n77H	30	30	3964.98	DFT	pi/2 BPSK	Outer_Full	26.76	26.96
n77H	30	30	3964.98	DFT	QPSK	Inner_Full	27.27	27.47
n77H	30	30	3964.98	DFT	QPSK	Edge_1RB_Left	23.65	23.85
n77H	30	30	3964.98	DFT	QPSK	Edge_1RB_Right	23.70	23.90
n77H	30	30	3964.98	DFT	QPSK	Outer_Full	26.27	26.47
n77H	30	30	3964.98	DFT	16QAM	Inner_Full	26.27	26.47
n77H	30	30	3964.98	DFT	16QAM	Edge_1RB_Left	23.80	24.00
n77H	30	30	3964.98	DFT	16QAM	Edge_1RB_Right	23.86	24.06
n77H	30	30	3964.98	DFT	16QAM	Outer_Full	25.28	25.48
n77H	30	30	3964.98	DFT	64QAM	Inner_Full	24.87	25.07
n77H	30	30	3964.98	DFT	64QAM	Edge_1RB_Left	23.54	23.74
n77H	30	30	3964.98	DFT	64QAM	Edge_1RB_Right	23.62	23.82
n77H	30	30	3964.98	DFT	64QAM	Outer_Full	24.82	25.02
n77H	30	30	3964.98	DFT	256QAM	Inner_Full	22.81	23.01
n77H	30	30	3964.98	DFT	256QAM	Edge_1RB_Left	22.73	22.93
n77H	30	30	3964.98	DFT	256QAM	Edge_1RB_Right	22.84	23.04
n77H	30	30	3964.98	DFT	256QAM	Outer_Full	22.87	23.07
n77H	40	30	3720	DFT	pi/2 BPSK	Inner_Full	26.03	26.23
n77H	40	30	3720	DFT	pi/2 BPSK	Edge_1RB_Left	22.32	22.52
n77H	40	30	3720	DFT	pi/2 BPSK	Edge_1RB_Right	22.55	22.75
n77H	40	30	3720	DFT	pi/2 BPSK	Outer_Full	25.47	25.67
n77H	40	30	3720	DFT	QPSK	Inner_Full	26.02	26.22
n77H	40	30	3720	DFT	QPSK	Edge_1RB_Left	22.39	22.59
n77H	40	30	3720	DFT	QPSK	Edge_1RB_Right	22.54	22.74
n77H	40	30	3720	DFT	QPSK	Outer_Full	24.98	25.18
n77H	40	30	3720	DFT	16QAM	Inner_Full	25.02	25.22
n77H	40	30	3720	DFT	16QAM	Edge_1RB_Left	22.49	22.69
n77H	40	30	3720	DFT	16QAM	Edge_1RB_Right	22.88	23.08
n77H	40	30	3720	DFT	16QAM	Outer_Full	23.98	24.18
n77H	40	30	3720	DFT	64QAM	Inner_Full	23.56	23.76
n77H	40	30	3720	DFT	64QAM	Edge_1RB_Left	22.19	22.39
n77H	40	30	3720	DFT	64QAM	Edge_1RB_Right	22.36	22.56
n77H	40	30	3720	DFT	64QAM	Outer_Full	23.50	23.70
n77H	40	30	3720	DFT	256QAM	Inner_Full	21.60	21.80
n77H	40	30	3720	DFT	256QAM	Edge_1RB_Left	21.50	21.70
n77H	40	30	3720	DFT	256QAM	Edge_1RB_Right	21.74	21.94
n77H	40	30	3720	DFT	256QAM	Outer_Full	21.58	21.78
n77H	40	30	3840	DFT	pi/2 BPSK	Inner_Full	25.46	25.66
n77H	40	30	3840	DFT	pi/2 BPSK	Edge_1RB_Left	21.91	22.11
n77H	40	30	3840	DFT	pi/2 BPSK	Edge_1RB_Right	21.95	22.15
n77H	40	30	3840	DFT	pi/2 BPSK	Outer_Full	24.94	25.14

©Copyright. All rights reserved by CTTL.

n77H	40	30	3840	DFT	QPSK	Inner_Full	25.46	25.66
n77H	40	30	3840	DFT	QPSK	Edge_1RB_Left	21.84	22.04
n77H	40	30	3840	DFT	QPSK	Edge_1RB_Right	21.96	22.16
n77H	40	30	3840	DFT	QPSK	Outer_Full	24.43	24.63
n77H	40	30	3840	DFT	16QAM	Inner_Full	24.47	24.67
n77H	40	30	3840	DFT	16QAM	Edge_1RB_Left	22.00	22.20
n77H	40	30	3840	DFT	16QAM	Edge_1RB_Right	22.07	22.27
n77H	40	30	3840	DFT	16QAM	Outer_Full	23.43	23.63
n77H	40	30	3840	DFT	64QAM	Inner_Full	23.04	23.24
n77H	40	30	3840	DFT	64QAM	Edge_1RB_Left	21.70	21.90
n77H	40	30	3840	DFT	64QAM	Edge_1RB_Right	21.75	21.95
n77H	40	30	3840	DFT	64QAM	Outer_Full	22.97	23.17
n77H	40	30	3840	DFT	256QAM	Inner_Full	21.07	21.27
n77H	40	30	3840	DFT	256QAM	Edge_1RB_Left	21.02	21.22
n77H	40	30	3840	DFT	256QAM	Edge_1RB_Right	21.01	21.21
n77H	40	30	3840	DFT	256QAM	Outer_Full	21.01	21.21
n77H	40	30	3960	DFT	pi/2 BPSK	Inner_Full	27.18	27.38
n77H	40	30	3960	DFT	pi/2 BPSK	Edge_1RB_Left	23.76	23.96
n77H	40	30	3960	DFT	pi/2 BPSK	Edge_1RB_Right	23.69	23.89
n77H	40	30	3960	DFT	pi/2 BPSK	Outer_Full	26.73	26.93
n77H	40	30	3960	DFT	QPSK	Inner_Full	27.14	27.34
n77H	40	30	3960	DFT	QPSK	Edge_1RB_Left	23.72	23.92
n77H	40	30	3960	DFT	QPSK	Edge_1RB_Right	23.68	23.88
n77H	40	30	3960	DFT	QPSK	Outer_Full	26.22	26.42
n77H	40	30	3960	DFT	16QAM	Inner_Full	26.18	26.38
n77H	40	30	3960	DFT	16QAM	Edge_1RB_Left	23.86	24.06
n77H	40	30	3960	DFT	16QAM	Edge_1RB_Right	23.92	24.12
n77H	40	30	3960	DFT	16QAM	Outer_Full	25.22	25.42
n77H	40	30	3960	DFT	64QAM	Inner_Full	24.73	24.93
n77H	40	30	3960	DFT	64QAM	Edge_1RB_Left	23.57	23.77
n77H	40	30	3960	DFT	64QAM	Edge_1RB_Right	23.51	23.71
n77H	40	30	3960	DFT	64QAM	Outer_Full	24.75	24.95
n77H	40	30	3960	DFT	256QAM	Inner_Full	22.79	22.99
n77H	40	30	3960	DFT	256QAM	Edge_1RB_Left	22.79	22.99
n77H	40	30	3960	DFT	256QAM	Edge_1RB_Right	22.78	22.98
n77H	40	30	3960	DFT	256QAM	Outer_Full	22.77	22.97
n77H	50	30	3725.01	DFT	pi/2 BPSK	Inner_Full	25.89	26.09
n77H	50	30	3725.01	DFT	pi/2 BPSK	Edge_1RB_Left	22.26	22.46
n77H	50	30	3725.01	DFT	pi/2 BPSK	Edge_1RB_Right	22.69	22.89
n77H	50	30	3725.01	DFT	pi/2 BPSK	Outer_Full	25.43	25.63
n77H	50	30	3725.01	DFT	QPSK	Inner_Full	25.92	26.12

©Copyright. All rights reserved by CTTL.

n77H	50	30	3725.01	DFT	QPSK	Edge_1RB_Left	22.28	22.48
n77H	50	30	3725.01	DFT	QPSK	Edge_1RB_Right	22.68	22.88
n77H	50	30	3725.01	DFT	QPSK	Outer_Full	24.95	25.15
n77H	50	30	3725.01	DFT	16QAM	Inner_Full	24.88	25.08
n77H	50	30	3725.01	DFT	16QAM	Edge_1RB_Left	22.42	22.62
n77H	50	30	3725.01	DFT	16QAM	Edge_1RB_Right	22.84	23.04
n77H	50	30	3725.01	DFT	16QAM	Outer_Full	23.96	24.16
n77H	50	30	3725.01	DFT	64QAM	Inner_Full	23.52	23.72
n77H	50	30	3725.01	DFT	64QAM	Edge_1RB_Left	22.03	22.23
n77H	50	30	3725.01	DFT	64QAM	Edge_1RB_Right	22.45	22.65
n77H	50	30	3725.01	DFT	64QAM	Outer_Full	23.53	23.73
n77H	50	30	3725.01	DFT	256QAM	Inner_Full	21.52	21.72
n77H	50	30	3725.01	DFT	256QAM	Edge_1RB_Left	21.32	21.52
n77H	50	30	3725.01	DFT	256QAM	Edge_1RB_Right	21.78	21.98
n77H	50	30	3725.01	DFT	256QAM	Outer_Full	21.55	21.75
n77H	50	30	3840	DFT	pi/2 BPSK	Inner_Full	25.50	25.70
n77H	50	30	3840	DFT	pi/2 BPSK	Edge_1RB_Left	21.90	22.10
n77H	50	30	3840	DFT	pi/2 BPSK	Edge_1RB_Right	22.16	22.36
n77H	50	30	3840	DFT	pi/2 BPSK	Outer_Full	24.94	25.14
n77H	50	30	3840	DFT	QPSK	Inner_Full	25.48	25.68
n77H	50	30	3840	DFT	QPSK	Edge_1RB_Left	21.92	22.12
n77H	50	30	3840	DFT	QPSK	Edge_1RB_Right	22.20	22.40
n77H	50	30	3840	DFT	QPSK	Outer_Full	24.43	24.63
n77H	50	30	3840	DFT	16QAM	Inner_Full	24.42	24.62
n77H	50	30	3840	DFT	16QAM	Edge_1RB_Left	22.03	22.23
n77H	50	30	3840	DFT	16QAM	Edge_1RB_Right	22.31	22.51
n77H	50	30	3840	DFT	16QAM	Outer_Full	23.45	23.65
n77H	50	30	3840	DFT	64QAM	Inner_Full	23.07	23.27
n77H	50	30	3840	DFT	64QAM	Edge_1RB_Left	21.63	21.83
n77H	50	30	3840	DFT	64QAM	Edge_1RB_Right	22.01	22.21
n77H	50	30	3840	DFT	64QAM	Outer_Full	22.96	23.16
n77H	50	30	3840	DFT	256QAM	Inner_Full	21.07	21.27
n77H	50	30	3840	DFT	256QAM	Edge_1RB_Left	21.05	21.25
n77H	50	30	3840	DFT	256QAM	Edge_1RB_Right	21.30	21.50
n77H	50	30	3840	DFT	256QAM	Outer_Full	21.08	21.28
n77H	50	30	3954.48	DFT	pi/2 BPSK	Inner_Full	27.22	27.42
n77H	50	30	3954.48	DFT	pi/2 BPSK	Edge_1RB_Left	23.91	24.11
n77H	50	30	3954.48	DFT	pi/2 BPSK	Edge_1RB_Right	23.75	23.95
n77H	50	30	3954.48	DFT	pi/2 BPSK	Outer_Full	26.74	26.94
n77H	50	30	3954.48	DFT	QPSK	Inner_Full	27.24	27.44
n77H	50	30	3954.48	DFT	QPSK	Edge_1RB_Left	23.89	24.09

©Copyright. All rights reserved by CTTL.

n77H	50	30	3954.48	DFT	QPSK	Edge_1RB_Right	23.69	23.89
n77H	50	30	3954.48	DFT	QPSK	Outer_Full	26.26	26.46
n77H	50	30	3954.48	DFT	16QAM	Inner_Full	26.25	26.45
n77H	50	30	3954.48	DFT	16QAM	Edge_1RB_Left	24.10	24.30
n77H	50	30	3954.48	DFT	16QAM	Edge_1RB_Right	23.83	24.03
n77H	50	30	3954.48	DFT	16QAM	Outer_Full	25.27	25.47
n77H	50	30	3954.48	DFT	64QAM	Inner_Full	24.80	25.00
n77H	50	30	3954.48	DFT	64QAM	Edge_1RB_Left	23.73	23.93
n77H	50	30	3954.48	DFT	64QAM	Edge_1RB_Right	23.51	23.71
n77H	50	30	3954.48	DFT	64QAM	Outer_Full	24.79	24.99
n77H	50	30	3954.48	DFT	256QAM	Inner_Full	22.80	23.00
n77H	50	30	3954.48	DFT	256QAM	Edge_1RB_Left	23.01	23.21
n77H	50	30	3954.48	DFT	256QAM	Edge_1RB_Right	22.81	23.01
n77H	50	30	3954.48	DFT	256QAM	Outer_Full	22.87	23.07
n77H	60	30	3730.02	DFT	pi/2 BPSK	Inner_Full	25.93	26.13
n77H	60	30	3730.02	DFT	pi/2 BPSK	Edge_1RB_Left	22.29	22.49
n77H	60	30	3730.02	DFT	pi/2 BPSK	Edge_1RB_Right	22.74	22.94
n77H	60	30	3730.02	DFT	pi/2 BPSK	Outer_Full	25.49	25.69
n77H	60	30	3730.02	DFT	QPSK	Inner_Full	25.94	26.14
n77H	60	30	3730.02	DFT	QPSK	Edge_1RB_Left	22.34	22.54
n77H	60	30	3730.02	DFT	QPSK	Edge_1RB_Right	22.76	22.96
n77H	60	30	3730.02	DFT	QPSK	Outer_Full	25.04	25.24
n77H	60	30	3730.02	DFT	16QAM	Inner_Full	24.92	25.12
n77H	60	30	3730.02	DFT	16QAM	Edge_1RB_Left	22.48	22.68
n77H	60	30	3730.02	DFT	16QAM	Edge_1RB_Right	22.94	23.14
n77H	60	30	3730.02	DFT	16QAM	Outer_Full	24.04	24.24
n77H	60	30	3730.02	DFT	64QAM	Inner_Full	23.45	23.65
n77H	60	30	3730.02	DFT	64QAM	Edge_1RB_Left	22.14	22.34
n77H	60	30	3730.02	DFT	64QAM	Edge_1RB_Right	22.62	22.82
n77H	60	30	3730.02	DFT	64QAM	Outer_Full	23.56	23.76
n77H	60	30	3730.02	DFT	256QAM	Inner_Full	21.52	21.72
n77H	60	30	3730.02	DFT	256QAM	Edge_1RB_Left	21.42	21.62
n77H	60	30	3730.02	DFT	256QAM	Edge_1RB_Right	21.94	22.14
n77H	60	30	3730.02	DFT	256QAM	Outer_Full	21.62	21.82
n77H	60	30	3840	DFT	pi/2 BPSK	Inner_Full	25.38	25.58
n77H	60	30	3840	DFT	pi/2 BPSK	Edge_1RB_Left	22.04	22.24
n77H	60	30	3840	DFT	pi/2 BPSK	Edge_1RB_Right	22.53	22.73
n77H	60	30	3840	DFT	pi/2 BPSK	Outer_Full	24.94	25.14
n77H	60	30	3840	DFT	QPSK	Inner_Full	25.39	25.59
n77H	60	30	3840	DFT	QPSK	Edge_1RB_Left	22.09	22.29
n77H	60	30	3840	DFT	QPSK	Edge_1RB_Right	22.57	22.77

©Copyright. All rights reserved by CTTL.

