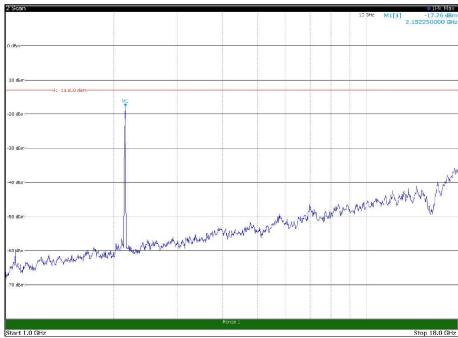
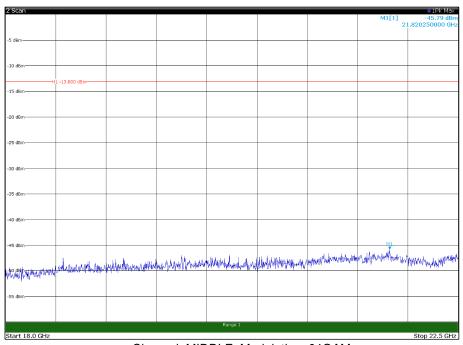


Channel: MIDDLE, Modulation: 64QAM, BW=20MHz, Range: 1GHz - 18GHz, Polarization: Horizontal

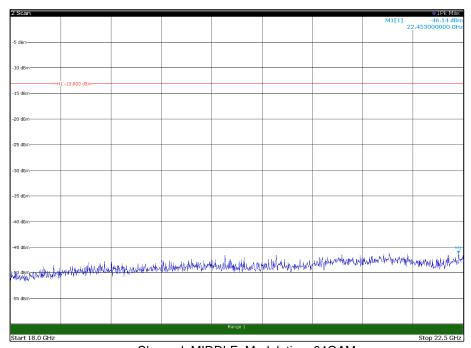


Channel: MIDDLE, Modulation: 64QAM, BW=20MHz, Range: 1GHz - 18GHz, Polarization: Vertical



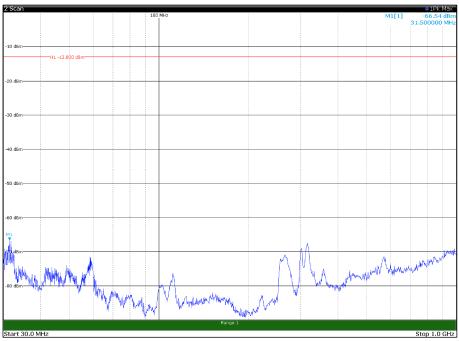


Channel: MIDDLE, Modulation: 64QAM, BW=20MHz, Range: 18GHz - 22.5GHz, Polarization: Horizontal

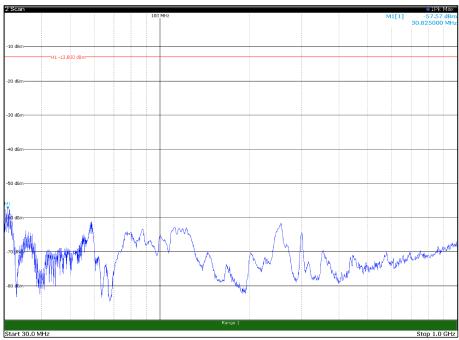


Channel: MIDDLE, Modulation: 64QAM, BW=20MHz, Range: 18GHz - 22.5GHz, Polarization: Vertical



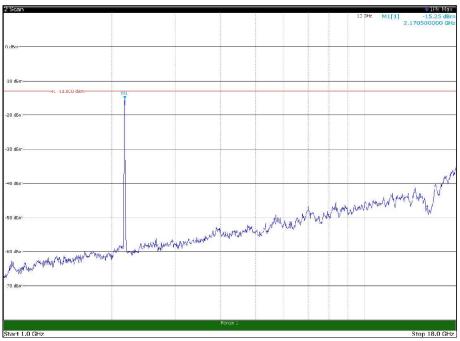


Channel: TOP, Modulation: 64QAM, BW=20MHz, Range: 30MHz - 1GHz, Polarization: Horizontal

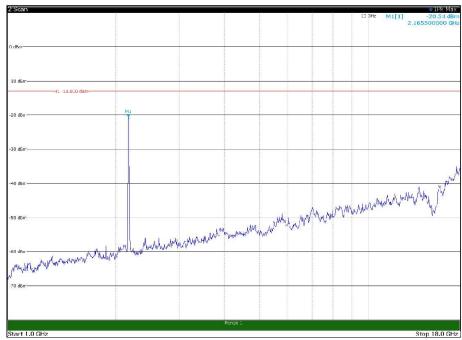


Channel: TOP, Modulation: 64QAM, BW=20MHz, Range: 30MHz - 1GHz, Polarization: Vertical



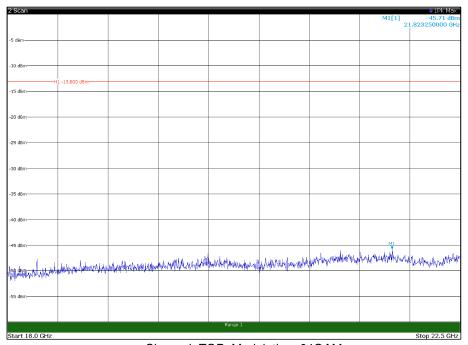


Channel: TOP, Modulation: 64QAM, BW=20MHz, Range: 1GHz - 18GHz, Polarization: Horizontal

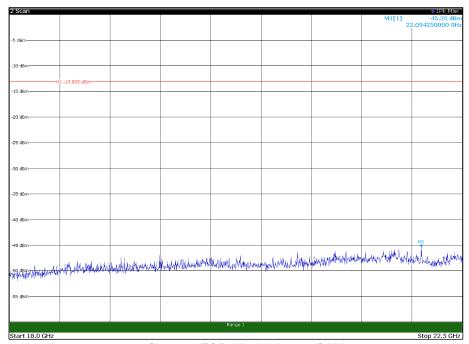


Channel: TOP, Modulation: 64QAM, BW=20MHz, Range: 1GHz - 18GHz, Polarization: Vertical





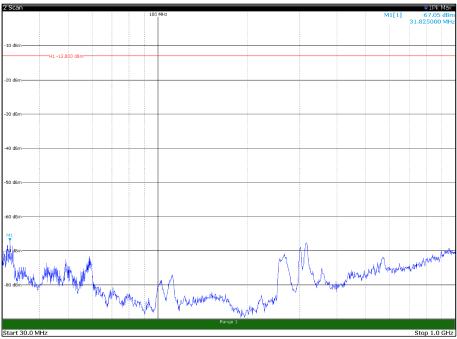
Channel: TOP, Modulation: 64QAM, BW=20MHz, Range: 18GHz - 22.5GHz, Polarization: Horizontal



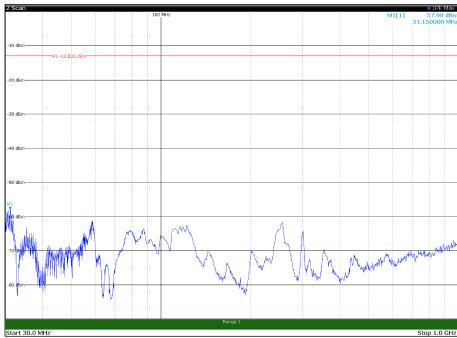
Channel: TOP, Modulation: 64QAM,

BW=20MHz, Range: 18GHz - 22.5GHz, Polarization: Vertical



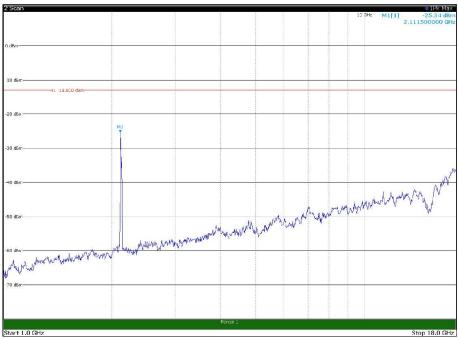


Channel: BOTTOM, Modulation: 256QAM, BW=20MHz, Range: 30MHz - 1GHz, Polarization: Horizontal

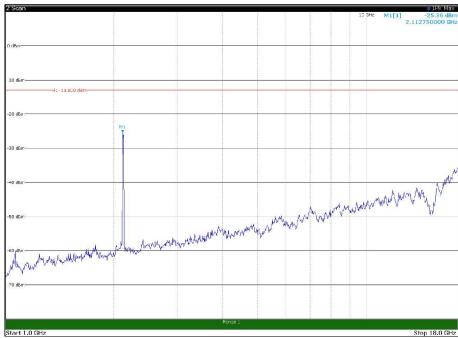


Channel: BOTTOM, Modulation: 256QAM, BW=20MHz, Range: 30MHz - 1GHz, Polarization: Vertical



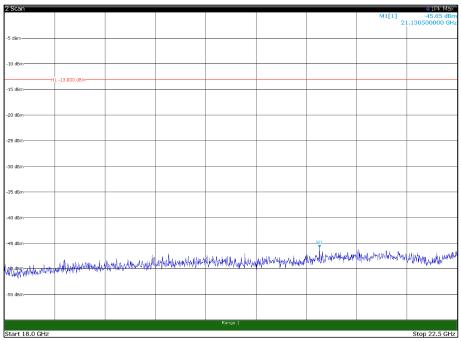


Channel: BOTTOM, Modulation: 256QAM, BW=20MHz, Range: 1GHz - 18GHz, Polarization: Horizontal

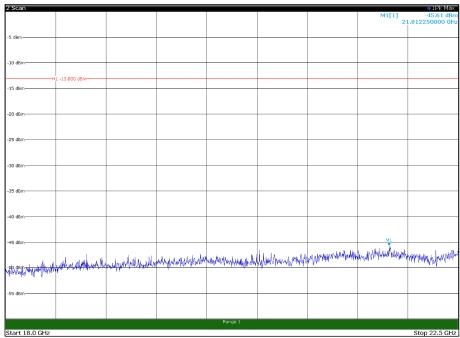


Channel: BOTTOM, Modulation: 256QAM, BW=20MHz, Range: 1GHz - 18GHz, Polarization: Vertical



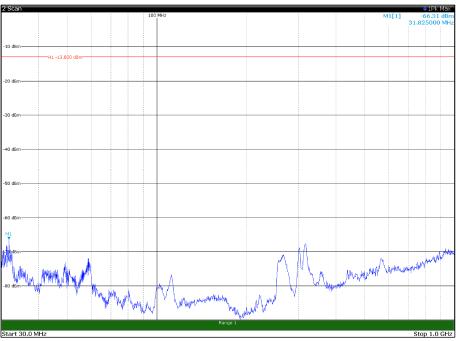


Channel: BOTTOM, Modulation: 256QAM, BW=20MHz, Range: 18GHz - 22.5GHz, Polarization: Horizontal

