.00	20.98	
40	QPSK	50	56	19.82	19.97	19.86	
40	QPSK	100	0	19.94	20.01	19.83	21.0
40	16QAM	1	1	20.34	20.44	20.29	
40	64QAM	1	1	18.72	18.91	18.77	
40	256QAM	1	1	16.65	16.66	16.64	17.5
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	21.05	20.89	21.01	22.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	20.93	20.97	20.98	22.0
Channel				637000	641666	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3624.99	3694.98	
10	PI/2 BPSK	1	1	21.08	21.05	20.99	22.0



<FR1 n48_Ant MIMO2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	22.0
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	20.52	20.56	20.46	
40	PI/2 BPSK	1	53	20.36	20.44	20.24	21.5
40	PI/2 BPSK	1	104	20.46	20.50	20.40	
40	PI/2 BPSK	50	0	19.83	19.93	19.81	
40	PI/2 BPSK	50	28	20.40	20.46	20.28	21.5
40	PI/2 BPSK	50	56	19.83	19.88	19.78	
40	PI/2 BPSK	100	0	19.82	19.92	19.77	
40	QPSK	1	1	20.38	20.47	20.30	22.0
40	QPSK	1	53	20.25	20.35	20.17	
40	QPSK	1	104	20.30	20.39	20.29	
40	QPSK	50	0	19.39	19.44	19.32	21.0
40	QPSK	50	28	20.30	20.36	20.19	
40	QPSK	50	56	19.23	19.34	19.14	
40	QPSK	100	0	19.31	19.42	19.24	21.0
40	16QAM	1	1	19.38	19.42	19.28	
40	64QAM	1	1	18.05	18.13	17.95	
40	256QAM	1	1	15.93	16.00	15.83	17.5
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	20.35	20.46	20.30	22.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	20.39	20.36	20.26	22.0
Channel				637000	641666	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3624.99	3694.98	
10	PI/2 BPSK	1	1	20.35	20.41	20.30	22.0



<FR1 n48_Ant Aux_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	21.04	21.12	21.01	
40	PI/2 BPSK	1	53	20.86	21.01	20.84	22.0
40	PI/2 BPSK	1	104	21.02	21.07	20.98	
40	PI/2 BPSK	50	0	20.42	20.55	20.40	
40	PI/2 BPSK	50	28	20.98	21.01	20.81	22.0
40	PI/2 BPSK	50	56	20.45	20.49	20.36	21.5
40	PI/2 BPSK	100	0	20.45	20.55	20.45	
40	QPSK	1	1	21.05	21.11	21.03	
40	QPSK	1	53	21.08	21.12	20.91	22.0
40	QPSK	1	104	21.01	21.10	20.95	
40	QPSK	50	0	20.02	20.08	19.93	
40	QPSK	50	28	20.93	21.00	20.87	22.0
40	QPSK	50	56	19.96	19.97	19.82	21.0
40	QPSK	100	0	20.00	20.05	19.86	
40	16QAM	1	1	20.28	20.39	20.23	
40	64QAM	1	1	18.60	18.68	18.49	19.5
40	256QAM	1	1	16.71	16.82	16.66	17.5
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	20.93	21.02	20.90	22.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	20.94	20.93	20.88	22.0
Channel				637000	641666	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3624.99	3694.98	
10	PI/2 BPSK	1	1	20.89	21.00	20.81	22.0



<FR1 n48_Ant Main_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	15.0
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	14.43	14.65	14.31	
40	PI/2 BPSK	1	53	14.17	14.30	14.30	15.0
40	PI/2 BPSK	1	104	14.11	14.31	14.15	
40	PI/2 BPSK	50	0	14.10	14.26	14.07	
40	PI/2 BPSK	50	28	14.20	14.30	14.24	15.0
40	PI/2 BPSK	50	56	14.07	14.17	14.04	15.0
40	PI/2 BPSK	100	0	14.20	14.23	14.21	
40	QPSK	1	1	14.28	14.28	14.24	
40	QPSK	1	53	14.18	14.24	14.14	15.0
40	QPSK	1	104	14.17	14.22	14.15	
40	QPSK	50	0	14.28	14.32	14.25	
40	QPSK	50	28	14.06	14.24	14.15	15.0
40	QPSK	50	56	14.09	14.23	14.10	15.0
40	QPSK	100	0	14.08	14.23	14.06	
40	16QAM	1	1	14.36	14.47	14.40	
40	64QAM	1	1	14.60	14.64	14.47	15.0
40	256QAM	1	1	14.35	14.46	14.39	15.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	14.42	14.45	14.24	15.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	14.29	14.59	14.25	15.0
Channel				637000	641666	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3624.99	3694.98	
10	PI/2 BPSK	1	1	14.42	14.56	14.12	15.0



<FR1 n48_Ant MIMO2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	19.0
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	18.10	18.28	18.25	
40	PI/2 BPSK	1	53	17.95	18.17	18.10	19.0
40	PI/2 BPSK	1	104	17.99	18.18	18.08	
40	PI/2 BPSK	50	0	17.93	18.12	18.03	
40	PI/2 BPSK	50	28	17.94	18.17	18.11	19.0
40	PI/2 BPSK	50	56	17.90	18.12	17.99	19.0
40	PI/2 BPSK	100	0	17.92	18.17	18.05	
40	QPSK	1	1	17.91	18.12	18.08	
40	QPSK	1	53	17.88	18.15	18.06	19.0
40	QPSK	1	104	18.00	18.25	18.14	
40	QPSK	50	0	17.83	18.10	18.04	
40	QPSK	50	28	17.95	18.15	18.03	19.0
40	QPSK	50	56	17.89	18.11	18.01	19.0
40	QPSK	100	0	17.83	18.11	18.00	
40	16QAM	1	1	17.95	18.14	18.11	
40	64QAM	1	1	17.87	18.10	18.05	19.0
40	256QAM	1	1	15.88	16.13	16.04	17.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	17.91	18.20	18.11	19.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	18.02	18.16	18.15	19.0
Channel				637000	641666	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3624.99	3694.98	
10	PI/2 BPSK	1	1	18.02	18.22	18.09	19.0



<FR1 n48_Ant MIMO1_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	18.0
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	17.69	17.94	17.84	
40	PI/2 BPSK	1	53	17.50	17.84	17.65	18.0
40	PI/2 BPSK	1	104	17.59	17.91	17.73	
40	PI/2 BPSK	50	0	17.50	17.77	17.61	
40	PI/2 BPSK	50	28	17.52	17.85	17.75	18.0
40	PI/2 BPSK	50	56	17.48	17.83	17.68	18.0
40	PI/2 BPSK	100	0	17.44	17.73	17.57	
40	QPSK	1	1	17.54	17.88	17.74	
40	QPSK	1	53	17.50	17.80	17.69	18.0
40	QPSK	1	104	17.56	17.89	17.70	
40	QPSK	50	0	17.47	17.76	17.63	
40	QPSK	50	28	17.47	17.82	17.72	18.0
40	QPSK	50	56	17.52	17.83	17.73	18.0
40	QPSK	100	0	17.39	17.74	17.63	
40	16QAM	1	1	17.63	17.91	17.73	
40	64QAM	1	1	17.65	17.93	17.82	18.0
40	256QAM	1	1	17.62	17.88	17.68	18.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	17.57	17.78	17.65	
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	17.59	17.81	17.74	
Channel				637000	641666	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3624.99	3694.98	
10	PI/2 BPSK	1	1	17.58	17.84	17.72	



<FR1 n48_Ant Aux_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	15.53	15.67	15.58	
40	PI/2 BPSK	1	53	15.40	15.59	15.42	16.5
40	PI/2 BPSK	1	104	15.47	15.66	15.47	
40	PI/2 BPSK	50	0	15.23	15.47	15.29	16.5
40	PI/2 BPSK	50	28	15.33	15.50	15.37	16.5
40	PI/2 BPSK	50	56	15.25	15.48	15.35	16.5
40	PI/2 BPSK	100	0	15.23	15.46	15.29	
40	QPSK	1	1	15.37	15.55	15.38	16.5
40	QPSK	1	53	15.24	15.44	15.31	
40	QPSK	1	104	15.40	15.60	15.43	
40	QPSK	50	0	15.35	15.51	15.39	16.5
40	QPSK	50	28	15.30	15.52	15.33	16.5
40	QPSK	50	56	15.29	15.48	15.38	16.5
40	QPSK	100	0	15.19	15.41	15.25	
40	16QAM	1	1	15.11	15.35	15.23	16.5
40	64QAM	1	1	15.40	15.59	15.41	16.5
40	256QAM	1	1	15.23	15.40	15.25	16.5
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	15.33	15.44	15.47	16.5
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	15.25	15.43	15.41	16.5
Channel				637000	641666	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3624.99	3694.98	
10	PI/2 BPSK	1	1	15.32	15.46	15.39	16.5



<FR1 n77_Ant Main_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	25.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	23.78	24.08	23.90	
100	PI/2 BPSK	1	137	23.77	23.81	23.87	24.5
100	PI/2 BPSK	1	271	23.73	23.63	23.67	
100	PI/2 BPSK	135	0	23.68	23.79	23.74	
100	PI/2 BPSK	135	69	23.70	23.80	23.75	24.5
100	PI/2 BPSK	135	138	23.47	23.48	23.58	
100	PI/2 BPSK	270	0	23.73	23.74	23.53	
100	QPSK	1	1	23.59	23.70	23.73	25.0
100	QPSK	1	137	23.83	23.82	23.66	
100	QPSK	1	271	23.51	23.47	23.58	
100	QPSK	135	0	23.66	23.74	23.65	25.0
100	QPSK	135	69	23.52	23.54	23.53	25.0
100	QPSK	135	138	23.55	23.56	23.43	25.0
100	QPSK	270	0	23.60	23.56	23.53	
100	16QAM	1	1	24.03	23.94	24.07	
100	64QAM	1	1	22.59	22.45	22.62	23.5
100	256QAM	1	1	20.30	20.31	20.20	21.5
Channel				649668	656000	662332	25.0
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	23.52	23.76	23.76	
Channel				649334	656000	662666	25.0
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	23.62	23.85	23.74	
Channel				649000	656000	663000	25.0
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	23.65	23.88	23.88	
Channel				648668	656000	663332	25.0
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	23.52	23.88	23.73	
Channel				648334	656000	663666	25.0
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	23.62	23.91	23.86	
Channel				648000	656000	664000	25.0
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	23.48	23.76	23.72	
Channel				647668	656000	664332	25.0
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	23.53	23.91	23.88	
Channel				647334	656000	664666	25.0
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	23.54	23.78	23.86	
Channel				647168	656000	664832	25.0
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	23.65	23.77	23.81	
Channel				647000	656000	665000	25.0
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	23.50	23.84	23.81	



<FR1 n77_Ant MIMO2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	25.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	23.67	23.85	23.68	
100	PI/2 BPSK	1	137	23.63	23.74	23.67	24.5
100	PI/2 BPSK	1	271	23.58	23.69	23.66	
100	PI/2 BPSK	135	0	23.03	23.11	23.13	
100	PI/2 BPSK	135	69	23.54	23.72	23.62	24.5
100	PI/2 BPSK	135	138	22.98	23.11	23.05	
100	PI/2 BPSK	270	0	23.04	23.23	23.15	
100	QPSK	1	1	23.56	23.67	23.58	25.0
100	QPSK	1	137	23.60	23.70	23.61	
100	QPSK	1	271	23.54	23.73	23.62	
100	QPSK	135	0	22.51	22.62	22.62	24.0
100	QPSK	135	69	23.54	23.65	23.61	
100	QPSK	135	138	22.53	22.68	22.59	
100	QPSK	270	0	22.63	22.74	22.59	24.0
100	16QAM	1	1	22.68	22.88	22.82	
100	64QAM	1	1	20.84	20.93	20.92	
100	256QAM	1	1	19.14	19.28	19.23	20.5
Channel				649668	656000	662332	25.0
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	23.50	23.69	23.58	
Channel				649334	656000	662666	25.0
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	23.52	23.75	23.48	
Channel				649000	656000	663000	25.0
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	23.54	23.73	23.50	
Channel				648668	656000	663332	25.0
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	23.51	23.74	23.54	
Channel				648334	656000	663666	25.0
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	23.47	23.67	23.49	
Channel				648000	656000	664000	25.0
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	23.55	23.65	23.53	
Channel				647668	656000	664332	25.0
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	23.52	23.67	23.53	
Channel				647334	656000	664666	25.0
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	23.54	23.70	23.53	
Channel				647168	656000	664832	25.0
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	23.56	23.71	23.52	
Channel				647000	656000	665000	25.0
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	23.53	23.72	23.55	



<FR1 n77_Ant Aux_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	25.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	23.86	24.06	24.02	
100	PI/2 BPSK	1	137	23.76	23.78	23.85	24.5
100	PI/2 BPSK	1	271	23.85	23.89	23.96	
100	PI/2 BPSK	135	0	23.29	23.47	23.40	
100	PI/2 BPSK	135	69	23.71	23.95	23.80	24.5
100	PI/2 BPSK	135	138	23.37	23.51	23.44	
100	PI/2 BPSK	270	0	23.35	23.56	23.40	
100	QPSK	1	1	23.73	23.80	23.73	25.0
100	QPSK	1	137	23.78	23.71	23.69	
100	QPSK	1	271	23.62	23.79	23.75	
100	QPSK	135	0	22.75	22.84	22.85	24.0
100	QPSK	135	69	23.64	23.87	23.89	
100	QPSK	135	138	22.70	22.77	22.74	
100	QPSK	270	0	22.72	22.98	22.80	24.0
100	16QAM	1	1	22.72	22.93	22.85	
100	64QAM	1	1	21.26	21.43	21.39	
100	256QAM	1	1	19.12	19.20	19.15	20.5
Channel				649668	656000	662332	25.0
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	23.67	23.94	23.90	
Channel				649334	656000	662666	25.0
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	23.67	23.86	23.85	
Channel				649000	656000	663000	25.0
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	23.63	23.89	23.87	
Channel				648668	656000	663332	25.0
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	23.66	23.96	23.91	
Channel				648334	656000	663666	25.0
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	23.63	23.91	23.82	
Channel				648000	656000	664000	25.0
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	23.63	23.89	23.86	
Channel				647668	656000	664332	25.0
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	23.68	23.91	23.82	
Channel				647334	656000	664666	25.0
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	23.65	23.86	23.92	
Channel				647168	656000	664832	25.0
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	23.64	23.94	23.83	
Channel				647000	656000	665000	25.0
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	23.68	23.89	23.89	



<FR1 n77_Ant Main_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	14.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	13.74	13.80	13.78	
100	PI/2 BPSK	1	137	13.48	13.71	13.61	14.0
100	PI/2 BPSK	1	271	13.39	13.60	13.50	
100	PI/2 BPSK	135	0	13.48	13.64	13.53	
100	PI/2 BPSK	135	69	13.53	13.70	13.56	14.0
100	PI/2 BPSK	135	138	13.44	13.66	13.51	14.0
100	PI/2 BPSK	270	0	13.42	13.65	13.46	
100	QPSK	1	1	13.29	13.48	13.38	
100	QPSK	1	137	13.43	13.61	13.43	14.0
100	QPSK	1	271	13.66	13.72	13.67	
100	QPSK	135	0	13.46	13.66	13.50	
100	QPSK	135	69	13.40	13.64	13.52	14.0
100	QPSK	135	138	13.45	13.71	13.61	14.0
100	QPSK	270	0	13.37	13.62	13.52	
100	16QAM	1	1	13.37	13.58	13.46	
100	64QAM	1	1	13.63	13.78	13.63	14.0
100	256QAM	1	1	13.49	13.72	13.57	14.0
Channel				649668	656000	662332	14.0
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	13.62	13.41	13.61	
Channel				649334	656000	662666	14.0
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	13.58	13.43	13.66	
Channel				649000	656000	663000	14.0
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	13.62	13.46	13.62	
Channel				648668	656000	663332	14.0
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	13.64	13.45	13.67	
Channel				648334	656000	663666	14.0
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	13.55	13.49	13.70	
Channel				648000	656000	664000	14.0
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	13.64	13.45	13.65	
Channel				647668	656000	664332	14.0
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	13.63	13.47	13.67	
Channel				647334	656000	664666	14.0
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	13.64	13.46	13.61	
Channel				647168	656000	664832	14.0
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	13.55	13.48	13.67	
Channel				647000	656000	665000	14.0
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	13.57	13.44	13.71	



<FR1 n77_Ant MIMO2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	16.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	15.10	15.15	15.06	
100	PI/2 BPSK	1	137	14.92	14.99	14.85	16.0
100	PI/2 BPSK	1	271	14.97	15.12	14.94	
100	PI/2 BPSK	135	0	14.68	14.80	14.67	
100	PI/2 BPSK	135	69	14.77	14.91	14.82	16.0
100	PI/2 BPSK	135	138	14.73	14.88	14.77	16.0
100	PI/2 BPSK	270	0	14.76	14.87	14.73	
100	QPSK	1	1	14.68	14.80	14.71	
100	QPSK	1	137	14.88	15.00	14.81	16.0
100	QPSK	1	271	14.96	15.10	14.92	
100	QPSK	135	0	14.70	14.76	14.62	
100	QPSK	135	69	14.80	14.91	14.75	16.0
100	QPSK	135	138	14.71	14.86	14.75	16.0
100	QPSK	270	0	14.80	14.87	14.71	
100	16QAM	1	1	14.33	14.38	14.20	
100	64QAM	1	1	14.89	15.04	14.93	16.0
100	256QAM	1	1	14.66	14.76	14.66	16.0
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	14.98	14.70	14.87	
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	15.02	14.67	14.93	
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	15.02	14.69	14.86	
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	15.02	14.66	14.92	
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	15.01	14.70	14.86	
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	15.00	14.62	14.96	
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	15.01	14.63	14.87	
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	15.02	14.64	14.94	
Channel				647168	656000	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	15.05	14.69	14.89	
Channel				647000	656000	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	14.95	14.68	14.95	



<FR1 n77_Ant MIMO1_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	18.5
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	17.29	17.39	17.34	
100	PI/2 BPSK	1	137	17.14	17.33	17.23	18.5
100	PI/2 BPSK	1	271	17.19	17.29	17.24	
100	PI/2 BPSK	135	0	17.04	17.20	17.11	
100	PI/2 BPSK	135	69	17.10	17.25	17.17	18.5
100	PI/2 BPSK	135	138	17.07	17.20	17.13	18.5
100	PI/2 BPSK	270	0	17.09	17.24	17.16	
100	QPSK	1	1	16.98	17.12	17.04	
100	QPSK	1	137	17.20	17.33	17.27	18.5
100	QPSK	1	271	17.23	17.33	17.18	
100	QPSK	135	0	17.08	17.20	17.06	
100	QPSK	135	69	17.12	17.22	17.12	18.5
100	QPSK	135	138	17.02	17.20	17.06	18.5
100	QPSK	270	0	17.10	17.25	17.12	
100	16QAM	1	1	17.16	17.29	17.17	
100	64QAM	1	1	16.99	17.16	17.02	18.5
100	256QAM	1	1	16.93	17.03	16.91	18.5
Channel				649668	656000	662332	18.5
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	17.09	17.00	17.14	
Channel				649334	656000	662666	18.5
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	17.02	17.01	17.21	
Channel				649000	656000	663000	18.5
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	17.03	17.03	17.14	
Channel				648668	656000	663332	18.5
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	17.04	17.06	17.18	
Channel				648334	656000	663666	18.5
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	17.09	17.04	17.21	
Channel				648000	656000	664000	18.5
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	17.04	17.00	17.22	
Channel				647668	656000	664332	18.5
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	17.03	17.07	17.24	
Channel				647334	656000	664666	18.5
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	17.01	16.99	17.19	
Channel				647168	656000	664832	18.5
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	17.09	16.97	17.18	
Channel				647000	656000	665000	18.5
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	17.03	17.04	17.15	



