

The screenshot displays the Keysight Spectrum Analyzer interface. The top panel shows the 'Spectrum Analyzer 1 Sweep SA' window with various input and resolution settings. The main display area shows a spectrum plot with a peak labeled 'Mkr1 2.688 95 GHz -41.158 dBm'. The plot is centered at 2.688 95 GHz with a resolution bandwidth of 1.0 Hz. The y-axis represents power in dBm, ranging from -80 to 10. The x-axis represents frequency in GHz, ranging from 1.000 to 3.000. The plot shows a noisy signal trace with a prominent peak at the marked frequency.

Keysight Spectrum Analyzer 1 Sweep SA

Input: Input: RF, Coupling: AC, Align: Auto

Resolution: Input Z: 50 Ω , Corr: COrr, Freq Ref: Int (S)

Math: 30 dB, μ W Path: Standard, Gate: Off, IF Class: Low, Seg Track: Off

Power: Avg Type: Power (RMS), Avg/Hold: 1/1, Trig: Free Run

Frequency: Center Frequency: 2.000000000 GHz, Span: 2.000000000 GHz, Sweep Span: Zero Span, Full Span

Start Freq: 1.000000000 GHz

Stop Freq: 3.000000000 GHz

AUTO TUNE

CF Step: 200.0000000 MHz, Auto, Man

Freq Offset: 0 Hz

X Axis Scale: Log, Lin

Start 1.000 GHz, #Res BW 1.0 MHz, #Video BW 3.0 MHz, Stop 3.000 GHz, #Sweep -1.00 s (40001 pts)

Local

The screenshot displays the Keysight Spectrum Analyzer 1 interface. The main display shows a spectrum plot with a yellow trace. A marker is placed on the trace at 3.731675 GHz with a level of -34.883 dBm. The plot has a logarithmic scale on the y-axis (dBm) ranging from -70 to 10. The x-axis represents frequency in GHz, with major ticks at 3.0, 4.0, and 5.0. The plot is titled '1 Spectrum' and 'Scale/Div 10 dB'. The center frequency is set to 6.500000000 GHz. The span is 7.000000000 GHz. The start frequency is 3.000000000 GHz and the stop frequency is 10.000000000 GHz. The resolution bandwidth (RBW) is 3.000 MHz and the video bandwidth (VBW) is 3.0 MHz. The sweep rate is 1.00 s (40001 pts). The interface includes various control buttons and settings on the right side, such as 'Span', 'Sweep Span', 'Zero Span', 'Full Span', 'Start Freq', 'Stop Freq', 'CF Step', 'Auto', 'Main', 'Freq Offset', 'X Axis Scale', 'Log', 'Lin', 'Signal Track', and 'Local'. The bottom status bar shows the date and time as Jul 31, 2025, 16:10:45.

The screenshot displays the Keysight Spectrum Analyzer 1 interface. The main display shows a spectrum plot with a yellow trace. A significant peak is labeled "Mkr1 80.628 kHz -89.818 dBm". The plot has a frequency range from 9.00 kHz to 150.00 kHz and a resolution bandwidth of 3.0 kHz. The vertical axis represents power in dBm, ranging from -100 to 20. The interface includes various control panels on the left and right, such as "Spectrum Analyzer 1", "Settings", and "Frequency". The top status bar shows the date and time as "Jul 31, 2025 16:10:55".

[illegible]

Keysight Spectrum Analyzer 1 Sweep SA

Input: RF, Coupling: AC, Align: Auto

Input Z: 50 Ω , Corr: COrr, Freq Ref: Int (S)

Attenu: 30 dB, μ V Path: Standard, Gate: Off, IF Gain: Low, Seg Track: Off

IF Type: Fast, Avg/hold: 1/1, Trig: Free Run

#Agc Type: Power (RMS), A1: 2, A2: 3, A3: 4, A4: 5, A5: 6, A6: 7, A7: 8, A8: 9, A9: 10, A10: 11, A11: 12, A13: 14, A14: 15, A15: 16, A16: 17, A17: 18, A18: 19, A19: 20, A20: 21, A22: 22, A23: 23, A24: 24, A25: 25, A26: 26, A27: 27, A28: 28, A29: 29, A30: 30, A31: 31, A32: 32, A33: 33, A34: 34, A35: 35, A36: 36, A37: 37, A38: 38, A39: 39, A40: 40, A41: 41, A42: 42, A43: 43, A44: 44, A45: 45, A46: 46, A47: 47, A48: 48, A49: 49, A50: 50, A51: 51, A52: 52, A53: 53, A54: 54, A55: 55, A56: 56, A57: 57, A58: 58, A59: 59, A60: 60, A61: 61, A62: 62, A63: 63, A64: 64, A65: 65, A66: 66, A67: 67, A68: 68, A69: 69, A70: 70, A71: 71, A72: 72, A73: 73, A74: 74, A75: 75, A76: 76, A77: 77, A78: 78, A79: 79, A80: 80, A81: 81, A82: 82, A83: 83, A84: 84, A85: 85, A86: 86, A87: 87, A88: 88, A89: 89, A90: 90, A91: 91, A92: 92, A93: 93, A94: 94, A95: 95, A96: 96, A97: 97, A98: 98, A99: 99, A100: 100, A101: 101, A102: 102, A103: 103, A104: 104, A105: 105, A106: 106, A107: 107, A108: 108, A109: 109, A110: 110, A111: 111, A112: 112, A113: 113, A114: 114, A115: 115, A116: 116, A117: 117, A118: 118, A119: 119, A120: 120, A121: 121, A122: 122, A123: 123, A124: 124, A125: 125, A126: 126, A127: 127, A128: 128, A129: 129, A130: 130, A131: 131, A132: 132, A133: 133, A134: 134, A135: 135, A136: 136, A137: 137, A138: 138, A139: 139, A140: 140, A141: 141, A142: 142, A143: 143, A144: 144, A145: 145, A146: 146, A147: 147, A148: 148, A149: 149, A150: 150, A151: 151, A152: 152, A153: 153, A154: 154, A155: 155, A156: 156, A157: 157, A158: 158, A159: 159, A160: 160, A161: 161, A162: 162, A163: 163, A164: 164, A165: 165, A166: 166, A167: 167, A168: 168, A169: 169, A170: 170, A171: 171, A172: 172, A173: 173, A174: 174, A175: 175, A176: 176, A177: 177, A178: 178, A179: 179, A180: 180, A181: 181, A182: 182, A183: 183, A184: 184, A185: 185, A186: 186, A187: 187, A188: 188, A189: 189, A190: 190, A191: 191, A192: 192, A193: 193, A194: 194, A195: 195, A196: 196, A197: 197, A198: 198, A199: 199, A200: 200, A201: 201, A202: 202, A203: 203, A204: 204, A205: 205, A206: 206, A207: 207, A208: 208, A209: 209, A210: 210, A211: 211, A212: 212, A213: 213, A214: 214, A215: 215, A216: 216, A217: 217, A218: 218, A219: 219, A220: 220, A221: 221, A222: 222, A223: 223, A224: 224, A225: 225, A226: 226, A227: 227, A228: 228, A229: 229, A230: 230, A231: 231, A232: 232, A233: 233, A234: 234, A235: 235, A236: 236, A237: 237, A238: 238, A239: 239, A240: 240, A241: 241, A242: 242, A243: 243, A244: 244, A245: 245, A246: 246, A247: 247, A248: 248, A249: 249, A250: 250, A251: 251, A252: 252, A253: 253, A254: 254, A255: 255, A256: 256, A257: 257, A258: 258, A259: 259, A260: 260, A261: 261, A262: 262, A263: 263, A264: 264, A265: 265, A266: 266, A267: 267, A268: 268, A269: 269, A270: 270, A271: 271, A272: 272, A273: 273, A274: 274, A275: 275, A276: 276, A277: 277, A278: 278, A279: 279, A280: 280, A281: 281, A282: 282, A283: 283, A284: 284, A285: 285, A286: 286, A287: 287, A288: 288, A289: 289, A290: 290, A291: 291, A292: 292, A293: 293, A294: 294, A295: 295, A296: 296, A297: 297, A298: 298, A299: 299, A300: 300, A301: 301, A302: 302, A303: 303, A304: 304, A305: 305, A306: 306, A307: 307, A308: 308, A309: 309, A310: 310, A311: 311, A312: 312, A313: 313, A314: 314, A315: 315, A316: 316, A317: 317, A318: 318, A319: 319, A320: 320, A321: 321, A322: 322, A323: 323, A324: 324, A325: 325, A326: 326, A327: 327, A328: 328, A329: 329, A330: 330, A331: 331, A332: 332, A333: 333, A334: 334, A335: 335, A336: 336, A337: 337, A338: 338, A339: 339, A340: 340, A341: 341, A342: 342, A343: 343, A344: 344, A345: 345, A346: 346, A347: 347, A348: 348, A349: 349, A350: 350, A351: 351, A352: 352, A353: 353, A354: 354, A355: 355, A356: 356, A357: 357, A358: 358, A359: 359, A360: 360, A361: 361, A362: 362, A363: 363, A364: 364, A365: 365, A366: 366, A367: 367, A368: 368, A369: 369, A370: 370, A371: 371, A372: 372, A373: 373, A374: 374, A375: 375, A376: 376, A377: 377, A378: 378, A379: 379, A380: 380, A381: 381, A382: 382, A383: 383, A384: 384, A385: 385, A386: 386, A387: 387, A388: 388, A389: 389, A390: 390, A391: 391, A392: 392, A393: 393, A394: 394, A395: 395, A396: 396, A397: 397, A398: 398, A399: 399, A400: 400, A401: 401, A402: 402, A403: 403, A404: 404, A405: 405, A406: 40

