

Partial FCC Test Report (Part 27 – SA Mode: n7, n38, n41, n66, n71)

Report No.: RFBGDY-WTW-P22120194-5

FCC ID: T8GSAN9200

Test Model: SA-N9200 eAP

Received Date: Dec. 06, 2022

Test Date: Feb. 21 ~ Feb. 22, 2023

Issued Date: Mar. 29, 2023

Applicant: Harman Connected Car Division

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories

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**FCC Registration /
Designation Number:** 788550 / TW0003



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Release Control Record

Issue No.	Description	Date Issued
RFBGDY-WTW-P22120194-5	Original release	Mar. 29, 2023

1 Certificate of Conformity

Product: Module

Brand: Harman

Test Model: SA-N9200 eAP

Sample Status: Standard Sample

Applicant: Harman Connected Car Division

Test Date: Feb. 21 ~ Feb. 22, 2023

Standards: FCC Part 27, Subpart L, M, N, O

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : Celine Chou , **Date:** Mar. 29, 2023
Celine Chou / Senior Specialist

Approved by : Jeremy Lin , **Date:** Mar. 29, 2023
Jeremy Lin / Project Engineer

2 Summary of Test Results

Applied Standard: FCC Part 27 & Part 2						
FCC Clause				Test Item	Result	Remarks
n7, n38, n41,	n66	n71	n77			
2.1046 27.50 (h)(2)	2.1046 27.50 (d)(4)	2.1046 27.50 (c)	2.1046 27.50 (j)	Equivalent Isotropically Radiated Power / Equivalent Radiated Power	Pass	Meet the requirement of limit.
2.1053 27.53 (m)(4)(6)	2.1053 27.53(h)	2.1053 27.53(g)	2.1053 27.53(l)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -24.04dB at 31.94MHz.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (\pm)
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	2.44 dB
	30MHz ~ 200MHz	2.93 dB
	200MHz ~ 1000MHz	2.95 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver KEYSIGHT	N9038A	MY55420137	Apr. 27, 2022	Apr. 26, 2023
Signal Analyzer Agilent	N9010A	MY52220207	Jan. 03, 2023	Jan. 02, 2024
Loop Antenna TESEQ	HLA 6121	45745	Jul. 27, 2022	Jul. 26, 2023
Pre-amplifier EMCI	EMC001340	980201	Sep. 23, 2022	Sep. 22, 2023
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	Jan. 07, 2023	Jan. 06, 2024
Preamplifier EMCI	EMC 330H	980112	Oct. 01, 2022	Sep. 30, 2023
BILOG Antenna SCHWARZBECK	VULB 9168	9168-472	Oct. 21, 2022	Oct. 20, 2023
RF Coaxial Cable WOKEN	8D-FB	Cable-Ch10-01	Oct. 01, 2022	Sep. 30, 2023
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-969	Nov. 13, 2022	Nov. 12, 2023
Preamplifier EMCI	EMC 012645	980115	Oct. 01, 2022	Sep. 30, 2023
RF Coaxial Cable EMCI	EMC104-SM-SM-8000	171005	Oct. 01, 2022	Sep. 30, 2023
RF Coaxial Cable HUBER+SUHNNER	SUCOFLEX 104	EMC104-SM-SM-1000(140807)	Oct. 01, 2022	Sep. 30, 2023
RF FLITER MICRO-TRONICS	BRM50716	058	Jun. 14, 2022	Jun. 13, 2023
RF FLITER MICRO-TRONICS	BRM17690	005	Jun. 14, 2022	Jun. 13, 2023
Pre-Amplifier EMCI	EMC 184045	980116	Oct. 01, 2022	Sep. 30, 2023
Broadband Horn Antenna SCHWARZBECK	BBHA 9170	148	Nov. 13, 2022	Nov. 12, 2023
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	Jul. 09, 2022	Jul. 08, 2023
RF Coaxial Cable EMCI	EMC102-KM-KM-3000	150929	Jul. 09, 2022	Jul. 08, 2023
Software BV ADT	ADT_Radiated_V7.6.15.9.5	NA	NA	NA
Antenna Tower Max-Full	MFA-440H	AT93021705	NA	NA
Turn Table Max-Full	MFT-201SS	NA	NA	NA
Antenna Tower & Turn Table Controller Max-Full	MF-7802	NA	NA	NA
Boresight antenna tower fixture BV	BAF-02	7	NA	NA
UXM 5G Wireless Test Platform Keysight	E7515B	MY60102114	May 20, 2022	May 19, 2023

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HY - 966 chamber 5.

3 General Information

3.1 General Description of EUT

Product	Module	
Brand	Harman	
Test Model	SA-N9200 eAP	
Sample Status	Standard Sample	
Power Supply rating	4.2Vdc	
Modulation Type	$\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM	
Waveform Type	CP-OFDM, DFT-s-OFDM	
Operating Frequency	n7 (Channel Bandwidth 5MHz)	2502.50MHz ~ 2567.50MHz
	n7 (Channel Bandwidth 10MHz)	2505.00MHz ~ 2565.00MHz
	n7 (Channel Bandwidth 15MHz)	2507.50MHz ~ 2562.50MHz
	n7 (Channel Bandwidth 20MHz)	2510.00MHz ~ 2560.00MHz
	n38 (Channel Bandwidth 10MHz)	2575.00MHz ~ 2615.00MHz
	n38 (Channel Bandwidth 15MHz)	2577.50MHz ~ 2612.50MHz
	n38 (Channel Bandwidth 20MHz)	2580.00MHz ~ 2610.00MHz
	n41 (Channel Bandwidth 10MHz)	2501.01MHz ~ 2685.00MHz
	n41 (Channel Bandwidth 15MHz)	2503.50MHz ~ 2682.48MHz
	n41 (Channel Bandwidth 20MHz)	2506.02MHz ~ 2679.99MHz
	n41 (Channel Bandwidth 40MHz)	2516.01MHz ~ 2670.00MHz
	n41 (Channel Bandwidth 50MHz)	2521.02MHz ~ 2664.99MHz
	n41 (Channel Bandwidth 60MHz)	2526.00MHz ~ 2659.98MHz
	n41 (Channel Bandwidth 80MHz)	2536.02MHz ~ 2649.99MHz
	n41 (Channel Bandwidth 90MHz)	2541.00MHz ~ 2644.98MHz
	n41 (Channel Bandwidth 100MHz)	2546.01MHz ~ 2640.00MHz
	n66 (Channel Bandwidth 5MHz)	1712.50MHz ~ 1777.5MHz
	n66 (Channel Bandwidth 10MHz)	1715.00MHz ~ 1775.0MHz
	n66 (Channel Bandwidth 15MHz)	1717.50MHz ~ 1772.5MHz
	n66 (Channel Bandwidth 20MHz)	1720.00MHz ~ 1770.0MHz
	n66 (Channel Bandwidth 40MHz)	1730.00MHz ~ 1760.0MHz
	n71 (Channel Bandwidth 5MHz)	665.50MHz ~ 695.50MHz
	n71 (Channel Bandwidth 10MHz)	668.00MHz ~ 693.00MHz
	n71 (Channel Bandwidth 15MHz)	670.50MHz ~ 690.50MHz
	n71 (Channel Bandwidth 20MHz)	673.00MHz ~ 688.00MHz
	n77 (Channel Bandwidth 10MHz)	3705.00MHz ~ 3975.00MHz
	n77 (Channel Bandwidth 15MHz)	3707.52MHz ~ 3972.48MHz
	n77 (Channel Bandwidth 20MHz)	3710.01MHz ~ 3969.99MHz
	n77 (Channel Bandwidth 40MHz)	3720.00MHz ~ 3960.00MHz
	n77 (Channel Bandwidth 50MHz)	3725.01MHz ~ 3954.99MHz
	n77 (Channel Bandwidth 60MHz)	3730.02MHz ~ 3949.98MHz
	n77 (Channel Bandwidth 80MHz)	3740.01MHz ~ 3939.99MHz
n77 (Channel Bandwidth 90MHz)	3745.02MHz ~ 3934.98MHz	
n77 (Channel Bandwidth 100MHz)	3750.00MHz ~ 3930.00MHz	

Max. EIRP Power		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n7 (Channel Bandwidth 5MHz)	349.945mW (25.44dBm)	179.061mW (22.53dBm)	181.134mW (22.58dBm)	155.597mW (21.92dBm)	74.473mW (18.72dBm)
n7 (Channel Bandwidth 10MHz)	352.371mW (25.47dBm)	175.388mW (22.44dBm)	179.061mW (22.53dBm)	159.588mW (22.03dBm)	77.983mW (18.92dBm)	
n7 (Channel Bandwidth 15MHz)	352.371mW (25.47dBm)	178.649mW (22.52dBm)	179.061mW (22.53dBm)	148.594mW (21.72dBm)	78.886mW (18.97dBm)	
n7 (Channel Bandwidth 20MHz)	362.243mW (25.59dBm)	173.380mW (22.39dBm)	175.388mW (22.44dBm)	157.036mW (21.96dBm)	77.983mW (18.92dBm)	
n38 (Channel Bandwidth 10MHz)	308.319mW (24.89dBm)	161.065mW (22.07dBm)	151.008mW (21.79dBm)	143.549mW (21.57dBm)	69.024mW (18.39dBm)	
n38 (Channel Bandwidth 15MHz)	310.456mW (24.92dBm)	159.956mW (22.04dBm)	151.705mW (21.81dBm)	144.212mW (21.59dBm)	70.795mW (18.50dBm)	
n38 (Channel Bandwidth 20MHz)	311.889mW (24.94dBm)	164.437mW (22.16dBm)	161.436mW (22.08dBm)	149.968mW (21.76dBm)	73.282mW (18.65dBm)	
n41 (Channel Bandwidth 10MHz)	337.287mW (25.28dBm)	165.959mW (22.20dBm)	157.036mW (21.96dBm)	148.252mW (21.71dBm)	74.473mW (18.72dBm)	
n41 (Channel Bandwidth 15MHz)	334.965mW (25.25dBm)	165.577mW (22.19dBm)	160.694mW (22.06dBm)	150.661mW (21.78dBm)	73.961mW (18.69dBm)	
n41 (Channel Bandwidth 20MHz)	338.065mW (25.29dBm)	169.434mW (22.29dBm)	163.305mW (22.13dBm)	149.279mW (21.74dBm)	74.131mW (18.70dBm)	
n41 (Channel Bandwidth 40MHz)	330.370mW (25.19dBm)	166.725mW (22.22dBm)	161.436mW (22.08dBm)	150.314mW (21.77dBm)	75.509mW (18.78dBm)	
n41 (Channel Bandwidth 50MHz)	330.370mW (25.19dBm)	165.577mW (22.19dBm)	156.675mW (21.95dBm)	151.705mW (21.81dBm)	75.858mW (18.80dBm)	
n41 (Channel Bandwidth 60MHz)	333.426mW (25.23dBm)	165.959mW (22.20dBm)	155.955mW (21.93dBm)	151.008mW (21.79dBm)	70.795mW (18.50dBm)	
n41 (Channel Bandwidth 80MHz)	333.426mW (25.23dBm)	169.824mW (22.30dBm)	158.855mW (22.01dBm)	148.936mW (21.73dBm)	75.683mW (18.79dBm)	
n41 (Channel Bandwidth 90MHz)	333.426mW (25.23dBm)	165.196mW (22.18dBm)	157.036mW (21.96dBm)	149.624mW (21.75dBm)	75.858mW (18.80dBm)	
n41 (Channel Bandwidth 100MHz)	338.844mW (25.30dBm)	176.604mW (22.47dBm)	166.725mW (22.22dBm)	154.525mW (21.89dBm)	79.616mW (19.01dBm)	
n66 (Channel Bandwidth 5MHz)	473.151mW (26.75dBm)	242.103mW (23.84dBm)	232.274mW (23.66dBm)	212.324mW (23.27dBm)	106.660mW (20.28dBm)	
n66 (Channel Bandwidth 10MHz)	467.735mW (26.70dBm)	237.684mW (23.76dBm)	224.388mW (23.51dBm)	206.538mW (23.15dBm)	108.143mW (20.34dBm)	
n66 (Channel Bandwidth 15MHz)	461.318mW (26.64dBm)	237.684mW (23.76dBm)	231.739mW (23.65dBm)	211.349mW (23.25dBm)	105.682mW (20.24dBm)	
n66 (Channel Bandwidth 20MHz)	466.659mW (26.69dBm)	242.661mW (23.85dBm)	229.615mW (23.61dBm)	215.774mW (23.34dBm)	103.514mW (20.15dBm)	
n66 (Channel Bandwidth 40MHz)	488.652mW (26.89dBm)	248.886mW (23.96dBm)	240.991mW (23.82dBm)	218.273mW (23.39dBm)	110.408mW (20.43dBm)	

		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
		Max. EIRP Power	n77 (Channel Bandwidth 10MHz)	356.451mW (25.52dBm)	177.011mW (22.48dBm)	169.044mW (22.28dBm)
	n77 (Channel Bandwidth 15MHz)	353.997mW (25.49dBm)	176.604mW (22.47dBm)	172.187mW (22.36dBm)	163.305mW (22.13dBm)	78.343mW (18.94dBm)
	n77 (Channel Bandwidth 20MHz)	349.140mW (25.43dBm)	179.473mW (22.54dBm)	169.434mW (22.29dBm)	157.036mW (21.96dBm)	77.983mW (18.92dBm)
	n77 (Channel Bandwidth 40MHz)	349.945mW (25.44dBm)	178.649mW (22.52dBm)	167.494mW (22.24dBm)	162.181mW (22.10dBm)	78.163mW (18.93dBm)
	n77 (Channel Bandwidth 50MHz)	353.997mW (25.49dBm)	175.388mW (22.44dBm)	169.044mW (22.28dBm)	160.694mW (22.06dBm)	79.433mW (19.00dBm)
	n77 (Channel Bandwidth 60MHz)	357.273mW (25.53dBm)	178.649mW (22.52dBm)	173.380mW (22.39dBm)	157.036mW (21.96dBm)	78.524mW (18.95dBm)
	n77 (Channel Bandwidth 80MHz)	353.997mW (25.49dBm)	178.649mW (22.52dBm)	171.791mW (22.35dBm)	155.597mW (21.92dBm)	77.446mW (18.89dBm)
	n77 (Channel Bandwidth 90MHz)	354.813mW (25.50dBm)	173.380mW (22.39dBm)	174.181mW (22.41dBm)	160.694mW (22.06dBm)	78.886mW (18.97dBm)
	n77 (Channel Bandwidth 100MHz)	374.973mW (25.74dBm)	184.927mW (22.67dBm)	180.302mW (22.56dBm)	164.437mW (22.16dBm)	83.560mW (19.22dBm)
Max. ERP Power		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n71 (Channel Bandwidth 5MHz)	202.768mW (23.07dBm)	100.462mW (20.02dBm)	93.972mW (19.73dBm)	88.308mW (19.46dBm)	44.259mW (16.46dBm)
	n71 (Channel Bandwidth 10MHz)	200.447mW (23.02dBm)	98.628mW (19.94dBm)	95.940mW (19.82dBm)	87.902mW (19.44dBm)	45.709mW (16.60dBm)
	n71 (Channel Bandwidth 15MHz)	195.884mW (22.92dBm)	100.231mW (20.01dBm)	95.280mW (19.79dBm)	88.308mW (19.46dBm)	44.055mW (16.44dBm)
	n71 (Channel Bandwidth 20MHz)	211.836mW (23.26dBm)	103.992mW (20.17dBm)	100.462mW (20.02dBm)	93.325mW (19.70dBm)	46.559mW (16.68dBm)

Note:

1. This report is prepared for FCC class II permissive change. The difference compared with the original design are adding n77 (3450-3550MHz) and n78 (3450-3550MHz and 3700-3800MHz) bands and adding NSA mode for n77 and n78 bands. After verification, only the Equivalent Isotropically Radiated Power, Equivalent Radiated Power and Radiated Spurious Emissions for worst case had been tested for this addendum.

2. The antenna information is listed as below.

Operating frequency band	Antenna	Gain (dBi)	Connector Type
Band 2	5G/4G Terminal Mount Monopole Antenna	2.92	SMA
Band 5		1.01	
Band 7		2.20	
Band 12		-1.17	
Band 25		2.97	
Band 38		2.18	
Band 41		2.20	
Band 66		3.44	
Band 71		1.72	
Band 77, 78		2.61	

* The EUT only support 1TX function.

* PRX antenna is primary RX & TX 2G, 3G 4G function and diversity RX 5G function.
 DRX antenna is primary RX & TX 5G function and diversity RX 2G, 3G 4G function.
 The rest of the antennas are non-functional.

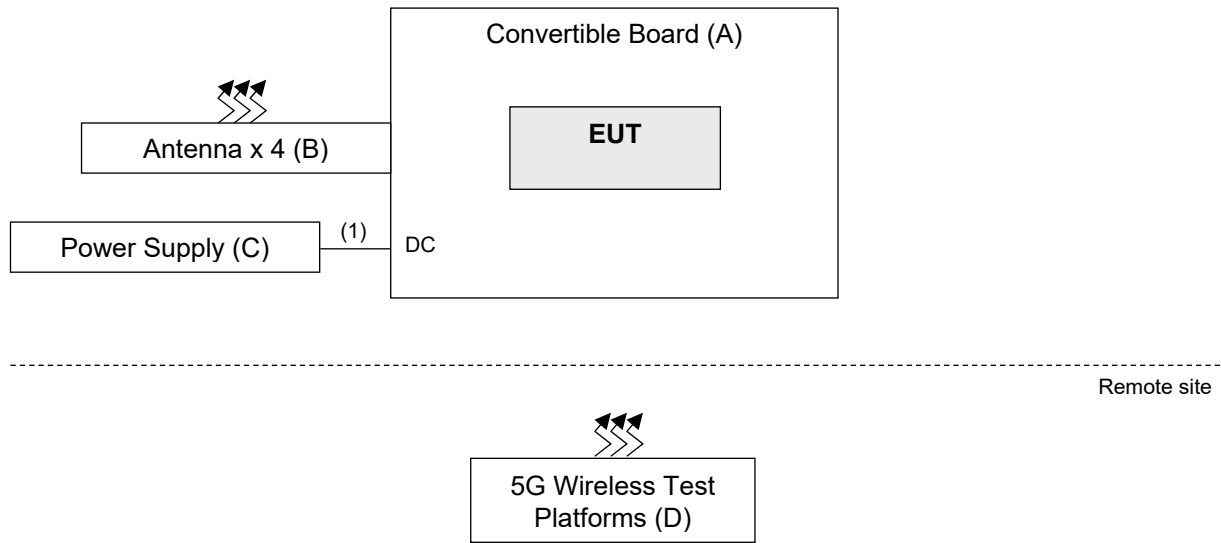
* The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

3. The EUT supports the following ENDC configuration.

	FCC 5G FR1			ENDC
	Band	SCS	Bandwidth (MHz)	
5G NR	n5	15kHz	5/10/15/20	Band 2/66
	n41	30kHz	10/15/20/40/50/60/80/90/100	Band 26
	n66	15kHz	5/10/15/20/40	Band 5/12
	n71	15kHz	5/10/15/20	Band 2/66
	n77, n78	30kHz	10/15/20/40/50/60/80/90/100	Band 2/5/7/38/41/66

* This EUT support SA mode and NSA mode, after verification, SA mode was the worst case and chosen for final test.

