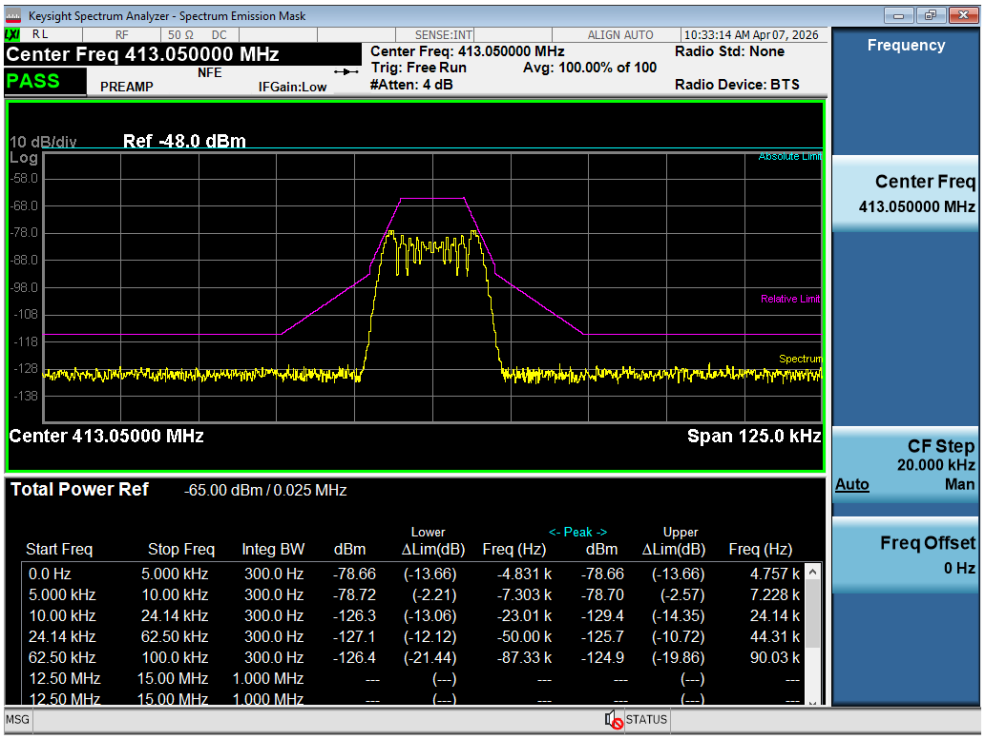
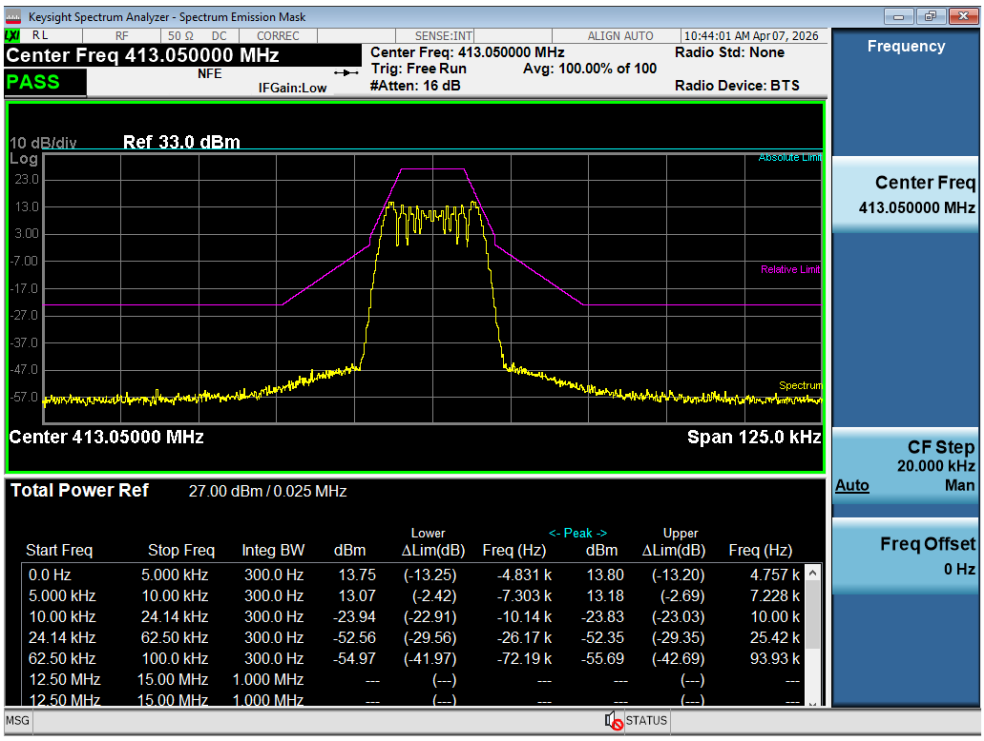
Input @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Uplink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | Peak dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | -78.66 | (-13.66) | -4.831 k | -78.66 | (-13.66) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | -78.72 | (-2.21) | -7.303 k | -78.70 | (-2.57) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -126.3 | (-13.06) | -23.01 k | -129.4 | (-14.35) | 24.14 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -127.1 | (-12.12) | -50.00 k | -125.7 | (-10.72) | 44.31 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -126.4 | (-21.44) | -87.33 k | -124.9 | (-19.86) | 90.03 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

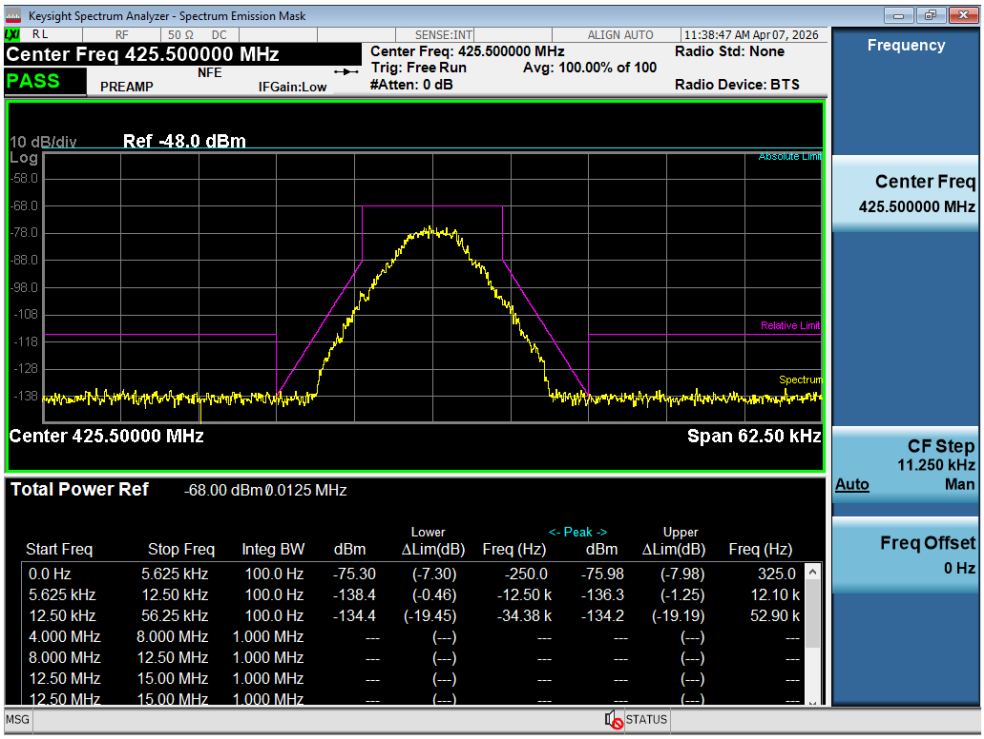
Output @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Uplink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | Peak dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | 13.75 | (-13.25) | -4.831 k | 13.80 | (-13.20) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | 13.07 | (-2.42) | -7.303 k | 13.18 | (-2.69) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -23.94 | (-22.91) | -10.14 k | -23.83 | (-23.03) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -52.56 | (-29.56) | -26.17 k | -52.35 | (-29.35) | 25.42 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -54.97 | (-41.97) | -72.19 k | -55.69 | (-42.69) | 93.93 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

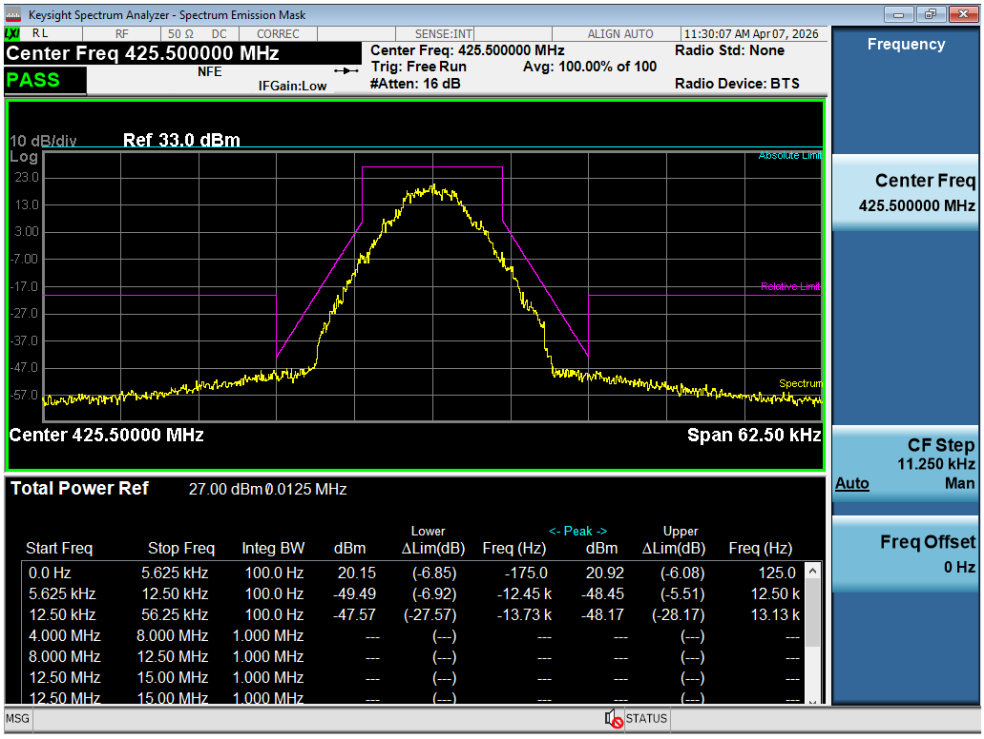

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (421 ~ 430) / Uplink / P25 Phase 1 (C4FM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -75.30 | (-7.30) | -250.0 | -75.98 | (-7.98) | 325.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -138.4 | (-0.46) | -12.50 k | -136.3 | (-1.25) | 12.10 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -134.4 | (-19.45) | -34.38 k | -134.2 | (-19.19) | 52.90 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

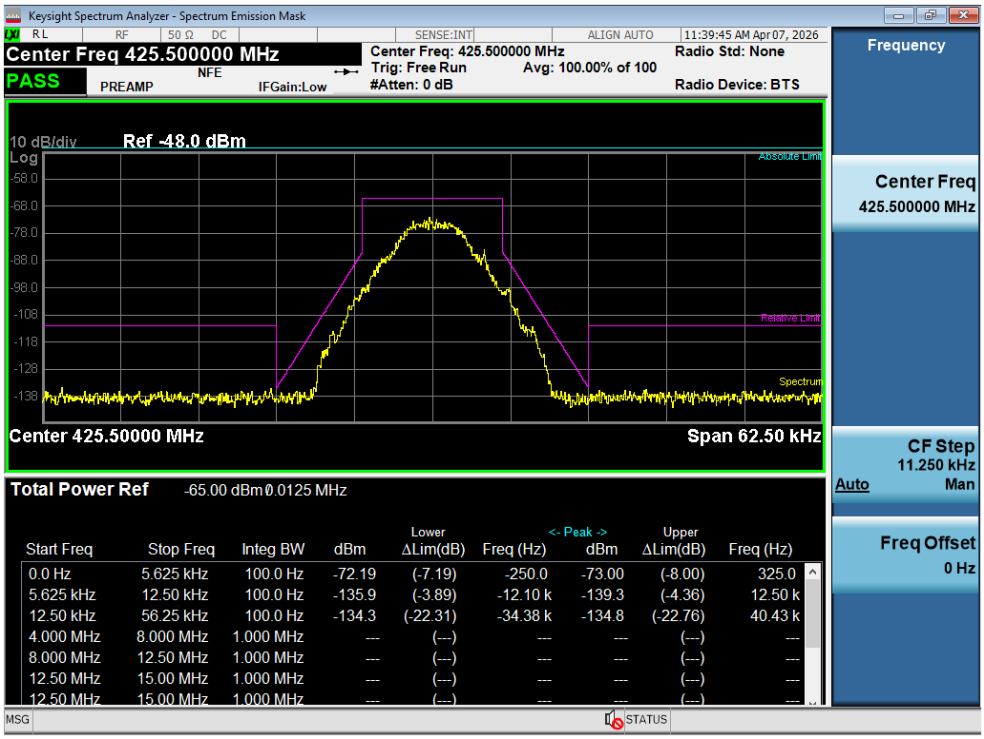
Output / UHF (421 ~ 430) / Uplink / P25 Phase 1 (C4FM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 20.15 | (-6.85) | -175.0 | 20.92 | (-6.08) | 125.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -49.49 | (-6.92) | -12.45 k | -48.45 | (-5.51) | 12.50 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -47.57 | (-27.57) | -13.73 k | -48.17 | (-28.17) | 13.13 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

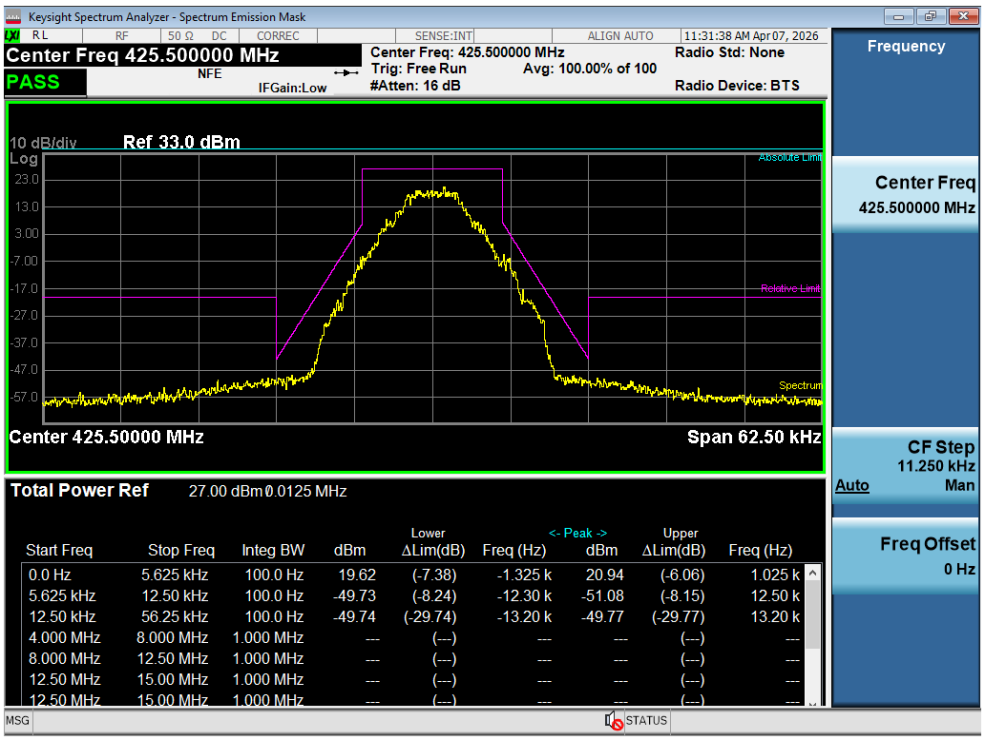

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (421 ~ 430) / Uplink / P25 Phase 1 (C4FM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -72.19 | (-7.19) | -250.0 | -73.00 | (-8.00) | 325.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -135.9 | (-3.89) | -12.10 k | -139.3 | (-4.36) | 12.50 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -134.3 | (-22.31) | -34.38 k | -134.8 | (-22.76) | 40.43 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output @ + 3 dB AGC threshold / UHF (421 ~ 430) / Uplink / P25 Phase 1 (C4FM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 19.62 | (-7.38) | -1.325 k | 20.94 | (-6.06) | 1.025 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -49.73 | (-8.24) | -12.30 k | -51.08 | (-8.15) | 12.50 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -49.74 | (-29.74) | -13.20 k | -49.77 | (-29.77) | 13.20 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



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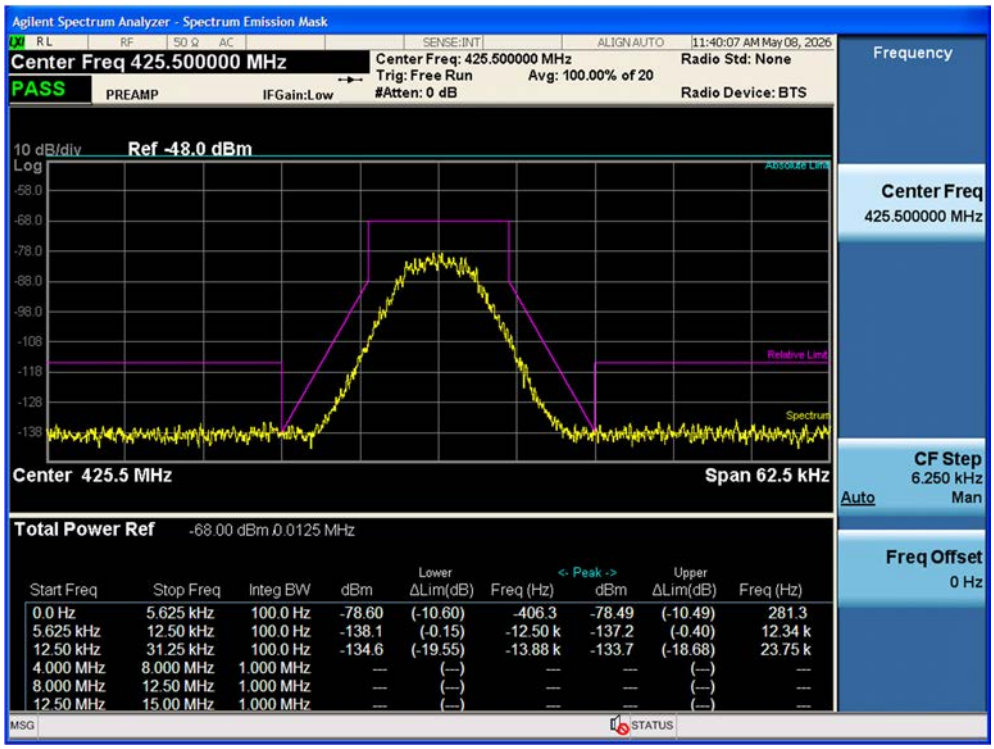
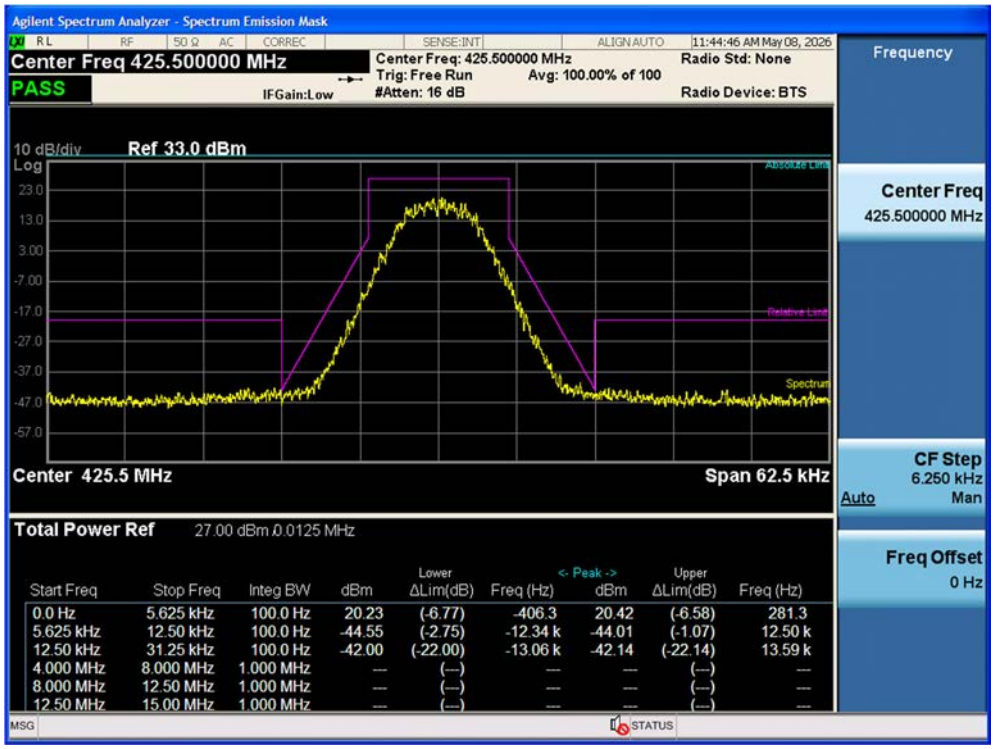
Input / UHF (421 ~ 430) / Uplink / P25 Phase 2 (H-CPM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | Peak dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -78.60 | (-10.60) | -406.3 | -78.49 | (-10.49) | 281.3 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -138.1 | (-0.15) | -12.50 k | -137.2 | (-0.40) | 12.34 k |
| 12.50 kHz | 31.25 kHz | 100.0 Hz | -134.6 | (-19.55) | -13.88 k | -133.7 | (-18.68) | 23.75 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output / UHF (421 ~ 430) / Uplink / P25 Phase 2 (H-CPM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | Peak dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 20.23 | (-6.77) | -406.3 | 20.42 | (-6.58) | 281.3 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -44.55 | (-2.75) | -12.34 k | -44.01 | (-1.07) | 12.50 k |
| 12.50 kHz | 31.25 kHz | 100.0 Hz | -42.00 | (-22.00) | -13.06 k | -42.14 | (-22.14) | 13.59 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



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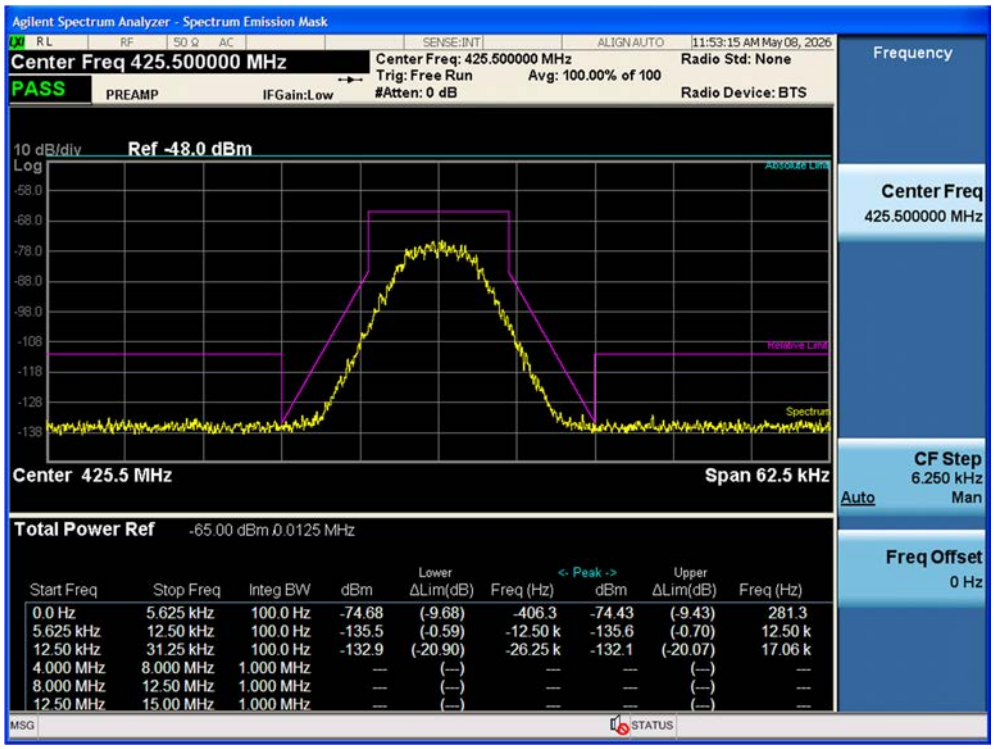
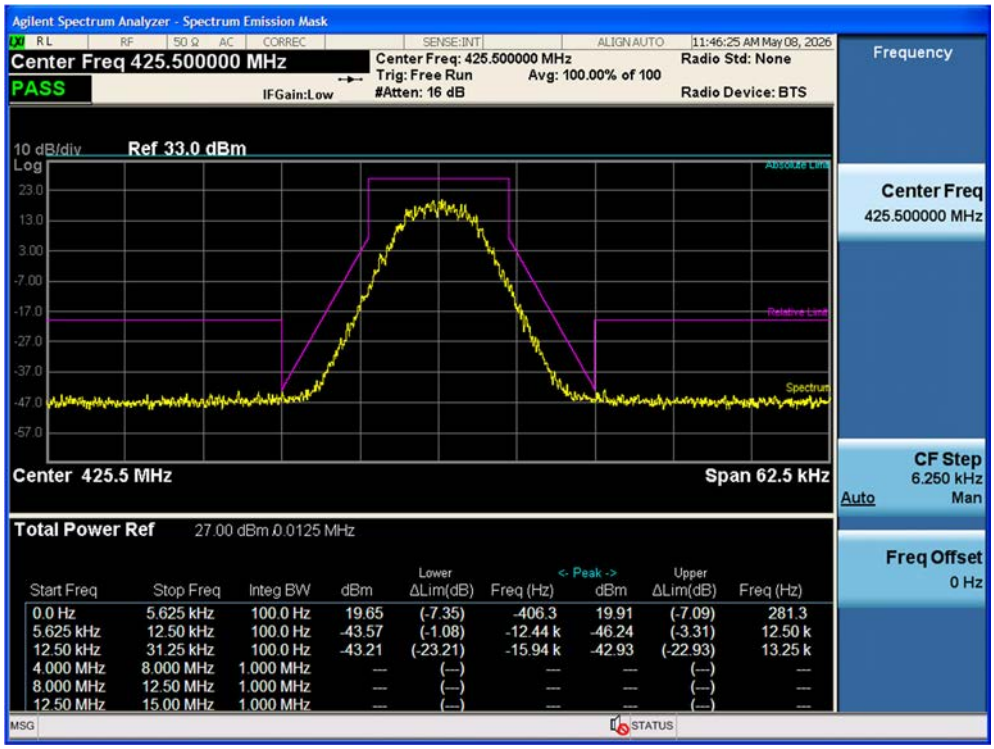
Input @ + 3 dB AGC threshold / UHF (421 ~ 430) / Uplink / P25 Phase 2 (H-CPM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | Peak dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -74.68 | (-9.68) | -406.3 | -74.43 | (-9.43) | 281.3 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -135.5 | (-0.59) | -12.50 k | -135.6 | (-0.70) | 12.50 k |
| 12.50 kHz | 31.25 kHz | 100.0 Hz | -132.9 | (-20.90) | -26.25 k | -132.1 | (-20.07) | 17.06 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output @ + 3 dB AGC threshold / UHF (421 ~ 430) / Uplink / P25 Phase 2 (H-CPM) / Mask D

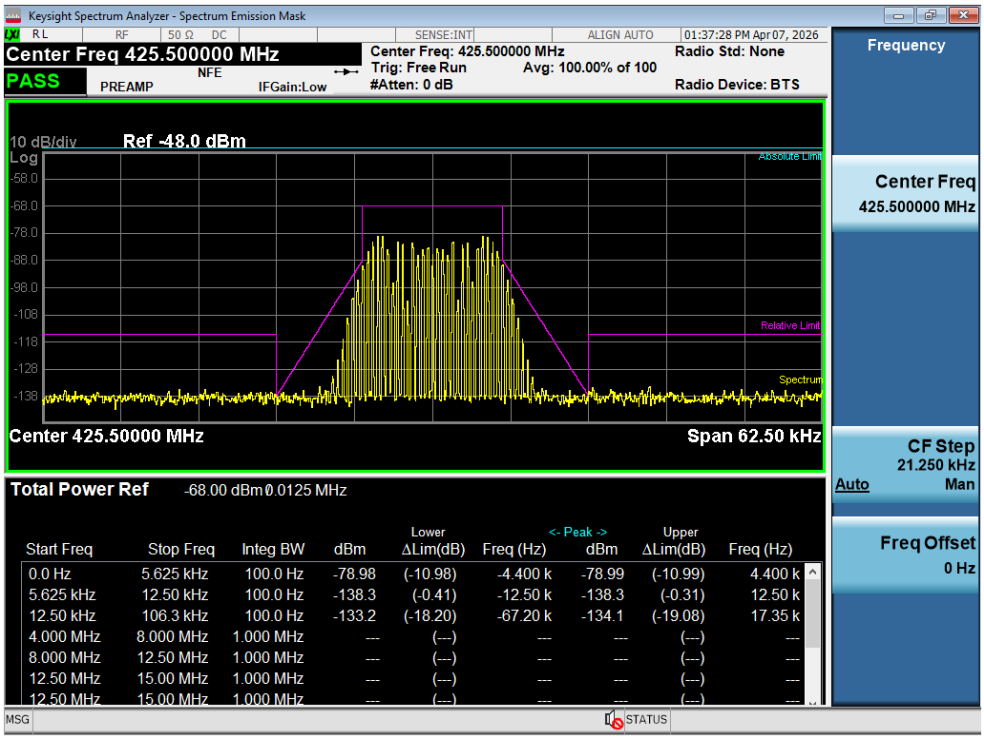



| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | Peak dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 19.65 | (-7.35) | -406.3 | 19.91 | (-7.09) | 281.3 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -43.57 | (-1.08) | -12.44 k | -46.24 | (-3.31) | 12.50 k |
| 12.50 kHz | 31.25 kHz | 100.0 Hz | -43.21 | (-23.21) | -15.94 k | -42.93 | (-22.93) | 13.25 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



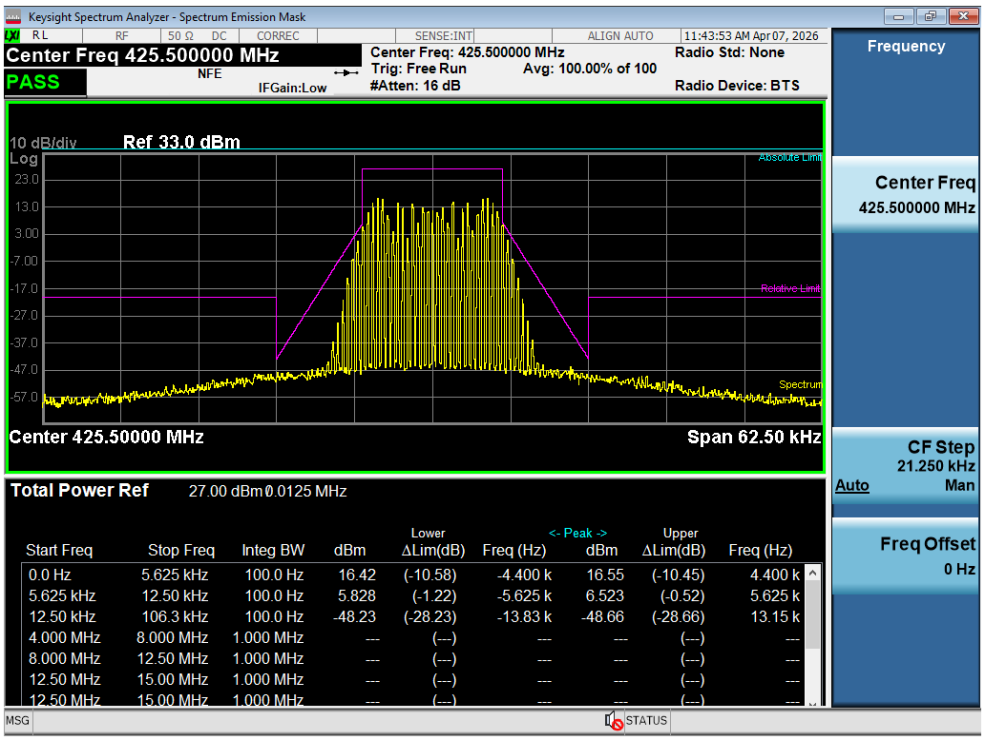
The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (421 ~ 430) / Uplink / FM (12.5 kHz) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | Peak dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -78.98 | (-10.98) | -4.400 k | -78.99 | (-10.99) | 4.400 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -138.3 | (-0.41) | -12.50 k | -138.3 | (-0.31) | 12.50 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -133.2 | (-18.20) | -67.20 k | -134.1 | (-19.08) | 17.35 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