[illegible]

The screenshot displays the Keysight Spectrum Analyzer 1 interface. The main display shows a spectrum plot with a yellow trace. A peak is labeled 'Mkr1 3.719 75 GHz -34.516 dBm'. The plot has a scale of 10 dB and a frequency range from 3.000 GHz to 10.000 GHz. The resolution bandwidth (RBW) is 3.0 MHz. The video bandwidth (VBW) is 3.0 MHz. The sweep rate is 1.00 s / (40001 pts). The center frequency is 3.500000000 GHz. The span is 7.000000000 GHz. The start frequency is 3.000000000 GHz. The stop frequency is 10.000000000 GHz. The CF step is 700.000000 MHz. The auto tune function is enabled. The signal track is set to 'Log'.

Keysight Spectrum Analyzer 1
 Sweep SA

Input: Z 50 D
Ref: Coupling AC
Align: Auto

Attenuation: 30 dB
Path: Standard
Gain: Low
Track: Off

Power: Fast
Hold: 111
Run: Free

Measurement: Avg Type: Power (RMS)
 Avg Hold: 111
 Trg: Free Run
 0.2 3 4 9 0
 A W W W W W W
 A A A A A A A

Center Frequency: 3.500000000 GHz
Span: 7.000000000 GHz
Swept Span: Zero Span
Full Span
Start Freq: 3.000000000 GHz
Stop Freq: 10.000000000 GHz
AUTO TUNE
CF Step: 700.000000 MHz
Auto
Man
Freq Offset: 0 Hz
X Axis Scale: Log
Lin
Signal Track
Local

1 Spectrum
Scale/Div 10 dB
Log

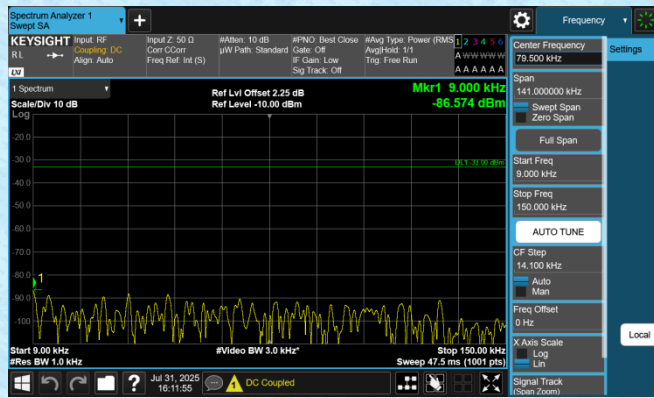
Ref Lvl Offset 19.25 dBm
Ref Level 20.00 dBm

Mkr1 3.719 75 GHz
-34.516 dBm

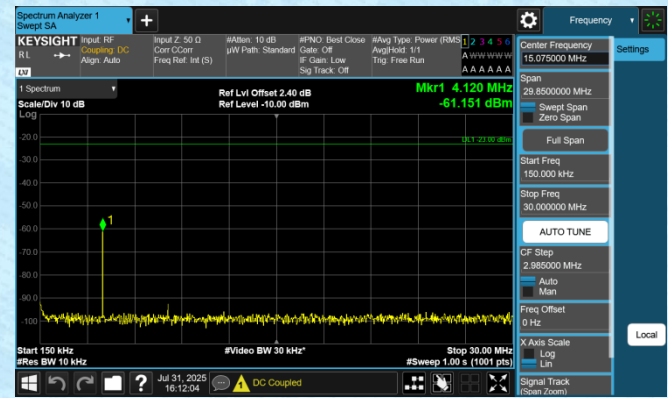
Start 3.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 10.000 GHz
#Sweep ~1.00 s (40001 pts)

Start 3.000 GHz
Stop 10.000 GHz
CF Step 700.000000 MHz
Auto
Man
Freq Offset 0 Hz
X Axis Scale Log
Lin
Signal Track
Local