3.2 Configuration of System under Test



3.2.1 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Convertible Board	NA	NA	NA	NA	Provided by client
B.	Antenna x 4	TAOGLAS	TG.55.8113	NA	NA	Provided by client
C.	DC Power supply	TECPEL	GPS-3030DD	GEO855739	NA	-
D.	5G Wireless Test Platforms	Keysight	E7515B	MY60102114	NA	-

Note: All power cords of the above support units are non-shielded (1.8m).

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	DC cable	1	1	N	0	-

3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case was found when positioned on Z-plane for antenna. Following channel(s) was (were) selected for the final test as listed below.

5G NR n7

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	500500 to 513500	500500 (2502.5MHz), 507000 (2535.0MHz), 513500 (2567.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		501000 to 513000	501000 (2505.0MHz), 507000 (2535.0MHz), 513000 (2565.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		501500 to 512500	501500 (2507.5MHz), 507000 (2535.0MHz), 512500 (2562.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		502000 to 512000	502000 (2510.0MHz), 507000 (2535.0MHz), 512000 (2560.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full

5G NR n38

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	515000 to 523000	515000 (2575.0MHz), 519000 (2595.0MHz), 523000 (2615.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		515500 to 522500	515500 (2577.5MHz), 519000 (2595.0MHz), 522500 (2612.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		516000 to 522000	516000 (2580.0MHz), 519000 (2595.0MHz), 522000 (2610.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full

5GNR n41

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	500202 to 537000	500202 (2501.01MHz), 518598 (2592.99MHz), 537000 (2685.00MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		500700 to 536496	500700 (2503.50MHz), 518598 (2592.99MHz), 536496 (2682.48MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		501204 to 535998	501204 (2506.02MHz), 518598 (2592.99MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		503202 to 534000	503202 (2516.01MHz), 518598 (2592.99MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		504204 to 532998	504204 (2521.02MHz), 518598 (2592.99MHz), 532998 (2664.99MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		505200 to 531996	505200 (2526.00MHz), 518598 (2592.99MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		507204 to 529998	507204 (2536.02MHz), 518598 (2592.99MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		508200 to 528996	508200 (2541.00MHz), 518598 (2592.99MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		509202 to 528000	509202 (2546.01MHz), 518598 (2592.99MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full

5GNR n66

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	342500 to 355500	342500 (1712.5MHz), 349000 (1745.0MHz), 355500 (1777.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		343000 to 355000	343000 (1715.0MHz), 349000 (1745.0MHz), 355000 (1775.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		343500 to 354500	343500 (1717.5MHz), 349000 (1745.0MHz), 354500 (1772.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		344000 to 354000	344000 (1720.0MHz), 349000 (1745.0MHz), 354000 (1770.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		346000 to 352000	346000 (1730.0MHz), 349000 (1745.0MHz), 352000 (1760.0MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
-	Radiated Emission Below 1GHz	346000 to 352000	349000 (1745.0MHz)	40MHz	$\pi/2$ BPSK	1
-	Radiated Emission Above 1GHz	346000 to 352000	349000 (1745.0MHz)	40MHz	$\pi/2$ BPSK	1

5GNR n71

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	133100 to 139100	133100 (665.5MHz), 136100 (680.5MHz), 139100 (695.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		133600 to 138600	133600 (668.0MHz), 136100 (680.5MHz), 138600 (693.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		134100 to 138100	134100 (670.5MHz), 136100 (680.5MHz), 138100 (690.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		134600 to 137600	134600 (673.0MHz), 136100 (680.5MHz), 137600 (688.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full

5GNR n77

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	647000 to 665000	647000 (3705.00MHz), 656000 (3840.00MHz), 665000 (3975.00MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		647168 to 664832	647168 (3707.52MHz), 656000 (3840.00MHz), 664832 (3972.48MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		647334 to 664666	647334 (3710.01MHz), 656000 (3840.00MHz), 664666 (3969.99MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		648000 to 664000	648000 (3720.00MHz), 656000 (3840.00MHz), 664000 (3960.00MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		648334 to 663666	648334 (3725.01MHz), 656000 (3840.00MHz), 663666 (3954.99MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		648668 to 663332	648668 (3730.02MHz), 656000 (3840.00MHz), 663332 (3949.98MHz)	60MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		649334 to 662666	649334 (3740.01MHz), 656000 (3840.00MHz), 662666 (3939.99MHz)	80MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		649668 to 662332	649668 (3745.02MHz), 656000 (3840.00MHz), 662332 (3934.98MHz)	90MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full
		650000 to 662000	650000 (3750.00MHz), 656000 (3840.00MHz), 662000 (3930.00MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 Half Full

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
EIRP / ERP	25deg. C, 70%RH	4.2Vdc	James Yang
Radiated Emission	21deg. C, 67%RH	120Vac, 60Hz (System)	Vincent Chen

3.4 EUT Operating Conditions

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

3.5 General Description of Applied Standards and References

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and References:

Test Standard:

FCC 47 CFR Part 2

FCC 47 CFR Part 27

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

All test items have been performed and recorded as per the above standards.

References Test Guidance:

KDB 971168 D01 Power Meas License Digital Systems v03r01

All test items have been performed as a reference to the above KDB test guidance.

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

For 5G NR n7, n38, n41:

Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

For 5G NR n66:

Mobile / Portable station are limited to 1 watt e.i.r.p.

For 5G NR n71:

Control and mobile stations in the 698-746 MHz, 746-757 MHz, 787-788 MHz and 805-806 MHz band are limited to 30 watts ERP.

Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink, 746-757 MHz, 787-788 MHz and 805-806 MHz band are limited to 3 watts ERP.

For 5G NR n77:

Mobile and portable stations are limited to 1 Watt EIRP. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

4.1.2 Test Procedures

Conducted Power Measurement:

The EUT was set up for the maximum power with 5G NR link data modulation and link up with simulator (Built-in power meter). The power measurement was performed on emulator and power value was measured from power function on emulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

Maximum EIRP / ERP

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

$$\text{EIRP} = P_{\text{Meas}} + G_{\text{T}}$$

$$\text{ERP} = P_{\text{Meas}} + G_{\text{T}} - 2.15$$

where

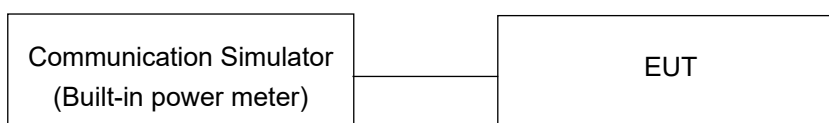
ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas} , e.g., dBm or dBW)

P_{Meas} measured transmitter output power or PSD, in dBm or dBW

G_{T} gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

4.1.3 Test Setup

Conducted Power Measurement:



4.1.4 Test Results

Conducted Output Power (dBm)

NR Band 7 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		502000	507000	512000
		Frequency (MHz)		2510	2535	2560
20M	pi/2 BPSK	1	0	23.15	23.39	23.03
		1	53	22.96	23.31	23.03
		1	105	22.73	22.37	22.68
		53	0	23.24	23.15	22.88
		53	27	22.79	23.12	22.72
		53	53	22.92	22.53	22.93
		106	0	22.93	23.03	22.98
	QPSK	1	0	19.88	20.17	20.08
		1	53	20.02	19.93	19.80
		1	105	19.49	19.47	19.41
		53	0	19.94	19.99	20.19
		53	27	20.13	19.80	20.18
		53	53	19.87	19.79	19.95
		106	0	19.75	19.53	19.83
	16QAM	1	0	19.77	20.05	20.12
		1	53	20.24	20.22	19.81
		1	105	19.63	19.65	19.52
		53	0	19.89	20.22	20.20
		53	27	19.84	19.65	19.62
		53	53	19.87	19.62	20.10
		106	0	19.57	20.12	19.62
	64QAM	1	0	19.31	19.75	19.76
		1	53	19.71	19.42	19.54
		1	105	18.89	18.89	18.82
		53	0	19.45	19.34	19.69
		53	27	19.23	19.05	19.34
		53	53	19.45	19.17	19.35
		106	0	19.18	19.33	19.55
	256QAM	1	0	16.72	16.54	16.28
		1	53	16.22	16.57	16.37
		1	105	15.88	15.91	15.95
		53	0	16.29	16.31	16.42
		53	27	16.25	16.09	16.32
		53	53	16.02	16.11	15.99
		106	0	16.12	16.46	16.11

NR Band 7 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		501500	507000	512500
		Frequency (MHz)		2507.5	2535	2562.5
15M	pi/2 BPSK	1	0	22.85	23.17	23.15
		1	39	23.27	23.08	23.24
		1	78	22.38	22.63	22.45
		39	0	22.76	22.70	22.74
		39	19	22.88	23.03	22.71
		39	40	22.71	22.78	22.75
		79	0	22.95	23.09	23.14
	QPSK	1	0	20.18	20.29	20.16
		1	39	19.87	20.32	20.28
		1	78	19.60	19.61	19.49
		39	0	20.14	19.86	19.92
		39	19	19.76	19.60	20.09
		39	40	19.76	19.79	19.81
		79	0	19.63	19.74	19.82
	16QAM	1	0	19.95	19.94	19.90
		1	39	19.79	20.09	19.77
		1	78	19.83	19.64	19.57
		39	0	20.33	20.07	20.06
		39	19	19.94	20.15	19.66
		39	40	19.64	19.63	20.10
		79	0	19.90	20.19	19.97
	64QAM	1	0	19.38	19.51	19.35
		1	39	19.46	19.47	19.46
		1	78	19.34	19.19	18.95
		39	0	19.52	19.51	19.31
		39	19	19.18	19.01	19.37
		39	40	19.39	19.16	19.17
		79	0	19.21	19.09	19.47
	256QAM	1	0	16.77	16.23	16.67
		1	39	16.31	16.43	16.63
1		78	15.88	16.29	16.18	
39		0	16.46	16.22	16.31	
39		19	16.46	16.21	16.35	
39		40	15.95	16.09	16.29	
79		0	16.47	16.10	16.20	

NR Band 7 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		501000	507000	513000
		Frequency (MHz)		2505	2535	2565
10M	pi/2 BPSK	1	0	23.17	23.27	23.02
		1	26	23.03	23.20	22.79
		1	51	22.55	22.72	22.71
		26	0	23.22	22.95	23.26
		26	13	23.15	22.98	23.09
		26	26	22.77	22.57	22.63
		52	0	23.12	22.84	23.14
	QPSK	1	0	20.11	20.20	20.09
		1	26	19.82	19.94	19.84
		1	51	19.46	19.56	19.78
		26	0	19.90	20.04	20.09
		26	13	20.24	19.80	20.13
		26	26	19.70	19.81	19.69
		52	0	19.72	19.99	19.78
	16QAM	1	0	20.08	19.91	19.91
		1	26	19.88	20.07	20.11
		1	51	19.96	19.60	19.67
		26	0	20.33	20.09	20.15
		26	13	19.92	20.14	19.93
		26	26	19.69	19.56	19.76
		52	0	19.59	20.12	19.88
	64QAM	1	0	19.31	19.54	19.31
		1	26	19.83	19.66	19.63
		1	51	19.15	19.29	18.81
		26	0	19.68	19.50	19.34
		26	13	19.46	19.36	19.46
		26	26	19.13	19.40	19.25
		52	0	19.06	19.46	19.08
	256QAM	1	0	16.51	16.49	16.30
		1	26	16.31	16.69	16.72
		1	51	15.96	16.17	16.08
		26	0	16.31	16.33	16.65
		26	13	16.08	16.09	16.23
		26	26	16.38	15.93	15.94
		52	0	16.61	16.50	16.33

NR Band 7 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		500500	507000	513500
		Frequency (MHz)		2502.5	2535	2567.5
5M	pi/2 BPSK	1	0	23.24	23.22	23.03
		1	12	22.97	23.01	22.77
		1	24	22.42	22.52	22.60
		12	0	23.10	22.79	23.01
		12	6	23.00	22.95	22.81
		12	13	22.91	22.69	22.70
		25	0	22.74	22.80	23.17
	QPSK	1	0	19.78	20.24	20.18
		1	12	20.11	20.33	20.23
		1	24	19.94	19.94	19.91
		12	0	19.88	19.96	20.31
		12	6	20.17	19.72	20.07
		12	13	19.90	19.69	19.97
		25	0	19.81	19.77	20.19
	16QAM	1	0	19.71	20.38	19.85
		1	12	19.85	19.89	19.92
		1	24	19.93	19.80	19.44
		12	0	20.00	20.21	19.70
		12	6	19.99	20.00	19.67
		12	13	19.54	19.76	19.99
		25	0	19.64	20.17	19.72
	64QAM	1	0	19.40	19.28	19.54
		1	12	19.55	19.70	19.72
		1	24	18.95	18.88	19.05
		12	0	19.34	19.41	19.53
		12	6	19.11	19.52	19.50
		12	13	19.47	19.40	19.23
		25	0	19.40	19.46	19.38
	256QAM	1	0	16.36	16.47	16.46
		1	12	16.22	16.23	16.48
		1	24	16.10	16.28	16.37
		12	0	16.40	16.52	16.30
		12	6	16.38	16.25	16.48
		12	13	16.42	16.40	16.45
		25	0	16.29	16.10	16.12

NR Band 38 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		51600	519000	522000
		Frequency (MHz)		2580	2595	2610
20M	pi/2 BPSK	1	0	22.68	22.76	22.53
		1	25	22.65	22.68	22.69
		1	50	22.54	22.55	22.65
		25	0	22.63	22.60	22.65
		25	12	22.68	22.58	22.56
		25	25	22.63	22.54	22.74
		51	0	22.51	22.40	22.47
	QPSK	1	0	19.84	19.64	19.71
		1	25	19.51	19.64	19.82
		1	50	19.79	19.79	19.67
		25	0	19.94	19.86	19.92
		25	12	19.81	19.98	19.83
		25	25	19.98	19.93	19.91
		51	0	19.43	19.65	19.59
	16QAM	1	0	19.74	19.63	19.90
		1	25	19.58	19.55	19.54
		1	50	19.19	19.28	19.31
		25	0	19.37	19.33	19.38
		25	12	19.43	19.53	19.43
		25	25	19.77	19.76	19.74
		51	0	19.39	19.25	19.58
	64QAM	1	0	19.34	19.57	19.23
		1	25	19.51	19.05	18.94
		1	50	19.26	19.37	19.46
		25	0	19.34	19.31	19.50
		25	12	19.54	19.47	19.48
		25	25	19.38	19.58	19.48
		51	0	19.06	19.39	18.97
	256QAM	1	0	16.09	16.39	16.47
		1	25	15.95	16.26	16.12
1		50	16.13	15.98	16.35	
25		0	16.22	16.31	16.40	
25		12	16.14	16.29	16.27	
25		25	16.30	16.19	16.11	
51		0	16.06	16.22	15.97	

NR Band 38 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		515500	519000	522500
		Frequency (MHz)		2577.5	2595	2612.5
15M	pi/2 BPSK	1	0	22.62	22.74	22.26
		1	19	22.41	22.26	22.66
		1	37	22.64	22.47	22.63
		19	0	22.61	22.53	22.55
		19	9	22.40	22.72	22.30
		19	20	22.37	22.27	22.64
		38	0	22.68	22.70	22.38
	QPSK	1	0	19.41	19.76	19.53
		1	19	19.12	19.45	19.39
		1	37	19.24	19.54	19.61
		19	0	19.68	19.64	19.73
		19	9	19.55	19.41	19.77
		19	20	19.58	19.61	19.86
		38	0	19.23	19.14	19.44
	16QAM	1	0	19.34	19.63	19.22
		1	19	19.30	19.38	19.35
		1	37	19.06	18.91	18.90
		19	0	19.33	19.51	19.32
		19	9	19.29	19.57	19.40
		19	20	19.24	19.31	19.35
		38	0	18.92	18.84	19.25
	64QAM	1	0	18.93	18.96	19.27
		1	19	19.12	19.02	18.96
		1	37	18.92	18.92	19.10
		19	0	19.21	19.02	18.80
		19	9	19.41	18.92	19.27
		19	20	19.18	19.00	19.26
		38	0	18.64	19.14	18.78
	256QAM	1	0	16.08	16.32	15.98
		1	19	15.94	16.05	15.71
1		37	15.66	16.02	16.06	
19		0	15.94	15.89	16.12	
19		9	15.88	15.80	15.96	
19		20	16.20	16.12	16.09	
38		0	15.77	15.68	15.99	