<FR1 n77_Ant Aux_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	16.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	15.03	15.31	15.20	
100	PI/2 BPSK	1	137	14.76	15.11	14.95	16.0
100	PI/2 BPSK	1	271	14.83	15.21	15.00	
100	PI/2 BPSK	135	0	14.51	14.84	14.66	
100	PI/2 BPSK	135	69	14.77	15.11	14.98	16.0
100	PI/2 BPSK	135	138	14.76	15.08	14.94	16.0
100	PI/2 BPSK	270	0	14.63	15.00	14.80	
100	QPSK	1	1	14.47	14.78	14.67	
100	QPSK	1	137	14.63	15.00	14.84	16.0
100	QPSK	1	271	14.88	15.22	15.09	
100	QPSK	135	0	14.53	14.85	14.68	
100	QPSK	135	69	14.65	14.99	14.83	16.0
100	QPSK	135	138	14.76	15.07	14.86	16.0
100	QPSK	270	0	14.68	14.99	14.88	
100	16QAM	1	1	14.47	14.81	14.65	
100	64QAM	1	1	14.45	14.79	14.58	16.0
100	256QAM	1	1	14.27	14.65	14.46	16.0
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	14.93	14.77	15.03	
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	14.92	14.78	15.04	
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	14.91	14.82	15.08	
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	14.87	14.83	15.00	
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	14.93	14.79	15.04	
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	14.92	14.81	15.04	
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	14.86	14.83	15.06	
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	14.85	14.79	15.07	
Channel				647168	656000	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	14.91	14.83	15.02	
Channel				647000	656000	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	14.90	14.80	15.00	



<FR1 n77_HPUE_Ant Main_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	27.5
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	26.30	26.53	26.52	
100	PI/2 BPSK	1	137	26.27	26.43	26.39	27.0
100	PI/2 BPSK	1	271	26.26	26.10	26.26	
100	PI/2 BPSK	135	0	26.28	26.30	26.30	
100	PI/2 BPSK	135	69	26.29	26.32	26.31	27.0
100	PI/2 BPSK	135	138	26.17	26.12	26.07	
100	PI/2 BPSK	270	0	26.26	26.27	26.26	
100	QPSK	1	1	26.37	26.40	26.37	27.5
100	QPSK	1	137	26.31	26.24	26.39	
100	QPSK	1	271	26.01	26.02	26.03	
100	QPSK	135	0	26.24	26.29	26.27	26.5
100	QPSK	135	69	26.17	26.14	26.21	
100	QPSK	135	138	26.22	26.25	26.05	
100	QPSK	270	0	26.10	26.22	26.09	25.0
100	16QAM	1	1	26.00	25.98	26.10	
100	64QAM	1	1	24.92	24.95	24.81	
100	256QAM	1	1	22.95	22.87	22.87	23.0
Channel				649668	656000	662332	27.5
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	26.12	26.32	26.44	
Channel				649334	656000	662666	27.5
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	26.24	26.42	26.42	
Channel				649000	656000	663000	27.5
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	26.26	26.43	26.41	
Channel				648668	656000	663332	27.5
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	26.16	26.35	26.38	
Channel				648334	656000	663666	27.5
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	26.19	26.33	26.52	
Channel				648000	656000	664000	27.5
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	26.27	26.27	26.46	
Channel				647668	656000	664332	27.5
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	26.12	26.36	26.40	
Channel				647334	656000	664666	27.5
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	26.18	26.38	26.48	
Channel				647168	656000	664832	27.5
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	26.20	26.24	26.51	
Channel				647000	656000	665000	27.5
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	26.11	26.32	26.50	



<FR1 n77_HPUE_Ant MIMO2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	27.5
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	26.08	26.27	26.25	
100	PI/2 BPSK	1	137	26.01	26.22	26.16	27.0
100	PI/2 BPSK	1	271	26.07	26.15	26.24	
100	PI/2 BPSK	135	0	25.43	25.62	25.59	
100	PI/2 BPSK	135	69	26.06	26.26	26.21	27.0
100	PI/2 BPSK	135	138	25.61	25.69	25.76	
100	PI/2 BPSK	270	0	25.58	25.74	25.73	
100	QPSK	1	1	26.00	26.24	26.25	27.5
100	QPSK	1	137	26.02	26.20	26.20	
100	QPSK	1	271	26.01	26.14	26.21	
100	QPSK	135	0	25.01	25.14	25.17	26.5
100	QPSK	135	69	26.04	26.17	26.15	27.5
100	QPSK	135	138	24.97	25.22	25.19	26.5
100	QPSK	270	0	25.00	25.22	25.14	
100	16QAM	1	1	25.11	25.23	25.18	
100	64QAM	1	1	23.63	23.74	23.78	25.0
100	256QAM	1	1	21.71	21.86	21.80	23.0
Channel				649668	656000	662332	27.5
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	25.83	26.17	26.06	
Channel				649334	656000	662666	27.5
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	25.83	26.11	26.05	
Channel				649000	656000	663000	27.5
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	25.86	26.12	26.08	
Channel				648668	656000	663332	27.5
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	25.86	26.08	26.07	
Channel				648334	656000	663666	27.5
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	25.93	26.10	26.05	
Channel				648000	656000	664000	27.5
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	25.92	26.07	26.11	
Channel				647668	656000	664332	27.5
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	25.87	26.11	26.10	
Channel				647334	656000	664666	27.5
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	25.85	26.14	26.05	
Channel				647168	656000	664832	27.5
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	25.83	26.08	26.04	
Channel				647000	656000	665000	27.5
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	25.92	26.09	26.08	



<FR1 n77_HPUE_Ant Aux_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	27.5
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	26.33	26.43	26.30	
100	PI/2 BPSK	1	137	26.25	26.42	26.23	27.0
100	PI/2 BPSK	1	271	26.30	26.33	26.29	
100	PI/2 BPSK	135	0	25.71	25.76	25.73	
100	PI/2 BPSK	135	69	26.20	26.37	26.32	27.0
100	PI/2 BPSK	135	138	25.69	25.76	25.76	
100	PI/2 BPSK	270	0	25.80	25.84	25.77	
100	QPSK	1	1	26.20	26.27	26.27	27.5
100	QPSK	1	137	26.08	26.27	26.23	
100	QPSK	1	271	26.13	26.41	26.29	
100	QPSK	135	0	25.06	25.19	25.17	27.5
100	QPSK	135	69	26.24	26.42	26.22	
100	QPSK	135	138	25.18	25.35	25.29	
100	QPSK	270	0	25.15	25.27	25.21	26.5
100	16QAM	1	1	25.25	25.45	25.23	
100	64QAM	1	1	23.54	23.70	23.66	
100	256QAM	1	1	21.66	21.80	21.72	23.0
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	26.21	26.27	26.13	27.5
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	26.19	26.31	26.20	27.5
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	26.15	26.28	26.17	27.5
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	26.18	26.33	26.20	27.5
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	26.20	26.24	26.10	27.5
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	26.14	26.29	26.13	27.5
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	26.15	26.26	26.13	27.5
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	26.17	26.24	26.20	27.5
Channel				647168	656000	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	26.16	26.31	26.13	27.5
Channel				647000	656000	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	26.15	26.24	26.12	27.5



<FR1 n77_HPUE_Ant Main_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	17.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	16.70	16.91	16.71	
100	PI/2 BPSK	1	137	16.30	16.61	16.39	17.0
100	PI/2 BPSK	1	271	16.53	16.79	16.50	
100	PI/2 BPSK	135	0	16.34	16.55	16.34	
100	PI/2 BPSK	135	69	16.41	16.66	16.45	17.0
100	PI/2 BPSK	135	138	16.36	16.61	16.41	17.0
100	PI/2 BPSK	270	0	16.39	16.64	16.42	
100	QPSK	1	1	16.35	16.62	16.32	
100	QPSK	1	137	16.33	16.58	16.35	17.0
100	QPSK	1	271	16.51	16.78	16.56	
100	QPSK	135	0	16.27	16.55	16.29	
100	QPSK	135	69	16.36	16.59	16.29	17.0
100	QPSK	135	138	16.38	16.59	16.30	17.0
100	QPSK	270	0	16.28	16.56	16.34	
100	16QAM	1	1	16.39	16.66	16.46	
100	64QAM	1	1	16.47	16.72	16.52	17.0
100	256QAM	1	1	16.39	16.65	16.44	17.0
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	16.54	16.60	16.52	
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	16.52	16.55	16.51	
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	16.59	16.56	16.56	
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	16.60	16.59	16.57	
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	16.58	16.53	16.59	
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	16.50	16.53	16.51	
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	16.56	16.55	16.60	
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	16.56	16.53	16.54	
Channel				647168	656000	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	16.51	16.62	16.60	
Channel				647000	656000	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	16.54	16.56	16.52	



<FR1 n77_HPUE_Ant MIMO2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	19.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	18.13	18.31	18.09	
100	PI/2 BPSK	1	137	17.79	18.04	17.75	19.0
100	PI/2 BPSK	1	271	17.83	18.11	17.89	
100	PI/2 BPSK	135	0	17.76	17.95	17.70	
100	PI/2 BPSK	135	69	17.89	18.10	17.86	19.0
100	PI/2 BPSK	135	138	17.85	18.05	17.83	19.0
100	PI/2 BPSK	270	0	17.76	17.94	17.66	
100	QPSK	1	1	17.62	17.82	17.60	
100	QPSK	1	137	17.81	18.00	17.78	19.0
100	QPSK	1	271	17.96	18.22	17.99	
100	QPSK	135	0	17.65	17.92	17.68	
100	QPSK	135	69	17.72	17.95	17.64	19.0
100	QPSK	135	138	17.79	18.03	17.74	19.0
100	QPSK	270	0	17.75	17.93	17.70	
100	16QAM	1	1	17.64	17.87	17.56	
100	64QAM	1	1	17.77	18.04	17.80	19.0
100	256QAM	1	1	17.65	17.89	17.60	19.0
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	18.01	17.81	17.93	
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	17.98	17.75	17.93	
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	17.93	17.75	17.92	
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	17.98	17.78	17.92	
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	17.96	17.80	17.89	
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	17.98	17.80	17.97	
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	18.01	17.82	17.99	
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	17.96	17.82	17.90	
Channel				647168	656000	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	17.93	17.76	17.91	
Channel				647000	656000	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	18.01	17.84	17.99	



<FR1 n77_HPUE_Ant MIMO1_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	21.5
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	20.26	20.55	20.45	
100	PI/2 BPSK	1	137	20.09	20.39	20.20	21.5
100	PI/2 BPSK	1	271	20.14	20.52	20.40	
100	PI/2 BPSK	135	0	20.01	20.33	20.22	
100	PI/2 BPSK	135	69	20.02	20.38	20.23	21.5
100	PI/2 BPSK	135	138	20.00	20.35	20.22	21.5
100	PI/2 BPSK	270	0	19.95	20.28	20.13	
100	QPSK	1	1	19.85	20.17	19.98	
100	QPSK	1	137	19.97	20.28	20.14	21.5
100	QPSK	1	271	20.01	20.39	20.27	
100	QPSK	135	0	19.95	20.33	20.22	
100	QPSK	135	69	19.93	20.31	20.15	21.5
100	QPSK	135	138	20.03	20.35	20.17	21.5
100	QPSK	270	0	19.98	20.27	20.11	
100	16QAM	1	1	20.12	20.48	20.28	
100	64QAM	1	1	20.07	20.43	20.26	21.5
100	256QAM	1	1	19.88	20.24	20.07	21.5
Channel				649668	656000	662332	21.5
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	20.10	20.14	20.32	
Channel				649334	656000	662666	21.5
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	20.09	20.18	20.26	
Channel				649000	656000	663000	21.5
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	20.10	20.23	20.29	
Channel				648668	656000	663332	21.5
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	20.06	20.14	20.28	
Channel				648334	656000	663666	21.5
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	20.12	20.16	20.34	
Channel				648000	656000	664000	21.5
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	20.11	20.18	20.32	
Channel				647668	656000	664332	21.5
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	20.07	20.21	20.28	
Channel				647334	656000	664666	21.5
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	20.15	20.18	20.26	
Channel				647168	656000	664832	21.5
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	20.15	20.22	20.28	
Channel				647000	656000	665000	21.5
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	20.12	20.22	20.29	



<FR1 n77_HPUE_Ant Aux_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	19.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	18.10	18.44	18.27	
100	PI/2 BPSK	1	137	17.94	18.28	18.11	19.0
100	PI/2 BPSK	1	271	18.00	18.34	18.09	
100	PI/2 BPSK	135	0	17.75	18.14	17.95	
100	PI/2 BPSK	135	69	17.87	18.24	18.03	19.0
100	PI/2 BPSK	135	138	17.78	18.18	17.91	19.0
100	PI/2 BPSK	270	0	17.71	18.14	17.91	
100	QPSK	1	1	17.64	18.00	17.75	
100	QPSK	1	137	17.78	18.15	17.94	19.0
100	QPSK	1	271	17.96	18.37	18.14	
100	QPSK	135	0	17.67	18.11	17.86	
100	QPSK	135	69	17.78	18.22	18.03	19.0
100	QPSK	135	138	17.81	18.16	17.98	19.0
100	QPSK	270	0	17.70	18.13	17.93	
100	16QAM	1	1	17.64	17.99	17.73	
100	64QAM	1	1	17.68	18.07	17.80	19.0
100	256QAM	1	1	17.71	18.13	17.89	19.0
Channel				649668	656000	662332	19.0
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	17.82	18.16	18.09	
Channel				649334	656000	662666	19.0
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	17.97	18.30	18.07	
Channel				649000	656000	663000	19.0
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	17.96	18.16	18.02	
Channel				648668	656000	663332	19.0
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	17.97	18.17	18.16	
Channel				648334	656000	663666	19.0
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	17.97	18.33	18.15	
Channel				648000	656000	664000	19.0
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	17.83	18.21	17.99	
Channel				647668	656000	664332	19.0
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	17.89	18.33	18.17	
Channel				647334	656000	664666	19.0
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	17.88	18.15	18.07	
Channel				647168	656000	664832	19.0
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	17.91	18.22	18.16	
Channel				647000	656000	665000	19.0
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	17.86	18.22	18.03	



<FR1 n77_Ant Main_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.99		
100	PI/2 BPSK	1	137		23.84		25.0
100	PI/2 BPSK	1	271		23.80		
100	PI/2 BPSK	135	0		23.72		
100	PI/2 BPSK	135	69		23.73		24.5
100	PI/2 BPSK	135	138		23.55		25.0
100	PI/2 BPSK	270	0		23.63		
100	QPSK	1	1		23.64		
100	QPSK	1	137		23.67		25.0
100	QPSK	1	271		23.55		
100	QPSK	135	0		23.77		
100	QPSK	135	69		23.50		25.0
100	QPSK	135	138		23.42		25.0
100	QPSK	270	0		23.53		
100	16QAM	1	1		23.98		
100	64QAM	1	1		22.56		23.5
100	256QAM	1	1		20.26		21.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.53	23.88	23.86	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.62	23.96	23.77	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.65	23.78	23.85	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.55	23.81	23.83	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.63	23.94	23.90	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.60	23.80	23.88	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.65	23.86	23.85	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.59	23.95	23.87	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	23.63	23.78	23.89	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	23.63	23.84	23.88	



<FR1 n77_Ant MIMO2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.91		
100	PI/2 BPSK	1	137		23.82		25.0
100	PI/2 BPSK	1	271		23.78		
100	PI/2 BPSK	135	0		23.25		
100	PI/2 BPSK	135	69		23.73		24.5
100	PI/2 BPSK	135	138		23.31		25.0
100	PI/2 BPSK	270	0		23.31		
100	QPSK	1	1		23.90		
100	QPSK	1	137		23.82		25.0
100	QPSK	1	271		23.91		
100	QPSK	135	0		22.80		
100	QPSK	135	69		23.74		24.0
100	QPSK	135	138		22.80		25.0
100	QPSK	270	0		22.68		
100	16QAM	1	1		23.13		
100	64QAM	1	1		21.38		24.0
100	256QAM	1	1		19.35		22.5
Channel				633000	633332	633666	20.5
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.82	23.85	23.81	
Channel				632668	633332	634000	25.0
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.77	23.80	23.76	
Channel				632334	633332	634332	25.0
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.77	23.80	23.76	
Channel				632000	633332	634666	25.0
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.77	23.80	23.76	
Channel				631668	633332	635000	25.0
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.77	23.80	23.76	
Channel				631334	633332	635332	25.0
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.77	23.80	23.76	
Channel				631000	633332	635666	25.0
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.77	23.80	23.76	
Channel				630668	633332	636000	25.0
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.77	23.80	23.76	
Channel				630500	633332	636166	25.0
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	23.77	23.80	23.76	
Channel				630334	633332	636332	25.0
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	23.77	23.80	23.76	



<FR1 n77_Ant Aux_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.88		
100	PI/2 BPSK	1	137		23.81		25.0
100	PI/2 BPSK	1	271		23.87		
100	PI/2 BPSK	135	0		23.29		
100	PI/2 BPSK	135	69		23.81		24.5
100	PI/2 BPSK	135	138		23.57		24.5
100	PI/2 BPSK	270	0		23.47		
100	QPSK	1	1		23.87		
100	QPSK	1	137		23.82		25.0
100	QPSK	1	271		23.76		
100	QPSK	135	0		22.89		
100	QPSK	135	69		23.76		24.0
100	QPSK	135	138		22.70		25.0
100	QPSK	270	0		22.81		
100	16QAM	1	1		22.72		
100	64QAM	1	1		21.49		24.0
100	256QAM	1	1		19.17		22.5
Channel				633000	633332	633666	20.5
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.77	23.81	23.80	
Channel				632668	633332	634000	25.0
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.57	23.64	23.65	
Channel				632334	633332	634332	25.0
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.66	23.66	23.70	
Channel				632000	633332	634666	25.0
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.62	23.70	23.67	
Channel				631668	633332	635000	25.0
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.61	23.67	23.66	
Channel				631334	633332	635332	25.0
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.64	23.66	23.67	
Channel				631000	633332	635666	25.0
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.62	23.62	23.67	
Channel				630668	633332	636000	25.0
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.64	23.66	23.62	
Channel				630500	633332	636166	25.0
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	23.64	23.62	23.69	
Channel				630334	633332	636332	25.0
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	23.59	23.64	23.63	



<FR1 n77_Ant Main_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		13.85		
100	PI/2 BPSK	1	137		13.56		14.0
100	PI/2 BPSK	1	271		13.69		
100	PI/2 BPSK	135	0		13.58		
100	PI/2 BPSK	135	69		13.68		14.0
100	PI/2 BPSK	135	138		13.66		14.0
100	PI/2 BPSK	270	0		13.67		
100	QPSK	1	1		13.56		
100	QPSK	1	137		13.47		14.0
100	QPSK	1	271		13.84		
100	QPSK	135	0		13.58		
100	QPSK	135	69		13.60		14.0
100	QPSK	135	138		13.65		14.0
100	QPSK	270	0		13.67		
100	16QAM	1	1		13.67		
100	64QAM	1	1		13.79		14.0
100	256QAM	1	1		13.69		14.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	13.37	13.49	13.35	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	13.33	13.40	13.41	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	13.28	13.39	13.36	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	13.31	13.39	13.36	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	13.28	13.45	13.32	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	13.30	13.40	13.36	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	13.36	13.40	13.40	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	13.32	13.39	13.38	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	13.37	13.41	13.34	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	13.32	13.40	13.42	



<FR1 n77_Ant MIMO2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		15.40		
100	PI/2 BPSK	1	137		15.05		16.0
100	PI/2 BPSK	1	271		15.17		
100	PI/2 BPSK	135	0		15.15		
100	PI/2 BPSK	135	69		15.16		16.0
100	PI/2 BPSK	135	138		15.04		16.0
100	PI/2 BPSK	270	0		15.09		
100	QPSK	1	1		15.06		
100	QPSK	1	137		14.98		16.0
100	QPSK	1	271		15.14		
100	QPSK	135	0		15.11		
100	QPSK	135	69		15.08		16.0
100	QPSK	135	138		15.05		16.0
100	QPSK	270	0		15.07		
100	16QAM	1	1		14.93		
100	64QAM	1	1		15.29		16.0
100	256QAM	1	1		15.25		16.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	14.91	14.99	14.87	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	14.90	15.01	14.82	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	14.85	14.93	14.90	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	14.89	14.95	14.85	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	14.87	15.00	14.81	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	14.90	15.00	14.83	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	14.84	14.99	14.81	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	14.90	14.93	14.86	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	14.90	14.99	14.83	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	14.87	14.91	14.86	