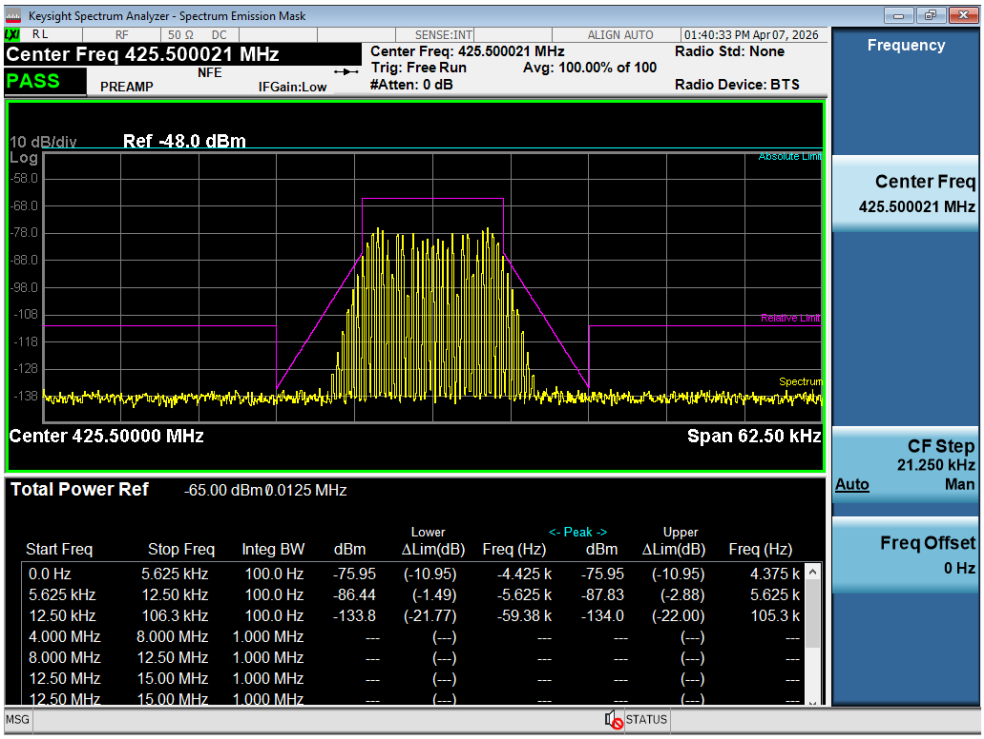
Output / UHF (421 ~ 430) / Uplink / FM (12.5 kHz) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | Peak dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 16.42 | (-10.58) | -4.400 k | 16.55 | (-10.45) | 4.400 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | 5.828 | (-1.22) | -5.625 k | 6.523 | (-0.52) | 5.625 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -48.23 | (-28.23) | -13.83 k | -48.66 | (-28.66) | 13.15 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

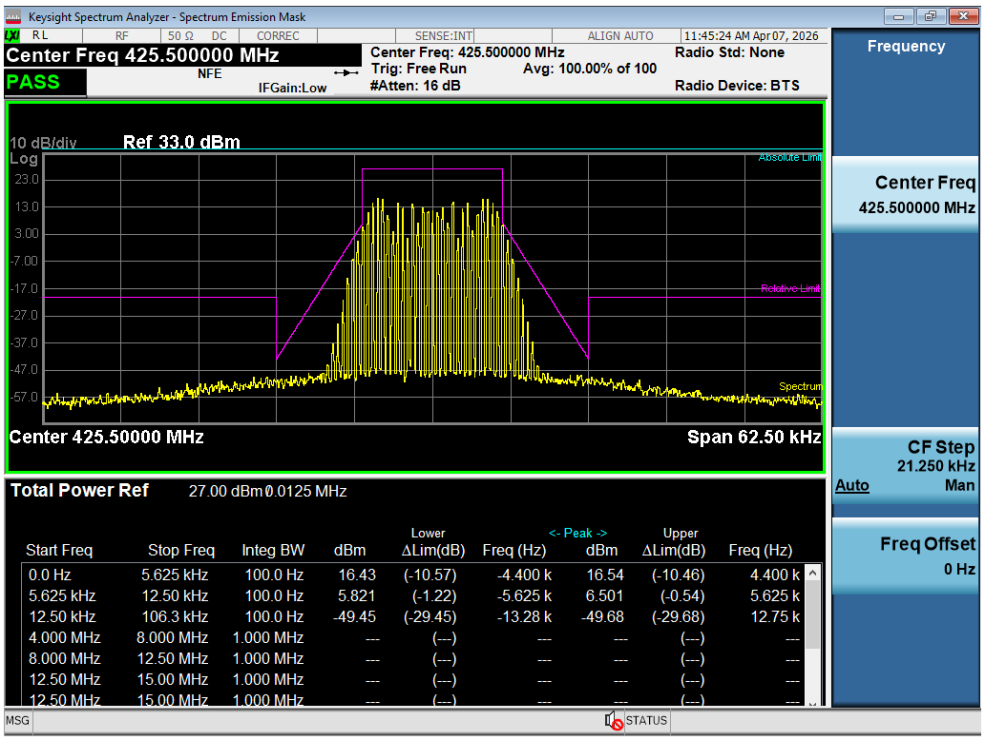

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (421 ~ 430) / Uplink / FM (12.5 kHz) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -75.95 | (-10.95) | -4.425 k | -75.95 | (-10.95) | 4.375 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -86.44 | (-1.49) | -5.625 k | -87.83 | (-2.88) | 5.625 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -133.8 | (-21.77) | -59.38 k | -134.0 | (-22.00) | 105.3 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output @ + 3 dB AGC threshold / UHF (421 ~ 430) / Uplink / FM (12.5 kHz) / Mask D

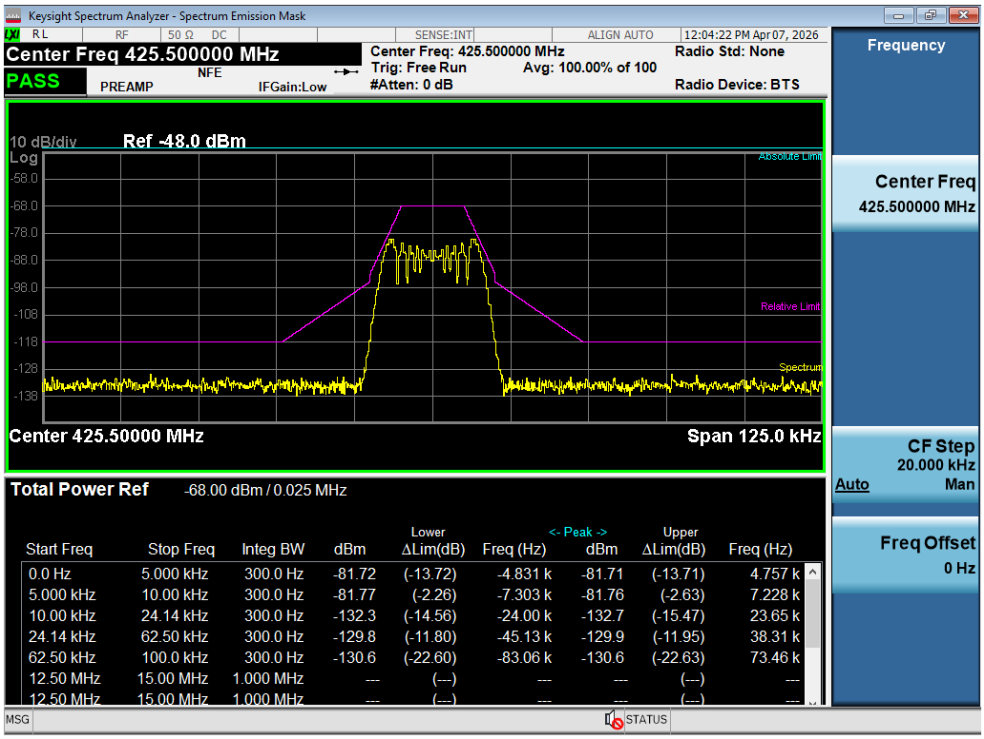



| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 16.43 | (-10.57) | -4.400 k | 16.54 | (-10.46) | 4.400 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | 5.821 | (-1.22) | -5.625 k | 6.501 | (-0.54) | 5.625 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -49.45 | (-29.45) | -13.28 k | -49.68 | (-29.68) | 12.75 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



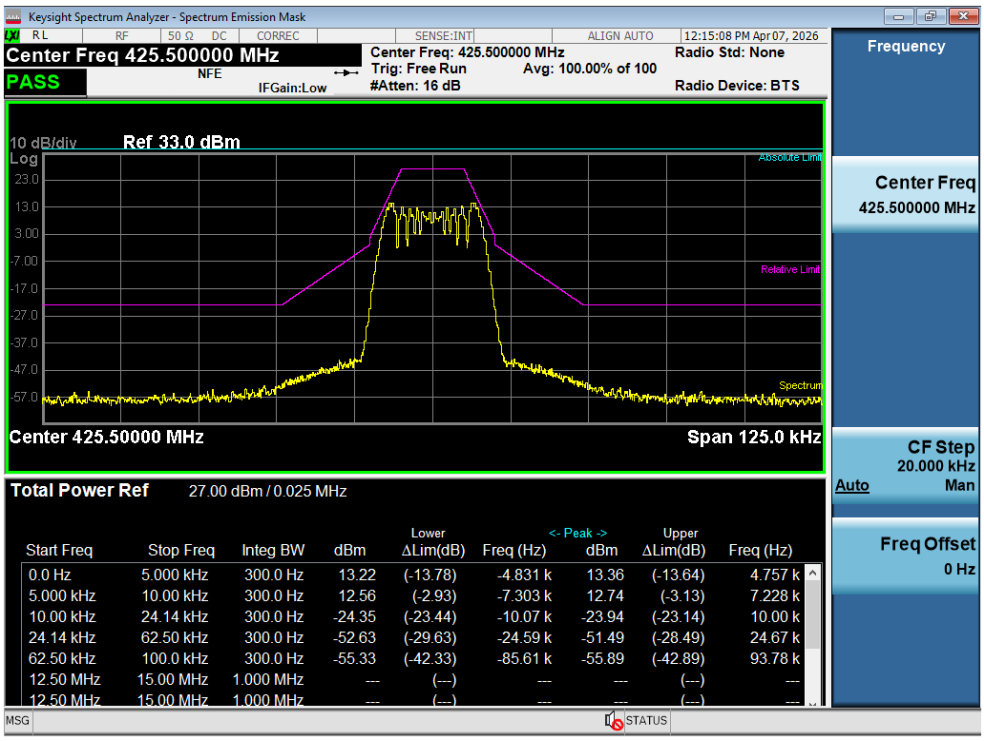
The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (421 ~ 430) / Uplink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | -81.72 | (-13.72) | -4.831 k | -81.71 | (-13.71) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | -81.77 | (-2.26) | -7.303 k | -81.76 | (-2.63) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -132.3 | (-14.56) | -24.00 k | -132.7 | (-15.47) | 23.65 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -129.8 | (-11.80) | -45.13 k | -129.9 | (-11.95) | 38.31 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -130.6 | (-22.60) | -83.06 k | -130.6 | (-22.63) | 73.46 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output / UHF (421 ~ 430) / Uplink / FM (25 kHz) / Mask C

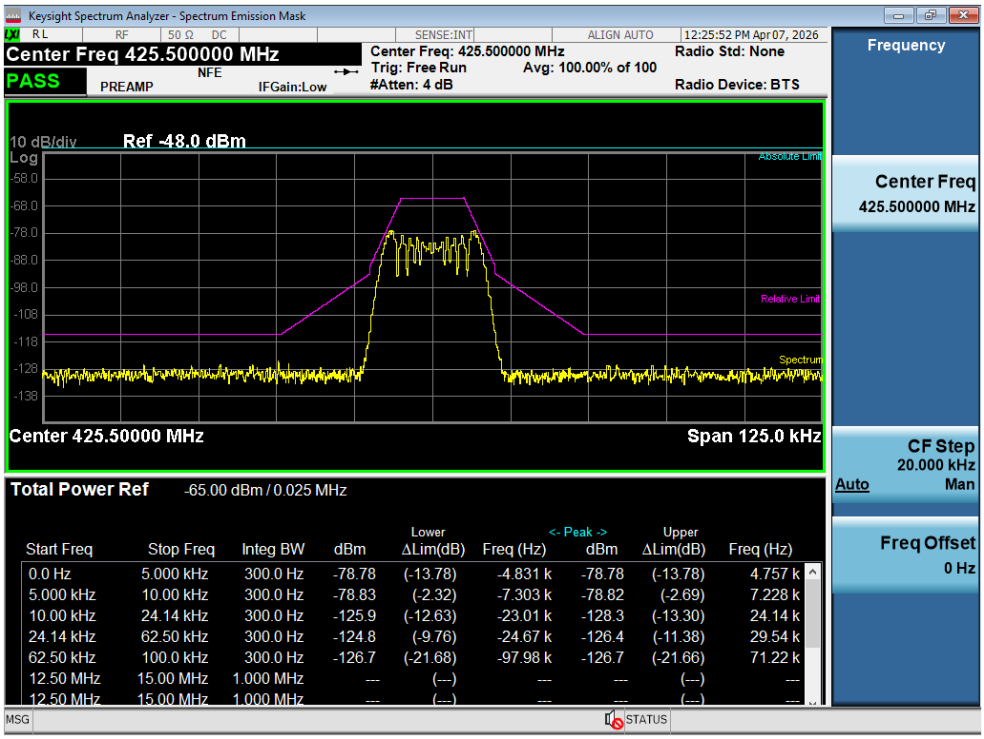



| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | 13.22 | (-13.78) | -4.831 k | 13.36 | (-13.64) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | 12.56 | (-2.93) | -7.303 k | 12.74 | (-3.13) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -24.35 | (-23.44) | -10.07 k | -23.94 | (-23.14) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -52.63 | (-29.63) | -24.59 k | -51.49 | (-28.49) | 24.67 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -55.33 | (-42.33) | -85.61 k | -55.89 | (-42.89) | 93.78 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



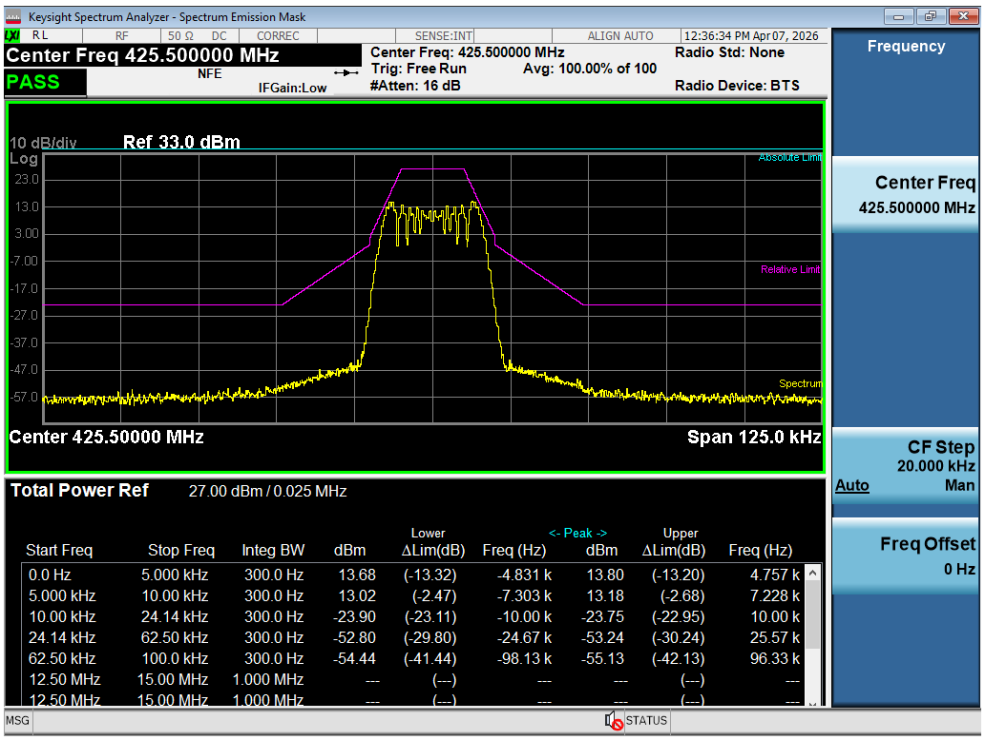
The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (421 ~ 430) / Uplink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | -78.78 | (-13.78) | -4.831 k | -78.78 | (-13.78) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | -78.83 | (-2.32) | -7.303 k | -78.82 | (-2.69) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -125.9 | (-12.63) | -23.01 k | -128.3 | (-13.30) | 24.14 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -124.8 | (-9.76) | -24.67 k | -126.4 | (-11.38) | 29.54 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -126.7 | (-21.68) | -97.98 k | -126.7 | (-21.66) | 71.22 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output @ + 3 dB AGC threshold / UHF (421 ~ 430) / Uplink / FM (25 kHz) / Mask C

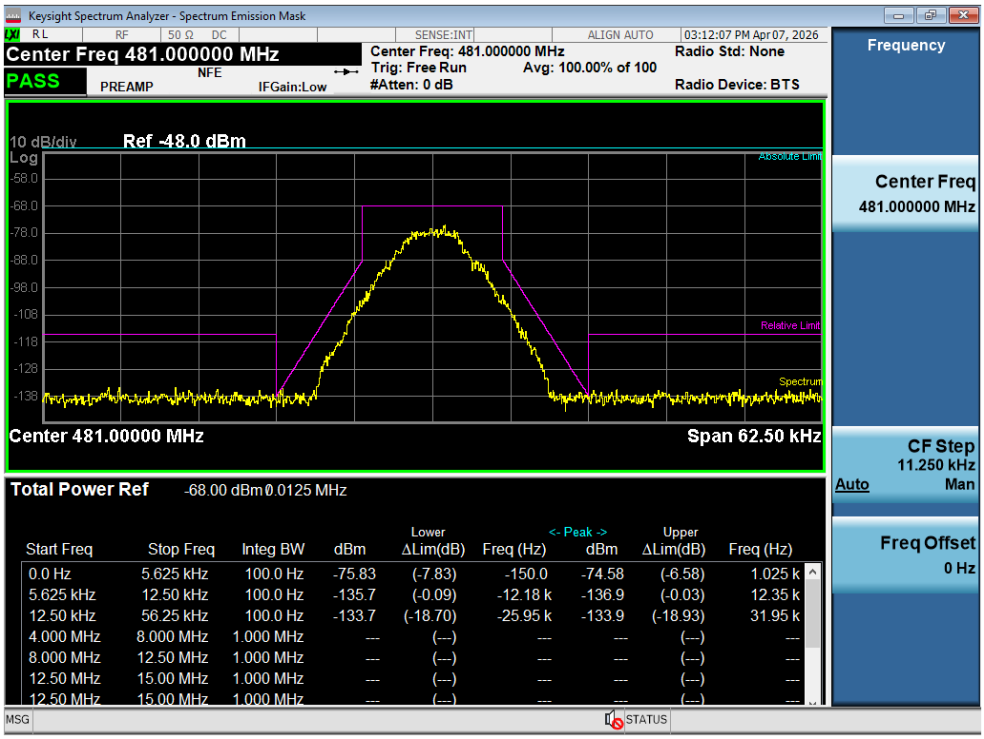



| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | 13.68 | (-13.32) | -4.831 k | 13.80 | (-13.20) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | 13.02 | (-2.47) | -7.303 k | 13.18 | (-2.68) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -23.90 | (-23.11) | -10.00 k | -23.75 | (-22.95) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -52.80 | (-29.80) | -24.67 k | -53.24 | (-30.24) | 25.57 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -54.44 | (-41.44) | -98.13 k | -55.13 | (-42.13) | 96.33 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



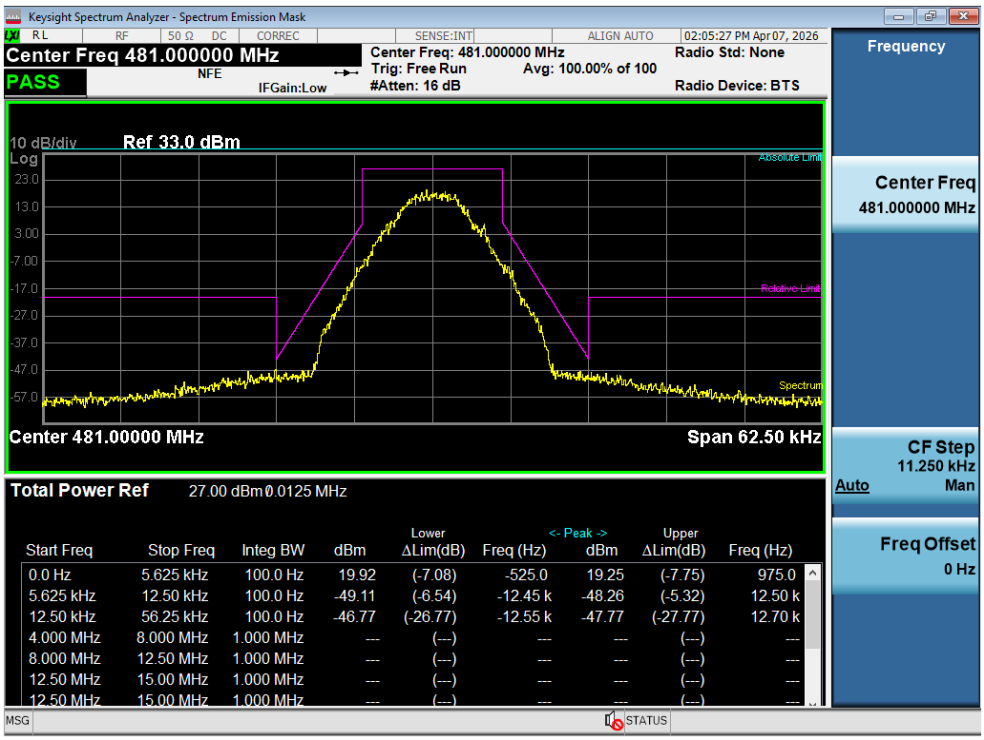
The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (450 ~ 512) / Uplink / P25 Phase 1 (C4FM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -75.83 | (-7.83) | -150.0 | -74.58 | (-6.58) | 1.025 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -135.7 | (-0.09) | -12.18 k | -136.9 | (-0.03) | 12.35 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -133.7 | (-18.70) | -25.95 k | -133.9 | (-18.93) | 31.95 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

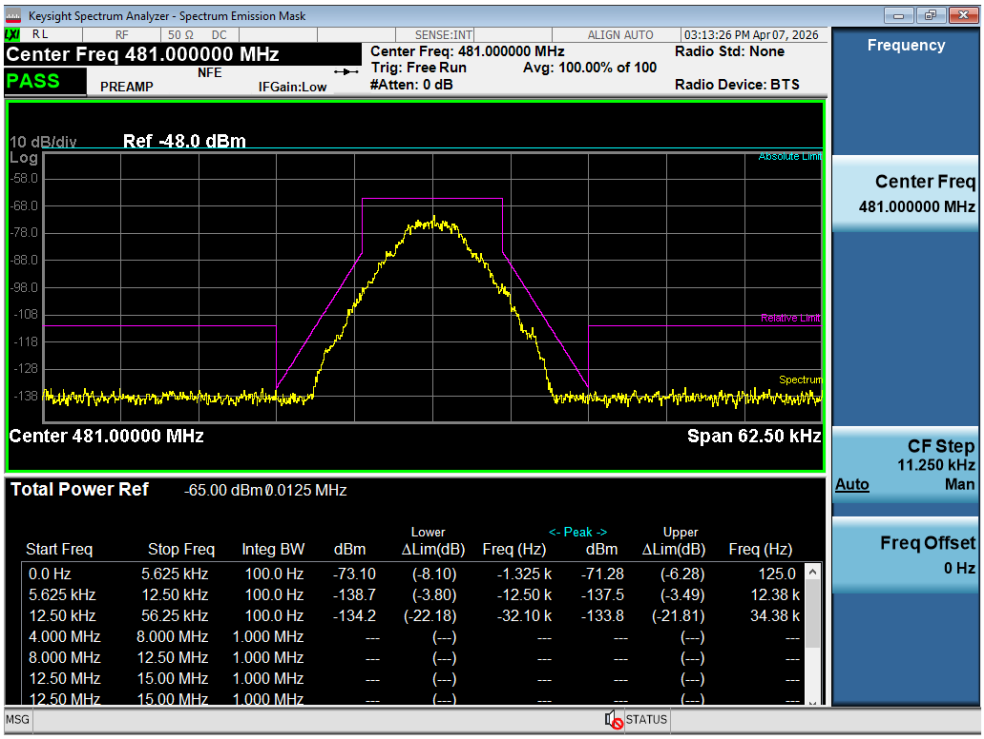
Output / UHF (450 ~ 512) / Uplink / P25 Phase 1 (C4FM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 19.92 | (-7.08) | -525.0 | 19.25 | (-7.75) | 975.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -49.11 | (-6.54) | -12.45 k | -48.26 | (-5.32) | 12.50 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -46.77 | (-26.77) | -12.55 k | -47.77 | (-27.77) | 12.70 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

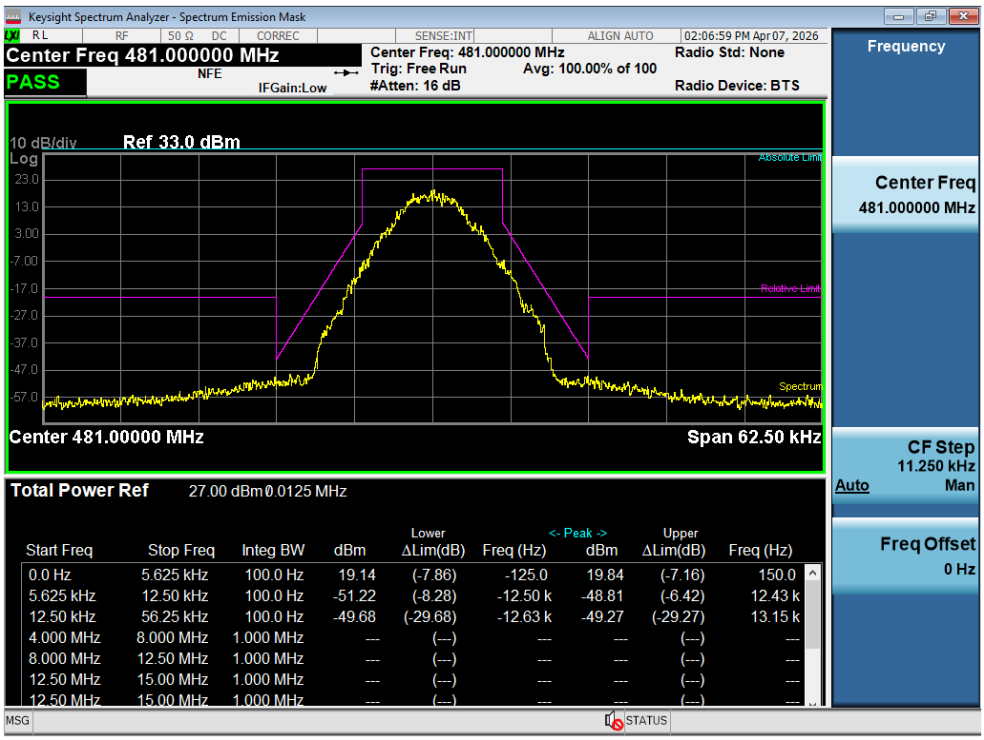

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (450 ~ 512) / Uplink / P25 Phase 1 (C4FM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -73.10 | (-8.10) | -1.325 k | -71.28 | (-6.28) | 125.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -138.7 | (-3.80) | -12.50 k | -137.5 | (-3.49) | 12.38 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -134.2 | (-22.18) | -32.10 k | -133.8 | (-21.81) | 34.38 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output @ + 3 dB AGC threshold / UHF (450 ~ 512) / Uplink / P25 Phase 1 (C4FM) / Mask D

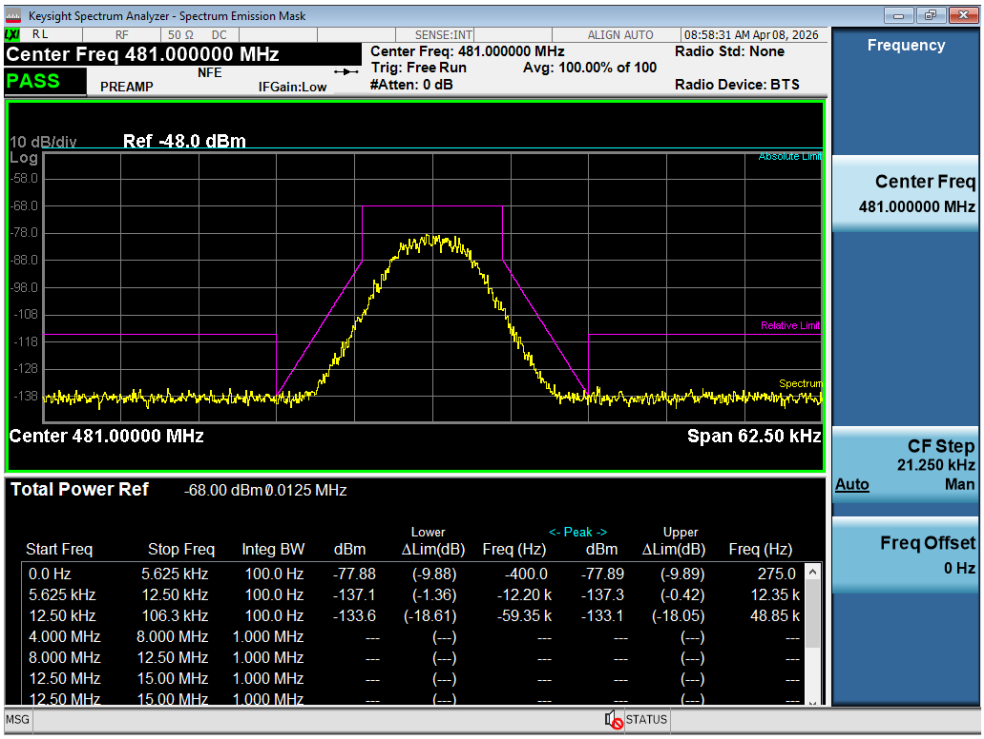



| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 19.14 | (-7.86) | -125.0 | 19.84 | (-7.16) | 150.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -51.22 | (-8.28) | -12.50 k | -48.81 | (-6.42) | 12.43 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -49.68 | (-29.68) | -12.63 k | -49.27 | (-29.27) | 13.15 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