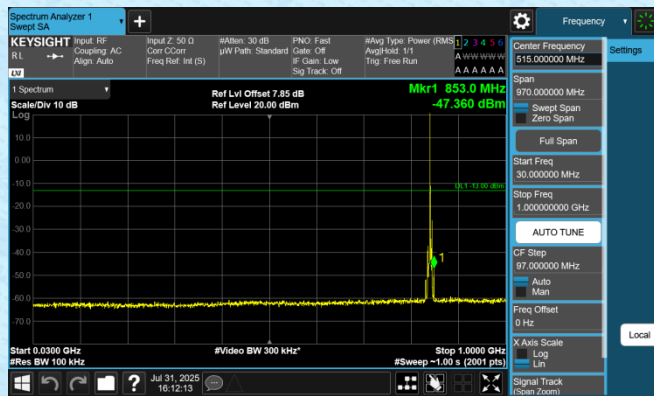
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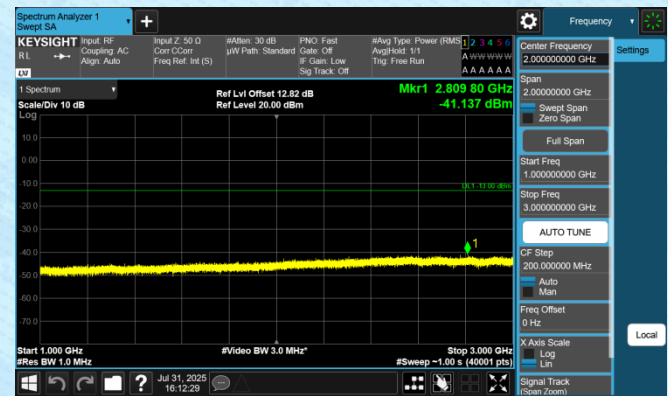
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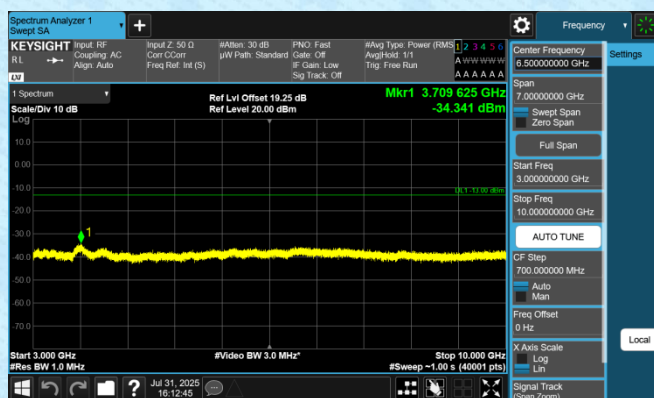
Band5-5MHz-QPSK-20625-1RB#0-0.15~30-PASS



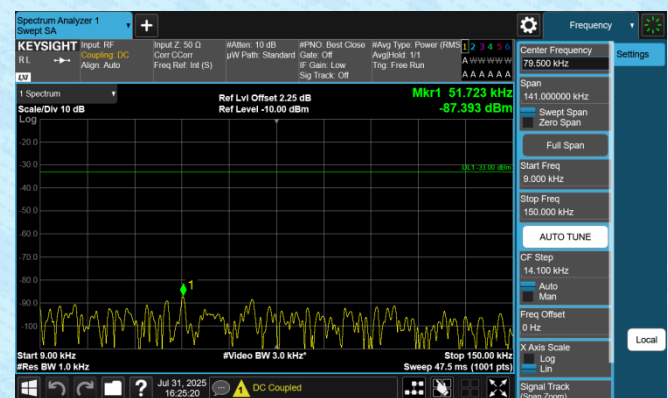
Band5-5MHz-QPSK-20625-1RB#0-30~1000-PASS



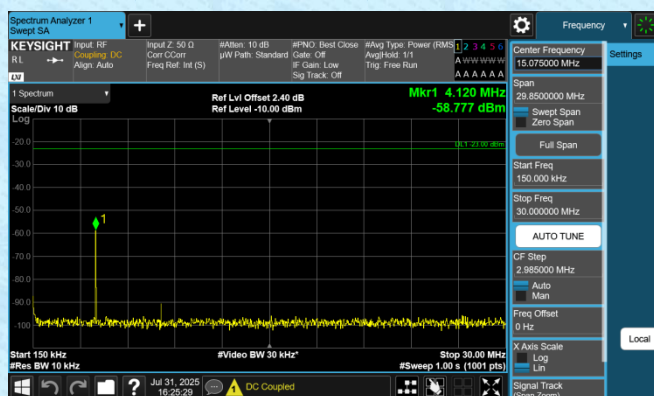
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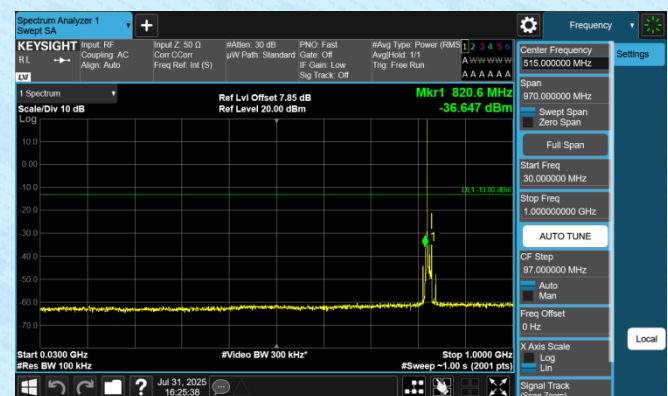
Band5-5MHz-QPSK-20625-1RB#0-3000~10000-PASS