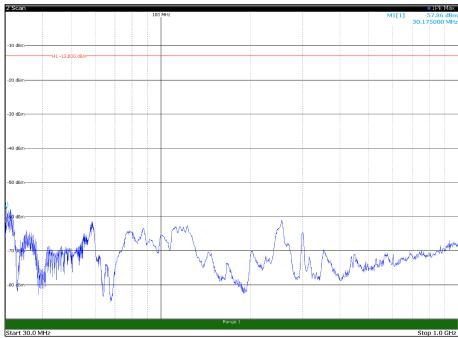


Channel: BOTTOM, Modulation: 256QAM, BW=20MHz, Range: 18GHz - 22.5GHz, Polarization: Vertical



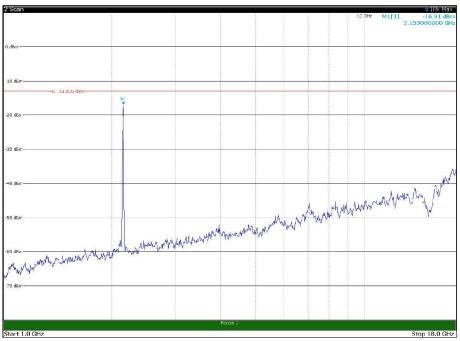


Channel: MIDDLE, Modulation: 256QAM, BW=20MHz, Range: 30MHz - 1GHz, Polarization: Horizontal

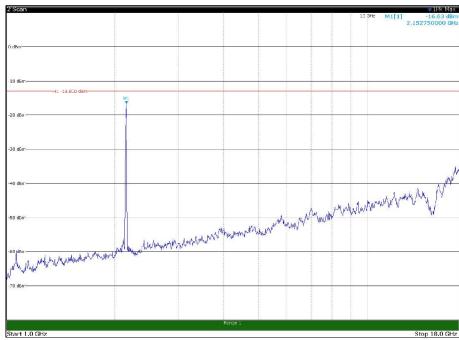


Channel: MIDDLE, Modulation: 256QAM, BW=20MHz, Range: 30MHz - 1GHz, Polarization: Vertical



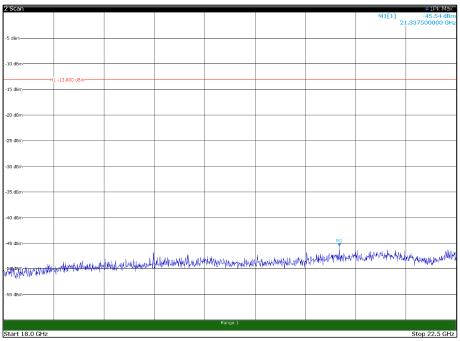


Channel: MIDDLE, Modulation: 256QAM, BW=20MHz, Range: 1GHz - 18GHz, Polarization: Horizontal

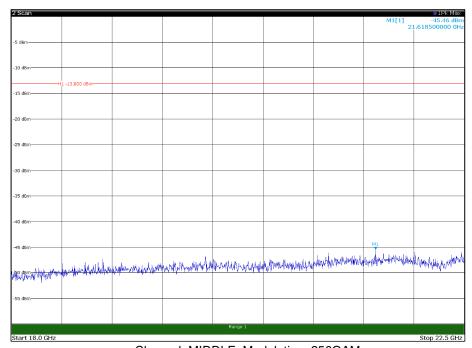


Channel: MIDDLE, Modulation: 256QAM, BW=20MHz, Range: 1GHz - 18GHz, Polarization: Vertical



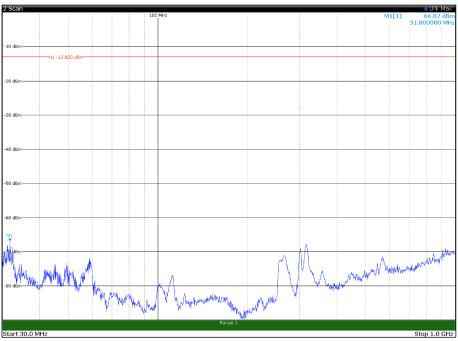


Channel: MIDDLE, Modulation: 256QAM, BW=20MHz, Range: 18GHz - 22.5GHz, Polarization: Horizontal

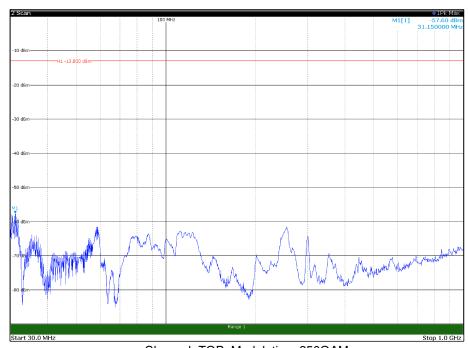


Channel: MIDDLE, Modulation: 256QAM, BW=20MHz, Range: 18GHz - 22.5GHz, Polarization: Vertical



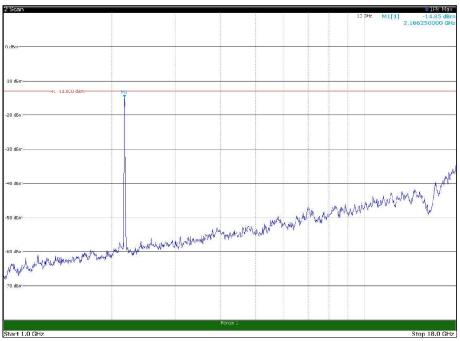


Channel: TOP, Modulation: 256QAM, BW=20MHz, Range: 30MHz - 1GHz, Polarization: Horizontal

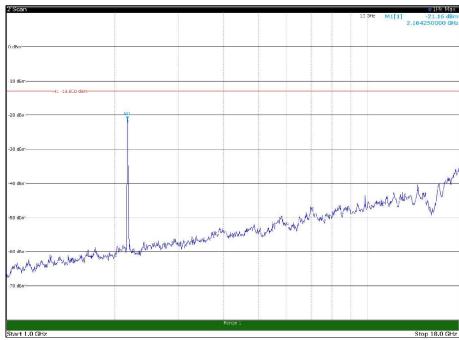


Channel: TOP, Modulation: 256QAM, BW=20MHz, Range: 30MHz - 1GHz, Polarization: Vertical



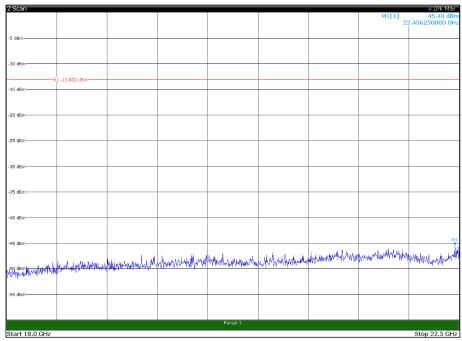


Channel: TOP, Modulation: 256QAM, BW=20MHz, Range: 1GHz - 18GHz, Polarization: Horizontal

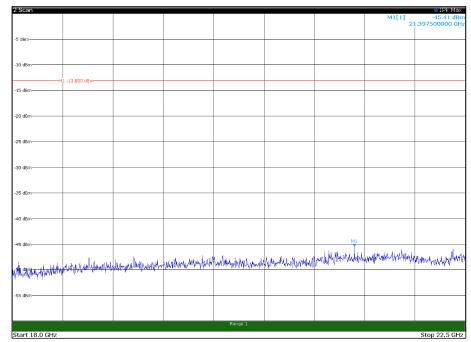


Channel: TOP, Modulation: 256QAM, BW=20MHz, Range: 1GHz - 18GHz, Polarization: Vertical





Channel: TOP, Modulation: 256QAM, BW=20MHz, Range: 18GHz - 22.5GHz, Polarization: Horizontal



Channel: TOP, Modulation: 256QAM, BW=20MHz, Range: 18GHz - 22.5GHz, Polarization: Vertical



Specification: FCC 27

# Clause 27.54 Frequency stability

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized bands of operation.

Test date: 04/03/2019 to 05/10/2019

Test results: Pass

#### Special notes

Test are performed at 85% (40,8Vdc) and 115% (55,2Vdc) of the primary supply voltage and the same result was found.

#### Clause 27.54 Frequency stability, continued

Test data



Product: XR19AX35WM2/48Y

#### **RF PORT 1**

RF PORT 1	Temperature = -30°C				
Channel	Signal	Modulation	Frequency Error		
BOTTOM	LTE 5 MHz	QPSK	196.48	mHz	
BOTTOM	LTE 5 MHz	16QAM	-20.11	mHz	
BOTTOM	LTE 5 MHz	64QAM	-38.62	mHz	
BOTTOM	LTE 5 MHz	256QAM	103.25	mHz	
MIDDLE	LTE 5 MHz	QPSK	-488.86	mHz	
MIDDLE	LTE 5 MHz	16QAM	1.37	Hz	
MIDDLE	LTE 5 MHz	64QAM	239.89	mHz	
MIDDLE	LTE 5 MHz	256QAM	404.26	mHz	
TOP	LTE 5 MHz	QPSK	-399.11	mHz	
TOP	LTE 5 MHz	16QAM	-49.34	mHz	
TOP	LTE 5 MHz	64QAM	131.79	mHz	
TOP	LTE 5 MHz	256QAM	165.35	mHz	
BOTTOM	LTE 10 MHz	QPSK	462.99	mHz	
BOTTOM	LTE 10 MHz	16QAM	-337.63	mHz	
BOTTOM	LTE 10 MHz	64QAM	115.44	mHz	
BOTTOM	LTE 10 MHz	256QAM	66.35	mHz	
MIDDLE	LTE 10 MHz	QPSK	-2.78	Hz	
MIDDLE	LTE 10 MHz	16QAM	-1.99	Hz	
MIDDLE MIDDLE	LTE 10 MHz	64QAM	-2.24	Hz	
	LTE 10 MHz	256QAM	65.66	mHz	
TOP TOP	LTE 10 MHz	QPSK	319.63	mHz	
TOP	LTE 10 MHz	16QAM	337.89 57.21	mHz	
TOP	LTE 10 MHz LTE 10 MHz	64QAM 256QAM	439.43	mHz mHz	
BOTTOM	LTE 15 MHz	QPSK	-42.34	mHz	
BOTTOM	LTE 15 MHz	16QAM	-1.20	Hz	
BOTTOM	LTE 15 MHz	64QAM	84.64	mHz	
BOTTOM	LTE 15 MHz	256QAM	-60.80	mHz	
MIDDLE	LTE 15 MHz	QPSK	-2.23	Hz	
MIDDLE	LTE 15 MHz	16QAM	-2.61	Hz	
MIDDLE	LTE 15 MHz	64QAM	-1.96	Hz	
MIDDLE	LTE 15 MHz	256QAM	-232.57	mHz	
TOP	LTE 15 MHz	QPSK	-376.84	mHz	
TOP	LTE 15 MHz	16QAM	211.75	mHz	
TOP	LTE 15 MHz	64QAM	336.38	mHz	
TOP	LTE 15 MHz	256QAM	-350.58	mHz	
BOTTOM	LTE 20 MHz	QPSK	34.53	mHz	
BOTTOM	LTE 20 MHz	16QAM	34.54	mHz	
BOTTOM	LTE 20 MHz	64QAM	153.55	mHz	
BOTTOM	LTE 20 MHz	256QAM	221.52	mHz	
MIDDLE	LTE 20 MHz	QPSK	-1.51	Hz	
MIDDLE	LTE 20 MHz	16QAM	163.55	mHz	
MIDDLE	LTE 20 MHz	64QAM	-2.26	Hz	
MIDDLE	LTE 20 MHz	256QAM	-132.36	mHz	
TOP	LTE 20 MHz	QPSK	-211.12	mHz	
TOP	LTE 20 MHz	16QAM	415.21	mHz	
TOP	LTE 20 MHz	64QAM	205.29	mHz	
TOP	LTE 20 MHz	256QAM	-4.39	Hz	