n77H	60	30	3840	DFT	QPSK	Outer_Full	24.43	24.63
n77H	60	30	3840	DFT	16QAM	Inner_Full	24.42	24.62
n77H	60	30	3840	DFT	16QAM	Edge_1RB_Left	22.24	22.44
n77H	60	30	3840	DFT	16QAM	Edge_1RB_Right	22.69	22.89
n77H	60	30	3840	DFT	16QAM	Outer_Full	23.45	23.65
n77H	60	30	3840	DFT	64QAM	Inner_Full	22.89	23.09
n77H	60	30	3840	DFT	64QAM	Edge_1RB_Left	21.88	22.08
n77H	60	30	3840	DFT	64QAM	Edge_1RB_Right	22.36	22.56
n77H	60	30	3840	DFT	64QAM	Outer_Full	23.00	23.20
n77H	60	30	3840	DFT	256QAM	Inner_Full	21.02	21.22
n77H	60	30	3840	DFT	256QAM	Edge_1RB_Left	21.21	21.41
n77H	60	30	3840	DFT	256QAM	Edge_1RB_Right	21.67	21.87
n77H	60	30	3840	DFT	256QAM	Outer_Full	21.06	21.26
n77H	60	30	3949.98	DFT	pi/2 BPSK	Inner_Full	27.12	27.32
n77H	60	30	3949.98	DFT	pi/2 BPSK	Edge_1RB_Left	23.53	23.73
n77H	60	30	3949.98	DFT	pi/2 BPSK	Edge_1RB_Right	23.73	23.93
n77H	60	30	3949.98	DFT	pi/2 BPSK	Outer_Full	26.69	26.89
n77H	60	30	3949.98	DFT	QPSK	Inner_Full	27.08	27.28
n77H	60	30	3949.98	DFT	QPSK	Edge_1RB_Left	23.56	23.76
n77H	60	30	3949.98	DFT	QPSK	Edge_1RB_Right	23.69	23.89
n77H	60	30	3949.98	DFT	QPSK	Outer_Full	26.18	26.38
n77H	60	30	3949.98	DFT	16QAM	Inner_Full	26.19	26.39
n77H	60	30	3949.98	DFT	16QAM	Edge_1RB_Left	23.72	23.92
n77H	60	30	3949.98	DFT	16QAM	Edge_1RB_Right	23.93	24.13
n77H	60	30	3949.98	DFT	16QAM	Outer_Full	25.21	25.41
n77H	60	30	3949.98	DFT	64QAM	Inner_Full	24.72	24.92
n77H	60	30	3949.98	DFT	64QAM	Edge_1RB_Left	23.33	23.53
n77H	60	30	3949.98	DFT	64QAM	Edge_1RB_Right	23.58	23.78
n77H	60	30	3949.98	DFT	64QAM	Outer_Full	24.72	24.92
n77H	60	30	3949.98	DFT	256QAM	Inner_Full	22.74	22.94
n77H	60	30	3949.98	DFT	256QAM	Edge_1RB_Left	22.66	22.86
n77H	60	30	3949.98	DFT	256QAM	Edge_1RB_Right	22.84	23.04
n77H	60	30	3949.98	DFT	256QAM	Outer_Full	22.82	23.02
n77H	70	30	3735	DFT	pi/2 BPSK	Inner_Full	25.95	26.15
n77H	70	30	3735	DFT	pi/2 BPSK	Edge_1RB_Left	22.45	22.65
n77H	70	30	3735	DFT	pi/2 BPSK	Edge_1RB_Right	22.74	22.94
n77H	70	30	3735	DFT	pi/2 BPSK	Outer_Full	25.56	25.76
n77H	70	30	3735	DFT	QPSK	Inner_Full	25.88	26.08
n77H	70	30	3735	DFT	QPSK	Edge_1RB_Left	22.47	22.67
n77H	70	30	3735	DFT	QPSK	Edge_1RB_Right	22.67	22.87
n77H	70	30	3735	DFT	QPSK	Outer_Full	25.07	25.27

©Copyright. All rights reserved by CTTL.

n77H	70	30	3735	DFT	16QAM	Inner_Full	24.99	25.19
n77H	70	30	3735	DFT	16QAM	Edge_1RB_Left	22.79	22.99
n77H	70	30	3735	DFT	16QAM	Edge_1RB_Right	22.94	23.14
n77H	70	30	3735	DFT	16QAM	Outer_Full	24.13	24.33
n77H	70	30	3735	DFT	64QAM	Inner_Full	23.51	23.71
n77H	70	30	3735	DFT	64QAM	Edge_1RB_Left	22.39	22.59
n77H	70	30	3735	DFT	64QAM	Edge_1RB_Right	22.48	22.68
n77H	70	30	3735	DFT	64QAM	Outer_Full	23.59	23.79
n77H	70	30	3735	DFT	256QAM	Inner_Full	21.55	21.75
n77H	70	30	3735	DFT	256QAM	Edge_1RB_Left	21.57	21.77
n77H	70	30	3735	DFT	256QAM	Edge_1RB_Right	21.84	22.04
n77H	70	30	3735	DFT	256QAM	Outer_Full	21.64	21.84
n77H	70	30	3840	DFT	pi/2 BPSK	Inner_Full	25.34	25.54
n77H	70	30	3840	DFT	pi/2 BPSK	Edge_1RB_Left	22.30	22.50
n77H	70	30	3840	DFT	pi/2 BPSK	Edge_1RB_Right	22.89	23.09
n77H	70	30	3840	DFT	pi/2 BPSK	Outer_Full	25.01	25.21
n77H	70	30	3840	DFT	QPSK	Inner_Full	25.40	25.60
n77H	70	30	3840	DFT	QPSK	Edge_1RB_Left	22.31	22.51
n77H	70	30	3840	DFT	QPSK	Edge_1RB_Right	22.83	23.03
n77H	70	30	3840	DFT	QPSK	Outer_Full	24.48	24.68
n77H	70	30	3840	DFT	16QAM	Inner_Full	24.41	24.61
n77H	70	30	3840	DFT	16QAM	Edge_1RB_Left	22.52	22.72
n77H	70	30	3840	DFT	16QAM	Edge_1RB_Right	23.00	23.20
n77H	70	30	3840	DFT	16QAM	Outer_Full	23.48	23.68
n77H	70	30	3840	DFT	64QAM	Inner_Full	22.95	23.15
n77H	70	30	3840	DFT	64QAM	Edge_1RB_Left	22.24	22.44
n77H	70	30	3840	DFT	64QAM	Edge_1RB_Right	22.72	22.92
n77H	70	30	3840	DFT	64QAM	Outer_Full	23.03	23.23
n77H	70	30	3840	DFT	256QAM	Inner_Full	21.02	21.22
n77H	70	30	3840	DFT	256QAM	Edge_1RB_Left	21.45	21.65
n77H	70	30	3840	DFT	256QAM	Edge_1RB_Right	21.98	22.18
n77H	70	30	3840	DFT	256QAM	Outer_Full	21.08	21.28
n77H	70	30	3945	DFT	pi/2 BPSK	Inner_Full	27.11	27.31
n77H	70	30	3945	DFT	pi/2 BPSK	Edge_1RB_Left	23.00	23.20
n77H	70	30	3945	DFT	pi/2 BPSK	Edge_1RB_Right	23.82	24.02
n77H	70	30	3945	DFT	pi/2 BPSK	Outer_Full	26.65	26.85
n77H	70	30	3945	DFT	QPSK	Inner_Full	27.13	27.33
n77H	70	30	3945	DFT	QPSK	Edge_1RB_Left	23.01	23.21
n77H	70	30	3945	DFT	QPSK	Edge_1RB_Right	23.76	23.96
n77H	70	30	3945	DFT	QPSK	Outer_Full	26.10	26.30
n77H	70	30	3945	DFT	16QAM	Inner_Full	26.15	26.35

©Copyright. All rights reserved by CTTL.

n77H	70	30	3945	DFT	16QAM	Edge_1RB_Left	23.35	23.55
n77H	70	30	3945	DFT	16QAM	Edge_1RB_Right	23.96	24.16
n77H	70	30	3945	DFT	16QAM	Outer_Full	25.09	25.29
n77H	70	30	3945	DFT	64QAM	Inner_Full	24.68	24.88
n77H	70	30	3945	DFT	64QAM	Edge_1RB_Left	22.75	22.95
n77H	70	30	3945	DFT	64QAM	Edge_1RB_Right	23.66	23.86
n77H	70	30	3945	DFT	64QAM	Outer_Full	24.67	24.87
n77H	70	30	3945	DFT	256QAM	Inner_Full	22.73	22.93
n77H	70	30	3945	DFT	256QAM	Edge_1RB_Left	22.13	22.33
n77H	70	30	3945	DFT	256QAM	Edge_1RB_Right	22.90	23.10
n77H	70	30	3945	DFT	256QAM	Outer_Full	22.73	22.93
n77H	80	30	3740.01	DFT	pi/2 BPSK	Inner_Full	26.06	26.26
n77H	80	30	3740.01	DFT	pi/2 BPSK	Edge_1RB_Left	22.51	22.71
n77H	80	30	3740.01	DFT	pi/2 BPSK	Edge_1RB_Right	22.57	22.77
n77H	80	30	3740.01	DFT	pi/2 BPSK	Outer_Full	25.58	25.78
n77H	80	30	3740.01	DFT	QPSK	Inner_Full	26.09	26.29
n77H	80	30	3740.01	DFT	QPSK	Edge_1RB_Left	22.54	22.74
n77H	80	30	3740.01	DFT	QPSK	Edge_1RB_Right	22.52	22.72
n77H	80	30	3740.01	DFT	QPSK	Outer_Full	25.11	25.31
n77H	80	30	3740.01	DFT	16QAM	Inner_Full	25.14	25.34
n77H	80	30	3740.01	DFT	16QAM	Edge_1RB_Left	22.68	22.88
n77H	80	30	3740.01	DFT	16QAM	Edge_1RB_Right	22.94	23.14
n77H	80	30	3740.01	DFT	16QAM	Outer_Full	24.14	24.34
n77H	80	30	3740.01	DFT	64QAM	Inner_Full	23.69	23.89
n77H	80	30	3740.01	DFT	64QAM	Edge_1RB_Left	22.34	22.54
n77H	80	30	3740.01	DFT	64QAM	Edge_1RB_Right	22.31	22.51
n77H	80	30	3740.01	DFT	64QAM	Outer_Full	23.68	23.88
n77H	80	30	3740.01	DFT	256QAM	Inner_Full	21.70	21.90
n77H	80	30	3740.01	DFT	256QAM	Edge_1RB_Left	21.59	21.79
n77H	80	30	3740.01	DFT	256QAM	Edge_1RB_Right	21.70	21.90
n77H	80	30	3740.01	DFT	256QAM	Outer_Full	21.70	21.90
n77H	80	30	3840	DFT	pi/2 BPSK	Inner_Full	25.40	25.60
n77H	80	30	3840	DFT	pi/2 BPSK	Edge_1RB_Left	22.48	22.68
n77H	80	30	3840	DFT	pi/2 BPSK	Edge_1RB_Right	23.02	23.22
n77H	80	30	3840	DFT	pi/2 BPSK	Outer_Full	25.11	25.31
n77H	80	30	3840	DFT	QPSK	Inner_Full	25.39	25.59
n77H	80	30	3840	DFT	QPSK	Edge_1RB_Left	22.44	22.64
n77H	80	30	3840	DFT	QPSK	Edge_1RB_Right	23.05	23.25
n77H	80	30	3840	DFT	QPSK	Outer_Full	24.61	24.81
n77H	80	30	3840	DFT	16QAM	Inner_Full	24.43	24.63
n77H	80	30	3840	DFT	16QAM	Edge_1RB_Left	22.75	22.95

©Copyright. All rights reserved by CTTL.

n77H	80	30	3840	DFT	16QAM	Edge_1RB_Right	23.33	23.53
n77H	80	30	3840	DFT	16QAM	Outer_Full	23.60	23.80
n77H	80	30	3840	DFT	64QAM	Inner_Full	22.98	23.18
n77H	80	30	3840	DFT	64QAM	Edge_1RB_Left	22.22	22.42
n77H	80	30	3840	DFT	64QAM	Edge_1RB_Right	22.82	23.02
n77H	80	30	3840	DFT	64QAM	Outer_Full	23.11	23.31
n77H	80	30	3840	DFT	256QAM	Inner_Full	21.05	21.25
n77H	80	30	3840	DFT	256QAM	Edge_1RB_Left	21.61	21.81
n77H	80	30	3840	DFT	256QAM	Edge_1RB_Right	22.14	22.34
n77H	80	30	3840	DFT	256QAM	Outer_Full	21.20	21.40
n77H	80	30	3939.99	DFT	pi/2 BPSK	Inner_Full	27.19	27.39
n77H	80	30	3939.99	DFT	pi/2 BPSK	Edge_1RB_Left	22.67	22.87
n77H	80	30	3939.99	DFT	pi/2 BPSK	Edge_1RB_Right	23.79	23.99
n77H	80	30	3939.99	DFT	pi/2 BPSK	Outer_Full	26.56	26.76
n77H	80	30	3939.99	DFT	QPSK	Inner_Full	27.21	27.41
n77H	80	30	3939.99	DFT	QPSK	Edge_1RB_Left	22.70	22.90
n77H	80	30	3939.99	DFT	QPSK	Edge_1RB_Right	23.81	24.01
n77H	80	30	3939.99	DFT	QPSK	Outer_Full	26.06	26.26
n77H	80	30	3939.99	DFT	16QAM	Inner_Full	26.25	26.45
n77H	80	30	3939.99	DFT	16QAM	Edge_1RB_Left	22.90	23.10
n77H	80	30	3939.99	DFT	16QAM	Edge_1RB_Right	24.01	24.21
n77H	80	30	3939.99	DFT	16QAM	Outer_Full	25.06	25.26
n77H	80	30	3939.99	DFT	64QAM	Inner_Full	24.76	24.96
n77H	80	30	3939.99	DFT	64QAM	Edge_1RB_Left	22.51	22.71
n77H	80	30	3939.99	DFT	64QAM	Edge_1RB_Right	23.72	23.92
n77H	80	30	3939.99	DFT	64QAM	Outer_Full	24.63	24.83
n77H	80	30	3939.99	DFT	256QAM	Inner_Full	22.85	23.05
n77H	80	30	3939.99	DFT	256QAM	Edge_1RB_Left	21.82	22.02
n77H	80	30	3939.99	DFT	256QAM	Edge_1RB_Right	22.92	23.12
n77H	80	30	3939.99	DFT	256QAM	Outer_Full	22.66	22.86
n77H	90	30	3745.02	DFT	pi/2 BPSK	Inner_Full	26.09	26.29
n77H	90	30	3745.02	DFT	pi/2 BPSK	Edge_1RB_Left	22.53	22.73
n77H	90	30	3745.02	DFT	pi/2 BPSK	Edge_1RB_Right	22.51	22.71
n77H	90	30	3745.02	DFT	pi/2 BPSK	Outer_Full	25.59	25.79
n77H	90	30	3745.02	DFT	QPSK	Inner_Full	26.08	26.28
n77H	90	30	3745.02	DFT	QPSK	Edge_1RB_Left	22.49	22.69
n77H	90	30	3745.02	DFT	QPSK	Edge_1RB_Right	22.54	22.74
n77H	90	30	3745.02	DFT	QPSK	Outer_Full	25.10	25.30
n77H	90	30	3745.02	DFT	16QAM	Inner_Full	25.16	25.36
n77H	90	30	3745.02	DFT	16QAM	Edge_1RB_Left	22.71	22.91
n77H	90	30	3745.02	DFT	16QAM	Edge_1RB_Right	22.90	23.10

©Copyright. All rights reserved by CTTL.

n77H	90	30	3745.02	DFT	16QAM	Outer_Full	24.11	24.31
n77H	90	30	3745.02	DFT	64QAM	Inner_Full	23.69	23.89
n77H	90	30	3745.02	DFT	64QAM	Edge_1RB_Left	22.41	22.61
n77H	90	30	3745.02	DFT	64QAM	Edge_1RB_Right	22.24	22.44
n77H	90	30	3745.02	DFT	64QAM	Outer_Full	23.64	23.84
n77H	90	30	3745.02	DFT	256QAM	Inner_Full	21.71	21.91
n77H	90	30	3745.02	DFT	256QAM	Edge_1RB_Left	21.62	21.82
n77H	90	30	3745.02	DFT	256QAM	Edge_1RB_Right	21.59	21.79
n77H	90	30	3745.02	DFT	256QAM	Outer_Full	21.62	21.82
n77H	90	30	3840	DFT	pi/2 BPSK	Inner_Full	25.41	25.61
n77H	90	30	3840	DFT	pi/2 BPSK	Edge_1RB_Left	22.44	22.64
n77H	90	30	3840	DFT	pi/2 BPSK	Edge_1RB_Right	23.08	23.28
n77H	90	30	3840	DFT	pi/2 BPSK	Outer_Full	25.15	25.35
n77H	90	30	3840	DFT	QPSK	Inner_Full	25.40	25.60
n77H	90	30	3840	DFT	QPSK	Edge_1RB_Left	22.48	22.68
n77H	90	30	3840	DFT	QPSK	Edge_1RB_Right	23.05	23.25
n77H	90	30	3840	DFT	QPSK	Outer_Full	24.65	24.85
n77H	90	30	3840	DFT	16QAM	Inner_Full	24.45	24.65
n77H	90	30	3840	DFT	16QAM	Edge_1RB_Left	22.63	22.83
n77H	90	30	3840	DFT	16QAM	Edge_1RB_Right	23.14	23.34
n77H	90	30	3840	DFT	16QAM	Outer_Full	23.66	23.86
n77H	90	30	3840	DFT	64QAM	Inner_Full	22.93	23.13
n77H	90	30	3840	DFT	64QAM	Edge_1RB_Left	22.44	22.64
n77H	90	30	3840	DFT	64QAM	Edge_1RB_Right	22.94	23.14
n77H	90	30	3840	DFT	64QAM	Outer_Full	23.18	23.38
n77H	90	30	3840	DFT	256QAM	Inner_Full	21.04	21.24
n77H	90	30	3840	DFT	256QAM	Edge_1RB_Left	21.61	21.81
n77H	90	30	3840	DFT	256QAM	Edge_1RB_Right	22.12	22.32
n77H	90	30	3840	DFT	256QAM	Outer_Full	21.26	21.46
n77H	90	30	3934.98	DFT	pi/2 BPSK	Inner_Full	27.19	27.39
n77H	90	30	3934.98	DFT	pi/2 BPSK	Edge_1RB_Left	22.86	23.06
n77H	90	30	3934.98	DFT	pi/2 BPSK	Edge_1RB_Right	23.73	23.93
n77H	90	30	3934.98	DFT	pi/2 BPSK	Outer_Full	26.54	26.74
n77H	90	30	3934.98	DFT	QPSK	Inner_Full	27.17	27.37
n77H	90	30	3934.98	DFT	QPSK	Edge_1RB_Left	22.84	23.04
n77H	90	30	3934.98	DFT	QPSK	Edge_1RB_Right	23.67	23.87
n77H	90	30	3934.98	DFT	QPSK	Outer_Full	26.02	26.22
n77H	90	30	3934.98	DFT	16QAM	Inner_Full	26.18	26.38
n77H	90	30	3934.98	DFT	16QAM	Edge_1RB_Left	23.17	23.37
n77H	90	30	3934.98	DFT	16QAM	Edge_1RB_Right	24.01	24.21
n77H	90	30	3934.98	DFT	16QAM	Outer_Full	25.06	25.26