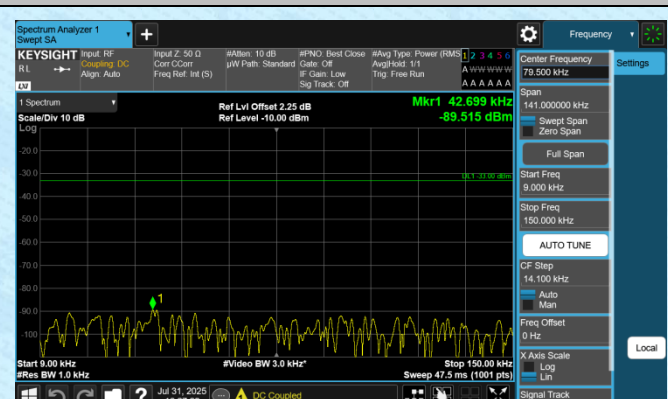
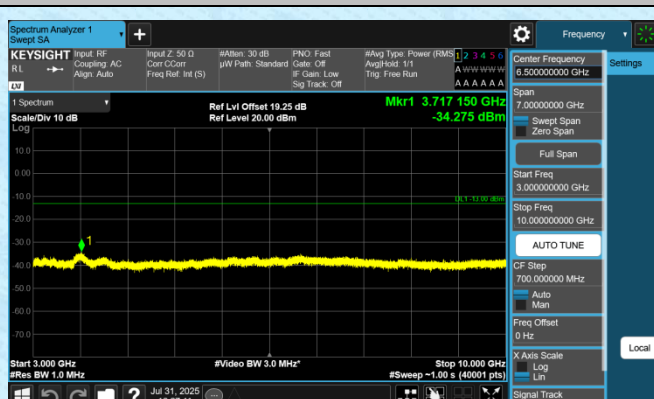
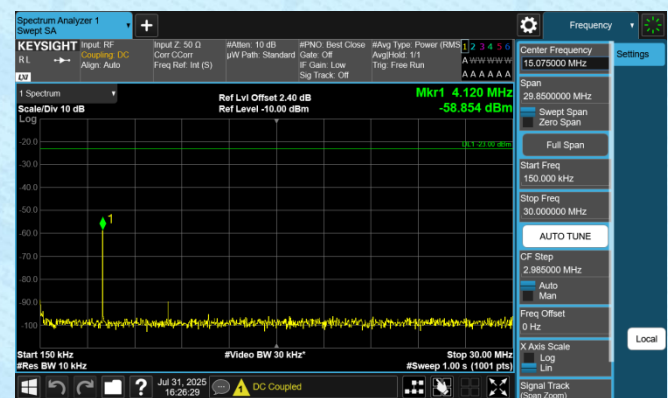
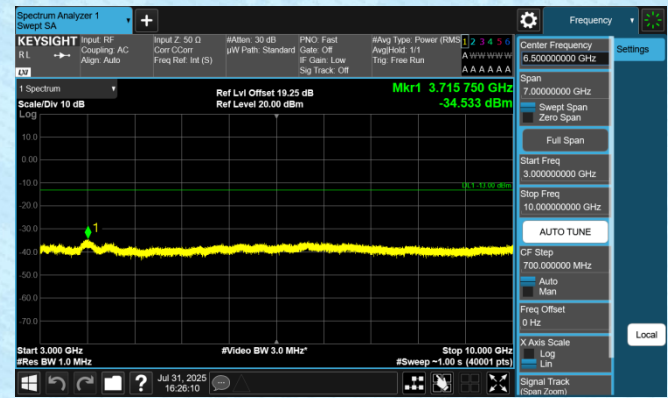
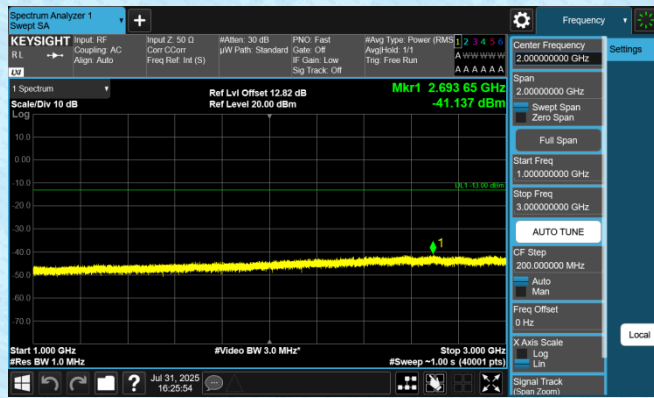
Band5-10MHz-QPSK-20450-1RB#0-0.009~0.15-PASS

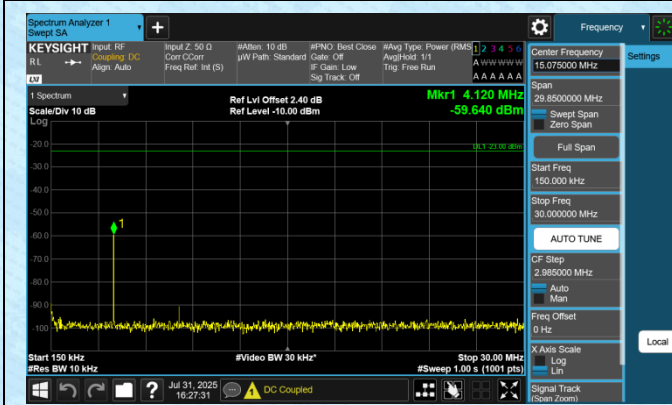


Band5-10MHz-QPSK-20450-1RB#0-0.15~30-PASS

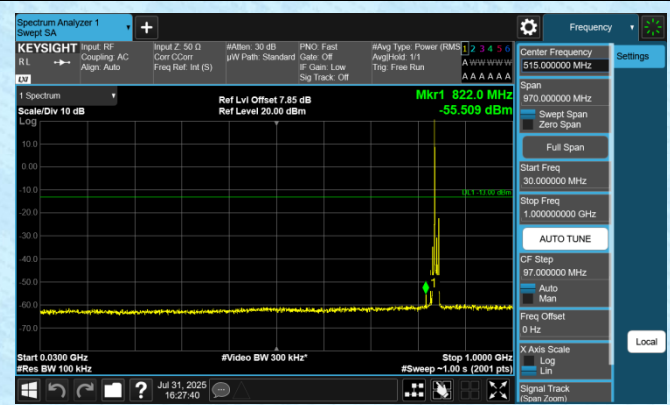


Band5-10MHz-QPSK-20450-1RB#0-30~1000-PASS

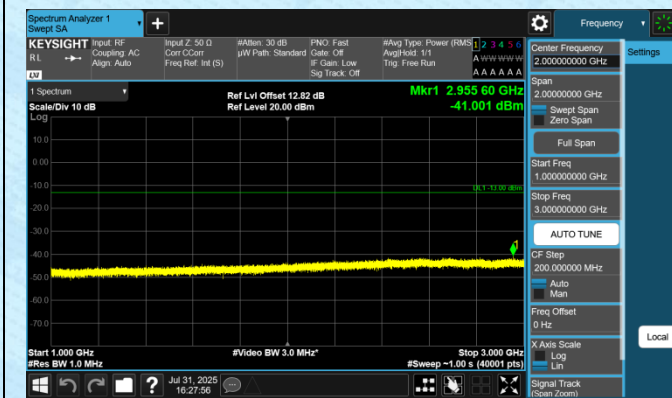




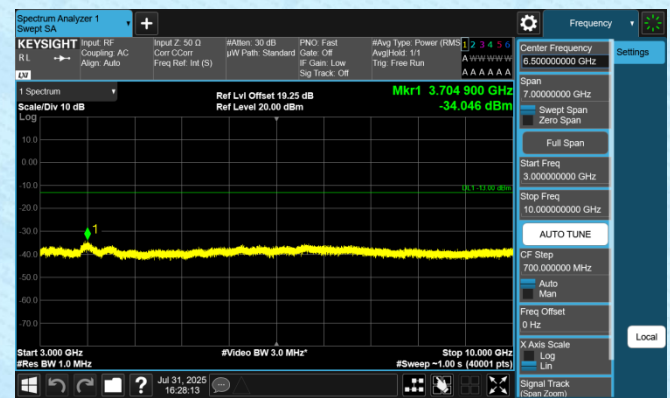
Band5-10MHz-QPSK-20600-1RB#0-0.15~30-PASS