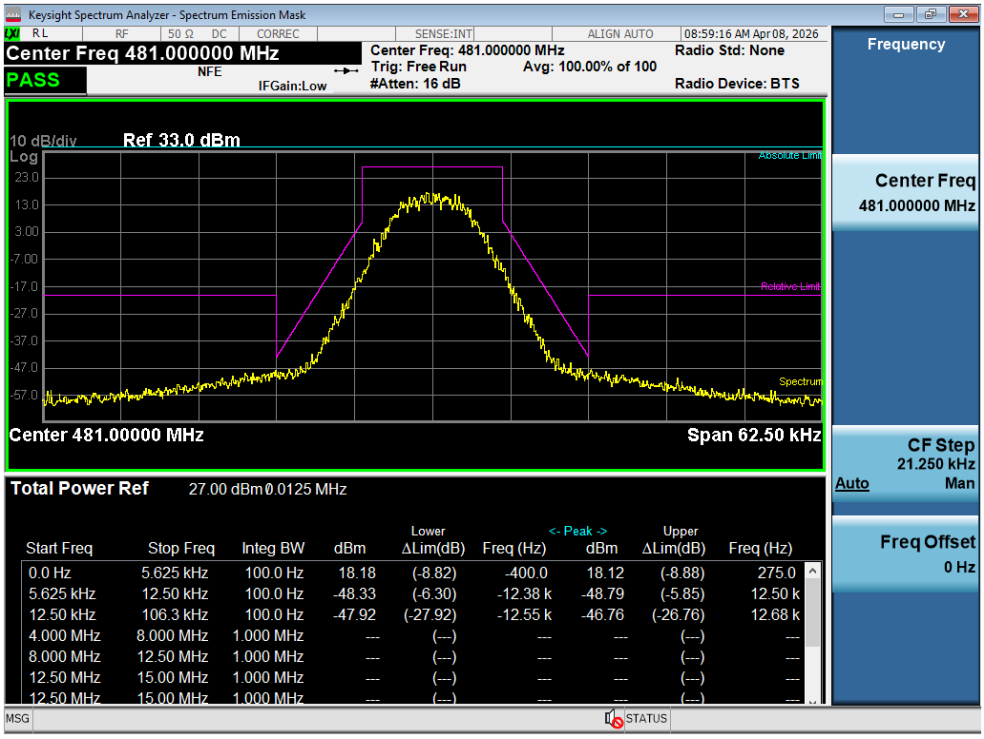
The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (450 ~ 512) / Uplink / P25 Phase 2 (H-CPM)/ Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -77.88 | (-9.88) | -400.0 | -77.89 | (-9.89) | 275.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -137.1 | (-1.36) | -12.20 k | -137.3 | (-0.42) | 12.35 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -133.6 | (-18.61) | -59.35 k | -133.1 | (-18.05) | 48.85 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

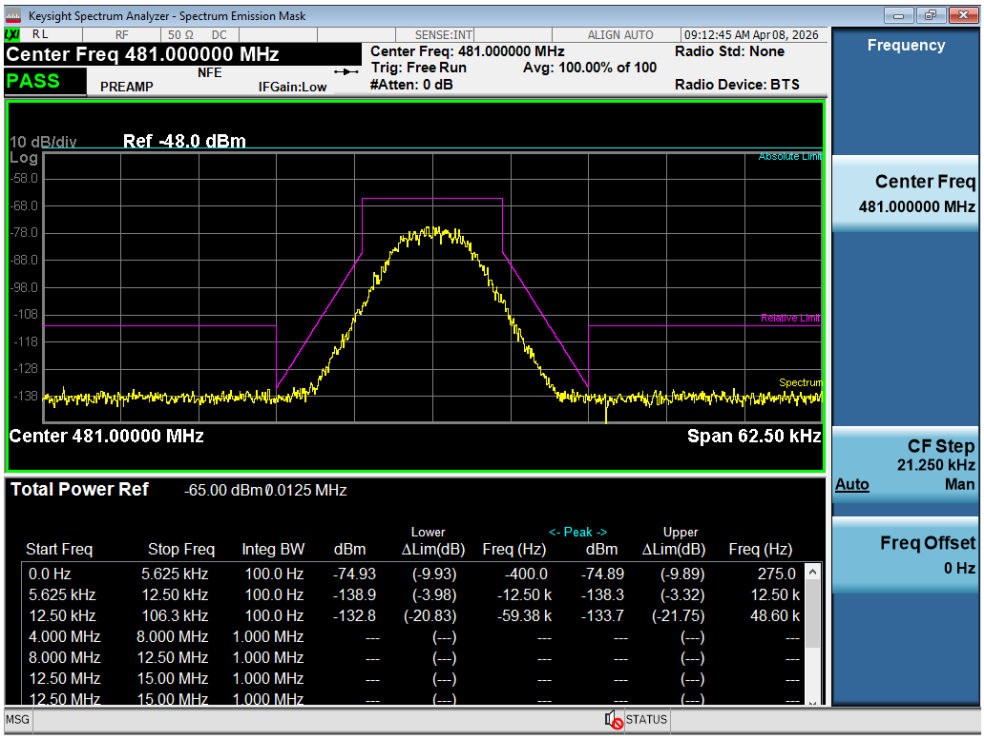
Output / UHF (450 ~ 512) / Uplink / P25 Phase 2 (H-CPM)/ Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 18.18 | (-8.82) | -400.0 | 18.12 | (-8.88) | 275.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -48.33 | (-6.30) | -12.38 k | -48.79 | (-5.85) | 12.50 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -47.92 | (-27.92) | -12.55 k | -46.76 | (-26.76) | 12.68 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

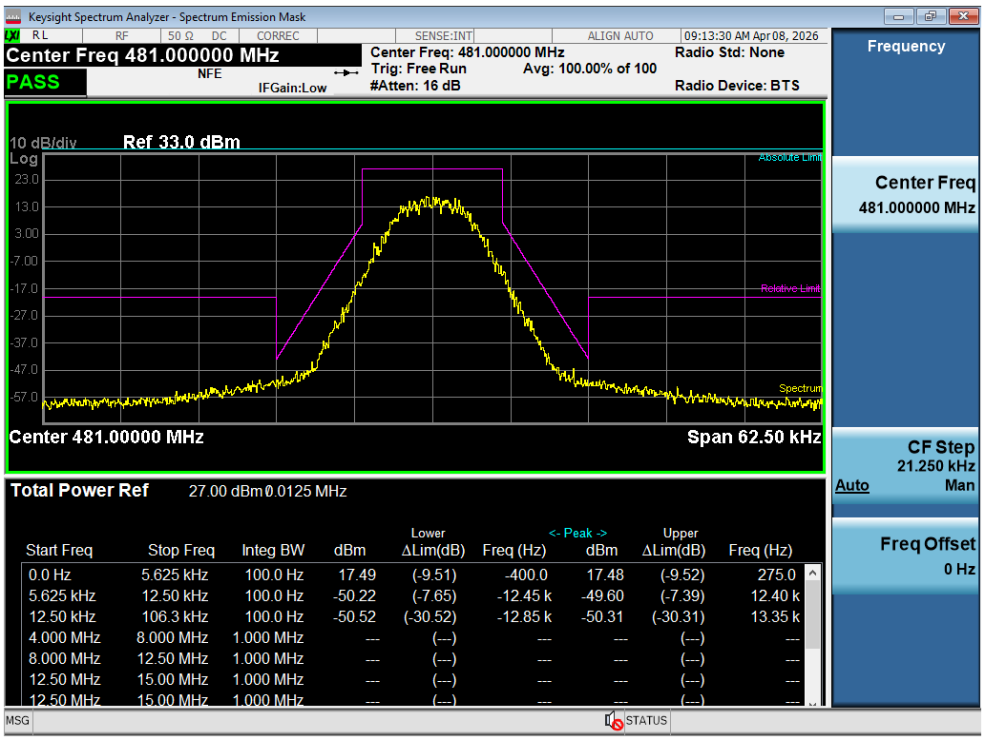

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (450 ~ 512) / Uplink / P25 Phase 2 (H-CPM)/ Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -74.93 | (-9.93) | -400.0 | -74.89 | (-9.89) | 275.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -138.9 | (-3.98) | -12.50 k | -138.3 | (-3.32) | 12.50 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -132.8 | (-20.83) | -59.38 k | -133.7 | (-21.75) | 48.60 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

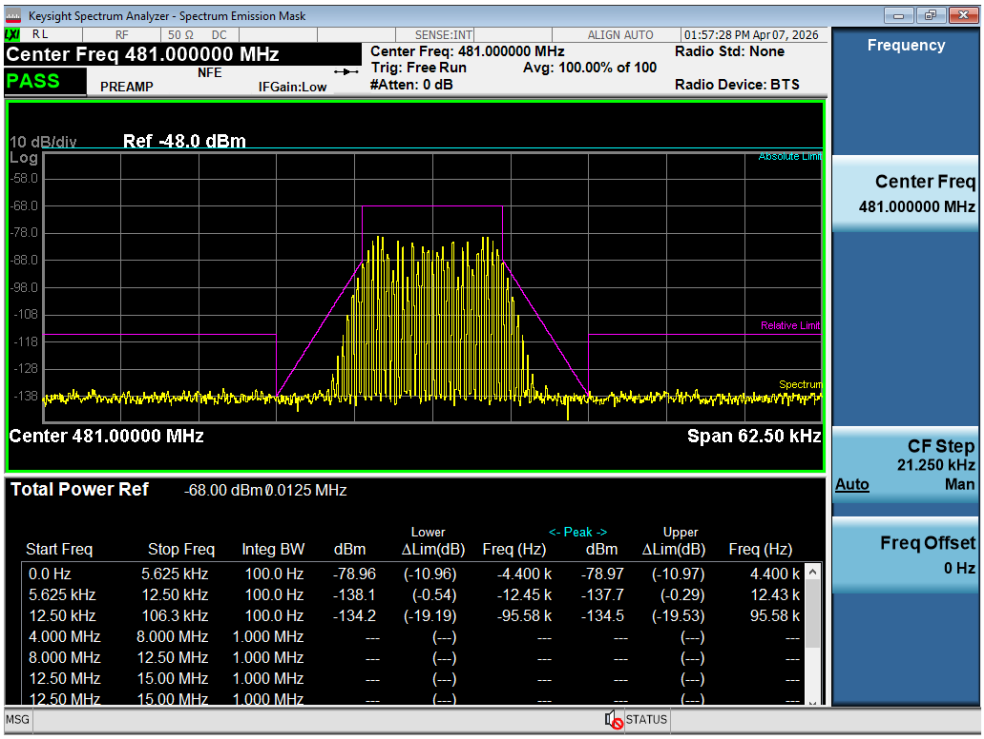
Output @ + 3 dB AGC threshold / UHF (450 ~ 512) / Uplink / P25 Phase 2 (H-CPM)/ Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 17.49 | (-9.51) | -400.0 | 17.48 | (-9.52) | 275.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -50.22 | (-7.65) | -12.45 k | -49.60 | (-7.39) | 12.40 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -50.52 | (-30.52) | -12.85 k | -50.31 | (-30.31) | 13.35 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

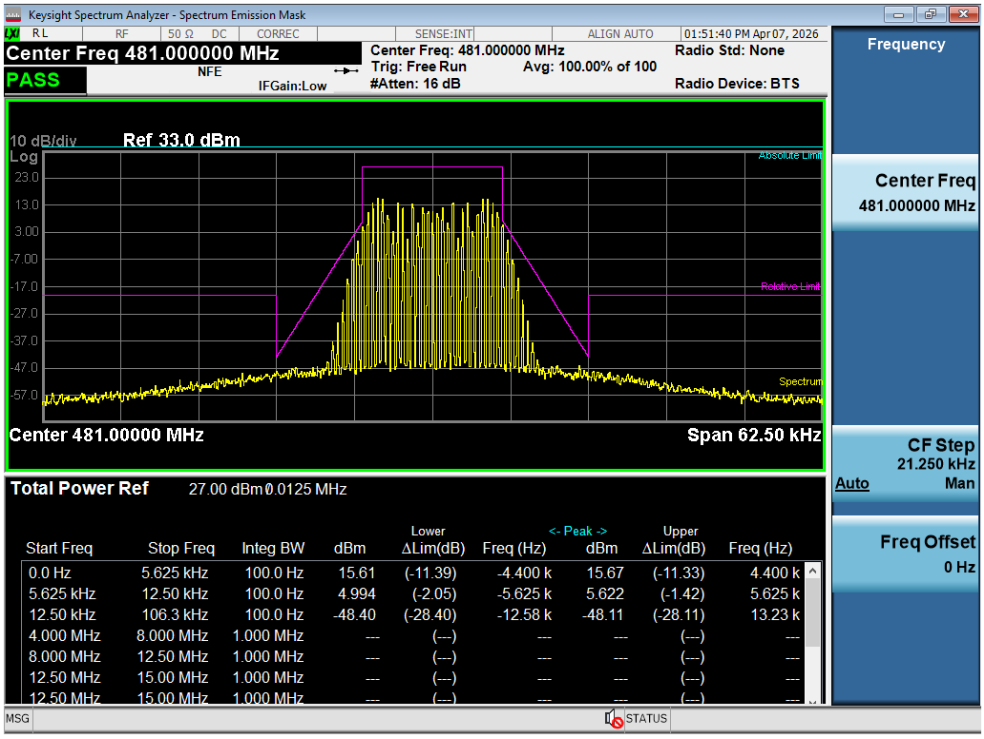

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (450 ~ 512) / Uplink / FM (12.5 kHz) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -78.96 | (-10.96) | -4.400 k | -78.97 | (-10.97) | 4.400 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -138.1 | (-0.54) | -12.45 k | -137.7 | (-0.29) | 12.43 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -134.2 | (-19.19) | -95.58 k | -134.5 | (-19.53) | 95.58 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

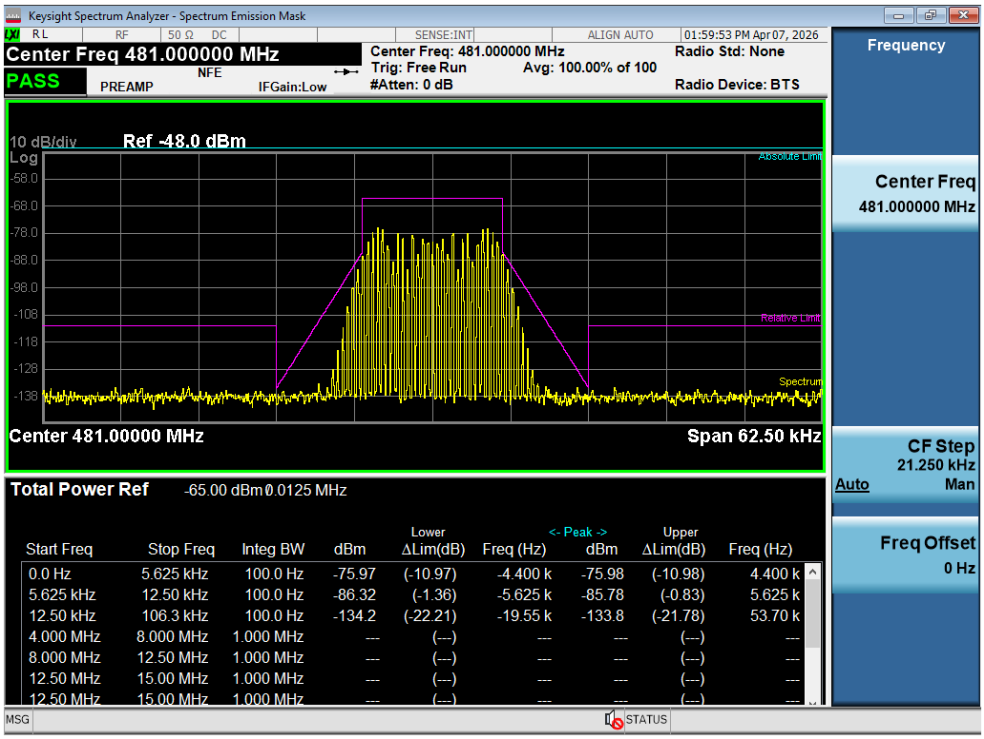
Output / UHF (450 ~ 512) / Uplink / FM (12.5 kHz) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 15.61 | (-11.39) | -4.400 k | 15.67 | (-11.33) | 4.400 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | 4.994 | (-2.05) | -5.625 k | 5.622 | (-1.42) | 5.625 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -48.40 | (-28.40) | -12.58 k | -48.11 | (-28.11) | 13.23 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

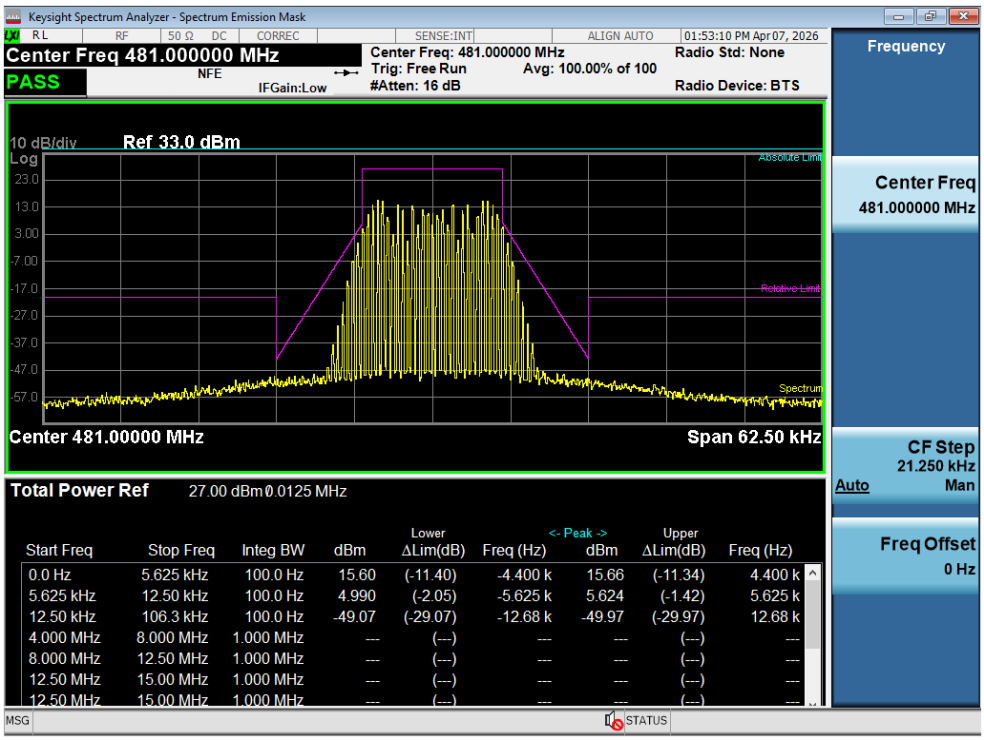

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (450 ~ 512) / Uplink / FM (12.5 kHz) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -75.97 | (-10.97) | -4.400 k | -75.98 | (-10.98) | 4.400 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -86.32 | (-1.36) | -5.625 k | -85.78 | (-0.83) | 5.625 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -134.2 | (-22.21) | -19.55 k | -133.8 | (-21.78) | 53.70 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output @ + 3 dB AGC threshold / UHF (450 ~ 512) / Uplink / FM (12.5 kHz) / Mask D

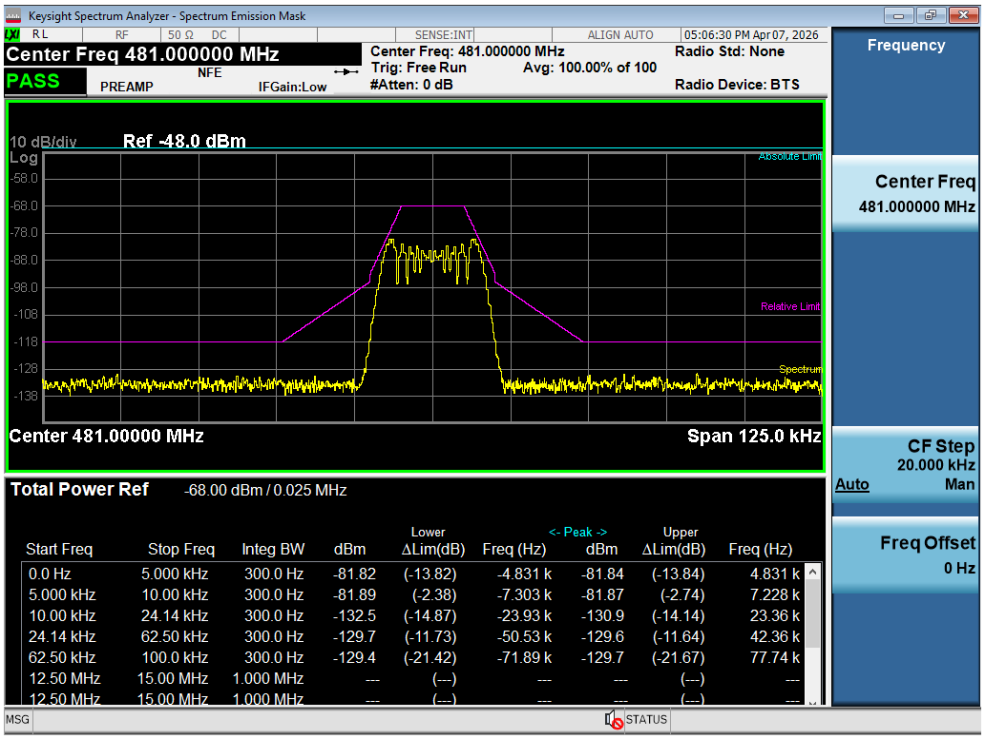



| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 15.60 | (-11.40) | -4.400 k | 15.66 | (-11.34) | 4.400 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | 4.990 | (-2.05) | -5.625 k | 5.624 | (-1.42) | 5.625 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -49.07 | (-29.07) | -12.68 k | -49.97 | (-29.97) | 12.68 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



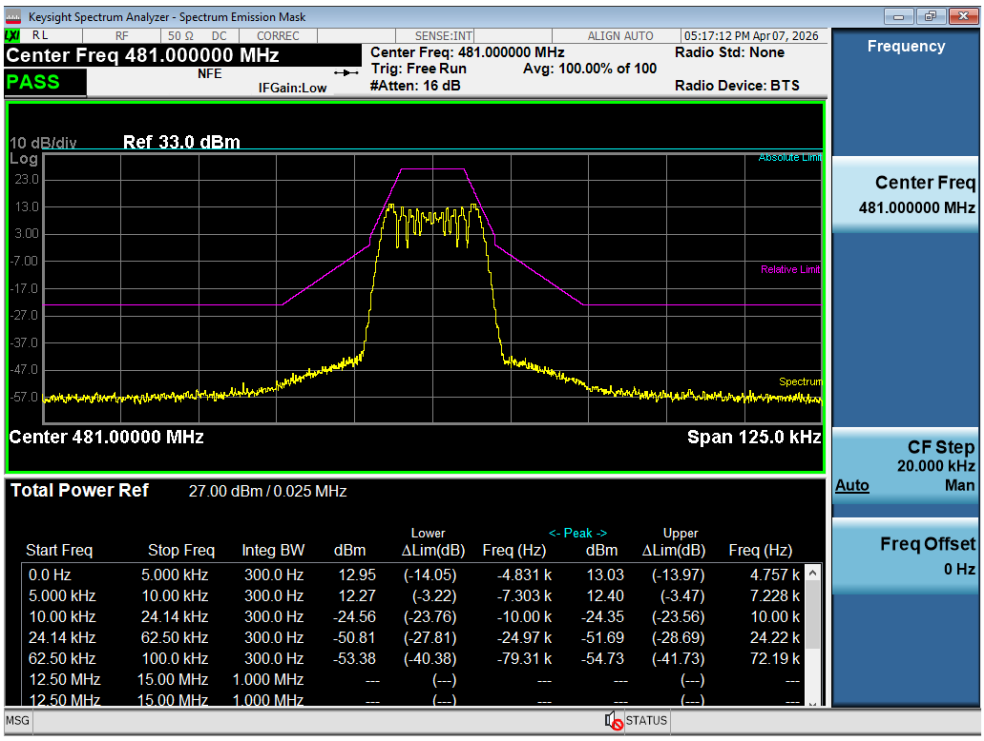
The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (450 ~ 512) / Uplink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | -81.82 | (-13.82) | -4.831 k | -81.84 | (-13.84) | 4.831 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | -81.89 | (-2.38) | -7.303 k | -81.87 | (-2.74) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -132.5 | (-14.87) | -23.93 k | -130.9 | (-14.14) | 23.36 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -129.7 | (-11.73) | -50.53 k | -129.6 | (-11.64) | 42.36 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -129.4 | (-21.42) | -71.89 k | -129.7 | (-21.67) | 77.74 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

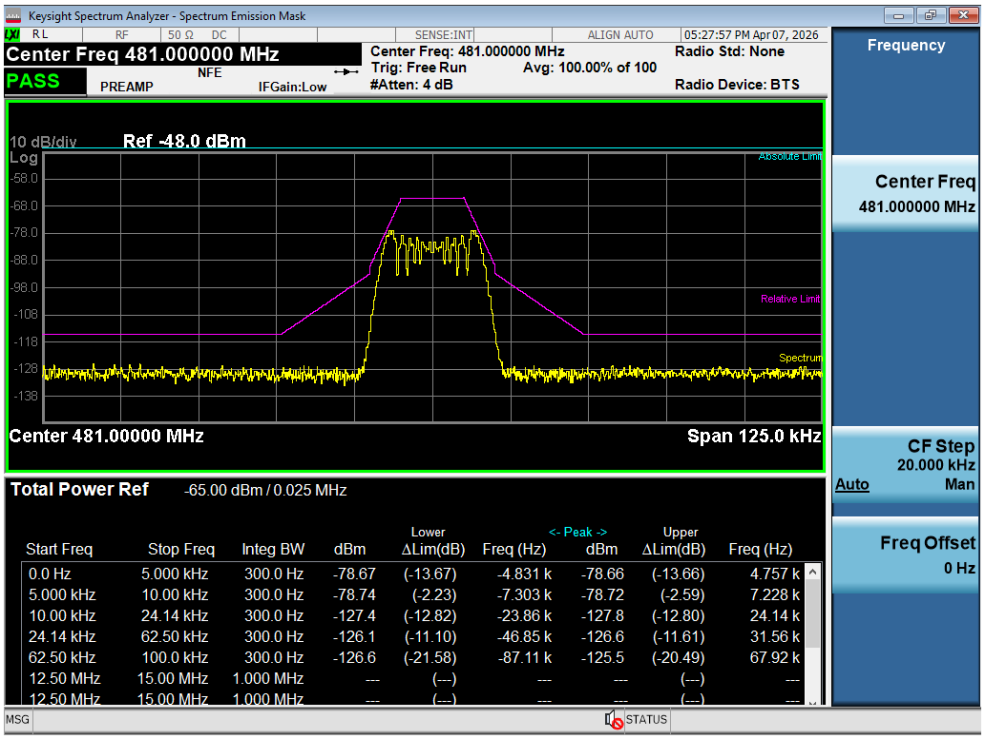
Output / UHF (450 ~ 512) / Uplink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | 12.95 | (-14.05) | -4.831 k | 13.03 | (-13.97) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | 12.27 | (-3.22) | -7.303 k | 12.40 | (-3.47) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -24.56 | (-23.76) | -10.00 k | -24.35 | (-23.56) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -50.81 | (-27.81) | -24.97 k | -51.69 | (-28.69) | 24.22 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -53.38 | (-40.38) | -79.31 k | -54.73 | (-41.73) | 72.19 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

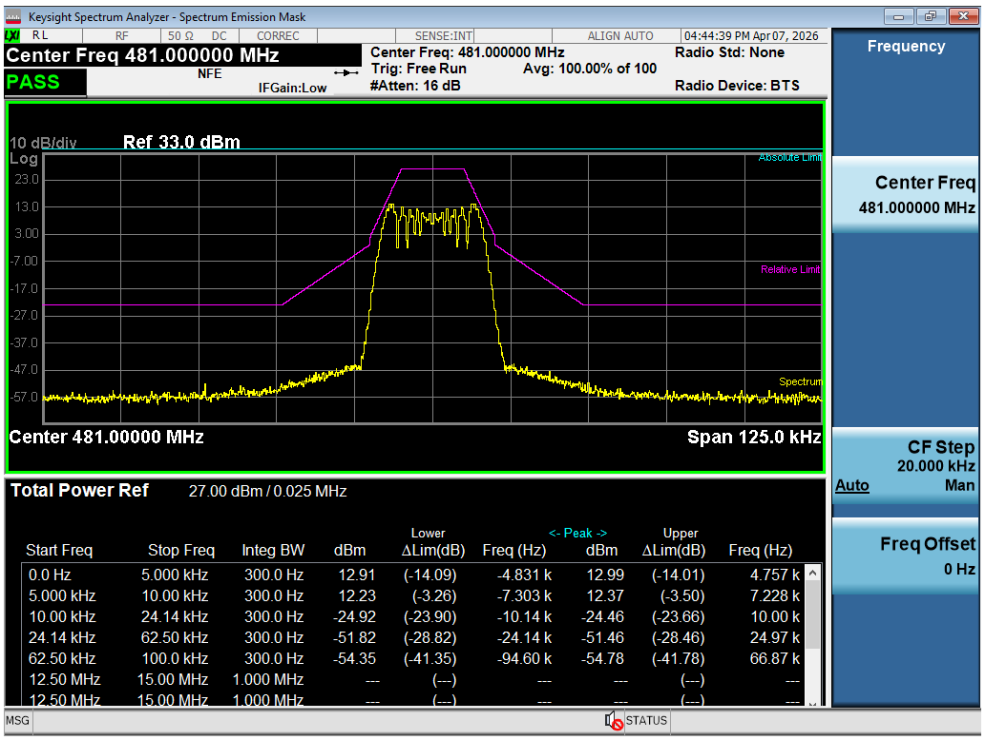

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (450 ~ 512) / Uplink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | -78.67 | (-13.67) | -4.831 k | -78.66 | (-13.66) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | -78.74 | (-2.23) | -7.303 k | -78.72 | (-2.59) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -127.4 | (-12.82) | -23.86 k | -127.8 | (-12.80) | 24.14 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -126.1 | (-11.10) | -46.85 k | -126.6 | (-11.61) | 31.56 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -126.6 | (-21.58) | -87.11 k | -125.5 | (-20.49) | 67.92 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output @ + 3 dB AGC threshold / UHF (450 ~ 512) / Uplink / FM (25 kHz) / Mask C

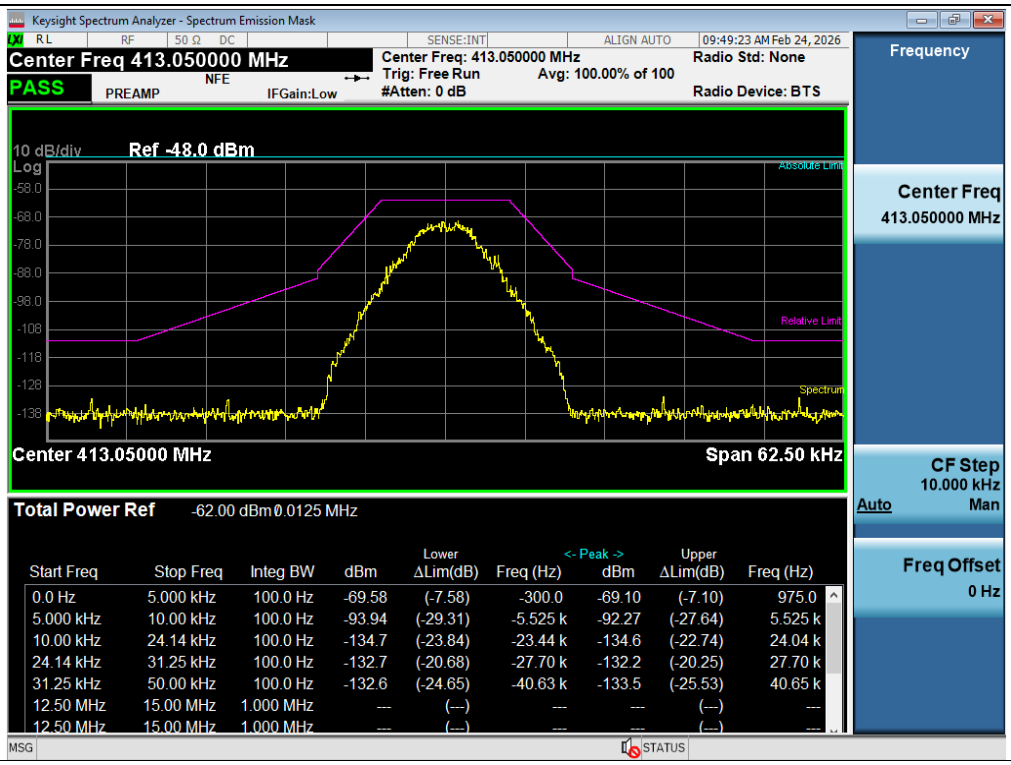



| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | 12.91 | (-14.09) | -4.831 k | 12.99 | (-14.01) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | 12.23 | (-3.26) | -7.303 k | 12.37 | (-3.50) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -24.92 | (-23.90) | -10.14 k | -24.46 | (-23.66) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -51.82 | (-28.82) | -24.14 k | -51.46 | (-28.46) | 24.97 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -54.35 | (-41.35) | -94.60 k | -54.78 | (-41.78) | 66.87 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