©Copyright. All rights reserved by CTTL.

n77H	90	30	3934.98	DFT	64QAM	Inner_Full	24.75	24.95
n77H	90	30	3934.98	DFT	64QAM	Edge_1RB_Left	22.73	22.93
n77H	90	30	3934.98	DFT	64QAM	Edge_1RB_Right	23.54	23.74
n77H	90	30	3934.98	DFT	64QAM	Outer_Full	24.60	24.80
n77H	90	30	3934.98	DFT	256QAM	Inner_Full	22.85	23.05
n77H	90	30	3934.98	DFT	256QAM	Edge_1RB_Left	22.08	22.28
n77H	90	30	3934.98	DFT	256QAM	Edge_1RB_Right	22.88	23.08
n77H	90	30	3934.98	DFT	256QAM	Outer_Full	22.63	22.83
n77H	100	30	3750	DFT	pi/2 BPSK	Inner_Full	26.14	26.34
n77H	100	30	3750	DFT	pi/2 BPSK	Edge_1RB_Left	22.46	22.66
n77H	100	30	3750	DFT	pi/2 BPSK	Edge_1RB_Right	22.43	22.63
n77H	100	30	3750	DFT	pi/2 BPSK	Outer_Full	25.62	25.82
n77H	100	30	3750	DFT	QPSK	Inner_Full	26.16	26.36
n77H	100	30	3750	DFT	QPSK	Edge_1RB_Left	22.41	22.61
n77H	100	30	3750	DFT	QPSK	Edge_1RB_Right	22.44	22.64
n77H	100	30	3750	DFT	QPSK	Outer_Full	25.14	25.34
n77H	100	30	3750	DFT	16QAM	Inner_Full	25.18	25.38
n77H	100	30	3750	DFT	16QAM	Edge_1RB_Left	22.58	22.78
n77H	100	30	3750	DFT	16QAM	Edge_1RB_Right	22.68	22.88
n77H	100	30	3750	DFT	16QAM	Outer_Full	24.16	24.36
n77H	100	30	3750	DFT	64QAM	Inner_Full	23.77	23.97
n77H	100	30	3750	DFT	64QAM	Edge_1RB_Left	22.28	22.48
n77H	100	30	3750	DFT	64QAM	Edge_1RB_Right	22.20	22.40
n77H	100	30	3750	DFT	64QAM	Outer_Full	23.72	23.92
n77H	100	30	3750	DFT	256QAM	Inner_Full	21.81	22.01
n77H	100	30	3750	DFT	256QAM	Edge_1RB_Left	21.55	21.75
n77H	100	30	3750	DFT	256QAM	Edge_1RB_Right	21.55	21.75
n77H	100	30	3750	DFT	256QAM	Outer_Full	21.75	21.95
n77H	100	30	3840	DFT	pi/2 BPSK	Inner_Full	25.37	25.57
n77H	100	30	3840	DFT	pi/2 BPSK	Edge_1RB_Left	22.34	22.54
n77H	100	30	3840	DFT	pi/2 BPSK	Edge_1RB_Right	22.83	23.03
n77H	100	30	3840	DFT	pi/2 BPSK	Outer_Full	25.09	25.29
n77H	100	30	3840	DFT	QPSK	Inner_Full	25.35	25.55
n77H	100	30	3840	DFT	QPSK	Edge_1RB_Left	22.25	22.45
n77H	100	30	3840	DFT	QPSK	Edge_1RB_Right	22.84	23.04
n77H	100	30	3840	DFT	QPSK	Outer_Full	24.58	24.78
n77H	100	30	3840	DFT	16QAM	Inner_Full	24.39	24.59
n77H	100	30	3840	DFT	16QAM	Edge_1RB_Left	22.61	22.81
n77H	100	30	3840	DFT	16QAM	Edge_1RB_Right	23.03	23.23
n77H	100	30	3840	DFT	16QAM	Outer_Full	23.59	23.79
n77H	100	30	3840	DFT	64QAM	Inner_Full	22.92	23.12

©Copyright. All rights reserved by CTTL.

n77H	100	30	3840	DFT	64QAM	Edge_1RB_Left	22.18	22.38
n77H	100	30	3840	DFT	64QAM	Edge_1RB_Right	22.81	23.01
n77H	100	30	3840	DFT	64QAM	Outer_Full	23.06	23.26
n77H	100	30	3840	DFT	256QAM	Inner_Full	20.98	21.18
n77H	100	30	3840	DFT	256QAM	Edge_1RB_Left	21.36	21.56
n77H	100	30	3840	DFT	256QAM	Edge_1RB_Right	21.97	22.17
n77H	100	30	3840	DFT	256QAM	Outer_Full	21.14	21.34
n77H	100	30	3840	CP	QPSK	Inner_Full	23.81	24.01
n77H	100	30	3840	CP	QPSK	Edge_1RB_Left	22.28	22.48
n77H	100	30	3840	CP	QPSK	Edge_1RB_Right	22.89	23.09
n77H	100	30	3840	CP	QPSK	Outer_Full	22.62	22.82
n77H	100	30	3840	CP	16QAM	Inner_Full	23.35	23.55
n77H	100	30	3840	CP	16QAM	Edge_1RB_Left	22.54	22.74
n77H	100	30	3840	CP	16QAM	Edge_1RB_Right	23.22	23.42
n77H	100	30	3840	CP	16QAM	Outer_Full	22.63	22.83
n77H	100	30	3840	CP	64QAM	Inner_Full	21.92	22.12
n77H	100	30	3840	CP	64QAM	Edge_1RB_Left	21.99	22.19
n77H	100	30	3840	CP	64QAM	Edge_1RB_Right	22.58	22.78
n77H	100	30	3840	CP	64QAM	Outer_Full	22.13	22.33
n77H	100	30	3840	CP	256QAM	Inner_Full	19.02	19.22
n77H	100	30	3840	CP	256QAM	Edge_1RB_Left	19.58	19.78
n77H	100	30	3840	CP	256QAM	Edge_1RB_Right	20.18	20.38
n77H	100	30	3840	CP	256QAM	Outer_Full	19.24	19.44
n77H	100	30	3930	DFT	pi/2 BPSK	Inner_Full	27.02	27.22
n77H	100	30	3930	DFT	pi/2 BPSK	Edge_1RB_Left	23.07	23.27
n77H	100	30	3930	DFT	pi/2 BPSK	Edge_1RB_Right	23.77	23.97
n77H	100	30	3930	DFT	pi/2 BPSK	Outer_Full	26.42	26.62
n77H	100	30	3930	DFT	QPSK	Inner_Full	27.00	27.20
n77H	100	30	3930	DFT	QPSK	Edge_1RB_Left	23.08	23.28
n77H	100	30	3930	DFT	QPSK	Edge_1RB_Right	23.65	23.85
n77H	100	30	3930	DFT	QPSK	Outer_Full	25.91	26.11
n77H	100	30	3930	DFT	16QAM	Inner_Full	26.01	26.21
n77H	100	30	3930	DFT	16QAM	Edge_1RB_Left	23.18	23.38
n77H	100	30	3930	DFT	16QAM	Edge_1RB_Right	24.05	24.25
n77H	100	30	3930	DFT	16QAM	Outer_Full	24.96	25.16
n77H	100	30	3930	DFT	64QAM	Inner_Full	24.57	24.77
n77H	100	30	3930	DFT	64QAM	Edge_1RB_Left	22.91	23.11
n77H	100	30	3930	DFT	64QAM	Edge_1RB_Right	23.68	23.88
n77H	100	30	3930	DFT	64QAM	Outer_Full	24.48	24.68
n77H	100	30	3930	DFT	256QAM	Inner_Full	22.62	22.82
n77H	100	30	3930	DFT	256QAM	Edge_1RB_Left	22.21	22.41

©Copyright. All rights reserved by CTTL.

n77H	100	30	3930	DFT	256QAM	Edge_1RB_Right	22.88	23.08
n77H	100	30	3930	DFT	256QAM	Outer_Full	22.55	22.75

Note: The maximum value of expanded measurement uncertainty for this test item is U = 0.668 dB, *k* = 2.

©Copyright. All rights reserved by CTTL.

A.2 Emission Limit

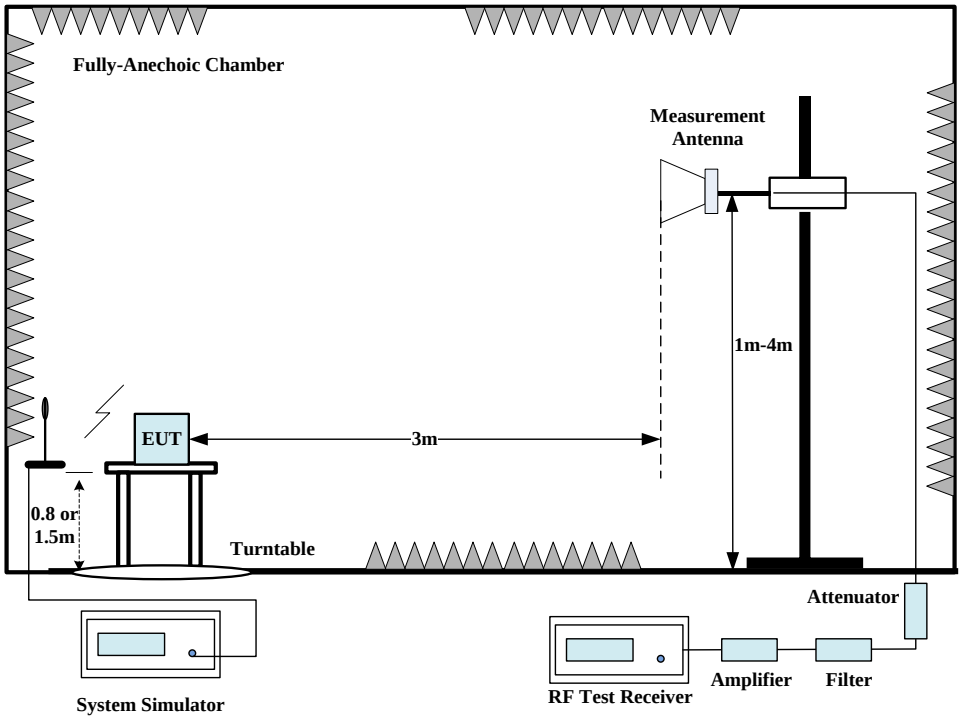
A.2.1 Measurement Method

The measurement procedures in TIA-603E-2016 are used.

The spectrum was scanned from 30 MHz to the lower of the 10th harmonic of the highest fundamental frequency and 40GHz. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of each NR Band.

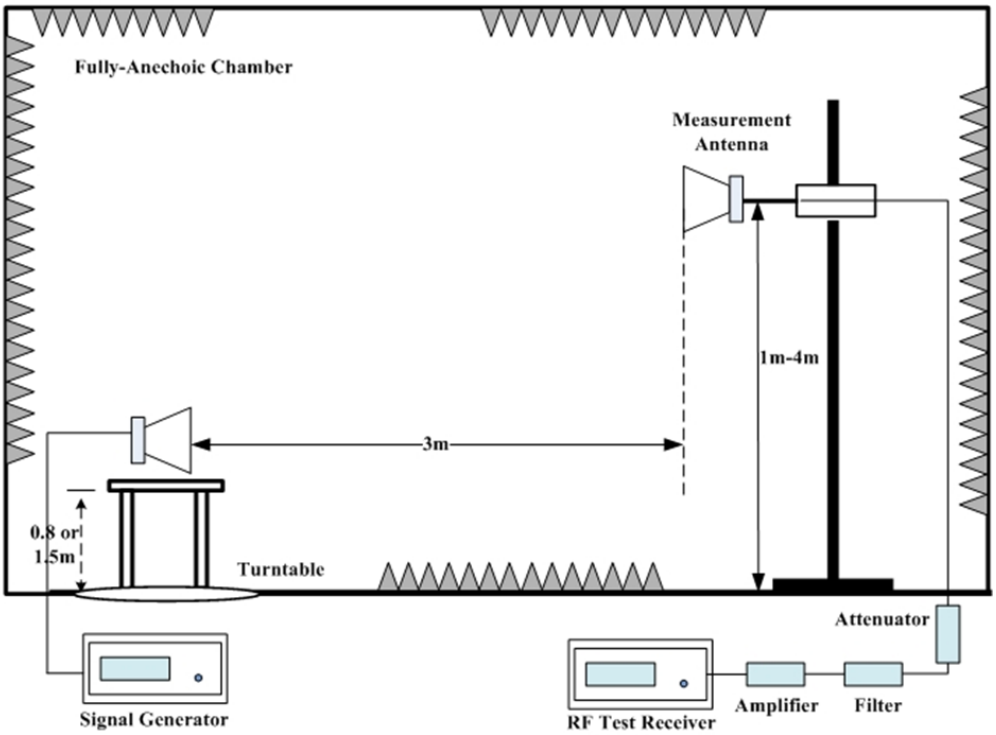
The procedure of radiated spurious emissions is as follows:

For measurements performed at frequencies less than or equal to 1 GHz, the EUT was placed on a 80cm-high non-conductive support; For measurements performed at frequencies above 1GHz,EUT was placed on a 1.5-meter-high non-conductive support. A measurement antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. In the initial test, the height of the measurement antenna was varied from 1 m to 4 m for the relative positioning that produces the maximum radiated signal level. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic were measured with peak detector.



1. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (Pr).
2. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.

©Copyright. All rights reserved by CTTL.



In the chamber, a substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. The height of measurement antenna varied between 1 m to 4 m to maximize the received signal amplitude for each emission that was detected and measured in the initial test. A power (P_{Mea}) is applied to the input of the substitution antenna and adjusts the level of the signal generator output until the value of the receiver reach the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test was performed with the measurement antenna in both vertical and horizontal polarization.

3. The Path loss (P_{pl}) between the Signal Source and the Substitution Antenna and the Substitution Antenna Gain (G_a) were recorded after test.A amplifier was connected in for the test. The Path loss (P_{pl}) is the summation of the cable loss and the gain of the amplifier.
4. The measurement results are obtained as described below:

$$\text{Power (EIRP)} = P_{Mea} - P_{pl} + G_a$$

This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP -2.15dBi.

A.2.2 Measurement Limit

NR Band n2: Part 24.238 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

NR Band n5: Part 22.917 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

©Copyright. All rights reserved by CTTL.

NR Band n30: Part 27.53(a) states for mobile and portable stations operating in the 2305–2315 MHz and 2350–2360 MHz bands: By a factor of not less than: 43 +10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than 61 + 10 log (P) dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337MHz; By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296 MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz; By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.
NR Band n66: Part 27.53(h) specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

A.2.3 Measurement Results

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of each NR Band. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of each NR Band into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this. The range of evaluated frequency is from 30MHz to 40GHz.

Note 1: All EN-DC UL bands have been tested, but only the worst cases were reported in this report.
Note 2: Both of Vertical and Horizontal polarizations are evaluated, but only the worst cases were reported in this report.