NR Band 38 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		515000	519000	523000
		Frequency (MHz)		2575	2595	2615
10M	pi/2 BPSK	1	0	22.56	22.63	22.66
		1	12	22.29	22.34	22.66
		1	23	22.52	22.57	22.34
		12	0	22.50	22.56	22.25
		12	6	22.54	22.71	22.63
		12	12	22.55	22.55	22.41
		24	0	22.38	22.31	22.05
	QPSK	1	0	19.79	19.39	19.73
		1	12	19.46	19.50	19.33
		1	23	19.66	19.76	19.51
		12	0	19.29	19.63	19.79
		12	6	19.40	19.56	19.86
		12	12	19.44	19.77	19.89
		24	0	19.21	19.04	19.53
	16QAM	1	0	19.24	19.34	19.59
		1	12	19.18	19.61	19.28
		1	23	18.94	18.99	19.09
		12	0	19.22	19.28	19.05
		12	6	19.50	19.52	19.20
		12	12	19.39	19.51	19.56
		24	0	19.27	19.13	19.03
	64QAM	1	0	19.16	19.35	19.28
		1	12	19.04	18.98	19.06
		1	23	18.75	19.23	19.02
		12	0	19.17	19.18	18.96
		12	6	18.89	19.39	19.23
		12	12	19.24	19.27	18.99
		24	0	18.72	18.95	18.87
	256QAM	1	0	15.77	16.20	16.13
		1	12	15.61	15.68	16.12
		1	23	16.12	15.82	15.72
		12	0	15.84	16.21	15.84
		12	6	15.91	16.00	15.84
		12	12	15.89	15.87	15.95
		24	0	16.02	15.79	15.90

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		509202	518598	528000
		Frequency (MHz)		2546.01	2592.99	2640
100M	pi/2 BPSK	1	0	22.93	22.87	23.08
		1	136	22.86	23.10	22.60
		1	272	22.62	22.40	22.60
		136	0	23.05	22.87	23.09
		136	68	23.09	23.05	22.95
		136	136	22.74	22.98	22.70
		273	0	22.91	22.74	23.05
	QPSK	1	0	20.10	20.27	19.77
		1	136	19.91	19.82	19.65
		1	272	19.53	19.57	19.54
		136	0	20.05	20.15	20.12
		136	68	20.11	19.87	19.88
		136	136	19.65	19.84	19.76
		273	0	20.02	20.02	20.04
	16QAM	1	0	19.71	19.60	19.72
		1	136	19.84	19.92	19.73
		1	272	19.35	19.15	19.46
		136	0	20.02	19.75	19.60
		136	68	19.76	19.54	19.96
		136	136	19.38	19.67	19.78
		273	0	19.59	19.72	19.68
	64QAM	1	0	19.44	19.51	19.46
		1	136	19.45	19.37	19.59
		1	272	18.99	18.81	19.05
		136	0	19.63	19.32	19.62
		136	68	19.42	19.69	19.58
		136	136	19.17	19.47	19.09
		273	0	19.57	19.51	19.38
	256QAM	1	0	16.81	16.22	16.57
		1	136	16.47	16.36	16.12
		1	272	15.97	15.61	15.80
		136	0	16.45	16.69	16.73
		136	68	16.61	16.22	16.66
		136	136	16.51	16.29	16.31
		273	0	16.48	16.45	16.16

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		508200	518598	528996
		Frequency (MHz)		2541	2592.99	2644.98
90M	pi/2 BPSK	1	0	22.86	22.96	23.03
		1	122	22.57	22.82	22.49
		1	244	21.92	22.11	22.11
		122	0	22.57	22.70	23.00
		122	61	22.86	22.89	22.73
		122	122	22.74	22.61	22.59
		245	0	22.29	22.93	22.48
	QPSK	1	0	19.53	19.65	19.65
		1	122	19.70	19.70	19.56
		1	244	19.34	18.89	19.32
		122	0	19.61	19.98	19.52
		122	61	19.97	19.90	19.69
		122	122	19.87	19.74	19.76
		245	0	19.74	19.36	19.78
	16QAM	1	0	19.62	19.66	19.60
		1	122	19.67	19.48	19.39
		1	244	18.77	18.95	19.18
		122	0	19.76	19.54	19.66
		122	61	19.36	19.41	19.39
		122	122	19.48	19.25	19.14
		245	0	19.60	19.72	19.25
	64QAM	1	0	19.39	19.19	19.09
		1	122	19.17	19.03	19.42
		1	244	19.02	18.63	18.84
		122	0	19.55	19.15	19.49
		122	61	19.15	19.24	19.29
		122	122	18.94	18.98	19.00
		245	0	19.00	19.18	19.31
	256QAM	1	0	16.41	16.02	16.13
		1	122	16.27	16.31	16.11
1		244	15.64	15.57	15.84	
122		0	16.06	16.37	16.49	
122		61	16.11	16.11	16.60	
122		122	15.81	16.06	16.21	
245		0	16.31	16.20	15.95	

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		507204	518598	529998
		Frequency (MHz)		2536.02	2592.99	2649.99
80M	pi/2 BPSK	1	0	22.56	22.90	22.66
		1	108	22.73	22.56	22.80
		1	216	21.95	22.05	22.25
		108	0	22.94	22.92	22.64
		108	54	22.57	22.68	23.03
		108	108	22.55	22.62	22.48
		217	0	22.84	22.63	22.54
	QPSK	1	0	19.52	20.10	19.82
		1	108	19.67	19.54	19.41
		1	216	19.13	18.90	19.39
		108	0	19.58	19.88	19.47
		108	54	19.49	19.80	19.66
		108	108	19.53	19.54	19.41
		217	0	19.69	19.47	19.57
	16QAM	1	0	19.74	19.66	19.39
		1	108	19.21	19.35	19.52
		1	216	19.05	19.09	19.27
		108	0	19.46	19.81	19.40
		108	54	19.61	19.54	19.76
		108	108	19.41	19.18	19.46
		217	0	19.64	19.32	19.69
	64QAM	1	0	19.53	19.45	19.27
		1	108	19.17	18.93	19.04
		1	216	18.69	18.42	18.81
		108	0	19.52	19.44	19.38
		108	54	19.15	19.20	19.06
		108	108	19.03	18.81	19.23
		217	0	19.14	18.92	19.21
	256QAM	1	0	16.59	16.48	16.31
		1	108	16.07	16.01	16.16
1		216	15.87	15.56	15.73	
108		0	16.33	16.16	16.21	
108		54	16.00	15.95	16.36	
108		108	15.86	16.19	15.92	
217		0	16.02	16.31	16.14	

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		505200	518598	531996
		Frequency (MHz)		2526	2592.99	2659.98
60M	pi/2 BPSK	1	0	22.68	22.51	22.67
		1	81	22.51	22.91	22.67
		1	161	22.25	21.84	22.36
		81	0	22.73	23.03	22.95
		81	40	22.88	22.91	22.62
		81	81	22.54	22.85	22.55
		162	0	22.54	22.54	22.65
	QPSK	1	0	19.78	19.97	19.64
		1	81	19.79	19.92	19.45
		1	161	19.45	19.36	19.45
		81	0	20.00	19.85	19.60
		81	40	19.67	19.93	19.82
		81	81	19.88	19.39	19.69
		162	0	19.62	19.77	19.77
	16QAM	1	0	19.33	19.54	19.48
		1	81	19.67	19.73	19.38
		1	161	18.73	18.97	19.21
		81	0	19.42	19.46	19.56
		81	40	19.28	19.50	19.60
		81	81	19.16	19.40	19.62
		162	0	19.54	19.30	19.56
	64QAM	1	0	19.47	19.49	19.56
		1	81	19.04	18.90	18.97
		1	161	18.62	18.84	18.49
		81	0	19.17	19.37	19.59
		81	40	19.34	19.25	19.01
		81	81	19.30	18.88	19.14
		162	0	19.37	19.25	19.32
	256QAM	1	0	16.10	16.30	16.08
		1	81	16.04	16.06	16.21
1		161	15.54	15.59	15.82	
81		0	16.29	16.19	16.12	
81		40	16.23	16.11	16.30	
81		81	15.99	16.07	16.23	
162		0	15.99	16.06	16.14	

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		504204	518598	532998
		Frequency (MHz)		2521.02	2592.99	2664.99
50M	pi/2 BPSK	1	0	22.63	22.48	22.94
		1	66	22.75	22.39	22.54
		1	132	21.90	22.10	22.03
		66	0	22.80	22.99	22.99
		66	33	22.45	22.74	22.70
		66	66	22.78	22.39	22.81
		133	0	22.74	22.57	22.39
	QPSK	1	0	19.81	19.77	19.62
		1	66	19.59	19.65	19.76
		1	132	19.21	18.88	19.16
		66	0	19.90	19.78	19.48
		66	33	19.52	19.99	19.41
		66	66	19.82	19.70	19.34
		133	0	19.65	19.67	19.88
	16QAM	1	0	19.53	19.75	19.39
		1	66	19.65	19.43	19.23
		1	132	18.97	18.82	19.27
		66	0	19.43	19.49	19.73
		66	33	19.52	19.55	19.72
		66	66	19.42	19.37	19.60
		133	0	19.70	19.53	19.30
	64QAM	1	0	19.61	19.22	19.10
		1	66	18.91	19.04	19.21
		1	132	18.59	18.78	18.70
		66	0	19.20	18.98	19.37
		66	33	19.06	19.57	19.03
		66	66	19.28	19.26	19.11
		133	0	19.21	19.31	19.08
	256QAM	1	0	16.60	16.21	16.20
		1	66	15.88	16.30	15.86
1		132	15.64	15.85	15.69	
66		0	16.39	16.10	16.44	
66		33	15.97	16.15	16.59	
66		66	16.26	16.18	16.11	
133		0	16.04	16.35	16.27	

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		503202	518598	534000
		Frequency (MHz)		2516.01	2592.99	2670
40M	pi/2 BPSK	1	0	22.86	22.76	22.63
		1	53	22.70	22.83	22.30
		1	105	22.39	21.98	22.48
		53	0	22.39	22.84	22.99
		53	26	22.76	22.61	22.74
		53	53	22.35	22.64	22.60
		106	0	22.58	22.80	22.41
	QPSK	1	0	19.56	19.62	19.89
		1	53	19.62	19.44	19.77
		1	105	19.38	18.88	19.10
		53	0	19.76	20.02	19.99
		53	26	19.46	19.81	19.82
		53	53	19.70	19.65	19.68
		106	0	19.84	19.60	19.43
	16QAM	1	0	19.21	19.38	19.75
		1	53	19.41	19.32	19.14
		1	105	18.97	19.01	19.07
		53	0	19.88	19.85	19.59
		53	26	19.79	19.44	19.81
		53	53	19.35	19.38	19.51
		106	0	19.23	19.53	19.31
	64QAM	1	0	19.22	19.29	19.42
		1	53	19.27	19.09	19.36
		1	105	18.77	18.54	18.46
		53	0	19.57	19.27	19.14
		53	26	19.49	19.41	19.02
		53	53	18.87	18.91	19.21
		106	0	19.03	19.04	19.36
	256QAM	1	0	16.36	16.25	15.97
		1	53	15.90	16.08	15.86
1		105	15.80	15.75	15.90	
53		0	16.48	16.33	16.17	
53		26	16.08	16.11	16.58	
53		53	16.03	16.09	15.89	
106		0	16.12	16.09	16.10	

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		501204	518598	535998
		Frequency (MHz)		2506.02	2592.99	2679.99
20M	pi/2 BPSK	1	0	22.64	22.66	22.61
		1	25	22.62	22.91	22.76
		1	50	22.26	21.90	21.99
		25	0	22.89	22.77	23.01
		25	12	22.49	22.61	23.09
		25	25	22.42	22.54	22.64
		51	0	22.45	22.50	22.77
	QPSK	1	0	19.62	20.09	19.55
		1	25	19.45	19.58	19.37
		1	50	19.51	18.91	19.13
		25	0	19.88	19.68	19.71
		25	12	19.80	19.99	19.52
		25	25	19.38	19.65	19.49
		51	0	19.55	19.73	19.42
	16QAM	1	0	19.22	19.46	19.46
		1	25	19.72	19.68	19.54
		1	50	18.81	18.87	19.13
		25	0	19.93	19.37	19.67
		25	12	19.25	19.49	19.56
		25	25	19.08	19.20	19.36
		51	0	19.52	19.45	19.26
	64QAM	1	0	19.06	19.14	19.16
		1	25	19.23	18.92	19.29
		1	50	18.47	18.60	18.84
		25	0	19.17	19.16	19.24
		25	12	19.18	19.54	19.32
		25	25	19.02	18.93	18.85
		51	0	19.09	19.14	19.41
	256QAM	1	0	16.50	16.47	16.08
		1	25	16.04	15.90	16.15
		1	50	15.57	15.65	15.71
		25	0	16.43	16.49	16.32
		25	12	15.98	15.96	16.45
		25	25	15.89	15.94	16.18
		51	0	16.08	16.48	16.19

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		500700	518598	536496
		Frequency (MHz)		2503.5	2592.99	2682.48
15M	pi/2 BPSK	1	0	22.69	22.90	22.75
		1	19	22.68	22.52	22.62
		1	37	22.27	22.10	22.40
		19	0	22.83	23.01	23.05
		19	9	22.84	22.83	22.96
		19	20	22.70	22.55	22.56
		38	0	22.29	22.70	22.50
	QPSK	1	0	19.81	19.99	19.87
		1	19	19.57	19.83	19.41
		1	37	19.12	18.88	19.00
		19	0	19.61	19.82	19.70
		19	9	19.70	19.67	19.62
		19	20	19.50	19.78	19.64
		38	0	19.70	19.44	19.48
	16QAM	1	0	19.30	19.61	19.37
		1	19	19.56	19.30	19.17
		1	37	18.81	19.06	18.86
		19	0	19.86	19.79	19.62
		19	9	19.75	19.26	19.79
		19	20	19.05	19.65	19.49
		38	0	19.22	19.54	19.61
	64QAM	1	0	19.21	19.31	19.58
		1	19	18.94	18.99	19.47
		1	37	18.62	18.42	18.80
		19	0	19.08	19.15	19.08
		19	9	19.31	19.31	19.47
		19	20	18.80	19.29	19.24
		38	0	19.02	19.08	19.02
	256QAM	1	0	16.27	16.39	16.08
		1	19	16.28	16.19	15.81
		1	37	15.59	15.66	15.50
		19	0	16.24	16.17	16.26
		19	9	16.11	16.45	16.21
		19	20	15.98	15.78	16.13
		38	0	16.03	16.49	16.16

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		500202	518598	537000
		Frequency (MHz)		2501.01	2592.99	2685
10M	pi/2 BPSK	1	0	22.87	22.82	22.92
		1	12	22.61	22.84	22.56
		1	23	22.36	21.90	22.48
		12	0	22.71	22.61	22.79
		12	6	22.47	22.97	23.08
		12	12	22.28	22.67	22.57
		24	0	22.63	22.47	22.53
	QPSK	1	0	19.46	20.00	19.80
		1	12	19.83	19.51	19.87
		1	23	19.15	19.31	19.03
		12	0	19.60	19.85	19.56
		12	6	19.60	19.63	19.90
		12	12	19.35	19.48	19.79
		24	0	19.66	19.63	19.59
	16QAM	1	0	19.69	19.70	19.63
		1	12	19.60	19.72	19.24
		1	23	19.09	18.78	19.28
		12	0	19.44	19.39	19.56
		12	6	19.57	19.76	19.52
		12	12	19.50	19.30	19.55
		24	0	19.43	19.18	19.73
	64QAM	1	0	19.06	19.15	19.30
		1	12	19.43	19.05	19.18
		1	23	18.58	18.87	18.52
		12	0	19.51	19.12	19.48
		12	6	19.50	19.40	19.10
		12	12	19.16	19.21	19.01
		24	0	19.37	19.27	19.06
	256QAM	1	0	16.32	16.01	16.21
		1	12	16.25	16.06	15.88
		1	23	15.42	15.73	15.45
		12	0	16.51	16.15	16.06
		12	6	16.50	16.30	16.52
		12	12	16.13	16.08	16.35
		24	0	16.00	16.24	16.24

NR Band 66 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		346000	349000	352000
		Frequency (MHz)		1730	1745	1760
40M	pi/2 BPSK	1	0	22.77	23.01	22.82
		1	108	23.34	23.45	23.18
		1	215	23.39	23.17	23.40
		108	0	23.20	23.39	23.06
		108	53	23.01	22.95	23.07
		108	107	23.20	23.33	23.00
		216	0	23.14	23.08	23.10
	QPSK	1	0	19.69	20.05	20.00
		1	108	20.25	20.25	20.39
		1	215	20.52	20.30	20.14
		108	0	20.51	20.46	20.34
		108	53	20.37	19.93	20.08
		108	107	20.45	20.24	20.08
		216	0	20.22	20.16	20.13
	16QAM	1	0	19.91	19.90	19.89
		1	108	20.12	20.05	20.04
		1	215	20.38	20.03	20.17
		108	0	20.05	19.98	19.89
		108	53	19.86	20.22	20.02
		108	107	20.19	20.29	20.06
		216	0	19.90	20.01	20.06
	64QAM	1	0	19.51	19.62	19.17
		1	108	19.81	19.65	19.86
		1	215	19.62	19.85	19.95
		108	0	19.44	19.52	19.59
		108	53	19.75	19.89	19.50
		108	107	19.70	19.58	19.55
		216	0	19.83	19.76	19.86
	256QAM	1	0	16.09	16.26	16.48
		1	108	16.99	16.69	16.82
		1	215	16.70	16.59	16.61
		108	0	16.75	16.60	16.44
		108	53	16.53	16.96	16.66
		108	107	16.79	16.55	16.62
		216	0	16.83	16.75	16.47