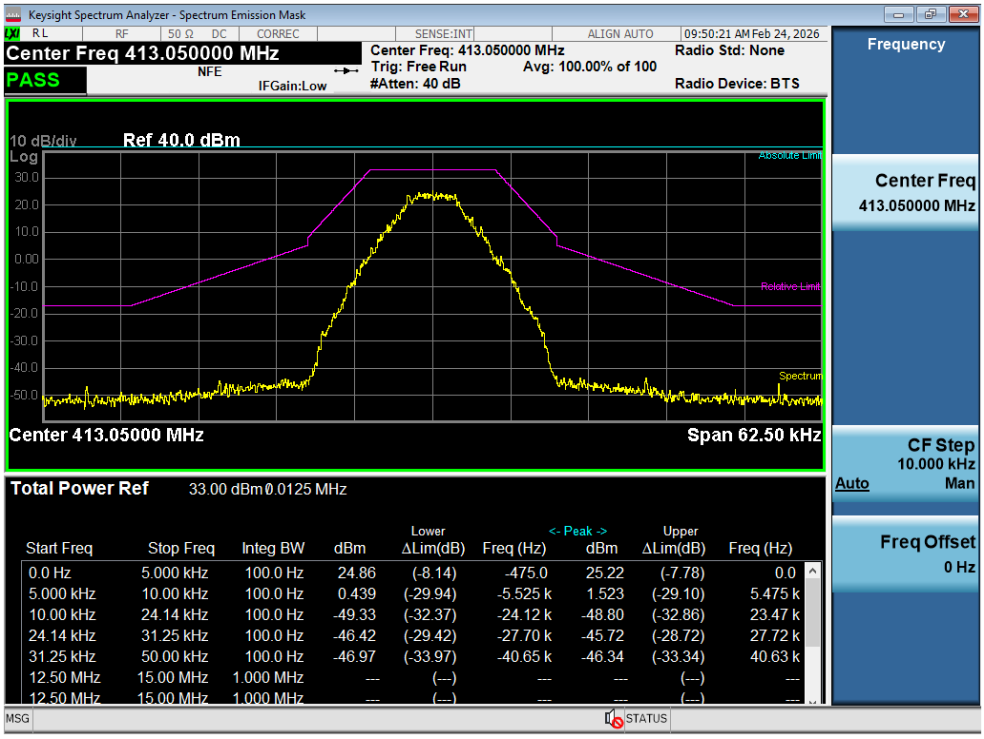
The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (406.1 ~ 420) / Downlink / P25 Phase 1 (C4FM) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 100.0 Hz | -69.58 | (-7.58) | -300.0 | -69.10 | (-7.10) | 975.0 |
| 5.000 kHz | 10.00 kHz | 100.0 Hz | -93.94 | (-29.31) | -5.525 k | -92.27 | (-27.64) | 5.525 k |
| 10.00 kHz | 24.14 kHz | 100.0 Hz | -134.7 | (-23.84) | -23.44 k | -134.6 | (-22.74) | 24.04 k |
| 24.14 kHz | 31.25 kHz | 100.0 Hz | -132.7 | (-20.68) | -27.70 k | -132.2 | (-20.25) | 27.70 k |
| 31.25 kHz | 50.00 kHz | 100.0 Hz | -132.6 | (-24.65) | -40.63 k | -133.5 | (-25.53) | 40.65 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output / UHF (406.1 ~ 420) / Downlink / P25 Phase 1 (C4FM) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 100.0 Hz | 24.86 | (-8.14) | -475.0 | 25.22 | (-7.78) | 0.0 |
| 5.000 kHz | 10.00 kHz | 100.0 Hz | 0.439 | (-29.94) | -5.525 k | 1.523 | (-29.10) | 5.475 k |
| 10.00 kHz | 24.14 kHz | 100.0 Hz | -49.33 | (-32.37) | -24.12 k | -48.80 | (-32.86) | 23.47 k |
| 24.14 kHz | 31.25 kHz | 100.0 Hz | -46.42 | (-29.42) | -27.70 k | -45.72 | (-28.72) | 27.72 k |
| 31.25 kHz | 50.00 kHz | 100.0 Hz | -46.97 | (-33.97) | -40.65 k | -46.34 | (-33.34) | 40.63 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



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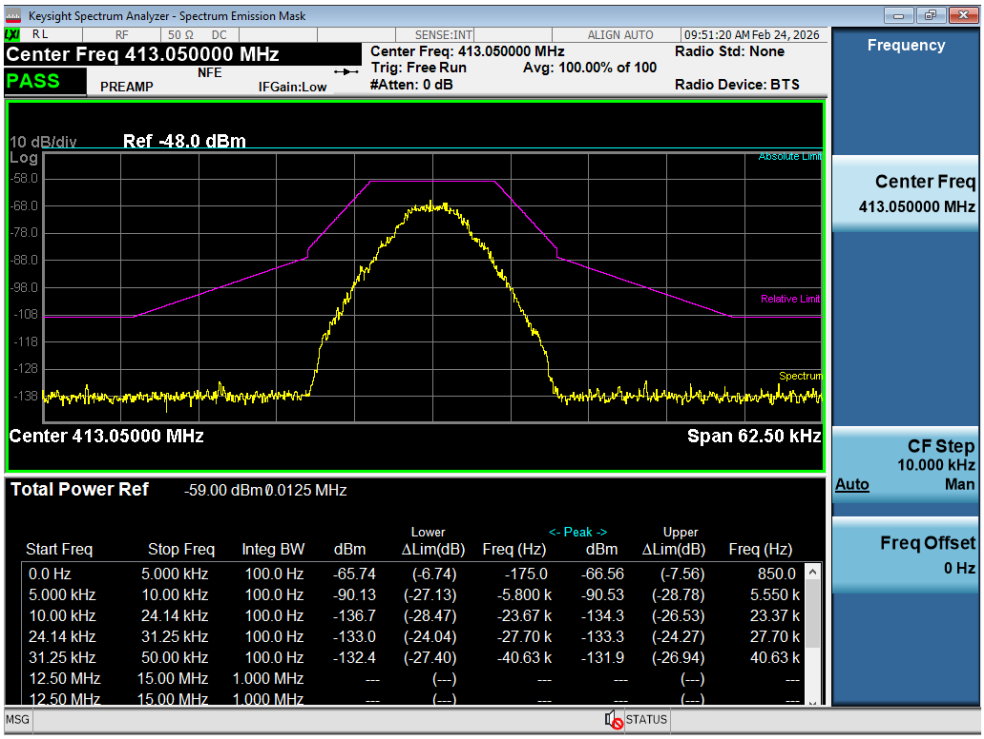
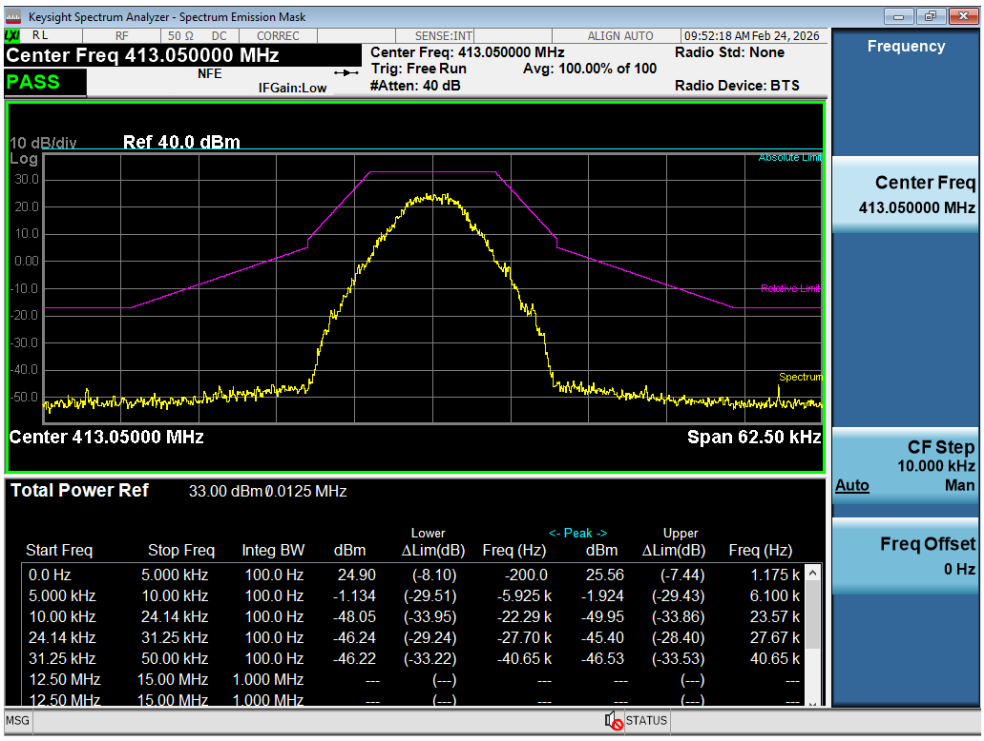
Input @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Downlink / P25 Phase 1 (C4FM) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 100.0 Hz | -65.74 | (-6.74) | -175.0 | -66.56 | (-7.56) | 850.0 |
| 5.000 kHz | 10.00 kHz | 100.0 Hz | -90.13 | (-27.13) | -5.800 k | -90.53 | (-28.78) | 5.550 k |
| 10.00 kHz | 24.14 kHz | 100.0 Hz | -136.7 | (-28.47) | -23.67 k | -134.3 | (-26.53) | 23.37 k |
| 24.14 kHz | 31.25 kHz | 100.0 Hz | -133.0 | (-24.04) | -27.70 k | -133.3 | (-24.27) | 27.70 k |
| 31.25 kHz | 50.00 kHz | 100.0 Hz | -132.4 | (-27.40) | -40.63 k | -131.9 | (-26.94) | 40.63 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Downlink / P25 Phase 1 (C4FM) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 100.0 Hz | 24.90 | (-8.10) | -200.0 | 25.56 | (-7.44) | 1.175 k |
| 5.000 kHz | 10.00 kHz | 100.0 Hz | -1.134 | (-29.51) | -5.925 k | -1.924 | (-29.43) | 6.100 k |
| 10.00 kHz | 24.14 kHz | 100.0 Hz | -48.05 | (-33.95) | -22.29 k | -49.95 | (-33.86) | 23.57 k |
| 24.14 kHz | 31.25 kHz | 100.0 Hz | -46.24 | (-29.24) | -27.70 k | -45.40 | (-28.40) | 27.67 k |
| 31.25 kHz | 50.00 kHz | 100.0 Hz | -46.22 | (-33.22) | -40.65 k | -46.53 | (-33.53) | 40.65 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



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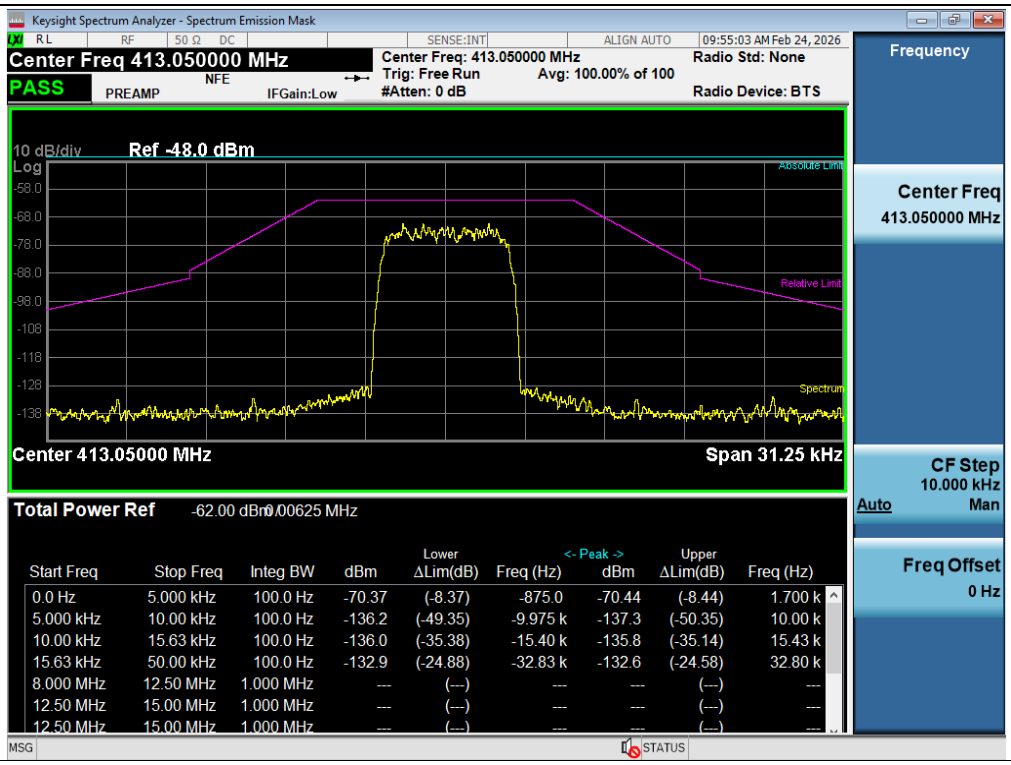
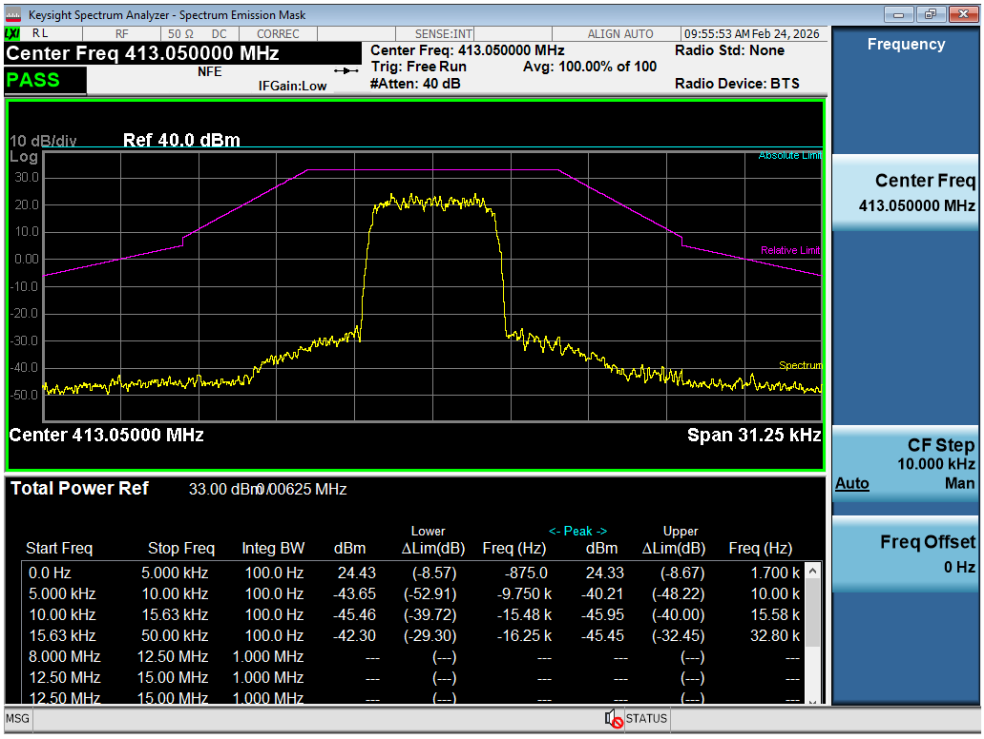
Input / UHF (406.1 ~ 420) / Downlink / P25 Phase 1 (CQPSK) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 100.0 Hz | -70.37 | (-8.37) | -875.0 | -70.44 | (-8.44) | 1.700 k |
| 5.000 kHz | 10.00 kHz | 100.0 Hz | -136.2 | (-49.35) | -9.975 k | -137.3 | (-50.35) | 10.00 k |
| 10.00 kHz | 15.63 kHz | 100.0 Hz | -136.0 | (-35.38) | -15.40 k | -135.8 | (-35.14) | 15.43 k |
| 15.63 kHz | 50.00 kHz | 100.0 Hz | -132.9 | (-24.88) | -32.83 k | -132.6 | (-24.58) | 32.80 k |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output / UHF (406.1 ~ 420) / Downlink / P25 Phase 1 (CQPSK) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 100.0 Hz | 24.43 | (-8.57) | -875.0 | 24.33 | (-8.67) | 1.700 k |
| 5.000 kHz | 10.00 kHz | 100.0 Hz | -43.65 | (-52.91) | -9.750 k | -40.21 | (-48.22) | 10.00 k |
| 10.00 kHz | 15.63 kHz | 100.0 Hz | -45.46 | (-39.72) | -15.48 k | -45.95 | (-40.00) | 15.58 k |
| 15.63 kHz | 50.00 kHz | 100.0 Hz | -42.30 | (-29.30) | -16.25 k | -45.45 | (-32.45) | 32.80 k |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |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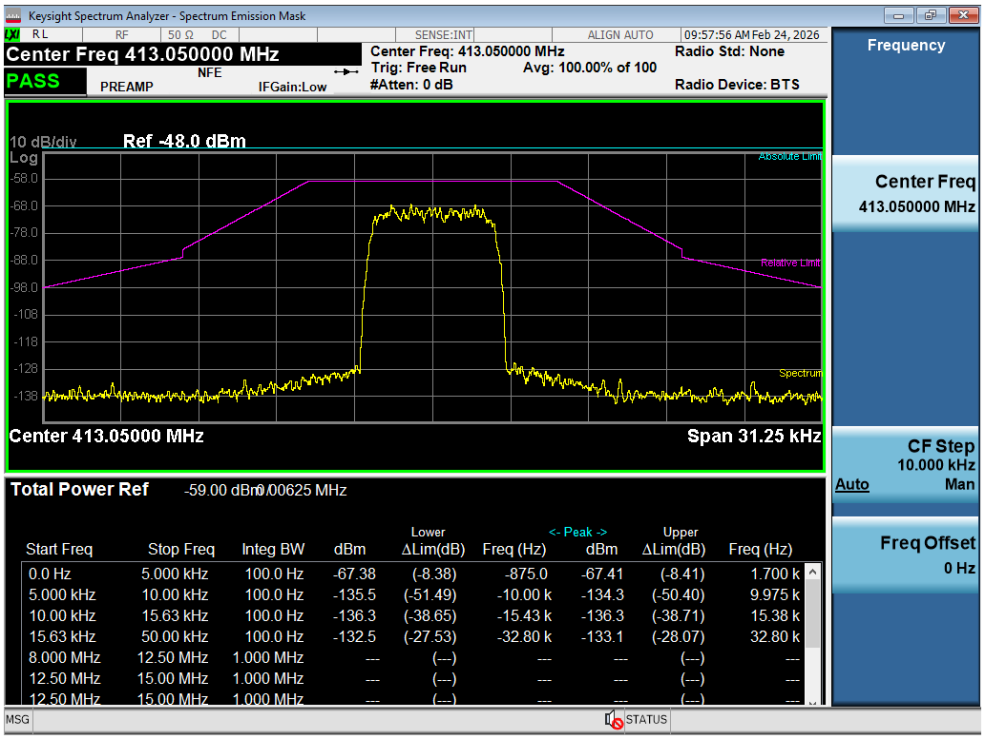
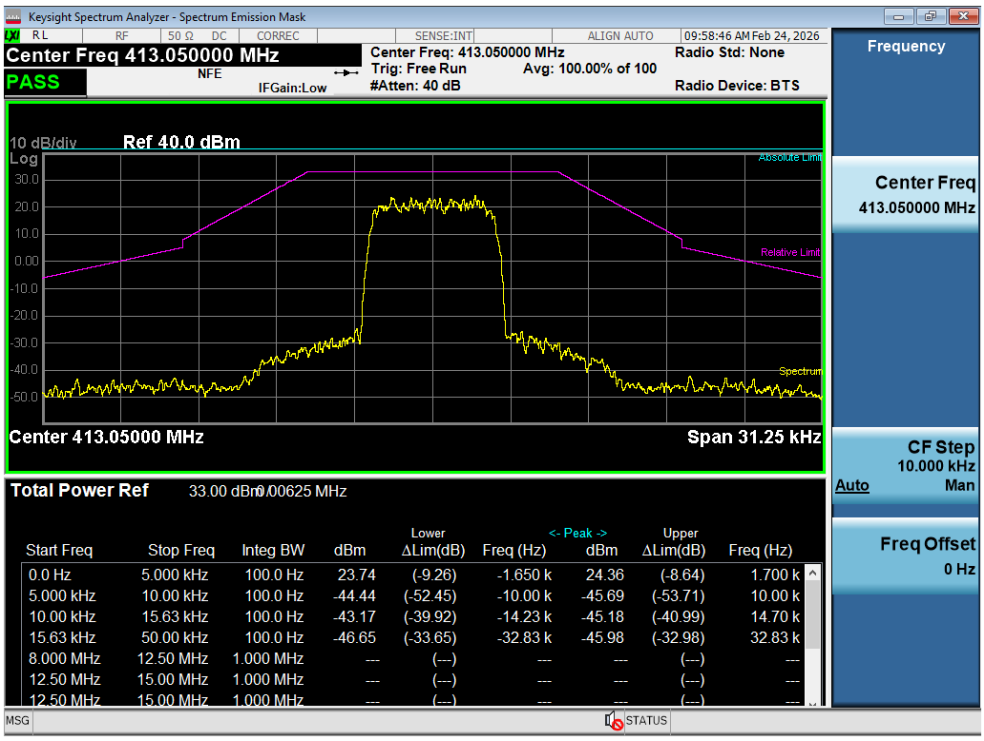
Input @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Downlink / P25 Phase 1 (CQPSK) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 100.0 Hz | -67.38 | (-8.38) | -875.0 | -67.41 | (-8.41) | 1.700 k |
| 5.000 kHz | 10.00 kHz | 100.0 Hz | -135.5 | (-51.49) | -10.00 k | -134.3 | (-50.40) | 9.975 k |
| 10.00 kHz | 15.63 kHz | 100.0 Hz | -136.3 | (-38.65) | -15.43 k | -136.3 | (-38.71) | 15.38 k |
| 15.63 kHz | 50.00 kHz | 100.0 Hz | -132.5 | (-27.53) | -32.80 k | -133.1 | (-28.07) | 32.80 k |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

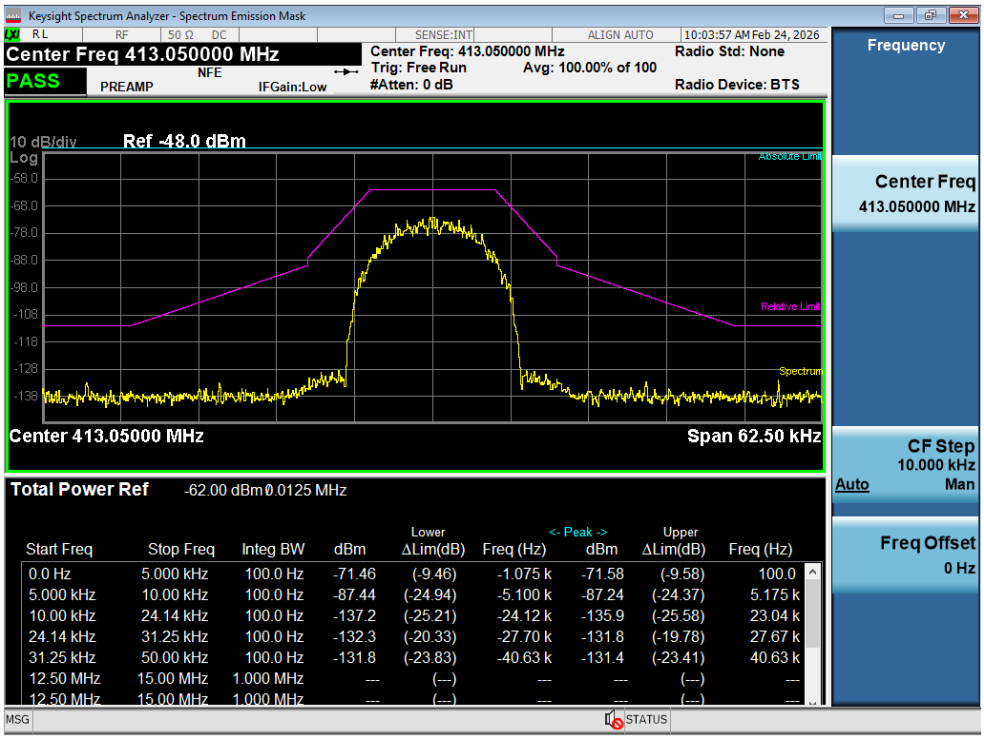
Output @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Downlink / P25 Phase 1 (CQPSK) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 100.0 Hz | 23.74 | (-9.26) | -1.650 k | 24.36 | (-8.64) | 1.700 k |
| 5.000 kHz | 10.00 kHz | 100.0 Hz | -44.44 | (-52.45) | -10.00 k | -45.69 | (-53.71) | 10.00 k |
| 10.00 kHz | 15.63 kHz | 100.0 Hz | -43.17 | (-39.92) | -14.23 k | -45.18 | (-40.99) | 14.70 k |
| 15.63 kHz | 50.00 kHz | 100.0 Hz | -46.65 | (-33.65) | -32.83 k | -45.98 | (-32.98) | 32.83 k |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

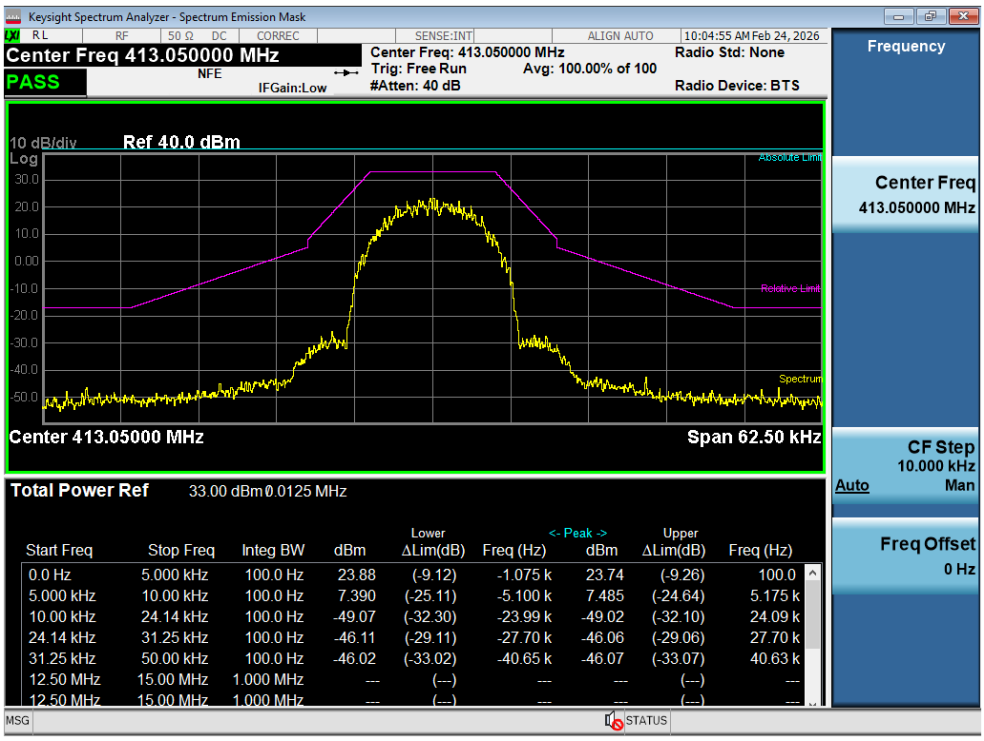

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (406.1 ~ 420) / Downlink / P25 Phase 2 (H-DQPSK) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 100.0 Hz | -71.46 | (-9.46) | -1.075 k | -71.58 | (-9.58) | 100.0 |
| 5.000 kHz | 10.00 kHz | 100.0 Hz | -87.44 | (-24.94) | -5.100 k | -87.24 | (-24.37) | 5.175 k |
| 10.00 kHz | 24.14 kHz | 100.0 Hz | -137.2 | (-25.21) | -24.12 k | -135.9 | (-25.58) | 23.04 k |
| 24.14 kHz | 31.25 kHz | 100.0 Hz | -132.3 | (-20.33) | -27.70 k | -131.8 | (-19.78) | 27.67 k |
| 31.25 kHz | 50.00 kHz | 100.0 Hz | -131.8 | (-23.83) | -40.63 k | -131.4 | (-23.41) | 40.63 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output / UHF (406.1 ~ 420) / Downlink / P25 Phase 2 (H-DQPSK) / Mask C

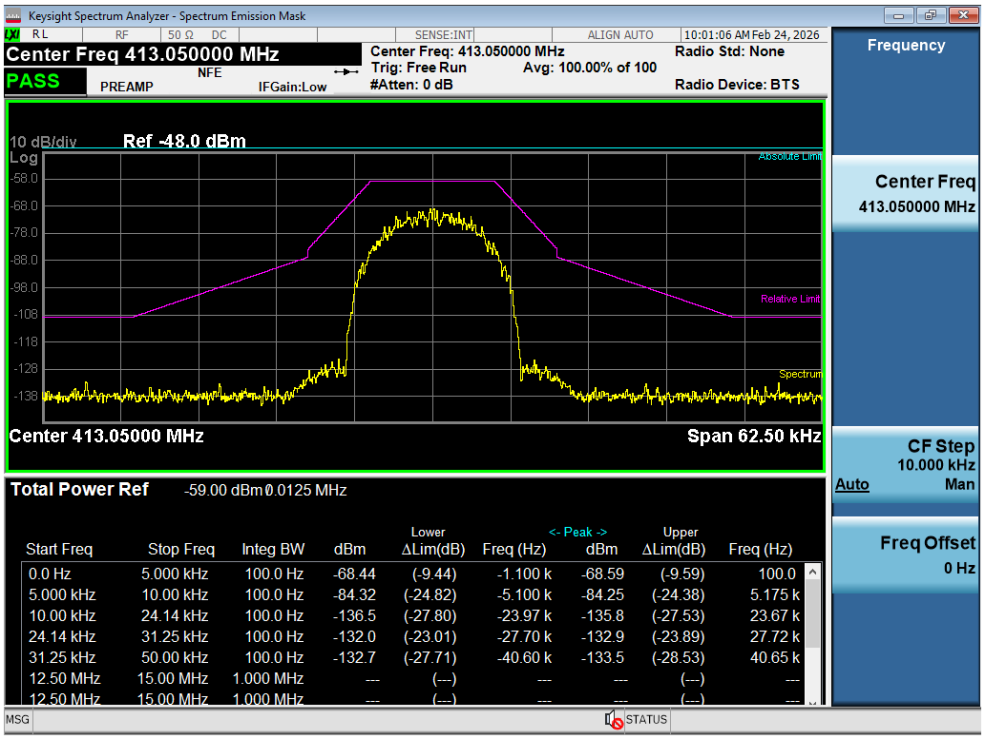



| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 100.0 Hz | 23.88 | (-9.12) | -1.075 k | 23.74 | (-9.26) | 100.0 |
| 5.000 kHz | 10.00 kHz | 100.0 Hz | 7.390 | (-25.11) | -5.100 k | 7.485 | (-24.64) | 5.175 k |
| 10.00 kHz | 24.14 kHz | 100.0 Hz | -49.07 | (-32.30) | -23.99 k | -49.02 | (-32.10) | 24.09 k |
| 24.14 kHz | 31.25 kHz | 100.0 Hz | -46.11 | (-29.11) | -27.70 k | -46.06 | (-29.06) | 27.70 k |
| 31.25 kHz | 50.00 kHz | 100.0 Hz | -46.02 | (-33.02) | -40.65 k | -46.07 | (-33.07) | 40.63 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