A.2.4 Measurement Results Table

Frequency	Channel	Frequency Range	Result
NR Bands	Low	9kHz-26GHz	Pass
	Middle	9kHz-26GHz	Pass
	High	9kHz-26GHz	Pass

A.2.5 Sweep Table

Subrange	RBW	VBW
9~150 kHz	0.2kHz	0.6kHz
150kHz~30MHz	9kHz	27kHz
30MHz~1 GHz	100KHz	300KHz
1~20 GHz	1 MHz	3 MHz

©Copyright. All rights reserved by CTTL.

A.2.6 Measurement Result

SA_n2, CH370500,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3704.50	-55.11	3.48	10.38	-48.21	-13.00	35.21	H
5557.50	-48.56	5.35	11.22	-42.69	-13.00	29.69	H
7418.00	-50.28	7.99	10.10	-48.17	-13.00	35.17	H
9262.50	-49.22	8.85	11.70	-46.37	-13.00	33.37	V
11122.00	-49.92	9.89	12.62	-47.19	-13.00	34.19	V
12962.50	-47.77	12.52	12.74	-47.55	-13.00	34.55	H

SA_n2, CH376000,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3759.50	-56.51	3.82	10.16	-50.17	-13.00	37.17	V
5640.00	-46.92	5.61	11.38	-41.15	-13.00	28.15	H
7520.00	-51.46	7.71	10.24	-48.93	-13.00	35.93	H
9400.00	-45.40	9.10	11.50	-43.00	-13.00	30.00	V
11292.50	-48.67	10.62	12.61	-46.68	-13.00	33.68	H
13157.50	-44.60	13.22	12.54	-45.28	-13.00	32.28	V

SA_n2, CH381500,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3814.50	-56.68	3.94	9.97	-50.65	-13.00	37.65	V
5722.50	-47.48	5.90	11.36	-42.02	-13.00	29.02	H
7630.00	-53.01	6.72	10.36	-49.37	-13.00	36.37	H
9537.00	-45.07	9.12	11.87	-42.32	-13.00	29.32	V
11430.50	-46.34	12.45	12.57	-46.22	-13.00	33.22	V
13364.00	-42.83	13.10	12.44	-43.49	-13.00	30.49	V

©Copyright. All rights reserved by CTTL.

SA_n5, CH165300,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1653.00	-58.36	2.57	9.49	2.15	-53.59	-13.00	40.59	H
2486.50	-50.86	4.49	10.33	2.15	-47.17	-13.00	34.17	V
5790.00	-57.12	5.70	11.06	2.15	-53.91	-13.00	40.91	H
6621.00	-53.22	6.91	10.34	2.15	-51.94	-13.00	38.94	H
7445.50	-48.63	7.83	10.10	2.15	-48.51	-13.00	35.51	V
8251.00	-50.90	7.59	11.20	2.15	-49.44	-13.00	36.44	V

SA_n5, CH167300,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1672.50	-53.67	2.79	9.46	2.15	-49.15	-13.00	36.15	V
2509.50	-50.97	4.42	10.30	2.15	-47.24	-13.00	34.24	V
5864.50	-56.96	5.62	10.94	2.15	-53.79	-13.00	40.79	H
6698.00	-53.81	6.21	10.50	2.15	-51.67	-13.00	38.67	V
7514.50	-48.89	7.71	10.23	2.15	-48.52	-13.00	35.52	H
8368.00	-50.23	8.19	11.30	2.15	-49.27	-13.00	36.27	H

SA_n5, CH169300,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1693.00	-54.27	2.95	9.41	2.15	-49.96	-13.00	36.96	H
2539.50	-51.15	4.65	10.30	2.15	-47.65	-13.00	34.65	H
5911.00	-56.56	6.16	10.78	2.15	-54.09	-13.00	41.09	H
6783.50	-53.88	6.39	10.37	2.15	-52.05	-13.00	39.05	V
7614.00	-50.89	6.61	10.33	2.15	-49.32	-13.00	36.32	H
8463.00	-49.36	8.02	11.30	2.15	-48.23	-13.00	35.23	V

©Copyright. All rights reserved by CTTL.

SA_n30, CH461500,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4615.00	-66.93	4.68	10.97	-60.64	-40.00	20.64	H
6922.50	-45.88	6.47	10.34	-42.01	-40.00	2.01	H
9230.00	-56.74	8.85	11.74	-53.85	-40.00	13.85	H
11537.50	-54.23	10.58	12.54	-52.27	-40.00	12.27	V
13831.00	-53.24	13.06	12.10	-54.20	-40.00	14.20	H
16167.00	-52.27	18.55	15.10	-55.72	-40.00	15.72	V

SA_n30, CH462000,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4620.00	-67.12	4.69	10.96	-60.85	-40.00	20.85	V
6930.00	-45.40	6.47	10.36	-41.51	-40.00	1.51	H
9240.00	-56.43	8.85	11.72	-53.56	-40.00	13.56	H
11550.00	-58.19	10.67	12.55	-56.31	-40.00	16.31	H
13867.50	-53.99	13.11	12.10	-55.00	-40.00	15.00	H
16179.00	-51.75	18.49	15.10	-55.14	-40.00	15.14	V

SA_n30, CH462500,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4625.00	-68.00	4.71	10.95	-61.76	-40.00	21.76	V
6937.50	-44.40	6.47	10.38	-40.49	-40.00	0.49	H
9250.00	-58.13	8.85	11.70	-55.28	-40.00	15.28	H
11562.50	-58.20	10.76	12.56	-56.40	-40.00	16.40	V
13868.00	-54.25	13.11	12.10	-55.26	-40.00	15.26	H
16187.00	-51.78	18.45	15.10	-55.13	-40.00	15.13	V

©Copyright. All rights reserved by CTTL.

SA_n66, CH342500,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5137.00	-52.34	5.54	11.60	-46.28	-13.00	33.28	H
8562.50	-52.24	8.48	11.20	-49.52	-13.00	36.52	H
11974.50	-57.43	12.28	13.05	-56.66	-13.00	43.66	V
13690.50	-53.56	13.02	12.20	-54.38	-13.00	41.38	H
15417.00	-57.08	14.92	15.43	-56.57	-13.00	43.57	H
17132.50	-46.94	20.08	13.47	-53.55	-13.00	40.55	H

SA_n66, CH349000,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5235.00	-55.63	4.70	11.70	-48.63	-13.00	35.63	H
8725.00	-56.74	8.45	11.10	-54.09	-13.00	41.09	H
12220.50	-57.60	12.16	13.40	-56.36	-13.00	43.36	V
13951.00	-52.72	14.68	12.15	-55.25	-13.00	42.25	H
15702.50	-55.19	16.65	15.50	-56.34	-13.00	43.34	H
17438.50	-45.51	19.25	13.04	-51.72	-13.00	38.72	H

SA_n66, CH355500,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5332.00	-51.25	6.25	11.74	-45.76	-13.00	32.76	H
8887.50	-61.64	8.03	11.55	-58.12	-13.00	45.12	V
12437.50	-57.37	13.03	13.48	-56.92	-13.00	43.92	V
14223.50	-54.84	13.08	12.62	-55.30	-13.00	42.30	H
15993.50	-54.65	17.55	15.41	-56.79	-13.00	43.79	V
17778.50	-46.04	19.55	13.48	-52.11	-13.00	39.11	H

©Copyright. All rights reserved by CTTL.

DC 66(5M)_n2(5M), CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3514.50	-60.14	5.55	8.22	-57.47	-13.00	44.47	H
5250.00	-58.28	7.00	10.25	-55.03	-13.00	42.03	V
7000.50	-55.01	8.30	11.60	-51.71	-13.00	38.71	V
3704.50	-55.27	6.42	8.49	-53.20	-13.00	40.20	H
5557.50	-56.10	7.19	10.59	-52.70	-13.00	39.70	H
7395.00	-52.94	8.12	12.07	-48.99	-13.00	35.99	V

DC 66(5M)_n2(5M), CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3514.00	-59.94	5.55	8.22	-57.27	-13.00	44.27	V
5236.00	-58.30	7.00	10.23	-55.07	-13.00	42.07	H
7006.00	-55.01	8.29	11.61	-51.69	-13.00	38.69	H
3759.50	-56.77	6.26	8.56	-54.47	-13.00	41.47	V
5640.00	-56.75	7.27	10.57	-53.45	-13.00	40.45	V
7534.50	-52.63	8.25	12.23	-48.65	-13.00	35.65	V

DC 66(5M)_n2(5M), CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3497.50	-58.58	5.52	8.19	-55.91	-13.00	42.91	H
5238.50	-58.37	7.00	10.23	-55.14	-13.00	42.14	V
7007.50	-54.43	8.29	11.61	-51.11	-13.00	38.11	H
3815.00	-55.67	6.09	8.64	-53.12	-13.00	40.12	H
5722.00	-56.23	7.30	10.56	-52.97	-13.00	39.97	H
7629.50	-54.59	8.11	12.30	-50.40	-13.00	37.40	V

©Copyright. All rights reserved by CTTL.

DC 66(5M)_n5(5M), CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1641.50	-45.11	3.56	9.50	2.15	-41.32	-13.00	28.32	H
2465.00	-38.75	4.59	10.34	2.15	-35.15	-13.00	22.15	V
3301.00	-61.97	5.29	10.40	2.15	-59.01	-13.00	46.01	V
4141.00	-58.18	6.07	10.40	2.15	-56.00	-13.00	43.00	H
4949.00	-57.40	6.69	11.20	2.15	-55.04	-13.00	42.04	H
5782.50	-55.83	7.22	11.04	2.15	-54.16	-13.00	41.16	V

DC 66(5M)_n5(5M), CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1672.50	-45.79	3.58	9.55	2.15	-41.97	-13.00	28.97	V
2522.00	-38.16	4.65	10.16	2.15	-34.80	-13.00	21.80	H
3354.00	-61.17	5.32	10.50	2.15	-58.14	-13.00	45.14	H
4197.00	-57.46	6.20	10.49	2.15	-55.32	-13.00	42.32	V
5034.00	-57.41	6.59	11.37	2.15	-54.78	-13.00	41.78	V
5844.00	-56.53	7.22	10.82	2.15	-55.08	-13.00	42.08	H

DC 66(5M)_n5(5M), CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2539.50	-38.74	4.66	10.12	2.15	-35.43	-13.00	22.43	H
3383.00	-61.47	5.35	10.50	2.15	-58.47	-13.00	45.47	V
4246.50	-57.43	6.24	10.59	2.15	-55.23	-13.00	42.23	V
5074.50	-57.96	6.70	11.45	2.15	-55.36	-13.00	42.36	V
5920.50	-55.14	7.46	10.50	2.15	-54.25	-13.00	41.25	V
6760.50	-53.24	7.95	10.40	2.15	-52.94	-13.00	39.94	H

©Copyright. All rights reserved by CTTL.

DC 66(5M)_n30(5M), CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4614.50	-68.01	6.46	9.51	-64.96	-40.00	24.96	H
6922.50	-56.07	7.72	11.51	-52.28	-40.00	12.28	V
9229.50	-62.61	8.99	13.24	-58.36	-40.00	18.36	V
11556.50	-60.24	9.81	13.09	-56.96	-40.00	16.96	V
13821.50	-58.44	10.65	14.39	-54.70	-40.00	14.70	V
16180.50	-57.60	11.75	13.66	-55.69	-40.00	15.69	H

DC 66(5M)_n30(5M), CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4619.50	-68.93	6.45	9.52	-65.86	-40.00	25.86	H
6930.00	-57.07	7.76	11.52	-53.31	-40.00	13.31	H
9267.00	-62.34	9.08	13.26	-58.16	-40.00	18.16	H
11560.50	-60.42	9.80	13.09	-57.13	-40.00	17.13	V
13833.50	-58.92	10.67	14.40	-55.19	-40.00	15.19	V
16193.50	-57.52	11.74	13.66	-55.60	-40.00	15.60	H

DC 66(5M)_n30(5M), CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4625.00	-69.21	6.44	9.53	-66.12	-40.00	26.12	V
6937.50	-54.55	7.82	11.53	-50.84	-40.00	10.84	H
9250.50	-62.13	9.04	13.25	-57.92	-40.00	17.92	H
11552.00	-60.32	9.81	13.09	-57.04	-40.00	17.04	V
13847.00	-59.40	10.70	14.41	-55.69	-40.00	15.69	H
16212.50	-57.42	11.74	13.66	-55.50	-40.00	15.50	V

©Copyright. All rights reserved by CTTL.

DC 2(5M)_n66(5M), CH18900,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3425.00	-67.09	5.38	8.02	-64.45	-13.00	51.45	H
5137.50	-54.86	6.86	10.09	-51.63	-13.00	38.63	V
6833.50	-66.29	7.85	11.40	-62.74	-13.00	49.74	V
8564.50	-63.94	8.56	13.01	-59.49	-13.00	46.49	H
10258.00	-61.93	9.50	13.00	-58.43	-13.00	45.43	H
12004.00	-59.64	10.06	13.00	-56.70	-13.00	43.70	H

DC 2(5M)_n66(5M), CH18900,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3474.50	-69.96	5.47	8.14	-67.29	-13.00	54.29	V
5212.50	-52.65	6.98	10.20	-49.43	-13.00	36.43	H
6933.50	-66.08	7.79	11.52	-62.35	-13.00	49.35	H
8687.50	-64.03	8.38	13.04	-59.37	-13.00	46.37	H
10406.50	-59.71	9.79	13.06	-56.44	-13.00	43.44	V
12169.50	-59.32	10.15	13.07	-56.40	-13.00	43.40	H

DC 2(5M)_n66(5M), CH18900,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3524.50	-69.48	5.56	8.23	-66.81	-13.00	53.81	V
5287.50	-54.02	6.99	10.30	-50.71	-13.00	37.71	H
7050.50	-64.65	8.23	11.66	-61.22	-13.00	48.22	H
8812.50	-63.19	8.68	13.06	-58.81	-13.00	45.81	V
10564.50	-62.13	9.41	13.11	-58.43	-13.00	45.43	V
12347.00	-60.34	10.20	13.14	-57.40	-13.00	44.40	V

Note: The maximum value of expanded measurement uncertainty for this test item is U = 5.62 dB, *k* = 2.

©Copyright. All rights reserved by CTTL.

A.3 Frequency Stability

A.3.1 Method of Measurement

Frequency stability is a measure of the frequency drift due to temperature and supply voltage variations, with reference to the frequency measured at +20 °C and rated supply voltage. Two reference points are established at the applicable unwanted emissions limit using a RBW equal to the RBW required by the unwanted emissions specification of the applicable regulatory standard. These reference points measured using the lowest and highest channel of operation shall be identified as F_L and F_H respectively.

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a “call mode”. This is accomplished with the use of MT8000A.

1. Measure the carrier frequency at room temperature.
2. Subject the EUT to overnight soak at -30℃.
3. With the EUT, powered via nominal voltage, connected to the MT8000A, and in a simulated call on middle channel for each NR band, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
4. Repeat the above measurements at 10℃ increments from -30℃ to +50℃. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
5. Re-measure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments re-measuring carrier frequency at each voltage. Pause at nominal voltage for 1.5 hours unpowered, to allow any self-heating to stabilize, before continuing.
6. Subject the EUT to overnight soak at +50℃.
7. With the EUT, powered via nominal voltage, connected to the MT8000A and in a simulated call on the center channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
8. Repeat the above measurements at 10 ℃ decrements from +50℃ to -30℃. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
9. At all temperature levels hold the temperature to +/- 0.5℃ during the measurement procedure.

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. As this transceiver is considered "Hand carried, battery powered equipment" Section 2.1055(d)(2) applies. This requires that the lower voltage for frequency stability testing be specified by the manufacturer. This transceiver is specified to operate with an input voltage of the lower, higher and nominal voltage. Operation above or below these voltage limits is prohibited by transceiver software in order to prevent improper operation as well as to protect components from overstress.

©Copyright. All rights reserved by CTTL.