<FR1 n77_Ant MIMO1_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		17.42		
100	PI/2 BPSK	1	137		17.01		18.5
100	PI/2 BPSK	1	271		17.22		
100	PI/2 BPSK	135	0		16.78		
100	PI/2 BPSK	135	69		17.19		18.5
100	PI/2 BPSK	135	138		17.09		18.5
100	PI/2 BPSK	270	0		16.94		
100	QPSK	1	1		16.72		
100	QPSK	1	137		16.88		18.5
100	QPSK	1	271		17.32		
100	QPSK	135	0		16.75		
100	QPSK	135	69		16.93		18.5
100	QPSK	135	138		17.12		18.5
100	QPSK	270	0		16.91		
100	16QAM	1	1		16.56		
100	64QAM	1	1		16.95		18.5
100	256QAM	1	1		16.80		18.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	16.51	16.72	16.57	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	16.55	16.67	16.57	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	16.57	16.70	16.57	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	16.53	16.66	16.64	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	16.56	16.66	16.59	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	16.59	16.66	16.55	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	16.54	16.67	16.55	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	16.53	16.66	16.64	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	16.54	16.67	16.61	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	16.54	16.63	16.56	



<FR1 n77_Ant Aux_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		15.42		
100	PI/2 BPSK	1	137		14.92		16.0
100	PI/2 BPSK	1	271		15.06		
100	PI/2 BPSK	135	0		14.91		
100	PI/2 BPSK	135	69		14.98		16.0
100	PI/2 BPSK	135	138		14.95		16.0
100	PI/2 BPSK	270	0		14.92		
100	QPSK	1	1		15.04		
100	QPSK	1	137		14.90		16.0
100	QPSK	1	271		15.02		
100	QPSK	135	0		14.90		
100	QPSK	135	69		14.91		16.0
100	QPSK	135	138		14.91		16.0
100	QPSK	270	0		14.91		
100	16QAM	1	1		14.88		
100	64QAM	1	1		15.20		16.0
100	256QAM	1	1		15.03		16.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	14.73	14.88	14.69	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	14.74	14.89	14.77	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	14.78	14.90	14.76	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	14.79	14.95	14.78	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	14.77	14.95	14.69	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	14.81	14.94	14.75	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	14.80	14.93	14.70	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	14.79	14.88	14.72	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	14.82	14.87	14.74	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	14.82	14.86	14.69	



<FR1 n77_HPUE_Ant Main_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		26.46		
100	PI/2 BPSK	1	137		26.45		27.5
100	PI/2 BPSK	1	271		26.16		
100	PI/2 BPSK	135	0		26.33		
100	PI/2 BPSK	135	69		26.34		27.0
100	PI/2 BPSK	135	138		26.20		27.5
100	PI/2 BPSK	270	0		26.26		
100	QPSK	1	1		26.29		
100	QPSK	1	137		26.34		27.5
100	QPSK	1	271		26.09		
100	QPSK	135	0		26.29		
100	QPSK	135	69		26.30		26.5
100	QPSK	135	138		26.18		27.5
100	QPSK	270	0		26.12		
100	16QAM	1	1		26.02		
100	64QAM	1	1		24.94		26.5
100	256QAM	1	1		22.85		25.0
Channel				633000	633332	633666	23.0
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	26.41	26.45	26.44	
Channel				632668	633332	634000	27.5
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	26.35	26.39	26.37	
Channel				632334	633332	634332	27.5
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	26.26	26.41	26.30	
Channel				632000	633332	634666	27.5
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	26.39	26.34	26.40	
Channel				631668	633332	635000	27.5
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	26.41	26.34	26.34	
Channel				631334	633332	635332	27.5
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	26.34	26.36	26.44	
Channel				631000	633332	635666	27.5
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	26.38	26.37	26.34	
Channel				630668	633332	636000	27.5
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	26.34	26.27	26.40	
Channel				630500	633332	636166	27.5
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	26.23	26.34	26.27	
Channel				630334	633332	636332	27.5
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	26.38	26.34	26.41	



<FR1 n77_HPUE_Ant MIMO2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		26.41		
100	PI/2 BPSK	1	137		26.34		27.5
100	PI/2 BPSK	1	271		26.33		
100	PI/2 BPSK	135	0		25.81		27.0
100	PI/2 BPSK	135	69		26.38		27.5
100	PI/2 BPSK	135	138		25.84		27.0
100	PI/2 BPSK	270	0		25.83		
100	QPSK	1	1		26.38		27.5
100	QPSK	1	137		26.35		
100	QPSK	1	271		26.22		
100	QPSK	135	0		25.41		26.5
100	QPSK	135	69		26.20		27.5
100	QPSK	135	138		25.32		26.5
100	QPSK	270	0		25.21		
100	16QAM	1	1		25.22		26.5
100	64QAM	1	1		23.89		25.0
100	256QAM	1	1		21.91		23.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	26.31	26.34	26.29	27.5
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	26.23	26.27	26.23	27.5
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	26.24	26.31	26.25	27.5
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	26.27	26.28	26.23	27.5
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	26.28	26.29	26.22	27.5
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	26.26	26.31	26.25	27.5
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	26.28	26.29	26.22	27.5
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	26.26	26.26	26.26	27.5
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	26.25	26.31	26.26	27.5
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	26.24	26.26	26.24	27.5



<FR1 n77_HPUE_Ant Aux_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		26.64		
100	PI/2 BPSK	1	137		26.38		27.5
100	PI/2 BPSK	1	271		26.51		
100	PI/2 BPSK	135	0		25.86		
100	PI/2 BPSK	135	69		26.60		27.0
100	PI/2 BPSK	135	138		25.96		27.5
100	PI/2 BPSK	270	0		26.09		
100	QPSK	1	1		26.47		
100	QPSK	1	137		26.44		27.5
100	QPSK	1	271		26.37		
100	QPSK	135	0		25.28		
100	QPSK	135	69		26.41		26.5
100	QPSK	135	138		25.41		27.5
100	QPSK	270	0		25.41		
100	16QAM	1	1		25.46		
100	64QAM	1	1		23.79		26.5
100	256QAM	1	1		21.86		25.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	26.51	26.58	26.50	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	26.43	26.52	26.42	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	26.43	26.48	26.41	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	26.43	26.48	26.43	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	26.44	26.51	26.43	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	26.41	26.52	26.43	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	26.44	26.53	26.45	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	26.42	26.52	26.45	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	26.43	26.53	26.42	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	26.41	26.51	26.43	



<FR1 n77_HPUE_Ant Main_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		16.95		
100	PI/2 BPSK	1	137		16.73		17.0
100	PI/2 BPSK	1	271		16.85		
100	PI/2 BPSK	135	0		16.68		
100	PI/2 BPSK	135	69		16.72		17.0
100	PI/2 BPSK	135	138		16.69		17.0
100	PI/2 BPSK	270	0		16.71		
100	QPSK	1	1		16.71		
100	QPSK	1	137		16.61		17.0
100	QPSK	1	271		16.85		
100	QPSK	135	0		16.67		
100	QPSK	135	69		16.67		17.0
100	QPSK	135	138		16.67		17.0
100	QPSK	270	0		16.69		
100	16QAM	1	1		16.88		
100	64QAM	1	1		16.91		17.0
100	256QAM	1	1		16.84		17.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	16.50	16.63	16.48	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	16.56	16.55	16.48	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	16.51	16.60	16.49	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	16.51	16.62	16.53	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	16.52	16.57	16.48	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	16.52	16.59	16.55	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	16.57	16.64	16.50	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	16.57	16.56	16.58	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	16.52	16.60	16.54	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	16.58	16.57	16.56	



<FR1 n77_HPUE_Ant MIMO2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		18.38		
100	PI/2 BPSK	1	137		18.13		19.0
100	PI/2 BPSK	1	271		18.27		
100	PI/2 BPSK	135	0		18.06		
100	PI/2 BPSK	135	69		18.10		19.0
100	PI/2 BPSK	135	138		18.04		19.0
100	PI/2 BPSK	270	0		17.97		
100	QPSK	1	1		18.02		
100	QPSK	1	137		18.02		19.0
100	QPSK	1	271		18.17		
100	QPSK	135	0		18.03		
100	QPSK	135	69		17.98		19.0
100	QPSK	135	138		18.07		19.0
100	QPSK	270	0		17.97		
100	16QAM	1	1		18.02		
100	64QAM	1	1		18.25		19.0
100	256QAM	1	1		18.13		19.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	17.95	18.01	18.01	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	17.91	18.07	18.05	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	17.94	18.07	17.99	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	17.92	18.03	17.97	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	17.96	18.08	18.02	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	17.96	18.08	18.02	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	17.97	18.06	18.03	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	17.95	18.04	18.02	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	17.95	18.01	18.01	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	17.94	18.02	18.05	



<FR1 n77_HPUE_Ant MIMO1_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		20.60		
100	PI/2 BPSK	1	137		20.12		21.5
100	PI/2 BPSK	1	271		20.38		
100	PI/2 BPSK	135	0		19.98		
100	PI/2 BPSK	135	69		20.20		21.5
100	PI/2 BPSK	135	138		20.19		21.5
100	PI/2 BPSK	270	0		20.13		
100	QPSK	1	1		19.81		
100	QPSK	1	137		19.92		21.5
100	QPSK	1	271		20.42		
100	QPSK	135	0		19.94		
100	QPSK	135	69		20.00		21.5
100	QPSK	135	138		20.17		21.5
100	QPSK	270	0		20.10		
100	16QAM	1	1		19.96		
100	64QAM	1	1		20.21		21.5
100	256QAM	1	1		19.94		21.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	19.65	19.74	19.71	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	19.68	19.70	19.70	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	19.65	19.80	19.73	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	19.68	19.70	19.69	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	19.69	19.79	19.68	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	19.63	19.70	19.65	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	19.67	19.76	19.67	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	19.62	19.79	19.69	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	19.70	19.79	19.73	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	19.71	19.73	19.75	



<FR1 n77_HPUE_Ant Aux_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		18.48		
100	PI/2 BPSK	1	137		17.84		19.0
100	PI/2 BPSK	1	271		18.13		
100	PI/2 BPSK	135	0		17.88		
100	PI/2 BPSK	135	69		17.96		19.0
100	PI/2 BPSK	135	138		17.90		19.0
100	PI/2 BPSK	270	0		17.95		
100	QPSK	1	1		18.02		
100	QPSK	1	137		17.94		19.0
100	QPSK	1	271		17.92		
100	QPSK	135	0		17.89		
100	QPSK	135	69		17.96		19.0
100	QPSK	135	138		18.01		19.0
100	QPSK	270	0		17.85		
100	16QAM	1	1		17.87		
100	64QAM	1	1		18.28		19.0
100	256QAM	1	1		18.12		19.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	18.17	18.41	18.40	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	18.17	18.29	18.28	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	18.16	18.31	18.34	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	18.15	18.34	18.30	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	18.15	18.22	18.20	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	18.18	18.34	18.30	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	18.17	18.37	18.37	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	18.14	18.24	18.36	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	18.14	18.21	18.39	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	18.15	18.21	18.28	



<FR1 n78_Ant Main_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		24.19		
100	PI/2 BPSK	1	137		24.12		25.0
100	PI/2 BPSK	1	271		23.95		
100	PI/2 BPSK	135	0		23.92		
100	PI/2 BPSK	135	69		24.01		24.5
100	PI/2 BPSK	135	138		23.97		25.0
100	PI/2 BPSK	270	0		24.06		
100	QPSK	1	1		23.93		
100	QPSK	1	137		24.06		25.0
100	QPSK	1	271		24.09		
100	QPSK	135	0		23.93		
100	QPSK	135	69		23.99		25.0
100	QPSK	135	138		23.98		25.0
100	QPSK	270	0		24.13		
100	16QAM	1	1		24.18		
100	64QAM	1	1		22.74		23.5
100	256QAM	1	1		20.48		21.5
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	23.95	24.05	23.99	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	23.85	24.07	24.07	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	23.84	24.08	24.00	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	23.78	24.09	24.00	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	23.91	24.13	24.04	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	23.83	24.01	23.97	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	23.96	23.98	23.87	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	23.83	23.98	23.93	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	23.81	24.06	23.96	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	23.91	23.99	23.99	



<FR1 n78_Ant MIMO2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		24.07		
100	PI/2 BPSK	1	137		23.91		25.0
100	PI/2 BPSK	1	271		24.03		
100	PI/2 BPSK	135	0		23.87		
100	PI/2 BPSK	135	69		24.04		24.5
100	PI/2 BPSK	135	138		23.95		25.0
100	PI/2 BPSK	270	0		23.85		
100	QPSK	1	1		23.94		
100	QPSK	1	137		23.88		25.0
100	QPSK	1	271		23.96		
100	QPSK	135	0		23.93		
100	QPSK	135	69		23.91		24.0
100	QPSK	135	138		23.99		25.0
100	QPSK	270	0		23.86		
100	16QAM	1	1		23.88		
100	64QAM	1	1		23.22		24.0
100	256QAM	1	1		21.34		23.5
Channel				649668	650000	650332	21.5
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	23.98	24.01	23.91	
Channel				649334	650000	650666	25.0
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	23.78	23.84	23.75	
Channel				649000	650000	651000	25.0
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	23.80	23.85	23.78	
Channel				648668	650000	651332	25.0
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	23.84	23.89	23.79	
Channel				648334	650000	651666	25.0
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	23.86	23.87	23.71	
Channel				648000	650000	652000	25.0
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	23.82	23.90	23.74	
Channel				647668	650000	652332	25.0
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	23.88	23.89	23.79	
Channel				647334	650000	652666	25.0
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	23.82	23.82	23.79	
Channel				647168	650000	652832	25.0
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	23.85	23.86	23.77	
Channel				647000	650000	653000	25.0
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	23.83	23.82	23.77	



<FR1 n78_Ant Aux_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		23.95		
100	PI/2 BPSK	1	137		23.78		25.0
100	PI/2 BPSK	1	271		23.88		
100	PI/2 BPSK	135	0		23.27		
100	PI/2 BPSK	135	69		23.86		24.5
100	PI/2 BPSK	135	138		23.42		25.0
100	PI/2 BPSK	270	0		23.40		
100	QPSK	1	1		23.77		
100	QPSK	1	137		23.71		25.0
100	QPSK	1	271		23.80		
100	QPSK	135	0		22.83		
100	QPSK	135	69		23.79		24.0
100	QPSK	135	138		22.83		25.0
100	QPSK	270	0		22.79		
100	16QAM	1	1		23.00		
100	64QAM	1	1		21.48		24.0
100	256QAM	1	1		19.42		22.5
Channel				649668	650000	650332	20.5
Frequency (MHz)				3745.02	3750	3754.98	Tune-up limit (dBm)
90	PI/2 BPSK	1	1	23.85	23.92	23.89	25.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	23.77	23.87	23.82	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	23.76	23.83	23.79	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	23.75	23.83	23.82	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	23.77	23.87	23.84	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	23.79	23.86	23.84	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	23.77	23.87	23.84	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	23.80	23.83	23.84	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	23.80	23.87	23.80	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	23.77	23.87	23.80	



<FR1 n78_Ant Main_Sensor ON

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		13.88		
100	PI/2 BPSK	1	137		13.61		14.0
100	PI/2 BPSK	1	271		13.58		
100	PI/2 BPSK	135	0		13.68		
100	PI/2 BPSK	135	69		13.78		14.0
100	PI/2 BPSK	135	138		13.57		14.0
100	PI/2 BPSK	270	0		13.59		
100	QPSK	1	1		13.74		
100	QPSK	1	137		13.59		14.0
100	QPSK	1	271		13.51		
100	QPSK	135	0		13.70		
100	QPSK	135	69		13.57		14.0
100	QPSK	135	138		13.56		14.0
100	QPSK	270	0		13.62		
100	16QAM	1	1		13.69		
100	64QAM	1	1		13.83		14.0
100	256QAM	1	1		13.83		14.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	13.64	13.75	13.64	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	13.67	13.75	13.66	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	13.69	13.69	13.62	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	13.67	13.71	13.70	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	13.72	13.72	13.66	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	13.70	13.73	13.71	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	13.68	13.68	13.70	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	13.69	13.71	13.63	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	13.65	13.72	13.62	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	13.69	13.76	13.63	



<FR1 n78_Ant MIMO2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		15.30		
100	PI/2 BPSK	1	137		15.15		16.0
100	PI/2 BPSK	1	271		15.11		
100	PI/2 BPSK	135	0		15.07		
100	PI/2 BPSK	135	69		15.11		16.0
100	PI/2 BPSK	135	138		14.91		16.0
100	PI/2 BPSK	270	0		14.95		
100	QPSK	1	1		15.07		
100	QPSK	1	137		14.97		16.0
100	QPSK	1	271		15.02		
100	QPSK	135	0		15.11		
100	QPSK	135	69		14.91		16.0
100	QPSK	135	138		14.88		16.0
100	QPSK	270	0		14.97		
100	16QAM	1	1		15.27		
100	64QAM	1	1		15.18		16.0
100	256QAM	1	1		15.10		16.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	15.01	15.03	14.94	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	15.01	15.08	14.97	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	14.99	14.99	14.92	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	15.01	15.04	14.88	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	14.96	14.99	14.95	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	14.93	15.00	14.88	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	15.02	14.99	14.89	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	14.95	15.07	14.97	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	14.97	15.01	14.88	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	14.92	15.08	14.91	



<FR1 n78_Ant MIMO1_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		17.59		
100	PI/2 BPSK	1	137		17.36		18.5
100	PI/2 BPSK	1	271		17.30		
100	PI/2 BPSK	135	0		17.35		
100	PI/2 BPSK	135	69		17.36		18.5
100	PI/2 BPSK	135	138		17.18		18.5
100	PI/2 BPSK	270	0		17.30		
100	QPSK	1	1		17.33		
100	QPSK	1	137		17.26		18.5
100	QPSK	1	271		17.17		
100	QPSK	135	0		17.36		
100	QPSK	135	69		17.31		18.5
100	QPSK	135	138		17.20		18.5
100	QPSK	270	0		17.29		
100	16QAM	1	1		17.40		
100	64QAM	1	1		17.56		18.5
100	256QAM	1	1		17.37		18.5
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	17.23	17.35	17.14	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	17.19	17.26	17.14	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	17.16	17.33	17.22	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	17.16	17.36	17.14	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	17.14	17.35	17.12	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	17.23	17.30	17.21	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	17.20	17.35	17.13	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	17.23	17.29	17.22	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	17.13	17.36	17.14	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	17.15	17.29	17.12	



<FR1 n78_Ant Aux_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		15.32		
100	PI/2 BPSK	1	137		14.97		16.0
100	PI/2 BPSK	1	271		15.02		
100	PI/2 BPSK	135	0		15.03		
100	PI/2 BPSK	135	69		15.13		16.0
100	PI/2 BPSK	135	138		14.84		16.0
100	PI/2 BPSK	270	0		14.92		
100	QPSK	1	1		15.08		
100	QPSK	1	137		14.95		16.0
100	QPSK	1	271		14.92		
100	QPSK	135	0		15.02		
100	QPSK	135	69		14.91		16.0
100	QPSK	135	138		14.82		16.0
100	QPSK	270	0		14.91		
100	16QAM	1	1		15.06		
100	64QAM	1	1		15.25		16.0
100	256QAM	1	1		15.21		16.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	14.92	14.96	14.97	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	14.87	15.03	14.93	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	14.89	15.01	14.94	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	14.83	15.04	14.91	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	14.87	15.06	14.98	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	14.84	15.00	14.90	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	14.85	15.02	14.92	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	14.88	15.06	14.94	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	14.91	15.06	14.89	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	14.91	14.96	14.91	