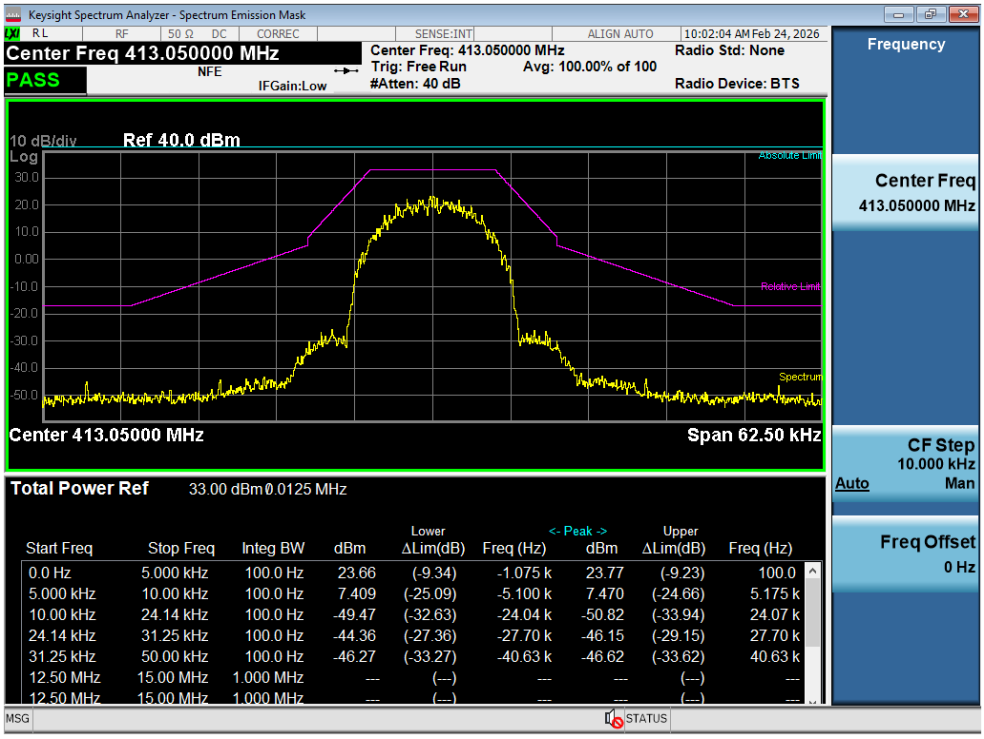
The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Downlink / P25 Phase 2 (H-DQPSK) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 100.0 Hz | -68.44 | (-9.44) | -1.100 k | -68.59 | (-9.59) | 100.0 |
| 5.000 kHz | 10.00 kHz | 100.0 Hz | -84.32 | (-24.82) | -5.100 k | -84.25 | (-24.38) | 5.175 k |
| 10.00 kHz | 24.14 kHz | 100.0 Hz | -136.5 | (-27.80) | -23.97 k | -135.8 | (-27.53) | 23.67 k |
| 24.14 kHz | 31.25 kHz | 100.0 Hz | -132.0 | (-23.01) | -27.70 k | -132.9 | (-23.89) | 27.72 k |
| 31.25 kHz | 50.00 kHz | 100.0 Hz | -132.7 | (-27.71) | -40.60 k | -133.5 | (-28.53) | 40.65 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

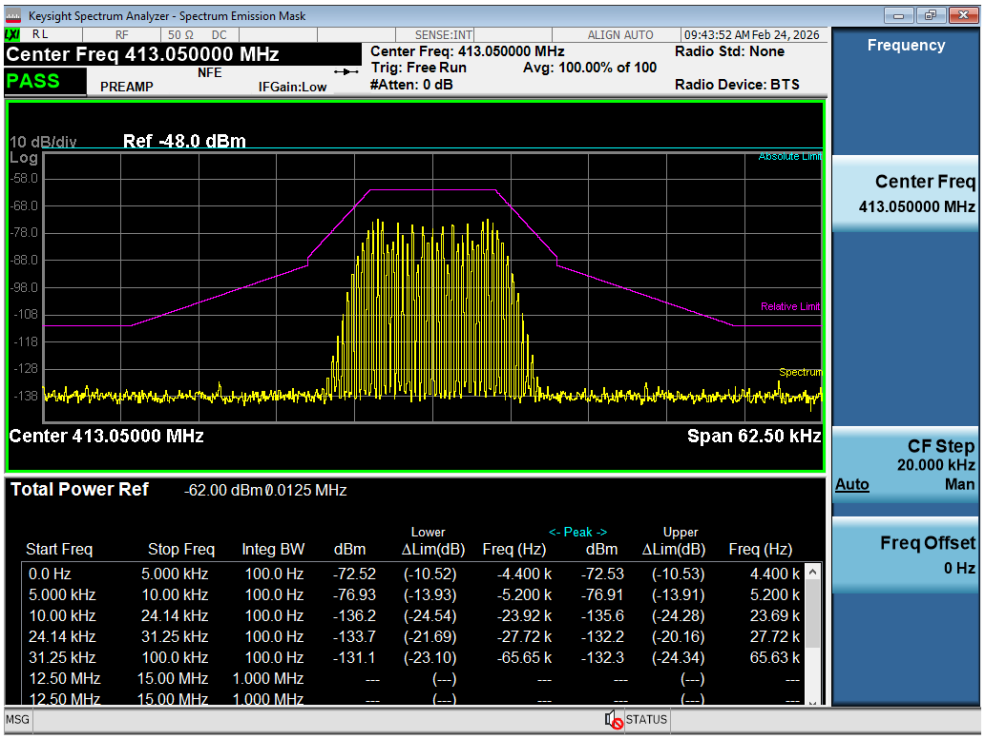
Output @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Downlink / P25 Phase 2 (H-DQPSK) / Mask C



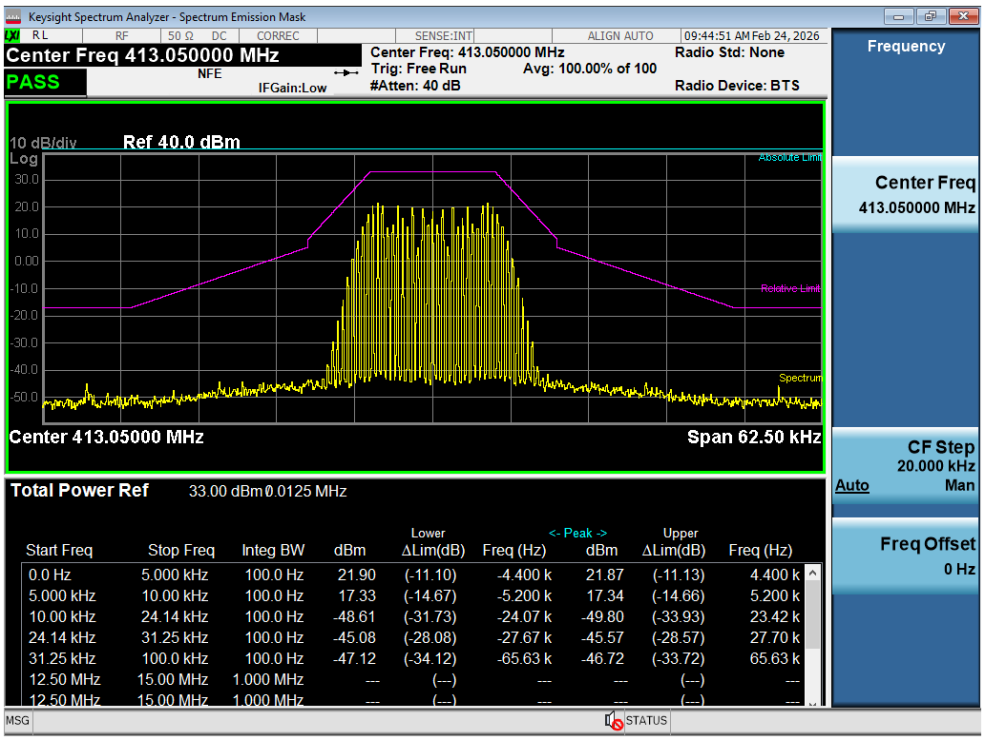

| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 100.0 Hz | 23.66 | (-9.34) | -1.075 k | 23.77 | (-9.23) | 100.0 |
| 5.000 kHz | 10.00 kHz | 100.0 Hz | 7.409 | (-25.09) | -5.100 k | 7.470 | (-24.66) | 5.175 k |
| 10.00 kHz | 24.14 kHz | 100.0 Hz | -49.47 | (-32.63) | -24.04 k | -50.82 | (-33.94) | 24.07 k |
| 24.14 kHz | 31.25 kHz | 100.0 Hz | -44.36 | (-27.36) | -27.70 k | -46.15 | (-29.15) | 27.70 k |
| 31.25 kHz | 50.00 kHz | 100.0 Hz | -46.27 | (-33.27) | -40.63 k | -46.62 | (-33.62) | 40.63 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |


The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (406.1 ~ 420) / Downlink / FM (12.5 kHz) / Mask C



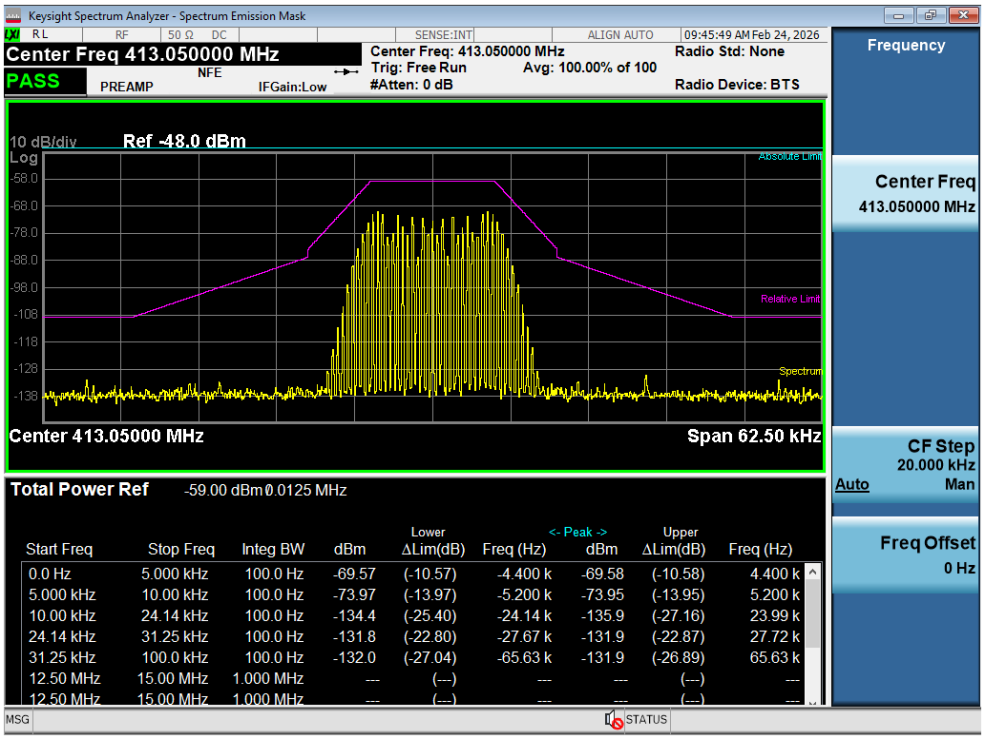

Output / UHF (406.1 ~ 420) / Downlink / FM (12.5 kHz) / Mask C



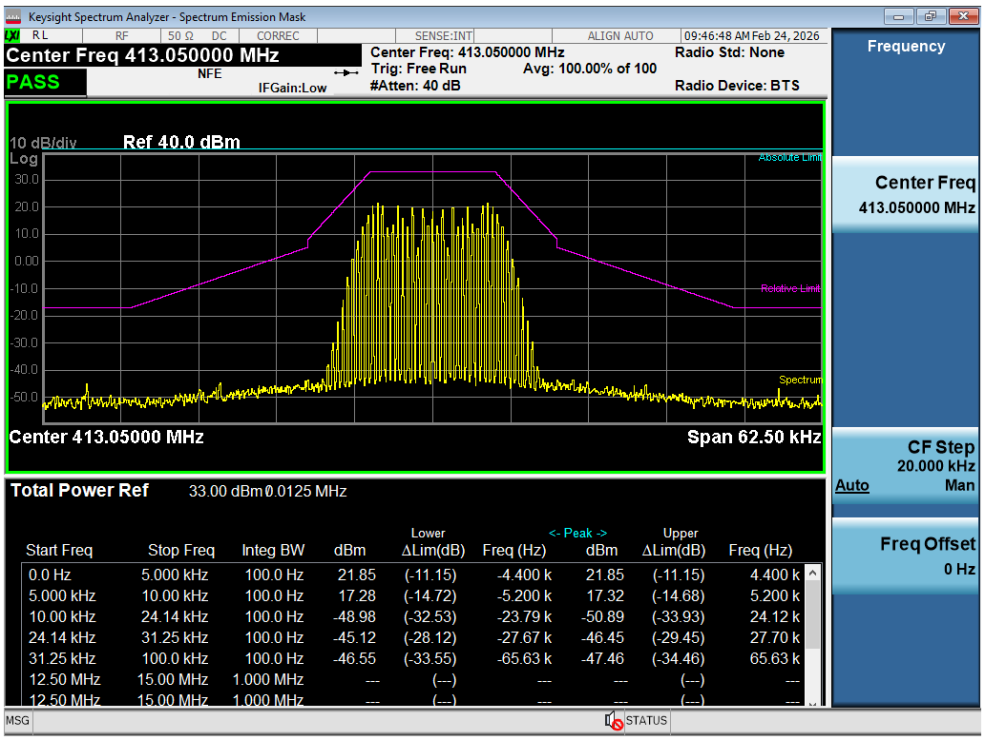



The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Downlink / FM (12.5 kHz) / Mask C



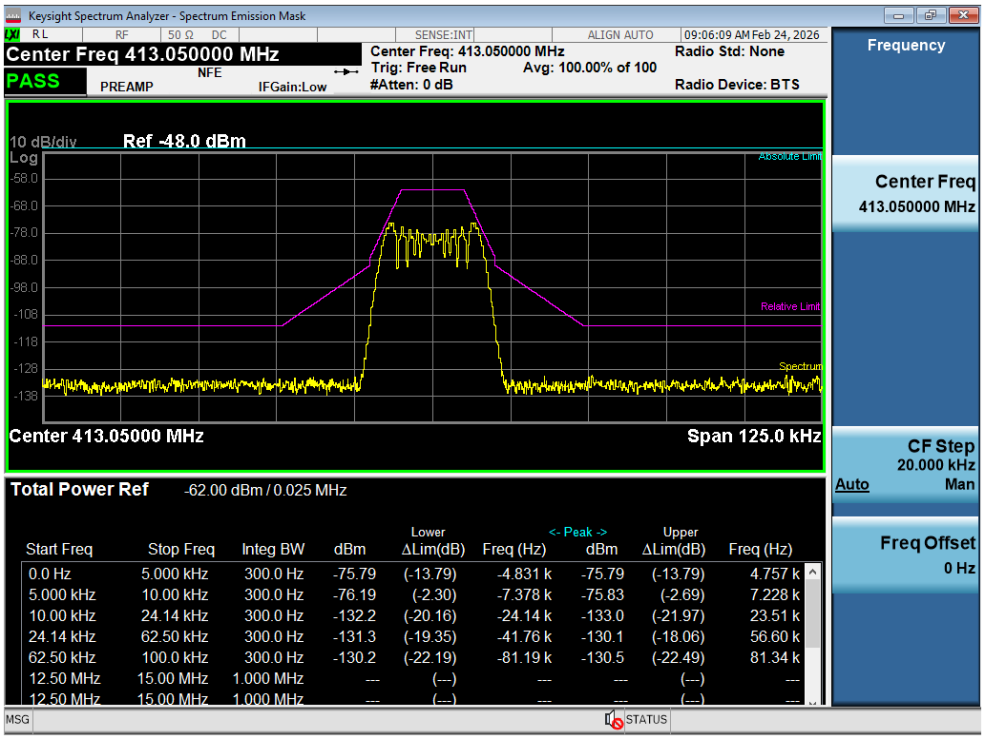

Output @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Downlink / FM (12.5 kHz) / Mask C





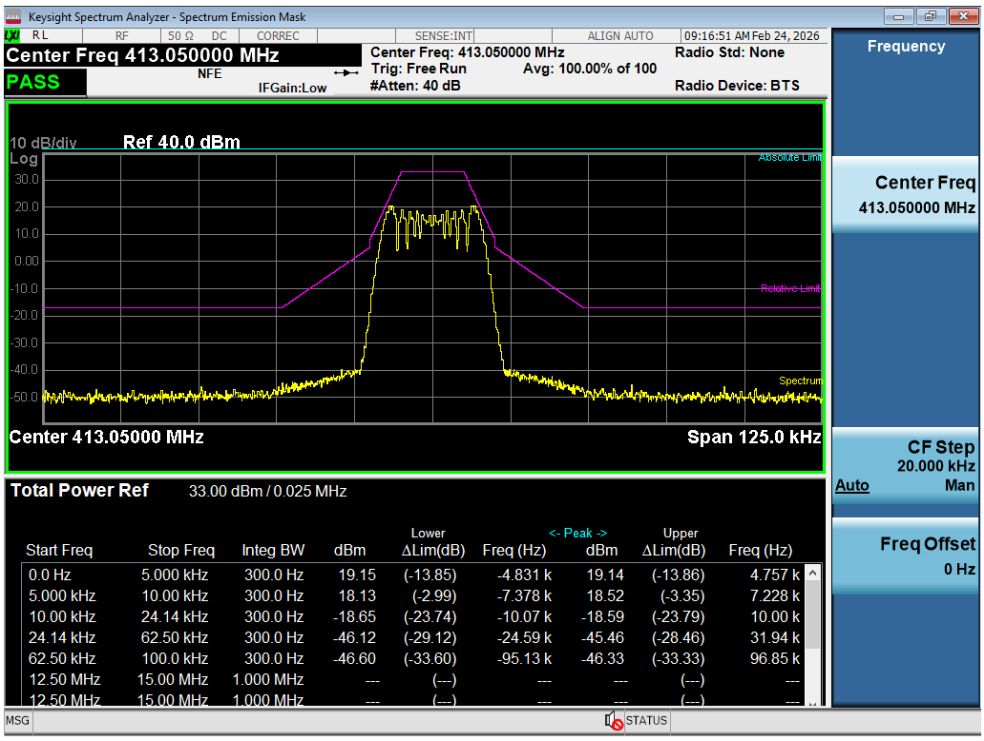

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (406.1 ~ 420) / Downlink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | -75.79 | (-13.79) | -4.831 k | -75.79 | (-13.79) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | -76.19 | (-2.30) | -7.378 k | -75.83 | (-2.69) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -132.2 | (-20.16) | -24.14 k | -133.0 | (-21.97) | 23.51 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -131.3 | (-19.35) | -41.76 k | -130.1 | (-18.06) | 56.60 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -130.2 | (-22.19) | -81.19 k | -130.5 | (-22.49) | 81.34 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output / UHF (406.1 ~ 420) / Downlink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | 19.15 | (-13.85) | -4.831 k | 19.14 | (-13.86) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | 18.13 | (-2.99) | -7.378 k | 18.52 | (-3.35) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -18.65 | (-23.74) | -10.07 k | -18.59 | (-23.79) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -46.12 | (-29.12) | -24.59 k | -45.46 | (-28.46) | 31.94 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -46.60 | (-33.60) | -95.13 k | -46.33 | (-33.33) | 96.85 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |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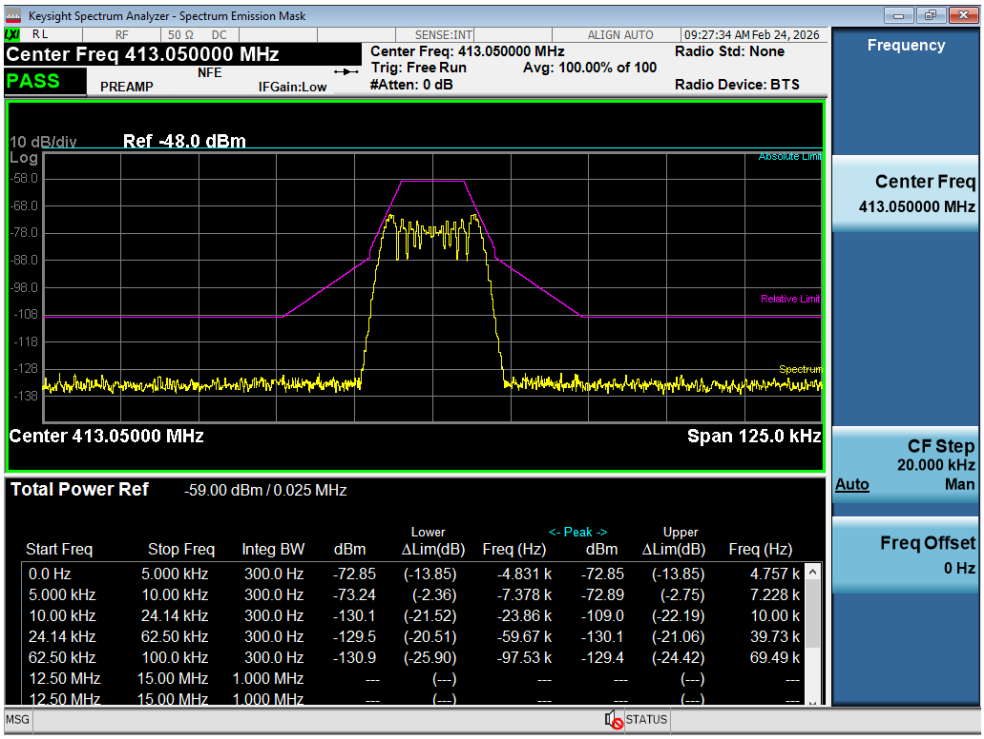
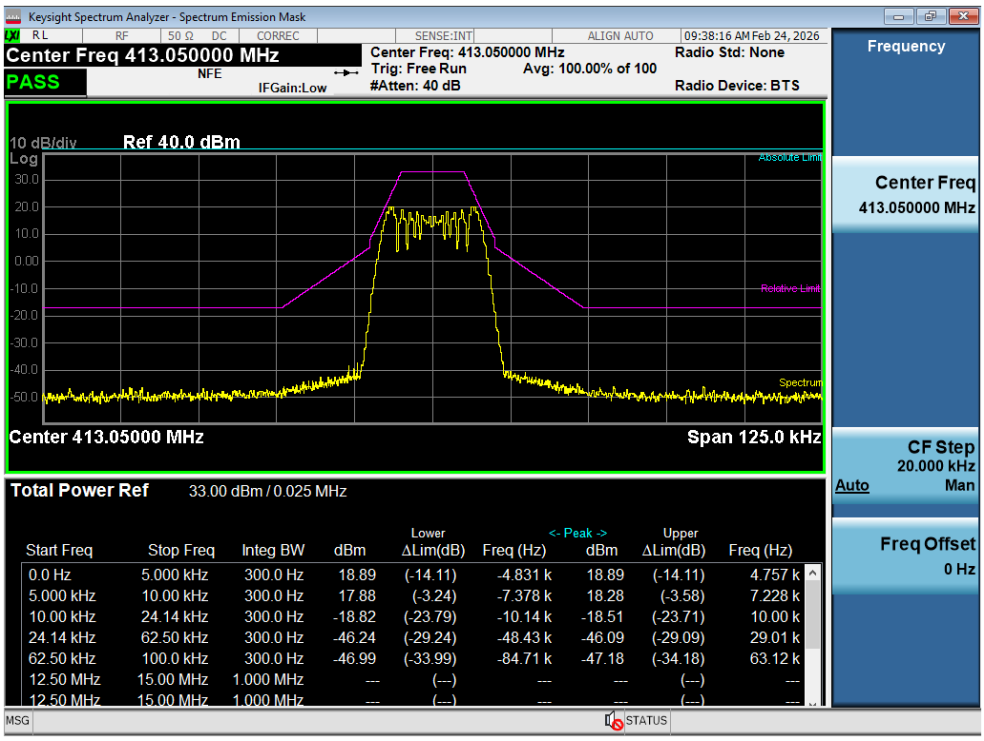
Input @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Downlink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | -72.85 | (-13.85) | -4.831 k | -72.85 | (-13.85) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | -73.24 | (-2.36) | -7.378 k | -72.89 | (-2.75) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -130.1 | (-21.52) | -23.86 k | -109.0 | (-22.19) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -129.5 | (-20.51) | -59.67 k | -130.1 | (-21.06) | 39.73 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -130.9 | (-25.90) | -97.53 k | -129.4 | (-24.42) | 69.49 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Downlink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | 18.89 | (-14.11) | -4.831 k | 18.89 | (-14.11) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | 17.88 | (-3.24) | -7.378 k | 18.28 | (-3.58) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -18.82 | (-23.79) | -10.14 k | -18.51 | (-23.71) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -46.24 | (-29.24) | -48.43 k | -46.09 | (-29.09) | 29.01 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -46.99 | (-33.99) | -84.71 k | -47.18 | (-34.18) | 63.12 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



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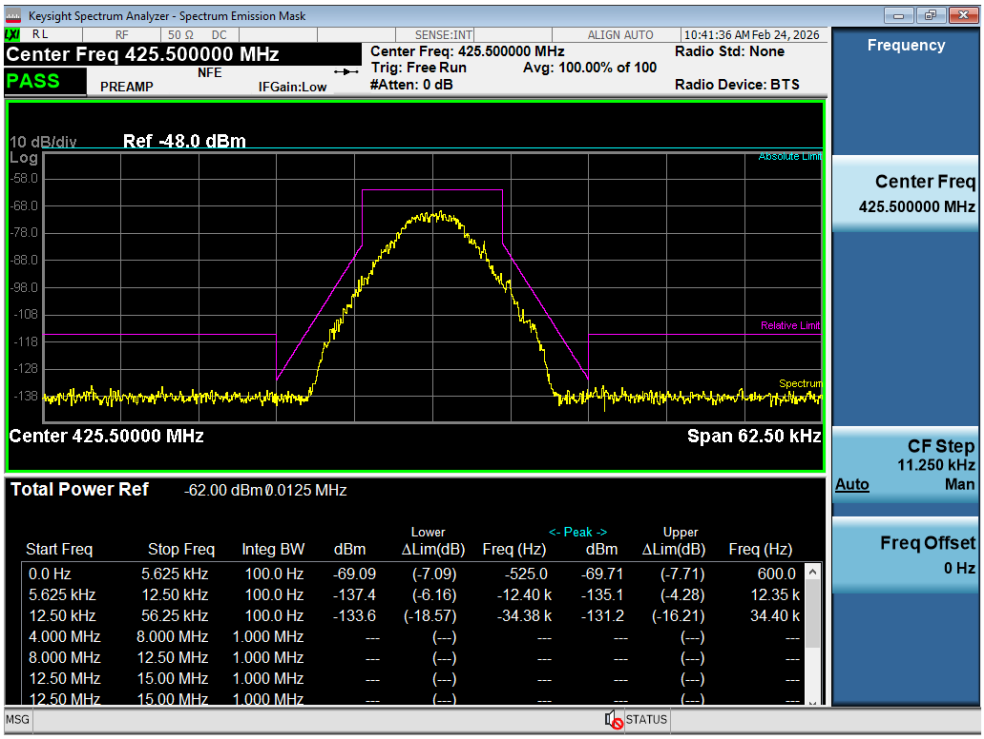
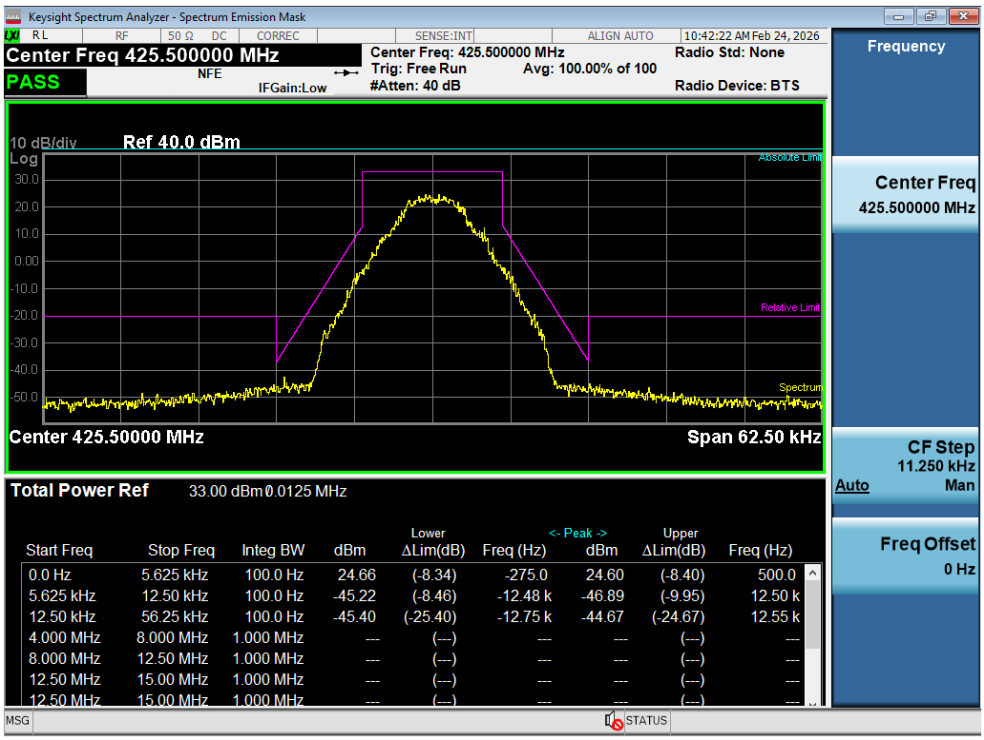
Input / UHF (421 ~ 430) / Downlink / P25 Phase 1 (C4FM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -69.09 | (-7.09) | -525.0 | -69.71 | (-7.71) | 600.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -137.4 | (-6.16) | -12.40 k | -135.1 | (-4.28) | 12.35 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -133.6 | (-18.57) | -34.38 k | -131.2 | (-16.21) | 34.40 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