A.3.2 Measurement results

n2

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.8	1850.080	1909.872		
50				-1.50	0.0008
40				6.30	0.0034
30				10.20	0.0054
10				8.00	0.0043
0				3.20	0.0017
-10				-3.30	0.0018
-20				3.00	0.0016
-30				3.20	0.0017

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.6	20	1850.080	1909.872	1.20	0.0006
4.4				2.70	0.0014

n5

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.8	824.256	847.624		
50				-1.10	0.0013
40				-2.10	0.0025
30				2.50	0.0030
10				-1.20	0.0014
0				1.10	0.0013
-10				1.30	0.0016
-20				-1.20	0.0014
-30				-2.40	0.0029

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.6	20	824.256	847.624	2.20	0.0026
4.4				-2.60	0.0031

©Copyright. All rights reserved by CTTL.

n30

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.8	2305.280	2314.320		
50				3.10	0.0013
40				4.30	0.0019
30				4.40	0.0019
10				3.30	0.0014
0				0.80	0.0003
-10				7.70	0.0033
-20				6.10	0.0026
-30				4.50	0.0019

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.6	20	2305.280	2314.320	4.30	0.0019
4.4				4.30	0.0019

n66

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.8	1710.256	1779.344		
50				-1.40	0.0008
40				-7.60	0.0044
30				-7.10	0.0041
10				-5.40	0.0031
0				-4.40	0.0025
-10				-7.50	0.0043
-20				-1.20	0.0007
-30				-3.60	0.0021

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.6	20	1710.256	1779.344	-3.00	0.0017
4.4				-2.60	0.0015

©Copyright. All rights reserved by CTTL.

n77L

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.8	3450.688	3548.224		
50				0.70	0.0002
40				7.20	0.0021
30				-3.80	0.0011
10				-7.20	0.0021
0				-2.80	0.0008
-10				-0.10	0.0000
-20				-7.40	0.0021
-30				-0.60	0.0002

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.6	20	3450.688	3548.224	-2.30	0.0007
4.4				-5.90	0.0017

n77H

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.8	3700.368	3978.528		
50				-13.70	0.0036
40				-10.50	0.0027
30				-15.30	0.0040
10				-13.60	0.0035
0				1.00	0.0003
-10				-8.20	0.0021
-20				-4.30	0.0011
-30				7.90	0.0021

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.6	20	3700.368	3978.528	-2.50	0.0007
4.4				-1.70	0.0004

Note: The maximum value of expanded measurement uncertainty for this test item is U = 0.047k Hz, *k* = 2.

©Copyright. All rights reserved by CTTL.

A.4 Occupied Bandwidth

Occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the mid frequencies frequency. The table below lists the measured 99% BW. Spectrum analyzer plots are included on the following pages.
The measurement method is from ANSI C63.26:
a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts.
b) The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set ≥ 3 × RBW.
c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation.
d) Set the detection mode to peak, and the trace mode to max-hold.

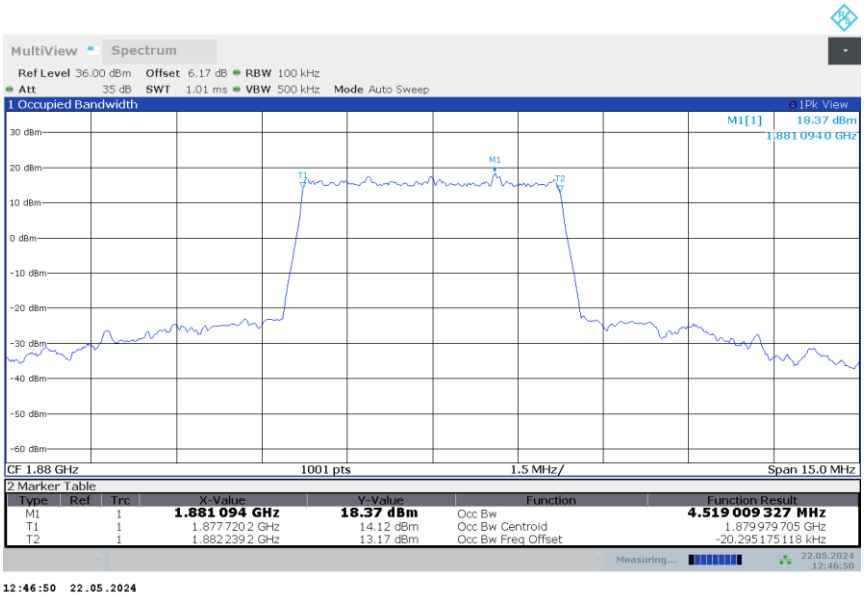
©Copyright. All rights reserved by CTTL.

n2

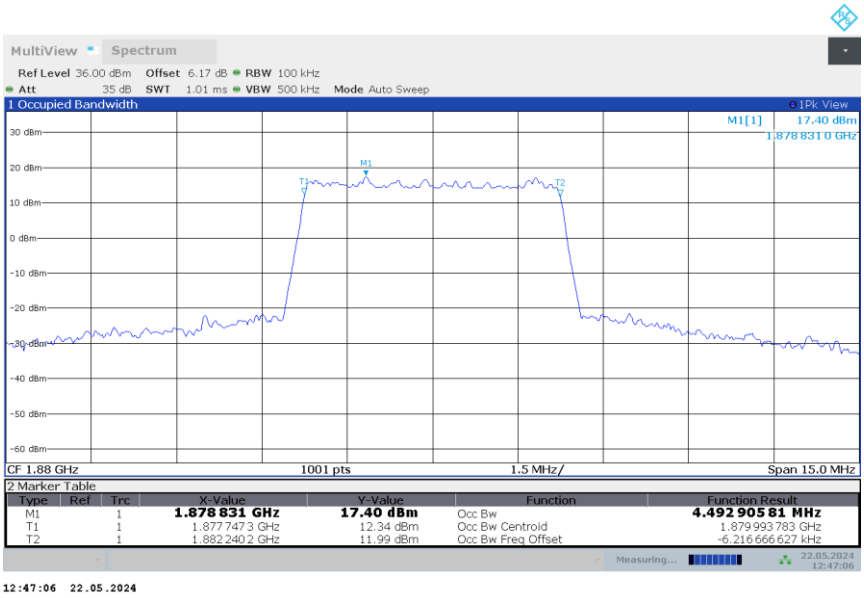
n2,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1880	4.519	4.493

n2,5MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n2,5MHz Bandwidth,DFT-s-QPSK (99% BW)



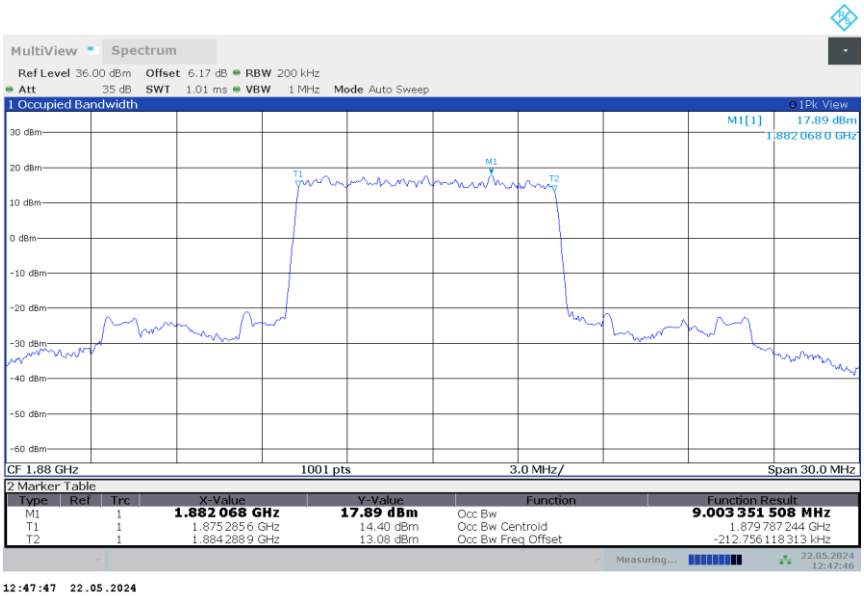
©Copyright. All rights reserved by CTTL.

n2

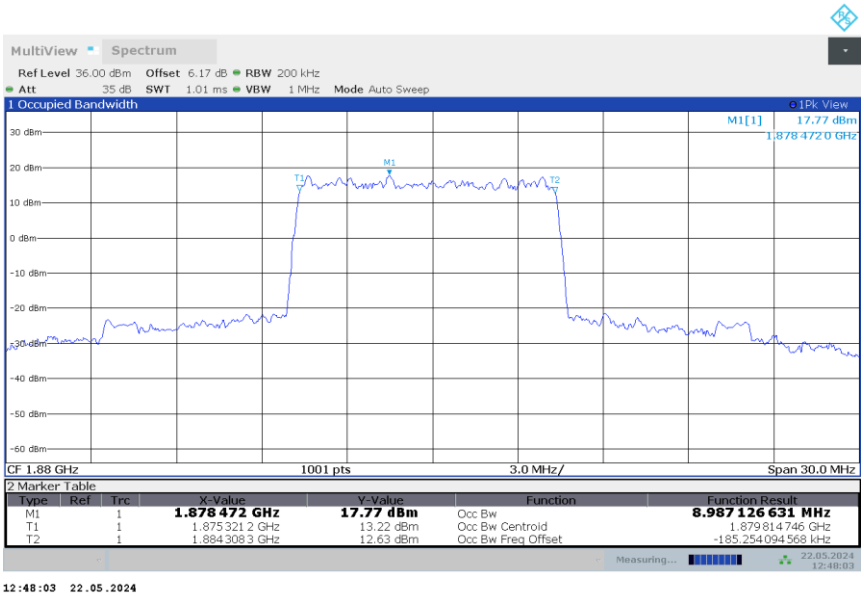
n2,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1880	9.003	8.987

n2,10MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n2,10MHz Bandwidth,DFT-s-QPSK (99% BW)



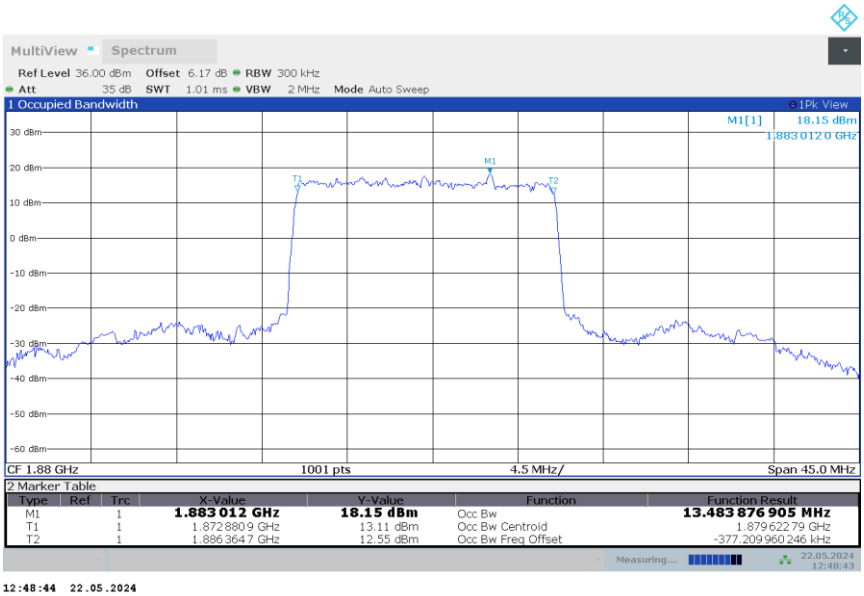
©Copyright. All rights reserved by CTTL.

n2

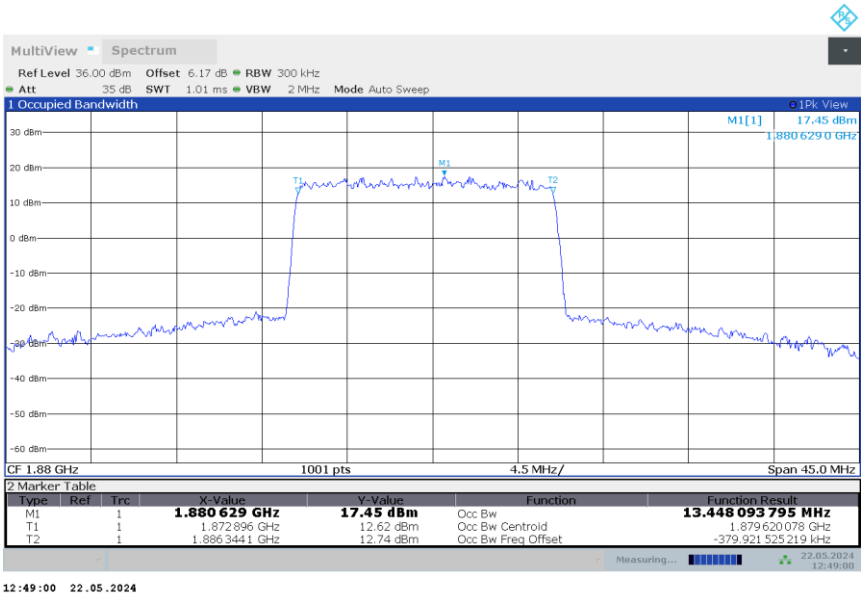
n2,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1880	13.484	13.448

n2,15MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n2,15MHz Bandwidth,DFT-s-QPSK (99% BW)



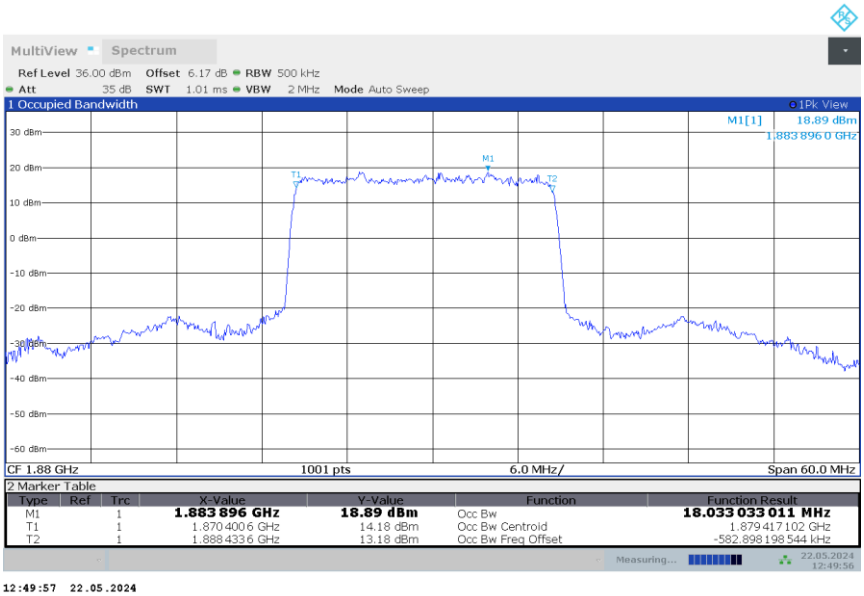
©Copyright. All rights reserved by CTTL.

n2

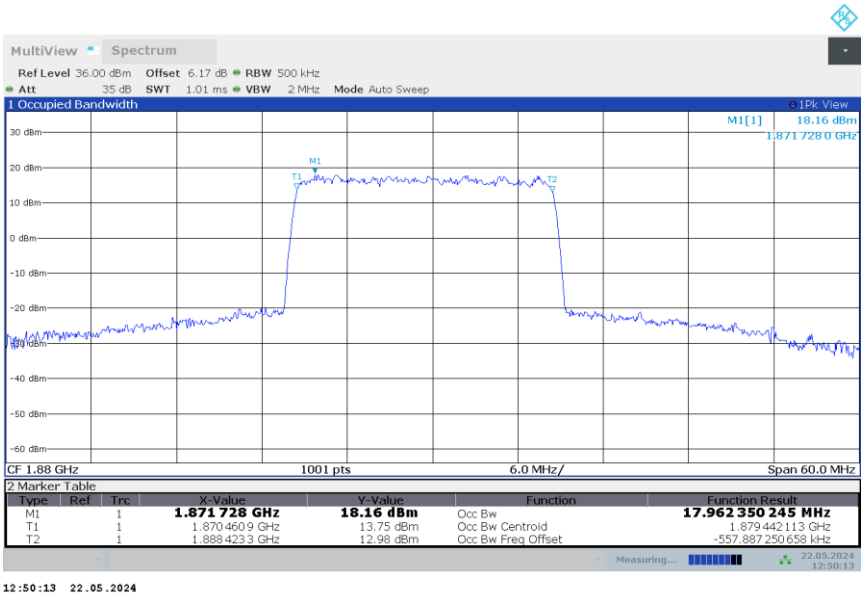
n2,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1880	18.033	17.962

n2,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n2,20MHz Bandwidth,DFT-s-QPSK (99% BW)