<FR1 n78_HPUE_Ant Main_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		26.54		27.5
100	PI/2 BPSK	1	137		26.30		
100	PI/2 BPSK	1	271		26.17		
100	PI/2 BPSK	135	0		26.30		27.0
100	PI/2 BPSK	135	69		26.32		27.5
100	PI/2 BPSK	135	138		26.25		27.0
100	PI/2 BPSK	270	0		26.21		
100	QPSK	1	1		26.35		27.5
100	QPSK	1	137		26.47		
100	QPSK	1	271		26.42		
100	QPSK	135	0		26.23		27.5
100	QPSK	135	69		26.27		27.5
100	QPSK	135	138		26.21		27.5
100	QPSK	270	0		26.21		
100	16QAM	1	1		26.35		27.5
100	64QAM	1	1		24.97		26.0
100	256QAM	1	1		22.79		24.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	26.07	26.18	26.21	27.5
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	26.23	26.26	26.13	27.5
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	26.16	26.09	26.22	27.5
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	26.05	26.16	26.17	27.5
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	26.20	26.20	26.08	27.5
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	26.20	26.20	26.24	27.5
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	26.12	26.18	26.15	27.5
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	26.24	26.25	26.09	27.5
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	26.16	26.26	26.17	27.5
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	26.07	26.21	26.17	27.5



<FR1 n78_HPUE_Ant MIMO2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		26.40		
100	PI/2 BPSK	1	137		26.34		27.5
100	PI/2 BPSK	1	271		26.18		
100	PI/2 BPSK	135	0		25.64		
100	PI/2 BPSK	135	69		25.99		27.0
100	PI/2 BPSK	135	138		25.56		27.5
100	PI/2 BPSK	270	0		25.44		
100	QPSK	1	1		26.22		
100	QPSK	1	137		26.23		27.5
100	QPSK	1	271		26.23		
100	QPSK	135	0		24.94		
100	QPSK	135	69		25.96		26.5
100	QPSK	135	138		24.99		27.5
100	QPSK	270	0		25.06		
100	16QAM	1	1		25.17		
100	64QAM	1	1		23.70		26.5
100	256QAM	1	1		21.44		25.0
Channel				649668	650000	650332	23.0
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	26.28	26.32	26.30	
Channel				649334	650000	650666	27.5
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	26.21	26.25	26.24	
Channel				649000	650000	651000	27.5
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	26.25	26.28	26.22	
Channel				648668	650000	651332	27.5
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	26.25	26.26	26.27	
Channel				648334	650000	651666	27.5
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	26.21	26.24	26.22	
Channel				648000	650000	652000	27.5
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	26.25	26.27	26.26	
Channel				647668	650000	652332	27.5
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	26.24	26.23	26.21	
Channel				647334	650000	652666	27.5
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	26.20	26.25	26.21	
Channel				647168	650000	652832	27.5
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	26.25	26.26	26.21	
Channel				647000	650000	653000	27.5
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	26.21	26.25	26.27	



<FR1 n78_HPUE_Ant Aux_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		26.59		
100	PI/2 BPSK	1	137		26.52		27.5
100	PI/2 BPSK	1	271		26.55		
100	PI/2 BPSK	135	0		26.02		
100	PI/2 BPSK	135	69		26.42		27.0
100	PI/2 BPSK	135	138		25.92		27.5
100	PI/2 BPSK	270	0		25.84		
100	QPSK	1	1		26.43		
100	QPSK	1	137		26.50		27.5
100	QPSK	1	271		26.51		
100	QPSK	135	0		25.52		
100	QPSK	135	69		26.47		26.5
100	QPSK	135	138		25.57		27.5
100	QPSK	270	0		25.34		
100	16QAM	1	1		25.50		
100	64QAM	1	1		23.85		26.5
100	256QAM	1	1		21.96		25.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	26.47	26.51	26.44	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	26.43	26.42	26.36	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	26.41	26.41	26.35	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	26.40	26.48	26.35	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	26.42	26.46	26.34	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	26.39	26.46	26.40	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	26.39	26.42	26.39	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	26.40	26.41	26.41	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	26.42	26.41	26.35	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	26.41	26.43	26.41	



<FR1 n78_HPUE_Ant Main_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		16.94		
100	PI/2 BPSK	1	137		16.82		17.0
100	PI/2 BPSK	1	271		16.65		
100	PI/2 BPSK	135	0		16.78		
100	PI/2 BPSK	135	69		16.84		17.0
100	PI/2 BPSK	135	138		16.61		17.0
100	PI/2 BPSK	270	0		16.65		
100	QPSK	1	1		16.83		
100	QPSK	1	137		16.79		17.0
100	QPSK	1	271		16.62		
100	QPSK	135	0		16.78		
100	QPSK	135	69		16.73		17.0
100	QPSK	135	138		16.60		17.0
100	QPSK	270	0		16.76		
100	16QAM	1	1		16.72		
100	64QAM	1	1		16.86		17.0
100	256QAM	1	1		16.79		17.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	16.68	16.78	16.60	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	16.72	16.78	16.61	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	16.71	16.76	16.57	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	16.70	16.74	16.59	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	16.66	16.80	16.55	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	16.64	16.84	16.63	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	16.68	16.77	16.54	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	16.66	16.75	16.60	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	16.62	16.78	16.63	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	16.64	16.74	16.64	



<FR1 n78_HPUE_Ant MIMO2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		18.37		
100	PI/2 BPSK	1	137		17.89		19.0
100	PI/2 BPSK	1	271		17.81		
100	PI/2 BPSK	135	0		17.90		
100	PI/2 BPSK	135	69		17.95		19.0
100	PI/2 BPSK	135	138		17.83		19.0
100	PI/2 BPSK	270	0		17.87		
100	QPSK	1	1		17.99		
100	QPSK	1	137		17.82		19.0
100	QPSK	1	271		17.77		
100	QPSK	135	0		17.94		
100	QPSK	135	69		17.81		19.0
100	QPSK	135	138		17.82		19.0
100	QPSK	270	0		17.85		
100	16QAM	1	1		17.83		
100	64QAM	1	1		18.36		19.0
100	256QAM	1	1		18.02		19.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	17.79	17.93	17.73	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	17.76	17.93	17.79	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	17.70	17.94	17.76	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	17.79	17.92	17.80	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	17.69	17.87	17.82	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	17.73	17.88	17.83	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	17.78	17.86	17.83	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	17.69	17.87	17.73	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	17.79	17.95	17.76	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	17.79	17.95	17.81	



<FR1 n78_HPUE_Ant MIMO1_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		20.70		21.5
100	PI/2 BPSK	1	137		20.35		
100	PI/2 BPSK	1	271		20.36		
100	PI/2 BPSK	135	0		20.39		21.5
100	PI/2 BPSK	135	69		20.40		21.5
100	PI/2 BPSK	135	138		20.29		21.5
100	PI/2 BPSK	270	0		20.29		
100	QPSK	1	1		20.45		21.5
100	QPSK	1	137		20.40		
100	QPSK	1	271		20.35		
100	QPSK	135	0		20.35		21.5
100	QPSK	135	69		20.27		21.5
100	QPSK	135	138		20.26		21.5
100	QPSK	270	0		20.27		
100	16QAM	1	1		20.38		21.5
100	64QAM	1	1		20.60		21.5
100	256QAM	1	1		20.58		21.5
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	20.11	20.33	20.24	21.5
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	20.12	20.32	20.21	21.5
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	20.14	20.30	20.18	21.5
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	20.17	20.29	20.22	21.5
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	20.13	20.34	20.17	21.5
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	20.17	20.34	20.16	21.5
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	20.21	20.38	20.22	21.5
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	20.21	20.37	20.23	21.5
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	20.14	20.33	20.18	21.5
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	20.12	20.33	20.24	21.5



<FR1 n78_HPUE_Ant Aux_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		18.29		
100	PI/2 BPSK	1	137		17.99		19.0
100	PI/2 BPSK	1	271		17.96		
100	PI/2 BPSK	135	0		18.02		
100	PI/2 BPSK	135	69		18.12		19.0
100	PI/2 BPSK	135	138		17.83		19.0
100	PI/2 BPSK	270	0		17.99		
100	QPSK	1	1		18.03		
100	QPSK	1	137		18.03		19.0
100	QPSK	1	271		18.01		
100	QPSK	135	0		18.04		
100	QPSK	135	69		17.84		19.0
100	QPSK	135	138		17.77		19.0
100	QPSK	270	0		17.95		
100	16QAM	1	1		17.99		
100	64QAM	1	1		18.20		19.0
100	256QAM	1	1		18.19		19.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	18.21	18.25	18.20	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	18.04	18.17	18.00	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	18.13	18.13	18.01	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	18.03	18.18	18.20	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	18.02	18.05	18.03	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	18.18	18.21	18.17	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	18.04	18.22	18.15	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	18.08	18.12	18.02	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	18.14	18.21	18.00	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	18.12	18.20	18.05	



<FR1 n78_Ant Main_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.98		
100	PI/2 BPSK	1	137		23.91		25.0
100	PI/2 BPSK	1	271		23.73		
100	PI/2 BPSK	135	0		23.80		
100	PI/2 BPSK	135	69		23.87		24.5
100	PI/2 BPSK	135	138		23.86		25.0
100	PI/2 BPSK	270	0		23.91		
100	QPSK	1	1		23.70		
100	QPSK	1	137		23.73		25.0
100	QPSK	1	271		23.72		
100	QPSK	135	0		23.86		
100	QPSK	135	69		23.79		25.0
100	QPSK	135	138		23.78		25.0
100	QPSK	270	0		23.81		
100	16QAM	1	1		23.97		
100	64QAM	1	1		22.47		23.5
100	256QAM	1	1		20.13		21.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.54	23.87	23.68	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.51	23.70	23.65	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.50	23.70	23.65	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.62	23.84	23.66	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.53	23.76	23.68	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.58	23.73	23.65	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.65	23.69	23.70	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.62	23.80	23.56	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	23.48	23.76	23.72	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	23.49	23.84	23.61	



<FR1 n78_Ant MIMO2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.78		
100	PI/2 BPSK	1	137		23.54		25.0
100	PI/2 BPSK	1	271		23.57		
100	PI/2 BPSK	135	0		23.60		
100	PI/2 BPSK	135	69		23.68		24.5
100	PI/2 BPSK	135	138		23.62		25.0
100	PI/2 BPSK	270	0		23.54		
100	QPSK	1	1		23.65		
100	QPSK	1	137		23.58		25.0
100	QPSK	1	271		23.66		
100	QPSK	135	0		23.47		
100	QPSK	135	69		23.65		24.0
100	QPSK	135	138		23.49		25.0
100	QPSK	270	0		23.56		
100	16QAM	1	1		22.61		
100	64QAM	1	1		21.02		24.0
100	256QAM	1	1		19.15		22.5
Channel				633000	633332	633666	20.5
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.61	23.68	23.64	
Channel				632668	633332	634000	25.0
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.54	23.59	23.55	
Channel				632334	633332	634332	25.0
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.55	23.60	23.57	
Channel				632000	633332	634666	25.0
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.52	23.62	23.56	
Channel				631668	633332	635000	25.0
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.53	23.59	23.58	
Channel				631334	633332	635332	25.0
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.54	23.62	23.59	
Channel				631000	633332	635666	25.0
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.53	23.60	23.59	
Channel				630668	633332	636000	25.0
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.52	23.60	23.56	
Channel				630500	633332	636166	25.0
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	23.52	23.62	23.56	
Channel				630334	633332	636332	25.0
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	23.52	23.60	23.55	



<FR1 n78_Ant Aux_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.91		
100	PI/2 BPSK	1	137		23.61		25.0
100	PI/2 BPSK	1	271		23.76		
100	PI/2 BPSK	135	0		23.28		
100	PI/2 BPSK	135	69		23.80		24.5
100	PI/2 BPSK	135	138		23.33		25.0
100	PI/2 BPSK	270	0		23.26		
100	QPSK	1	1		23.68		
100	QPSK	1	137		23.61		25.0
100	QPSK	1	271		23.62		
100	QPSK	135	0		22.71		
100	QPSK	135	69		23.71		24.0
100	QPSK	135	138		22.80		25.0
100	QPSK	270	0		22.75		
100	16QAM	1	1		23.02		
100	64QAM	1	1		21.27		24.0
100	256QAM	1	1		19.21		22.5
Channel				633000	633332	633666	20.5
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.78	23.84	23.81	
Channel				632668	633332	634000	25.0
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.73	23.78	23.76	
Channel				632334	633332	634332	25.0
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.74	23.79	23.78	
Channel				632000	633332	634666	25.0
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.69	23.79	23.76	
Channel				631668	633332	635000	25.0
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.74	23.79	23.74	
Channel				631334	633332	635332	25.0
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.71	23.81	23.77	
Channel				631000	633332	635666	25.0
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.75	23.79	23.78	
Channel				630668	633332	636000	25.0
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.71	23.75	23.78	
Channel				630500	633332	636166	25.0
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	23.72	23.80	23.72	
Channel				630334	633332	636332	25.0
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	23.74	23.79	23.74	



<FR1 n78_Ant Main_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		13.78		
100	PI/2 BPSK	1	137		13.61		14.0
100	PI/2 BPSK	1	271		13.58		
100	PI/2 BPSK	135	0		13.51		
100	PI/2 BPSK	135	69		13.57		14.0
100	PI/2 BPSK	135	138		13.55		14.0
100	PI/2 BPSK	270	0		13.59		
100	QPSK	1	1		13.42		
100	QPSK	1	137		13.45		14.0
100	QPSK	1	271		13.67		
100	QPSK	135	0		13.50		
100	QPSK	135	69		13.57		14.0
100	QPSK	135	138		13.55		14.0
100	QPSK	270	0		13.59		
100	16QAM	1	1		13.48		
100	64QAM	1	1		13.70		14.0
100	256QAM	1	1		13.59		14.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	13.36	13.37	13.32	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	13.35	13.38	13.30	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	13.30	13.34	13.23	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	13.36	13.41	13.23	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	13.30	13.34	13.32	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	13.33	13.35	13.33	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	13.34	13.36	13.30	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	13.35	13.32	13.31	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	13.37	13.34	13.23	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	13.29	13.37	13.31	



<FR1 n78_Ant MIMO2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		15.30		
100	PI/2 BPSK	1	137		15.05		16.0
100	PI/2 BPSK	1	271		15.19		
100	PI/2 BPSK	135	0		15.05		
100	PI/2 BPSK	135	69		15.11		16.0
100	PI/2 BPSK	135	138		15.07		16.0
100	PI/2 BPSK	270	0		14.99		
100	QPSK	1	1		15.02		
100	QPSK	1	137		15.06		16.0
100	QPSK	1	271		15.12		
100	QPSK	135	0		15.03		
100	QPSK	135	69		14.99		16.0
100	QPSK	135	138		15.02		16.0
100	QPSK	270	0		14.97		
100	16QAM	1	1		15.13		
100	64QAM	1	1		15.20		16.0
100	256QAM	1	1		14.82		16.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	14.75	14.88	14.79	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	14.69	14.90	14.74	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	14.68	14.86	14.75	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	14.68	14.89	14.78	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	14.75	14.82	14.74	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	14.72	14.90	14.82	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	14.70	14.83	14.74	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	14.76	14.83	14.79	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	14.70	14.89	14.83	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	14.68	14.81	14.79	



<FR1 n78_Ant MIMO1_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		17.24		
100	PI/2 BPSK	1	137		17.11		18.5
100	PI/2 BPSK	1	271		17.04		
100	PI/2 BPSK	135	0		16.86		
100	PI/2 BPSK	135	69		17.20		18.5
100	PI/2 BPSK	135	138		17.19		18.5
100	PI/2 BPSK	270	0		17.07		
100	QPSK	1	1		16.79		
100	QPSK	1	137		17.00		18.5
100	QPSK	1	271		17.16		
100	QPSK	135	0		16.87		
100	QPSK	135	69		17.05		18.5
100	QPSK	135	138		17.17		18.5
100	QPSK	270	0		17.05		
100	16QAM	1	1		16.65		
100	64QAM	1	1		16.99		18.5
100	256QAM	1	1		16.80		18.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	17.22	17.22	17.21	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	17.21	17.20	17.16	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	17.06	17.03	17.15	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	17.19	17.16	17.14	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	17.18	17.06	17.17	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	17.02	17.19	17.09	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	17.04	17.06	17.01	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	17.04	17.19	17.18	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	17.10	17.18	17.16	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	17.11	17.04	17.05	



<FR1 n78_Ant Aux_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		15.25		
100	PI/2 BPSK	1	137		15.05		16.0
100	PI/2 BPSK	1	271		15.02		
100	PI/2 BPSK	135	0		15.06		
100	PI/2 BPSK	135	69		15.08		16.0
100	PI/2 BPSK	135	138		15.03		16.0
100	PI/2 BPSK	270	0		15.00		
100	QPSK	1	1		14.91		
100	QPSK	1	137		14.84		16.0
100	QPSK	1	271		14.90		
100	QPSK	135	0		14.82		
100	QPSK	135	69		14.82		16.0
100	QPSK	135	138		14.83		16.0
100	QPSK	270	0		14.84		
100	16QAM	1	1		15.15		
100	64QAM	1	1		15.16		16.0
100	256QAM	1	1		15.13		16.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	14.66	14.83	14.69	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	14.72	14.79	14.72	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	14.64	14.79	14.68	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	14.72	14.77	14.72	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	14.72	14.78	14.68	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	14.71	14.76	14.68	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	14.66	14.81	14.70	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	14.66	14.77	14.70	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	14.71	14.73	14.72	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	14.64	14.82	14.75	



<FR1 n78_HPUE_Ant Main_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		26.27		
100	PI/2 BPSK	1	137		26.25		27.5
100	PI/2 BPSK	1	271		26.04		
100	PI/2 BPSK	135	0		26.01		
100	PI/2 BPSK	135	69		26.13		27.0
100	PI/2 BPSK	135	138		26.08		27.5
100	PI/2 BPSK	270	0		26.20		
100	QPSK	1	1		26.14		
100	QPSK	1	137		26.20		27.5
100	QPSK	1	271		26.16		
100	QPSK	135	0		26.10		
100	QPSK	135	69		26.05		27.5
100	QPSK	135	138		26.14		27.5
100	QPSK	270	0		26.03		
100	16QAM	1	1		26.10		
100	64QAM	1	1		24.85		26.0
100	256QAM	1	1		22.75		24.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	26.25	26.26	26.26	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	26.24	26.06	26.11	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	26.19	26.22	26.22	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	26.17	26.21	26.23	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	26.22	26.15	26.13	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	26.09	26.20	26.07	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	26.23	26.26	26.19	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	26.12	26.25	26.14	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	26.22	26.08	26.23	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	26.23	26.08	26.25	



<FR1 n78_HPUE_Ant MIMO2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		26.40		
100	PI/2 BPSK	1	137		26.37		27.5
100	PI/2 BPSK	1	271		26.29		
100	PI/2 BPSK	135	0		25.59		
100	PI/2 BPSK	135	69		25.99		27.0
100	PI/2 BPSK	135	138		25.66		27.5
100	PI/2 BPSK	270	0		25.57		
100	QPSK	1	1		26.30		
100	QPSK	1	137		26.29		27.5
100	QPSK	1	271		26.38		
100	QPSK	135	0		25.17		
100	QPSK	135	69		26.14		26.5
100	QPSK	135	138		24.98		27.5
100	QPSK	270	0		24.96		
100	16QAM	1	1		25.23		
100	64QAM	1	1		23.79		26.5
100	256QAM	1	1		22.00		25.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	26.27	26.30	26.29	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	26.23	26.24	26.23	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	26.24	26.24	26.24	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	26.21	26.22	26.24	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	26.20	26.23	26.22	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	26.19	26.22	26.23	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	26.20	26.25	26.22	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	26.23	26.25	26.25	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	26.22	26.24	26.25	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	26.23	26.26	26.26	