	Temperature = -20°C				
Channel	Signal	Modulation	Frequency Error		
BOTTOM	LTE 5 MHz	QPSK	340.06	mHz	
BOTTOM	LTE 5 MHz	16QAM	-328.61	mHz	
BOTTOM	LTE 5 MHz	64QAM	-280.07	mHz	
BOTTOM	LTE 5 MHz	256QAM	-319.92	mHz	
MIDDLE	LTE 5 MHz	QPSK	-881.21	mHz	
MIDDLE	LTE 5 MHz	16QAM	-1.84	Hz	
MIDDLE	LTE 5 MHz	64QAM	398.61	mHz	
MIDDLE	LTE 5 MHz	256QAM	-1.02	Hz	
TOP	LTE 5 MHz	QPSK	153.61	mHz	
TOP	LTE 5 MHz	16QAM	178.83	mHz	
TOP	LTE 5 MHz	64QAM	-262.89	mHz	
TOP	LTE 5 MHz	256QAM	120.92	mHz	
BOTTOM	LTE 10 MHz	QPSK	-294.82	mHz	
BOTTOM	LTE 10 MHz	16QAM	408.19	mHz	
BOTTOM	LTE 10 MHz	64QAM	3.27	Hz	
BOTTOM	LTE 10 MHz	256QAM	-59.96	mHz	
MIDDLE	LTE 10 MHz	QPSK	212.42	mHz	
MIDDLE	LTE 10 MHz	16QAM	-898.97	mHz	
MIDDLE	LTE 10 MHz	64QAM	419.14	mHz	
MIDDLE	LTE 10 MHz	256QAM	164.60	mHz	
TOP	LTE 10 MHz	QPSK	-261.86	mHz	
TOP	LTE 10 MHz	16QAM	128.46	mHz	
TOP	LTE 10 MHz	64QAM	-320.57	mHz	
TOP	LTE 10 MHz	256QAM	-371.19	mHz	
BOTTOM	LTE 15 MHz	QPSK	99.33	mHz	
BOTTOM	LTE 15 MHz	16QAM	470.04	mHz	
BOTTOM	LTE 15 MHz	64QAM	453.41	mHz	
BOTTOM	LTE 15 MHz	256QAM	2.73	Hz	
MIDDLE	LTE 15 MHz	QPSK	503.53	mHz	
MIDDLE	LTE 15 MHz	16QAM	769.31	mHz	
MIDDLE	LTE 15 MHz	64QAM	512.22	mHz	
MIDDLE	LTE 15 MHz	256QAM	100.93	mHz	
TOP	LTE 15 MHz	QPSK	337.25	mHz	
TOP	LTE 15 MHz	16QAM	402.59	mHz	
TOP	LTE 15 MHz	64QAM	389.45	mHz	
TOP	LTE 15 MHz	256QAM	191.24	mHz	
BOTTOM	LTE 20 MHz	QPSK	-359.30	mHz	
BOTTOM	LTE 20 MHz	16QAM	-118.51	mHz	
BOTTOM	LTE 20 MHz	64QAM	-112.32	mHz	
BOTTOM	LTE 20 MHz	256QAM	207.29	mHz	
MIDDLE	LTE 20 MHz	QPSK	487.97	mHz	
MIDDLE	LTE 20 MHz	16QAM	1.56	Hz	
MIDDLE	LTE 20 MHz	64QAM	245.20	mHz	
MIDDLE	LTE 20 MHz	256QAM	739.99	mHz	
TOP	LTE 20 MHz	QPSK	331.48	mHz	
TOP	LTE 20 MHz	16QAM	314.91	mHz	
TOP	LTE 20 MHz	64QAM	-261.37	mHz	
TOP	LTE 20 MHz	256QAM	162.20	mHz	



	Temperature = -10°C				
Channel	Signal	Modulation	Frequency Error		
BOTTOM	LTE 5 MHz	QPSK	263.53	mHz	
BOTTOM	LTE 5 MHz	16QAM	144.70	mHz	
BOTTOM	LTE 5 MHz	64QAM	294.70	mHz	
BOTTOM	LTE 5 MHz	256QAM	-198.93	mHz	
MIDDLE	LTE 5 MHz	QPSK	-1.02	Hz	
MIDDLE	LTE 5 MHz	16QAM	-1.26	Hz	
MIDDLE	LTE 5 MHz	64QAM	309.13	mHz	
MIDDLE	LTE 5 MHz	256QAM	756.66	mHz	
TOP	LTE 5 MHz	QPSK	-300.64	mHz	
TOP	LTE 5 MHz	16QAM	473.18	mHz	
TOP	LTE 5 MHz	64QAM	184.27	mHz	
TOP	LTE 5 MHz	256QAM	-314.34	mHz	
BOTTOM	LTE 10 MHz	QPSK	-80.50	mHz	
BOTTOM	LTE 10 MHz	16QAM	315.44	mHz	
BOTTOM	LTE 10 MHz	64QAM	26.84	mHz	
BOTTOM	LTE 10 MHz	256QAM	-101.41	mHz	
MIDDLE	LTE 10 MHz	QPSK	-706.74	mHz	
MIDDLE	LTE 10 MHz	16QAM	289.42	mHz	
MIDDLE	LTE 10 MHz	64QAM	-238.34	mHz	
MIDDLE	LTE 10 MHz	256QAM	-183.99	mHz	
TOP	LTE 10 MHz	QPSK	-276.50	mHz	
TOP	LTE 10 MHz	16QAM	264.55	mHz	
TOP	LTE 10 MHz	64QAM	-4.35	Hz	
TOP	LTE 10 MHz	256QAM	-370.04	mHz	
BOTTOM	LTE 15 MHz	QPSK	72.16	mHz	
BOTTOM	LTE 15 MHz	16QAM	-37.98	mHz	
BOTTOM	LTE 15 MHz	64QAM	460.18	mHz	
BOTTOM	LTE 15 MHz	256QAM	-359.44	mHz	
MIDDLE	LTE 15 MHz	QPSK	-166.46	mHz	
MIDDLE	LTE 15 MHz	16QAM	-746.94	mHz	
MIDDLE	LTE 15 MHz	64QAM	1.11	Hz	
MIDDLE	LTE 15 MHz	256QAM	-467.30	mHz	
TOP	LTE 15 MHz	QPSK	-124.07	mHz	
TOP	LTE 15 MHz	16QAM	-99.36	mHz	
TOP	LTE 15 MHz	64QAM	-23.66	mHz	
TOP	LTE 15 MHz	256QAM	149.20	mHz	
BOTTOM	LTE 20 MHz	QPSK	-326.88	mHz	
BOTTOM	LTE 20 MHz	16QAM	187.47	mHz	
BOTTOM	LTE 20 MHz	64QAM	244.39	mHz	
BOTTOM	LTE 20 MHz	256QAM	-27.34	mHz	
MIDDLE	LTE 20 MHz	QPSK	-895.69	mHz	
MIDDLE	LTE 20 MHz	16QAM	1.11	Hz	
MIDDLE	LTE 20 MHz	64QAM	-500.07	mHz	
MIDDLE	LTE 20 MHz	256QAM	1.52	Hz	
TOP	LTE 20 MHz	QPSK	376.54	mHz	
TOP	LTE 20 MHz	16QAM	41.46	mHz	
TOP	LTE 20 MHz	64QAM	68.73	mHz	
TOP	LTE 20 MHz	256QAM	387.73	mHz	



		Temperature = 0°C		
Channel	Signal	Modulation	Frequency Error	
BOTTOM	LTE 5 MHz	QPSK	158.62	mHz
BOTTOM	LTE 5 MHz	16QAM	-262.98	mHz
BOTTOM	LTE 5 MHz	64QAM	-294.92	mHz
BOTTOM	LTE 5 MHz	256QAM	-245.14	mHz
MIDDLE	LTE 5 MHz	QPSK	763.37	mHz
MIDDLE	LTE 5 MHz	16QAM	-1.86	Hz
MIDDLE	LTE 5 MHz	64QAM	-5.01	Hz
MIDDLE	LTE 5 MHz	256QAM	475.96	mHz
TOP	LTE 5 MHz	QPSK	264.38	mHz
TOP	LTE 5 MHz	16QAM	68.48	mHz
TOP	LTE 5 MHz	64QAM	92.00	mHz
TOP	LTE 5 MHz	256QAM	-315.62	mHz
BOTTOM	LTE 10 MHz	QPSK	165.24	mHz
BOTTOM	LTE 10 MHz	16QAM	330.99	mHz
BOTTOM	LTE 10 MHz	64QAM	112.62	mHz
BOTTOM	LTE 10 MHz	256QAM	-162.49	mHz
MIDDLE	LTE 10 MHz	QPSK	2.89	Hz
MIDDLE	LTE 10 MHz	16QAM	132.32	mHz
MIDDLE	LTE 10 MHz	64QAM	-2.51	Hz
MIDDLE	LTE 10 MHz	256QAM	76.40	mHz
TOP	LTE 10 MHz	QPSK	48.71	mHz
TOP	LTE 10 MHz	16QAM	228.39	mHz
TOP	LTE 10 MHz	64QAM	438.17	mHz
TOP	LTE 10 MHz	256QAM	-334.94	mHz
BOTTOM	LTE 15 MHz	QPSK	5.77	Hz
BOTTOM	LTE 15 MHz	16QAM	-1.47	Hz
BOTTOM	LTE 15 MHz	64QAM	224.56	mHz
BOTTOM	LTE 15 MHz	256QAM	-328.95	mHz
MIDDLE	LTE 15 MHz	QPSK	-2.99	Hz
MIDDLE	LTE 15 MHz	16QAM	-6.76	Hz
MIDDLE	LTE 15 MHz	64QAM	-4.91	Hz
MIDDLE	LTE 15 MHz	256QAM	74.26	mHz
TOP	LTE 15 MHz	QPSK	-159.76	mHz
TOP	LTE 15 MHz	16QAM	-57.08	mHz
TOP	LTE 15 MHz	64QAM	-222.85	mHz
TOP	LTE 15 MHz	256QAM	-376.67	mHz
BOTTOM	LTE 20 MHz	QPSK	-1.14	Hz
BOTTOM	LTE 20 MHz	16QAM	68.68	mHz
BOTTOM	LTE 20 MHz	64QAM	97.05	mHz
BOTTOM	LTE 20 MHz	256QAM	434.73	mHz
MIDDLE	LTE 20 MHz	QPSK	-1.98	Hz
MIDDLE	LTE 20 MHz	16QAM	-277.66	mHz
MIDDLE	LTE 20 MHz	64QAM	-1.82	Hz
MIDDLE	LTE 20 MHz	256QAM	-291.17	mHz
TOP	LTE 20 MHz	QPSK	-233.73	mHz
TOP	LTE 20 MHz	16QAM	478.22	mHz
TOP	LTE 20 MHz	64QAM	-45.71	mHz
TOP	LTE 20 MHz	256QAM	-189.82	mHz