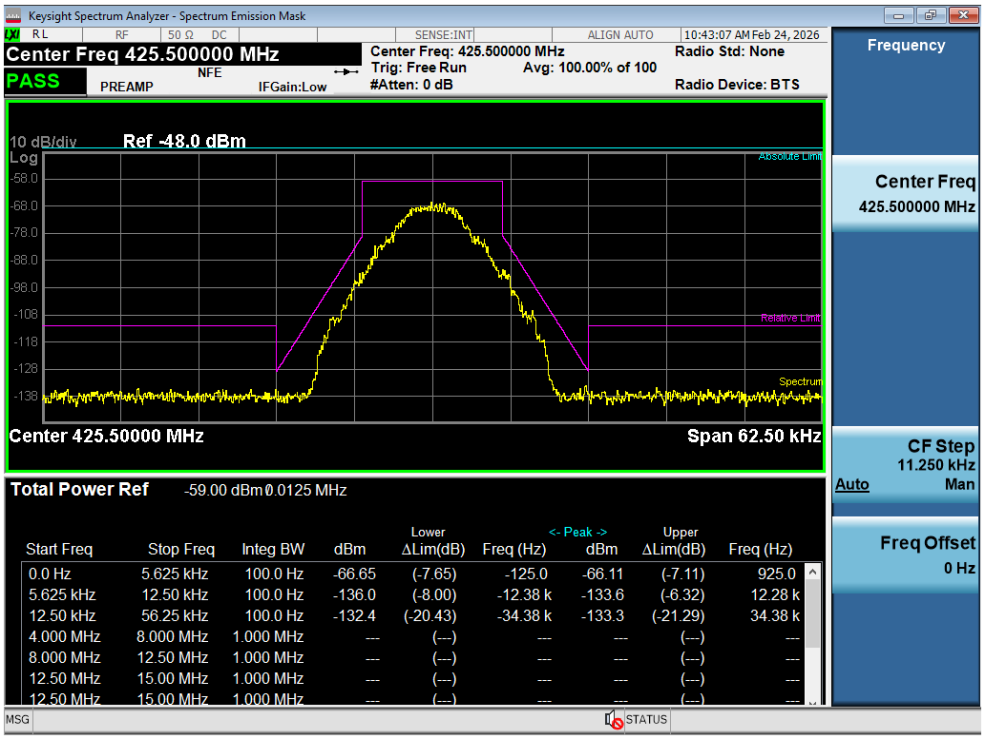
Output / UHF (421 ~ 430) / Downlink / P25 Phase 1 (C4FM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 24.66 | (-8.34) | -275.0 | 24.60 | (-8.40) | 500.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -45.22 | (-8.46) | -12.48 k | -46.89 | (-9.95) | 12.50 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -45.40 | (-25.40) | -12.75 k | -44.67 | (-24.67) | 12.55 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

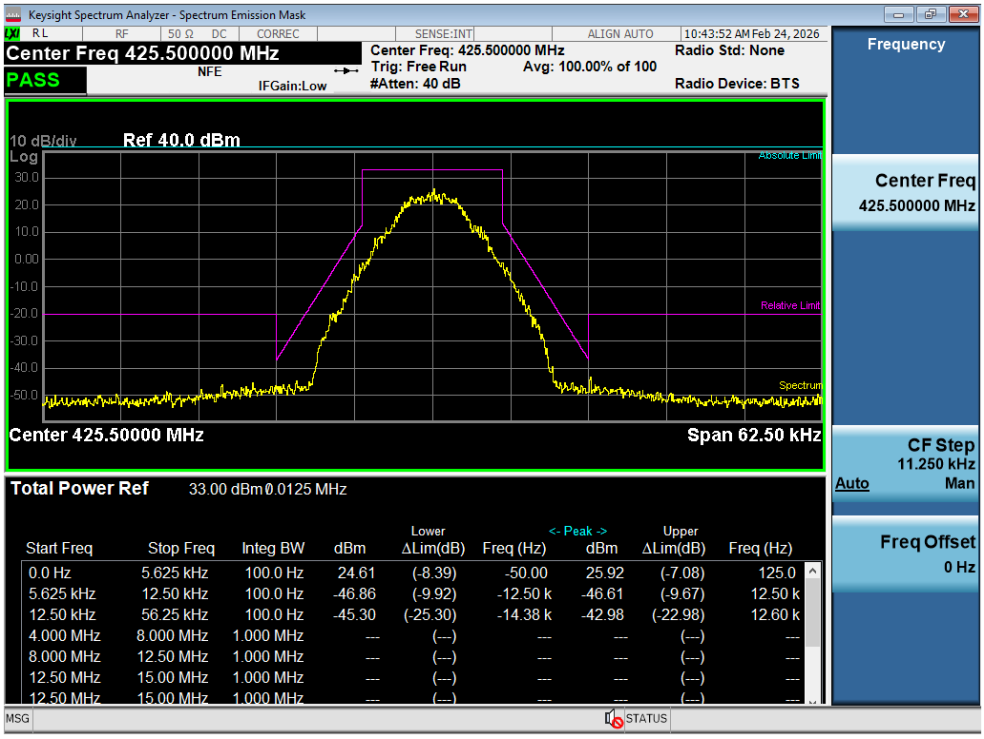

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (421 ~ 430) / Downlink / P25 Phase 1 (C4FM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | Peak dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -66.65 | (-7.65) | -125.0 | -66.11 | (-7.11) | 925.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -136.0 | (-8.00) | -12.38 k | -133.6 | (-6.32) | 12.28 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -132.4 | (-20.43) | -34.38 k | -133.3 | (-21.29) | 34.38 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

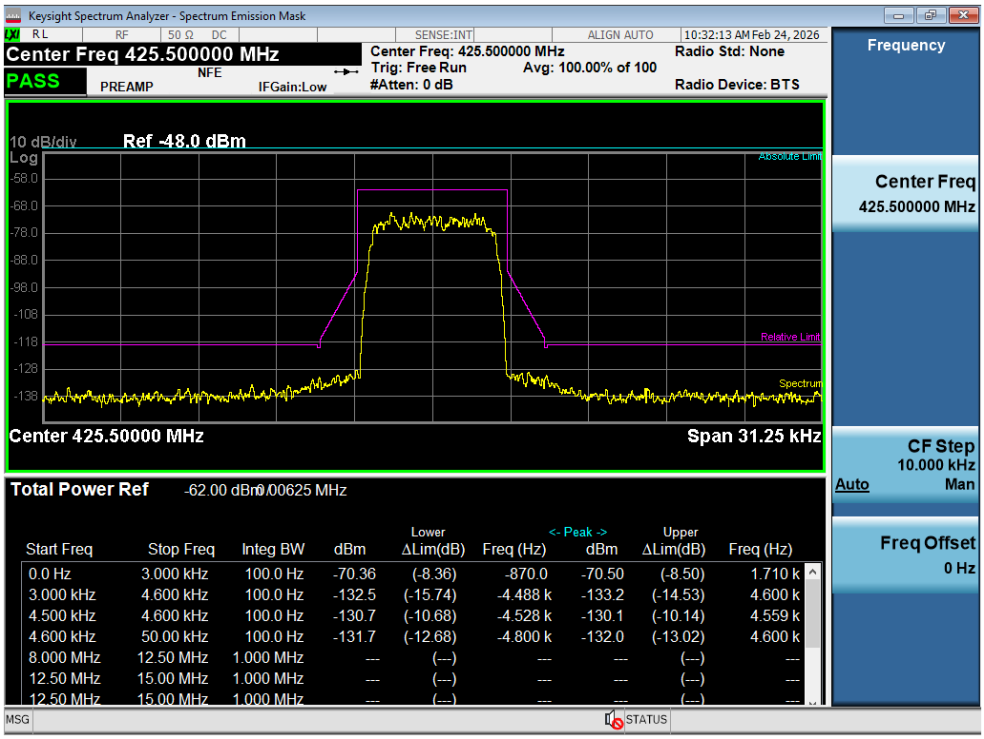
Output @ + 3 dB AGC threshold / UHF (421 ~ 430) / Downlink / P25 Phase 1 (C4FM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | Peak dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 24.61 | (-8.39) | -50.00 | 25.92 | (-7.08) | 125.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -46.86 | (-9.92) | -12.50 k | -46.61 | (-9.67) | 12.50 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -45.30 | (-25.30) | -14.38 k | -42.98 | (-22.98) | 12.60 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

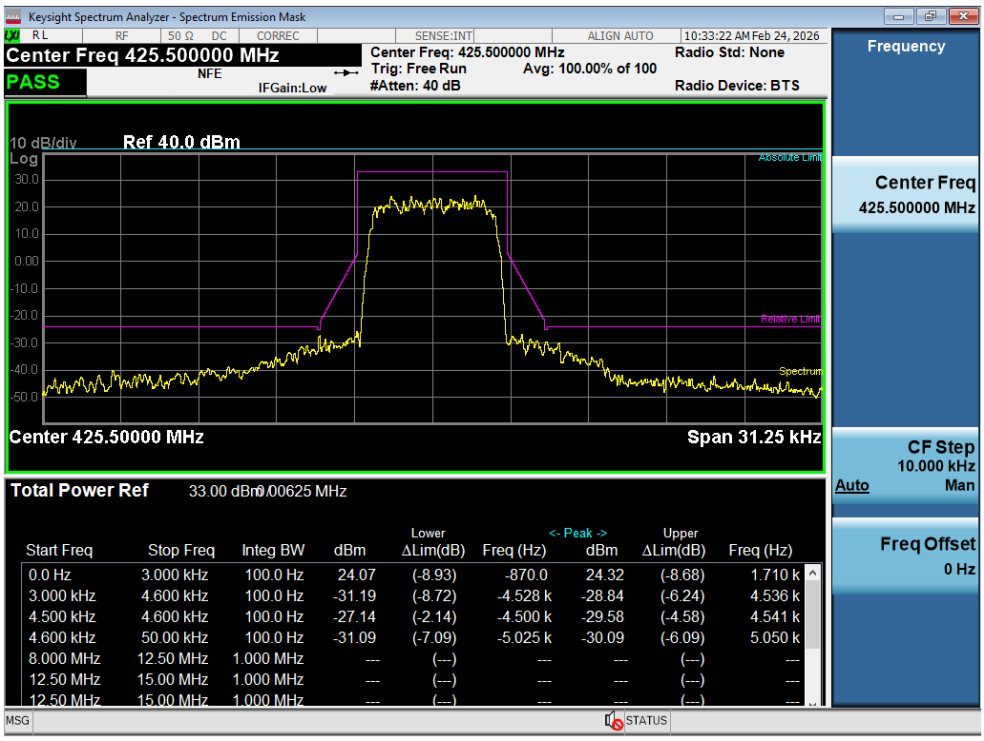

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (421 ~ 430) / Downlink / P25 Phase 1 (CQPSK) / Mask E




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 3.000 kHz | 100.0 Hz | -70.36 | (-8.36) | -870.0 | -70.50 | (-8.50) | 1.710 k |
| 3.000 kHz | 4.600 kHz | 100.0 Hz | -132.5 | (-15.74) | -4.488 k | -133.2 | (-14.53) | 4.600 k |
| 4.500 kHz | 4.600 kHz | 100.0 Hz | -130.7 | (-10.68) | -4.528 k | -130.1 | (-10.14) | 4.559 k |
| 4.600 kHz | 50.00 kHz | 100.0 Hz | -131.7 | (-12.68) | -4.800 k | -132.0 | (-13.02) | 4.600 k |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output / UHF (421 ~ 430) / Downlink / P25 Phase 1 (CQPSK) / Mask E




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 3.000 kHz | 100.0 Hz | 24.07 | (-8.93) | -870.0 | 24.32 | (-8.68) | 1.710 k |
| 3.000 kHz | 4.600 kHz | 100.0 Hz | -31.19 | (-8.72) | -4.528 k | -28.84 | (-6.24) | 4.536 k |
| 4.500 kHz | 4.600 kHz | 100.0 Hz | -27.14 | (-2.14) | -4.500 k | -29.58 | (-4.58) | 4.541 k |
| 4.600 kHz | 50.00 kHz | 100.0 Hz | -31.09 | (-7.09) | -5.025 k | -30.09 | (-6.09) | 5.050 k |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |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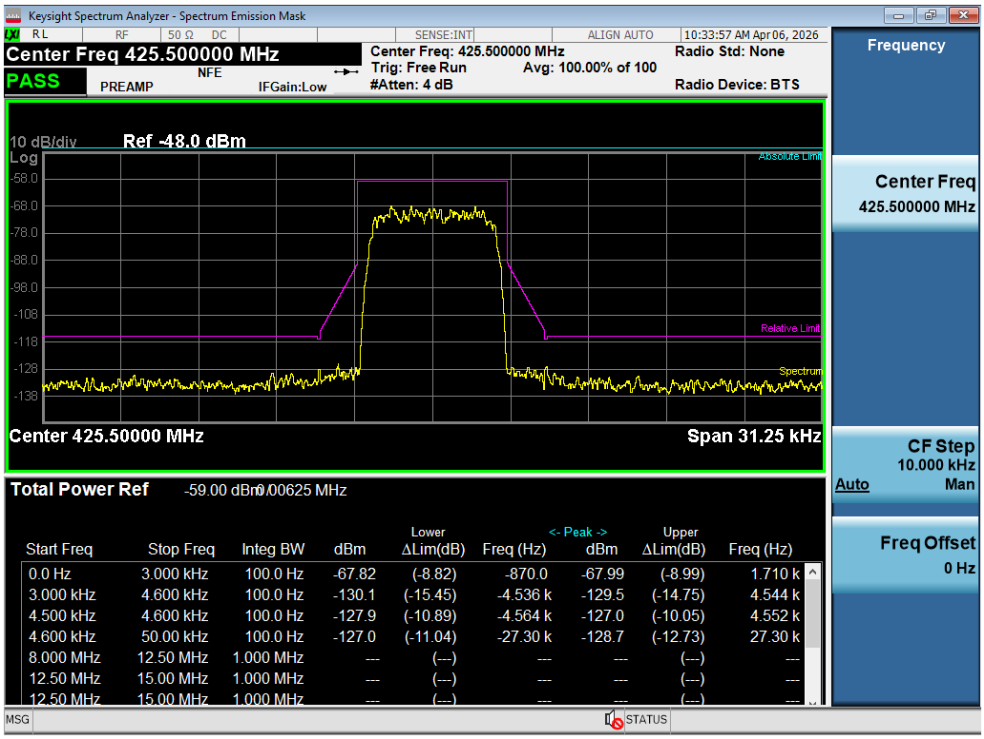
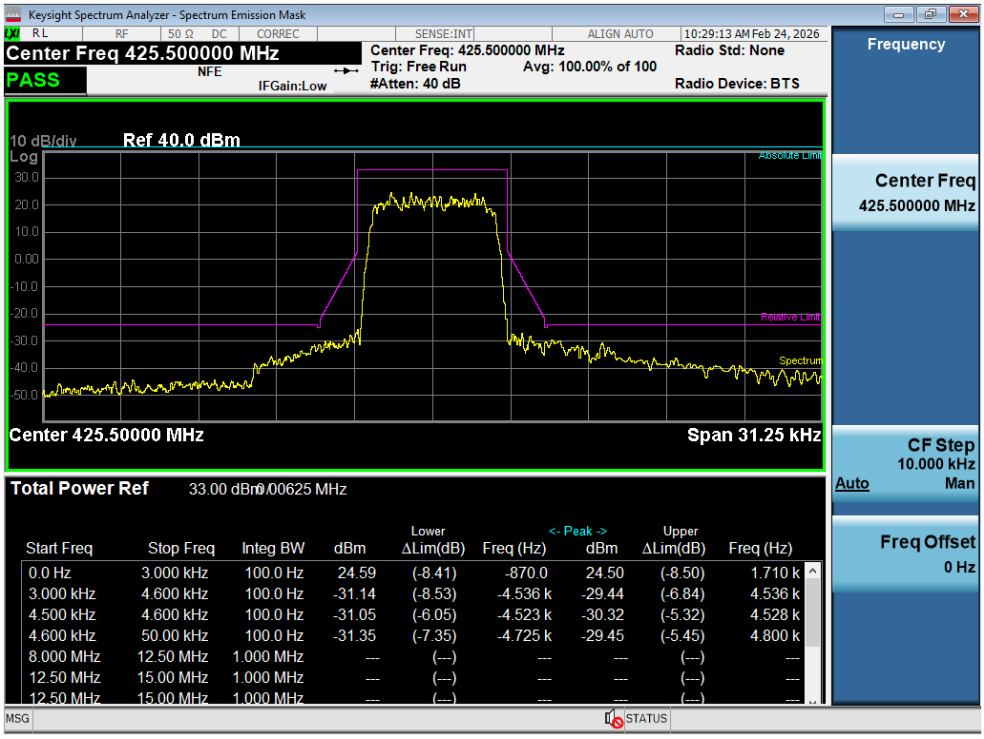
Input @ + 3 dB AGC threshold / UHF (421 ~ 430) / Downlink / P25 Phase 1 (CQPSK) / Mask E




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 3.000 kHz | 100.0 Hz | -67.82 | (-8.82) | -870.0 | -67.99 | (-8.99) | 1.710 k |
| 3.000 kHz | 4.600 kHz | 100.0 Hz | -130.1 | (-15.45) | -4.536 k | -129.5 | (-14.75) | 4.544 k |
| 4.500 kHz | 4.600 kHz | 100.0 Hz | -127.9 | (-10.89) | -4.564 k | -127.0 | (-10.05) | 4.552 k |
| 4.600 kHz | 50.00 kHz | 100.0 Hz | -127.0 | (-11.04) | -27.30 k | -128.7 | (-12.73) | 27.30 k |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

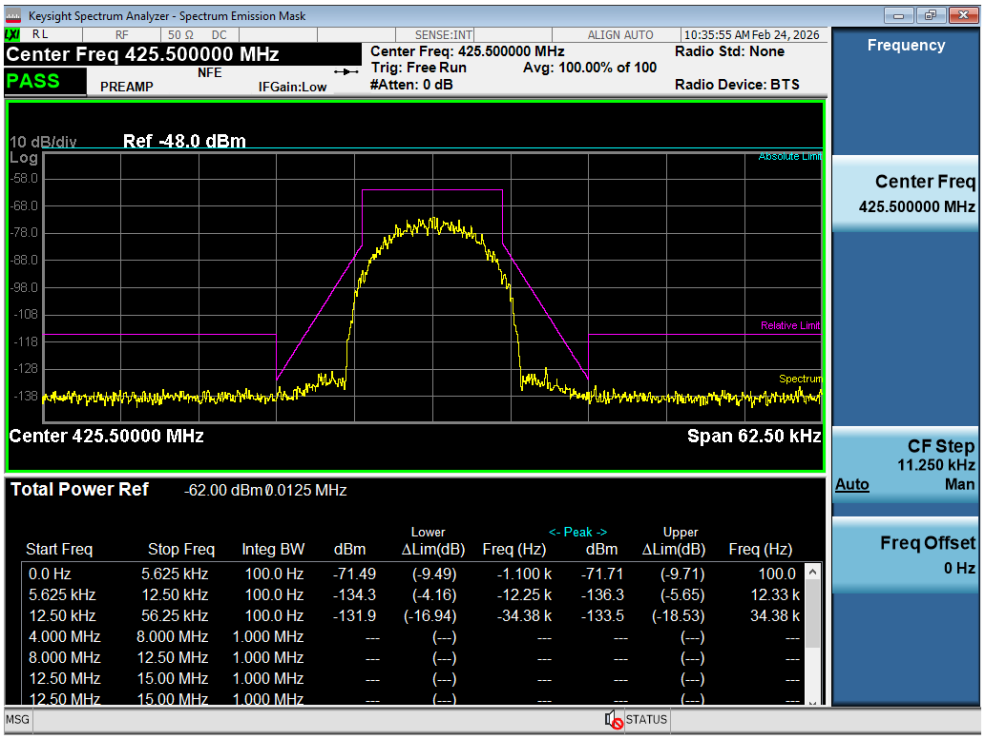
Output @ + 3 dB AGC threshold / UHF (421 ~ 430) / Downlink / P25 Phase 1 (CQPSK) / Mask E




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 3.000 kHz | 100.0 Hz | 24.59 | (-8.41) | -870.0 | 24.50 | (-8.50) | 1.710 k |
| 3.000 kHz | 4.600 kHz | 100.0 Hz | -31.14 | (-8.53) | -4.536 k | -29.44 | (-6.84) | 4.536 k |
| 4.500 kHz | 4.600 kHz | 100.0 Hz | -31.05 | (-6.05) | -4.523 k | -30.32 | (-5.32) | 4.528 k |
| 4.600 kHz | 50.00 kHz | 100.0 Hz | -31.35 | (-7.35) | -4.725 k | -29.45 | (-5.45) | 4.800 k |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

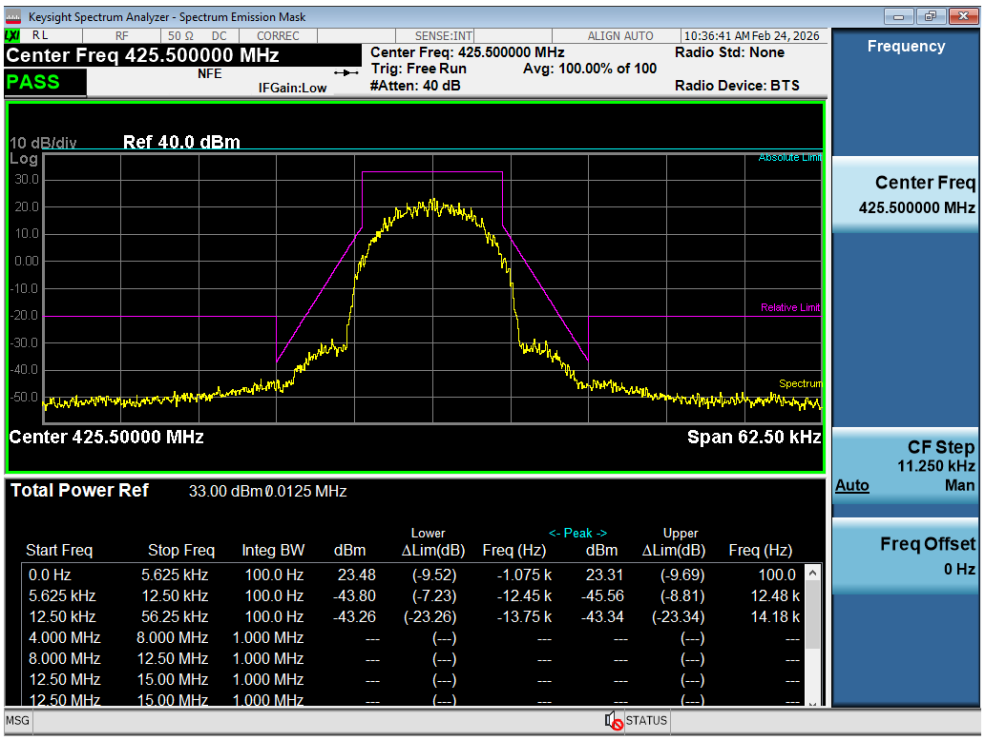

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (421 ~ 430) / Downlink / P25 Phase 2 (H-DQPSK) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -71.49 | (-9.49) | -1.100 k | -71.71 | (-9.71) | 100.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -134.3 | (-4.16) | -12.25 k | -136.3 | (-5.65) | 12.33 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -131.9 | (-16.94) | -34.38 k | -133.5 | (-18.53) | 34.38 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output / UHF (421 ~ 430) / Downlink / P25 Phase 2 (H-DQPSK) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 23.48 | (-9.52) | -1.075 k | 23.31 | (-9.69) | 100.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -43.80 | (-7.23) | -12.45 k | -45.56 | (-8.81) | 12.48 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -43.26 | (-23.26) | -13.75 k | -43.34 | (-23.34) | 14.18 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |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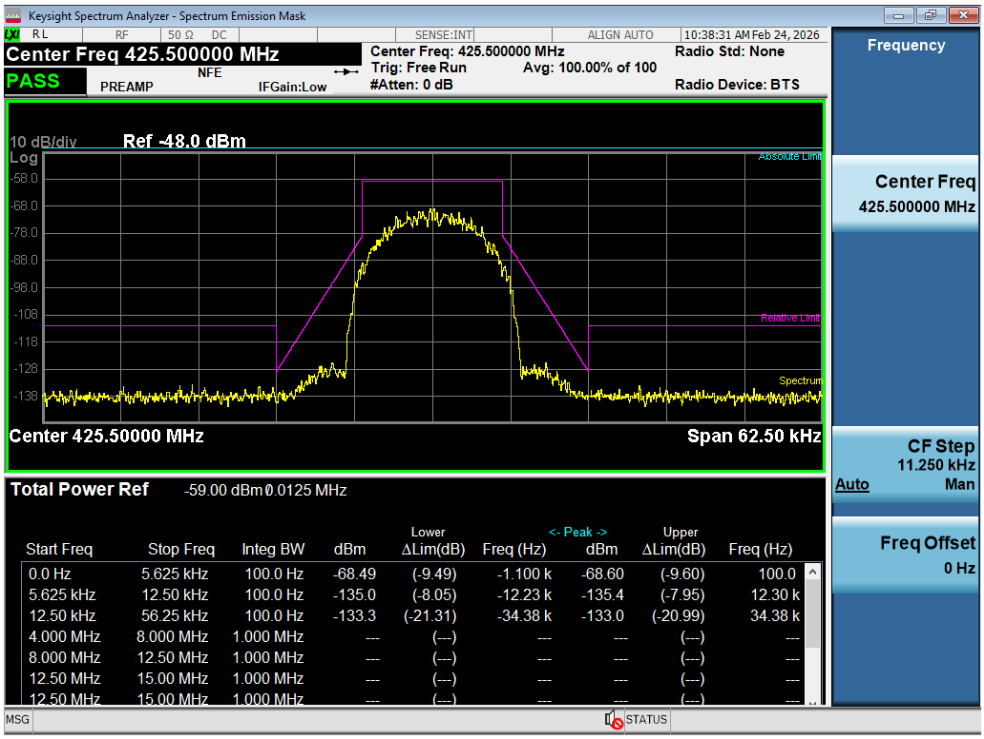
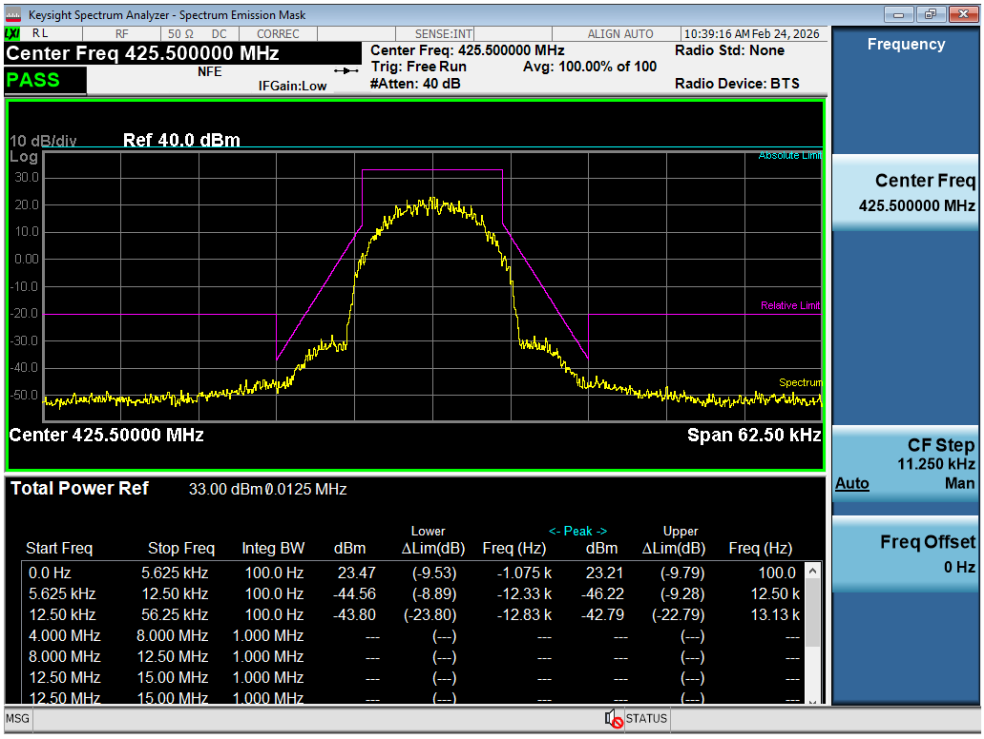
Input @ + 3 dB AGC threshold / UHF (421 ~ 430) / Downlink / P25 Phase 2 (H-DQPSK) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -68.49 | (-9.49) | -1.100 k | -68.60 | (-9.60) | 100.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -135.0 | (-8.05) | -12.23 k | -135.4 | (-7.95) | 12.30 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -133.3 | (-21.31) | -34.38 k | -133.0 | (-20.99) | 34.38 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

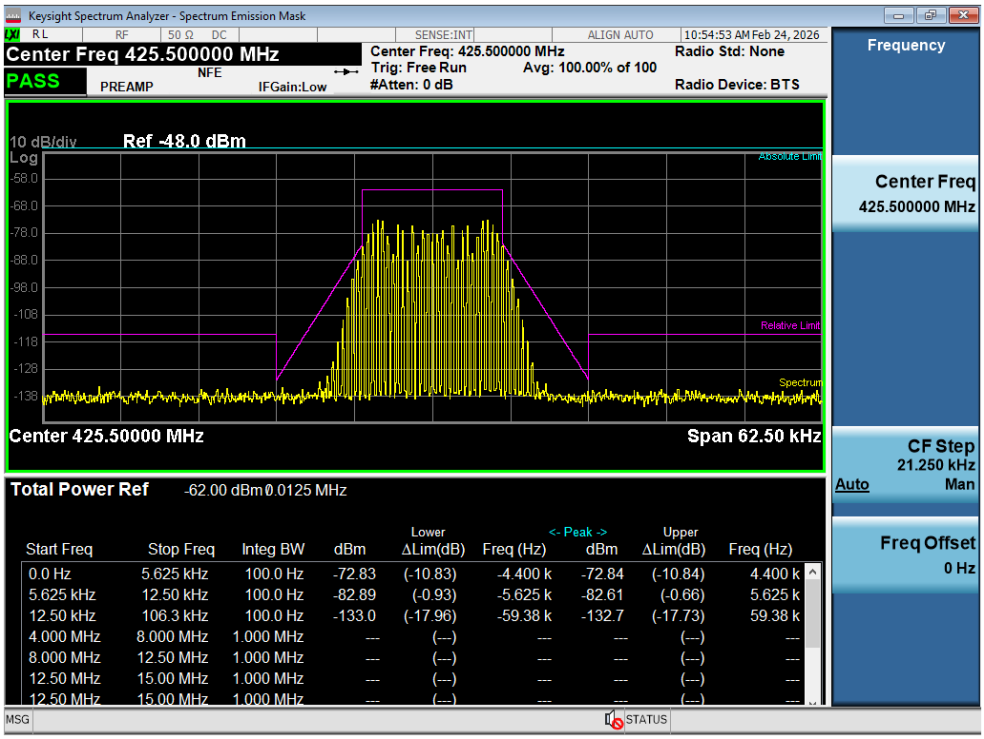
Output @ + 3 dB AGC threshold / UHF (421 ~ 430) / Downlink / P25 Phase 2 (H-DQPSK) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 23.47 | (-9.53) | -1.075 k | 23.21 | (-9.79) | 100.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -44.56 | (-8.89) | -12.33 k | -46.22 | (-9.28) | 12.50 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -43.80 | (-23.80) | -12.83 k | -42.79 | (-22.79) | 13.13 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