<FR1 n78_HPUE_Ant Aux_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		26.62		
100	PI/2 BPSK	1	137		26.55		27.5
100	PI/2 BPSK	1	271		26.48		
100	PI/2 BPSK	135	0		26.04		
100	PI/2 BPSK	135	69		26.43		27.0
100	PI/2 BPSK	135	138		26.08		27.5
100	PI/2 BPSK	270	0		26.04		
100	QPSK	1	1		26.53		
100	QPSK	1	137		26.36		27.5
100	QPSK	1	271		26.54		
100	QPSK	135	0		25.57		
100	QPSK	135	69		26.49		26.5
100	QPSK	135	138		25.46		27.5
100	QPSK	270	0		25.51		
100	16QAM	1	1		25.69		
100	64QAM	1	1		24.09		25.0
100	256QAM	1	1		22.07		23.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	26.48	26.58	26.51	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	26.42	26.54	26.49	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	26.38	26.49	26.49	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	26.42	26.56	26.48	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	26.41	26.56	26.46	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	26.46	26.53	26.48	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	26.41	26.50	26.48	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	26.38	26.49	26.43	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	26.42	26.51	26.43	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	26.43	26.54	26.47	



<FR1 n78_HPUE_Ant Main_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		17.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		16.80		
100	PI/2 BPSK	1	137		16.64		17.0
100	PI/2 BPSK	1	271		16.68		
100	PI/2 BPSK	135	0		16.59		
100	PI/2 BPSK	135	69		16.66		17.0
100	PI/2 BPSK	135	138		16.61		17.0
100	PI/2 BPSK	270	0		16.63		
100	QPSK	1	1		16.52		
100	QPSK	1	137		16.63		17.0
100	QPSK	1	271		16.78		
100	QPSK	135	0		16.56		
100	QPSK	135	69		16.60		17.0
100	QPSK	135	138		16.61		17.0
100	QPSK	270	0		16.65		
100	16QAM	1	1		16.35		
100	64QAM	1	1		16.76		17.0
100	256QAM	1	1		16.78		17.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	16.35	16.42	16.28	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	16.43	16.43	16.30	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	16.42	16.49	16.28	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	16.34	16.41	16.29	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	16.33	16.43	16.31	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	16.40	16.45	16.34	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	16.39	16.42	16.36	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	16.33	16.43	16.35	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	16.38	16.43	16.28	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	16.36	16.50	16.38	



<FR1 n78_HPUE_Ant MIMO2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		18.21		
100	PI/2 BPSK	1	137		18.14		19.0
100	PI/2 BPSK	1	271		18.18		
100	PI/2 BPSK	135	0		18.09		
100	PI/2 BPSK	135	69		18.11		19.0
100	PI/2 BPSK	135	138		18.04		19.0
100	PI/2 BPSK	270	0		18.07		
100	QPSK	1	1		18.07		
100	QPSK	1	137		18.02		19.0
100	QPSK	1	271		18.08		
100	QPSK	135	0		18.01		
100	QPSK	135	69		18.07		19.0
100	QPSK	135	138		18.05		19.0
100	QPSK	270	0		18.06		
100	16QAM	1	1		18.03		
100	64QAM	1	1		18.11		19.0
100	256QAM	1	1		18.02		19.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	17.96	17.99	17.80	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	17.88	17.96	17.81	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	17.96	18.03	17.83	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	17.97	18.04	17.85	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	17.98	18.05	17.87	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	17.96	18.04	17.88	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	17.89	17.98	17.87	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	17.96	18.06	17.89	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	17.89	17.98	17.88	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	17.96	18.04	17.90	



<FR1 n78_HPUE_Ant MIMO1_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		20.38		21.5
100	PI/2 BPSK	1	137		20.02		
100	PI/2 BPSK	1	271		20.08		
100	PI/2 BPSK	135	0		19.83		21.5
100	PI/2 BPSK	135	69		20.10		21.5
100	PI/2 BPSK	135	138		20.08		21.5
100	PI/2 BPSK	270	0		19.91		
100	QPSK	1	1		19.69		21.5
100	QPSK	1	137		20.01		
100	QPSK	1	271		20.36		
100	QPSK	135	0		19.86		21.5
100	QPSK	135	69		19.88		21.5
100	QPSK	135	138		20.06		21.5
100	QPSK	270	0		19.90		
100	16QAM	1	1		19.92		21.5
100	64QAM	1	1		19.86		21.5
100	256QAM	1	1		19.74		21.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	19.55	19.65	19.64	21.5
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	19.52	19.62	19.65	21.5
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	19.54	19.71	19.56	21.5
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	19.57	19.68	19.62	21.5
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	19.50	19.69	19.60	21.5
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	19.60	19.64	19.57	21.5
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	19.58	19.65	19.58	21.5
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	19.57	19.63	19.58	21.5
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	19.58	19.64	19.57	21.5
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	19.50	19.71	19.58	21.5



<FR1 n78_HPUE_Ant Aux_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		18.30		
100	PI/2 BPSK	1	137		17.94		19.0
100	PI/2 BPSK	1	271		18.00		
100	PI/2 BPSK	135	0		17.94		
100	PI/2 BPSK	135	69		17.96		19.0
100	PI/2 BPSK	135	138		17.81		19.0
100	PI/2 BPSK	270	0		17.86		
100	QPSK	1	1		17.92		
100	QPSK	1	137		17.82		19.0
100	QPSK	1	271		17.86		
100	QPSK	135	0		17.77		
100	QPSK	135	69		17.76		19.0
100	QPSK	135	138		17.80		19.0
100	QPSK	270	0		17.90		
100	16QAM	1	1		18.23		
100	64QAM	1	1		18.20		19.0
100	256QAM	1	1		18.08		19.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	18.25	18.24	18.20	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	18.23	18.05	18.04	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	18.06	18.16	18.10	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	18.08	18.04	18.01	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	18.12	18.22	18.02	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	18.07	18.05	18.20	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	18.16	18.13	18.17	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	18.20	18.16	18.01	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	18.20	18.20	18.00	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	18.08	18.20	18.00	

<SAR test exclusion table>
General Note:

1. The below table, when the distance is < 50 mm exclusion threshold is "Ratio", when the distance is > 50 mm exclusion threshold is "mW"
2. Maximum power is the source-based time-average power and represents the maximum RF output power among production units
3. Per KDB 447498 D01v06, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
4. Per KDB 447498 D01v06, standalone SAR test exclusion threshold is applied; If the test separation distance is < 5mm, 5mm is used to determine SAR exclusion threshold.
5. Per KDB 447498 D01v06, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$
 - f(GHz) is the RF channel transmit frequency in GHz
 - Power and distance are rounded to the nearest mW and mm before calculation
 - The result is rounded to one decimal place for comparison
6. Per KDB 447498 D01v06, at 100 MHz to 6 GHz and for *test separation distances* > 50 mm, the SAR test exclusion threshold is determined according to the following
 - a) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · (f(MHz)/150)] mW, at 100 MHz to 1500 MHz
 - b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at > 1500 MHz and ≤ 6 GHz

<Main Ant>

Exposure Position	Wireless Interface	WCDMA Band V	WCDMA Band IV	WCDMA Band II	LTE Band 71/n71	LTE Band 12/n12	LTE Band 13/n13	LTE Band 14/n14	LTE Band 26/n26	LTE Band 66/n66	LTE Band 25/n25	LTE Band 30/n30	LTE Band 7/n7	LTE Band 41/n41	LTE Band 42	LTE Band 48/n48	FR1 Band n77	FR1 Band n78
	Calculated Frequency (MHz)	846	1750	1907	695	715	784	795	848	1779	1914	2312	2567	2690	3600	3700	3980	3800
	Maximum power (dBm)	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	23.0	25.0	27.5	22.0	22.0	27.5	27.5
	Maximum rated power(mW)	316.23	316.23	316.23	316.23	316.23	316.23	316.23	316.23	316.23	316.23	199.53	316.23	562.34	158.49	158.49	562.34	562.34
Bottom Side	Separation distance(mm)	7.2																
	exclusion threshold	40.4	58.1	60.7	36.6	37.1	38.9	39.2	40.5	58.6	60.8	42.1	70.4	128.1	41.8	42.3	155.8	152.3
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

<MIMO 2 Ant>

Exposure Position	Wireless Interface	LTE Band 66/n66	LTE Band 25/n25	LTE Band 30/n30	LTE Band 7/n7	LTE Band 41/n41	LTE Band 42	LTE Band 43	LTE Band 48/n48	FR1 Band n77	FR1 Band n78
	Calculated Frequency (MHz)	1779	1914	2312	2567	2690	3600	3800	3700	3980	3800
	Maximum power (dBm)	24.0	24.0	23.0	24.0	27.5	22.0	22.0	22.0	27.5	27.5
	Maximum rated power(mW)	251.19	251.19	199.53	251.19	562.34	158.49	158.49	158.49	562.34	562.34
Bottom Side	Separation distance(mm)	6.3									
	exclusion threshold	53.2	55.2	48.2	63.9	146.4	47.7	49.0	48.4	178.1	174.0
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

<MIMO 1 Ant>

Exposure Position	Wireless Interface	LTE Band n41	LTE Band n48	FR1 Band n77	FR1 Band n78
	Calculated Frequency (MHz)	2690	3700	3980	3800
	Maximum power (dBm)	21.5	18.0	21.5	21.5
	Maximum rated power(mW)	141.25	63.10	141.25	141.25
Bottom Side	Separation distance(mm)	6.3			
	exclusion threshold	36.8	19.3	44.7	43.7
	Testing required?	Yes	Yes	Yes	Yes

<Aux Ant>

Exposure Position	Wireless Interface	LTE Band n41	LTE Band n48	FR1 Band n77	FR1 Band n78
	Calculated Frequency (MHz)	2690	3700	3980	3800
	Maximum power (dBm)	27.5	22.0	27.5	27.5
	Maximum rated power(mW)	562.34	158.49	562.34	562.34
Bottom Side	Separation distance(mm)	7.2			
	exclusion threshold	128.1	42.3	155.8	152.3
	Testing required?	Yes	Yes	Yes	Yes

13. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - c. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix $63.3\%/62.9\% = 1.006$ is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.

UMTS Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4/B5/B12/B17/B26/B38/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE band 2/4/5/17/38 SAR test was covered by Band 25/66/26/12/41; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. The maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion.
 - b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

5G NR Note:

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below:
 - a. To start SAR test for the largest channel bandwidth for PI/2 BPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
 - b. For PI/2 BPSK with 100% RB allocation, SAR test is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
 - c. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is not $\frac{1}{2}$ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
 - d. Smaller bandwidth output power for each RB allocation configuration for this device is not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - e. For 5G FR1 n5/n12/n41/n71/n77, the maximum channel bandwidth does not support three non-overlapping channels in the frequency band, the middle channel of the group of overlapping channels were selected for testing.
 - f. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission
 - g. For NR FDD was establishing connections via a base station simulator to use for output power measurement and SAR testing
 - h. 5G FR1 n2/5/38/78 SAR test was covered by 5G FR1 n25//26/41; due to the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band, and the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

13.1 Body SAR

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	9400	1880	AWAN	17.78	18.00	1.052	-0.12	0.974	1.025
	WCDMA II	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	9262	1852.4	AWAN	17.71	18.00	1.069	0.07	0.884	0.945
	WCDMA II	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	9538	1907.6	AWAN	17.77	18.00	1.054	-0.02	0.986	1.040
	WCDMA II	RMC 12.2Kbps	Bottom Side	22mm	Main	OFF	9400	1880	AWAN	23.77	25.00	1.327	0.16	0.364	0.483
1	WCDMA II	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	9538	1907.6	AMP	17.77	18.00	1.054	-0.02	0.991	1.045
	WCDMA II	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	9262	1852.4	AMP	17.71	18.00	1.069	0.01	0.963	1.029
	WCDMA II	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	9400	1880	AMP	17.78	18.00	1.052	0.08	0.826	0.869
	WCDMA IV	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	1413	1732.6	AWAN	17.75	18.50	1.189	0.17	0.887	1.054
	WCDMA IV	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	1312	1712.4	AWAN	17.74	18.50	1.191	-0.01	0.852	1.015
	WCDMA IV	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	1513	1752.6	AWAN	17.64	18.50	1.219	0	0.821	1.001
	WCDMA IV	RMC 12.2Kbps	Bottom Side	22mm	Main	OFF	1413	1732.6	AWAN	23.80	25.00	1.318	0.03	0.353	0.465
2	WCDMA IV	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	1413	1732.6	AMP	17.75	18.50	1.189	-0.11	0.964	1.146
	WCDMA IV	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	1312	1712.4	AMP	17.74	18.50	1.191	-0.15	0.937	1.116
	WCDMA IV	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	1513	1752.6	AMP	17.64	18.50	1.219	-0.02	0.882	1.075
3	WCDMA V	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	4182	836.4	AWAN	19.09	20.00	1.233	-0.05	0.483	0.596
	WCDMA V	RMC 12.2Kbps	Bottom Side	22mm	Main	OFF	4182	836.4	AWAN	23.96	25.00	1.271	-0.18	0.112	0.142
	WCDMA V	RMC 12.2Kbps	Bottom Side	0mm	Main	ON	4182	836.4	AMP	19.09	20.00	1.233	0.03	0.471	0.581



<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Cap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	20850	2510	AWAN	14.22	15.00	1.197	0.1	0.410	0.491
	LTE Band 7	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	20850	2510	AWAN	13.24	14.00	1.191	-0.09	0.327	0.390
	LTE Band 7	20M	QPSK	1	0	Bottom Side	22mm	Main	OFF	20850	2510	AWAN	23.52	25.00	1.406	-0.18	0.145	0.204
	LTE Band 7	20M	QPSK	50	0	Bottom Side	22mm	Main	OFF	20850	2510	AWAN	22.80	24.00	1.318	-0.06	0.123	0.162
	LTE Band 7C	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	20850+21048	2510	AWAN	14.18	15.00	1.208	0.08	0.398	0.481
	LTE Band 7	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	20850	2510	AMP	14.22	15.00	1.197	0.11	0.370	0.443
	LTE Band 7	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	21100	2535	AWAN	17.60	18.00	1.096	0.03	0.948	1.039
	LTE Band 7	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	20850	2510	AWAN	17.48	18.00	1.127	0.1	0.934	1.053
	LTE Band 7	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	21350	2560	AWAN	17.50	18.00	1.122	0.16	0.853	0.957
	LTE Band 7	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	21100	2535	AWAN	17.56	18.00	1.107	-0.06	0.901	0.997
4	LTE Band 7	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	20850	2510	AWAN	17.44	18.00	1.138	0.19	0.931	1.059
	LTE Band 7	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	21350	2560	AWAN	17.51	18.00	1.119	-0.16	0.850	0.952
	LTE Band 7	20M	QPSK	100	0	Bottom Side	0mm	MIMO2	ON	21100	2535	AWAN	17.50	18.00	1.122	0.05	0.850	0.954
	LTE Band 7	20M	QPSK	1	0	Bottom Side	14mm	MIMO2	OFF	21100	2535	AWAN	22.62	24.00	1.374	-0.15	0.493	0.677
	LTE Band 7	20M	QPSK	50	0	Bottom Side	14mm	MIMO2	OFF	21100	2535	AWAN	21.52	23.00	1.406	0.16	0.365	0.513
	LTE Band 7	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	20850	2510	AMP	17.44	18.00	1.138	-0.1	0.783	0.891
	LTE Band 7	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	21100	2535	AMP	17.56	18.00	1.107	0.01	0.762	0.843
	LTE Band 7	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	21350	2560	AMP	17.51	18.00	1.119	-0.04	0.767	0.859
	LTE Band 12	10M	QPSK	1	0	Bottom Side	0mm	Main	ON	23095	707.5	AWAN	19.87	21.00	1.297	0.12	0.407	0.528
	LTE Band 12	10M	QPSK	25	0	Bottom Side	0mm	Main	ON	23095	707.5	AWAN	18.60	20.00	1.380	0.07	0.323	0.446
	LTE Band 12	10M	QPSK	1	0	Bottom Side	22mm	Main	OFF	23095	707.5	AWAN	23.67	25.00	1.358	0	0.079	0.107
	LTE Band 12	10M	QPSK	25	0	Bottom Side	22mm	Main	OFF	23095	707.5	AWAN	22.94	24.00	1.276	-0.03	0.064	0.082
5	LTE Band 12	10M	QPSK	1	0	Bottom Side	0mm	Main	ON	23095	707.5	AMP	19.87	21.00	1.297	-0.06	0.412	0.534
	LTE Band 13	10M	QPSK	1	0	Bottom Side	0mm	Main	ON	23230	782	AWAN	20.76	21.50	1.186	-0.03	0.836	0.991
	LTE Band 13	10M	QPSK	25	0	Bottom Side	0mm	Main	ON	23230	782	AWAN	19.61	20.50	1.227	0.02	0.669	0.821
	LTE Band 13	10M	QPSK	50	0	Bottom Side	0mm	Main	ON	23230	782	AWAN	19.42	20.50	1.282	0.12	0.662	0.849
	LTE Band 13	10M	QPSK	1	0	Bottom Side	22mm	Main	OFF	23230	782	AWAN	23.72	25.00	1.343	0	0.157	0.211
	LTE Band 13	10M	QPSK	25	0	Bottom Side	22mm	Main	OFF	23230	782	AWAN	23.06	24.00	1.242	-0.1	0.128	0.159
6	LTE Band 13	10M	QPSK	1	0	Bottom Side	0mm	Main	ON	23230	782	AMP	20.76	21.50	1.186	-0.14	0.905	1.073
	LTE Band 14	10M	QPSK	1	0	Bottom Side	0mm	Main	ON	23330	793	AWAN	20.49	21.50	1.262	0.08	0.701	0.885
	LTE Band 14	10M	QPSK	25	0	Bottom Side	0mm	Main	ON	23330	793	AWAN	19.02	20.50	1.406	0.01	0.548	0.771
	LTE Band 14	10M	QPSK	50	0	Bottom Side	0mm	Main	ON	23330	793	AWAN	19.08	20.50	1.387	0.03	0.544	0.754
	LTE Band 14	10M	QPSK	1	0	Bottom Side	22mm	Main	OFF	23330	793	AWAN	23.70	25.00	1.349	0.1	0.142	0.192
	LTE Band 14	10M	QPSK	25	0	Bottom Side	22mm	Main	OFF	23330	793	AWAN	23.00	24.00	1.259	-0.18	0.113	0.142
7	LTE Band 14	10M	QPSK	1	0	Bottom Side	0mm	Main	ON	23330	793	AMP	20.49	21.50	1.262	-0.1	0.794	1.002