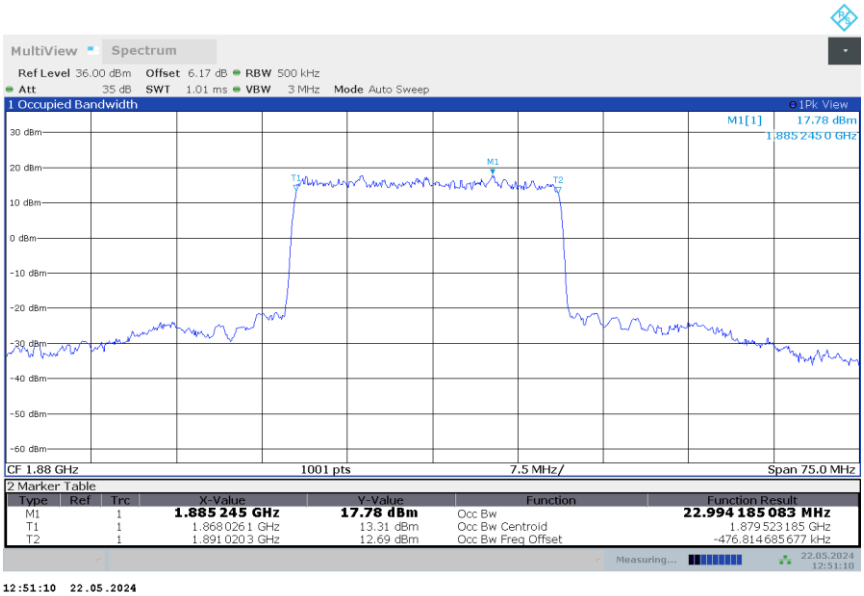
©Copyright. All rights reserved by CTTL.

n2

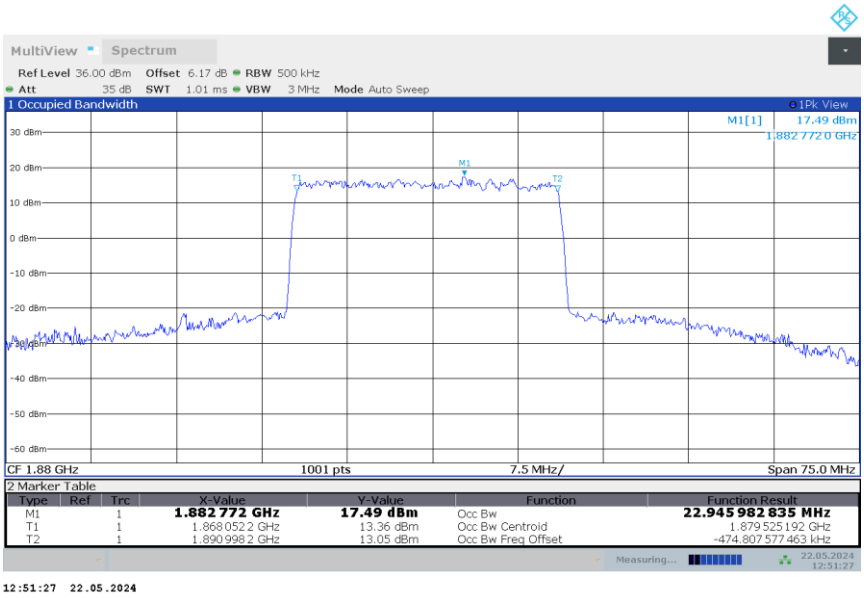
n2,25MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1880	22.994	22.946

n2,25MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n2,25MHz Bandwidth,DFT-s-QPSK (99% BW)



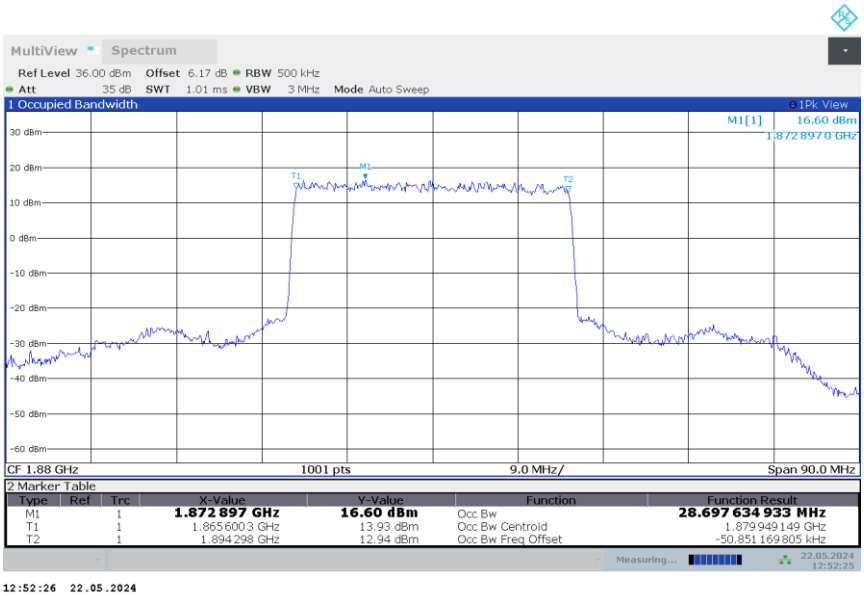
©Copyright. All rights reserved by CTTL.

n2

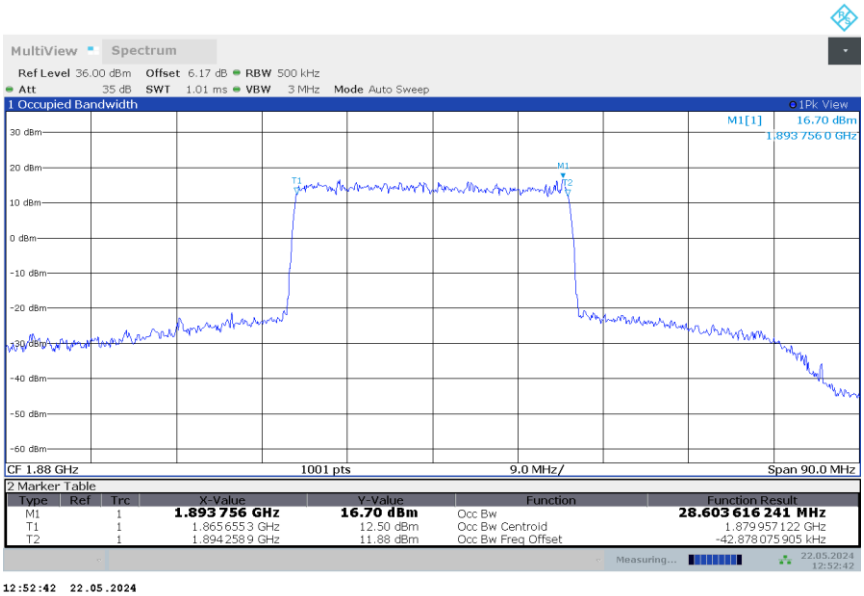
n2,30MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1880	28.698	28.604

n2,30MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n2,30MHz Bandwidth,DFT-s-QPSK (99% BW)



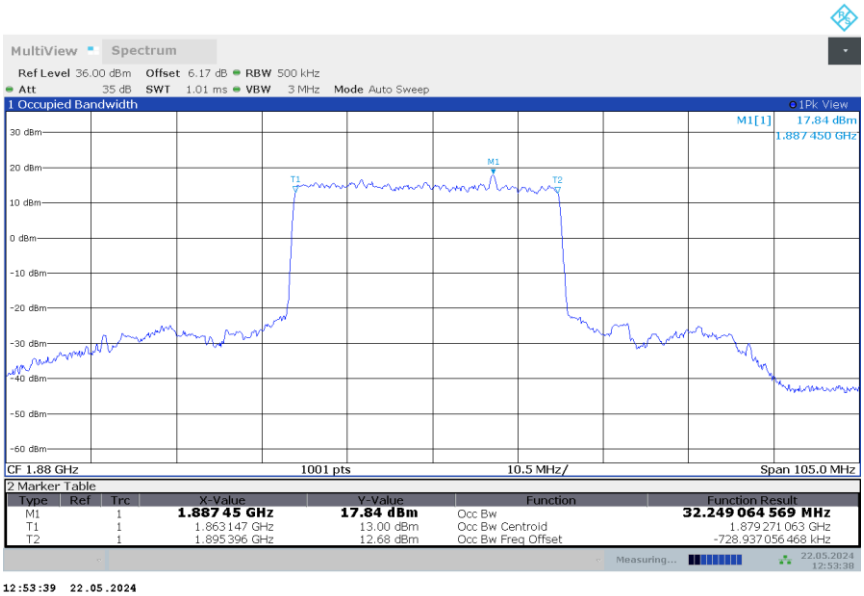
©Copyright. All rights reserved by CTTL.

n2

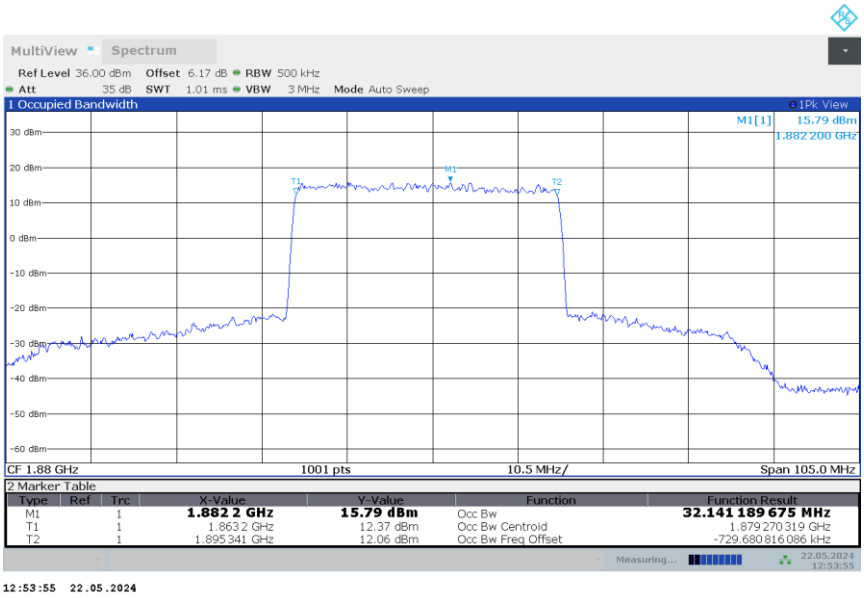
n2,35MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1880	32.249	32.141

n2,35MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n2,35MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

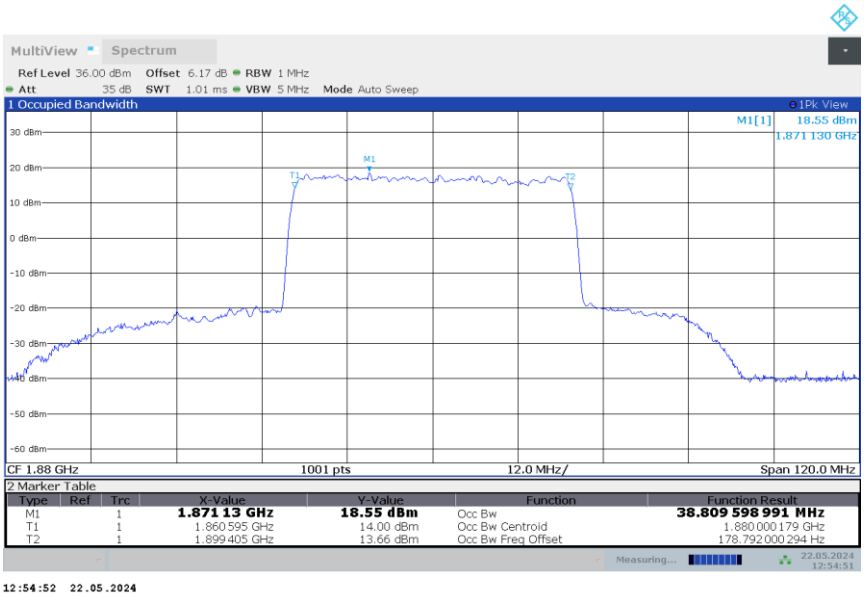
n2

n2,40MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1880	38.929	38.810

n2,40MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

n2,40MHz Bandwidth,DFT-s-QPSK (99% BW)



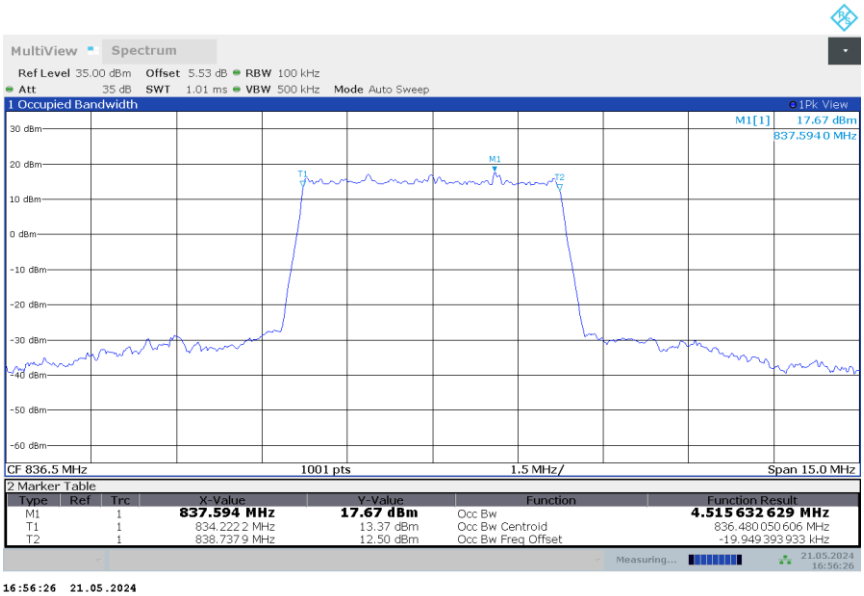
©Copyright. All rights reserved by CTTL.

n5

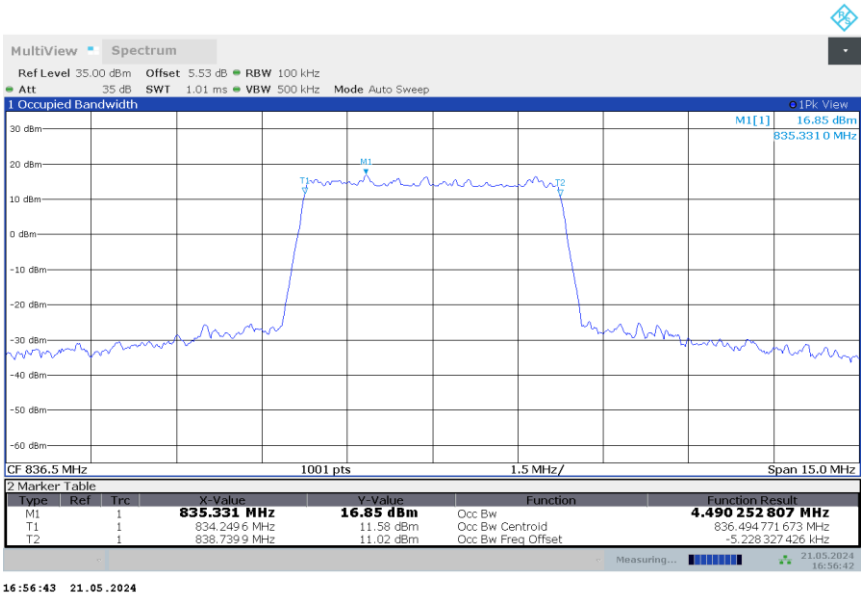
n5,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
836.5	4.516	4.490

n5,5MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n5,5MHz Bandwidth,DFT-s-QPSK (99% BW)



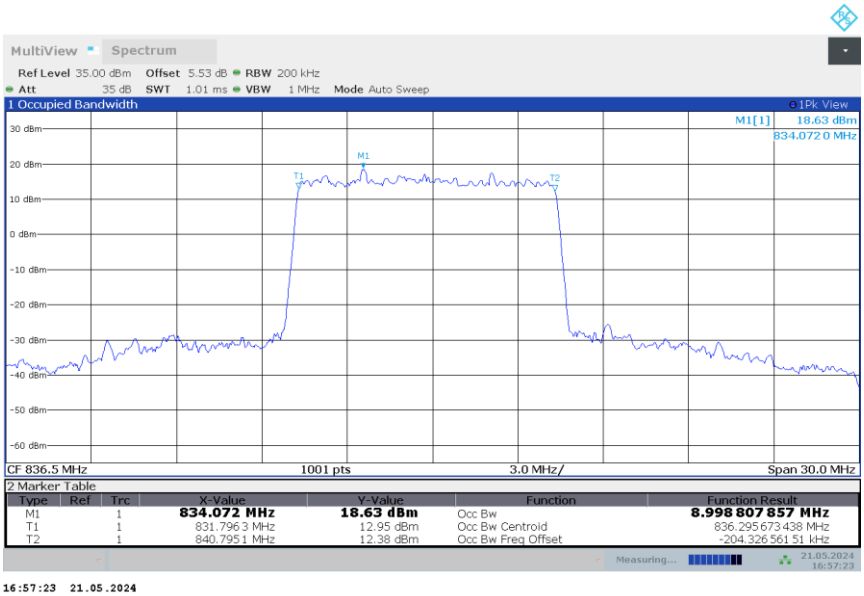
©Copyright. All rights reserved by CTTL.

