



CTK Co., Ltd.

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Channel	Port	QPSK	16QAM	64QAM	256QAM
high	0	24.51	24.31	24.37	24.51
	1	24.76	24.72	24.55	24.90
	2	24.97	24.88	24.74	25.09
	3	24.89	24.80	24.63	25.00
	4	24.81	24.77	24.58	24.96
	5	24.82	24.76	24.58	24.96
	6	25.31	25.19	24.97	25.41
	7	25.35	25.24	25.08	25.46
	8	24.91	24.81	24.61	24.98
	9	24.88	24.74	24.59	24.97
	10	25.03	24.87	24.74	25.07
	11	24.88	24.77	24.59	24.98
	12	24.56	24.44	24.31	24.62
	13	25.18	25.05	24.88	25.18
	14	24.90	24.75	24.61	24.95
	15	24.80	24.62	24.50	24.81
Total Conducted Power (mW)		4962.33	4833.06	4667.89	5055.96
Total Conducted Power (dBm)		36.96	36.84	36.69	37.04
Ant. Gain (dBi)		14.80	14.80	14.80	14.80
e.i.r.p (dBm)		51.76	51.64	51.49	51.84

Table 10-5. Conducted Average Output Power Table (n48_2C_20M + 30M)

Channel	Port	QPSK	16QAM	64QAM	256QAM
Low	0	25.54	25.69	25.50	25.65
	1	25.79	25.97	25.74	25.82
	2	25.97	26.17	26.01	26.12
	3	25.82	26.00	25.84	25.96
	4	25.86	26.25	25.92	26.04
	5	25.92	26.26	25.94	26.05
	6	26.35	26.71	26.38	26.47
	7	26.29	26.59	26.26	26.46
	8	25.97	26.25	25.91	26.14
	9	25.71	26.04	25.71	25.94
	10	25.91	26.12	25.87	26.08
	11	25.87	26.08	25.81	26.04
	12	25.77	26.10	25.69	25.93
	13	26.07	26.33	25.97	26.11
	14	25.94	26.24	25.90	26.00
	15	25.69	25.97	25.62	25.74
Total Conducted Power (mW)		6237.70	6638.64	6202.80	6427.88
Total Conducted Power (dBm)		37.95	38.22	37.93	38.08
Ant. Gain (dBi)		14.80	14.80	14.80	14.80
e.i.r.p (dBm)		52.75	53.02	52.73	52.88



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Channel	Port	QPSK	16QAM	64QAM	256QAM
Mid	0	25.53	25.47	25.52	25.47
	1	25.78	25.76	25.74	25.74
	2	26.01	25.98	26.02	25.98
	3	25.82	25.80	25.87	25.77
	4	25.94	25.87	25.94	25.84
	5	25.92	25.93	25.95	25.89
	6	26.41	26.38	26.45	26.36
	7	26.35	26.33	26.43	26.29
	8	25.96	25.93	26.02	25.91
	9	25.83	25.80	25.91	25.78
	10	25.94	25.89	25.99	25.87
	11	25.89	25.86	25.93	25.83
	12	25.73	25.69	25.78	25.67
	13	26.12	26.08	26.15	26.05
	14	25.95	25.90	25.99	25.88
	15	25.71	25.73	25.76	25.65
Total Conducted Power (mW)		6276.60	6232.60	6328.30	6194.97
Total Conducted Power (dBm)		37.98	37.95	38.01	37.92
Ant. Gain (dBi)		14.80	14.80	14.80	14.80
e.i.r.p (dBm)		52.78	52.75	52.81	52.72
Channel	Port	QPSK	16QAM	64QAM	256QAM
high	0	25.33	25.22	25.43	25.25
	1	25.66	25.57	25.75	25.55
	2	25.88	25.79	25.98	25.77
	3	25.75	25.64	25.82	25.54
	4	25.74	25.66	25.82	25.52
	5	25.77	25.69	25.87	25.55
	6	26.21	26.11	26.30	26.20
	7	26.20	26.13	26.31	26.15
	8	25.74	25.65	25.87	25.69
	9	25.74	25.62	25.82	25.51
	10	25.80	25.71	25.92	25.70
	11	25.74	25.67	25.85	25.52
	12	25.45	25.36	25.57	25.24
	13	25.94	25.84	26.06	25.76
	14	25.69	25.58	25.80	25.63
	15	25.56	25.49	25.67	25.42
Total Conducted Power (mW)		6038.60	5912.40	6182.79	5853.03
Total Conducted Power (dBm)		37.81	37.72	37.91	37.67
Ant. Gain (dBi)		14.80	14.80	14.80	14.80
e.i.r.p (dBm)		52.61	52.52	52.71	52.47