FCC SAR TEST REPORT

Report No. : FA482101

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	26590	1905	AWAN	17.53	18.00	1.114	-0.02	0.859	0.957
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	26140	1860	AWAN	17.38	18.00	1.153	-0.08	0.732	0.844
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	26340	1880	AWAN	17.35	18.00	1.161	-0.04	0.802	0.931
	LTE Band 25	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	26590	1905	AWAN	16.46	17.00	1.132	0.14	0.711	0.805
	LTE Band 25	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	26140	1860	AWAN	16.45	17.00	1.135	0.05	0.606	0.688
	LTE Band 25	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	26340	1880	AWAN	16.44	17.00	1.138	0.03	0.664	0.755
	LTE Band 25	20M	QPSK	100	0	Bottom Side	0mm	Main	ON	26590	1905	AWAN	16.40	17.00	1.148	0.13	0.699	0.803
	LTE Band 25	20M	QPSK	1	0	Bottom Side	22mm	Main	OFF	26590	1905	AWAN	23.33	25.00	1.469	-0.13	0.122	0.179
	LTE Band 25	20M	QPSK	50	0	Bottom Side	22mm	Main	OFF	26590	1905	AWAN	22.64	24.00	1.368	0.12	0.096	0.131
	LTE Band 2C	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	18900+18702	1880	AWAN	17.33	18.00	1.167	-0.17	0.733	0.855
	LTE Band 2C	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	18700+18898	1860	AWAN	17.12	18.00	1.225	-0.03	0.681	0.834
	LTE Band 2C	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	19100+18902	1900	AWAN	17.24	18.00	1.191	0.14	0.782	0.932
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	26590	1905	AMP	17.53	18.00	1.114	0.14	0.711	0.792
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	26140	1860	AMP	17.38	18.00	1.153	0.01	0.701	0.809
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	26340	1880	AMP	17.35	18.00	1.161	0.05	0.768	0.892
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	26340	1880	AWAN	17.59	18.00	1.099	-0.05	0.973	1.069
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	26140	1860	AWAN	17.56	18.00	1.107	-0.05	1.030	1.140
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	26590	1905	AWAN	17.56	18.00	1.107	-0.14	0.916	1.014
	LTE Band 25	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	26340	1880	AWAN	17.58	18.00	1.102	-0.15	0.940	1.035
	LTE Band 25	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	26140	1860	AWAN	17.55	18.00	1.109	-0.12	1.000	1.109
	LTE Band 25	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	26590	1905	AWAN	17.51	18.00	1.119	-0.17	0.910	1.019
	LTE Band 25	20M	QPSK	100	0	Bottom Side	0mm	MIMO2	ON	26340	1880	AWAN	17.50	18.00	1.122	0.08	0.954	1.070
	LTE Band 25	20M	QPSK	1	0	Bottom Side	14mm	MIMO2	OFF	26340	1880	AWAN	22.48	24.00	1.419	-0.11	0.417	0.592
	LTE Band 25	20M	QPSK	50	0	Bottom Side	14mm	MIMO2	OFF	26340	1880	AWAN	21.58	23.00	1.387	-0.01	0.358	0.496
8	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	26140	1860	AMP	17.56	18.00	1.107	-0.14	1.060	1.173
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	26340	1880	AMP	17.59	18.00	1.099	0.15	1.040	1.143
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	26590	1905	AMP	17.56	18.00	1.107	0.09	1.000	1.107
	LTE Band 26	15M	QPSK	1	0	Bottom Side	0mm	Main	ON	26865	831.5	AWAN	20.29	20.50	1.050	0.08	0.440	0.462
	LTE Band 26	15M	QPSK	36	0	Bottom Side	0mm	Main	ON	26865	831.5	AWAN	19.18	19.50	1.076	0.01	0.350	0.377
	LTE Band 26	15M	QPSK	1	0	Bottom Side	22mm	Main	OFF	26865	831.5	AWAN	23.47	25.00	1.422	0.03	0.106	0.151
	LTE Band 26	15M	QPSK	36	0	Bottom Side	22mm	Main	OFF	26865	831.5	AWAN	22.75	24.00	1.334	-0.08	0.087	0.116
	LTE Band 5B	10M	QPSK	1	0	Bottom Side	0mm	Main	ON	20475+20574	831.5	AWAN	20.08	20.50	1.102	0.01	0.368	0.405
9	LTE Band 26	15M	QPSK	1	0	Bottom Side	0mm	Main	ON	26865	831.5	AMP	20.29	20.50	1.050	-0.14	0.630	0.661
	LTE Band 30	10M	QPSK	1	0	Bottom Side	0mm	Main	ON	27710	2310	AWAN	14.77	15.50	1.183	-0.17	0.474	0.561
	LTE Band 30	10M	QPSK	25	0	Bottom Side	0mm	Main	ON	27710	2310	AWAN	13.81	14.50	1.172	-0.03	0.377	0.442
	LTE Band 30	10M	QPSK	1	0	Bottom Side	22mm	Main	OFF	27710	2310	AWAN	21.50	23.00	1.413	-0.15	0.126	0.178
	LTE Band 30	10M	QPSK	25	0	Bottom Side	22mm	Main	OFF	27710	2310	AWAN	20.73	22.00	1.340	-0.12	0.100	0.134
	LTE Band 30	10M	QPSK	1	0	Bottom Side	0mm	Main	ON	27710	2310	AMP	14.77	15.50	1.183	0.15	0.457	0.541
10	LTE Band 30	10M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	27710	2310	AWAN	18.13	18.50	1.089	-0.08	1.000	1.089
	LTE Band 30	10M	QPSK	25	0	Bottom Side	0mm	MIMO2	ON	27710	2310	AWAN	18.12	18.50	1.091	0.02	0.991	1.082
	LTE Band 30	10M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	27710	2310	AWAN	18.00	18.50	1.122	0	0.961	1.078
	LTE Band 30	10M	QPSK	1	0	Bottom Side	14mm	MIMO2	OFF	27710	2310	AWAN	21.36	23.00	1.459	-0.05	0.296	0.432
	LTE Band 30	10M	QPSK	25	0	Bottom Side	14mm	MIMO2	OFF	27710	2310	AWAN	20.37	22.00	1.455	-0.04	0.298	0.434
	LTE Band 30	10M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	27710	2310	AMP	18.13	18.50	1.089	0	0.866	0.943



FCC SAR TEST REPORT

Report No. : FA482101

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
11	LTE Band 41	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	40620	2593	AWAN	16.28	17.00	1.180	62.9	1.006	0.19	0.542	0.644
	LTE Band 41	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	39750	2506	AWAN	15.82	17.00	1.312	62.9	1.006	0.16	0.398	0.525
	LTE Band 41	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	40185	2549.5	AWAN	16.27	17.00	1.183	62.9	1.006	0.06	0.484	0.576
	LTE Band 41	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	41055	2636.5	AWAN	16.02	17.00	1.253	62.9	1.006	-0.02	0.489	0.616
	LTE Band 41	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	41490	2680	AWAN	15.87	17.00	1.297	62.9	1.006	0.07	0.426	0.556
	LTE Band 41	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	40620	2593	AWAN	15.07	16.00	1.239	62.9	1.006	-0.17	0.454	0.566
	LTE Band 41	20M	QPSK	1	0	Bottom Side	22mm	Main	OFF	40620	2593	AWAN	23.57	25.00	1.390	62.9	1.006	0.17	0.106	0.148
	LTE Band 41	20M	QPSK	50	0	Bottom Side	22mm	Main	OFF	40620	2593	AWAN	22.64	24.00	1.368	62.9	1.006	0.11	0.083	0.114
	LTE Band 41C	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	40620+40422	2593	AWAN	16.10	17.00	1.230	62.9	1.006	0.11	0.478	0.592
	LTE Band 41_HPUE	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	40620	2593	AWAN	18.20	19.00	1.202	42.9	1.009	0.08	0.530	0.643
	LTE Band 41_HPUE	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	39750	2506	AWAN	17.90	19.00	1.288	42.9	1.009	-0.03	0.365	0.474
	LTE Band 41_HPUE	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	40185	2549.5	AWAN	18.17	19.00	1.211	42.9	1.009	0.14	0.444	0.542
	LTE Band 41_HPUE	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	41055	2636.5	AWAN	18.18	19.00	1.208	42.9	1.009	0.11	0.448	0.546
	LTE Band 41_HPUE	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	41490	2680	AWAN	17.85	19.00	1.303	42.9	1.009	-0.05	0.391	0.514
	LTE Band 41	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	40620	2593	AMP	16.28	17.00	1.180	62.9	1.006	0.08	0.448	0.532
	LTE Band 41	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	40620	2593	AWAN	15.98	16.00	1.005	62.9	1.006	0.02	0.324	0.327
	LTE Band 41	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	40620	2593	AWAN	15.95	16.00	1.012	62.9	1.006	0.08	0.320	0.326
	LTE Band 41	20M	QPSK	1	0	Bottom Side	14mm	MIMO2	OFF	40620	2593	AWAN	22.53	24.00	1.403	62.9	1.006	-0.08	0.099	0.140
	LTE Band 41	20M	QPSK	50	0	Bottom Side	14mm	MIMO2	OFF	40620	2593	AWAN	21.74	23.00	1.337	62.9	1.006	-0.08	0.080	0.108
	LTE Band 41	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	40620	2593	AMP	15.98	16.00	1.005	62.9	1.006	-0.13	0.269	0.272
	LTE Band 42	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	42590	3500	AWAN	15.84	16.50	1.164	62.9	1.006	-0.18	0.510	0.597
12	LTE Band 42	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	42590	3500	AWAN	15.69	16.50	1.205	62.9	1.006	-0.14	0.536	0.650
	LTE Band 42	20M	QPSK	1	0	Bottom Side	22mm	Main	OFF	42590	3500	AWAN	20.67	22.00	1.358	62.9	1.006	0.11	0.065	0.089
	LTE Band 42	20M	QPSK	50	0	Bottom Side	22mm	Main	OFF	42590	3500	AWAN	19.56	21.00	1.393	62.9	1.006	-0.05	0.049	0.069
	LTE Band 42	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	42590	3500	AMP	15.69	16.50	1.205	62.9	1.006	0.18	0.475	0.576
	LTE Band 42	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	42190	3460	AWAN	17.41	18.00	1.146	62.9	1.006	0	0.404	0.466
	LTE Band 42	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	42190	3460	AWAN	16.52	17.00	1.117	62.9	1.006	0.15	0.329	0.370
	LTE Band 42	20M	QPSK	1	0	Bottom Side	14mm	MIMO2	OFF	42190	3460	AWAN	20.58	22.00	1.387	62.9	1.006	0.13	0.076	0.106
	LTE Band 42	20M	QPSK	50	0	Bottom Side	14mm	MIMO2	OFF	42190	3460	AWAN	19.64	21.00	1.368	62.9	1.006	-0.02	0.056	0.077
	LTE Band 42C	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	42190+42388	3460	AWAN	17.35	18.00	1.161	62.9	1.006	-0.08	0.371	0.433
	LTE Band 42	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	42190	3460	AMP	17.41	18.00	1.146	62.9	1.006	0.13	0.323	0.372
	LTE Band 43	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	44690	3710	AWAN	20.74	21.00	1.062	62.9	1.006	-0.08	0.961	1.026
	LTE Band 43	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	45090	3750	AWAN	20.54	21.00	1.112	62.9	1.006	0.05	0.911	1.019
13	LTE Band 43	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	45490	3790	AWAN	20.48	21.00	1.127	62.9	1.006	-0.16	0.967	1.097
	LTE Band 43	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	44690	3710	AWAN	19.77	20.00	1.054	62.9	1.006	-0.09	0.766	0.813
	LTE Band 43	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	45090	3750	AWAN	19.49	20.00	1.125	62.9	1.006	-0.08	0.730	0.826
	LTE Band 43	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	45490	3790	AWAN	19.47	20.00	1.130	62.9	1.006	0.13	0.745	0.847
	LTE Band 43	20M	QPSK	100	0	Bottom Side	0mm	MIMO2	ON	44690	3710	AWAN	19.66	20.00	1.081	62.9	1.006	0.12	0.811	0.882
	LTE Band 43	20M	QPSK	1	0	Bottom Side	14mm	MIMO2	OFF	44690	3710	AWAN	20.74	22.00	1.337	62.9	1.006	0.03	0.206	0.277
	LTE Band 43	20M	QPSK	50	0	Bottom Side	14mm	MIMO2	OFF	44690	3710	AWAN	19.77	21.00	1.327	62.9	1.006	0.18	0.168	0.224
	LTE Band 43C	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	44690+44888	3710	AWAN	20.68	21.00	1.076	62.9	1.006	-0.05	0.910	0.985
	LTE Band 43C	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	45090+44892	3750	AWAN	20.51	21.00	1.119	62.9	1.006	0.18	0.866	0.975
	LTE Band 43C	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	45490+45292	3790	AWAN	20.39	21.00	1.151	62.9	1.006	0.14	0.912	1.056
	LTE Band 43	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	45490	3790	AMP	20.48	21.00	1.127	62.9	1.006	0.12	0.648	0.735



FCC SAR TEST REPORT

Report No. : FA482101

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	55830	3609	AWAN	16.74	17.50	1.191	62.9	1.006	-0.15	0.539	0.646
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	55340	3560	AWAN	16.48	17.50	1.265	62.9	1.006	-0.19	0.486	0.618
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	56150	3641	AWAN	16.47	17.50	1.268	62.9	1.006	-0.13	0.552	0.704
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	56640	3690	AWAN	16.54	17.50	1.247	62.9	1.006	-0.08	0.578	0.725
	LTE Band 48	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	55830	3609	AWAN	16.69	17.50	1.205	62.9	1.006	-0.12	0.495	0.600
	LTE Band 48	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	55340	3560	AWAN	16.63	17.50	1.222	62.9	1.006	0.18	0.468	0.575
	LTE Band 48	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	56150	3641	AWAN	16.66	17.50	1.213	62.9	1.006	0.14	0.495	0.604
	LTE Band 48	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	56640	3690	AWAN	16.61	17.50	1.227	62.9	1.006	0.03	0.582	0.719
	LTE Band 48	20M	QPSK	1	0	Bottom Side	22mm	Main	OFF	55830	3609	AWAN	20.90	22.00	1.288	62.9	1.006	0.12	0.069	0.089
	LTE Band 48	20M	QPSK	50	0	Bottom Side	22mm	Main	OFF	55830	3609	AWAN	19.86	21.00	1.300	62.9	1.006	0.02	0.071	0.093
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	56640	3690	AMP	16.54	17.50	1.247	62.9	1.006	-0.05	0.542	0.680
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	55340	3560	AMP	16.48	17.50	1.265	62.9	1.006	-0.05	0.456	0.580
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	55830	3609	AMP	16.74	17.50	1.191	62.9	1.006	0.06	0.505	0.605
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	56150	3641	AMP	16.47	17.50	1.268	62.9	1.006	0.01	0.518	0.661
14	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	56640	3690	AWAN	20.63	21.00	1.089	62.9	1.006	-0.16	0.972	1.065
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	55340	3560	AWAN	20.52	21.00	1.117	62.9	1.006	-0.17	0.748	0.840
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	55830	3609	AWAN	20.56	21.00	1.107	62.9	1.006	0.02	0.768	0.855
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	56150	3641	AWAN	20.53	21.00	1.114	62.9	1.006	-0.11	0.859	0.963
	LTE Band 48	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	56640	3690	AWAN	19.65	20.00	1.084	62.9	1.006	0.18	0.774	0.844
	LTE Band 48	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	55340	3560	AWAN	19.52	20.00	1.117	62.9	1.006	0.16	0.594	0.667
	LTE Band 48	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	55830	3609	AWAN	19.55	20.00	1.109	62.9	1.006	0.19	0.621	0.693
	LTE Band 48	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	56150	3641	AWAN	19.49	20.00	1.125	62.9	1.006	0.13	0.701	0.793
	LTE Band 48	20M	QPSK	100	0	Bottom Side	0mm	MIMO2	ON	56640	3690	AWAN	19.61	20.00	1.094	62.9	1.006	-0.03	0.765	0.842
	LTE Band 48	20M	QPSK	1	0	Bottom Side	14mm	MIMO2	OFF	56640	3690	AWAN	20.63	22.00	1.371	62.9	1.006	-0.18	0.185	0.255
	LTE Band 48	20M	QPSK	50	0	Bottom Side	14mm	MIMO2	OFF	56640	3690	AWAN	19.65	21.00	1.365	62.9	1.006	-0.06	0.151	0.207
	LTE Band 48C	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	56442+56640	3670	AWAN	20.55	21.00	1.109	62.9	1.006	-0.17	0.942	1.051
	LTE Band 48C	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	55340+55538	3560	AWAN	20.39	21.00	1.151	62.9	1.006	0.17	0.698	0.808
	LTE Band 48C	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	55632+55830	3589	AWAN	20.42	21.00	1.143	62.9	1.006	-0.05	0.748	0.860
	LTE Band 48C	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	55952+56150	3621	AWAN	20.44	21.00	1.138	62.9	1.006	0.01	0.829	0.949
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	56640	3690	AMP	20.63	21.00	1.089	62.9	1.006	0.17	0.936	1.025
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	55340	3560	AMP	20.52	21.00	1.117	62.9	1.006	-0.15	0.876	0.984
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	56150	3641	AMP	20.53	21.00	1.114	62.9	1.006	-0.08	0.793	0.889
	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	55830	3609	AMP	20.56	21.00	1.107	62.9	1.006	-0.04	0.696	0.775



FCC SAR TEST REPORT

Report No. : FA482101

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	132322	1745	AWAN	18.06	18.50	1.107		1.000	-0.01	0.938	1.038
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	132072	1720	AWAN	17.92	18.50	1.143		1.000	-0.08	0.899	1.027
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	132572	1770	AWAN	17.93	18.50	1.140		1.000	0.12	0.841	0.959
	LTE Band 66	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	132322	1745	AWAN	16.91	17.50	1.146		1.000	-0.07	0.740	0.848
	LTE Band 66	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	132072	1720	AWAN	16.90	17.50	1.148		1.000	-0.05	0.709	0.814
	LTE Band 66	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	132572	1770	AWAN	16.90	17.50	1.148		1.000	-0.04	0.663	0.761
	LTE Band 66	20M	QPSK	100	0	Bottom Side	0mm	Main	ON	132322	1745	AWAN	16.85	17.50	1.161		1.000	-0.07	0.728	0.846
	LTE Band 66	20M	QPSK	1	0	Bottom Side	22mm	Main	OFF	132322	1745	AWAN	23.48	25.00	1.419		1.000	0.01	0.377	0.535
	LTE Band 66	20M	QPSK	50	0	Bottom Side	22mm	Main	OFF	132322	1745	AWAN	22.78	24.00	1.324		1.000	-0.11	0.264	0.350
	LTE Band 66B	15M	QPSK	1	0	Bottom Side	0mm	Main	ON	132229+132322	1735.7	AWAN	17.98	18.50	1.127		1.000	0.04	0.868	0.978
	LTE Band 66B	15M	QPSK	1	0	Bottom Side	0mm	Main	ON	132047+132140	1717.5	AWAN	17.84	18.50	1.164		1.000	-0.01	0.819	0.953
	LTE Band 66B	15M	QPSK	1	0	Bottom Side	0mm	Main	ON	132504+132597	1763.2	AWAN	17.77	18.50	1.183		1.000	-0.08	0.761	0.900
	LTE Band 66C	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	132322+132124	1745	AWAN	18.01	18.50	1.119		1.000	0.05	0.858	0.960
	LTE Band 66C	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	132072+132270	1720	AWAN	17.88	18.50	1.153		1.000	0.06	0.829	0.956
	LTE Band 66C	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	132572+132374	1770	AWAN	17.81	18.50	1.172		1.000	-0.09	0.781	0.915
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	132322	1745	AMP	18.06	18.50	1.107		1.000	0.01	1.000	1.107
15	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	132072	1720	AMP	17.92	18.50	1.143		1.000	0.05	0.985	1.126
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	132572	1770	AMP	17.93	18.50	1.140		1.000	0.15	0.893	1.018
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	132322	1745	AWAN	17.03	17.50	1.114		1.000	0.07	0.836	0.932
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	132072	1720	AWAN	16.99	17.50	1.125		1.000	-0.08	0.748	0.841
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	132572	1770	AWAN	16.95	17.50	1.135		1.000	-0.05	0.685	0.777
	LTE Band 66	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	132322	1745	AWAN	17.00	17.50	1.122		1.000	-0.18	0.822	0.922
	LTE Band 66	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	132072	1720	AWAN	16.89	17.50	1.151		1.000	-0.08	0.765	0.880
	LTE Band 66	20M	QPSK	50	0	Bottom Side	0mm	MIMO2	ON	132572	1770	AWAN	16.94	17.50	1.138		1.000	0.18	0.691	0.786
	LTE Band 66	20M	QPSK	100	0	Bottom Side	0mm	MIMO2	ON	132322	1745	AWAN	16.92	17.50	1.143		1.000	0.1	0.814	0.930
	LTE Band 66	20M	QPSK	1	0	Bottom Side	14mm	MIMO2	OFF	132322	1745	AWAN	22.58	24.00	1.387		1.000	-0.09	0.460	0.638
	LTE Band 66	20M	QPSK	50	0	Bottom Side	14mm	MIMO2	OFF	132322	1745	AWAN	21.52	23.00	1.406		1.000	0	0.416	0.585
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	132322	1745	AMP	17.03	17.50	1.114		1.000	-0.03	0.956	1.065
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	132072	1720	AMP	16.99	17.50	1.125		1.000	0.02	0.892	1.003
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	132572	1770	AMP	16.95	17.50	1.135		1.000	0.08	0.972	1.103
	LTE Band 71	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	133297	680.5	AWAN	20.09	20.50	1.099		1.000	-0.02	0.431	0.474
	LTE Band 71	20M	QPSK	50	0	Bottom Side	0mm	Main	ON	133297	680.5	AWAN	19.10	19.50	1.096		1.000	0.08	0.418	0.458
	LTE Band 71	20M	QPSK	1	0	Bottom Side	22mm	Main	OFF	133297	680.5	AWAN	23.74	25.00	1.337		1.000	0.03	0.083	0.111
	LTE Band 71	20M	QPSK	50	0	Bottom Side	22mm	Main	OFF	133297	680.5	AWAN	23.08	24.00	1.236		1.000	0.01	0.066	0.082
16	LTE Band 71	20M	QPSK	1	0	Bottom Side	0mm	Main	ON	133297	680.5	AMP	20.09	20.50	1.099		1.000	-0.06	0.458	0.503