	Temperature = 10°C				
Channel	Signal	Modulation	Frequency Error		
BOTTOM	LTE 5 MHz	QPSK	-13.83	Hz	
BOTTOM	LTE 5 MHz	16QAM	170.15	mHz	
BOTTOM	LTE 5 MHz	64QAM	55.82	mHz	
BOTTOM	LTE 5 MHz	256QAM	473.58	mHz	
MIDDLE	LTE 5 MHz	QPSK	-57.02	mHz	
MIDDLE	LTE 5 MHz	16QAM	-572.82	mHz	
MIDDLE	LTE 5 MHz	64QAM	1.10	Hz	
MIDDLE	LTE 5 MHz	256QAM	822.45	mHz	
TOP	LTE 5 MHz	QPSK	-91.04	mHz	
TOP	LTE 5 MHz	16QAM	-325.49	mHz	
TOP	LTE 5 MHz	64QAM	497.55	mHz	
TOP	LTE 5 MHz	256QAM	272.77	mHz	
BOTTOM	LTE 10 MHz	QPSK	88.04	mHz	
BOTTOM	LTE 10 MHz	16QAM	-47.14	mHz	
BOTTOM	LTE 10 MHz	64QAM	492.38	mHz	
BOTTOM	LTE 10 MHz	256QAM	345.08	mHz	
MIDDLE	LTE 10 MHz	QPSK	-1.67	Hz	
MIDDLE	LTE 10 MHz	16QAM	642.72	mHz	
MIDDLE	LTE 10 MHz	64QAM	833.96	mHz	
MIDDLE	LTE 10 MHz	256QAM	-351.83	mHz	
TOP	LTE 10 MHz	QPSK	-337.64	mHz	
TOP	LTE 10 MHz	16QAM	134.84	mHz	
TOP	LTE 10 MHz	64QAM	-134.69	mHz	
TOP	LTE 10 MHz	256QAM	59.22	mHz	
BOTTOM	LTE 15 MHz	QPSK	161.36	mHz	
BOTTOM	LTE 15 MHz	16QAM	-288.32	mHz	
BOTTOM	LTE 15 MHz	64QAM	-260.34	mHz	
BOTTOM	LTE 15 MHz	256QAM	-154.18	mHz	
MIDDLE	LTE 15 MHz	QPSK	-1.14	Hz	
MIDDLE	LTE 15 MHz	16QAM	130.83	mHz	
MIDDLE	LTE 15 MHz	64QAM	317.04	mHz	
MIDDLE	LTE 15 MHz	256QAM	564.19	mHz	
TOP	LTE 15 MHz	QPSK	490.86	mHz	
TOP	LTE 15 MHz	16QAM	477.45	mHz	
TOP	LTE 15 MHz	64QAM	3.78	Hz	
TOP	LTE 15 MHz	256QAM	468.05	mHz	
BOTTOM	LTE 20 MHz	QPSK	331.79	mHz	
BOTTOM	LTE 20 MHz	16QAM	-51.42	mHz	
BOTTOM	LTE 20 MHz	64QAM	350.07	mHz	
BOTTOM	LTE 20 MHz	256QAM	177.80	mHz	
MIDDLE	LTE 20 MHz	QPSK	-22.97	mHz	
MIDDLE	LTE 20 MHz	16QAM	434.58	mHz	
MIDDLE	LTE 20 MHz	64QAM	171.43	mHz	
MIDDLE	LTE 20 MHz	256QAM	-207.77	mHz	
TOP	LTE 20 MHz	QPSK	-110.83	mHz	
TOP	LTE 20 MHz	16QAM	-74.73	mHz	
TOP	LTE 20 MHz	64QAM	-65.93	mHz	
TOP	LTE 20 MHz	256QAM	-311.99	mHz	



	Temperature = 20°C				
Channel	Signal	Modulation	Frequency Error		
BOTTOM	LTE 5 MHz	QPSK	1.3695	Hz	
BOTTOM	LTE 5 MHz	16QAM	224.53	mHz	
BOTTOM	LTE 5 MHz	64QAM	-605,07	mHz	
BOTTOM	LTE 5 MHz	256QAM	119.35	mHz	
MIDDLE	LTE 5 MHz	QPSK	-2.702	Hz	
MIDDLE	LTE 5 MHz	16QAM	5.3364	Hz	
MIDDLE	LTE 5 MHz	64QAM	-699.1	mHz	
MIDDLE	LTE 5 MHz	256QAM	-567.1	mHz	
TOP	LTE 5 MHz	QPSK	-595.7	mHz	
TOP	LTE 5 MHz	16QAM	340.24	mHz	
TOP	LTE 5 MHz	64QAM	-3.525	Hz	
TOP	LTE 5 MHz	256QAM	-1.132	Hz	
BOTTOM	LTE 10 MHz	QPSK	-55.04	mHz	
BOTTOM	LTE 10 MHz	16QAM	-332.3	mHz	
BOTTOM	LTE 10 MHz	64QAM	595.15	mHz	
BOTTOM	LTE 10 MHz	256QAM	-590.3	mHz	
MIDDLE	LTE 10 MHz	QPSK	347.42	mHz	
MIDDLE	LTE 10 MHz	16QAM	-567.9	mHz	
MIDDLE	LTE 10 MHz	64QAM	365.72	mHz	
MIDDLE	LTE 10 MHz	256QAM	-907	mHz	
TOP	LTE 10 MHz	QPSK	264.74	mHz	
TOP	LTE 10 MHz	16QAM	82.719	mHz	
TOP	LTE 10 MHz	64QAM	-282.2	mHz	
TOP	LTE 10 MHz	256QAM	-255.1	mHz	
BOTTOM	LTE 15 MHz	QPSK	-23.84	mHz	
BOTTOM	LTE 15 MHz	16QAM	2.5203	Hz	
BOTTOM	LTE 15 MHz	64QAM	1.7784	Hz	
BOTTOM	LTE 15 MHz	256QAM	-273.2	mHz	
MIDDLE	LTE 15 MHz	QPSK	-422.9	mHz	
MIDDLE	LTE 15 MHz	16QAM	2.1161	Hz	
MIDDLE	LTE 15 MHz	64QAM	427.28	mHz	
MIDDLE	LTE 15 MHz	256QAM	-555.3	mHz	
TOP	LTE 15 MHz	QPSK	-702.2	mHz	
TOP	LTE 15 MHz	16QAM	-544.5	mHz	
TOP	LTE 15 MHz	64QAM	431.72	mHz	
TOP	LTE 15 MHz	256QAM	996.12	mHz	
BOTTOM	LTE 20 MHz	QPSK	-716.3	mHz	
BOTTOM	LTE 20 MHz	16QAM	-223.4	mHz	
BOTTOM	LTE 20 MHz	64QAM	-2.31	Hz	
BOTTOM	LTE 20 MHz	256QAM	-770.3	mHz	
MIDDLE	LTE 20 MHz	QPSK	-1.724	Hz	
MIDDLE	LTE 20 MHz	16QAM	219.37	mHz	
MIDDLE	LTE 20 MHz	64QAM	1.7925	Hz	
MIDDLE	LTE 20 MHz	256QAM	-733.9	mHz	
TOP	LTE 20 MHz	QPSK	481.54	mHz	
TOP	LTE 20 MHz	16QAM	-1.597	Hz	
TOP	LTE 20 MHz	64QAM	338.43	mHz	
TOP	LTE 20 MHz	256QAM	-228.7	mHz	



	Temperature = 30°C				
Channel	Signal	Modulation	Frequency Error		
BOTTOM	LTE 5 MHz	QPSK	162.39	mHz	
BOTTOM	LTE 5 MHz	16QAM	237.00	mHz	
BOTTOM	LTE 5 MHz	64QAM	214.83	mHz	
BOTTOM	LTE 5 MHz	256QAM	-128.78	mHz	
MIDDLE	LTE 5 MHz	QPSK	330.71	mHz	
MIDDLE	LTE 5 MHz	16QAM	-96.72	mHz	
MIDDLE	LTE 5 MHz	64QAM	-174.85	mHz	
MIDDLE	LTE 5 MHz	256QAM	-147.12	mHz	
TOP	LTE 5 MHz	QPSK	363.76	mHz	
TOP	LTE 5 MHz	16QAM	-221.92	mHz	
TOP	LTE 5 MHz	64QAM	385.11	mHz	
TOP	LTE 5 MHz	256QAM	465.40	mHz	
BOTTOM	LTE 10 MHz	QPSK	213.12	mHz	
BOTTOM	LTE 10 MHz	16QAM	-198.70	mHz	
BOTTOM	LTE 10 MHz	64QAM	21.56	mHz	
BOTTOM	LTE 10 MHz	256QAM	195.13	mHz	
MIDDLE	LTE 10 MHz	QPSK	71.13	mHz	
MIDDLE	LTE 10 MHz	16QAM	-338.30	mHz	
MIDDLE	LTE 10 MHz	64QAM	396.79	mHz	
MIDDLE	LTE 10 MHz	256QAM	297.23	mHz	
TOP	LTE 10 MHz	QPSK	77.14	mHz	
TOP	LTE 10 MHz	16QAM	-107.05	mHz	
TOP	LTE 10 MHz	64QAM	69.16	mHz	
TOP	LTE 10 MHz	256QAM	-38.71	mHz	
BOTTOM	LTE 15 MHz	QPSK	179.56	mHz	
BOTTOM	LTE 15 MHz	16QAM	454.79	mHz	
BOTTOM	LTE 15 MHz	64QAM	-334.34	mHz	
BOTTOM	LTE 15 MHz	256QAM	-36.73	mHz	
MIDDLE	LTE 15 MHz	QPSK	-69.56	mHz	
MIDDLE	LTE 15 MHz	16QAM	70.68	mHz	
MIDDLE	LTE 15 MHz	64QAM	167.45	mHz	
MIDDLE	LTE 15 MHz	256QAM	296.78	mHz	
TOP	LTE 15 MHz	QPSK	437.93	mHz	
TOP	LTE 15 MHz	16QAM	4.49	Hz	
TOP	LTE 15 MHz	64QAM	391.43	mHz	
TOP	LTE 15 MHz	256QAM	434.67	mHz	
BOTTOM	LTE 20 MHz	QPSK	412.60	mHz	
BOTTOM	LTE 20 MHz	16QAM	-384.96	mHz	
BOTTOM	LTE 20 MHz	64QAM	246.86	mHz	
BOTTOM	LTE 20 MHz	256QAM	-2.54	Hz	
MIDDLE	LTE 20 MHz	QPSK	436.43	mHz	
MIDDLE	LTE 20 MHz	16QAM	-184.83	mHz	
MIDDLE	LTE 20 MHz	64QAM	261.58	mHz	
MIDDLE	LTE 20 MHz	256QAM	-374.25	mHz	
TOP	LTE 20 MHz	QPSK	-246.22	mHz	
TOP	LTE 20 MHz	16QAM	141.61	mHz	
TOP	LTE 20 MHz	64QAM	221.32	mHz	
TOP	LTE 20 MHz	256QAM	364.29	mHz	