Band5-10MHz-QPSK-20600-1RB#0-30~1000-PASS



Band5-10MHz-QPSK-20600-1RB#0-1000~3000-PASS



Band5-10MHz-QPSK-20600-1RB#0-3000~10000-PASS

Appendix F: Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	VN	NT	-3.58	-0.004341	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	VL	NT	-2.22	-0.002692	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	VH	NT	-2.49	-0.003019	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	VN	NT	0.94	0.001140	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	VL	NT	-2.50	-0.003031	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	VH	NT	-2.10	-0.002546	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	VN	NT	2.03	0.002427	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	VL	NT	2.57	0.003072	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	VH	NT	-2.70	-0.003228	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	VN	NT	-2.68	-0.003204	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	VL	NT	2.75	0.003288	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	VH	NT	2.85	0.003407	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	VN	NT	2.00	0.002358	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	VL	NT	3.20	0.003772	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	VH	NT	2.92	0.003442	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	VN	NT	1.82	0.002145	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	VL	NT	2.99	0.003525	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	VH	NT	2.62	0.003089	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	VN	NT	3.03	0.003671	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	VL	NT	3.16	0.003828	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	VH	NT	2.76	0.003343	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	VN	NT	3.59	0.004349	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	VL	NT	3.16	0.003828	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	VH	NT	2.98	0.003610	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	VN	NT	2.16	0.002582	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	VL	NT	-2.62	-0.003132	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	VH	NT	2.06	0.002463	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	VN	NT	1.93	0.002307	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	VL	NT	2.82	0.003371	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	VH	NT	2.07	0.002475	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	VN	NT	-1.59	-0.001876	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	VL	NT	-2.13	-0.002513	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	VH	NT	-1.40	-0.001652	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	VN	NT	-2.89	-0.003410	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	VL	NT	-2.79	-0.003292	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	VH	NT	-3.49	-0.004118	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	VN	NT	-2.66	-0.003218	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	VL	NT	-2.19	-0.002650	±2.5	PASS

Band5	5MHz	QPSK	20425	25RB#0	VH	NT	-1.89	-0.002287	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	VN	NT	-3.39	-0.004102	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	VL	NT	2.37	0.002868	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	VH	NT	1.83	0.002214	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	VN	NT	-1.19	-0.001423	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	VL	NT	3.19	0.003814	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	VH	NT	-3.19	-0.003814	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	VN	NT	2.43	0.002905	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	VL	NT	-1.34	-0.001602	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	VH	NT	2.22	0.002654	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	VN	NT	-1.92	-0.002268	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	VL	NT	2.98	0.003520	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	VH	NT	3.06	0.003615	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	VN	NT	2.55	0.003012	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	VL	NT	2.89	0.003414	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	VH	NT	3.19	0.003768	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VN	NT	-2.10	-0.002533	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VL	NT	-1.92	-0.002316	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VH	NT	3.03	0.003655	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	2.83	0.003383	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-1.80	-0.002152	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	1.46	0.001745	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VN	NT	-1.95	-0.002310	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VL	NT	-2.30	-0.002725	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VH	NT	-2.19	-0.002595	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	NV	-30	-3.53	-0.004280	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	-20	2.63	0.003189	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	-10	-4.33	-0.005250	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	0	2.33	0.002825	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	10	1.66	0.002013	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	20	-2.17	-0.002631	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	30	-1.54	-0.001867	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	40	-3.98	-0.004826	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	50	-1.80	-0.002183	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	-30	-4.25	-0.005153	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	-20	-3.36	-0.004074	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	-10	-2.73	-0.003310	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	0	-2.80	-0.003395	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	10	-2.92	-0.003541	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	20	-1.82	-0.002207	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	30	-2.12	-0.002571	±2.5	PASS

Band5	1.4MHz	16QAM	20407	6RB#0	NV	40	-2.06	-0.002498	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	50	1.33	0.001613	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	-30	-2.07	-0.002475	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	-20	-2.62	-0.003132	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	-10	-3.15	-0.003766	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	0	1.47	0.001757	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	10	-2.42	-0.002893	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	20	1.87	0.002236	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	30	2.29	0.002738	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	40	-2.73	-0.003264	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	50	2.12	0.002534	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	-30	3.13	0.003742	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	-20	-1.29	-0.001542	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	-10	2.43	0.002905	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	0	-1.82	-0.002176	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	10	-3.20	-0.003825	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	20	-2.33	-0.002785	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	30	-1.85	-0.002212	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	40	-2.23	-0.002666	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	50	1.87	0.002236	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	-30	2.36	0.002782	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	-20	3.92	0.004621	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	-10	3.68	0.004338	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	0	4.02	0.004739	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	10	2.83	0.003336	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	20	2.72	0.003206	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	30	2.69	0.003171	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	40	3.53	0.004161	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	50	2.65	0.003124	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	-30	2.26	0.002664	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	-20	2.98	0.003513	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	-10	2.56	0.003018	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	0	4.39	0.005175	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	10	4.61	0.005434	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	20	3.50	0.004126	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	30	2.16	0.002546	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	40	2.12	0.002499	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	50	2.52	0.002971	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	-30	2.30	0.002786	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	-20	4.09	0.004955	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	-10	3.22	0.003901	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	0	2.95	0.003574	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	10	2.63	0.003186	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	20	3.60	0.004361	±2.5	PASS

Band5	3MHz	QPSK	20415	15RB#0	NV	30	3.65	0.004422	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	40	3.49	0.004228	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	50	2.96	0.003586	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	-30	2.95	0.003574	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	-20	-1.59	-0.001926	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	-10	-3.02	-0.003658	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	0	-1.80	-0.002180	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	10	-2.46	-0.002980	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	20	3.35	0.004058	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	30	2.83	0.003428	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	40	3.20	0.003876	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	50	2.82	0.003416	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	-30	-2.26	-0.002702	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	-20	2.89	0.003455	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	-10	0.97	0.001160	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	0	1.20	0.001435	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	10	1.54	0.001841	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	20	1.42	0.001698	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	30	-1.37	-0.001638	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	40	-1.83	-0.002188	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	50	3.32	0.003969	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	-30	3.00	0.003586	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	-20	-2.55	-0.003048	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	-10	-2.39	-0.002857	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	0	-2.42	-0.002893	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	10	1.93	0.002307	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	20	-1.92	-0.002295	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	30	-2.30	-0.002750	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	40	-2.29	-0.002738	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	50	1.89	0.002259	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	-30	-2.56	-0.003021	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	-20	2.56	0.003021	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	-10	-1.23	-0.001451	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	0	2.43	0.002867	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	10	-3.22	-0.003799	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	20	-2.40	-0.002832	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	30	-2.22	-0.002619	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	40	-1.69	-0.001994	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	50	-1.49	-0.001758	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	-30	1.56	0.001841	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	-20	-2.73	-0.003221	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	-10	2.40	0.002832	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	0	-1.66	-0.001959	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	10	1.44	0.001699	±2.5	PASS