n5

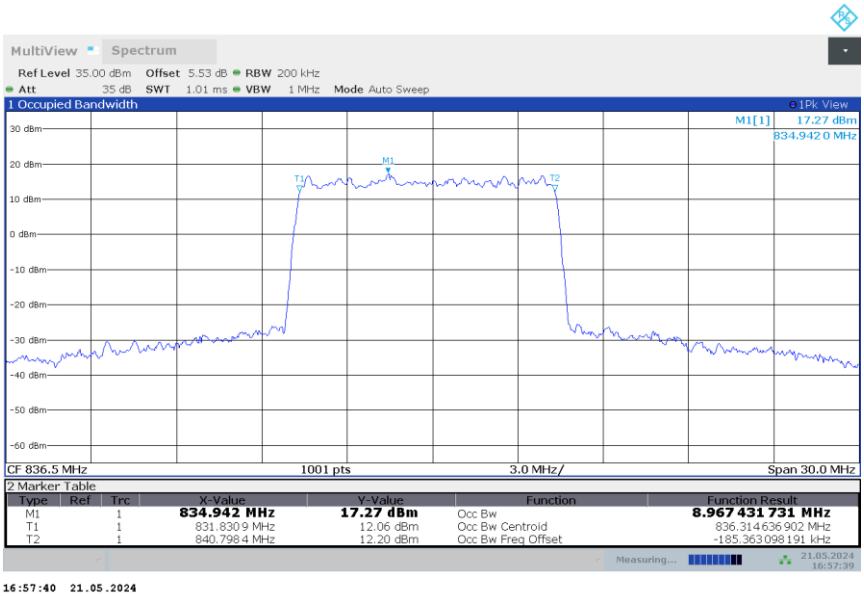
n5,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
836.5	8.999	8.967

n5,10MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n5,10MHz Bandwidth,DFT-s-QPSK (99% BW)



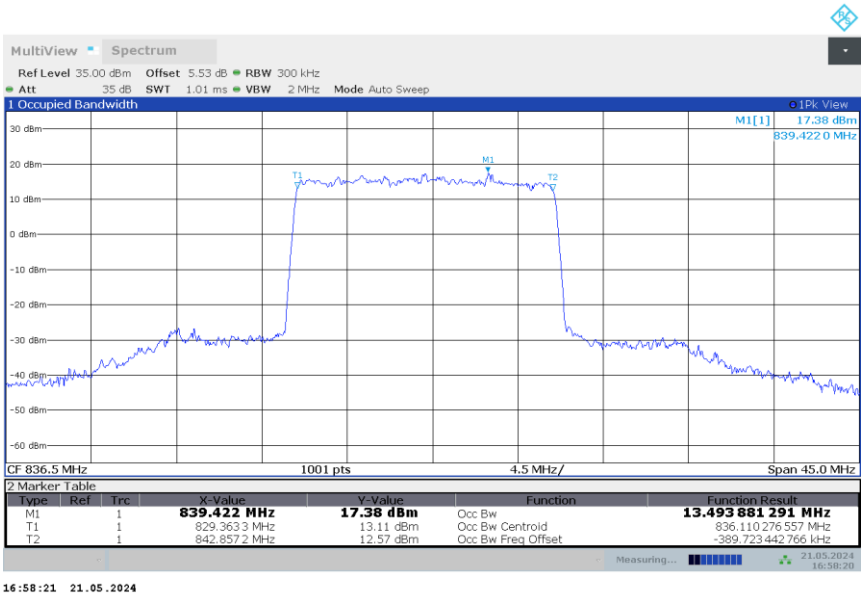
©Copyright. All rights reserved by CTTL.

n5

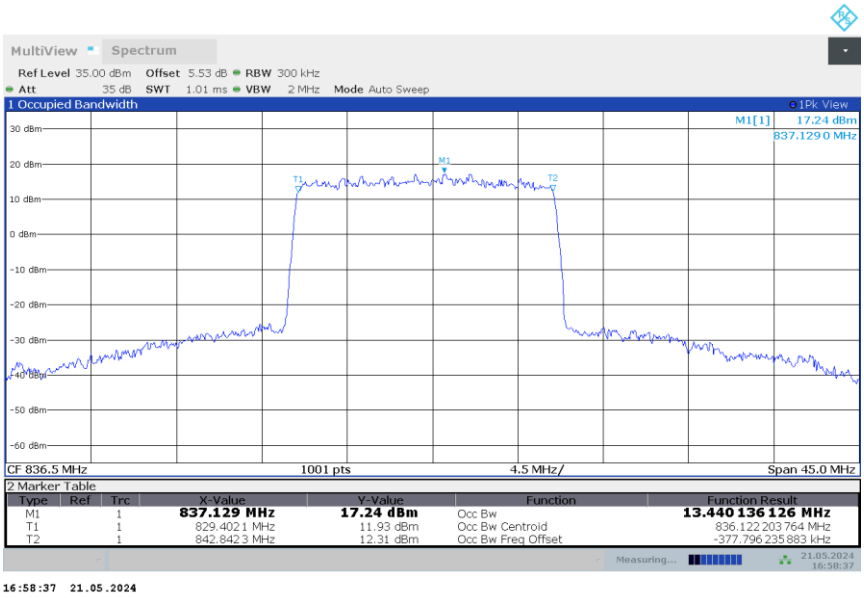
n5,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
836.5	13.494	13.440

n5,15MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n5,15MHz Bandwidth,DFT-s-QPSK (99% BW)



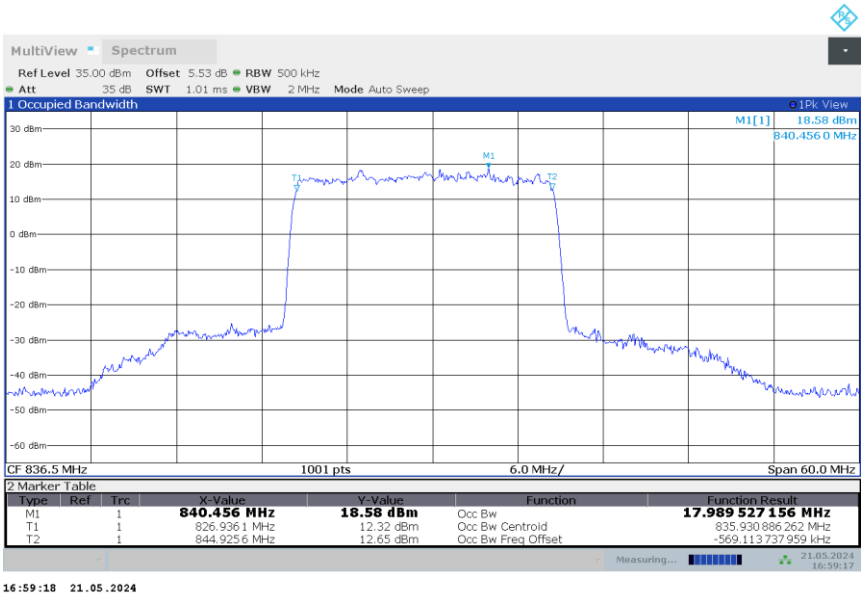
©Copyright. All rights reserved by CTTL.

n5

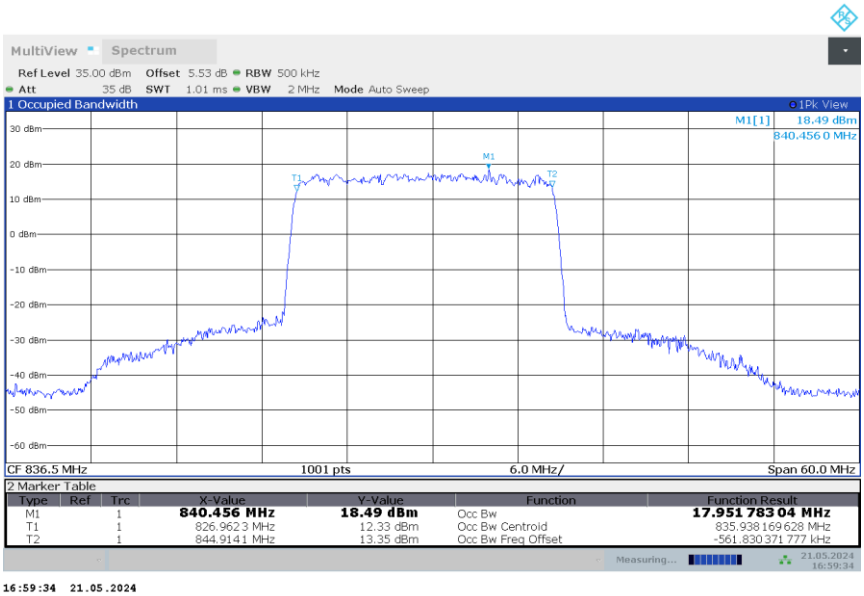
n5,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
836.5	17.990	17.952

n5,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n5,20MHz Bandwidth,DFT-s-QPSK (99% BW)



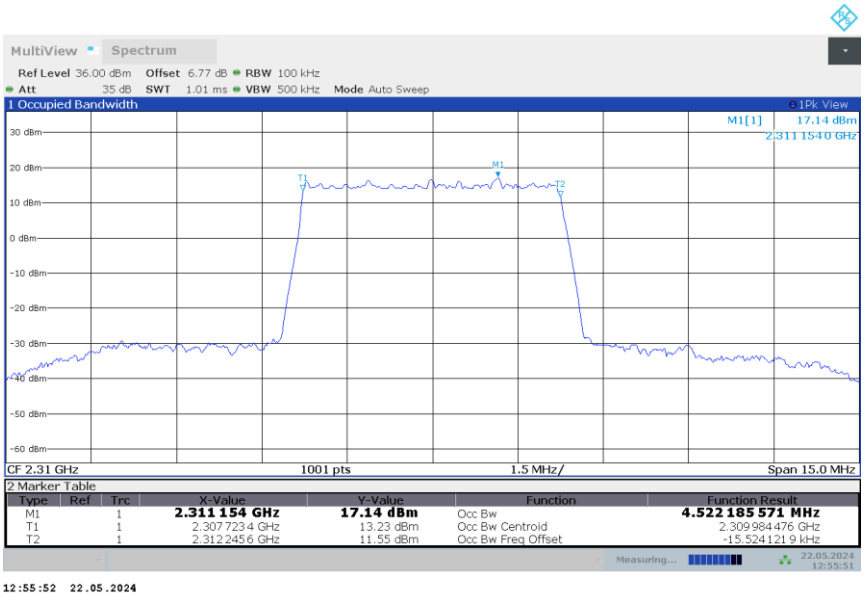
©Copyright. All rights reserved by CTTL.

n30

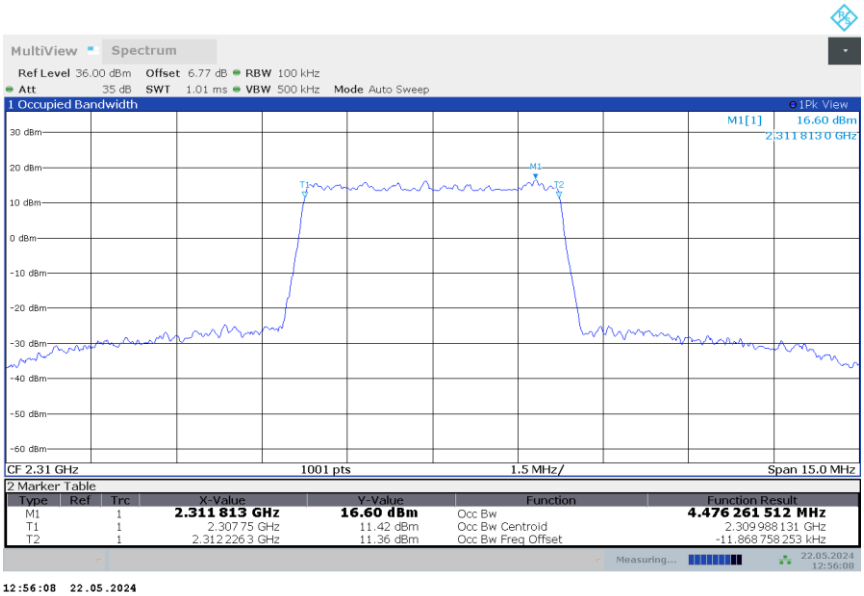
n30,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2310	4.522	4.476

n30,5MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n30,5MHz Bandwidth,DFT-s-QPSK (99% BW)



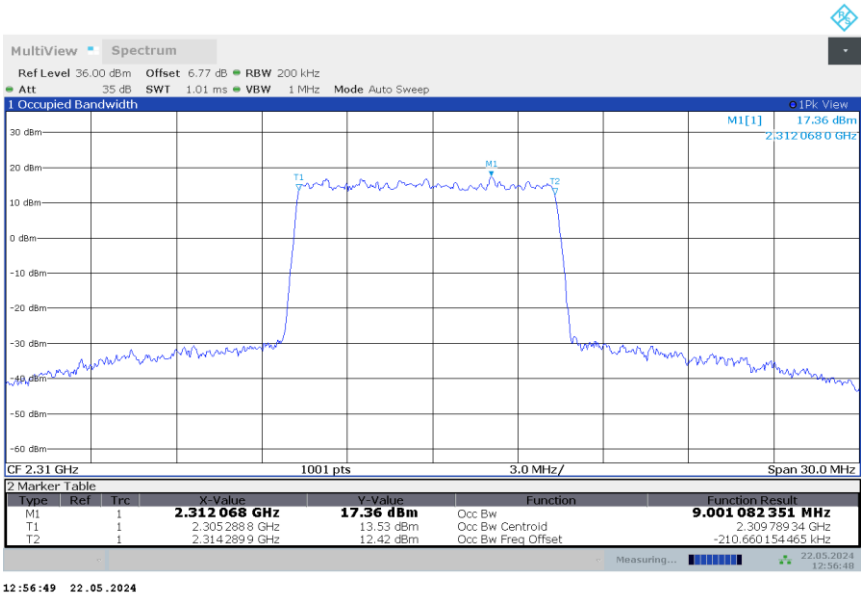
©Copyright. All rights reserved by CTTL.

n30

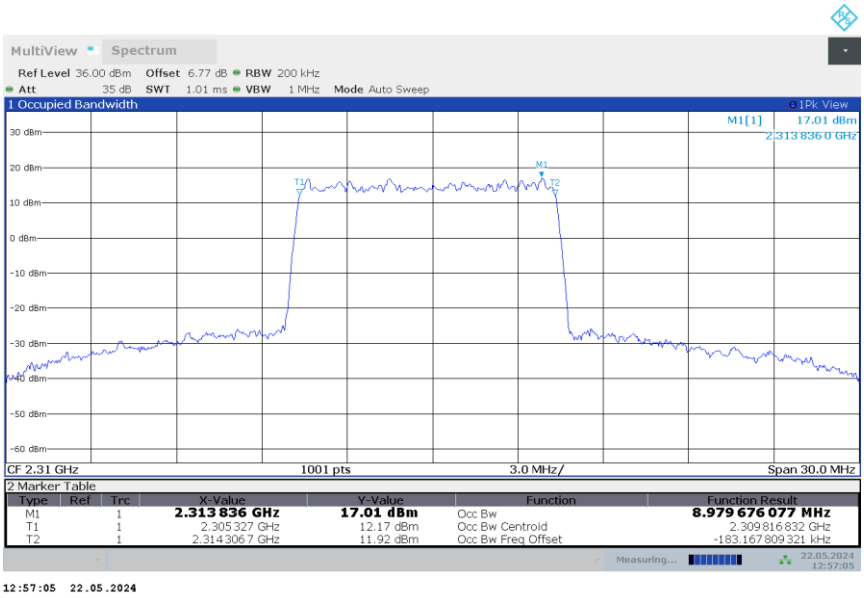
n30,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2310	9.001	8.980

n30,10MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n30,10MHz Bandwidth,DFT-s-QPSK (99% BW)