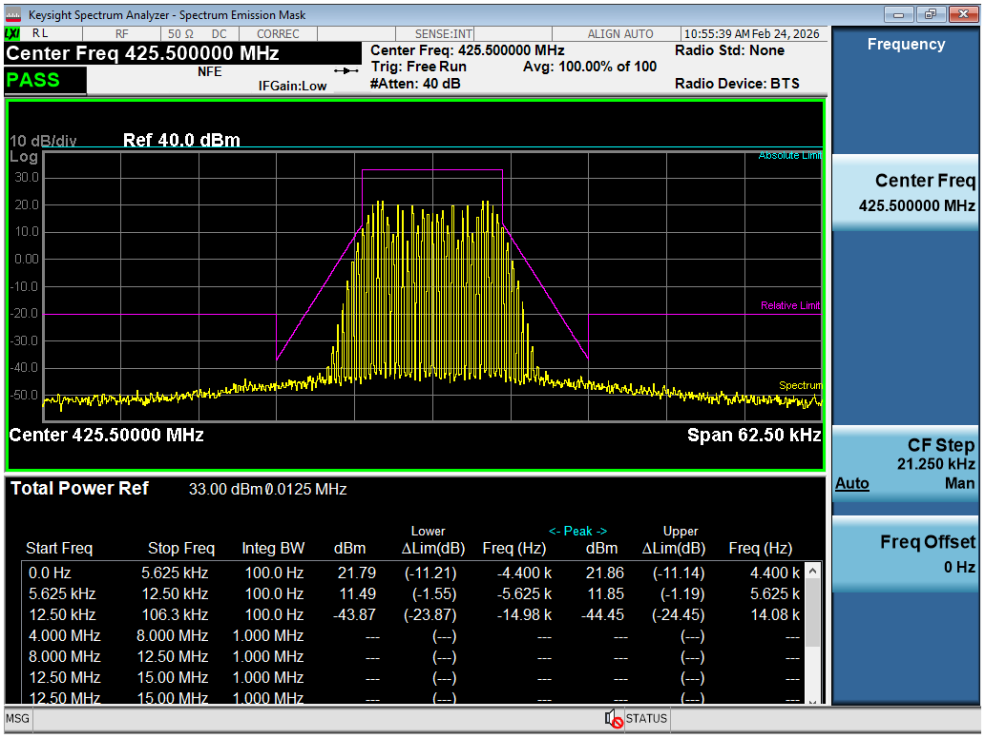

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (421 ~ 430) / Downlink / FM (12.5 kHz) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -72.83 | (-10.83) | -4.400 k | -72.84 | (-10.84) | 4.400 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -82.89 | (-0.93) | -5.625 k | -82.61 | (-0.66) | 5.625 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -133.0 | (-17.96) | -59.38 k | -132.7 | (-17.73) | 59.38 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output / UHF (421 ~ 430) / Downlink / FM (12.5 kHz) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 21.79 | (-11.21) | -4.400 k | 21.86 | (-11.14) | 4.400 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | 11.49 | (-1.55) | -5.625 k | 11.85 | (-1.19) | 5.625 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -43.87 | (-23.87) | -14.98 k | -44.45 | (-24.45) | 14.08 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



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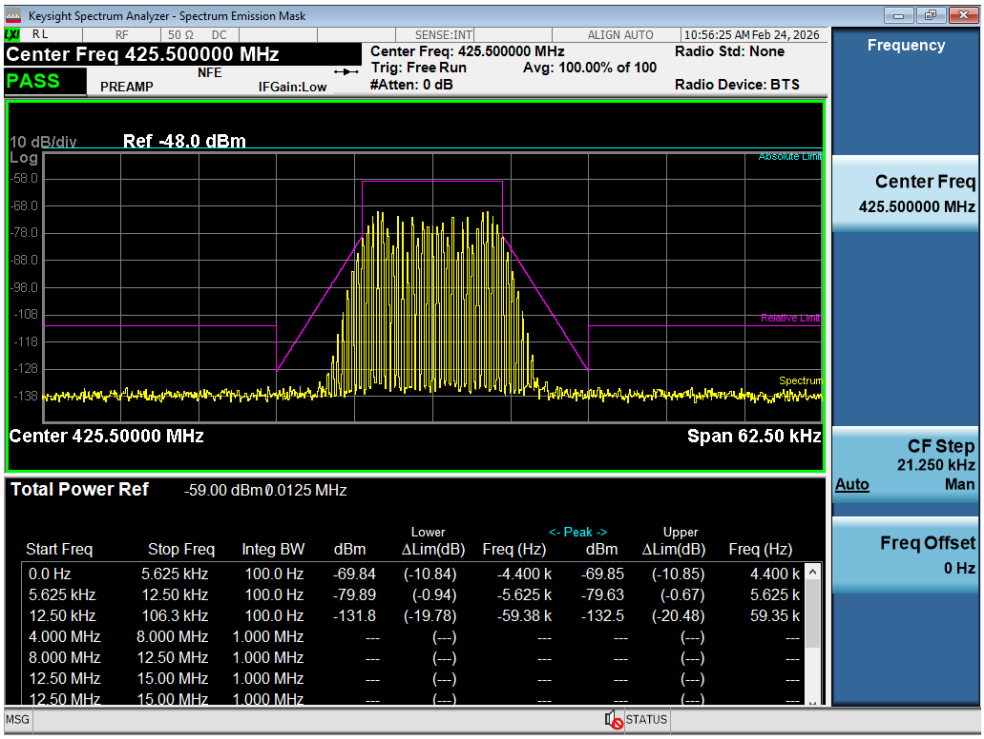
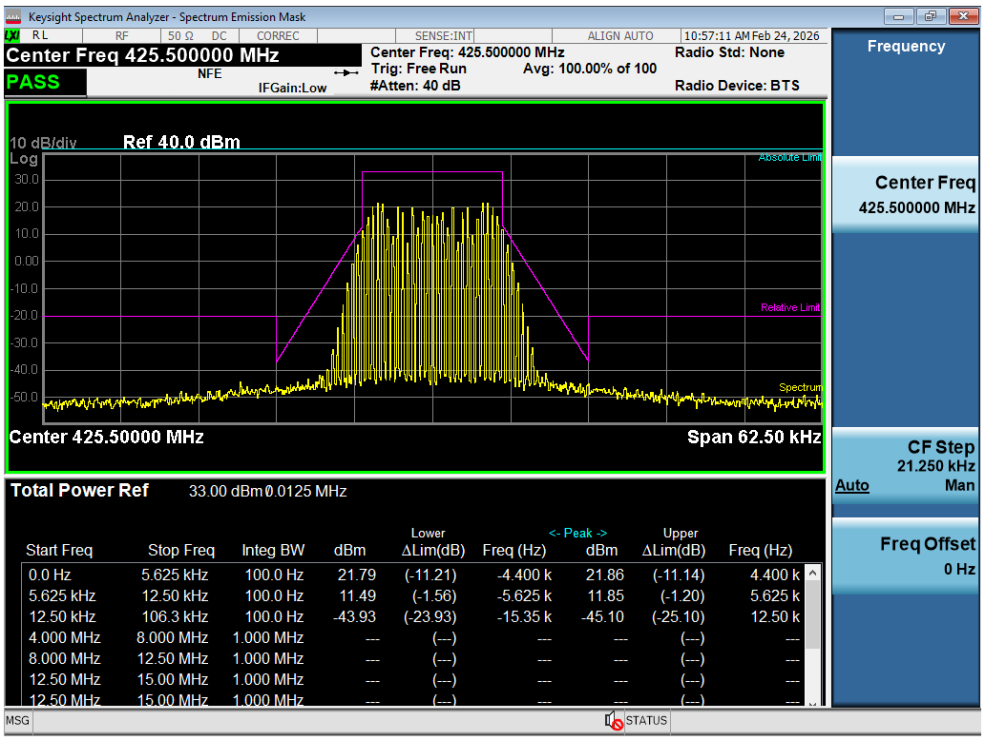
Input @ + 3 dB AGC threshold / UHF (421 ~ 430) / Downlink / FM (12.5 kHz) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -69.84 | (-10.84) | -4.400 k | -69.85 | (-10.85) | 4.400 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -79.89 | (-0.94) | -5.625 k | -79.63 | (-0.67) | 5.625 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -131.8 | (-19.78) | -59.38 k | -132.5 | (-20.48) | 59.35 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output @ + 3 dB AGC threshold / UHF (421 ~ 430) / Downlink / FM (12.5 kHz) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 21.79 | (-11.21) | -4.400 k | 21.86 | (-11.14) | 4.400 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | 11.49 | (-1.56) | -5.625 k | 11.85 | (-1.20) | 5.625 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -43.93 | (-23.93) | -15.35 k | -45.10 | (-25.10) | 12.50 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



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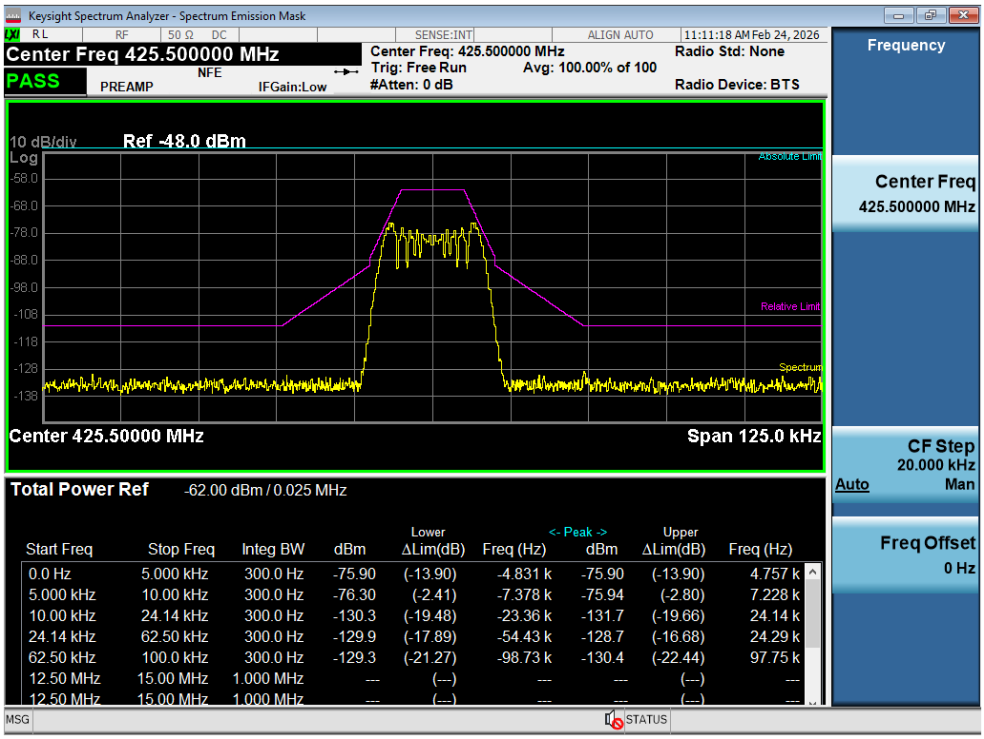
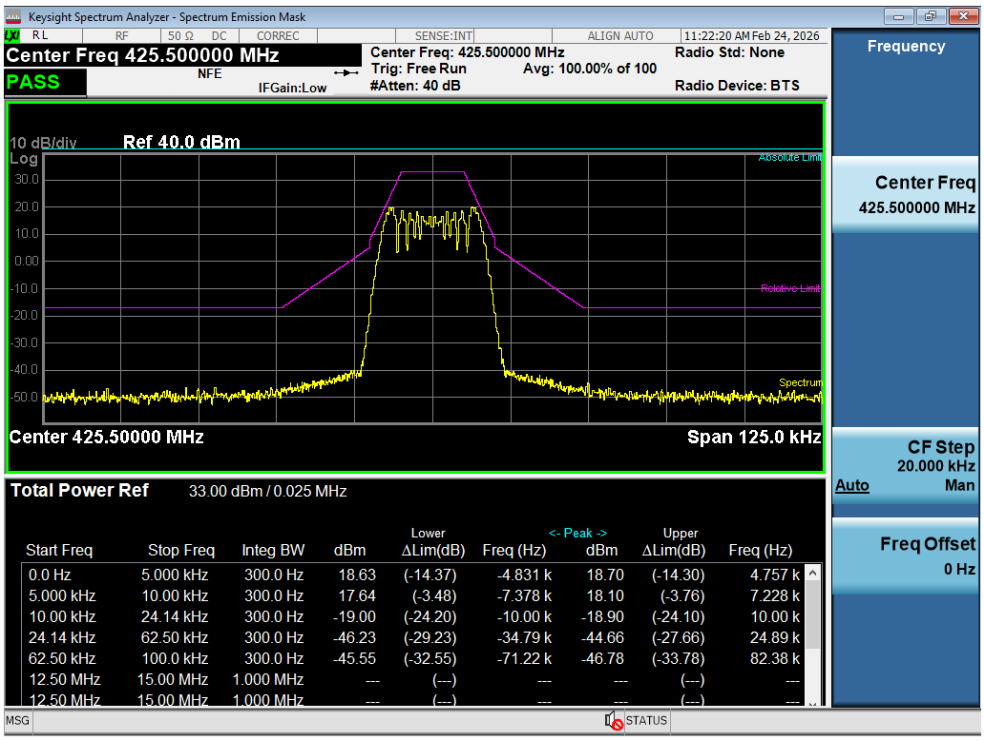
Input / UHF (421 ~ 430) / Downlink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | -75.90 | (-13.90) | -4.831 k | -75.90 | (-13.90) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | -76.30 | (-2.41) | -7.378 k | -75.94 | (-2.80) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -130.3 | (-19.48) | -23.36 k | -131.7 | (-19.66) | 24.14 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -129.9 | (-17.89) | -54.43 k | -128.7 | (-16.68) | 24.29 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -129.3 | (-21.27) | -98.73 k | -130.4 | (-22.44) | 97.75 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output / UHF (421 ~ 430) / Downlink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | 18.63 | (-14.37) | -4.831 k | 18.70 | (-14.30) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | 17.64 | (-3.48) | -7.378 k | 18.10 | (-3.76) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -19.00 | (-24.20) | -10.00 k | -18.90 | (-24.10) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -46.23 | (-29.23) | -34.79 k | -44.66 | (-27.66) | 24.89 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -45.55 | (-32.55) | -71.22 k | -46.78 | (-33.78) | 82.38 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |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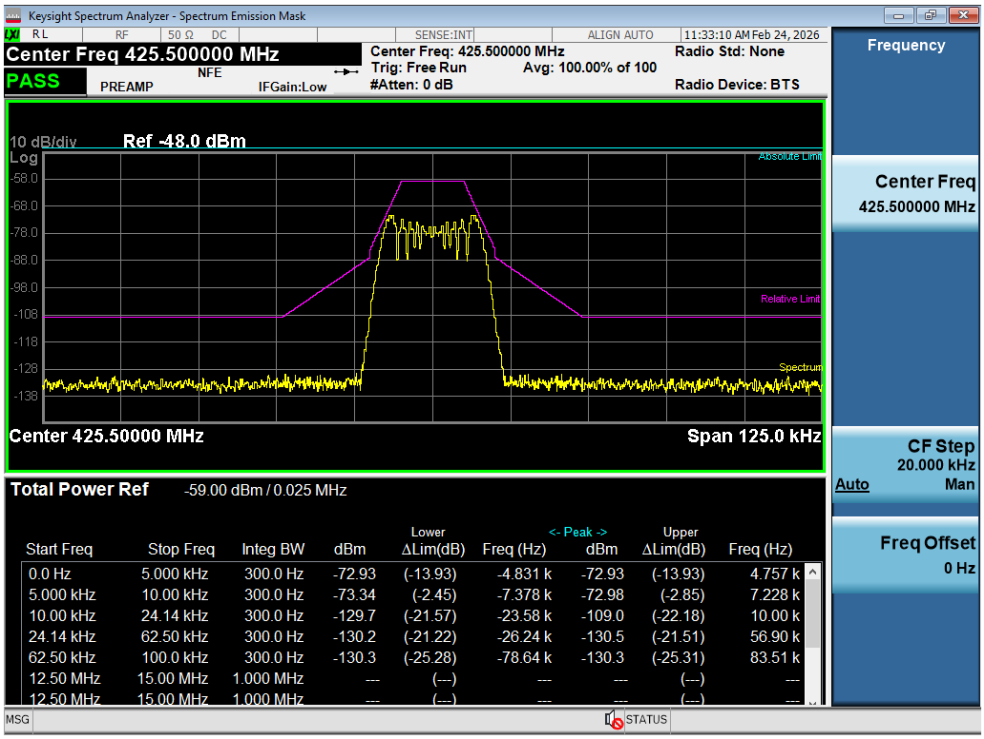
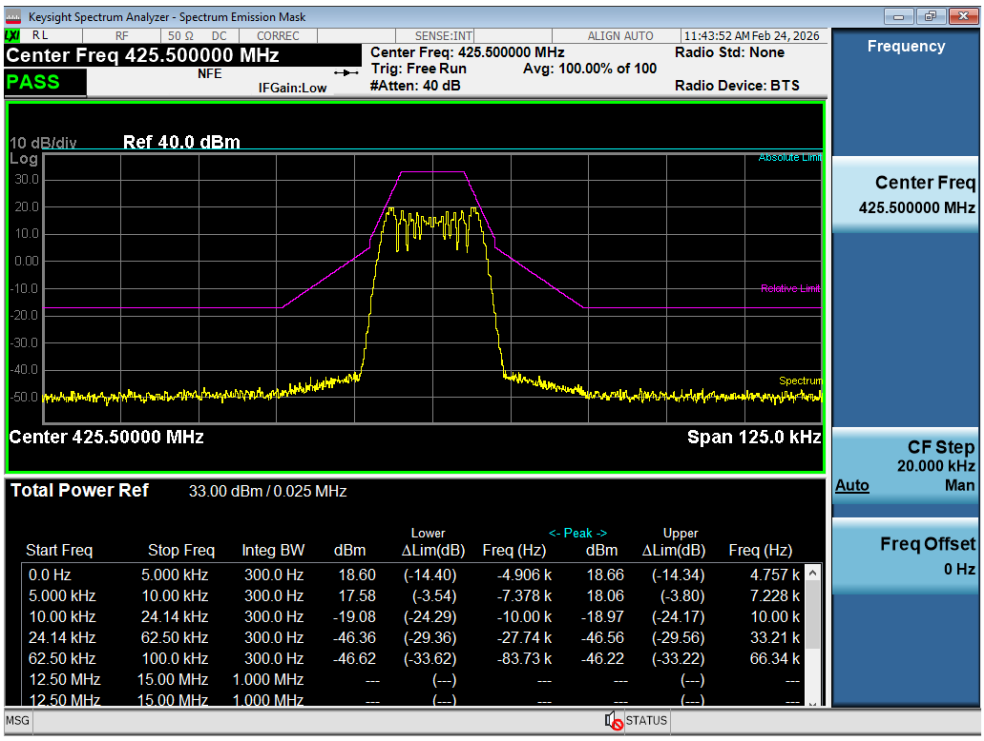
Input @ + 3 dB AGC threshold / UHF (421 ~ 430) / Downlink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | -72.93 | (-13.93) | -4.831 k | -72.93 | (-13.93) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | -73.34 | (-2.45) | -7.378 k | -72.98 | (-2.85) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -129.7 | (-21.57) | -23.58 k | -109.0 | (-22.18) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -130.2 | (-21.22) | -26.24 k | -130.5 | (-21.51) | 56.90 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -130.3 | (-25.28) | -78.64 k | -130.3 | (-25.31) | 83.51 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

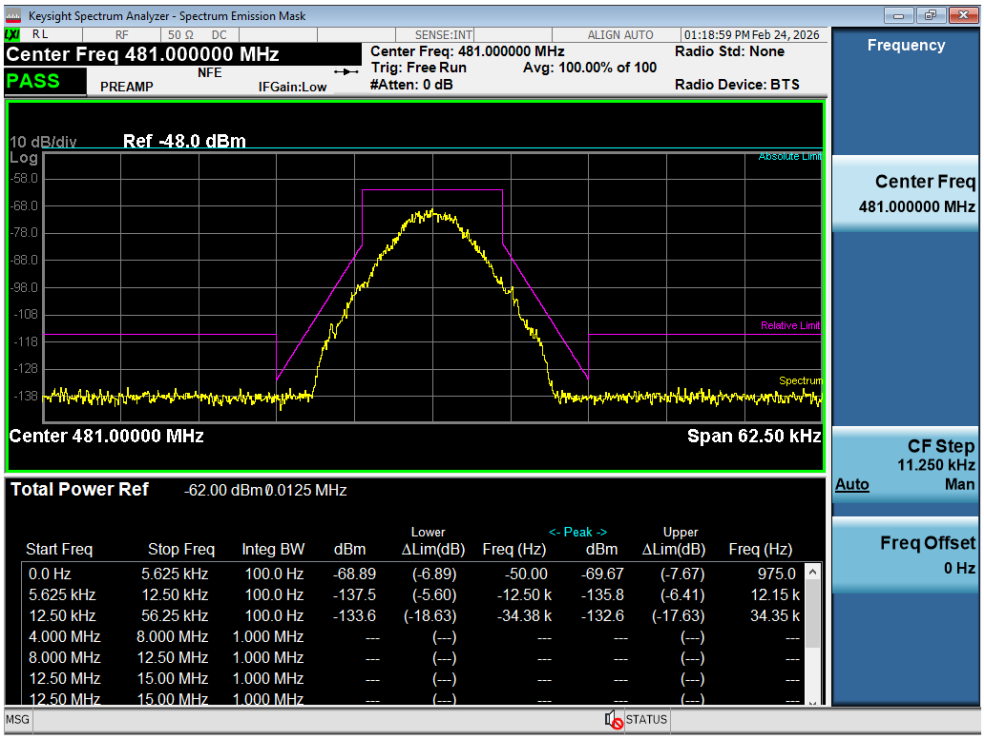
Output @ + 3 dB AGC threshold / UHF (421 ~ 430) / Downlink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | 18.60 | (-14.40) | -4.906 k | 18.66 | (-14.34) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | 17.58 | (-3.54) | -7.378 k | 18.06 | (-3.80) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -19.08 | (-24.29) | -10.00 k | -18.97 | (-24.17) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -46.36 | (-29.36) | -27.74 k | -46.56 | (-29.56) | 33.21 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -46.62 | (-33.62) | -83.73 k | -46.22 | (-33.22) | 66.34 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

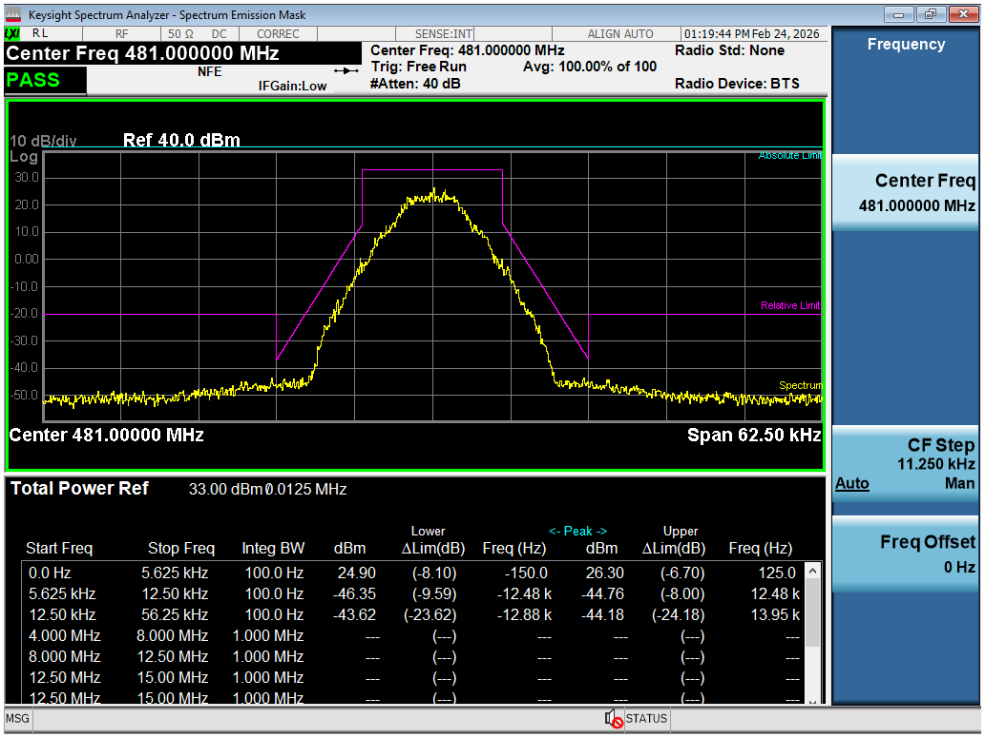

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (450 ~ 512) / Downlink / P25 Phase 1 (C4FM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -68.89 | (-6.89) | -50.00 | -69.67 | (-7.67) | 975.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -137.5 | (-5.60) | -12.50 k | -135.8 | (-6.41) | 12.15 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -133.6 | (-18.63) | -34.38 k | -132.6 | (-17.63) | 34.35 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output / UHF (450 ~ 512) / Downlink / P25 Phase 1 (C4FM) / Mask D

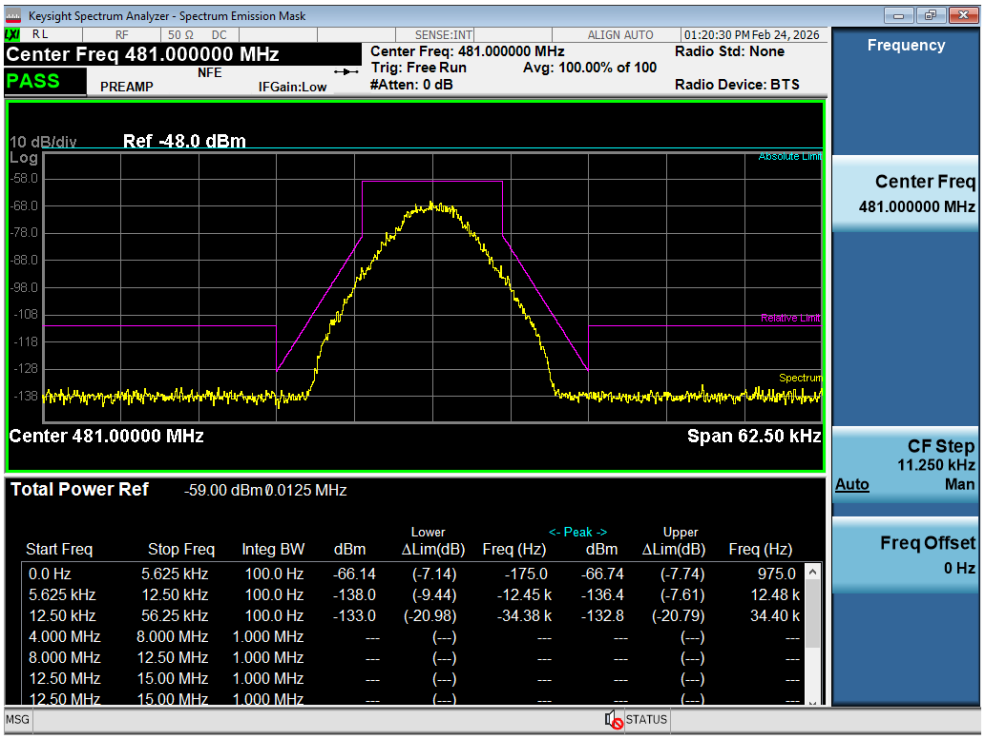



| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 24.90 | (-8.10) | -150.0 | 26.30 | (-6.70) | 125.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -46.35 | (-9.59) | -12.48 k | -44.76 | (-8.00) | 12.48 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -43.62 | (-23.62) | -12.88 k | -44.18 | (-24.18) | 13.95 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



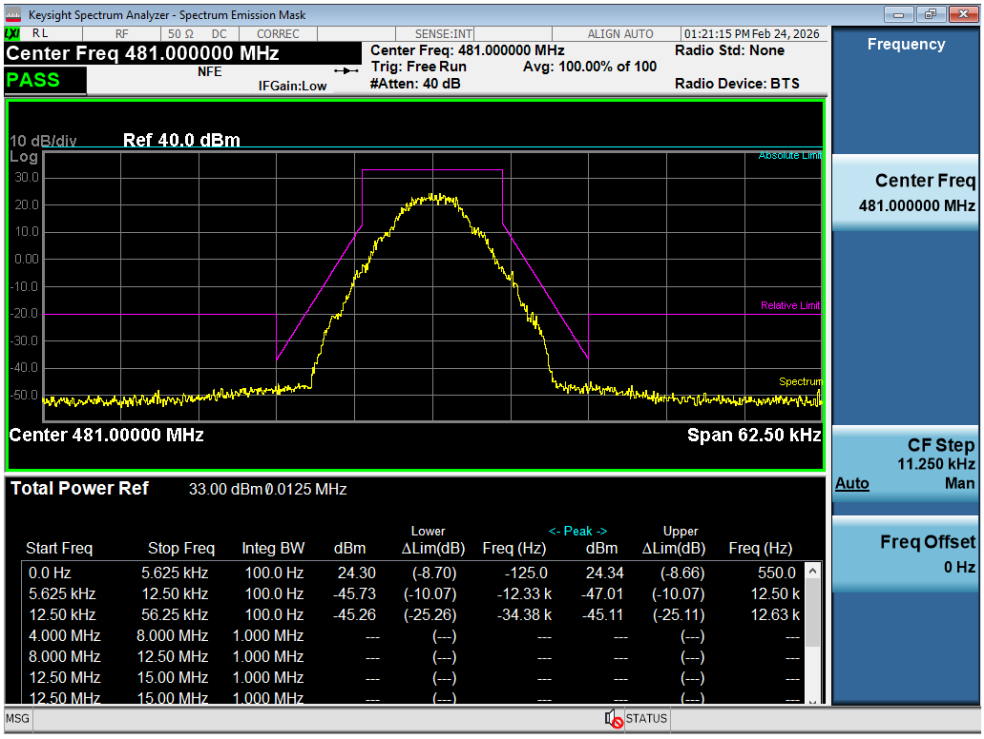
The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (450 ~ 512) / Downlink / P25 Phase 1 (C4FM) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -66.14 | (-7.14) | -175.0 | -66.74 | (-7.74) | 975.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -138.0 | (-9.44) | -12.45 k | -136.4 | (-7.61) | 12.48 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -133.0 | (-20.98) | -34.38 k | -132.8 | (-20.79) | 34.40 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output @ + 3 dB AGC threshold / UHF (450 ~ 512) / Downlink / P25 Phase 1 (C4FM) / Mask D

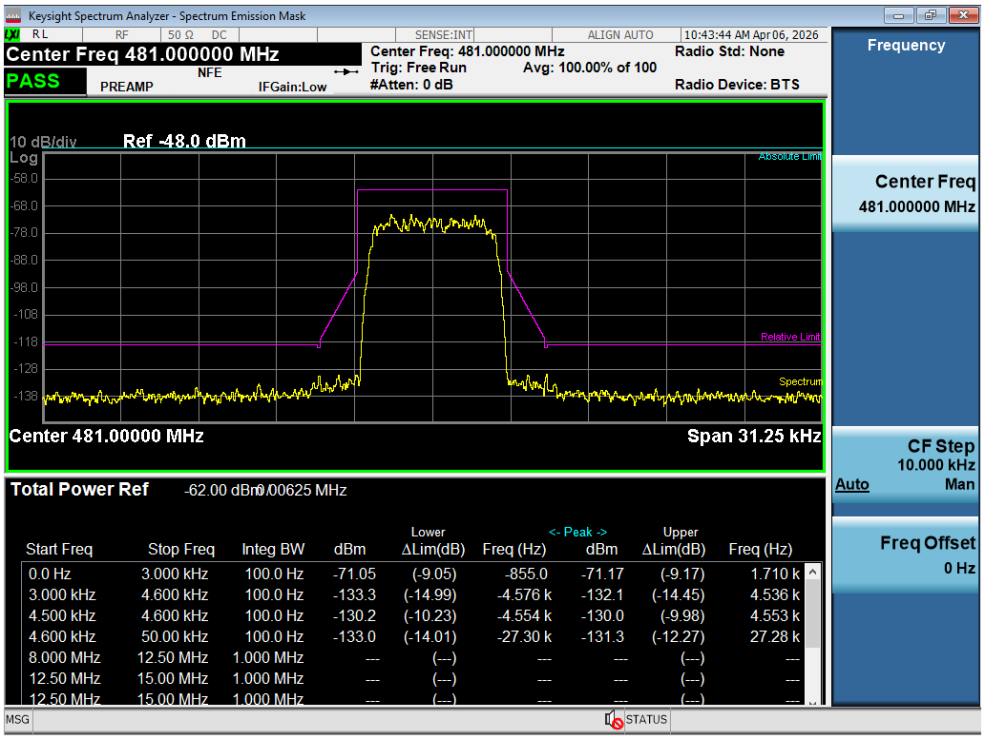



| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 24.30 | (-8.70) | -125.0 | 24.34 | (-8.66) | 550.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -45.73 | (-10.07) | -12.33 k | -47.01 | (-10.07) | 12.50 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -45.26 | (-25.26) | -34.38 k | -45.11 | (-25.11) | 12.63 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