Band5	3MHz	16QAM	20635	15RB#0	NV	20	-3.75	-0.004425	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	30	-2.09	-0.002466	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	40	-2.72	-0.003209	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	50	-2.29	-0.002702	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	-30	-1.43	-0.001730	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	-20	2.49	0.003013	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	-10	1.73	0.002093	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	0	-1.23	-0.001488	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	10	2.46	0.002976	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	20	1.79	0.002166	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	30	2.02	0.002444	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	40	-2.62	-0.003170	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	50	-2.68	-0.003243	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	-30	-2.43	-0.002940	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	-20	-2.80	-0.003388	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	-10	-3.86	-0.004670	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	0	-2.75	-0.003327	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	10	2.22	0.002686	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	20	-2.55	-0.003085	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	30	0.96	0.001162	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	40	-2.45	-0.002964	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	50	-2.60	-0.003146	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	-30	1.66	0.001984	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	-20	-2.15	-0.002570	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	-10	2.26	0.002702	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	0	2.39	0.002857	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	10	1.77	0.002116	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	20	-1.70	-0.002032	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	30	-2.12	-0.002534	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	40	1.43	0.001710	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	50	2.59	0.003096	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	-30	-1.17	-0.001399	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	-20	-2.57	-0.003072	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	-10	-2.00	-0.002391	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	0	2.65	0.003168	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	10	-1.32	-0.001578	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	20	1.73	0.002068	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	30	1.17	0.001399	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	40	2.13	0.002546	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	50	-2.76	-0.003299	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	-30	3.05	0.003603	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	-20	1.93	0.002280	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	-10	2.07	0.002445	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	0	1.96	0.002315	±2.5	PASS

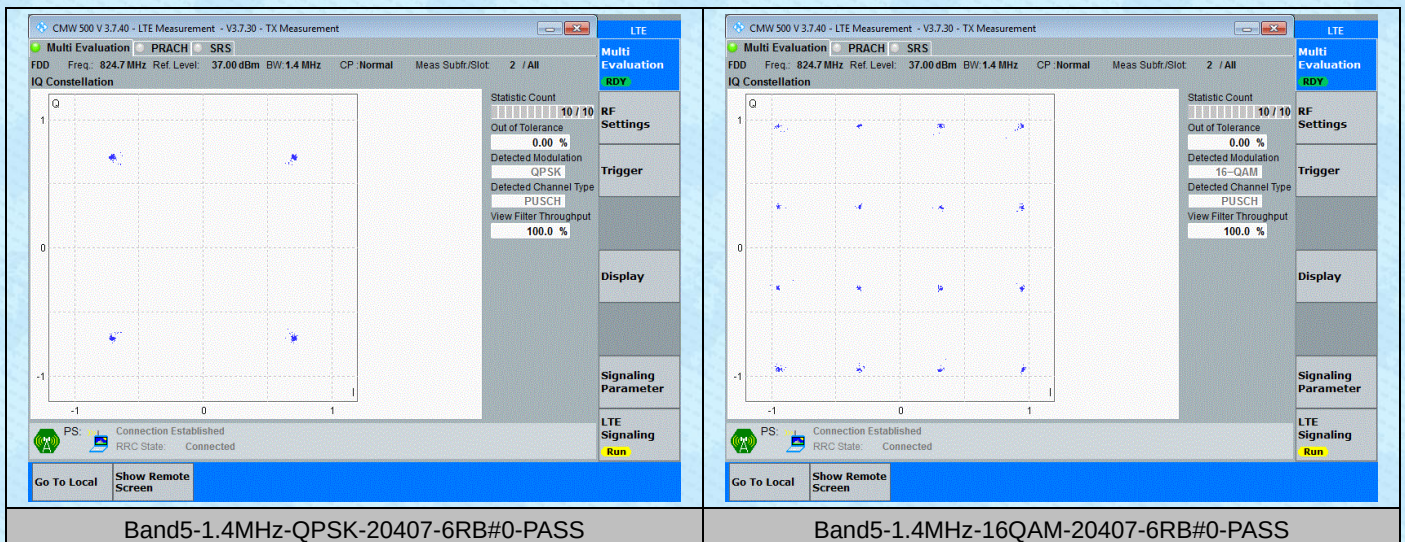
Band5	5MHz	QPSK	20625	25RB#0	NV	10	-1.30	-0.001536	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	20	-1.26	-0.001488	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	30	3.71	0.004383	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	40	1.57	0.001855	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	50	-3.40	-0.004017	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	-30	2.06	0.002434	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	-20	2.89	0.003414	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	-10	-2.22	-0.002623	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	0	2.88	0.003402	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	10	3.63	0.004288	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	20	1.22	0.001441	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	30	2.80	0.003308	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	40	2.42	0.002859	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	50	2.53	0.002989	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-30	-1.86	-0.002244	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-20	2.83	0.003414	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-10	-2.52	-0.003040	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	0	-1.95	-0.002352	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	10	2.59	0.003124	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	20	-1.85	-0.002232	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	30	-1.67	-0.002014	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	40	3.69	0.004451	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	50	2.70	0.003257	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	2.19	0.002618	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	1.79	0.002140	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-10	2.26	0.002702	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-1.67	-0.001996	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-1.63	-0.001949	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	3.40	0.004065	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	2.29	0.002738	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	-2.45	-0.002929	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	3.23	0.003861	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-30	-2.17	-0.002571	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-20	1.40	0.001659	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-10	-1.46	-0.001730	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	0	1.20	0.001422	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	10	2.82	0.003341	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	20	-1.73	-0.002050	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	30	-2.39	-0.002832	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	40	1.33	0.001576	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	50	2.35	0.002784	±2.5	PASS