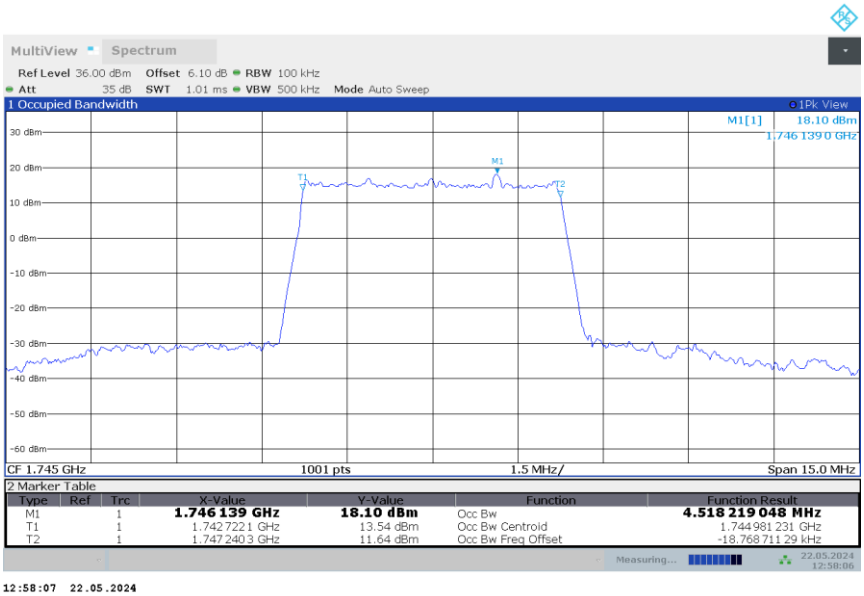
©Copyright. All rights reserved by CTTL.

n66

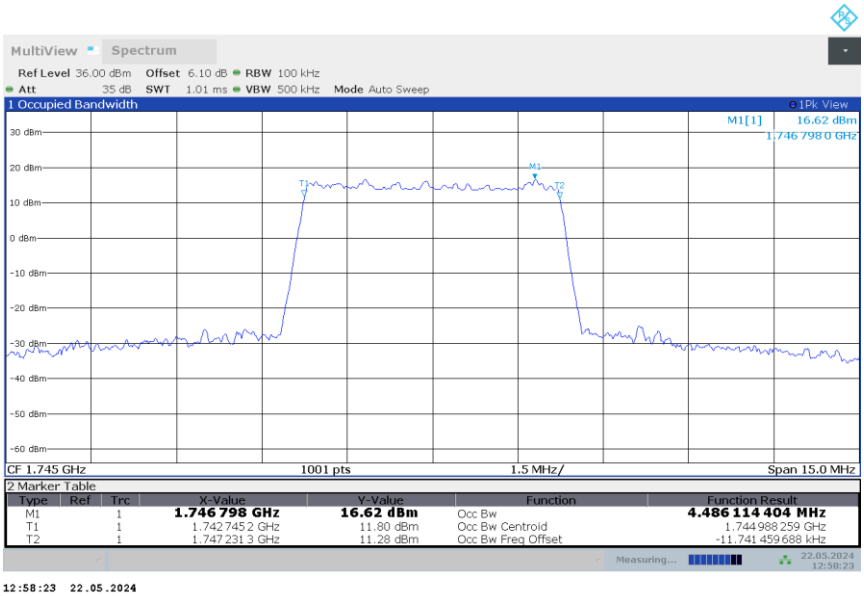
n66,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	4.518	4.486

n66,5MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n66,5MHz Bandwidth,DFT-s-QPSK (99% BW)



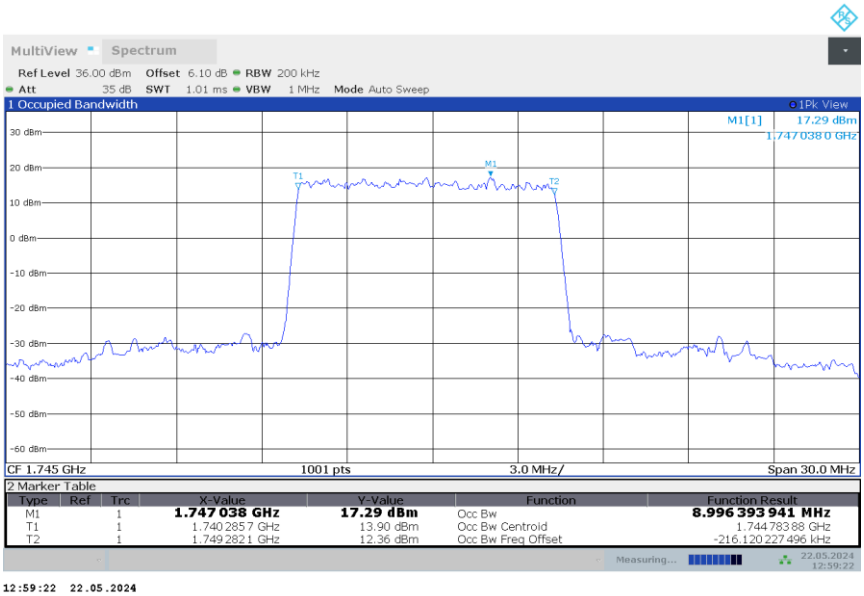
©Copyright. All rights reserved by CTTL.

n66

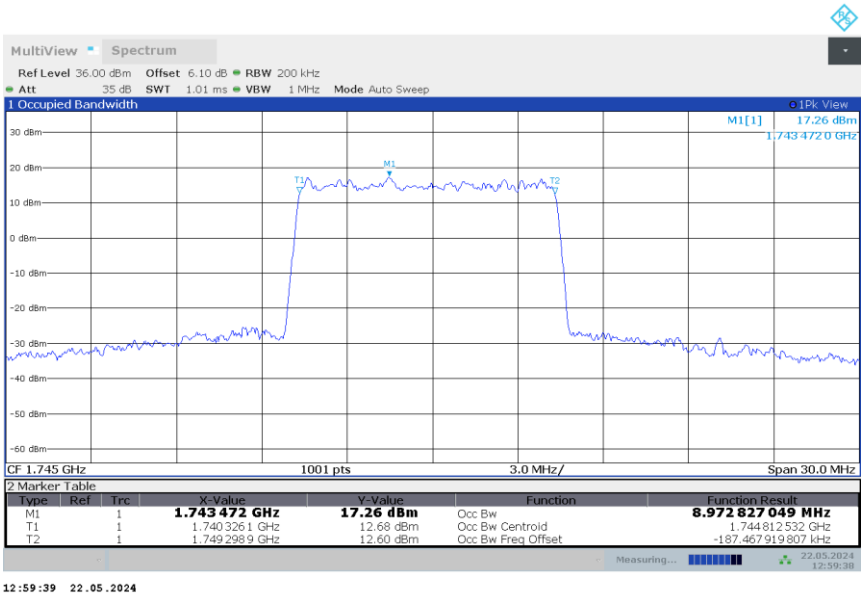
n66,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	8.996	8.973

n66,10MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n66,10MHz Bandwidth,DFT-s-QPSK (99% BW)



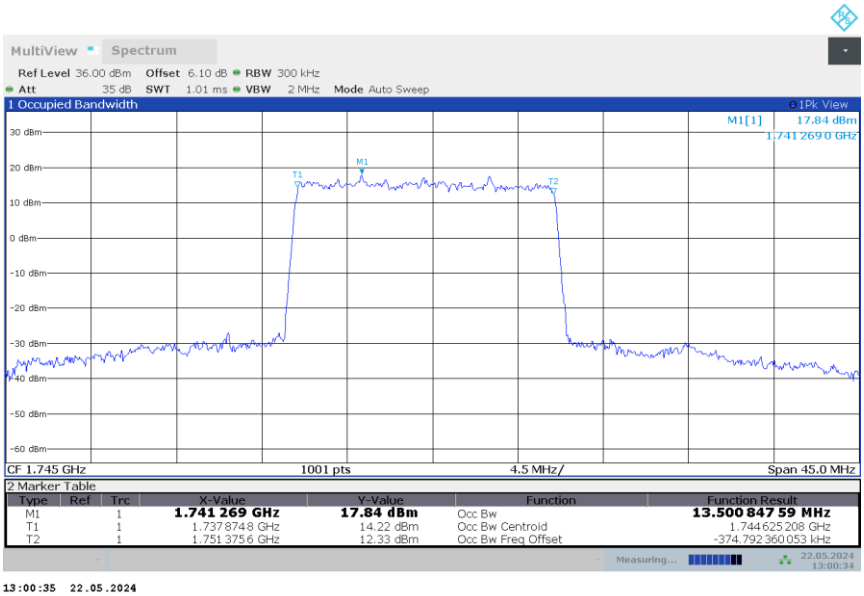
©Copyright. All rights reserved by CTTL.

n66

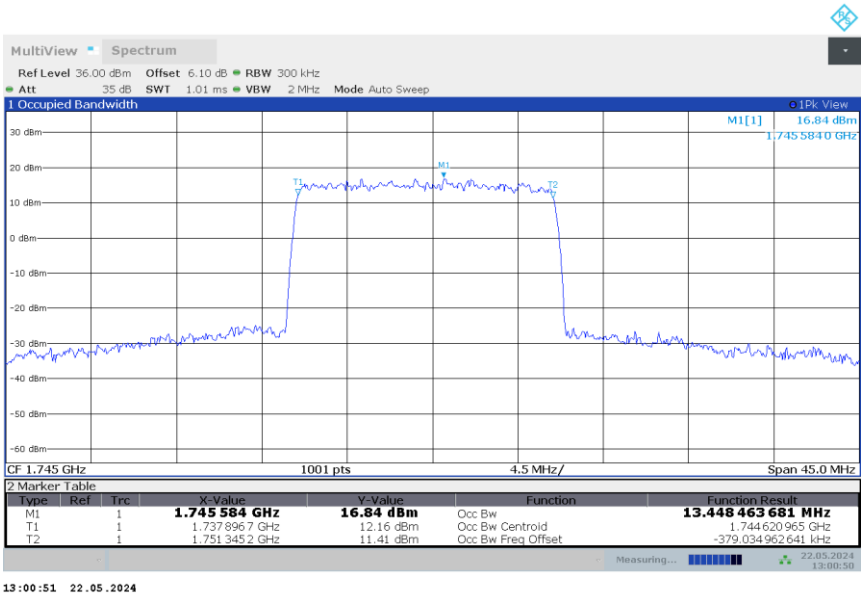
n66,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	13.501	13.448

n66,15MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n66,15MHz Bandwidth,DFT-s-QPSK (99% BW)



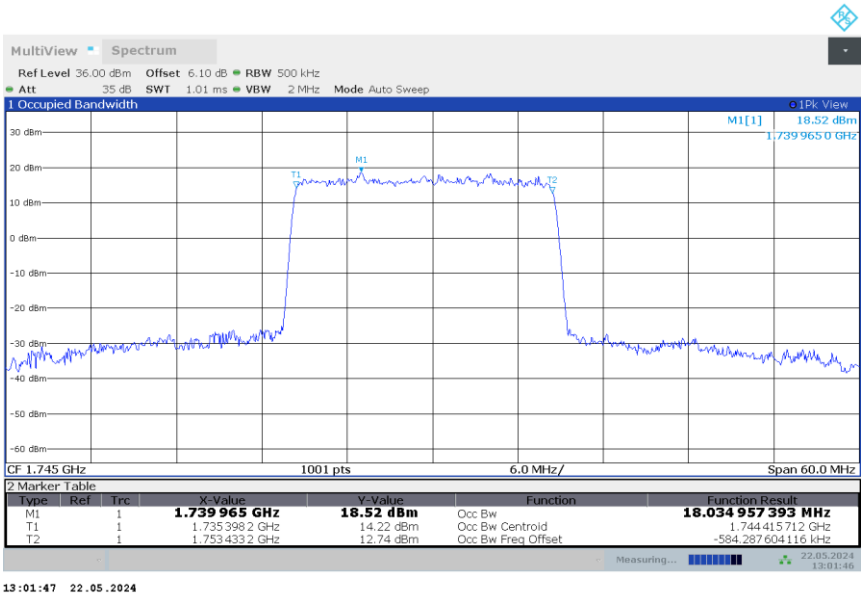
©Copyright. All rights reserved by CTTL.

n66

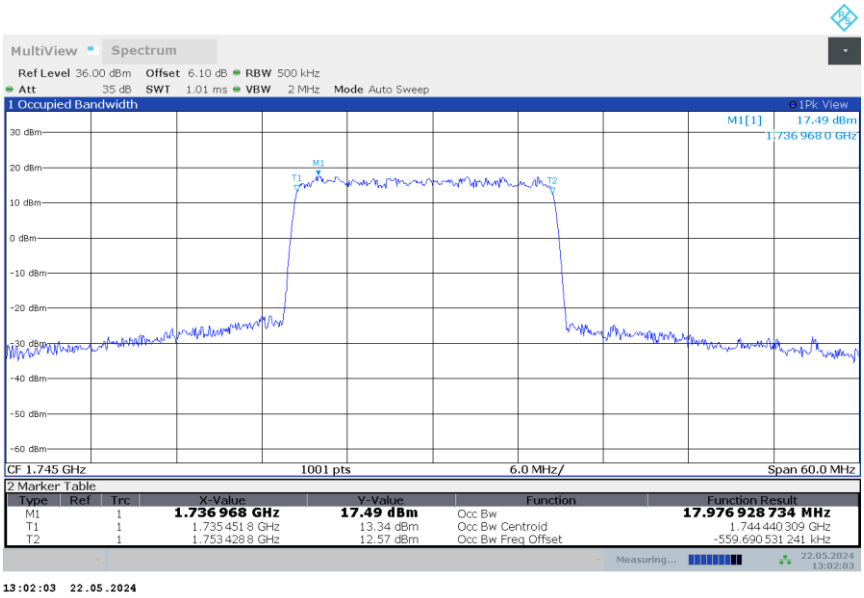
n66,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	18.035	17.977

n66,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n66,20MHz Bandwidth,DFT-s-QPSK (99% BW)



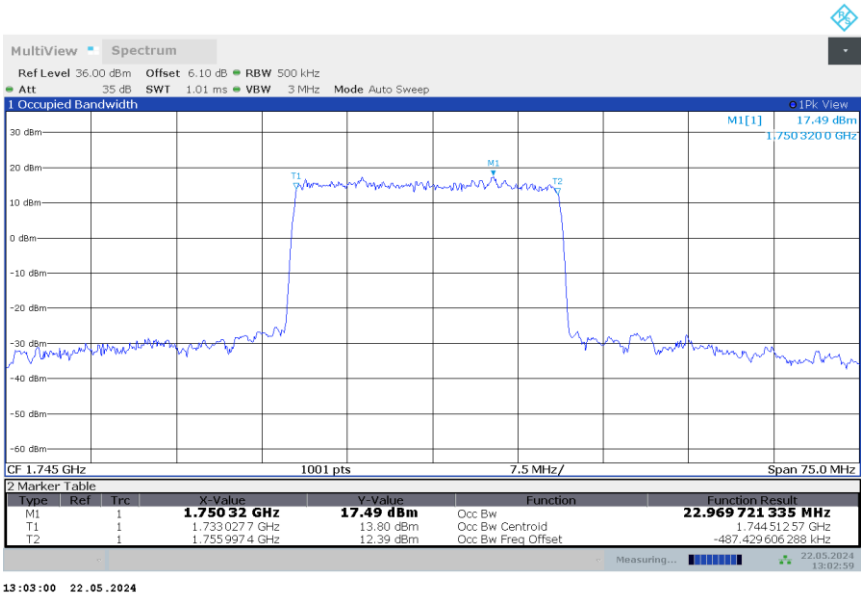
©Copyright. All rights reserved by CTTL.

n66

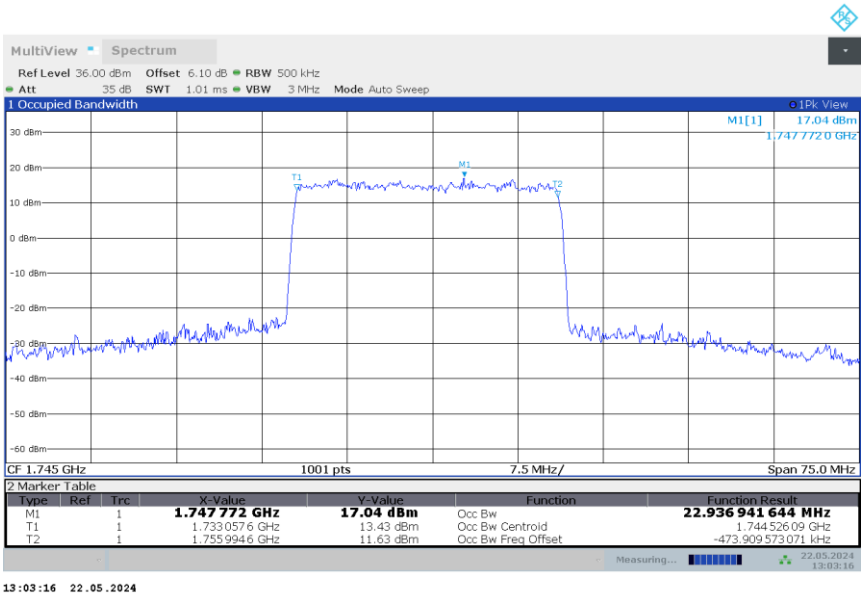
n66,25MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	22.970	22.937

n66,25MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n66,25MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.