NR Band 66 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		344000	349000	354000
		Frequency (MHz)		1720	1745	1770
20M	pi/2 BPSK	1	0	22.46	22.38	22.97
		1	53	22.95	23.18	22.76
		1	105	22.90	23.25	23.10
		53	0	22.73	23.10	23.18
		53	27	23.00	23.12	23.01
		53	53	23.00	22.78	22.87
		106	0	23.11	22.79	22.78
	QPSK	1	0	19.78	19.52	19.34
		1	53	20.41	20.07	19.89
		1	105	19.86	20.27	19.89
		53	0	20.34	19.84	19.84
		53	27	20.08	20.07	19.94
		53	53	19.97	20.08	20.19
		106	0	20.18	20.21	20.06
	16QAM	1	0	19.59	19.53	19.39
		1	53	20.17	19.74	20.10
		1	105	19.72	19.74	19.95
		53	0	19.87	19.95	19.39
		53	27	19.56	19.59	19.62
		53	53	20.04	19.77	19.82
		106	0	19.84	19.83	20.06
	64QAM	1	0	19.16	19.24	19.14
		1	53	19.57	19.45	19.83
		1	105	19.37	19.62	19.90
		53	0	19.52	19.33	19.48
		53	27	19.70	19.36	19.33
		53	53	19.54	19.65	19.42
		106	0	19.36	19.80	19.67
	256QAM	1	0	15.95	16.32	16.07
		1	53	16.71	16.55	16.41
		1	105	16.50	16.50	16.65
		53	0	16.40	16.15	16.18
		53	27	16.12	16.56	16.42
		53	53	16.63	16.14	16.64
		106	0	16.15	16.53	16.65

NR Band 66 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		343500	349000	354500
		Frequency (MHz)		1717.5	1745	1772.5
15M	pi/2 BPSK	1	0	22.48	22.46	22.87
		1	39	23.19	22.89	22.95
		1	78	22.84	23.20	22.95
		39	0	23.01	22.77	23.13
		39	19	22.70	22.93	22.89
		39	40	22.93	22.93	22.74
		79	0	23.09	22.83	22.74
	QPSK	1	0	19.61	19.72	19.73
		1	39	20.10	20.24	19.94
		1	78	19.90	19.96	19.86
		39	0	20.32	20.06	20.25
		39	19	20.04	20.09	19.91
		39	40	20.32	20.11	19.89
		79	0	20.02	19.69	19.85
	16QAM	1	0	19.49	19.65	19.72
		1	39	20.09	20.21	19.72
		1	78	19.95	19.53	19.98
		39	0	19.86	19.64	19.71
		39	19	19.70	20.01	19.67
		39	40	19.56	20.00	19.70
		79	0	19.87	19.70	19.78
	64QAM	1	0	19.01	19.02	19.09
		1	39	19.55	19.33	19.76
		1	78	19.71	19.59	19.81
		39	0	19.64	19.48	19.18
		39	19	19.64	19.40	19.18
		39	40	19.28	19.49	19.51
		79	0	19.35	19.29	19.76
	256QAM	1	0	16.32	16.49	16.18
		1	39	16.57	16.80	16.77
1		78	16.78	16.56	16.49	
39		0	16.58	16.65	16.53	
39		19	16.49	16.77	16.52	
39		40	16.71	16.49	16.75	
79		0	16.24	16.70	16.51	

NR Band 66 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		343000	349000	355000
		Frequency (MHz)		1715	1745	1775
10M	pi/2 BPSK	1	0	22.52	22.73	22.81
		1	26	23.06	23.06	23.20
		1	51	23.23	22.83	23.22
		26	0	23.24	22.99	23.15
		26	13	23.20	22.75	22.91
		26	26	22.83	22.60	23.16
		52	0	22.85	23.26	23.08
	QPSK	1	0	19.62	19.51	19.64
		1	26	19.98	20.01	20.10
		1	51	20.32	19.90	20.14
		26	0	19.99	20.07	19.86
		26	13	20.07	19.89	19.81
		26	26	20.03	20.03	19.96
		52	0	19.85	20.22	20.12
	16QAM	1	0	19.33	19.55	19.24
		1	26	19.89	20.07	19.86
		1	51	20.02	19.64	19.71
		26	0	19.57	19.97	19.50
		26	13	19.77	19.92	19.68
		26	26	19.77	19.69	19.75
		52	0	19.83	19.54	19.91
	64QAM	1	0	19.51	19.34	18.86
		1	26	19.38	19.46	19.42
		1	51	19.29	19.64	19.71
		26	0	19.47	19.18	19.48
		26	13	19.70	19.48	19.59
		26	26	19.20	19.31	19.59
		52	0	19.33	19.71	19.33
	256QAM	1	0	15.80	16.43	16.14
		1	26	16.57	16.65	16.90
		1	51	16.65	16.46	16.62
		26	0	16.32	16.56	16.41
		26	13	16.14	16.70	16.63
		26	26	16.31	16.45	16.33
		52	0	16.19	16.49	16.48

NR Band 66 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		342500	349000	355500
		Frequency (MHz)		1712.5	1745	1777.5
5M	pi/2 BPSK	1	0	22.48	22.60	22.66
		1	12	22.91	23.26	22.98
		1	24	23.18	22.77	23.31
		12	0	23.17	22.97	22.79
		12	6	23.11	22.74	23.13
		12	13	22.85	23.06	22.94
		25	0	23.18	23.16	22.68
	QPSK	1	0	19.84	19.91	19.34
		1	12	20.40	19.77	20.13
		1	24	19.83	20.08	20.08
		12	0	20.28	20.00	19.87
		12	6	20.10	20.18	20.00
		12	13	19.89	19.83	20.14
		25	0	19.97	20.23	19.99
	16QAM	1	0	19.34	19.55	19.73
		1	12	19.85	20.22	19.72
		1	24	20.09	19.82	20.11
		12	0	19.76	19.80	19.76
		12	6	19.61	19.81	19.48
		12	13	20.07	20.06	19.93
		25	0	19.61	19.47	20.07
	64QAM	1	0	19.23	19.16	19.39
		1	12	19.32	19.52	19.66
		1	24	19.48	19.56	19.57
		12	0	19.28	19.18	19.51
		12	6	19.72	19.32	19.23
		12	13	19.25	19.48	19.35
		25	0	19.24	19.83	19.22
	256QAM	1	0	16.11	16.33	16.10
		1	12	16.66	16.84	16.80
1		24	16.73	16.32	16.58	
12		0	16.74	16.53	16.63	
12		6	16.60	16.47	16.62	
12		13	16.56	16.50	16.59	
25		0	16.14	16.62	16.66	

NR Band 71 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		134600	136100	137600
		Frequency (MHz)		673	680.5	688
20M	pi/2 BPSK	1	0	23.52	23.69	23.68
		1	53	23.36	23.22	23.22
		1	105	23.12	23.40	23.24
		53	0	23.22	23.17	23.30
		53	27	23.58	23.08	23.39
		53	53	23.20	23.28	23.13
		106	0	23.39	23.15	23.35
	QPSK	1	0	20.55	20.47	20.33
		1	53	20.21	20.46	20.45
		1	105	20.36	20.19	20.08
		53	0	20.32	20.31	20.20
		53	27	20.10	20.60	20.11
		53	53	20.41	20.60	20.38
		106	0	20.27	20.27	20.45
	16QAM	1	0	20.45	20.36	20.05
		1	53	20.15	20.05	20.00
		1	105	20.20	20.21	20.09
		53	0	19.98	20.33	20.28
		53	27	20.18	20.34	19.87
		53	53	20.05	20.04	20.07
		106	0	20.24	20.18	20.09
	64QAM	1	0	20.07	19.92	20.13
		1	53	19.69	19.74	19.97
		1	105	19.96	19.73	19.84
		53	0	19.63	20.00	19.84
		53	27	19.94	19.77	19.79
		53	53	19.72	19.51	20.04
		106	0	19.74	19.71	20.03
	256QAM	1	0	16.87	16.97	16.92
		1	53	16.66	17.00	16.81
1		105	16.86	16.68	16.76	
53		0	16.86	16.66	16.63	
53		27	17.00	16.88	16.76	
53		53	16.85	16.82	16.73	
106		0	16.88	16.95	17.11	

NR Band 71 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		134100	136100	138100
		Frequency (MHz)		670.5	680.5	690.5
15M	pi/2 BPSK	1	0	23.31	23.13	23.35
		1	39	22.77	22.80	23.17
		1	78	23.25	23.10	23.26
		39	0	23.25	23.25	23.17
		39	19	23.12	22.80	22.88
		39	40	23.23	22.90	22.84
		79	0	22.93	22.87	23.21
	QPSK	1	0	20.44	20.32	20.14
		1	39	19.80	20.16	20.28
		1	78	20.28	20.06	20.05
		39	0	20.08	20.11	20.31
		39	19	19.98	19.95	20.19
		39	40	19.85	19.96	19.75
		79	0	20.00	20.01	20.15
	16QAM	1	0	20.12	19.71	20.18
		1	39	20.22	19.66	20.12
		1	78	20.00	19.68	20.11
		39	0	20.03	19.68	19.85
		39	19	19.74	19.79	19.70
		39	40	19.82	19.96	19.70
		79	0	20.01	19.81	19.99
	64QAM	1	0	19.62	19.89	19.88
		1	39	19.23	19.54	19.37
		1	78	19.73	19.70	19.73
		39	0	19.46	19.49	19.67
		39	19	19.59	19.67	19.67
		39	40	19.23	19.37	19.55
		79	0	19.29	19.37	19.46
	256QAM	1	0	16.79	16.64	16.87
		1	39	16.62	16.48	16.68
1		78	16.39	16.58	16.40	
39		0	16.61	16.62	16.49	
39		19	16.48	16.71	16.30	
39		40	16.48	16.70	16.61	
79		0	16.62	16.35	16.53	

NR Band 71 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133600	136100	138600
		Frequency (MHz)		668	680.5	693
10M	pi/2 BPSK	1	0	23.07	23.45	23.40
		1	26	23.27	23.01	23.07
		1	51	22.88	23.23	22.96
		26	0	23.24	23.10	22.94
		26	13	22.91	22.80	23.11
		26	26	22.87	23.19	23.37
		52	0	23.09	23.04	23.44
	QPSK	1	0	20.15	20.14	20.17
		1	26	20.03	19.91	19.94
		1	51	20.04	20.18	20.01
		26	0	20.25	19.81	20.28
		26	13	19.90	20.37	19.84
		26	26	19.95	20.09	19.79
		52	0	20.12	19.98	20.31
	16QAM	1	0	20.14	19.82	20.25
		1	26	20.20	20.11	20.04
		1	51	19.63	20.01	19.98
		26	0	19.78	20.15	19.71
		26	13	19.86	20.00	19.56
		26	26	20.03	20.15	19.83
		52	0	20.03	19.94	19.88
	64QAM	1	0	19.54	19.87	19.62
		1	26	19.31	19.77	19.70
		1	51	19.35	19.61	19.66
		26	0	19.38	19.32	19.31
		26	13	19.61	19.60	19.68
		26	26	19.72	19.61	19.66
		52	0	19.30	19.71	19.57
	256QAM	1	0	17.03	16.70	16.93
		1	26	16.41	16.63	16.79
		1	51	16.37	16.49	16.40
		26	0	16.36	16.68	16.45
		26	13	16.82	16.68	16.60
		26	26	16.41	16.40	16.83
		52	0	16.35	16.56	16.90

NR Band 71 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133100	136100	139100
		Frequency (MHz)		665.5	680.5	695.5
5M	pi/2 BPSK	1	0	23.37	23.50	23.06
		1	12	23.26	23.10	23.33
		1	24	22.79	22.98	22.74
		12	0	23.37	23.37	22.93
		12	6	23.43	22.89	23.00
		12	13	23.03	23.23	23.28
		25	0	22.96	22.77	23.30
	QPSK	1	0	20.25	20.43	20.45
		1	12	19.77	19.88	20.01
		1	24	20.21	20.03	20.11
		12	0	19.99	19.74	19.91
		12	6	20.26	20.39	19.91
		12	13	19.73	20.06	19.74
		25	0	20.17	19.88	20.25
	16QAM	1	0	20.16	20.05	19.77
		1	12	20.15	20.09	19.70
		1	24	19.76	19.83	19.87
		12	0	19.91	20.14	20.08
		12	6	20.05	19.71	19.72
		12	13	19.87	19.95	19.62
		25	0	20.15	19.86	19.96
	64QAM	1	0	19.62	19.62	19.58
		1	12	19.63	19.38	19.70
		1	24	19.76	19.29	19.57
		12	0	19.57	19.53	19.67
		12	6	19.47	19.85	19.74
		12	13	19.56	19.69	19.89
		25	0	19.43	19.28	19.46
	256QAM	1	0	16.89	16.74	16.57
		1	12	16.62	16.49	16.62
		1	24	16.42	16.34	16.75
		12	0	16.73	16.42	16.79
12		6	16.73	16.55	16.56	
12		13	16.49	16.60	16.66	
25		0	16.74	16.35	16.45	

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		650000	656000	662000
		Frequency (MHz)		3750	3840	3930
100M	pi/2 BPSK	1	0	22.73	22.94	22.74
		1	136	23.00	23.13	22.70
		1	272	23.00	22.80	22.91
		136	0	22.71	22.79	22.87
		136	68	22.73	22.47	22.97
		136	136	23.00	23.01	22.58
		273	0	22.79	22.72	22.77
	QPSK	1	0	19.70	19.80	19.65
		1	136	20.04	20.02	19.73
		1	272	19.95	19.74	19.81
		136	0	19.87	20.03	19.69
		136	68	19.61	19.74	19.65
		136	136	19.75	19.70	19.70
		273	0	20.06	19.68	19.76
	16QAM	1	0	19.78	19.38	19.88
		1	136	19.71	19.95	19.94
		1	272	19.44	19.58	19.66
		136	0	19.33	19.51	19.64
		136	68	19.89	19.74	19.74
		136	136	19.75	19.41	19.33
		273	0	19.73	19.86	19.73
	64QAM	1	0	19.32	19.55	19.34
		1	136	19.52	19.47	19.29
		1	272	19.15	19.55	19.29
		136	0	19.28	19.18	19.29
		136	68	19.15	19.17	19.43
		136	136	19.41	19.34	19.24
		273	0	19.25	19.48	19.26
	256QAM	1	0	16.48	16.06	16.34
		1	136	16.14	16.33	16.48
1		272	16.00	16.43	16.28	
136		0	16.39	16.12	16.44	
136		68	16.31	16.25	16.18	
136		136	16.61	16.29	16.16	
273		0	16.27	16.08	16.16	

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		649668	656000	662332
		Frequency (MHz)		3745.02	3840	3934.98
90M	pi/2 BPSK	1	0	22.32	22.73	22.82
		1	122	22.39	22.63	22.83
		1	244	22.52	22.33	22.65
		122	0	22.45	22.52	22.67
		122	61	22.74	22.19	22.89
		122	122	22.53	22.75	22.24
		245	0	22.33	22.68	22.56
	QPSK	1	0	19.59	19.58	19.58
		1	122	19.69	19.62	19.70
		1	244	19.62	19.63	19.44
		122	0	19.69	19.57	19.61
		122	61	19.55	19.74	19.75
		122	122	19.64	19.78	19.55
		245	0	19.53	19.65	19.47
	16QAM	1	0	19.63	19.18	19.46
		1	122	19.45	19.45	19.80
		1	244	19.29	19.41	19.14
		122	0	19.48	19.10	19.55
		122	61	19.71	19.60	19.63
		122	122	19.22	19.21	19.26
		245	0	19.20	19.42	19.10
	64QAM	1	0	18.99	19.21	19.01
		1	122	19.06	19.45	19.44
		1	244	19.00	19.24	18.99
		122	0	19.00	19.23	19.20
		122	61	18.85	19.26	19.08
		122	122	19.25	19.19	19.34
		245	0	19.07	19.24	18.97
	256QAM	1	0	16.07	16.01	15.90
		1	122	15.91	16.18	16.32
1		244	16.02	16.14	16.14	
122		0	16.01	16.36	16.22	
122		61	16.26	16.09	16.05	
122		122	16.36	16.22	16.26	
245		0	15.78	16.16	15.77	

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		649334	656000	662666
		Frequency (MHz)		3740.01	3840	3939.99
80M	pi/2 BPSK	1	0	22.43	22.56	22.58
		1	108	22.53	22.56	22.53
		1	216	22.72	22.46	22.32
		108	0	22.78	22.26	22.45
		108	54	22.64	22.29	22.88
		108	108	22.35	22.48	22.58
		217	0	22.77	22.44	22.77
	QPSK	1	0	19.76	19.60	19.64
		1	108	19.91	19.87	19.31
		1	216	19.79	19.85	19.75
		108	0	19.86	19.41	19.61
		108	54	19.56	19.39	19.54
		108	108	19.56	19.25	19.66
		217	0	19.76	19.36	19.56
	16QAM	1	0	19.48	19.46	19.44
		1	108	19.22	19.43	19.46
		1	216	19.10	19.34	19.37
		108	0	19.27	19.63	19.20
		108	54	19.74	19.41	19.28
		108	108	19.52	19.27	19.39
		217	0	19.45	19.26	19.58
	64QAM	1	0	19.20	19.01	18.85
		1	108	19.00	19.06	19.09
		1	216	19.08	19.12	19.31
		108	0	19.24	19.16	18.89
		108	54	18.80	19.23	19.23
		108	108	19.27	19.05	19.17
		217	0	18.96	18.80	19.27
	256QAM	1	0	15.96	16.08	15.86
		1	108	15.94	16.24	16.28
1		216	16.13	16.21	15.93	
108		0	15.92	16.06	15.79	
108		54	16.11	16.19	16.10	
108		108	16.19	16.20	15.79	
217		0	15.96	15.91	16.02	