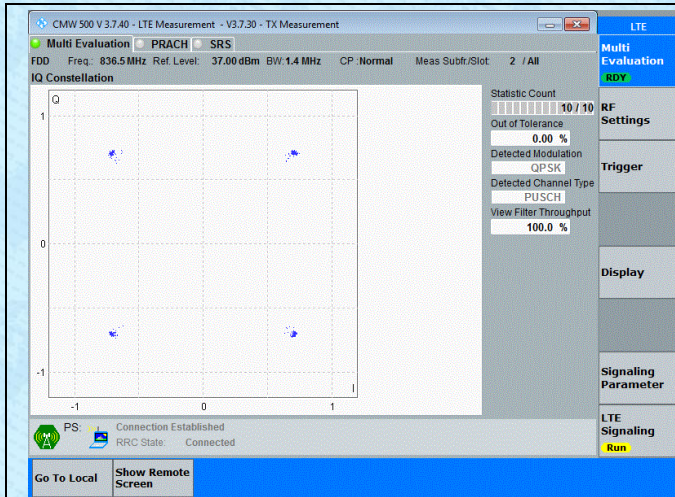
AppendixG:Modulation Characteristics

Test Result

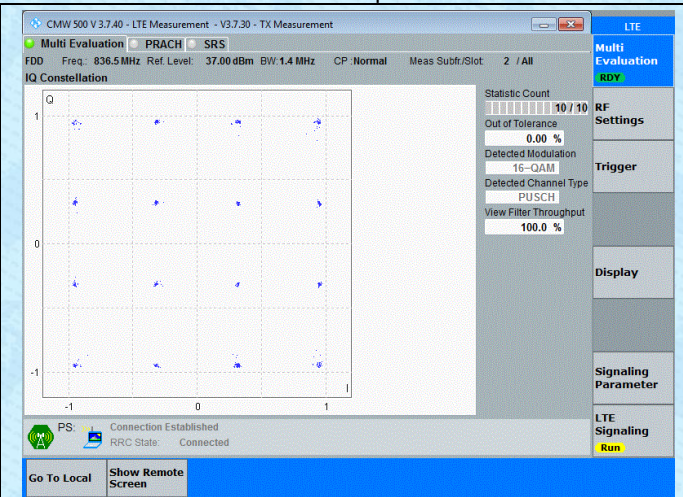
Band	Bandwidth	Modulation	Channel	RB Configuration	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	PASS
Band5	3MHz	QPSK	20415	15RB#0	PASS
Band5	3MHz	16QAM	20415	15RB#0	PASS
Band5	3MHz	QPSK	20525	15RB#0	PASS
Band5	3MHz	16QAM	20525	15RB#0	PASS
Band5	3MHz	QPSK	20635	15RB#0	PASS
Band5	3MHz	16QAM	20635	15RB#0	PASS
Band5	5MHz	QPSK	20425	25RB#0	PASS
Band5	5MHz	16QAM	20425	25RB#0	PASS
Band5	5MHz	QPSK	20525	25RB#0	PASS
Band5	5MHz	16QAM	20525	25RB#0	PASS
Band5	5MHz	QPSK	20625	25RB#0	PASS
Band5	5MHz	16QAM	20625	25RB#0	PASS
Band5	10MHz	QPSK	20450	50RB#0	PASS
Band5	10MHz	16QAM	20450	1RB#0	PASS
Band5	10MHz	QPSK	20525	50RB#0	PASS
Band5	10MHz	16QAM	20525	1RB#0	PASS
Band5	10MHz	QPSK	20600	50RB#0	PASS
Band5	10MHz	16QAM	20600	1RB#0	PASS