Table 10-6. Conducted Average Output Power Table (n48_1C_60M)

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Channel	Port	QPSK	16QAM	64QAM	256QAM
Low	0	26.09	26.29	25.89	25.99
	1	26.27	26.41	26.05	26.14
	2	26.47	26.60	26.30	26.39
	3	26.52	26.60	26.35	26.38
	4	26.52	26.64	26.39	26.41
	5	26.55	26.62	26.32	26.39
	6	27.06	27.15	26.83	26.86
	7	26.91	26.99	26.57	26.75
	8	26.62	26.72	26.38	26.44
	9	26.36	26.43	26.09	26.21
	10	26.53	26.59	26.28	26.36
	11	26.49	26.59	26.16	26.30
	12	26.43	26.52	26.14	26.26
	13	26.76	26.85	26.43	26.51
	14	26.56	26.65	26.29	26.38
	15	26.43	26.53	26.10	26.24
Total Conducted Power (mW)		7215.48	7383.24	6811.21	6952.93
Total Conducted Power (dBm)		38.58	38.68	38.33	38.42
Ant. Gain (dBi)		14.80	14.80	14.80	14.80
e.i.r.p (dBm)		53.38	53.48	53.13	53.22
Channel	Port	QPSK	16QAM	64QAM	256QAM
Mid	0	26.17	26.12	25.92	26.02
	1	26.37	26.50	26.14	26.25
	2	26.61	26.68	26.30	26.39
	3	26.58	26.69	26.29	26.40
	4	26.51	26.65	26.29	26.37
	5	26.53	26.66	26.33	26.43
	6	27.05	27.20	26.83	26.93
	7	26.89	27.06	26.66	26.78
	8	26.63	26.75	26.37	26.51
	9	26.38	26.51	26.13	26.26
	10	26.54	26.66	26.31	26.39
	11	26.46	26.67	26.27	26.39
	12	26.38	26.50	26.12	26.26
	13	26.77	26.90	26.57	26.66
	14	26.58	26.68	26.32	26.42
	15	26.42	26.56	26.16	26.28
Total Conducted Power (mW)		7245.31	7450.76	6854.42	7027.00
Total Conducted Power (dBm)		38.60	38.72	38.36	38.47
Ant. Gain (dBi)		14.80	14.80	14.80	14.80
e.i.r.p (dBm)		53.40	53.52	53.16	53.27

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Channel	Port	QPSK	16QAM	64QAM	256QAM
high	0	26.05	26.15	25.85	25.92
	1	26.35	26.46	26.20	26.23
	2	26.50	26.57	26.61	26.37
	3	26.50	26.61	26.34	26.38
	4	26.46	26.49	26.23	26.29
	5	26.48	26.54	26.27	26.34
	6	26.96	26.99	26.73	26.80
	7	26.82	26.91	26.61	26.72
	8	26.48	26.55	26.29	26.36
	9	26.34	26.40	26.14	26.21
	10	26.50	26.55	26.29	26.32
	11	26.48	26.54	26.25	26.33
	12	26.22	26.27	25.99	26.03
	13	26.65	26.71	26.51	26.56
	14	26.41	26.46	26.23	26.25
	15	26.37	26.44	26.16	26.25
Total Conducted Power (mW)		7110.93	7220.83	6824.41	6888.86
Total Conducted Power (dBm)		38.52	38.59	38.34	38.38
Ant. Gain (dBi)		14.80	14.80	14.80	14.80
e.i.r.p (dBm)		53.32	53.39	53.14	53.18

Table 10-7. Conducted Average Output Power Table (n48_4C_10M+10M+10M+40M)