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		648668	656000	663332
		Frequency (MHz)		3730.02	3840	3949.98
60M	pi/2 BPSK	1	0	22.65	22.75	22.73
		1	81	22.78	22.92	22.89
		1	161	22.50	22.80	22.52
		81	0	22.51	22.31	22.24
		81	40	22.63	22.53	22.69
		81	81	22.66	22.72	22.62
		162	0	22.38	22.26	22.46
	QPSK	1	0	19.35	19.61	19.74
		1	81	19.91	19.65	19.48
		1	161	19.76	19.46	19.82
		81	0	19.74	19.80	19.79
		81	40	19.51	19.52	19.58
		81	81	19.78	19.54	19.76
		162	0	19.70	19.84	19.45
	16QAM	1	0	19.20	19.33	19.40
		1	81	19.37	19.45	19.78
		1	161	19.37	19.29	19.19
		81	0	19.28	19.52	19.37
		81	40	19.45	19.26	19.48
		81	81	19.14	19.18	19.06
		162	0	19.46	19.59	19.38
	64QAM	1	0	19.35	19.06	18.90
		1	81	19.29	19.20	19.02
		1	161	19.18	18.88	19.25
		81	0	18.93	19.22	18.99
		81	40	18.75	19.05	19.24
		81	81	19.09	18.80	19.28
		162	0	19.13	18.99	18.80
	256QAM	1	0	15.87	15.83	16.06
		1	81	16.31	16.01	16.14
1		161	16.02	15.99	16.30	
81		0	15.81	16.34	16.14	
81		40	15.83	15.86	16.16	
81		81	16.19	15.92	16.20	
162		0	15.92	15.78	15.94	

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		648334	656000	663666
		Frequency (MHz)		3725.01	3840	3954.99
50M	pi/2 BPSK	1	0	22.58	22.81	22.84
		1	66	22.88	22.63	22.41
		1	132	22.88	22.29	22.79
		66	0	22.62	22.62	22.54
		66	33	22.66	22.49	22.44
		66	66	22.57	22.48	22.60
		133	0	22.29	22.32	22.79
	QPSK	1	0	19.43	19.63	19.69
		1	66	19.66	19.83	19.52
		1	132	19.68	19.75	19.47
		66	0	19.59	19.54	19.65
		66	33	19.33	19.51	19.65
		66	66	19.50	19.75	19.35
		133	0	19.41	19.81	19.75
	16QAM	1	0	19.16	19.12	19.41
		1	66	19.42	19.53	19.32
		1	132	19.05	19.30	19.51
		66	0	19.09	19.37	19.27
		66	33	19.22	19.27	19.30
		66	66	19.21	19.59	19.46
		133	0	19.67	19.55	19.30
	64QAM	1	0	19.02	19.20	18.82
		1	66	19.32	19.45	19.01
		1	132	18.90	19.18	19.21
		66	0	19.41	19.22	19.11
		66	33	19.06	18.83	18.90
		66	66	18.95	19.04	19.06
		133	0	18.89	19.13	19.22
	256QAM	1	0	16.02	15.97	16.22
		1	66	16.09	16.00	16.16
1		132	15.82	16.14	15.88	
66		0	15.75	16.16	16.10	
66		33	16.22	15.98	16.00	
66		66	16.32	16.39	15.86	
133		0	16.08	15.76	16.21	

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		648000	656000	664000
		Frequency (MHz)		3720	3840	3960
40M	pi/2 BPSK	1	0	22.53	22.35	22.61
		1	53	22.71	22.83	22.75
		1	105	22.71	22.61	22.41
		53	0	22.78	22.77	22.59
		53	26	22.80	22.59	22.69
		53	53	22.52	22.40	22.76
		106	0	22.73	22.42	22.72
	QPSK	1	0	19.52	19.78	19.43
		1	53	19.91	19.46	19.60
		1	105	19.37	19.64	19.42
		53	0	19.66	19.58	19.66
		53	26	19.84	19.90	19.38
		53	53	19.83	19.44	19.70
		106	0	19.39	19.55	19.57
	16QAM	1	0	19.45	19.40	19.22
		1	53	19.43	19.49	19.32
		1	105	19.55	19.14	19.51
		53	0	19.07	19.28	19.24
		53	26	19.63	19.49	19.55
		53	53	19.45	19.20	19.50
		106	0	19.25	19.60	19.47
	64QAM	1	0	19.11	19.16	18.84
		1	53	19.49	19.22	18.99
		1	105	19.18	19.01	19.13
		53	0	18.96	19.32	19.28
		53	26	18.76	18.75	18.78
		53	53	19.08	18.89	19.07
		106	0	19.32	19.34	19.22
	256QAM	1	0	16.32	15.84	15.75
		1	53	16.01	15.93	16.18
		1	105	16.13	15.98	16.00
		53	0	16.11	16.15	16.19
		53	26	16.08	16.05	16.08
		53	53	16.28	15.96	15.94
		106	0	16.14	16.25	15.95

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		647334	656000	664666
		Frequency (MHz)		3710.01	3840	3969.99
20M	pi/2 BPSK	1	0	22.65	22.82	22.49
		1	25	22.55	22.67	22.58
		1	50	22.46	22.59	22.48
		25	0	22.48	22.43	22.20
		25	12	22.40	22.37	22.76
		25	25	22.74	22.68	22.45
		51	0	22.47	22.54	22.71
	QPSK	1	0	19.60	19.76	19.33
		1	25	19.93	19.51	19.61
		1	50	19.51	19.43	19.74
		25	0	19.38	19.73	19.62
		25	12	19.45	19.69	19.36
		25	25	19.71	19.68	19.24
		51	0	19.38	19.79	19.78
	16QAM	1	0	19.36	19.56	19.46
		1	25	19.38	19.33	19.54
		1	50	19.13	19.12	19.12
		25	0	19.16	19.16	19.33
		25	12	19.50	19.34	19.25
		25	25	19.49	19.57	19.36
		51	0	19.16	19.68	19.18
	64QAM	1	0	19.35	19.11	19.20
		1	25	19.24	19.35	19.13
		1	50	18.98	19.01	19.26
		25	0	19.15	19.10	18.88
		25	12	18.83	19.00	18.82
		25	25	19.01	18.98	19.01
		51	0	18.93	18.87	18.94
	256QAM	1	0	15.91	15.81	16.09
		1	25	15.96	16.07	16.06
1		50	15.80	16.21	16.09	
25		0	16.07	16.31	15.89	
25		12	16.15	16.24	16.05	
25		25	15.89	16.12	15.83	
51		0	15.93	16.25	15.88	

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		647168	656000	664832
		Frequency (MHz)		3707.52	3840	3972.48
15M	pi/2 BPSK	1	0	22.41	22.38	22.70
		1	19	22.75	22.72	22.58
		1	37	22.77	22.82	22.52
		19	0	22.50	22.75	22.35
		19	9	22.88	22.45	22.80
		19	20	22.74	22.53	22.26
		38	0	22.76	22.73	22.66
	QPSK	1	0	19.65	19.81	19.75
		1	19	19.68	19.67	19.45
		1	37	19.34	19.38	19.78
		19	0	19.63	19.46	19.26
		19	9	19.50	19.86	19.39
		19	20	19.67	19.72	19.56
		38	0	19.73	19.61	19.72
	16QAM	1	0	19.55	19.24	19.55
		1	19	19.51	19.75	19.67
		1	37	19.23	19.31	19.32
		19	0	19.43	19.56	19.73
		19	9	19.28	19.44	19.55
		19	20	19.61	19.60	19.03
		38	0	19.18	19.62	19.26
	64QAM	1	0	18.91	19.29	18.91
		1	19	19.52	19.09	19.29
		1	37	18.95	19.02	19.02
		19	0	19.17	18.87	19.31
		19	9	18.76	19.11	18.88
		19	20	18.90	18.87	18.94
		38	0	19.25	19.05	18.84
	256QAM	1	0	15.88	16.19	16.09
		1	19	16.33	15.97	16.08
1		37	16.00	16.13	16.05	
19		0	15.83	15.97	15.79	
19		9	16.17	16.31	15.91	
19		20	16.32	15.92	15.87	
38		0	15.79	15.84	16.13	

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		647000	656000	665000
		Frequency (MHz)		3705	3840	3975
10M	pi/2 BPSK	1	0	22.81	22.60	22.55
		1	12	22.82	22.91	22.66
		1	23	22.64	22.68	22.82
		12	0	22.74	22.57	22.21
		12	6	22.53	22.73	22.78
		12	12	22.55	22.41	22.75
		24	0	22.30	22.43	22.79
	QPSK	1	0	19.43	19.56	19.56
		1	12	19.64	19.52	19.59
		1	23	19.75	19.43	19.79
		12	0	19.67	19.62	19.47
		12	6	19.83	19.80	19.70
		12	12	19.76	19.74	19.59
		24	0	19.83	19.68	19.87
	16QAM	1	0	19.15	19.39	19.23
		1	12	19.55	19.34	19.66
		1	23	19.50	19.43	19.16
		12	0	19.09	19.58	19.67
		12	6	19.57	19.57	19.62
		12	12	19.29	19.58	19.29
		24	0	19.48	19.66	19.59
	64QAM	1	0	19.23	19.39	19.25
		1	12	19.14	19.32	18.97
		1	23	18.88	19.28	19.01
		12	0	18.89	19.03	19.20
		12	6	19.20	19.26	19.08
		12	12	18.87	18.72	18.93
		24	0	19.36	19.24	19.27
	256QAM	1	0	16.01	15.84	15.71
		1	12	15.86	15.88	16.33
		1	23	16.07	15.77	16.29
		12	0	16.04	15.90	16.22
		12	6	15.91	15.86	16.10
		12	12	16.24	16.21	16.27
		24	0	15.90	16.19	15.71

EIRP / ERP Power (dBm)

NR Band 7 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		502000	507000	512000
		Frequency (MHz)		2510	2535	2560
20M	pi/2 BPSK	1	0	25.35	25.59	25.23
		1	53	25.16	25.51	25.23
		1	105	24.93	24.57	24.88
		53	0	25.44	25.35	25.08
		53	27	24.99	25.32	24.92
		53	53	25.12	24.73	25.13
		106	0	25.13	25.23	25.18
	QPSK	1	0	22.08	22.37	22.28
		1	53	22.22	22.13	22.00
		1	105	21.69	21.67	21.61
		53	0	22.14	22.19	22.39
		53	27	22.33	22.00	22.38
		53	53	22.07	21.99	22.15
		106	0	21.95	21.73	22.03
	16QAM	1	0	21.97	22.25	22.32
		1	53	22.44	22.42	22.01
		1	105	21.83	21.85	21.72
		53	0	22.09	22.42	22.40
		53	27	22.04	21.85	21.82
		53	53	22.07	21.82	22.30
		106	0	21.77	22.32	21.82
	64QAM	1	0	21.51	21.95	21.96
		1	53	21.91	21.62	21.74
		1	105	21.09	21.09	21.02
		53	0	21.65	21.54	21.89
		53	27	21.43	21.25	21.54
		53	53	21.65	21.37	21.55
		106	0	21.38	21.53	21.75
	256QAM	1	0	18.92	18.74	18.48
		1	53	18.42	18.77	18.57
1		105	18.08	18.11	18.15	
53		0	18.49	18.51	18.62	
53		27	18.45	18.29	18.52	
53		53	18.22	18.31	18.19	
106		0	18.32	18.66	18.31	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 7 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		501500	507000	512500
		Frequency (MHz)		2507.5	2535	2562.5
15M	pi/2 BPSK	1	0	25.05	25.37	25.35
		1	39	25.47	25.28	25.44
		1	78	24.58	24.83	24.65
		39	0	24.96	24.90	24.94
		39	19	25.08	25.23	24.91
		39	40	24.91	24.98	24.95
		79	0	25.15	25.29	25.34
	QPSK	1	0	22.38	22.49	22.36
		1	39	22.07	22.52	22.48
		1	78	21.80	21.81	21.69
		39	0	22.34	22.06	22.12
		39	19	21.96	21.80	22.29
		39	40	21.96	21.99	22.01
		79	0	21.83	21.94	22.02
	16QAM	1	0	22.15	22.14	22.10
		1	39	21.99	22.29	21.97
		1	78	22.03	21.84	21.77
		39	0	22.53	22.27	22.26
		39	19	22.14	22.35	21.86
		39	40	21.84	21.83	22.30
		79	0	22.10	22.39	22.17
	64QAM	1	0	21.58	21.71	21.55
		1	39	21.66	21.67	21.66
		1	78	21.54	21.39	21.15
		39	0	21.72	21.71	21.51
		39	19	21.38	21.21	21.57
		39	40	21.59	21.36	21.37
		79	0	21.41	21.29	21.67
256QAM	1	0	18.97	18.43	18.87	
	1	39	18.51	18.63	18.83	
	1	78	18.08	18.49	18.38	
	39	0	18.66	18.42	18.51	
	39	19	18.66	18.41	18.55	
	39	40	18.15	18.29	18.49	
	79	0	18.67	18.30	18.40	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 7 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		501000	507000	513000
		Frequency (MHz)		2505	2535	2565
10M	pi/2 BPSK	1	0	25.37	25.47	25.22
		1	26	25.23	25.40	24.99
		1	51	24.75	24.92	24.91
		26	0	25.42	25.15	25.46
		26	13	25.35	25.18	25.29
		26	26	24.97	24.77	24.83
		52	0	25.32	25.04	25.34
	QPSK	1	0	22.31	22.40	22.29
		1	26	22.02	22.14	22.04
		1	51	21.66	21.76	21.98
		26	0	22.10	22.24	22.29
		26	13	22.44	22.00	22.33
		26	26	21.90	22.01	21.89
		52	0	21.92	22.19	21.98
	16QAM	1	0	22.28	22.11	22.11
		1	26	22.08	22.27	22.31
		1	51	22.16	21.80	21.87
		26	0	22.53	22.29	22.35
		26	13	22.12	22.34	22.13
		26	26	21.89	21.76	21.96
		52	0	21.79	22.32	22.08
	64QAM	1	0	21.51	21.74	21.51
		1	26	22.03	21.86	21.83
		1	51	21.35	21.49	21.01
		26	0	21.88	21.70	21.54
		26	13	21.66	21.56	21.66
		26	26	21.33	21.60	21.45
		52	0	21.26	21.66	21.28
	256QAM	1	0	18.71	18.69	18.50
		1	26	18.51	18.89	18.92
		1	51	18.16	18.37	18.28
		26	0	18.51	18.53	18.85
		26	13	18.28	18.29	18.43
		26	26	18.58	18.13	18.14
		52	0	18.81	18.70	18.53

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 7 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		500500	507000	513500
		Frequency (MHz)		2502.5	2535	2567.5
5M	pi/2 BPSK	1	0	25.44	25.42	25.23
		1	12	25.17	25.21	24.97
		1	24	24.62	24.72	24.80
		12	0	25.30	24.99	25.21
		12	6	25.20	25.15	25.01
		12	13	25.11	24.89	24.90
		25	0	24.94	25.00	25.37
	QPSK	1	0	21.98	22.44	22.38
		1	12	22.31	22.53	22.43
		1	24	22.14	22.14	22.11
		12	0	22.08	22.16	22.51
		12	6	22.37	21.92	22.27
		12	13	22.10	21.89	22.17
		25	0	22.01	21.97	22.39
	16QAM	1	0	21.91	22.58	22.05
		1	12	22.05	22.09	22.12
		1	24	22.13	22.00	21.64
		12	0	22.20	22.41	21.90
		12	6	22.19	22.20	21.87
		12	13	21.74	21.96	22.19
		25	0	21.84	22.37	21.92
	64QAM	1	0	21.60	21.48	21.74
		1	12	21.75	21.90	21.92
		1	24	21.15	21.08	21.25
		12	0	21.54	21.61	21.73
		12	6	21.31	21.72	21.70
		12	13	21.67	21.60	21.43
		25	0	21.60	21.66	21.58
	256QAM	1	0	18.56	18.67	18.66
		1	12	18.42	18.43	18.68
		1	24	18.30	18.48	18.57
		12	0	18.60	18.72	18.50
12		6	18.58	18.45	18.68	
12		13	18.62	18.60	18.65	
25		0	18.49	18.30	18.32	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 38 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		51600	519000	522000
		Frequency (MHz)		2580	2595	2610
20M	pi/2 BPSK	1	0	24.86	24.94	24.71
		1	25	24.83	24.86	24.87
		1	50	24.72	24.73	24.83
		25	0	24.81	24.78	24.83
		25	12	24.86	24.76	24.74
		25	25	24.81	24.72	24.92
		51	0	24.69	24.58	24.65
	QPSK	1	0	22.02	21.82	21.89
		1	25	21.69	21.82	22.00
		1	50	21.97	21.97	21.85
		25	0	22.12	22.04	22.10
		25	12	21.99	22.16	22.01
		25	25	22.16	22.11	22.09
		51	0	21.61	21.83	21.77
	16QAM	1	0	21.92	21.81	22.08
		1	25	21.76	21.73	21.72
		1	50	21.37	21.46	21.49
		25	0	21.55	21.51	21.56
		25	12	21.61	21.71	21.61
		25	25	21.95	21.94	21.92
		51	0	21.57	21.43	21.76
	64QAM	1	0	21.52	21.75	21.41
		1	25	21.69	21.23	21.12
		1	50	21.44	21.55	21.64
		25	0	21.52	21.49	21.68
		25	12	21.72	21.65	21.66
		25	25	21.56	21.76	21.66
		51	0	21.24	21.57	21.15
	256QAM	1	0	18.27	18.57	18.65
		1	25	18.13	18.44	18.30
1		50	18.31	18.16	18.53	
25		0	18.40	18.49	18.58	
25		12	18.32	18.47	18.45	
25		25	18.48	18.37	18.29	
51		0	18.24	18.40	18.15	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 38 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		515500	519000	522500
		Frequency (MHz)		2577.5	2595	2612.5
15M	pi/2 BPSK	1	0	24.80	24.92	24.44
		1	19	24.59	24.44	24.84
		1	37	24.82	24.65	24.81
		19	0	24.79	24.71	24.73
		19	9	24.58	24.90	24.48
		19	20	24.55	24.45	24.82
		38	0	24.86	24.88	24.56
	QPSK	1	0	21.59	21.94	21.71
		1	19	21.30	21.63	21.57
		1	37	21.42	21.72	21.79
		19	0	21.86	21.82	21.91
		19	9	21.73	21.59	21.95
		19	20	21.76	21.79	22.04
		38	0	21.41	21.32	21.62
	16QAM	1	0	21.52	21.81	21.40
		1	19	21.48	21.56	21.53
		1	37	21.24	21.09	21.08
		19	0	21.51	21.69	21.50
		19	9	21.47	21.75	21.58
		19	20	21.42	21.49	21.53
		38	0	21.10	21.02	21.43
	64QAM	1	0	21.11	21.14	21.45
		1	19	21.30	21.20	21.14
		1	37	21.10	21.10	21.28
		19	0	21.39	21.20	20.98
		19	9	21.59	21.10	21.45
		19	20	21.36	21.18	21.44
		38	0	20.82	21.32	20.96
256QAM	1	0	18.26	18.50	18.16	
	1	19	18.12	18.23	17.89	
	1	37	17.84	18.20	18.24	
	19	0	18.12	18.07	18.30	
	19	9	18.06	17.98	18.14	
	19	20	18.38	18.30	18.27	
	38	0	17.95	17.86	18.17	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 38 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		515000	519000	523000
		Frequency (MHz)		2575	2595	2615
10M	pi/2 BPSK	1	0	24.74	24.81	24.84
		1	12	24.47	24.52	24.84
		1	23	24.70	24.75	24.52
		12	0	24.68	24.74	24.43
		12	6	24.72	24.89	24.81
		12	12	24.73	24.73	24.59
		24	0	24.56	24.49	24.23
	QPSK	1	0	21.97	21.57	21.91
		1	12	21.64	21.68	21.51
		1	23	21.84	21.94	21.69
		12	0	21.47	21.81	21.97
		12	6	21.58	21.74	22.04
		12	12	21.62	21.95	22.07
		24	0	21.39	21.22	21.71
	16QAM	1	0	21.42	21.52	21.77
		1	12	21.36	21.79	21.46
		1	23	21.12	21.17	21.27
		12	0	21.40	21.46	21.23
		12	6	21.68	21.70	21.38
		12	12	21.57	21.69	21.74
		24	0	21.45	21.31	21.21
	64QAM	1	0	21.34	21.53	21.46
		1	12	21.22	21.16	21.24
		1	23	20.93	21.41	21.20
		12	0	21.35	21.36	21.14
		12	6	21.07	21.57	21.41
		12	12	21.42	21.45	21.17
		24	0	20.90	21.13	21.05
	256QAM	1	0	17.95	18.38	18.31
		1	12	17.79	17.86	18.30
		1	23	18.30	18.00	17.90
		12	0	18.02	18.39	18.02
		12	6	18.09	18.18	18.02
		12	12	18.07	18.05	18.13
		24	0	18.20	17.97	18.08