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n7	40M	BPSK	1	1	Bottom Side	0mm	Main	ON	507000	2535	AWAN	14.70	15.00	1.072	-0.12	0.442	0.474
	FR1 n7	40M	BPSK	108	54	Bottom Side	0mm	Main	ON	507000	2535	AWAN	14.37	15.00	1.156	-0.1	0.486	0.562
	FR1 n7	40M	BPSK	1	1	Bottom Side	22mm	Main	OFF	507000	2535	AWAN	24.08	25.00	1.236	0.02	0.208	0.257
	FR1 n7	40M	BPSK	108	54	Bottom Side	22mm	Main	OFF	507000	2535	AWAN	23.82	25.00	1.312	0.11	0.240	0.315
	FR1 n7	40M	BPSK	108	54	Bottom Side	0mm	Main	ON	507000	2535	AMP	14.37	15.00	1.156	0.04	0.446	0.516
	FR1 n7	40M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	507000	2535	AWAN	17.66	18.00	1.081	0.04	0.793	0.858
17	FR1 n7	40M	BPSK	108	54	Bottom Side	0mm	MIMO2	ON	507000	2535	AWAN	17.45	18.00	1.135	0.14	0.865	0.982
	FR1 n7	40M	BPSK	216	0	Bottom Side	0mm	MIMO2	ON	507000	2535	AWAN	17.43	18.00	1.140	0.04	0.799	0.911
	FR1 n7	40M	BPSK	1	1	Bottom Side	14mm	MIMO2	OFF	507000	2535	AWAN	22.87	24.00	1.297	0.1	0.378	0.490
	FR1 n7	40M	BPSK	108	54	Bottom Side	14mm	MIMO2	OFF	507000	2535	AWAN	22.83	24.00	1.309	0.03	0.353	0.462
	FR1 n7	40M	BPSK	108	54	Bottom Side	0mm	MIMO2	ON	507000	2535	AMP	17.45	18.00	1.135	-0.13	0.597	0.678
	FR1 n12	15M	BPSK	1	1	Bottom Side	0mm	Main	ON	141500	707.5	AWAN	20.15	20.50	1.084	-0.1	0.393	0.426
18	FR1 n12	15M	BPSK	36	22	Bottom Side	0mm	Main	ON	141500	707.5	AWAN	19.82	20.50	1.169	-0.17	0.404	0.472
	FR1 n12	15M	BPSK	1	1	Bottom Side	22mm	Main	OFF	141500	707.5	AWAN	24.08	25.00	1.236	-0.18	0.117	0.145
	FR1 n12	15M	BPSK	36	22	Bottom Side	22mm	Main	OFF	141500	707.5	AWAN	23.80	25.00	1.318	0.11	0.110	0.145
	FR1 n12	15M	BPSK	36	22	Bottom Side	0mm	Main	ON	141500	707.5	AMP	19.82	20.50	1.169	0.04	0.396	0.463
	FR1 n13	10M	BPSK	1	1	Bottom Side	0mm	Main	ON	156400	782	AWAN	20.28	21.00	1.180	0.17	0.744	0.878
	FR1 n13	10M	BPSK	25	14	Bottom Side	0mm	Main	ON	156400	782	AWAN	20.15	21.00	1.216	-0.14	0.729	0.887
19	FR1 n13	10M	BPSK	50	0	Bottom Side	0mm	Main	ON	156400	782	AWAN	20.14	21.00	1.219	-0.19	0.763	0.930
	FR1 n13	10M	BPSK	1	1	Bottom Side	22mm	Main	OFF	156400	782	AWAN	23.84	25.00	1.306	0.17	0.202	0.264
	FR1 n13	10M	BPSK	25	14	Bottom Side	22mm	Main	OFF	156400	782	AWAN	23.60	25.00	1.380	-0.16	0.164	0.226
	FR1 n13	10M	BPSK	50	0	Bottom Side	0mm	Main	ON	156400	782	AMP	20.14	21.00	1.219	0.04	0.739	0.901
	FR1 n14	10M	BPSK	1	1	Bottom Side	0mm	Main	ON	158600	793	AWAN	20.59	21.00	1.099	-0.17	0.804	0.884
	FR1 n14	10M	BPSK	25	14	Bottom Side	0mm	Main	ON	158600	793	AWAN	20.32	21.00	1.169	0.02	0.763	0.892
	FR1 n14	10M	BPSK	50	0	Bottom Side	0mm	Main	ON	158600	793	AWAN	20.29	21.00	1.178	-0.07	0.759	0.894
	FR1 n14	10M	BPSK	1	1	Bottom Side	22mm	Main	OFF	158600	793	AWAN	24.06	25.00	1.242	-0.02	0.196	0.243
	FR1 n14	10M	BPSK	25	14	Bottom Side	22mm	Main	OFF	158600	793	AWAN	23.85	25.00	1.303	-0.07	0.157	0.205
20	FR1 n14	10M	BPSK	25	14	Bottom Side	0mm	Main	ON	158600	793	AMP	20.32	21.00	1.169	-0.05	0.776	0.908
	FR1 n25	40M	BPSK	1	1	Bottom Side	0mm	Main	ON	376500	1882.5	AWAN	17.40	18.50	1.288	0.03	0.793	1.022
	FR1 n25	40M	BPSK	108	54	Bottom Side	0mm	Main	ON	376500	1882.5	AWAN	17.22	18.50	1.343	-0.18	0.817	1.097
	FR1 n25	40M	BPSK	216	0	Bottom Side	0mm	Main	ON	376500	1882.5	AWAN	17.21	18.50	1.346	0.12	0.789	1.062
	FR1 n25	40M	BPSK	1	1	Bottom Side	22mm	Main	OFF	376500	1882.5	AWAN	24.01	25.00	1.256	0.07	0.136	0.171
	FR1 n25	40M	BPSK	108	54	Bottom Side	22mm	Main	OFF	376500	1882.5	AWAN	23.77	25.00	1.327	0.09	0.108	0.143
	FR1 n25	40M	BPSK	108	54	Bottom Side	0mm	Main	ON	376500	1882.5	AMP	17.22	18.50	1.343	0.04	0.797	1.070
	FR1 n25	40M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	376500	1882.5	AWAN	17.76	18.50	1.186	0.17	0.937	1.111
	FR1 n25	40M	BPSK	108	54	Bottom Side	0mm	MIMO2	ON	376500	1882.5	AWAN	17.45	18.50	1.274	0.12	0.863	1.099
	FR1 n25	40M	BPSK	216	0	Bottom Side	0mm	MIMO2	ON	376500	1882.5	AWAN	17.39	18.50	1.291	-0.11	0.858	1.108
	FR1 n25	40M	BPSK	1	1	Bottom Side	14mm	MIMO2	OFF	376500	1882.5	AWAN	23.51	24.00	1.119	0.16	0.499	0.559
	FR1 n25	40M	BPSK	108	54	Bottom Side	14mm	MIMO2	OFF	376500	1882.5	AWAN	23.41	24.00	1.146	-0.09	0.429	0.491
21	FR1 n25	40M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	376500	1882.5	AMP	17.76	18.50	1.186	-0.1	1.000	1.186
	FR1 n26	20M	BPSK	1	1	Bottom Side	0mm	Main	ON	166300	831.5	AWAN	20.00	20.00	1.000	-0.1	0.581	0.581
	FR1 n26	20M	BPSK	50	28	Bottom Side	0mm	Main	ON	166300	831.5	AWAN	19.77	20.00	1.054	0.01	0.592	0.624
	FR1 n26	20M	BPSK	1	1	Bottom Side	22mm	Main	OFF	166300	831.5	AWAN	23.86	25.00	1.300	-0.15	0.177	0.230
	FR1 n26	20M	BPSK	50	28	Bottom Side	22mm	Main	OFF	166300	831.5	AWAN	23.75	25.00	1.334	0.19	0.149	0.199
22	FR1 n26	20M	BPSK	50	28	Bottom Side	0mm	Main	ON	166300	831.5	AMP	19.77	20.00	1.054	-0.07	0.602	0.635



FCC SAR TEST REPORT

Report No. : FA482101

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n30	10M	BPSK	1	1	Bottom Side	0mm	Main	ON	462000	2310	AWAN	15.35	16.00	1.161	-0.14	0.544	0.632
	FR1 n30	10M	BPSK	25	14	Bottom Side	0mm	Main	ON	462000	2310	AWAN	15.04	16.00	1.247	-0.19	0.552	0.689
	FR1 n30	10M	BPSK	1	1	Bottom Side	22mm	Main	OFF	462000	2310	AWAN	21.61	23.00	1.377	-0.12	0.148	0.204
	FR1 n30	10M	BPSK	25	14	Bottom Side	22mm	Main	OFF	462000	2310	AWAN	21.40	23.00	1.445	0	0.117	0.169
	FR1 n30	10M	BPSK	25	14	Bottom Side	0mm	Main	ON	462000	2310	AMP	15.04	16.00	1.247	0.04	0.471	0.588
23	FR1 n30	10M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	462000	2310	AWAN	18.35	19.00	1.161	0.03	1.020	1.185
	FR1 n30	10M	BPSK	25	14	Bottom Side	0mm	MIMO2	ON	462000	2310	AWAN	18.26	19.00	1.186	0.07	0.980	1.162
	FR1 n30	10M	BPSK	50	0	Bottom Side	0mm	MIMO2	ON	462000	2310	AWAN	18.25	19.00	1.189	-0.18	0.982	1.167
	FR1 n30	10M	BPSK	1	1	Bottom Side	14mm	MIMO2	OFF	462000	2310	AWAN	21.60	23.00	1.380	-0.06	0.363	0.501
	FR1 n30	10M	BPSK	25	14	Bottom Side	14mm	MIMO2	OFF	462000	2310	AWAN	21.54	23.00	1.400	-0.15	0.365	0.511
	FR1 n30	10M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	462000	2310	AMP	18.35	19.00	1.161	-0.05	0.963	1.118
	FR1 n41	100M	BPSK	1	1	Bottom Side	0mm	Main	ON	518598	2592.99	AWAN	14.07	15.00	1.239	-0.02	0.498	0.617
	FR1 n41	100M	BPSK	135	69	Bottom Side	0mm	Main	ON	518598	2592.99	AWAN	13.82	15.00	1.312	-0.02	0.468	0.614
	FR1 n41	100M	BPSK	1	1	Bottom Side	22mm	Main	OFF	518598	2592.99	AWAN	23.54	25.00	1.400	0.18	0.151	0.211
	FR1 n41	100M	BPSK	135	69	Bottom Side	22mm	Main	OFF	518598	2592.99	AWAN	23.33	25.00	1.469	-0.08	0.117	0.172
	FR1 n41_HPUE	100M	BPSK	1	1	Bottom Side	0mm	Main	ON	518598	2592.99	AWAN	17.17	18.00	1.211	-0.06	0.498	0.603
	FR1 n41	100M	BPSK	1	1	Bottom Side	0mm	Main	ON	518598	2592.99	AMP	14.07	15.00	1.239	-0.08	0.455	0.564
24	FR1 n41	100M	BPSK	1	1	Bottom Side	0mm	MIMO1	OFF	518598	2592.99	AWAN	18.16	18.50	1.081	0.01	1.040	1.125
	FR1 n41	100M	BPSK	135	69	Bottom Side	0mm	MIMO1	OFF	518598	2592.99	AWAN	17.88	18.50	1.153	0.02	0.906	1.045
	FR1 n41	100M	BPSK	270	0	Bottom Side	0mm	MIMO1	OFF	518598	2592.99	AWAN	17.85	18.50	1.161	-0.16	0.962	1.117
	FR1 n41_HPUE	100M	BPSK	1	1	Bottom Side	0mm	MIMO1	OFF	518598	2592.99	AWAN	21.20	21.50	1.072	0.02	1.020	1.093
	FR1 n41	100M	BPSK	1	1	Bottom Side	0mm	MIMO1	OFF	518598	2592.99	AMP	18.16	18.50	1.081	-0.14	1.010	1.092
	FR1 n41	100M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	518598	2592.99	AWAN	13.39	14.00	1.151	0.04	0.316	0.364
	FR1 n41	100M	BPSK	135	69	Bottom Side	0mm	MIMO2	ON	518598	2592.99	AWAN	13.25	14.00	1.189	0.18	0.280	0.333
	FR1 n41	100M	BPSK	1	1	Bottom Side	14mm	MIMO2	OFF	518598	2592.99	AWAN	22.76	24.00	1.330	-0.07	0.182	0.242
	FR1 n41	100M	BPSK	135	69	Bottom Side	14mm	MIMO2	OFF	518598	2592.99	AWAN	22.70	24.00	1.349	0.04	0.147	0.198
	FR1 n41_HPUE	100M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	518598	2592.99	AWAN	16.48	17.00	1.127	-0.02	0.306	0.345
	FR1 n41	100M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	518598	2592.99	AMP	13.39	14.00	1.151	0.08	0.264	0.304
	FR1 n41	100M	BPSK	1	1	Bottom Side	0mm	Aux	ON	518598	2592.99	AWAN	16.44	17.00	1.138	-0.09	0.813	0.925
	FR1 n41	100M	BPSK	135	69	Bottom Side	0mm	Aux	ON	518598	2592.99	AWAN	16.25	17.00	1.189	0.02	0.674	0.801
	FR1 n41	100M	BPSK	270	0	Bottom Side	0mm	Aux	ON	518598	2592.99	AWAN	16.07	17.00	1.239	0	0.676	0.837
	FR1 n41	100M	BPSK	1	1	Bottom Side	13mm	Aux	OFF	518598	2592.99	AWAN	23.68	25.00	1.355	0.01	0.516	0.699
	FR1 n41	100M	BPSK	135	69	Bottom Side	13mm	Aux	OFF	518598	2592.99	AWAN	23.46	25.00	1.426	0.03	0.492	0.701
	FR1 n41_HPUE	100M	BPSK	1	1	Bottom Side	0mm	Aux	ON	518598	2592.99	AWAN	19.39	20.00	1.151	-0.02	0.801	0.922
	FR1 n41	100M	BPSK	1	1	Bottom Side	0mm	Aux	ON	518598	2592.99	AMP	16.44	17.00	1.138	-0.08	0.784	0.892



FCC SAR TEST REPORT

Report No. : FA482101

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n48	40M	BPSK	1	1	Bottom Side	0mm	Main	ON	641666	3624.99	AWAN	14.65	15.00	1.084	-0.13	0.484	0.525
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	Main	ON	641666	3624.99	AWAN	14.30	15.00	1.175	-0.06	0.507	0.596
	FR1 n48	40M	BPSK	1	1	Bottom Side	22mm	Main	OFF	641666	3624.99	AWAN	21.13	22.00	1.222	-0.11	0.064	0.078
	FR1 n48	40M	BPSK	50	28	Bottom Side	22mm	Main	OFF	641666	3624.99	AWAN	21.01	22.00	1.256	-0.17	0.066	0.083
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	Main	ON	641666	3624.99	AMP	14.30	15.00	1.175	0.04	0.437	0.513
	FR1 n48	40M	BPSK	1	1	Bottom Side	0mm	MIMO1	OFF	641666	3624.99	AWAN	17.94	18.00	1.014	-0.11	0.468	0.475
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	MIMO1	OFF	641666	3624.99	AWAN	17.85	18.00	1.035	0.12	0.384	0.397
	FR1 n48	40M	BPSK	1	1	Bottom Side	0mm	MIMO1	OFF	641666	3624.99	AMP	17.94	18.00	1.014	-0.04	0.550	0.558
	FR1 n48	40M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	641666	3624.99	AWAN	18.28	19.00	1.180	-0.16	0.700	0.826
	FR1 n48	40M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	638000	3570	AWAN	18.10	19.00	1.230	0.08	0.663	0.816
	FR1 n48	40M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	645332	3679.98	AWAN	18.25	19.00	1.189	-0.09	0.911	1.083
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	MIMO2	ON	641666	3624.99	AWAN	18.17	19.00	1.211	-0.17	0.756	0.915
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	MIMO2	ON	638000	3570	AWAN	17.94	19.00	1.276	-0.09	0.638	0.814
25	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	MIMO2	ON	645332	3679.98	AWAN	18.11	19.00	1.227	0.05	0.910	1.117
	FR1 n48	40M	BPSK	100	0	Bottom Side	0mm	MIMO2	ON	641666	3624.99	AWAN	18.17	19.00	1.211	-0.07	0.769	0.931
	FR1 n48	40M	BPSK	1	1	Bottom Side	14mm	MIMO2	OFF	641666	3624.99	AWAN	20.56	22.00	1.393	-0.11	0.211	0.294
	FR1 n48	40M	BPSK	50	28	Bottom Side	14mm	MIMO2	OFF	641666	3624.99	AWAN	20.46	22.00	1.426	-0.03	0.171	0.244
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	MIMO2	ON	645332	3679.98	AMP	18.11	19.00	1.227	0.07	0.837	1.027
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	MIMO2	ON	638000	3570	AMP	17.94	19.00	1.276	0.03	0.528	0.674
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	MIMO2	ON	641666	3624.99	AMP	18.17	19.00	1.211	0.04	0.681	0.824
	FR1 n48	40M	BPSK	1	1	Bottom Side	0mm	Aux	ON	641666	3624.99	AWAN	15.67	16.50	1.211	-0.17	0.531	0.643
	FR1 n48	40M	BPSK	1	1	Bottom Side	0mm	Aux	ON	638000	3570	AWAN	15.53	16.50	1.250	0.04	0.398	0.498
	FR1 n48	40M	BPSK	1	1	Bottom Side	0mm	Aux	ON	645332	3679.98	AWAN	15.58	16.50	1.236	0.03	0.566	0.700
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	Aux	ON	641666	3624.99	AWAN	15.50	16.50	1.259	-0.13	0.564	0.710
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	Aux	ON	638000	3570	AWAN	15.33	16.50	1.309	-0.1	0.423	0.554
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	Aux	ON	645332	3679.98	AWAN	15.37	16.50	1.297	-0.11	0.601	0.780
	FR1 n48	40M	BPSK	1	1	Bottom Side	13mm	Aux	OFF	641666	3624.99	AWAN	21.12	22.00	1.225	-0.13	0.198	0.242
	FR1 n48	40M	BPSK	50	28	Bottom Side	13mm	Aux	OFF	641666	3624.99	AWAN	21.01	22.00	1.256	0.06	0.275	0.345
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	Aux	ON	645332	3679.98	AMP	15.37	16.50	1.297	0.11	0.596	0.773
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	Aux	ON	638000	3570	AMP	15.33	16.50	1.309	0.02	0.546	0.715
	FR1 n48	40M	BPSK	50	28	Bottom Side	0mm	Aux	ON	641666	3624.99	AMP	15.50	16.50	1.259	0.03	0.618	0.778
	FR1 n66	40M	BPSK	1	1	Bottom Side	0mm	Main	ON	349000	1745	AWAN	17.75	18.50	1.189	0.04	0.876	1.041
	FR1 n66	40M	BPSK	108	54	Bottom Side	0mm	Main	ON	349000	1745	AWAN	17.66	18.50	1.213	0.04	0.835	1.013
	FR1 n66	40M	BPSK	216	0	Bottom Side	0mm	Main	ON	349000	1745	AWAN	17.69	18.50	1.205	0.07	0.842	1.015
	FR1 n66	40M	BPSK	1	1	Bottom Side	22mm	Main	OFF	349000	1745	AWAN	23.82	25.00	1.312	0.12	0.308	0.404
	FR1 n66	40M	BPSK	108	54	Bottom Side	22mm	Main	OFF	349000	1745	AWAN	23.71	25.00	1.346	-0.09	0.215	0.289
	FR1 n66	40M	BPSK	1	1	Bottom Side	0mm	Main	ON	349000	1745	AMP	17.75	18.50	1.189	-0.17	0.949	1.128
	FR1 n66	40M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	349000	1745	AWAN	18.09	18.50	1.099	0.13	0.853	0.937
	FR1 n66	40M	BPSK	108	54	Bottom Side	0mm	MIMO2	ON	349000	1745	AWAN	17.96	18.50	1.132	-0.11	0.926	1.049
	FR1 n66	40M	BPSK	216	0	Bottom Side	0mm	MIMO2	ON	349000	1745	AWAN	17.91	18.50	1.146	0.09	0.913	1.046
	FR1 n66	40M	BPSK	1	1	Bottom Side	14mm	MIMO2	OFF	349000	1745	AWAN	23.66	24.00	1.081	0.18	0.531	0.574
	FR1 n66	40M	BPSK	108	54	Bottom Side	14mm	MIMO2	OFF	349000	1745	AWAN	23.56	24.00	1.107	0.14	0.481	0.532
26	FR1 n66	40M	BPSK	108	54	Bottom Side	0mm	MIMO2	ON	349000	1745	AMP	17.96	18.50	1.132	0.07	1.010	1.144
	FR1 n71	20M	BPSK	1	1	Bottom Side	0mm	Main	ON	136100	680.5	AWAN	20.80	21.00	1.047	0.05	0.467	0.489
	FR1 n71	20M	BPSK	50	28	Bottom Side	0mm	Main	ON	136100	680.5	AWAN	20.70	21.00	1.072	0.04	0.472	0.506
	FR1 n71	20M	BPSK	1	1	Bottom Side	22mm	Main	OFF	136100	680.5	AWAN	24.28	25.00	1.180	-0.17	0.101	0.119
	FR1 n71	20M	BPSK	50	28	Bottom Side	22mm	Main	OFF	136100	680.5	AWAN	24.10	25.00	1.230	-0.05	0.080	0.098
27	FR1 n71	20M	BPSK	50	28	Bottom Side	0mm	Main	ON	136100	680.5	AMP	20.70	21.00	1.072	-0.07	0.499	0.535