	Temperature = 40°C				
Channel	Signal	Modulation	Frequency Error		
BOTTOM	LTE 5 MHz	QPSK	253.16	mHz	
BOTTOM	LTE 5 MHz	16QAM	165.53	mHz	
BOTTOM	LTE 5 MHz	64QAM	-4.08	Hz	
BOTTOM	LTE 5 MHz	256QAM	-127.96	mHz	
MIDDLE	LTE 5 MHz	QPSK	-39.71	mHz	
MIDDLE	LTE 5 MHz	16QAM	1.88	Hz	
MIDDLE	LTE 5 MHz	64QAM	136.13	mHz	
MIDDLE	LTE 5 MHz	256QAM	256.95	mHz	
TOP	LTE 5 MHz	QPSK	322.19	mHz	
TOP	LTE 5 MHz	16QAM	-363.39	mHz	
TOP	LTE 5 MHz	64QAM	393.32	mHz	
TOP	LTE 5 MHz	256QAM	164.18	mHz	
BOTTOM	LTE 10 MHz	QPSK	180.14	mHz	
BOTTOM	LTE 10 MHz	16QAM	-246.50	mHz	
BOTTOM	LTE 10 MHz	64QAM	458.58	mHz	
BOTTOM	LTE 10 MHz	256QAM	-327.74	mHz	
MIDDLE	LTE 10 MHz	QPSK	-1.91	Hz	
MIDDLE	LTE 10 MHz	16QAM	2.68	Hz	
MIDDLE	LTE 10 MHz	64QAM	-1.59	Hz	
MIDDLE	LTE 10 MHz	256QAM	348.67	mHz	
TOP	LTE 10 MHz	QPSK	-399.61	mHz	
TOP	LTE 10 MHz	16QAM	-316.22	mHz	
TOP	LTE 10 MHz	64QAM	5.67	Hz	
TOP	LTE 10 MHz	256QAM	-299.67	mHz	
BOTTOM	LTE 15 MHz	QPSK	205.61	mHz	
BOTTOM	LTE 15 MHz	16QAM	-2.22	Hz	
BOTTOM	LTE 15 MHz	64QAM	-211.08	mHz	
BOTTOM	LTE 15 MHz	256QAM	-305.73	mHz	
MIDDLE	LTE 15 MHz	QPSK	-647.90	mHz	
MIDDLE	LTE 15 MHz	16QAM	743.32	mHz	
MIDDLE	LTE 15 MHz	64QAM	2.01	Hz	
MIDDLE	LTE 15 MHz	256QAM	189.95	mHz	
TOP	LTE 15 MHz	QPSK	83.58	mHz	
TOP	LTE 15 MHz	16QAM	-42.07	mHz	
TOP	LTE 15 MHz	64QAM	324.08	mHz	
TOP	LTE 15 MHz	256QAM	310.53	mHz	
BOTTOM	LTE 20 MHz	QPSK	93.20	mHz	
BOTTOM	LTE 20 MHz	16QAM	54.77	mHz	
BOTTOM	LTE 20 MHz	64QAM	469.70	mHz	
BOTTOM	LTE 20 MHz	256QAM	362.07	mHz	
MIDDLE	LTE 20 MHz	QPSK	3.01	Hz	
MIDDLE	LTE 20 MHz	16QAM	2.18	Hz	
MIDDLE	LTE 20 MHz	64QAM	-903.44	mHz	
MIDDLE	LTE 20 MHz	256QAM	364.97	mHz	
TOP	LTE 20 MHz	QPSK	-275.26	mHz	
TOP	LTE 20 MHz	16QAM	-289.88	mHz	
TOP	LTE 20 MHz	64QAM	381.93	mHz	
TOP	LTE 20 MHz	256QAM	85.51	mHz	



	Temperature = 50°C				
Channel	Signal	Modulation	Frequency Error		
BOTTOM	LTE 5 MHz	QPSK	-87.37	mHz	
BOTTOM	LTE 5 MHz	16QAM	303.97	mHz	
BOTTOM	LTE 5 MHz	64QAM	245.37	mHz	
BOTTOM	LTE 5 MHz	256QAM	281.36	mHz	
MIDDLE	LTE 5 MHz	QPSK	1.36	Hz	
MIDDLE	LTE 5 MHz	16QAM	237.63	mHz	
MIDDLE	LTE 5 MHz	64QAM	939.57	mHz	
MIDDLE	LTE 5 MHz	256QAM	992.22	mHz	
TOP	LTE 5 MHz	QPSK	2.21	Hz	
TOP	LTE 5 MHz	16QAM	-65.74	mHz	
TOP	LTE 5 MHz	64QAM	342.09	mHz	
TOP	LTE 5 MHz	256QAM	-126.56	mHz	
BOTTOM	LTE 10 MHz	QPSK	-155.94	mHz	
BOTTOM	LTE 10 MHz	16QAM	-318.68	mHz	
BOTTOM	LTE 10 MHz	64QAM	288.54	mHz	
BOTTOM	LTE 10 MHz	256QAM	-51.43	mHz	
MIDDLE	LTE 10 MHz	QPSK	649.92	mHz	
MIDDLE	LTE 10 MHz	16QAM	-379.27	mHz	
MIDDLE	LTE 10 MHz	64QAM	2.66	Hz	
MIDDLE	LTE 10 MHz	256QAM	912.03	mHz	
TOP	LTE 10 MHz	QPSK	294.28	mHz	
TOP	LTE 10 MHz	16QAM	263.42	mHz	
TOP	LTE 10 MHz	64QAM	85.16	mHz	
TOP	LTE 10 MHz	256QAM	453.34	mHz	
BOTTOM	LTE 15 MHz	QPSK	-246.11	mHz	
BOTTOM	LTE 15 MHz	16QAM	43.40	mHz	
BOTTOM	LTE 15 MHz	64QAM	330.90	mHz	
BOTTOM	LTE 15 MHz	256QAM	-391.13	mHz	
MIDDLE	LTE 15 MHz	QPSK	3.85	Hz	
MIDDLE	LTE 15 MHz	16QAM	4.33	Hz	
MIDDLE	LTE 15 MHz	64QAM	-80.27	mHz	
MIDDLE	LTE 15 MHz	256QAM	-171.34	mHz	
TOP	LTE 15 MHz	QPSK	-323.12	mHz	
TOP	LTE 15 MHz	16QAM	148.81	mHz	
TOP	LTE 15 MHz	64QAM	327.21	mHz	
TOP	LTE 15 MHz	256QAM	-320.32	mHz	
BOTTOM	LTE 20 MHz	QPSK	463.76	mHz	
BOTTOM	LTE 20 MHz	16QAM	95.07	mHz	
BOTTOM	LTE 20 MHz	64QAM	93.21	mHz	
BOTTOM	LTE 20 MHz	256QAM	-169.97	mHz	
MIDDLE	LTE 20 MHz	QPSK	405.81	mHz	
MIDDLE	LTE 20 MHz	16QAM	151.38	mHz	
MIDDLE	LTE 20 MHz	64QAM	-502.92	mHz	
MIDDLE	LTE 20 MHz	256QAM	719.50	mHz	
TOP	LTE 20 MHz	QPSK	482.69	mHz	
TOP	LTE 20 MHz	16QAM	318.58	mHz	
TOP	LTE 20 MHz	64QAM	-279.27	mHz	
TOP	LTE 20 MHz	256QAM	-29.59	mHz	



Product: XR19AX35WM2/48Y

#### **RF PORT 2**

RF PORT 2				
		Temperature = -30°C		
Channel	Signal	Modulation	Frequency Error	
BOTTOM	LTE 5 MHz	QPSK	819.78	mHz
BOTTOM	LTE 5 MHz	16QAM	271.37	mHz
BOTTOM	LTE 5 MHz	64QAM	177.26	mHz
BOTTOM	LTE 5 MHz	256QAM	-79.24	mHz
MIDDLE	LTE 5 MHz	QPSK	795.11	mHz
MIDDLE	LTE 5 MHz	16QAM	-493.30	mHz
MIDDLE	LTE 5 MHz	64QAM	309.58	mHz
MIDDLE	LTE 5 MHz	256QAM	-146.67	mHz
TOP	LTE 5 MHz	QPSK	-739.91	mHz
TOP	LTE 5 MHz	16QAM	-313.89	mHz
TOP	LTE 5 MHz	64QAM	-280.88	mHz
TOP	LTE 5 MHz	256QAM	-445.68	mHz
BOTTOM	LTE 10 MHz	QPSK	128.25	mHz
BOTTOM	LTE 10 MHz	16QAM	-541.67	mHz
BOTTOM	LTE 10 MHz	64QAM	416.98	mHz
BOTTOM	LTE 10 MHz	256QAM	-385.02	mHz
MIDDLE	LTE 10 MHz	QPSK	287.00	mHz
MIDDLE	LTE 10 MHz	16QAM	451.95	mHz
MIDDLE	LTE 10 MHz	64QAM	121.48	mHz
MIDDLE	LTE 10 MHz	256QAM	-99.98	mHz
TOP	LTE 10 MHz	QPSK	-667.62	mHz
TOP	LTE 10 MHz	16QAM	405.89	mHz
TOP	LTE 10 MHz	64QAM	3.65	Hz
TOP	LTE 10 MHz	256QAM	-123.74	mHz
BOTTOM	LTE 15 MHz	QPSK	237.81	mHz
BOTTOM	LTE 15 MHz	16QAM	798.85	mHz
BOTTOM	LTE 15 MHz	64QAM	375.34	mHz
BOTTOM	LTE 15 MHz	256QAM	-2.65	Hz
MIDDLE	LTE 15 MHz	QPSK	-31.86	mHz
MIDDLE	LTE 15 MHz	16QAM	-663.21	mHz
MIDDLE	LTE 15 MHz	64QAM	52.44	mHz
MIDDLE	LTE 15 MHz	256QAM	-815.16	mHz
TOP	LTE 15 MHz	QPSK	-798.06	mHz
TOP	LTE 15 MHz	16QAM	612.02	mHz
TOP	LTE 15 MHz	64QAM	35.33	mHz
TOP	LTE 15 MHz	256QAM	-599.53	mHz
BOTTOM	LTE 20 MHz	QPSK	-1.19	Hz
BOTTOM	LTE 20 MHz	16QAM	726.95	mHz
BOTTOM	LTE 20 MHz	64QAM	-86.47	mHz
BOTTOM	LTE 20 MHz	256QAM	2.41	Hz
MIDDLE	LTE 20 MHz	QPSK	-784.52	mHz
MIDDLE	LTE 20 MHz	16QAM	806.09	mHz
MIDDLE	LTE 20 MHz	64QAM	896.58	mHz
MIDDLE	LTE 20 MHz	256QAM	-291.96	mHz
TOP	LTE 20 MHz	QPSK	39.32	mHz
TOP	LTE 20 MHz	16QAM	117.99	mHz
TOP	LTE 20 MHz	64QAM	132.31	mHz
TOP	LTE 20 MHz	256QAM	380.25	mHz