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		509202	518598	528000
		Frequency (MHz)		2546.01	2592.99	2640
100M	pi/2 BPSK	1	0	25.13	25.07	25.28
		1	136	25.06	25.30	24.80
		1	272	24.82	24.60	24.80
		136	0	25.25	25.07	25.29
		136	68	25.29	25.25	25.15
		136	136	24.94	25.18	24.90
		273	0	25.11	24.94	25.25
	QPSK	1	0	22.30	22.47	21.97
		1	136	22.11	22.02	21.85
		1	272	21.73	21.77	21.74
		136	0	22.25	22.35	22.32
		136	68	22.31	22.07	22.08
		136	136	21.85	22.04	21.96
		273	0	22.22	22.22	22.24
	16QAM	1	0	21.91	21.80	21.92
		1	136	22.04	22.12	21.93
		1	272	21.55	21.35	21.66
		136	0	22.22	21.95	21.80
		136	68	21.96	21.74	22.16
		136	136	21.58	21.87	21.98
		273	0	21.79	21.92	21.88
	64QAM	1	0	21.64	21.71	21.66
		1	136	21.65	21.57	21.79
		1	272	21.19	21.01	21.25
		136	0	21.83	21.52	21.82
		136	68	21.62	21.89	21.78
		136	136	21.37	21.67	21.29
		273	0	21.77	21.71	21.58
	256QAM	1	0	19.01	18.42	18.77
		1	136	18.67	18.56	18.32
		1	272	18.17	17.81	18.00
		136	0	18.65	18.89	18.93
		136	68	18.81	18.42	18.86
		136	136	18.71	18.49	18.51
		273	0	18.68	18.65	18.36

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		508200	518598	528996
		Frequency (MHz)		2541	2592.99	2644.98
90M	pi/2 BPSK	1	0	25.06	25.16	25.23
		1	122	24.77	25.02	24.69
		1	244	24.12	24.31	24.31
		122	0	24.77	24.90	25.20
		122	61	25.06	25.09	24.93
		122	122	24.94	24.81	24.79
		245	0	24.49	25.13	24.68
	QPSK	1	0	21.73	21.85	21.85
		1	122	21.90	21.90	21.76
		1	244	21.54	21.09	21.52
		122	0	21.81	22.18	21.72
		122	61	22.17	22.10	21.89
		122	122	22.07	21.94	21.96
		245	0	21.94	21.56	21.98
	16QAM	1	0	21.82	21.86	21.80
		1	122	21.87	21.68	21.59
		1	244	20.97	21.15	21.38
		122	0	21.96	21.74	21.86
		122	61	21.56	21.61	21.59
		122	122	21.68	21.45	21.34
		245	0	21.80	21.92	21.45
	64QAM	1	0	21.59	21.39	21.29
		1	122	21.37	21.23	21.62
		1	244	21.22	20.83	21.04
		122	0	21.75	21.35	21.69
		122	61	21.35	21.44	21.49
		122	122	21.14	21.18	21.20
		245	0	21.20	21.38	21.51
256QAM	1	0	18.61	18.22	18.33	
	1	122	18.47	18.51	18.31	
	1	244	17.84	17.77	18.04	
	122	0	18.26	18.57	18.69	
	122	61	18.31	18.31	18.80	
	122	122	18.01	18.26	18.41	
	245	0	18.51	18.40	18.15	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		507204	518598	529998
		Frequency (MHz)		2536.02	2592.99	2649.99
80M	pi/2 BPSK	1	0	24.76	25.10	24.86
		1	108	24.93	24.76	25.00
		1	216	24.15	24.25	24.45
		108	0	25.14	25.12	24.84
		108	54	24.77	24.88	25.23
		108	108	24.75	24.82	24.68
		217	0	25.04	24.83	24.74
	QPSK	1	0	21.72	22.30	22.02
		1	108	21.87	21.74	21.61
		1	216	21.33	21.10	21.59
		108	0	21.78	22.08	21.67
		108	54	21.69	22.00	21.86
		108	108	21.73	21.74	21.61
		217	0	21.89	21.67	21.77
	16QAM	1	0	21.94	21.86	21.59
		1	108	21.41	21.55	21.72
		1	216	21.25	21.29	21.47
		108	0	21.66	22.01	21.60
		108	54	21.81	21.74	21.96
		108	108	21.61	21.38	21.66
		217	0	21.84	21.52	21.89
	64QAM	1	0	21.73	21.65	21.47
		1	108	21.37	21.13	21.24
		1	216	20.89	20.62	21.01
		108	0	21.72	21.64	21.58
		108	54	21.35	21.40	21.26
		108	108	21.23	21.01	21.43
		217	0	21.34	21.12	21.41
	256QAM	1	0	18.79	18.68	18.51
		1	108	18.27	18.21	18.36
1		216	18.07	17.76	17.93	
108		0	18.53	18.36	18.41	
108		54	18.20	18.15	18.56	
108		108	18.06	18.39	18.12	
217		0	18.66	18.55	18.42	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		505200	518598	531996
		Frequency (MHz)		2526	2592.99	2659.98
60M	pi/2 BPSK	1	0	24.88	24.71	24.87
		1	81	24.71	25.11	24.87
		1	161	24.45	24.04	24.56
		81	0	24.93	25.23	25.15
		81	40	25.08	25.11	24.82
		81	81	24.74	25.05	24.75
		162	0	24.74	24.74	24.85
	QPSK	1	0	21.98	22.17	21.84
		1	81	21.99	22.12	21.65
		1	161	21.65	21.56	21.65
		81	0	22.20	22.05	21.80
		81	40	21.87	22.13	22.02
		81	81	22.08	21.59	21.89
		162	0	21.82	21.97	21.97
	16QAM	1	0	21.53	21.74	21.68
		1	81	21.87	21.93	21.58
		1	161	20.93	21.17	21.41
		81	0	21.62	21.66	21.76
		81	40	21.48	21.70	21.80
		81	81	21.36	21.60	21.82
		162	0	21.74	21.50	21.76
	64QAM	1	0	21.67	21.69	21.76
		1	81	21.24	21.10	21.17
		1	161	20.82	21.04	20.69
		81	0	21.37	21.57	21.79
		81	40	21.54	21.45	21.21
		81	81	21.50	21.08	21.34
		162	0	21.57	21.45	21.52
	256QAM	1	0	18.30	18.50	18.28
		1	81	18.24	18.26	18.41
		1	161	17.74	17.79	18.02
		81	0	18.49	18.39	18.32
81		40	18.43	18.31	18.50	
81		81	18.19	18.27	18.43	
162		0	18.19	18.26	18.34	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		504204	518598	532998
		Frequency (MHz)		2521.02	2592.99	2664.99
50M	pi/2 BPSK	1	0	24.83	24.68	25.14
		1	66	24.95	24.59	24.74
		1	132	24.10	24.30	24.23
		66	0	25.00	25.19	25.19
		66	33	24.65	24.94	24.90
		66	66	24.98	24.59	25.01
		133	0	24.94	24.77	24.59
	QPSK	1	0	22.01	21.97	21.82
		1	66	21.79	21.85	21.96
		1	132	21.41	21.08	21.36
		66	0	22.10	21.98	21.68
		66	33	21.72	22.19	21.61
		66	66	22.02	21.90	21.54
		133	0	21.85	21.87	22.08
	16QAM	1	0	21.73	21.95	21.59
		1	66	21.85	21.63	21.43
		1	132	21.17	21.02	21.47
		66	0	21.63	21.69	21.93
		66	33	21.72	21.75	21.92
		66	66	21.62	21.57	21.80
		133	0	21.90	21.73	21.50
	64QAM	1	0	21.81	21.42	21.30
		1	66	21.11	21.24	21.41
		1	132	20.79	20.98	20.90
		66	0	21.40	21.18	21.57
		66	33	21.26	21.77	21.23
		66	66	21.48	21.46	21.31
		133	0	21.41	21.51	21.28
	256QAM	1	0	18.80	18.41	18.40
		1	66	18.08	18.50	18.06
1		132	17.84	18.05	17.89	
66		0	18.59	18.30	18.64	
66		33	18.17	18.35	18.79	
66		66	18.46	18.38	18.31	
133		0	18.24	18.55	18.47	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		503202	518598	534000
		Frequency (MHz)		2516.01	2592.99	2670
40M	pi/2 BPSK	1	0	25.06	24.96	24.83
		1	53	24.90	25.03	24.50
		1	105	24.59	24.18	24.68
		53	0	24.59	25.04	25.19
		53	26	24.96	24.81	24.94
		53	53	24.55	24.84	24.80
		106	0	24.78	25.00	24.61
	QPSK	1	0	21.76	21.82	22.09
		1	53	21.82	21.64	21.97
		1	105	21.58	21.08	21.30
		53	0	21.96	22.22	22.19
		53	26	21.66	22.01	22.02
		53	53	21.90	21.85	21.88
		106	0	22.04	21.80	21.63
	16QAM	1	0	21.41	21.58	21.95
		1	53	21.61	21.52	21.34
		1	105	21.17	21.21	21.27
		53	0	22.08	22.05	21.79
		53	26	21.99	21.64	22.01
		53	53	21.55	21.58	21.71
		106	0	21.43	21.73	21.51
	64QAM	1	0	21.42	21.49	21.62
		1	53	21.47	21.29	21.56
		1	105	20.97	20.74	20.66
		53	0	21.77	21.47	21.34
		53	26	21.69	21.61	21.22
		53	53	21.07	21.11	21.41
		106	0	21.23	21.24	21.56
	256QAM	1	0	18.56	18.45	18.17
		1	53	18.10	18.28	18.06
1		105	18.00	17.95	18.10	
53		0	18.68	18.53	18.37	
53		26	18.28	18.31	18.78	
53		53	18.23	18.29	18.09	
106		0	18.32	18.29	18.30	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		501204	518598	535998
		Frequency (MHz)		2506.02	2592.99	2679.99
20M	pi/2 BPSK	1	0	24.84	24.86	24.81
		1	25	24.82	25.11	24.96
		1	50	24.46	24.10	24.19
		25	0	25.09	24.97	25.21
		25	12	24.69	24.81	25.29
		25	25	24.62	24.74	24.84
		51	0	24.65	24.70	24.97
	QPSK	1	0	21.82	22.29	21.75
		1	25	21.65	21.78	21.57
		1	50	21.71	21.11	21.33
		25	0	22.08	21.88	21.91
		25	12	22.00	22.19	21.72
		25	25	21.58	21.85	21.69
		51	0	21.75	21.93	21.62
	16QAM	1	0	21.42	21.66	21.66
		1	25	21.92	21.88	21.74
		1	50	21.01	21.07	21.33
		25	0	22.13	21.57	21.87
		25	12	21.45	21.69	21.76
		25	25	21.28	21.40	21.56
		51	0	21.72	21.65	21.46
	64QAM	1	0	21.26	21.34	21.36
		1	25	21.43	21.12	21.49
		1	50	20.67	20.80	21.04
		25	0	21.37	21.36	21.44
		25	12	21.38	21.74	21.52
		25	25	21.22	21.13	21.05
		51	0	21.29	21.34	21.61
256QAM	1	0	18.70	18.67	18.28	
	1	25	18.24	18.10	18.35	
	1	50	17.77	17.85	17.91	
	25	0	18.63	18.69	18.52	
	25	12	18.18	18.16	18.65	
	25	25	18.09	18.14	18.38	
	51	0	18.28	18.68	18.39	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		500700	518598	536496
		Frequency (MHz)		2503.5	2592.99	2682.48
15M	pi/2 BPSK	1	0	24.89	25.10	24.95
		1	19	24.88	24.72	24.82
		1	37	24.47	24.30	24.60
		19	0	25.03	25.21	25.25
		19	9	25.04	25.03	25.16
		19	20	24.90	24.75	24.76
		38	0	24.49	24.90	24.70
	QPSK	1	0	22.01	22.19	22.07
		1	19	21.77	22.03	21.61
		1	37	21.32	21.08	21.20
		19	0	21.81	22.02	21.90
		19	9	21.90	21.87	21.82
		19	20	21.70	21.98	21.84
		38	0	21.90	21.64	21.68
	16QAM	1	0	21.50	21.81	21.57
		1	19	21.76	21.50	21.37
		1	37	21.01	21.26	21.06
		19	0	22.06	21.99	21.82
		19	9	21.95	21.46	21.99
		19	20	21.25	21.85	21.69
		38	0	21.42	21.74	21.81
	64QAM	1	0	21.41	21.51	21.78
		1	19	21.14	21.19	21.67
		1	37	20.82	20.62	21.00
		19	0	21.28	21.35	21.28
		19	9	21.51	21.51	21.67
		19	20	21.00	21.49	21.44
		38	0	21.22	21.28	21.22
	256QAM	1	0	18.47	18.59	18.28
		1	19	18.48	18.39	18.01
		1	37	17.79	17.86	17.70
		19	0	18.44	18.37	18.46
		19	9	18.31	18.65	18.41
		19	20	18.18	17.98	18.33
		38	0	18.23	18.69	18.36