Channel	Port	QPSK	16QAM	64QAM	256QAM
Low	0	26.71	26.90	26.66	26.87
	1	26.92	27.06	26.87	27.14
	2	27.19	27.36	27.15	27.38
	3	27.00	27.14	26.96	27.20
	4	27.09	27.23	27.08	27.24
	5	27.11	27.26	27.06	27.26
	6	27.55	27.69	27.54	27.77
	7	27.50	27.66	27.51	27.89
	8	27.16	27.31	27.16	27.55
	9	26.92	27.08	26.95	27.34
	10	27.08	27.20	27.09	27.46
	11	27.06	27.19	27.07	27.46
	12	26.92	26.98	26.91	27.29
	13	27.23	27.35	27.23	27.62
	14	27.12	27.22	27.11	27.49
	15	26.85	26.95	26.82	27.36
Total Conducted Power (mW)		8193.15	8453.53	8165.79	8795.87
Total Conducted Power (dBm)		39.13	39.27	39.12	39.44
Ant. Gain (dBi)		14.80	14.80	14.80	14.80
e.i.r.p (dBm)		53.93	54.07	53.92	54.24

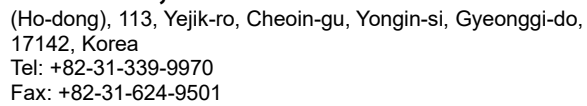
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Channel	Port	QPSK	16QAM	64QAM	256QAM
Mid	0	26.61	26.66	26.63	26.79
	1	26.86	26.90	26.88	27.00
	2	27.10	27.18	27.11	27.30
	3	26.90	26.99	26.94	27.11
	4	26.97	27.06	27.00	27.16
	5	27.00	27.12	27.05	27.22
	6	27.47	27.58	27.51	27.67
	7	27.44	27.54	27.49	27.66
	8	27.03	27.12	27.07	27.22
	9	26.88	26.94	26.94	27.09
	10	27.00	27.10	27.04	27.18
	11	26.99	27.06	27.02	27.17
	12	26.81	26.83	26.79	26.95
	13	27.19	27.29	27.22	27.36
	14	27.00	27.06	27.02	27.15
	15	26.79	26.85	26.82	26.96
Total Conducted Power (mW)		8033.55	8180.02	8091.07	8383.10
Total Conducted Power (dBm)		39.05	39.13	39.08	39.23
Ant. Gain (dBi)		14.80	14.80	14.80	14.80
e.i.r.p (dBm)		53.85	53.93	53.88	54.03
Channel	Port	QPSK	16QAM	64QAM	256QAM
high	0	26.65	26.71	26.60	26.69
	1	26.94	27.02	26.90	27.01
	2	27.21	27.23	27.12	27.21
	3	27.06	27.07	26.97	27.03
	4	26.92	27.13	27.00	27.08
	5	27.09	27.14	27.04	27.02
	6	27.55	27.56	27.47	27.55
	7	27.54	27.57	27.48	27.57
	8	27.08	27.13	27.02	27.13
	9	27.10	27.08	26.98	27.10
	10	27.17	27.16	27.07	27.15
	11	27.19	27.15	27.03	27.12
	12	26.78	26.82	26.75	26.83
	13	27.39	27.41	27.29	27.40
	14	26.99	27.04	26.96	27.06
	15	26.94	26.92	26.81	26.91
Total Conducted Power (mW)		8218.20	8280.98	8086.72	8247.88
Total Conducted Power (dBm)		39.15	39.18	39.08	39.16
Ant. Gain (dBi)		14.80	14.80	14.80	14.80
e.i.r.p (dBm)		53.95	53.98	53.88	53.96

Table 10-8. Conducted Average Output Power Table (n48_1C_80M)



Spectrum Analyzer 1
Spurious Emissions

5G NR 2 Channel Power

KEYSIGHT Input: RF
 R/L → Coupling: DC
 Align: Auto

Input Z: 50 Ω
 Corr: C Coor: R Cal
 Freq Ref: Ext (S)
 NFE: Off

Atten: 20 dB
 Preamp: Off
 #PNO: Fast

Trig: Periodic
 Gate: LO
 #IF Gain: Low

Carrier Ref Freq: 3.590000000 GHz
 Avg/Hold: 1001/100
 CC Info: Downlink, 1 CC

Carrier Reference Frequency
 3.590000000 GHz

Span
 160.00 MHz

Auto
Man

Center 3.59000 GHz
#Res BW 16.000 MHz

#Video BW 6.0000 MHz*

Span 160 MHz
Sweep 1.60 ms (1001 pts)

2 Metrics

Total Channel Power	26.71 dBm/80.000 MHz	Component Carrier	Carrier Power
Total Power Spectral Density	-52.32 dBm/MHz	CC0	26.71 dBm/80.000 MHz

Jun 27, 2025
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Plot 10-2. Conducted Average Output Power Plot
(n48_1C_80M_QPSK - Low Channel, Port 0)