	Temperature = -20°C				
Channel	Signal	Modulation	Frequency Error		
BOTTOM	LTE 5 MHz	QPSK	-218.49	mHz	
BOTTOM	LTE 5 MHz	16QAM	-295.01	mHz	
BOTTOM	LTE 5 MHz	64QAM	-93.40	mHz	
BOTTOM	LTE 5 MHz	256QAM	628.00	mHz	
MIDDLE	LTE 5 MHz	QPSK	375.98	mHz	
MIDDLE	LTE 5 MHz	16QAM	-356.88	mHz	
MIDDLE	LTE 5 MHz	64QAM	419.13	mHz	
MIDDLE	LTE 5 MHz	256QAM	-200.71	mHz	
TOP	LTE 5 MHz	QPSK	-506.91	mHz	
TOP	LTE 5 MHz	16QAM	-684.11	mHz	
TOP	LTE 5 MHz	64QAM	-169.62	mHz	
TOP	LTE 5 MHz	256QAM	-1.24	Hz	
BOTTOM	LTE 10 MHz	QPSK	-739.21	mHz	
BOTTOM	LTE 10 MHz	16QAM	409.60	mHz	
BOTTOM	LTE 10 MHz	64QAM	-303.69	mHz	
BOTTOM	LTE 10 MHz	256QAM	-563.53	mHz	
MIDDLE	LTE 10 MHz	QPSK	-293.33	mHz	
MIDDLE	LTE 10 MHz	16QAM	644.89	mHz	
MIDDLE	LTE 10 MHz	64QAM	222.55	mHz	
MIDDLE	LTE 10 MHz	256QAM	235.72	mHz	
TOP	LTE 10 MHz	QPSK	714.75	mHz	
TOP	LTE 10 MHz	16QAM	-47.37	mHz	
TOP	LTE 10 MHz	64QAM	374.96	mHz	
TOP	LTE 10 MHz	256QAM	-811.27	mHz	
BOTTOM	LTE 15 MHz	QPSK	-139.37	mHz	
BOTTOM	LTE 15 MHz	16QAM	772.30	mHz	
BOTTOM	LTE 15 MHz	64QAM	158.56	mHz	
BOTTOM	LTE 15 MHz	256QAM	-116.18	mHz	
MIDDLE	LTE 15 MHz	QPSK	-576.34	mHz	
MIDDLE	LTE 15 MHz	16QAM	-330.86	mHz	
MIDDLE	LTE 15 MHz	64QAM	626.56	mHz	
MIDDLE	LTE 15 MHz	256QAM	-269.23	mHz	
TOP	LTE 15 MHz	QPSK	61.03	mHz	
TOP	LTE 15 MHz	16QAM	-791.77	mHz	
TOP	LTE 15 MHz	64QAM	186.90	mHz	
TOP	LTE 15 MHz	256QAM	-546.68	mHz	
BOTTOM	LTE 20 MHz	QPSK	-556.92	mHz	
BOTTOM	LTE 20 MHz	16QAM	4.42	Hz	
BOTTOM	LTE 20 MHz	64QAM	-123.17	mHz	
BOTTOM	LTE 20 MHz	256QAM	305.13	mHz	
MIDDLE	LTE 20 MHz	QPSK	-338.31	mHz	
MIDDLE	LTE 20 MHz	16QAM	2.31	Hz	
MIDDLE	LTE 20 MHz	64QAM	141.33	mHz	
MIDDLE	LTE 20 MHz	256QAM	-115.04	mHz	
TOP	LTE 20 MHz	QPSK	153.51	mHz	
TOP	LTE 20 MHz	16QAM	490.17	mHz	
TOP	LTE 20 MHz	64QAM	-103.13	mHz	
TOP	LTE 20 MHz	256QAM	424.85	mHz	



Temperature = -10°C				
Channel	Signal	Modulation	Frequency Error	
BOTTOM	LTE 5 MHz	QPSK	-450.33	mHz
BOTTOM	LTE 5 MHz	16QAM	94.09	mHz
BOTTOM	LTE 5 MHz	64QAM	4.55	Hz
BOTTOM	LTE 5 MHz	256QAM	652.65	mHz
MIDDLE	LTE 5 MHz	QPSK	-675.53	mHz
MIDDLE	LTE 5 MHz	16QAM	-2.76	Hz
MIDDLE	LTE 5 MHz	64QAM	-699.24	mHz
MIDDLE	LTE 5 MHz	256QAM	-814.11	mHz
TOP	LTE 5 MHz	QPSK	233.74	mHz
TOP	LTE 5 MHz	16QAM	-810.33	mHz
TOP	LTE 5 MHz	64QAM	-163.69	mHz
TOP	LTE 5 MHz	256QAM	750.30	mHz
BOTTOM	LTE 10 MHz	QPSK	258.06	mHz
BOTTOM	LTE 10 MHz	16QAM	40.24	mHz
BOTTOM	LTE 10 MHz	64QAM	217.76	mHz
BOTTOM	LTE 10 MHz	256QAM	-508.99	mHz
MIDDLE	LTE 10 MHz	QPSK	-427.57	mHz
MIDDLE	LTE 10 MHz	16QAM	530.00	mHz
MIDDLE	LTE 10 MHz	64QAM	196.27	mHz
MIDDLE	LTE 10 MHz	256QAM	3.38	Hz
TOP	LTE 10 MHz	QPSK	-200.26	mHz
TOP	LTE 10 MHz	16QAM	-625.22	mHz
TOP	LTE 10 MHz	64QAM	810.73	mHz
TOP	LTE 10 MHz	256QAM	-385.10	mHz
BOTTOM	LTE 15 MHz	QPSK	751.10	mHz
BOTTOM	LTE 15 MHz	16QAM	796.03	mHz
BOTTOM	LTE 15 MHz	64QAM	-628.47	mHz
BOTTOM	LTE 15 MHz	256QAM	-2.53	Hz
MIDDLE	LTE 15 MHz	QPSK	-758.15	mHz
MIDDLE	LTE 15 MHz	16QAM	645.28	mHz
MIDDLE	LTE 15 MHz	64QAM	43.48	mHz
MIDDLE	LTE 15 MHz	256QAM	188.99	mHz
TOP	LTE 15 MHz	QPSK	474.36	mHz
TOP	LTE 15 MHz	16QAM	-645.49	mHz
TOP	LTE 15 MHz	64QAM	162.10	mHz
TOP	LTE 15 MHz	256QAM	-490.65	mHz
BOTTOM	LTE 20 MHz	QPSK	301.05	mHz
BOTTOM	LTE 20 MHz	16QAM	673.88	mHz
BOTTOM	LTE 20 MHz	64QAM	-343.45	mHz
BOTTOM	LTE 20 MHz	256QAM	601.23	mHz
MIDDLE	LTE 20 MHz	QPSK	-755.72	mHz
MIDDLE	LTE 20 MHz	16QAM	-446.85	mHz
MIDDLE	LTE 20 MHz	64QAM	-340.78	mHz
MIDDLE	LTE 20 MHz	256QAM	-592.35	mHz
TOP	LTE 20 MHz	QPSK	-223.29	mHz
TOP	LTE 20 MHz	16QAM	279.19	mHz
TOP	LTE 20 MHz	64QAM	-5.85	Hz
TOP	LTE 20 MHz	256QAM	221.81	mHz



Temperature = 0°C				
Channel	Signal	Modulation	Frequency Error	
BOTTOM	LTE 5 MHz	QPSK	-550.51	mHz
BOTTOM	LTE 5 MHz	16QAM	-527.27	mHz
BOTTOM	LTE 5 MHz	64QAM	-183.71	mHz
BOTTOM	LTE 5 MHz	256QAM	-876.44	mHz
MIDDLE	LTE 5 MHz	QPSK	811.77	mHz
MIDDLE	LTE 5 MHz	16QAM	-626.68	mHz
MIDDLE	LTE 5 MHz	64QAM	-164.20	mHz
MIDDLE	LTE 5 MHz	256QAM	-813.18	mHz
TOP	LTE 5 MHz	QPSK	-3.85	Hz
TOP	LTE 5 MHz	16QAM	-779.98	mHz
TOP	LTE 5 MHz	64QAM	-787.20	mHz
TOP	LTE 5 MHz	256QAM	295.88	mHz
BOTTOM	LTE 10 MHz	QPSK	-87.63	mHz
BOTTOM	LTE 10 MHz	16QAM	422.39	mHz
BOTTOM	LTE 10 MHz	64QAM	-69.47	mHz
BOTTOM	LTE 10 MHz	256QAM	589.46	mHz
MIDDLE	LTE 10 MHz	QPSK	131.39	mHz
MIDDLE	LTE 10 MHz	16QAM	-764.63	mHz
MIDDLE	LTE 10 MHz	64QAM	-496.06	mHz
MIDDLE	LTE 10 MHz	256QAM	371.45	mHz
TOP	LTE 10 MHz	QPSK	115.33	mHz
TOP	LTE 10 MHz	16QAM	210.04	mHz
TOP	LTE 10 MHz	64QAM	-151.36	mHz
TOP	LTE 10 MHz	256QAM	657.40	mHz
BOTTOM	LTE 15 MHz	QPSK	-866.73	mHz
BOTTOM	LTE 15 MHz	16QAM	-654.91	mHz
BOTTOM	LTE 15 MHz	64QAM	627.18	mHz
BOTTOM	LTE 15 MHz	256QAM	-656.14	mHz
MIDDLE	LTE 15 MHz	QPSK	-558.66	mHz
MIDDLE	LTE 15 MHz	16QAM	271.65	mHz
MIDDLE	LTE 15 MHz	64QAM	1.78	Hz
MIDDLE	LTE 15 MHz	256QAM	-33.21	mHz
TOP	LTE 15 MHz	QPSK	407.36	mHz
TOP	LTE 15 MHz	16QAM	-543.55	mHz
TOP	LTE 15 MHz	64QAM	-348.05	mHz
TOP	LTE 15 MHz	256QAM	737.54	mHz
BOTTOM	LTE 20 MHz	QPSK	-344.59	mHz
BOTTOM	LTE 20 MHz	16QAM	341.85	mHz
BOTTOM	LTE 20 MHz	64QAM	-1.06	Hz
BOTTOM	LTE 20 MHz	256QAM	142.27	mHz
MIDDLE	LTE 20 MHz	QPSK	794.30	mHz
MIDDLE	LTE 20 MHz	16QAM	1.60	Hz
MIDDLE	LTE 20 MHz	64QAM	344.79	mHz
MIDDLE	LTE 20 MHz	256QAM	-476.09	mHz
TOP	LTE 20 MHz	QPSK	536.04	mHz
TOP	LTE 20 MHz	16QAM	-259.42	mHz
TOP	LTE 20 MHz	64QAM	289.61	mHz
TOP	LTE 20 MHz	256QAM	233.19	mHz