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		500202	518598	537000
		Frequency (MHz)		2501.01	2592.99	2685
10M	pi/2 BPSK	1	0	25.07	25.02	25.12
		1	12	24.81	25.04	24.76
		1	23	24.56	24.10	24.68
		12	0	24.91	24.81	24.99
		12	6	24.67	25.17	25.28
		12	12	24.48	24.87	24.77
		24	0	24.83	24.67	24.73
	QPSK	1	0	21.66	22.20	22.00
		1	12	22.03	21.71	22.07
		1	23	21.35	21.51	21.23
		12	0	21.80	22.05	21.76
		12	6	21.80	21.83	22.10
		12	12	21.55	21.68	21.99
		24	0	21.86	21.83	21.79
	16QAM	1	0	21.89	21.90	21.83
		1	12	21.80	21.92	21.44
		1	23	21.29	20.98	21.48
		12	0	21.64	21.59	21.76
		12	6	21.77	21.96	21.72
		12	12	21.70	21.50	21.75
		24	0	21.63	21.38	21.93
	64QAM	1	0	21.26	21.35	21.50
		1	12	21.63	21.25	21.38
		1	23	20.78	21.07	20.72
		12	0	21.71	21.32	21.68
		12	6	21.70	21.60	21.30
		12	12	21.36	21.41	21.21
		24	0	21.57	21.47	21.26
	256QAM	1	0	18.52	18.21	18.41
		1	12	18.45	18.26	18.08
1		23	17.62	17.93	17.65	
12		0	18.71	18.35	18.26	
12		6	18.70	18.50	18.72	
12		12	18.33	18.28	18.55	
24		0	18.20	18.44	18.44	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 66 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		346000	349000	352000
		Frequency (MHz)		1730	1745	1760
40M	pi/2 BPSK	1	0	26.21	26.45	26.26
		1	108	26.78	26.89	26.62
		1	215	26.83	26.61	26.84
		108	0	26.64	26.83	26.50
		108	53	26.45	26.39	26.51
		108	107	26.64	26.77	26.44
		216	0	26.58	26.52	26.54
	QPSK	1	0	23.13	23.49	23.44
		1	108	23.69	23.69	23.83
		1	215	23.96	23.74	23.58
		108	0	23.95	23.90	23.78
		108	53	23.81	23.37	23.52
		108	107	23.89	23.68	23.52
		216	0	23.66	23.60	23.57
	16QAM	1	0	23.35	23.34	23.33
		1	108	23.56	23.49	23.48
		1	215	23.82	23.47	23.61
		108	0	23.49	23.42	23.33
		108	53	23.30	23.66	23.46
		108	107	23.63	23.73	23.50
		216	0	23.34	23.45	23.50
	64QAM	1	0	22.95	23.06	22.61
		1	108	23.25	23.09	23.30
		1	215	23.06	23.29	23.39
		108	0	22.88	22.96	23.03
		108	53	23.19	23.33	22.94
		108	107	23.14	23.02	22.99
		216	0	23.27	23.20	23.30
	256QAM	1	0	19.53	19.70	19.92
		1	108	20.43	20.13	20.26
1		215	20.14	20.03	20.05	
108		0	20.19	20.04	19.88	
108		53	19.97	20.40	20.10	
108		107	20.23	19.99	20.06	
216		0	20.27	20.19	19.91	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 66 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		344000	349000	354000
		Frequency (MHz)		1720	1745	1770
20M	pi/2 BPSK	1	0	25.90	25.82	26.41
		1	53	26.39	26.62	26.20
		1	105	26.34	26.69	26.54
		53	0	26.17	26.54	26.62
		53	27	26.44	26.56	26.45
		53	53	26.44	26.22	26.31
		106	0	26.55	26.23	26.22
	QPSK	1	0	23.22	22.96	22.78
		1	53	23.85	23.51	23.33
		1	105	23.30	23.71	23.33
		53	0	23.78	23.28	23.28
		53	27	23.52	23.51	23.38
		53	53	23.41	23.52	23.63
		106	0	23.62	23.65	23.50
	16QAM	1	0	23.03	22.97	22.83
		1	53	23.61	23.18	23.54
		1	105	23.16	23.18	23.39
		53	0	23.31	23.39	22.83
		53	27	23.00	23.03	23.06
		53	53	23.48	23.21	23.26
		106	0	23.28	23.27	23.50
	64QAM	1	0	22.60	22.68	22.58
		1	53	23.01	22.89	23.27
		1	105	22.81	23.06	23.34
		53	0	22.96	22.77	22.92
		53	27	23.14	22.80	22.77
		53	53	22.98	23.09	22.86
		106	0	22.80	23.24	23.11
	256QAM	1	0	19.39	19.76	19.51
		1	53	20.15	19.99	19.85
1		105	19.94	19.94	20.09	
53		0	19.84	19.59	19.62	
53		27	19.56	20.00	19.86	
53		53	20.07	19.58	20.08	
106		0	19.59	19.97	20.09	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 66 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		343500	349000	354500
		Frequency (MHz)		1717.5	1745	1772.5
15M	pi/2 BPSK	1	0	25.92	25.90	26.31
		1	39	26.63	26.33	26.39
		1	78	26.28	26.64	26.39
		39	0	26.45	26.21	26.57
		39	19	26.14	26.37	26.33
		39	40	26.37	26.37	26.18
		79	0	26.53	26.27	26.18
	QPSK	1	0	23.05	23.16	23.17
		1	39	23.54	23.68	23.38
		1	78	23.34	23.40	23.30
		39	0	23.76	23.50	23.69
		39	19	23.48	23.53	23.35
		39	40	23.76	23.55	23.33
		79	0	23.46	23.13	23.29
	16QAM	1	0	22.93	23.09	23.16
		1	39	23.53	23.65	23.16
		1	78	23.39	22.97	23.42
		39	0	23.30	23.08	23.15
		39	19	23.14	23.45	23.11
		39	40	23.00	23.44	23.14
		79	0	23.31	23.14	23.22
	64QAM	1	0	22.45	22.46	22.53
		1	39	22.99	22.77	23.20
		1	78	23.15	23.03	23.25
		39	0	23.08	22.92	22.62
		39	19	23.08	22.84	22.62
		39	40	22.72	22.93	22.95
		79	0	22.79	22.73	23.20
	256QAM	1	0	19.76	19.93	19.62
		1	39	20.01	20.24	20.21
		1	78	20.22	20.00	19.93
		39	0	20.02	20.09	19.97
39		19	19.93	20.21	19.96	
39		40	20.15	19.93	20.19	
79		0	19.68	20.14	19.95	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 66 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		343000	349000	355000
		Frequency (MHz)		1715	1745	1775
10M	pi/2 BPSK	1	0	25.96	26.17	26.25
		1	26	26.50	26.50	26.64
		1	51	26.67	26.27	26.66
		26	0	26.68	26.43	26.59
		26	13	26.64	26.19	26.35
		26	26	26.27	26.04	26.60
		52	0	26.29	26.70	26.52
	QPSK	1	0	23.06	22.95	23.08
		1	26	23.42	23.45	23.54
		1	51	23.76	23.34	23.58
		26	0	23.43	23.51	23.30
		26	13	23.51	23.33	23.25
		26	26	23.47	23.47	23.40
		52	0	23.29	23.66	23.56
	16QAM	1	0	22.77	22.99	22.68
		1	26	23.33	23.51	23.30
		1	51	23.46	23.08	23.15
		26	0	23.01	23.41	22.94
		26	13	23.21	23.36	23.12
		26	26	23.21	23.13	23.19
		52	0	23.27	22.98	23.35
	64QAM	1	0	22.95	22.78	22.30
		1	26	22.82	22.90	22.86
		1	51	22.73	23.08	23.15
		26	0	22.91	22.62	22.92
		26	13	23.14	22.92	23.03
		26	26	22.64	22.75	23.03
		52	0	22.77	23.15	22.77
	256QAM	1	0	19.24	19.87	19.58
		1	26	20.01	20.09	20.34
1		51	20.09	19.90	20.06	
26		0	19.76	20.00	19.85	
26		13	19.58	20.14	20.07	
26		26	19.75	19.89	19.77	
52		0	19.63	19.93	19.92	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 66 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		342500	349000	355500
		Frequency (MHz)		1712.5	1745	1777.5
5M	pi/2 BPSK	1	0	25.92	26.04	26.10
		1	12	26.35	26.70	26.42
		1	24	26.62	26.21	26.75
		12	0	26.61	26.41	26.23
		12	6	26.55	26.18	26.57
		12	13	26.29	26.50	26.38
		25	0	26.62	26.60	26.12
	QPSK	1	0	23.28	23.35	22.78
		1	12	23.84	23.21	23.57
		1	24	23.27	23.52	23.52
		12	0	23.72	23.44	23.31
		12	6	23.54	23.62	23.44
		12	13	23.33	23.27	23.58
		25	0	23.41	23.67	23.43
	16QAM	1	0	22.78	22.99	23.17
		1	12	23.29	23.66	23.16
		1	24	23.53	23.26	23.55
		12	0	23.20	23.24	23.20
		12	6	23.05	23.25	22.92
		12	13	23.51	23.50	23.37
		25	0	23.05	22.91	23.51
	64QAM	1	0	22.67	22.60	22.83
		1	12	22.76	22.96	23.10
		1	24	22.92	23.00	23.01
		12	0	22.72	22.62	22.95
		12	6	23.16	22.76	22.67
		12	13	22.69	22.92	22.79
		25	0	22.68	23.27	22.66
	256QAM	1	0	19.55	19.77	19.54
		1	12	20.10	20.28	20.24
		1	24	20.17	19.76	20.02
		12	0	20.18	19.97	20.07
		12	6	20.04	19.91	20.06
		12	13	20.00	19.94	20.03
		25	0	19.58	20.06	20.10

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 71 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		134600	136100	137600
		Frequency (MHz)		673	680.5	688
20M	pi/2 BPSK	1	0	23.09	23.26	23.25
		1	53	22.93	22.79	22.79
		1	105	22.69	22.97	22.81
		53	0	22.79	22.74	22.87
		53	27	23.15	22.65	22.96
		53	53	22.77	22.85	22.70
		106	0	22.96	22.72	22.92
	QPSK	1	0	20.12	20.04	19.90
		1	53	19.78	20.03	20.02
		1	105	19.93	19.76	19.65
		53	0	19.89	19.88	19.77
		53	27	19.67	20.17	19.68
		53	53	19.98	20.17	19.95
		106	0	19.84	19.84	20.02
	16QAM	1	0	20.02	19.93	19.62
		1	53	19.72	19.62	19.57
		1	105	19.77	19.78	19.66
		53	0	19.55	19.90	19.85
		53	27	19.75	19.91	19.44
		53	53	19.62	19.61	19.64
		106	0	19.81	19.75	19.66
	64QAM	1	0	19.64	19.49	19.70
		1	53	19.26	19.31	19.54
		1	105	19.53	19.30	19.41
		53	0	19.20	19.57	19.41
		53	27	19.51	19.34	19.36
		53	53	19.29	19.08	19.61
		106	0	19.31	19.28	19.60
	256QAM	1	0	16.44	16.54	16.49
		1	53	16.23	16.57	16.38
1		105	16.43	16.25	16.33	
53		0	16.43	16.23	16.20	
53		27	16.57	16.45	16.33	
53		53	16.42	16.39	16.30	
106		0	16.45	16.52	16.68	

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

NR Band 71 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		134100	136100	138100
		Frequency (MHz)		670.5	680.5	690.5
15M	pi/2 BPSK	1	0	22.88	22.70	22.92
		1	39	22.34	22.37	22.74
		1	78	22.82	22.67	22.83
		39	0	22.82	22.82	22.74
		39	19	22.69	22.37	22.45
		39	40	22.80	22.47	22.41
		79	0	22.50	22.44	22.78
	QPSK	1	0	20.01	19.89	19.71
		1	39	19.37	19.73	19.85
		1	78	19.85	19.63	19.62
		39	0	19.65	19.68	19.88
		39	19	19.55	19.52	19.76
		39	40	19.42	19.53	19.32
		79	0	19.57	19.58	19.72
	16QAM	1	0	19.69	19.28	19.75
		1	39	19.79	19.23	19.69
		1	78	19.57	19.25	19.68
		39	0	19.60	19.25	19.42
		39	19	19.31	19.36	19.27
		39	40	19.39	19.53	19.27
		79	0	19.58	19.38	19.56
	64QAM	1	0	19.19	19.46	19.45
		1	39	18.80	19.11	18.94
		1	78	19.30	19.27	19.30
		39	0	19.03	19.06	19.24
		39	19	19.16	19.24	19.24
		39	40	18.80	18.94	19.12
		79	0	18.86	18.94	19.03
	256QAM	1	0	16.36	16.21	16.44
		1	39	16.19	16.05	16.25
1		78	15.96	16.15	15.97	
39		0	16.18	16.19	16.06	
39		19	16.05	16.28	15.87	
39		40	16.05	16.27	16.18	
79		0	16.19	15.92	16.10	

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

NR Band 71 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133600	136100	138600
		Frequency (MHz)		668	680.5	693
10M	pi/2 BPSK	1	0	22.64	23.02	22.97
		1	26	22.84	22.58	22.64
		1	51	22.45	22.80	22.53
		26	0	22.81	22.67	22.51
		26	13	22.48	22.37	22.68
		26	26	22.44	22.76	22.94
		52	0	22.66	22.61	23.01
	QPSK	1	0	19.72	19.71	19.74
		1	26	19.60	19.48	19.51
		1	51	19.61	19.75	19.58
		26	0	19.82	19.38	19.85
		26	13	19.47	19.94	19.41
		26	26	19.52	19.66	19.36
		52	0	19.69	19.55	19.88
	16QAM	1	0	19.71	19.39	19.82
		1	26	19.77	19.68	19.61
		1	51	19.20	19.58	19.55
		26	0	19.35	19.72	19.28
		26	13	19.43	19.57	19.13
		26	26	19.60	19.72	19.40
		52	0	19.60	19.51	19.45
	64QAM	1	0	19.11	19.44	19.19
		1	26	18.88	19.34	19.27
		1	51	18.92	19.18	19.23
		26	0	18.95	18.89	18.88
		26	13	19.18	19.17	19.25
		26	26	19.29	19.18	19.23
		52	0	18.87	19.28	19.14
	256QAM	1	0	16.60	16.27	16.50
		1	26	15.98	16.20	16.36
		1	51	15.94	16.06	15.97
		26	0	15.93	16.25	16.02
26		13	16.39	16.25	16.17	
26		26	15.98	15.97	16.40	
52		0	15.92	16.13	16.47	

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

NR Band 71 (SCS 15kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133100	136100	139100
		Frequency (MHz)		665.5	680.5	695.5
5M	pi/2 BPSK	1	0	22.94	23.07	22.63
		1	12	22.83	22.67	22.90
		1	24	22.36	22.55	22.31
		12	0	22.94	22.94	22.50
		12	6	23.00	22.46	22.57
		12	13	22.60	22.80	22.85
		25	0	22.53	22.34	22.87
	QPSK	1	0	19.82	20.00	20.02
		1	12	19.34	19.45	19.58
		1	24	19.78	19.60	19.68
		12	0	19.56	19.31	19.48
		12	6	19.83	19.96	19.48
		12	13	19.30	19.63	19.31
		25	0	19.74	19.45	19.82
	16QAM	1	0	19.73	19.62	19.34
		1	12	19.72	19.66	19.27
		1	24	19.33	19.40	19.44
		12	0	19.48	19.71	19.65
		12	6	19.62	19.28	19.29
		12	13	19.44	19.52	19.19
		25	0	19.72	19.43	19.53
	64QAM	1	0	19.19	19.19	19.15
		1	12	19.20	18.95	19.27
		1	24	19.33	18.86	19.14
		12	0	19.14	19.10	19.24
		12	6	19.04	19.42	19.31
		12	13	19.13	19.26	19.46
		25	0	19.00	18.85	19.03
	256QAM	1	0	16.46	16.31	16.14
		1	12	16.19	16.06	16.19
1		24	15.99	15.91	16.32	
12		0	16.30	15.99	16.36	
12		6	16.30	16.12	16.13	
12		13	16.06	16.17	16.23	
25		0	16.31	15.92	16.02	