Test Graphs

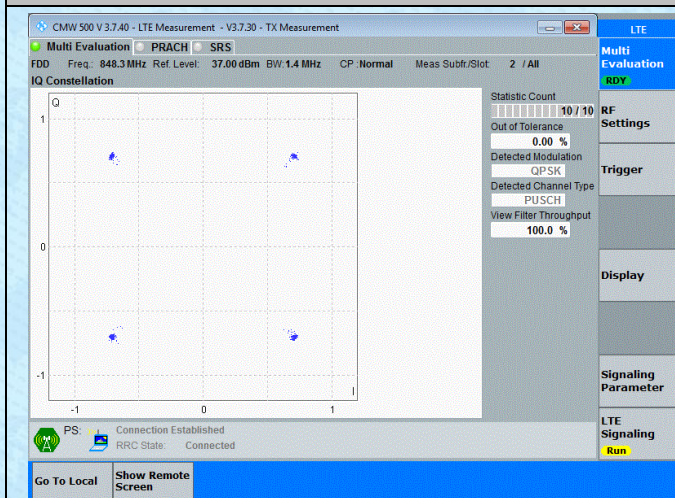




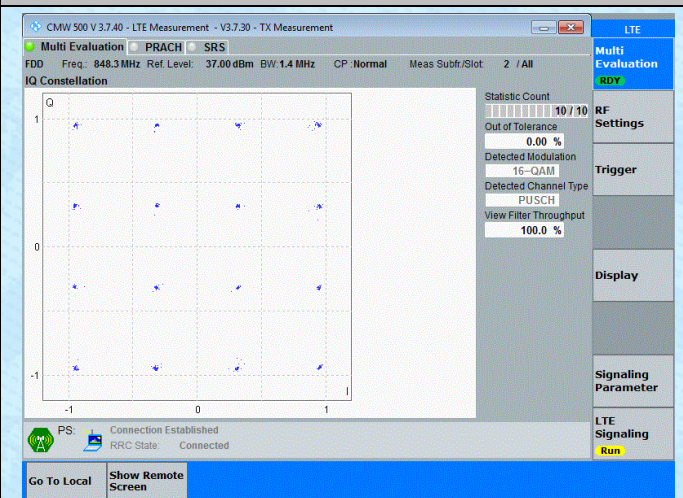
Band5-1.4MHz-QPSK-20525-6RB#0-PASS



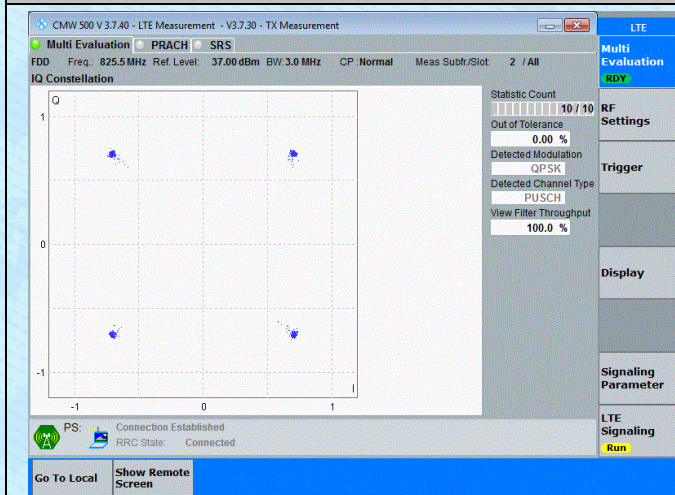
Band5-1.4MHz-16QAM-20525-6RB#0-PASS



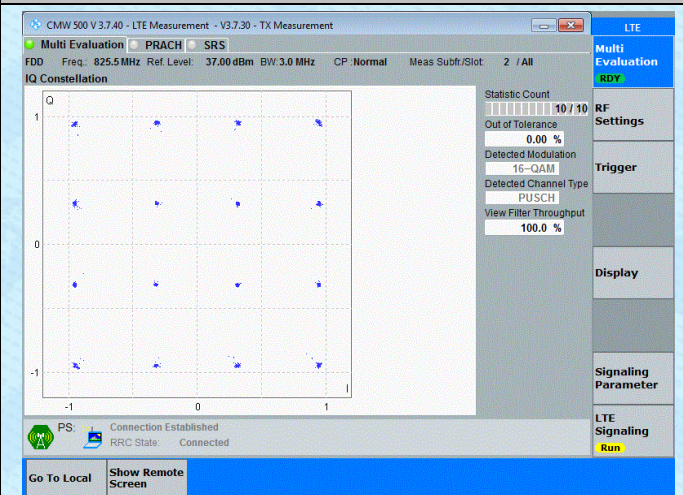
Band5-1.4MHz-QPSK-20643-6RB#0-PASS



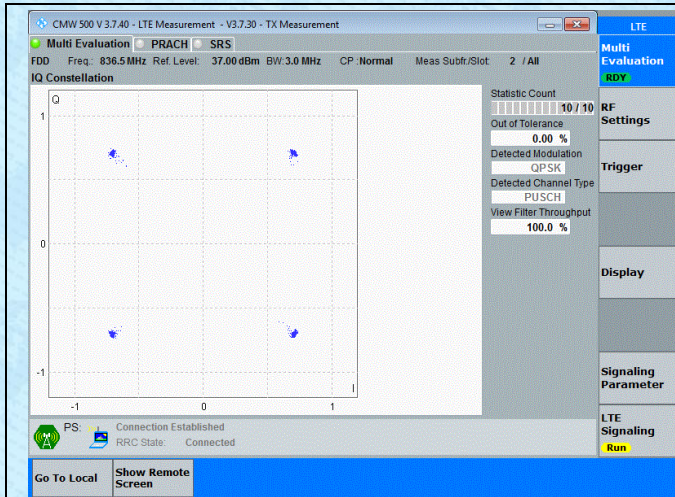
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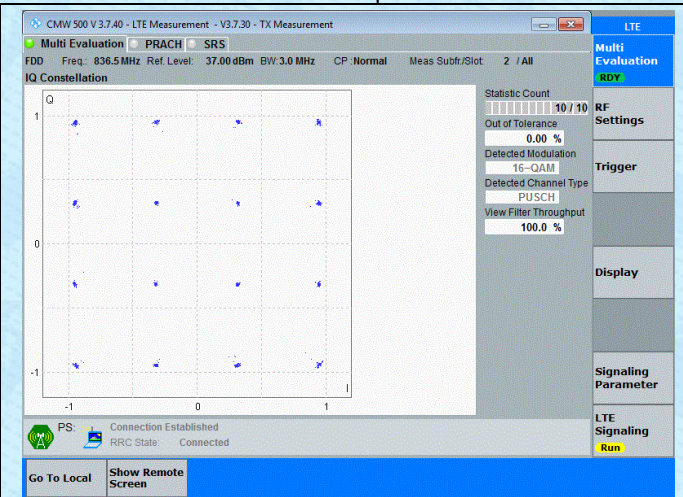
Band5-3MHz-QPSK-20415-15RB#0-PASS



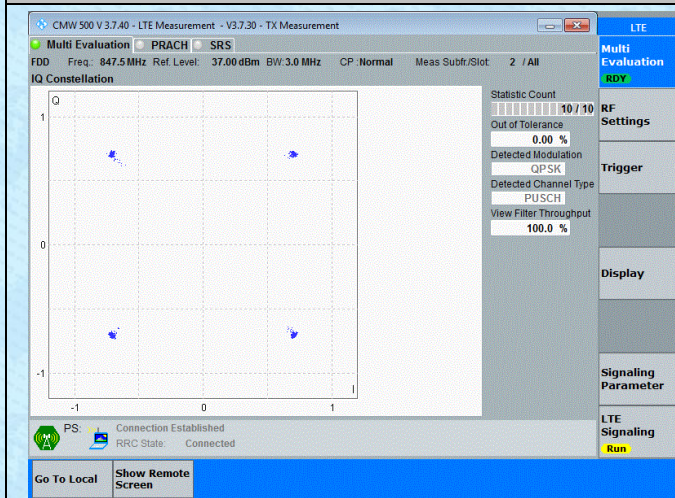
Band5-3MHz-16QAM-20415-15RB#0-PASS



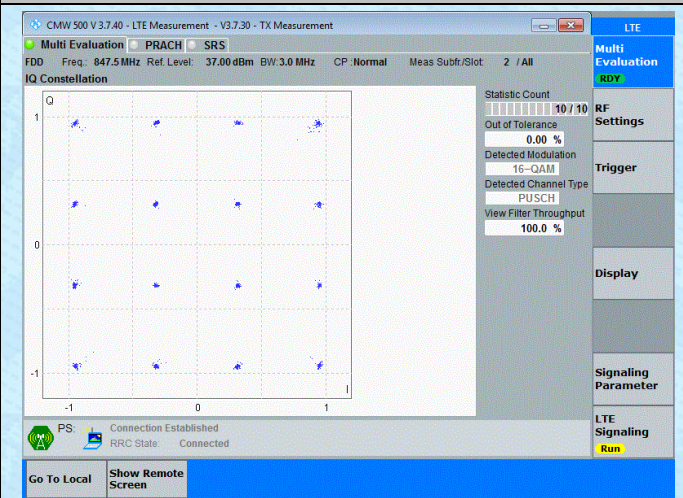
Band5-3MHz-QPSK-20525-15RB#0-PASS



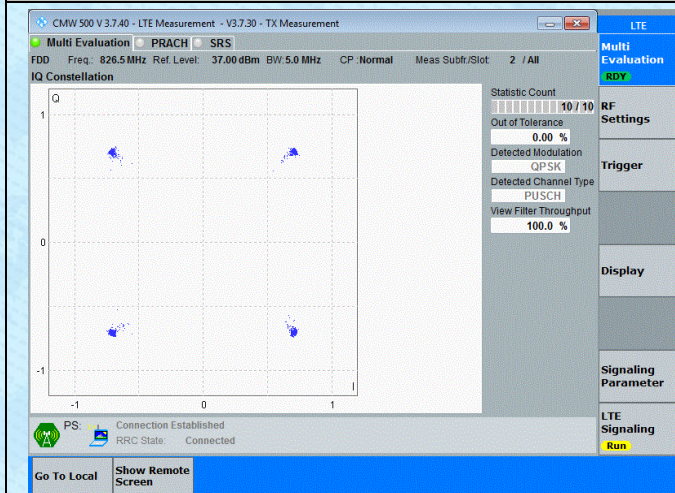
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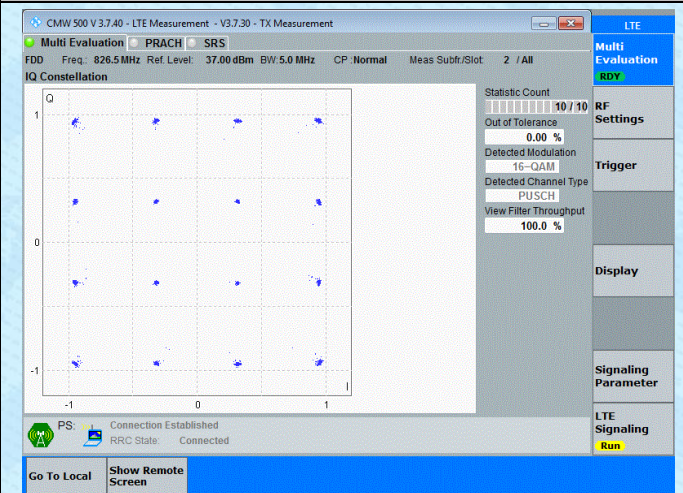
Band5-3MHz-QPSK-20635-15RB#0-PASS



Band5-3MHz-16QAM-20635-15RB#0-PASS



Band5-5MHz-QPSK-20425-25RB#0-PASS



Band5-5MHz-16QAM-20425-25RB#0-PASS