Channel		Temperature = 10°C				
Onamici	Signal	Modulation	Frequency Error			
BOTTOM	LTE 5 MHz	QPSK	-595.11	mHz		
BOTTOM	LTE 5 MHz	16QAM	586.80	mHz		
BOTTOM	LTE 5 MHz	64QAM	-642.78	mHz		
BOTTOM	LTE 5 MHz	256QAM	638.67	mHz		
MIDDLE	LTE 5 MHz	QPSK	-677.30	mHz		
MIDDLE	LTE 5 MHz	16QAM	665.87	mHz		
MIDDLE	LTE 5 MHz	64QAM	80.51	mHz		
MIDDLE	LTE 5 MHz	256QAM	-96.00	mHz		
TOP	LTE 5 MHz	QPSK	-688.62	mHz		
TOP	LTE 5 MHz	16QAM	-239.48	mHz		
TOP	LTE 5 MHz	64QAM	-100.97	mHz		
TOP	LTE 5 MHz	256QAM	-124.12	mHz		
BOTTOM	LTE 10 MHz	QPSK	-383.64	mHz		
BOTTOM	LTE 10 MHz	16QAM	-312.96	mHz		
BOTTOM	LTE 10 MHz	64QAM	-387.74	mHz		
BOTTOM	LTE 10 MHz	256QAM	205.47	mHz		
MIDDLE	LTE 10 MHz	QPSK	595.38	mHz		
MIDDLE	LTE 10 MHz	16QAM	345.98	mHz		
MIDDLE	LTE 10 MHz	64QAM	6.59	Hz		
MIDDLE	LTE 10 MHz	256QAM	-475.89	mHz		
TOP	LTE 10 MHz	QPSK	5.60	Hz		
TOP	LTE 10 MHz	16QAM	-274.66	mHz		
TOP	LTE 10 MHz	64QAM	373.69	mHz		
TOP	LTE 10 MHz	256QAM	157.13	mHz		
BOTTOM	LTE 15 MHz	QPSK	-682.47	mHz		
BOTTOM	LTE 15 MHz	16QAM	-643.20	mHz		
BOTTOM	LTE 15 MHz	64QAM	-442.92	mHz		
BOTTOM	LTE 15 MHz	256QAM	2.35	Hz		
MIDDLE	LTE 15 MHz	QPSK	743.78	mHz		
MIDDLE	LTE 15 MHz	16QAM	820.21	mHz		
MIDDLE	LTE 15 MHz	64QAM	581.81	mHz		
MIDDLE	LTE 15 MHz	256QAM	-360.05	mHz		
TOP	LTE 15 MHz	QPSK	254.70	mHz		
TOP	LTE 15 MHz	16QAM	-676.43	mHz		
TOP	LTE 15 MHz	64QAM	-108.75	mHz		
TOP	LTE 15 MHz	256QAM	-899.17	mHz		
BOTTOM	LTE 20 MHz	QPSK	780.49	mHz		
BOTTOM	LTE 20 MHz	16QAM	23.51	mHz		
BOTTOM	LTE 20 MHz	64QAM	91.51	mHz		
BOTTOM	LTE 20 MHz	256QAM	-26.17	mHz		
MIDDLE	LTE 20 MHz	QPSK	28.70	mHz		
MIDDLE	LTE 20 MHz	16QAM	-811.62	mHz		
MIDDLE	LTE 20 MHz	64QAM	-2.14	Hz		
MIDDLE	LTE 20 MHz	256QAM	162.14	mHz		
TOP	LTE 20 MHz	QPSK	-460.07	mHz		
TOP	LTE 20 MHz	16QAM	388.81	mHz		
TOP	LTE 20 MHz	64QAM	896.08	mHz		
TOP	LTE 20 MHz	256QAM	214.60	mHz		



Temperature = 20°C				
Channel	Signal	Modulation	Frequency Error	
BOTTOM	LTE 5 MHz	QPSK	57.48	mHz
BOTTOM	LTE 5 MHz	16QAM	279.64	mHz
BOTTOM	LTE 5 MHz	64QAM	-866.67	mHz
BOTTOM	LTE 5 MHz	256QAM	-152.67	mHz
MIDDLE	LTE 5 MHz	QPSK	-3.43	Hz
MIDDLE	LTE 5 MHz	16QAM	-127.44	mHz
MIDDLE	LTE 5 MHz	64QAM	529.75	mHz
MIDDLE	LTE 5 MHz	256QAM	376.23	mHz
TOP	LTE 5 MHz	QPSK	654.50	mHz
TOP	LTE 5 MHz	16QAM	771.10	mHz
TOP	LTE 5 MHz	64QAM	584.92	mHz
TOP	LTE 5 MHz	256QAM	-335.79	mHz
BOTTOM	LTE 10 MHz	QPSK	661.69	mHz
BOTTOM	LTE 10 MHz	16QAM	-326.95	mHz
BOTTOM	LTE 10 MHz	64QAM	521.92	mHz
BOTTOM	LTE 10 MHz	256QAM	397.35	mHz
MIDDLE	LTE 10 MHz	QPSK	509.26	mHz
MIDDLE	LTE 10 MHz	16QAM	299.64	mHz
MIDDLE	LTE 10 MHz	64QAM	-709.13	mHz
MIDDLE	LTE 10 MHz	256QAM	-657.19	mHz
TOP	LTE 10 MHz	QPSK	719.82	mHz
TOP	LTE 10 MHz	16QAM	582.12	mHz
TOP	LTE 10 MHz	64QAM	665.37	mHz
TOP	LTE 10 MHz	256QAM	754.68	mHz
BOTTOM	LTE 15 MHz	QPSK	362.78	mHz
BOTTOM	LTE 15 MHz	16QAM	399.04	mHz
BOTTOM	LTE 15 MHz	64QAM	1.32	Hz
BOTTOM	LTE 15 MHz	256QAM	-689.58	mHz
MIDDLE	LTE 15 MHz	QPSK	123.37	mHz
MIDDLE	LTE 15 MHz	16QAM	-401.75	mHz
MIDDLE	LTE 15 MHz	64QAM	-370.43	mHz
MIDDLE	LTE 15 MHz	256QAM	328.48	mHz
TOP	LTE 15 MHz	QPSK	-742.03	mHz
TOP	LTE 15 MHz	16QAM	-710.77	mHz
TOP	LTE 15 MHz	64QAM	303.47	mHz
TOP	LTE 15 MHz	256QAM	-4.14	Hz
BOTTOM	LTE 20 MHz	QPSK	-673.00	mHz
BOTTOM	LTE 20 MHz	16QAM	612.71	mHz
BOTTOM	LTE 20 MHz	64QAM	-601.20	mHz
BOTTOM	LTE 20 MHz	256QAM	-681.29	mHz
MIDDLE	LTE 20 MHz	QPSK	821.55	mHz
MIDDLE	LTE 20 MHz	16QAM	846.20	mHz
MIDDLE	LTE 20 MHz	64QAM	-4.72	Hz
MIDDLE	LTE 20 MHz	256QAM	772.55	mHz
TOP	LTE 20 MHz	QPSK	-505.97	mHz
TOP	LTE 20 MHz	16QAM	-31.47	mHz
TOP	LTE 20 MHz	64QAM	-409.46	mHz
TOP	LTE 20 MHz	256QAM	622.89	mHz



Temperature = 30°C				
Channel	Signal	Modulation	Frequency Error	
BOTTOM	LTE 5 MHz	QPSK	129.06	mHz
BOTTOM	LTE 5 MHz	16QAM	856.20	mHz
BOTTOM	LTE 5 MHz	64QAM	-327.18	mHz
BOTTOM	LTE 5 MHz	256QAM	-325.36	mHz
MIDDLE	LTE 5 MHz	QPSK	-34.45	mHz
MIDDLE	LTE 5 MHz	16QAM	370.34	mHz
MIDDLE	LTE 5 MHz	64QAM	373.78	mHz
MIDDLE	LTE 5 MHz	256QAM	-1.09	Hz
TOP	LTE 5 MHz	QPSK	329.35	mHz
TOP	LTE 5 MHz	16QAM	-834.56	mHz
TOP	LTE 5 MHz	64QAM	-96.47	mHz
TOP	LTE 5 MHz	256QAM	707.03	mHz
BOTTOM	LTE 10 MHz	QPSK	-165.26	mHz
BOTTOM	LTE 10 MHz	16QAM	-314.89	mHz
BOTTOM	LTE 10 MHz	64QAM	-1.11	Hz
BOTTOM	LTE 10 MHz	256QAM	360.76	mHz
MIDDLE	LTE 10 MHz	QPSK	-334.62	mHz
MIDDLE	LTE 10 MHz	16QAM	-566.64	mHz
MIDDLE	LTE 10 MHz	64QAM	362.45	mHz
MIDDLE	LTE 10 MHz	256QAM	-214.14	mHz
TOP	LTE 10 MHz	QPSK	-276.62	mHz
TOP	LTE 10 MHz	16QAM	5.50	Hz
TOP	LTE 10 MHz	64QAM	-498.37	mHz
TOP	LTE 10 MHz	256QAM	5.05	Hz
BOTTOM	LTE 15 MHz	QPSK	264.36	mHz
BOTTOM	LTE 15 MHz	16QAM	553.36	mHz
BOTTOM	LTE 15 MHz	64QAM	748.46	mHz
BOTTOM	LTE 15 MHz	256QAM	-376.15	mHz
MIDDLE	LTE 15 MHz	QPSK	604.00	mHz
MIDDLE	LTE 15 MHz	16QAM	456.36	mHz
MIDDLE	LTE 15 MHz	64QAM	-518.88	mHz
MIDDLE	LTE 15 MHz	256QAM	534.65	mHz
TOP	LTE 15 MHz	QPSK	-197.62	mHz
TOP	LTE 15 MHz	16QAM	623.45	mHz
TOP	LTE 15 MHz	64QAM	3.09	Hz
TOP	LTE 15 MHz	256QAM	-5.06	Hz
BOTTOM	LTE 20 MHz	QPSK	-769.70	mHz
BOTTOM	LTE 20 MHz	16QAM	-854.67	mHz
BOTTOM	LTE 20 MHz	64QAM	-236.41	mHz
BOTTOM	LTE 20 MHz	256QAM	300.49	mHz
MIDDLE	LTE 20 MHz	QPSK	863.14	mHz
MIDDLE	LTE 20 MHz	16QAM	357.76	mHz
MIDDLE	LTE 20 MHz	64QAM	-448.89	mHz
MIDDLE	LTE 20 MHz	256QAM	6.96	Hz
TOP	LTE 20 MHz	QPSK	792.03	mHz
TOP	LTE 20 MHz	16QAM	-462.14	mHz
TOP	LTE 20 MHz	64QAM	538.38	mHz
TOP	LTE 20 MHz	256QAM	41.97	mHz