*ERP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		650000	656000	662000
		Frequency (MHz)		3750	3840	3930
100M	pi/2 BPSK	1	0	25.34	25.55	25.35
		1	136	25.61	25.74	25.31
		1	272	25.61	25.41	25.52
		136	0	25.32	25.40	25.48
		136	68	25.34	25.08	25.58
		136	136	25.61	25.62	25.19
		273	0	25.40	25.33	25.38
	QPSK	1	0	22.31	22.41	22.26
		1	136	22.65	22.63	22.34
		1	272	22.56	22.35	22.42
		136	0	22.48	22.64	22.30
		136	68	22.22	22.35	22.26
		136	136	22.36	22.31	22.31
		273	0	22.67	22.29	22.37
	16QAM	1	0	22.39	21.99	22.49
		1	136	22.32	22.56	22.55
		1	272	22.05	22.19	22.27
		136	0	21.94	22.12	22.25
		136	68	22.50	22.35	22.35
		136	136	22.36	22.02	21.94
		273	0	22.34	22.47	22.34
	64QAM	1	0	21.93	22.16	21.95
		1	136	22.13	22.08	21.90
		1	272	21.76	22.16	21.90
		136	0	21.89	21.79	21.90
		136	68	21.76	21.78	22.04
		136	136	22.02	21.95	21.85
		273	0	21.86	22.09	21.87
	256QAM	1	0	19.09	18.67	18.95
		1	136	18.75	18.94	19.09
1		272	18.61	19.04	18.89	
136		0	19.00	18.73	19.05	
136		68	18.92	18.86	18.79	
136		136	19.22	18.90	18.77	
273		0	18.88	18.69	18.77	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		649668	656000	662332
		Frequency (MHz)		3745.02	3840	3934.98
90M	pi/2 BPSK	1	0	24.93	25.34	25.43
		1	122	25.00	25.24	25.44
		1	244	25.13	24.94	25.26
		122	0	25.06	25.13	25.28
		122	61	25.35	24.80	25.50
		122	122	25.14	25.36	24.85
		245	0	24.94	25.29	25.17
	QPSK	1	0	22.20	22.19	22.19
		1	122	22.30	22.23	22.31
		1	244	22.23	22.24	22.05
		122	0	22.30	22.18	22.22
		122	61	22.16	22.35	22.36
		122	122	22.25	22.39	22.16
		245	0	22.14	22.26	22.08
	16QAM	1	0	22.24	21.79	22.07
		1	122	22.06	22.06	22.41
		1	244	21.90	22.02	21.75
		122	0	22.09	21.71	22.16
		122	61	22.32	22.21	22.24
		122	122	21.83	21.82	21.87
		245	0	21.81	22.03	21.71
	64QAM	1	0	21.60	21.82	21.62
		1	122	21.67	22.06	22.05
		1	244	21.61	21.85	21.60
		122	0	21.61	21.84	21.81
		122	61	21.46	21.87	21.69
		122	122	21.86	21.80	21.95
		245	0	21.68	21.85	21.58
	256QAM	1	0	18.68	18.62	18.51
		1	122	18.52	18.79	18.93
1		244	18.63	18.75	18.75	
122		0	18.62	18.97	18.83	
122		61	18.87	18.70	18.66	
122		122	18.97	18.83	18.87	
245		0	18.39	18.77	18.38	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		649334	656000	662666
		Frequency (MHz)		3740.01	3840	3939.99
80M	pi/2 BPSK	1	0	25.04	25.17	25.19
		1	108	25.14	25.17	25.14
		1	216	25.33	25.07	24.93
		108	0	25.39	24.87	25.06
		108	54	25.25	24.90	25.49
		108	108	24.96	25.09	25.19
		217	0	25.38	25.05	25.38
	QPSK	1	0	22.37	22.21	22.25
		1	108	22.52	22.48	21.92
		1	216	22.40	22.46	22.36
		108	0	22.47	22.02	22.22
		108	54	22.17	22.00	22.15
		108	108	22.17	21.86	22.27
		217	0	22.37	21.97	22.17
	16QAM	1	0	22.09	22.07	22.05
		1	108	21.83	22.04	22.07
		1	216	21.71	21.95	21.98
		108	0	21.88	22.24	21.81
		108	54	22.35	22.02	21.89
		108	108	22.13	21.88	22.00
		217	0	22.06	21.87	22.19
	64QAM	1	0	21.81	21.62	21.46
		1	108	21.61	21.67	21.70
		1	216	21.69	21.73	21.92
		108	0	21.85	21.77	21.50
		108	54	21.41	21.84	21.84
		108	108	21.88	21.66	21.78
		217	0	21.57	21.41	21.88
	256QAM	1	0	18.57	18.69	18.47
		1	108	18.55	18.85	18.89
1		216	18.74	18.82	18.54	
108		0	18.53	18.67	18.40	
108		54	18.72	18.80	18.71	
108		108	18.80	18.81	18.40	
217		0	18.57	18.52	18.63	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		648668	656000	663332
		Frequency (MHz)		3730.02	3840	3949.98
60M	pi/2 BPSK	1	0	25.26	25.36	25.34
		1	81	25.39	25.53	25.50
		1	161	25.11	25.41	25.13
		81	0	25.12	24.92	24.85
		81	40	25.24	25.14	25.30
		81	81	25.27	25.33	25.23
		162	0	24.99	24.87	25.07
	QPSK	1	0	21.96	22.22	22.35
		1	81	22.52	22.26	22.09
		1	161	22.37	22.07	22.43
		81	0	22.35	22.41	22.40
		81	40	22.12	22.13	22.19
		81	81	22.39	22.15	22.37
		162	0	22.31	22.45	22.06
	16QAM	1	0	21.81	21.94	22.01
		1	81	21.98	22.06	22.39
		1	161	21.98	21.90	21.80
		81	0	21.89	22.13	21.98
		81	40	22.06	21.87	22.09
		81	81	21.75	21.79	21.67
		162	0	22.07	22.20	21.99
	64QAM	1	0	21.96	21.67	21.51
		1	81	21.90	21.81	21.63
		1	161	21.79	21.49	21.86
		81	0	21.54	21.83	21.60
		81	40	21.36	21.66	21.85
		81	81	21.70	21.41	21.89
		162	0	21.74	21.60	21.41
	256QAM	1	0	18.48	18.44	18.67
		1	81	18.92	18.62	18.75
		1	161	18.63	18.60	18.91
		81	0	18.42	18.95	18.75
81		40	18.44	18.47	18.77	
81		81	18.80	18.53	18.81	
162		0	18.53	18.39	18.55	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		648334	656000	663666
		Frequency (MHz)		3725.01	3840	3954.99
50M	pi/2 BPSK	1	0	25.19	25.42	25.45
		1	66	25.49	25.24	25.02
		1	132	25.49	24.90	25.40
		66	0	25.23	25.23	25.15
		66	33	25.27	25.10	25.05
		66	66	25.18	25.09	25.21
		133	0	24.90	24.93	25.40
	QPSK	1	0	22.04	22.24	22.30
		1	66	22.27	22.44	22.13
		1	132	22.29	22.36	22.08
		66	0	22.20	22.15	22.26
		66	33	21.94	22.12	22.26
		66	66	22.11	22.36	21.96
		133	0	22.02	22.42	22.36
	16QAM	1	0	21.77	21.73	22.02
		1	66	22.03	22.14	21.93
		1	132	21.66	21.91	22.12
		66	0	21.70	21.98	21.88
		66	33	21.83	21.88	21.91
		66	66	21.82	22.20	22.07
		133	0	22.28	22.16	21.91
	64QAM	1	0	21.63	21.81	21.43
		1	66	21.93	22.06	21.62
		1	132	21.51	21.79	21.82
		66	0	22.02	21.83	21.72
		66	33	21.67	21.44	21.51
		66	66	21.56	21.65	21.67
		133	0	21.50	21.74	21.83
	256QAM	1	0	18.63	18.58	18.83
		1	66	18.70	18.61	18.77
1		132	18.43	18.75	18.49	
66		0	18.36	18.77	18.71	
66		33	18.83	18.59	18.61	
66		66	18.93	19.00	18.47	
133		0	18.69	18.37	18.82	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		648000	656000	664000
		Frequency (MHz)		3720	3840	3960
40M	pi/2 BPSK	1	0	25.14	24.96	25.22
		1	53	25.32	25.44	25.36
		1	105	25.32	25.22	25.02
		53	0	25.39	25.38	25.20
		53	26	25.41	25.20	25.30
		53	53	25.13	25.01	25.37
		106	0	25.34	25.03	25.33
	QPSK	1	0	22.13	22.39	22.04
		1	53	22.52	22.07	22.21
		1	105	21.98	22.25	22.03
		53	0	22.27	22.19	22.27
		53	26	22.45	22.51	21.99
		53	53	22.44	22.05	22.31
		106	0	22.00	22.16	22.18
	16QAM	1	0	22.06	22.01	21.83
		1	53	22.04	22.10	21.93
		1	105	22.16	21.75	22.12
		53	0	21.68	21.89	21.85
		53	26	22.24	22.10	22.16
		53	53	22.06	21.81	22.11
		106	0	21.86	22.21	22.08
	64QAM	1	0	21.72	21.77	21.45
		1	53	22.10	21.83	21.60
		1	105	21.79	21.62	21.74
		53	0	21.57	21.93	21.89
		53	26	21.37	21.36	21.39
		53	53	21.69	21.50	21.68
		106	0	21.93	21.95	21.83
	256QAM	1	0	18.93	18.45	18.36
		1	53	18.62	18.54	18.79
		1	105	18.74	18.59	18.61
		53	0	18.72	18.76	18.80
		53	26	18.69	18.66	18.69
		53	53	18.89	18.57	18.55
		106	0	18.75	18.86	18.56

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		647334	656000	664666
		Frequency (MHz)		3710.01	3840	3969.99
20M	pi/2 BPSK	1	0	25.26	25.43	25.10
		1	25	25.16	25.28	25.19
		1	50	25.07	25.20	25.09
		25	0	25.09	25.04	24.81
		25	12	25.01	24.98	25.37
		25	25	25.35	25.29	25.06
		51	0	25.08	25.15	25.32
	QPSK	1	0	22.21	22.37	21.94
		1	25	22.54	22.12	22.22
		1	50	22.12	22.04	22.35
		25	0	21.99	22.34	22.23
		25	12	22.06	22.30	21.97
		25	25	22.32	22.29	21.85
		51	0	21.99	22.40	22.39
	16QAM	1	0	21.97	22.17	22.07
		1	25	21.99	21.94	22.15
		1	50	21.74	21.73	21.73
		25	0	21.77	21.77	21.94
		25	12	22.11	21.95	21.86
		25	25	22.10	22.18	21.97
		51	0	21.77	22.29	21.79
	64QAM	1	0	21.96	21.72	21.81
		1	25	21.85	21.96	21.74
		1	50	21.59	21.62	21.87
		25	0	21.76	21.71	21.49
		25	12	21.44	21.61	21.43
		25	25	21.62	21.59	21.62
		51	0	21.54	21.48	21.55
	256QAM	1	0	18.52	18.42	18.70
		1	25	18.57	18.68	18.67
1		50	18.41	18.82	18.70	
25		0	18.68	18.92	18.50	
25		12	18.76	18.85	18.66	
25		25	18.50	18.73	18.44	
51		0	18.54	18.86	18.49	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		647168	656000	664832
		Frequency (MHz)		3707.52	3840	3972.48
15M	pi/2 BPSK	1	0	25.02	24.99	25.31
		1	19	25.36	25.33	25.19
		1	37	25.38	25.43	25.13
		19	0	25.11	25.36	24.96
		19	9	25.49	25.06	25.41
		19	20	25.35	25.14	24.87
		38	0	25.37	25.34	25.27
	QPSK	1	0	22.26	22.42	22.36
		1	19	22.29	22.28	22.06
		1	37	21.95	21.99	22.39
		19	0	22.24	22.07	21.87
		19	9	22.11	22.47	22.00
		19	20	22.28	22.33	22.17
		38	0	22.34	22.22	22.33
	16QAM	1	0	22.16	21.85	22.16
		1	19	22.12	22.36	22.28
		1	37	21.84	21.92	21.93
		19	0	22.04	22.17	22.34
		19	9	21.89	22.05	22.16
		19	20	22.22	22.21	21.64
		38	0	21.79	22.23	21.87
	64QAM	1	0	21.52	21.90	21.52
		1	19	22.13	21.70	21.90
		1	37	21.56	21.63	21.63
		19	0	21.78	21.48	21.92
		19	9	21.37	21.72	21.49
		19	20	21.51	21.48	21.55
		38	0	21.86	21.66	21.45
	256QAM	1	0	18.49	18.80	18.70
		1	19	18.94	18.58	18.69
		1	37	18.61	18.74	18.66
		19	0	18.44	18.58	18.40
19		9	18.78	18.92	18.52	
19		20	18.93	18.53	18.48	
38		0	18.40	18.45	18.74	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

NR Band 77 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		647000	656000	665000
		Frequency (MHz)		3705	3840	3975
10M	pi/2 BPSK	1	0	25.42	25.21	25.16
		1	12	25.43	25.52	25.27
		1	23	25.25	25.29	25.43
		12	0	25.35	25.18	24.82
		12	6	25.14	25.34	25.39
		12	12	25.16	25.02	25.36
		24	0	24.91	25.04	25.40
	QPSK	1	0	22.04	22.17	22.17
		1	12	22.25	22.13	22.20
		1	23	22.36	22.04	22.40
		12	0	22.28	22.23	22.08
		12	6	22.44	22.41	22.31
		12	12	22.37	22.35	22.20
		24	0	22.44	22.29	22.48
	16QAM	1	0	21.76	22.00	21.84
		1	12	22.16	21.95	22.27
		1	23	22.11	22.04	21.77
		12	0	21.70	22.19	22.28
		12	6	22.18	22.18	22.23
		12	12	21.90	22.19	21.90
		24	0	22.09	22.27	22.20
	64QAM	1	0	21.84	22.00	21.86
		1	12	21.75	21.93	21.58
		1	23	21.49	21.89	21.62
		12	0	21.50	21.64	21.81
		12	6	21.81	21.87	21.69
		12	12	21.48	21.33	21.54
		24	0	21.97	21.85	21.88
	256QAM	1	0	18.62	18.45	18.32
		1	12	18.47	18.49	18.94
1		23	18.68	18.38	18.90	
12		0	18.65	18.51	18.83	
12		6	18.52	18.47	18.71	
12		12	18.85	18.82	18.88	
24		0	18.51	18.80	18.32	

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

4.2 Radiated Emission Measurement

4.2.1 Limits of Radiated Emission Measurement

For 5GNR n7, n38, n41:

In the FCC 27.53(m)(4), On any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least $55 + 10 \log (P)$ dB. The emission limit equal to -25dBm .

For 5GNR n66:

According to FCC 27.53(h) for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 MHz, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log (P)$ dB.

For 5GNR n71:

According to FCC 27.53(g) for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater.

For 5GNR n77:

According to FCC 27.53(l) for mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz . Compliance with this paragraph (l)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

4.2.2 Test Procedure

- a. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) and/or 1.5 m (above 1 GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
- b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.
- d. Following C63.26 section 5.5 and 5.2.7.
EIRP (dBm) = E (dB μ V/m) + 20log (D) - 104.8; where D is the measurement distance (in the far field region) in m.
ERP (dBm) = E (dB μ V/m) + 20log (D) - 104.8 - 2.15; where D is the measurement distance (in the far field region) in m.

Note:

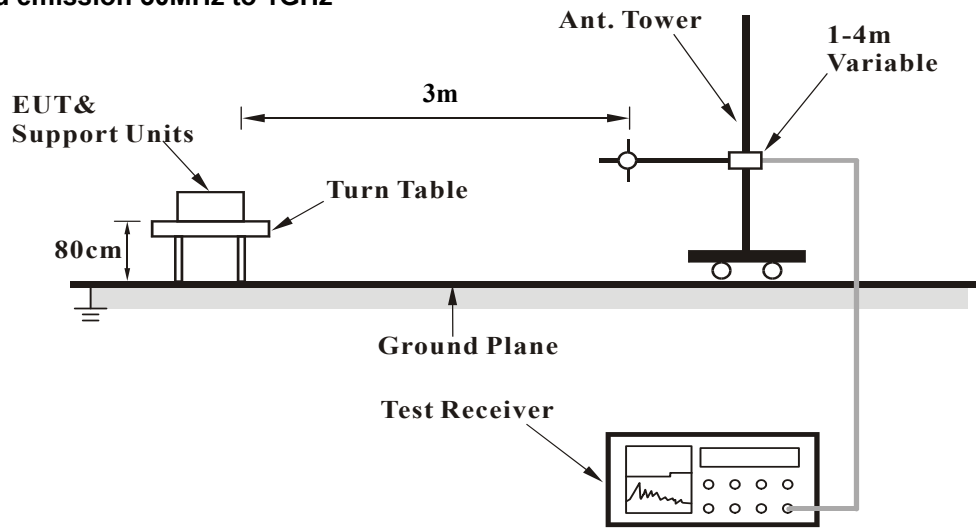
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.
2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:
The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

4.2.3 Deviation from Test Standard

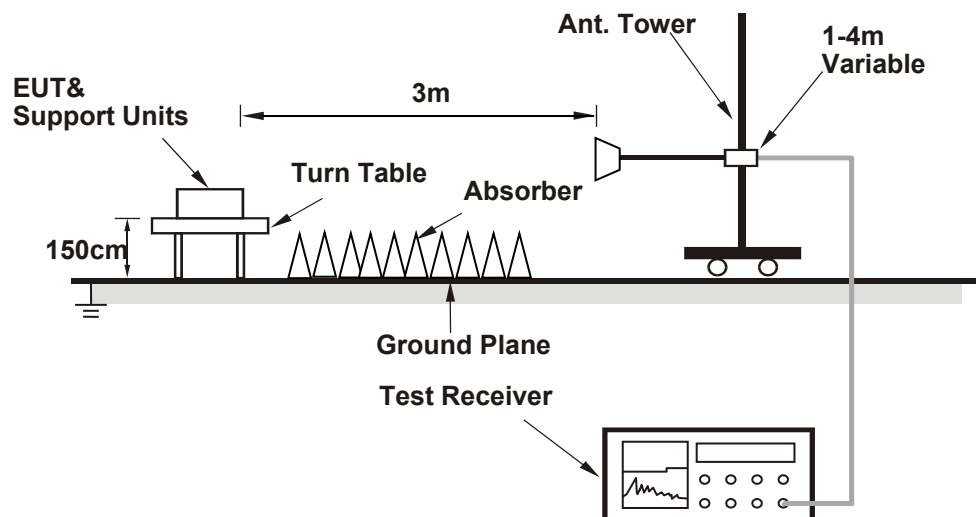
No deviation.

4.2.4 Test Setup

For radiated emission 30MHz to 1GHz



For radiated emission above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.5 Test Results

Below 1GHz

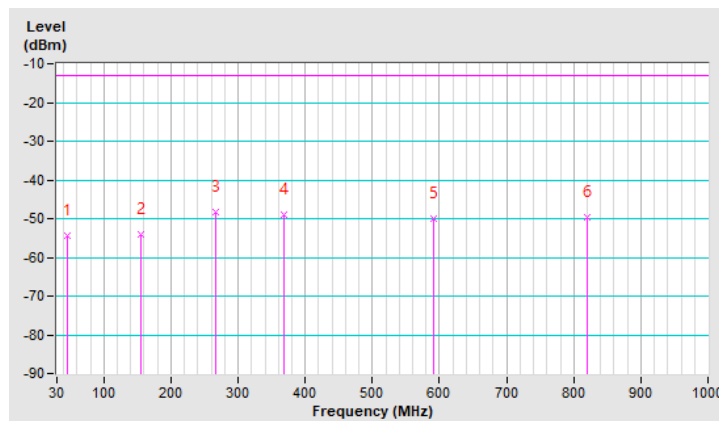
n66, Channel Bandwidth 40MHz

Mode	TX channel 349000 (1745.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	21deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	45.52	-54.53	-13.00	-41.53	1.00 H	86	52.93	-107.46
2	156.10	-54.21	-13.00	-41.21	1.00 H	242	53.52	-107.73
3	266.68	-48.32	-13.00	-35.32	1.00 H	28	59.83	-108.15
4	367.56	-49.03	-13.00	-36.03	1.00 H	17	56.45	-105.48
5	591.63	-49.99	-13.00	-36.99	1.00 H	252	50.81	-100.80
6	820.55	-49.71	-13.00	-36.71	1.00 H	171	46.99	-96.70

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

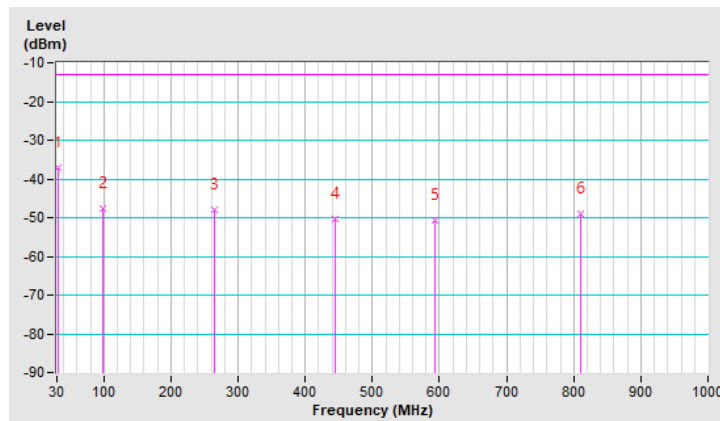


Mode	TX channel 349000 (1745.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	21deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	31.94	-37.04	-13.00	-24.04	1.00 V	174	71.06	-108.10
2	97.90	-47.60	-13.00	-34.60	1.00 V	8	64.77	-112.37
3	263.77	-47.81	-13.00	-34.81	1.00 V	324	60.49	-108.30
4	445.16	-50.28	-13.00	-37.28	1.00 V	242	53.16	-103.44
5	592.60	-50.81	-13.00	-37.81	1.00 V	150	49.97	-100.78
6	810.85	-49.12	-13.00	-36.12	1.00 V	229	47.73	-96.85

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



Above 1GHz

n66, Channel Bandwidth 40MHz

Mode	TX channel 349000 (1745.0MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	21deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBUV)	Correction Factor (dB/m)
1	3490.00	-52.36	-13.00	-39.36	1.60 H	337	56.77	-109.13
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBUV)	Correction Factor (dB/m)
1	3490.00	-52.85	-13.00	-39.85	3.66 V	39	56.28	-109.13

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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The address and road map of all our labs can be found in our web site also.

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