FCC SAR TEST REPORT

Report No. : FA482101

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	Main	ON	656000	3840	AWAN	13.80	14.00	1.047	-0.1	0.340	0.356
	FR1 n77	100M	BPSK	135	69	Bottom Side	0mm	Main	ON	656000	3840	AWAN	13.70	14.00	1.072	0.05	0.328	0.351
	FR1 n77	100M	BPSK	1	1	Bottom Side	22mm	Main	OFF	656000	3840	AWAN	24.08	25.00	1.236	-0.03	0.225	0.278
	FR1 n77	100M	BPSK	135	69	Bottom Side	22mm	Main	OFF	656000	3840	AWAN	23.80	25.00	1.318	-0.15	0.174	0.229
	FR1 n77_HPUE	100M	BPSK	1	1	Bottom Side	0mm	Main	ON	656000	3840	AWAN	16.91	17.00	1.021	0.01	0.341	0.348
	FR1 n77	100M	BPSK	135	69	Bottom Side	0mm	Main	ON	656000	3840	AMP	13.70	14.00	1.072	0.07	0.330	0.354
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	MIMO1	OFF	656000	3840	AWAN	17.39	18.50	1.291	0.04	0.483	0.624
	FR1 n77	100M	BPSK	135	69	Bottom Side	0mm	MIMO1	OFF	656000	3840	AWAN	17.25	18.50	1.334	-0.18	0.413	0.551
	FR1 n77_HPUE	100M	BPSK	1	1	Bottom Side	0mm	MIMO1	OFF	656000	3840	AWAN	20.55	21.50	1.245	-0.01	0.480	0.597
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	MIMO1	OFF	656000	3840	AMP	17.39	18.50	1.291	0.16	0.477	0.616
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	656000	3840	AWAN	15.15	16.00	1.216	-0.01	0.414	0.504
	FR1 n77	100M	BPSK	135	69	Bottom Side	0mm	MIMO2	ON	656000	3840	AWAN	14.91	16.00	1.285	0	0.382	0.491
	FR1 n77	100M	BPSK	1	1	Bottom Side	14mm	MIMO2	OFF	656000	3840	AWAN	23.85	25.00	1.303	-0.01	0.360	0.469
	FR1 n77	100M	BPSK	135	69	Bottom Side	14mm	MIMO2	OFF	656000	3840	AWAN	23.72	25.00	1.343	-0.06	0.333	0.447
	FR1 n77_HPUE	100M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	656000	3840	AWAN	18.31	19.00	1.172	0.02	0.424	0.497
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	656000	3840	AMP	15.15	16.00	1.216	-0.09	0.259	0.315
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	Aux	ON	656000	3840	AWAN	15.31	16.00	1.172	0.08	0.286	0.335
	FR1 n77	100M	BPSK	135	69	Bottom Side	0mm	Aux	ON	656000	3840	AWAN	15.11	16.00	1.227	0.18	0.271	0.333
	FR1 n77	100M	BPSK	1	1	Bottom Side	13mm	Aux	OFF	656000	3840	AWAN	24.06	25.00	1.242	-0.17	0.268	0.333
	FR1 n77	100M	BPSK	135	69	Bottom Side	13mm	Aux	OFF	656000	3840	AWAN	23.95	25.00	1.274	-0.04	0.259	0.330
	FR1 n77_HPUE	100M	BPSK	1	1	Bottom Side	0mm	Aux	ON	656000	3840	AWAN	18.44	19.00	1.138	-0.04	0.294	0.334
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	Aux	ON	656000	3840	AMP	15.31	16.00	1.172	0	0.217	0.254
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	Main	ON	633332	3499.98	AWAN	13.85	14.00	1.035	-0.01	0.509	0.527
	FR1 n77	100M	BPSK	135	69	Bottom Side	0mm	Main	ON	633332	3499.98	AWAN	13.68	14.00	1.076	-0.01	0.431	0.464
	FR1 n77	100M	BPSK	1	1	Bottom Side	22mm	Main	OFF	633332	3499.98	AWAN	23.99	25.00	1.262	0.02	0.250	0.315
	FR1 n77	100M	BPSK	135	69	Bottom Side	22mm	Main	OFF	633332	3499.98	AWAN	23.73	25.00	1.340	-0.13	0.268	0.359
	FR1 n77_HPUE	100M	BPSK	1	1	Bottom Side	0mm	Main	ON	633332	3499.98	AWAN	16.95	17.00	1.012	-0.01	0.512	0.518
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	Main	ON	633332	3499.98	AMP	13.85	14.00	1.035	0.04	0.379	0.392
28	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	MIMO1	OFF	633332	3499.98	AWAN	17.42	18.50	1.282	-0.08	0.540	0.692
	FR1 n77	100M	BPSK	135	69	Bottom Side	0mm	MIMO1	OFF	633332	3499.98	AWAN	17.19	18.50	1.352	-0.15	0.453	0.612
	FR1 n77_HPUE	100M	BPSK	1	1	Bottom Side	0mm	MIMO1	OFF	633332	3499.98	AWAN	20.60	21.50	1.230	0.01	0.553	0.680
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	MIMO1	OFF	633332	3499.98	AMP	17.42	18.50	1.282	-0.02	0.430	0.551
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	633332	3499.98	AWAN	15.40	16.00	1.148	-0.01	0.431	0.495
	FR1 n77	100M	BPSK	135	69	Bottom Side	0mm	MIMO2	ON	633332	3499.98	AWAN	15.16	16.00	1.213	0.13	0.360	0.437
	FR1 n77	100M	BPSK	1	1	Bottom Side	14mm	MIMO2	OFF	633332	3499.98	AWAN	23.91	25.00	1.285	-0.11	0.222	0.285
	FR1 n77	100M	BPSK	135	69	Bottom Side	14mm	MIMO2	OFF	633332	3499.98	AWAN	23.73	25.00	1.340	-0.16	0.197	0.264
	FR1 n77_HPUE	100M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	633332	3499.98	AWAN	18.38	19.00	1.153	0.05	0.426	0.491
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	633332	3499.98	AMP	15.40	16.00	1.148	-0.06	0.217	0.249
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	Aux	ON	633332	3499.98	AWAN	15.42	16.00	1.143	0.02	0.571	0.653
	FR1 n77	100M	BPSK	135	69	Bottom Side	0mm	Aux	ON	633332	3499.98	AWAN	14.98	16.00	1.265	0.01	0.441	0.558
	FR1 n77	100M	BPSK	1	1	Bottom Side	13mm	Aux	OFF	633332	3499.98	AWAN	23.88	25.00	1.294	0.06	0.340	0.440
	FR1 n77	100M	BPSK	135	69	Bottom Side	13mm	Aux	OFF	633332	3499.98	AWAN	23.81	25.00	1.315	0.02	0.279	0.367
	FR1 n77_HPUE	100M	BPSK	1	1	Bottom Side	0mm	Aux	ON	633332	3499.98	AWAN	18.48	19.00	1.127	0	0.577	0.650
	FR1 n77	100M	BPSK	1	1	Bottom Side	0mm	Aux	ON	633332	3499.98	AMP	15.42	16.00	1.143	-0.16	0.298	0.341

13.2 Repeated SAR Measurement

No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna	Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	LTE Band 13	10M	QPSK	1	0	Bottom Side	0mm	Main	ON	23230	782	AMP	20.76	21.50	1.186			-0.14	0.905	-	1.073
2nd	LTE Band 13	10M	QPSK	1	0	Bottom Side	0mm	Main	ON	23230	782	AMP	20.76	21.50	1.186			0.03	0.884	1.024	1.048
1st	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	26140	1860	AMP	17.56	18.00	1.107			-0.14	1.060	-	1.173
2nd	LTE Band 25	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	26140	1860	AMP	17.56	18.00	1.107			-0.11	1.020	1.039	1.129
1st	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	56640	3690	AWAN	20.63	21.00	1.089	62.9	1.006	-0.16	0.972	-	1.065
2nd	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	56640	3690	AWAN	20.63	21.00	1.089	62.9	1.006	-0.16	0.941	1.033	1.031
1st	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	55340	3560	AMP	20.52	21.00	1.117	62.9	1.006	-0.15	0.876	-	0.984
2nd	LTE Band 48	20M	QPSK	1	0	Bottom Side	0mm	MIMO2	ON	55340	3560	AMP	20.52	21.00	1.117	62.9	1.006	0.03	0.844	1.038	0.948
1st	FR1 n30	10M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	462000	2310	AWAN	18.35	19.00	1.161			0.03	1.020	-	1.185
2nd	FR1 n30	10M	BPSK	1	1	Bottom Side	0mm	MIMO2	ON	462000	2310	AWAN	18.35	19.00	1.161			0.01	0.991	1.029	1.151
1st	FR1 n41	100M	BPSK	1	1	Bottom Side	0mm	MIMO1	OFF	518598	2592.99	AWAN	18.16	18.50	1.081			0.01	1.040	-	1.125
2nd	FR1 n41	100M	BPSK	1	1	Bottom Side	0mm	MIMO1	OFF	518598	2592.99	AWAN	18.16	18.50	1.081			0.08	1.000	1.040	1.081
1st	FR1 n66	40M	BPSK	108	54	Bottom Side	0mm	MIMO2	ON	349000	1745	AMP	17.96	18.50	1.132			0.07	1.010	-	1.144
2nd	FR1 n66	40M	BPSK	108	54	Bottom Side	0mm	MIMO2	ON	349000	1745	AMP	17.96	18.50	1.132			0.04	0.982	1.029	1.112

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is $\geq 0.8\text{W/kg}$.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR $< 1.45\text{W/kg}$, only one repeated measurement is required.
3. The ratio is the difference in percentage between original and repeated *measured SAR*.
4. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

13.3 Power Class 2 and Power Class 3 Linearity

General Note:

This device support Power Class 2 and Power Class 3 operations. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE and FR1 configuration and exposure condition combination, according to the highest time averaged power for Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required. Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

	LTE Band 41_Ant Main	LTE Band 41_Ant Main
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	17	19
Reported 1g SAR (W/kg)	0.644	0.643
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	31.73	34.39
Linearity SAR(W/kg)	0.70	
% deviation from expected linearity		-7.90%

	FR1 n41_Ant Main	FR1 n41_Ant Main
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	15	18
Reported 1g SAR (W/kg)	0.617	0.603
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	31.62	31.55
Linearity SAR(W/kg)	0.62	
% deviation from expected linearity		-2.04%

	FR1 n41_Ant MIMO 1	FR1 n41_Ant MIMO 1
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	18.5	21.5
Reported 1g SAR (W/kg)	1.125	1.093
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR(W/kg)	1.12	
% deviation from expected linearity		-2.61%

	FR1 n41_Ant MIMO 2	FR1 n41_Ant MIMO 2
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	14	17
Reported 1g SAR (W/kg)	0.364	0.345
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	25.12	25.06
Linearity SAR(W/kg)	0.36	
% deviation from expected linearity		-4.99%

	FR1 n41_Ant Aux	FR1 n41_Ant Aux
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	17	20
Reported 1g SAR (W/kg)	0.925	0.922
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	50.12	50.00
Linearity SAR(W/kg)	0.92	
% deviation from expected linearity		-0.09%

	FR1 n77_Ant Main	FR1 n77_Ant Main
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	14	17
Reported 1g SAR (W/kg)	0.527	0.518
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	25.12	25.06
Linearity SAR(W/kg)	0.53	
% deviation from expected linearity		-1.47%

	FR1 n77_Ant MIMO 1	FR1 n77_Ant MIMO 1
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	18.5	21.5
Reported 1g SAR (W/kg)	0.692	0.68
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR(W/kg)	0.69	
% deviation from expected linearity		-1.50%

	FR1 n77_Ant MIMO 2	FR1 n77_Ant MIMO 2
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	16	19
Reported 1g SAR (W/kg)	0.504	0.497
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	39.81	39.72
Linearity SAR(W/kg)	0.50	
% deviation from expected linearity		-1.15%

	FR1 n77_Ant Aux	FR1 n77_Ant Aux
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	16	19
Reported 1g SAR (W/kg)	0.653	0.65
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	39.81	39.72
Linearity SAR(W/kg)	0.65	
% deviation from expected linearity		-0.22%

14. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Body
1.	WWAN Main + WWAN MIMO 2 + WLAN Main	Yes
2.	WWAN MIMO 1 + WLAN Aux	Yes
3.	WWAN Aux + BT Aux	Yes

General Note:

- The Intel BE201D2W WLAN/BT module (FCC ID: PD9BE201D2) is also integrated into this host.
- The WiFi/BT SAR of 1.59 W/kg was used conservatively for the purpose of simultaneous transmission analysis. For the WLAN main and WLAN Aux Sim-Tx analysis include in WLAN modular SAR report. In this report only assessment WWAN to each WLAN/BT antenna.
- The worst case WWAN SAR is using for Sim-Tx analysis.
- The Scaled SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - Scalar SAR summation < 1.6W/kg.
 - $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{ separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
 - The SPLSR calculated results please refer to section 14.2.

14.1 Body Exposure Conditions

WWAN Antenna		Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5	SPLSR	Case No.
			Maximum WWAN 1g SAR (W/kg)	Maximum WWAN 1g SAR (W/kg)	WLAN Main 1g SAR (W/kg)	WLAN Aux 1g SAR (W/kg)	Bluetooth Aux 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)		
MAX Main Ant	MAX MIMO2 Ant	Bottom Side at 0mm	1.146	1.186	1.590	1.590	1.590	3.922	3.922	3.922	0.030	Case 1
MAX MIMO1 Ant		Bottom Side at 0mm	1.125		1.590	1.590	1.590	2.715	2.715	2.715	0.030	Case 2
MAX Aux Ant		Bottom Side at 0mm	0.925		1.590	1.590	1.590	2.515	2.515	2.515	0.020	Case 3

14.2 SPLSR Evaluation and Analysis

General Note:

- According to antenna location of Appendix D, the minimum distance between each transmit antenna is using for SPLSR analysis.
- $SPLSR = (SAR_1 + SAR_2)^{1.5} / (\text{min. separation distance, mm})$. If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary.

	Band	Position	SAR (W/kg)	Gap (mm)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 1	Maximum WWAN Main	Bottom Side	1.146	0mm	218.9	2.33	0.02	Not required
	Maximum WWAN MIMO2		1.186	0mm				
	Maximum WWAN Main	Bottom Side	1.146	0mm	196.6	2.74	0.02	Not required
	WLAN_Main		1.59	0mm				
	Maximum WWAN Main	Bottom Side	1.146	0mm	208.7	2.74	0.02	Not required
	WLAN_AUX		1.59	0mm				
	Maximum WWAN Main	Bottom Side	1.146	0mm	208.7	2.74	0.02	Not required
	Bluetooth_AUX		1.59	0mm				
	Maximum WWAN MIMO2	Bottom Side	1.186	0mm	205.0	2.78	0.02	Not required
	WLAN_Main		1.59	0mm				
	Maximum WWAN MIMO2	Bottom Side	1.186	0mm	173.5	2.78	0.03	Not required
	WLAN_AUX		1.59	0mm				
	Maximum WWAN MIMO2	Bottom Side	1.186	0mm	173.5	2.78	0.03	Not required
	Bluetooth_AUX		1.59	0mm				
Case 2	Band	Position	SAR (W/kg)	Gap (mm)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	Maximum WWAN MIMO1	Bottom Side	1.125	0mm	173.5	2.72	0.03	Not required
	WLAN_Main		1.59	0mm				
	Maximum WWAN MIMO1	Bottom Side	1.125	0mm	205.0	2.72	0.02	Not required
	WLAN_AUX		1.59	0mm				
	Maximum WWAN MIMO1	Bottom Side	1.125	0mm	205.0	2.72	0.02	Not required
	Bluetooth_AUX		1.59	0mm				
Case 3	Band	Position	SAR (W/kg)	Gap (mm)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	Maximum WWAN AUX	Bottom Side	0.925	0mm	212.6	2.52	0.02	Not required
	WLAN_Main		1.59	0mm				
	Maximum WWAN AUX	Bottom Side	0.925	0mm	197.5	2.52	0.02	Not required
	WLAN_AUX		1.59	0mm				
	Maximum WWAN AUX	Bottom Side	0.925	0mm	197.5	2.52	0.02	Not required
	Bluetooth_AUX		1.59	0mm				

Test Engineer : Jefferson Lin, Tony Wu and Harry Hsu

15. Uncertainty Assessment

Per KDB 865664 D01 SAR measurement 100MHz to 6GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be $\leq 30\%$, for a confidence interval of $k = 2$. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. For this device, the highest measured 1-g SAR is less 1.5W/kg. Therefore, the measurement uncertainty table is not required in this report.

Declaration of Conformity:

The test results with all measurement uncertainty excluded is presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

16. References

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- [11] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.