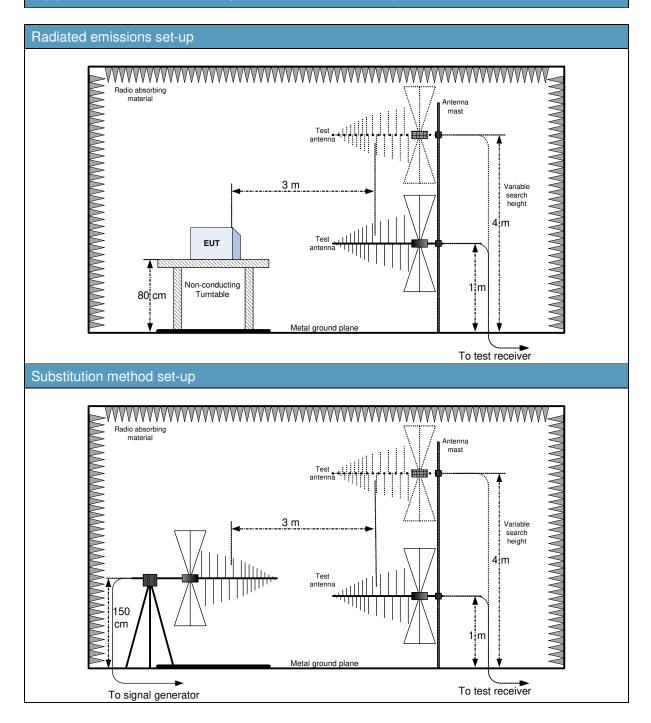
Temperature = 40°C				
Channel	Signal	Modulation	Frequency Error	
BOTTOM	LTE 5 MHz	QPSK	93.68	mHz
BOTTOM	LTE 5 MHz	16QAM	-224.10	mHz
BOTTOM	LTE 5 MHz	64QAM	699.79	mHz
BOTTOM	LTE 5 MHz	256QAM	-464.03	mHz
MIDDLE	LTE 5 MHz	QPSK	-5.64	Hz
MIDDLE	LTE 5 MHz	16QAM	-93.54	mHz
MIDDLE	LTE 5 MHz	64QAM	312.88	mHz
MIDDLE	LTE 5 MHz	256QAM	64.00	mHz
TOP	LTE 5 MHz	QPSK	-111.34	mHz
TOP	LTE 5 MHz	16QAM	-0.98	Hz
TOP	LTE 5 MHz	64QAM	453.47	mHz
TOP	LTE 5 MHz	256QAM	-1.17	Hz
BOTTOM	LTE 10 MHz	QPSK	1.08	Hz
BOTTOM	LTE 10 MHz	16QAM	110.31	mHz
BOTTOM	LTE 10 MHz	64QAM	361.45	mHz
BOTTOM	LTE 10 MHz	256QAM	-186.15	mHz
MIDDLE	LTE 10 MHz	QPSK	-732.59	mHz
MIDDLE	LTE 10 MHz	16QAM	-2.44	Hz
MIDDLE	LTE 10 MHz	64QAM	-3.57	Hz
MIDDLE	LTE 10 MHz	256QAM	5.24	Hz
TOP	LTE 10 MHz	QPSK	602.17	mHz
TOP	LTE 10 MHz	16QAM	-616.00	mHz
TOP	LTE 10 MHz	64QAM	361.30	mHz
TOP	LTE 10 MHz	256QAM	-615.18	mHz
BOTTOM	LTE 15 MHz	QPSK	-400.38	mHz
BOTTOM	LTE 15 MHz	16QAM	506.29	mHz
BOTTOM	LTE 15 MHz	64QAM	740.50	mHz
BOTTOM	LTE 15 MHz	256QAM	-726.66	mHz
MIDDLE	LTE 15 MHz	QPSK	-415.75	mHz
MIDDLE	LTE 15 MHz	16QAM	-3.48	Hz
MIDDLE	LTE 15 MHz	64QAM	-516.72	mHz
MIDDLE	LTE 15 MHz	256QAM	535.65	mHz
TOP	LTE 15 MHz	QPSK	793.57	mHz
TOP	LTE 15 MHz	16QAM	373.61	mHz
TOP	LTE 15 MHz	64QAM	654.03	mHz
TOP	LTE 15 MHz	256QAM	281.24	mHz
BOTTOM	LTE 20 MHz	QPSK	-849.85	mHz
BOTTOM	LTE 20 MHz	16QAM	-572.75	mHz
BOTTOM	LTE 20 MHz	64QAM	-3.76	Hz
BOTTOM	LTE 20 MHz	256QAM	499.06	mHz
MIDDLE	LTE 20 MHz	QPSK	474.05	mHz
MIDDLE	LTE 20 MHz	16QAM	422.88	mHz
MIDDLE	LTE 20 MHz	64QAM	-743.50	mHz
MIDDLE	LTE 20 MHz	256QAM	185.01	mHz
TOP	LTE 20 MHz	QPSK	466.35	mHz
TOP	LTE 20 MHz	16QAM	283.56	mHz
TOP	LTE 20 MHz	64QAM	-434.20	mHz
TOP	LTE 20 MHz	256QAM	509.23	mHz



Temperature = 50°C				
Channel	Signal	Modulation	Frequency Error	
BOTTOM	LTE 5 MHz	QPSK	234.56	mHz
BOTTOM	LTE 5 MHz	16QAM	-292.11	mHz
BOTTOM	LTE 5 MHz	64QAM	-38.68	mHz
BOTTOM	LTE 5 MHz	256QAM	730.70	mHz
MIDDLE	LTE 5 MHz	QPSK	-513.79	mHz
MIDDLE	LTE 5 MHz	16QAM	-182.99	mHz
MIDDLE	LTE 5 MHz	64QAM	-1.03	Hz
MIDDLE	LTE 5 MHz	256QAM	6.50	Hz
TOP	LTE 5 MHz	QPSK	-93.45	mHz
TOP	LTE 5 MHz	16QAM	831.87	mHz
TOP	LTE 5 MHz	64QAM	-3.34	Hz
TOP	LTE 5 MHz	256QAM	-168.43	mHz
BOTTOM	LTE 10 MHz	QPSK	-103.40	mHz
BOTTOM	LTE 10 MHz	16QAM	-88.05	mHz
BOTTOM	LTE 10 MHz	64QAM	409.42	mHz
BOTTOM	LTE 10 MHz	256QAM	-273.65	mHz
MIDDLE	LTE 10 MHz	QPSK	-857.90	mHz
MIDDLE	LTE 10 MHz	16QAM	5.90	Hz
MIDDLE	LTE 10 MHz	64QAM	-22.28	mHz
MIDDLE	LTE 10 MHz	256QAM	269.04	mHz
TOP	LTE 10 MHz	QPSK	731.63	mHz
TOP	LTE 10 MHz	16QAM	367.25	mHz
TOP	LTE 10 MHz	64QAM	-852.43	mHz
TOP	LTE 10 MHz	256QAM	1.61	Hz
BOTTOM	LTE 15 MHz	QPSK	275.63	mHz
BOTTOM	LTE 15 MHz	16QAM	629.37	mHz
BOTTOM	LTE 15 MHz	64QAM	2.07	Hz
BOTTOM	LTE 15 MHz	256QAM	240.38	mHz
MIDDLE	LTE 15 MHz	QPSK	364.62	mHz
MIDDLE	LTE 15 MHz	16QAM	155.89	mHz
MIDDLE	LTE 15 MHz	64QAM	850.98	mHz
MIDDLE	LTE 15 MHz	256QAM	148.10	mHz
TOP	LTE 15 MHz	QPSK	-269.33	mHz
TOP	LTE 15 MHz	16QAM	-368.66	mHz
TOP	LTE 15 MHz	64QAM	206.66	mHz
TOP	LTE 15 MHz	256QAM	-688.49	mHz
BOTTOM	LTE 20 MHz	QPSK	312.92	mHz
BOTTOM	LTE 20 MHz	16QAM	-2.92	Hz
BOTTOM	LTE 20 MHz	64QAM	1.04	Hz
BOTTOM	LTE 20 MHz	256QAM	-375.19	mHz
MIDDLE	LTE 20 MHz	QPSK	709.48	mHz
MIDDLE	LTE 20 MHz	16QAM	486.32	mHz
MIDDLE	LTE 20 MHz	64QAM	218.47	mHz
MIDDLE	LTE 20 MHz	256QAM	-863.23	mHz
TOP	LTE 20 MHz	QPSK	-6.84	Hz
TOP	LTE 20 MHz	16QAM	-319.26	mHz
TOP	LTE 20 MHz	64QAM	-92.92	mHz
TOP	LTE 20 MHz	256QAM	407.11	mHz



# Appendix B: Block diagrams of test set-ups



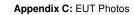


# Appendix C: EUT Photos

## Photo Set up

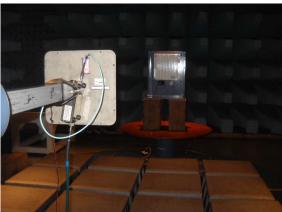




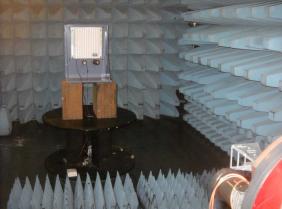














## Photo EUT









**END OF REPORT**