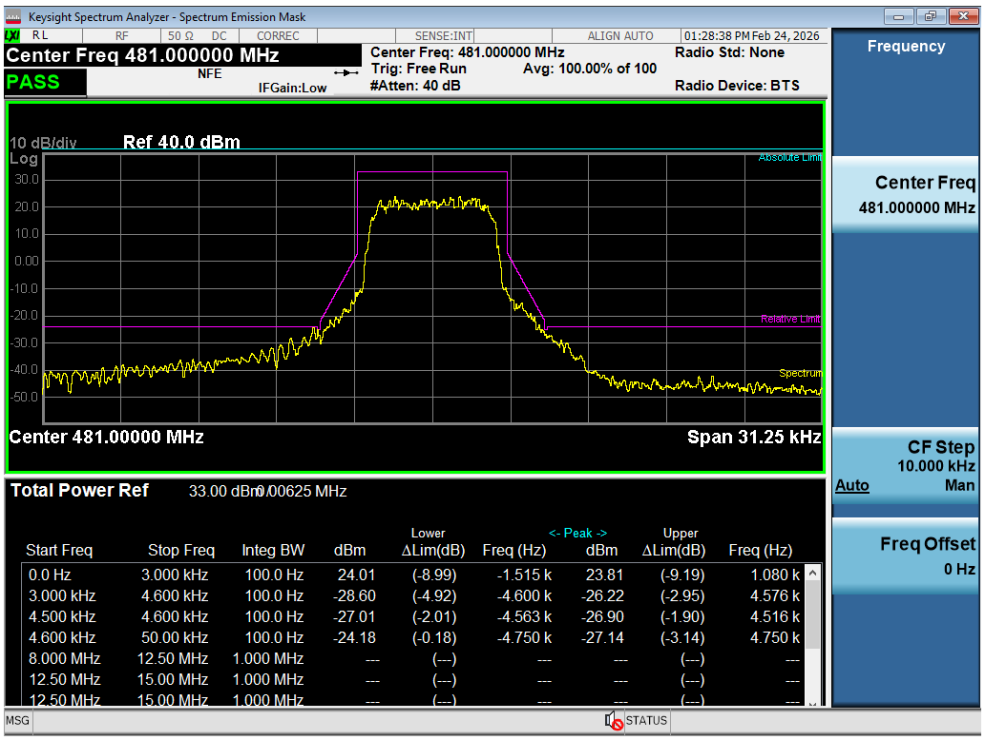
The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (450 ~ 512) / Downlink / P25 Phase 1 (CQPSK) / Mask E




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 3.000 kHz | 100.0 Hz | -71.05 | (-9.05) | -855.0 | -71.17 | (-9.17) | 1.710 k |
| 3.000 kHz | 4.600 kHz | 100.0 Hz | -133.3 | (-14.99) | -4.576 k | -132.1 | (-14.45) | 4.536 k |
| 4.500 kHz | 4.600 kHz | 100.0 Hz | -130.2 | (-10.23) | -4.554 k | -130.0 | (-9.98) | 4.553 k |
| 4.600 kHz | 50.00 kHz | 100.0 Hz | -133.0 | (-14.01) | -27.30 k | -131.3 | (-12.27) | 27.28 k |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

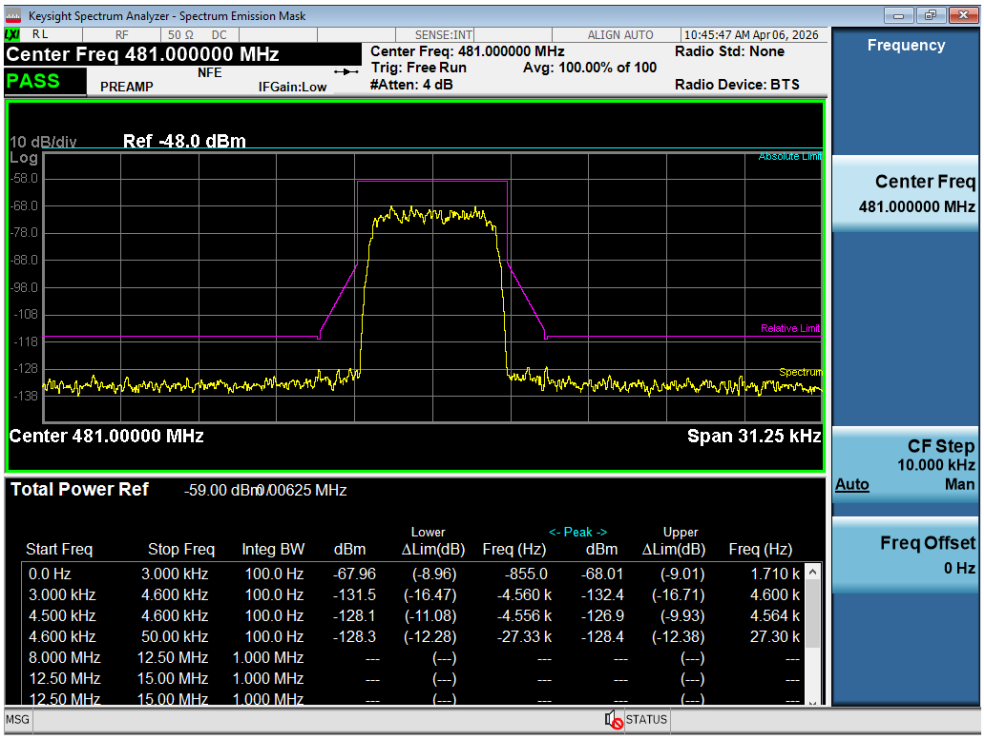
Output / UHF (450 ~ 512) / Downlink / P25 Phase 1 (CQPSK) / Mask E




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 3.000 kHz | 100.0 Hz | 24.01 | (-8.99) | -1.515 k | 23.81 | (-9.19) | 1.080 k |
| 3.000 kHz | 4.600 kHz | 100.0 Hz | -28.60 | (-4.92) | -4.600 k | -26.22 | (-2.95) | 4.576 k |
| 4.500 kHz | 4.600 kHz | 100.0 Hz | -27.01 | (-2.01) | -4.563 k | -26.90 | (-1.90) | 4.516 k |
| 4.600 kHz | 50.00 kHz | 100.0 Hz | -24.18 | (-0.18) | -4.750 k | -27.14 | (-3.14) | 4.750 k |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

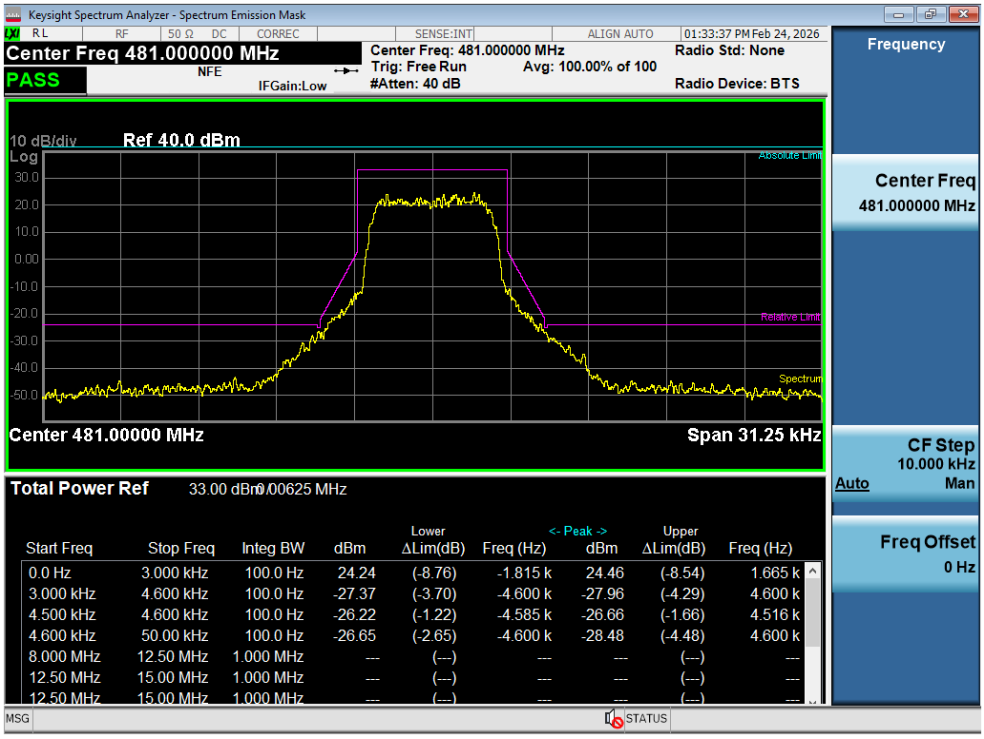

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (450 ~ 512) / Downlink / P25 Phase 1 (CQPSK) / Mask E




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 3.000 kHz | 100.0 Hz | -67.96 | (-8.96) | -855.0 | -68.01 | (-9.01) | 1.710 k |
| 3.000 kHz | 4.600 kHz | 100.0 Hz | -131.5 | (-16.47) | -4.560 k | -132.4 | (-16.71) | 4.600 k |
| 4.500 kHz | 4.600 kHz | 100.0 Hz | -128.1 | (-11.08) | -4.556 k | -126.9 | (-9.93) | 4.564 k |
| 4.600 kHz | 50.00 kHz | 100.0 Hz | -128.3 | (-12.28) | -27.33 k | -128.4 | (-12.38) | 27.30 k |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output @ + 3 dB AGC threshold / UHF (450 ~ 512) / Downlink / P25 Phase 1 (CQPSK) / Mask E

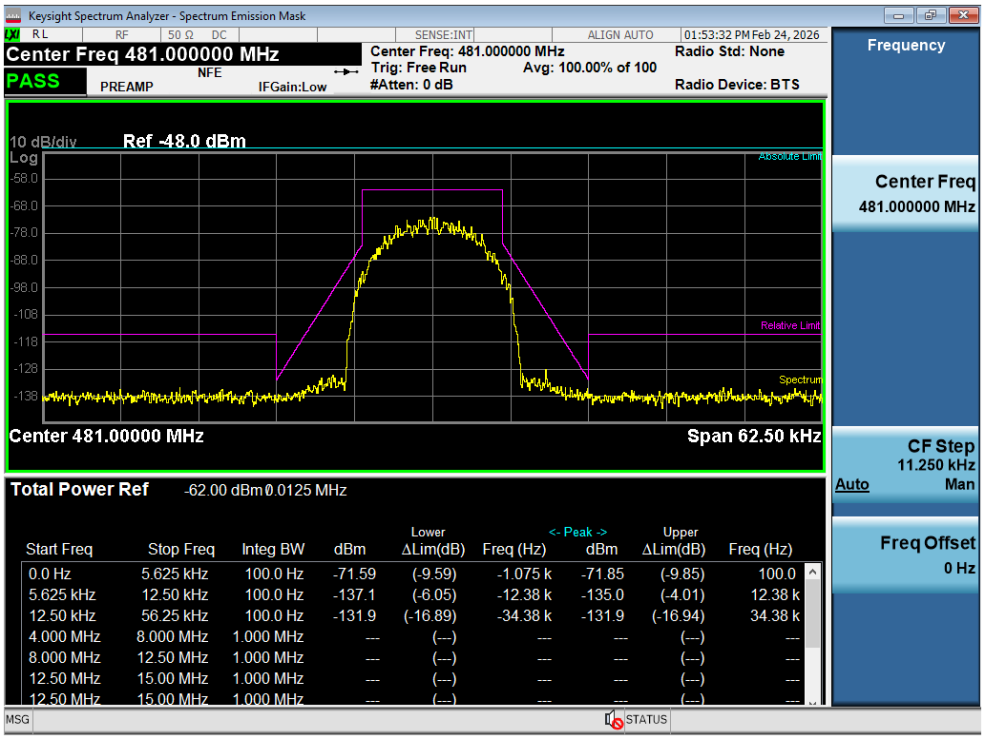



| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 3.000 kHz | 100.0 Hz | 24.24 | (-8.76) | -1.815 k | 24.46 | (-8.54) | 1.665 k |
| 3.000 kHz | 4.600 kHz | 100.0 Hz | -27.37 | (-3.70) | -4.600 k | -27.96 | (-4.29) | 4.600 k |
| 4.500 kHz | 4.600 kHz | 100.0 Hz | -26.22 | (-1.22) | -4.585 k | -26.66 | (-1.66) | 4.516 k |
| 4.600 kHz | 50.00 kHz | 100.0 Hz | -26.65 | (-2.65) | -4.600 k | -28.48 | (-4.48) | 4.600 k |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

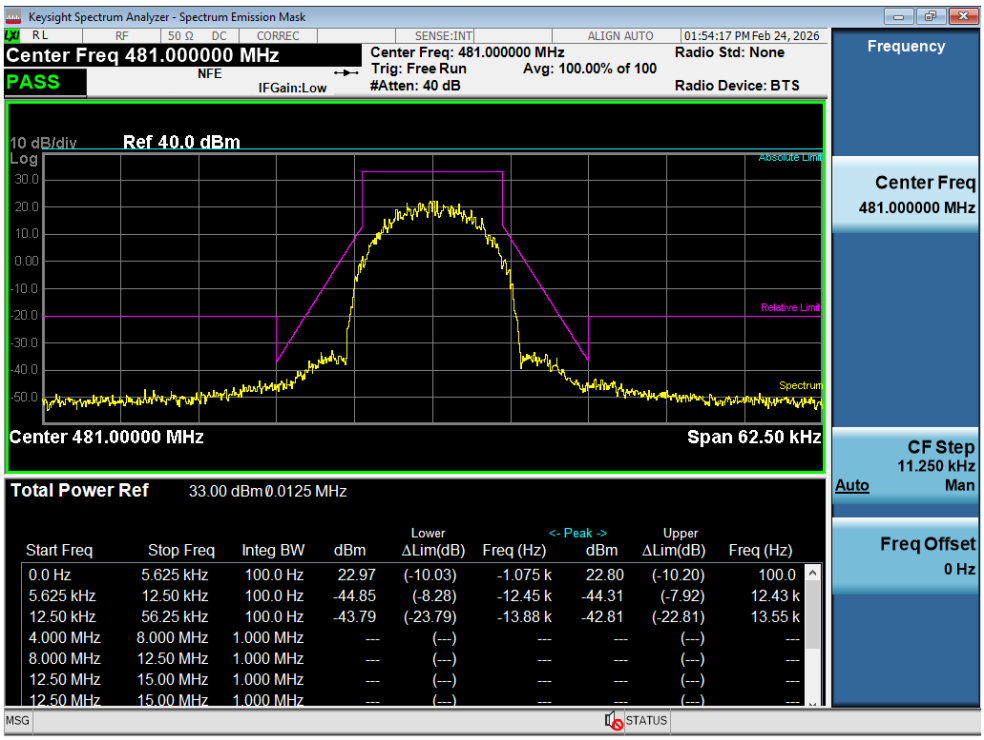


The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (450 ~ 512) / Downlink / P25 Phase 2 (H-DQPSK) / Mask D



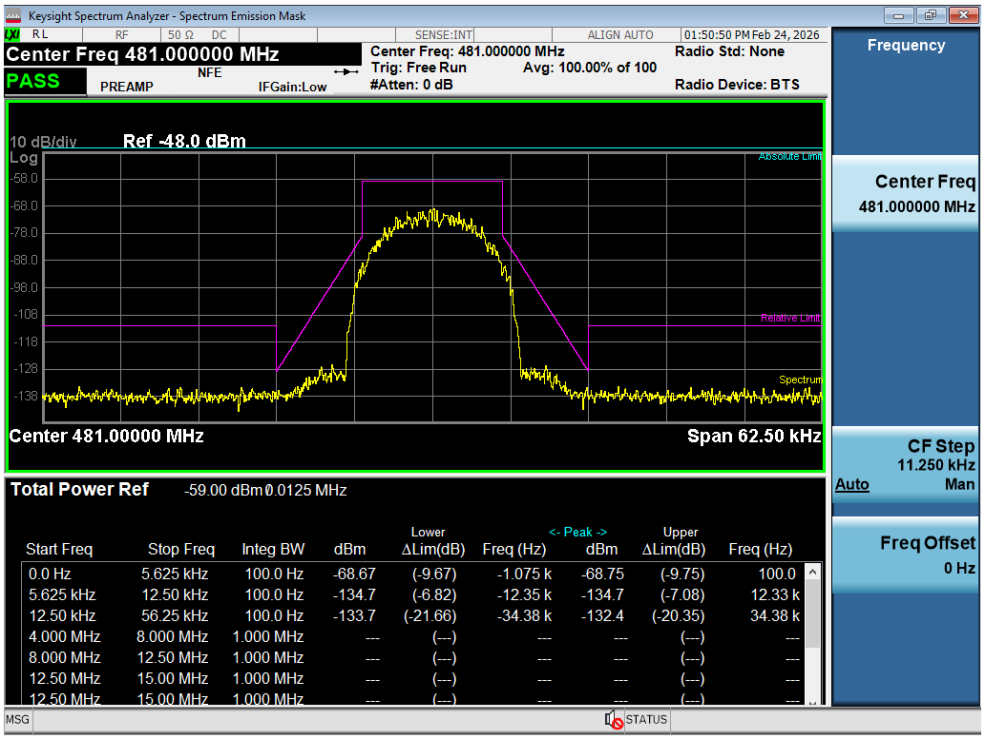

Output / UHF (450 ~ 512) / Downlink / P25 Phase 2 (H-DQPSK) / Mask D





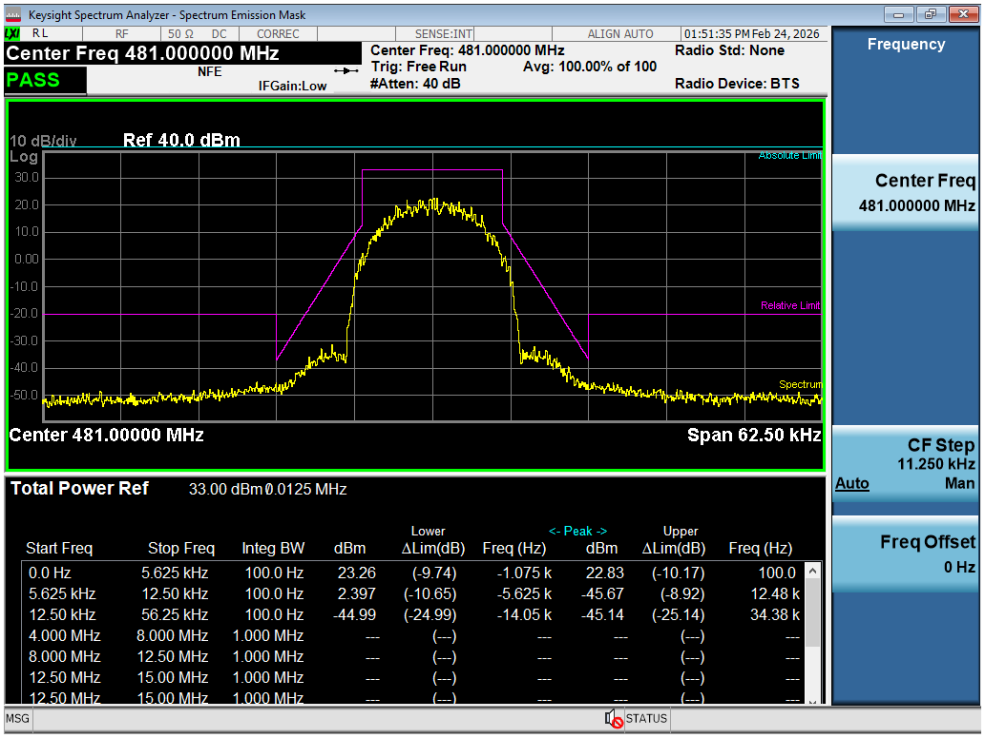

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (450 ~ 512) / Downlink / P25 Phase 2 (H-DQPSK) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -68.67 | (-9.67) | -1.075 k | -68.75 | (-9.75) | 100.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -134.7 | (-6.82) | -12.35 k | -134.7 | (-7.08) | 12.33 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -133.7 | (-21.66) | -34.38 k | -132.4 | (-20.35) | 34.38 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

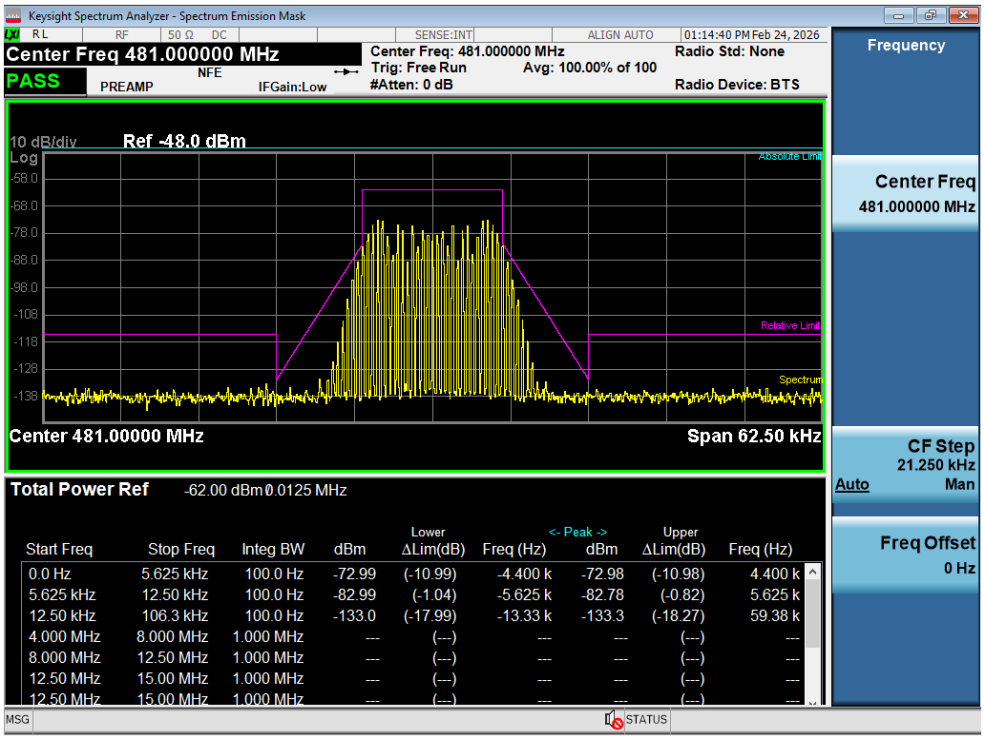
Output @ + 3 dB AGC threshold / UHF (450 ~ 512) / Downlink / P25 Phase 2 (H-DQPSK) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 23.26 | (-9.74) | -1.075 k | 22.83 | (-10.17) | 100.0 |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | 2.397 | (-10.65) | -5.625 k | -45.67 | (-8.92) | 12.48 k |
| 12.50 kHz | 56.25 kHz | 100.0 Hz | -44.99 | (-24.99) | -14.05 k | -45.14 | (-25.14) | 34.38 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

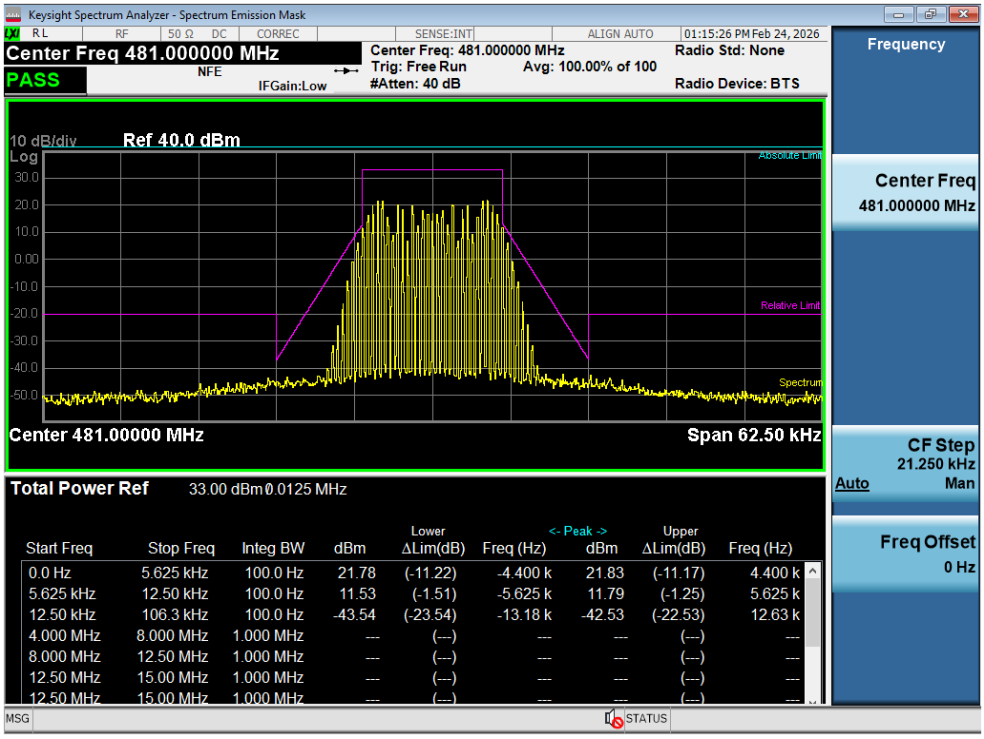

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (450 ~ 512) / Downlink / FM (12.5 kHz) / Mask D




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | -72.99 | (-10.99) | -4.400 k | -72.98 | (-10.98) | 4.400 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | -82.99 | (-1.04) | -5.625 k | -82.78 | (-0.82) | 5.625 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -133.0 | (-17.99) | -13.33 k | -133.3 | (-18.27) | 59.38 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

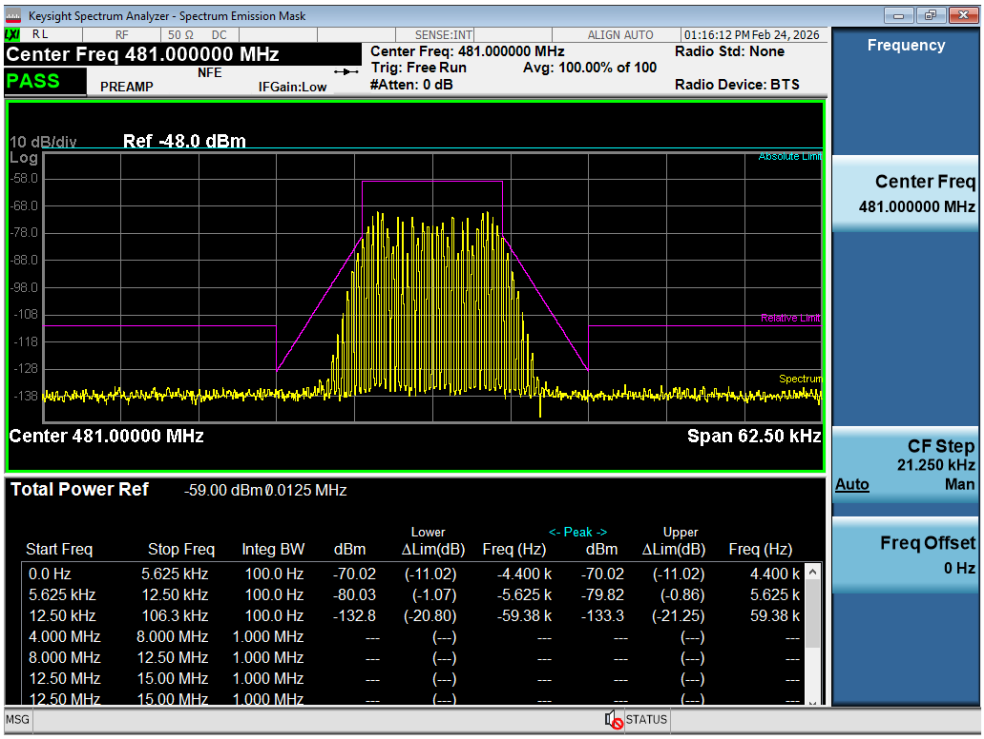
Output / UHF (450 ~ 512) / Downlink / FM (12.5 kHz) / Mask D



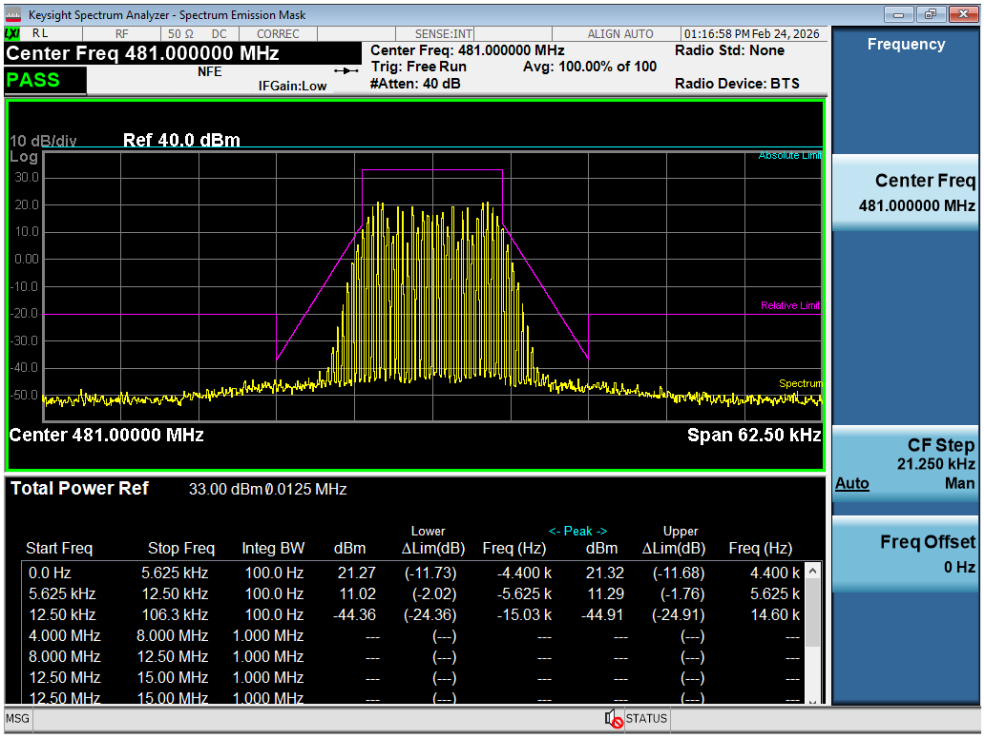

| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.625 kHz | 100.0 Hz | 21.78 | (-11.22) | -4.400 k | 21.83 | (-11.17) | 4.400 k |
| 5.625 kHz | 12.50 kHz | 100.0 Hz | 11.53 | (-1.51) | -5.625 k | 11.79 | (-1.25) | 5.625 k |
| 12.50 kHz | 106.3 kHz | 100.0 Hz | -43.54 | (-23.54) | -13.18 k | -42.53 | (-22.53) | 12.63 k |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |


The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (450 ~ 512) / Downlink / FM (12.5 kHz) / Mask D



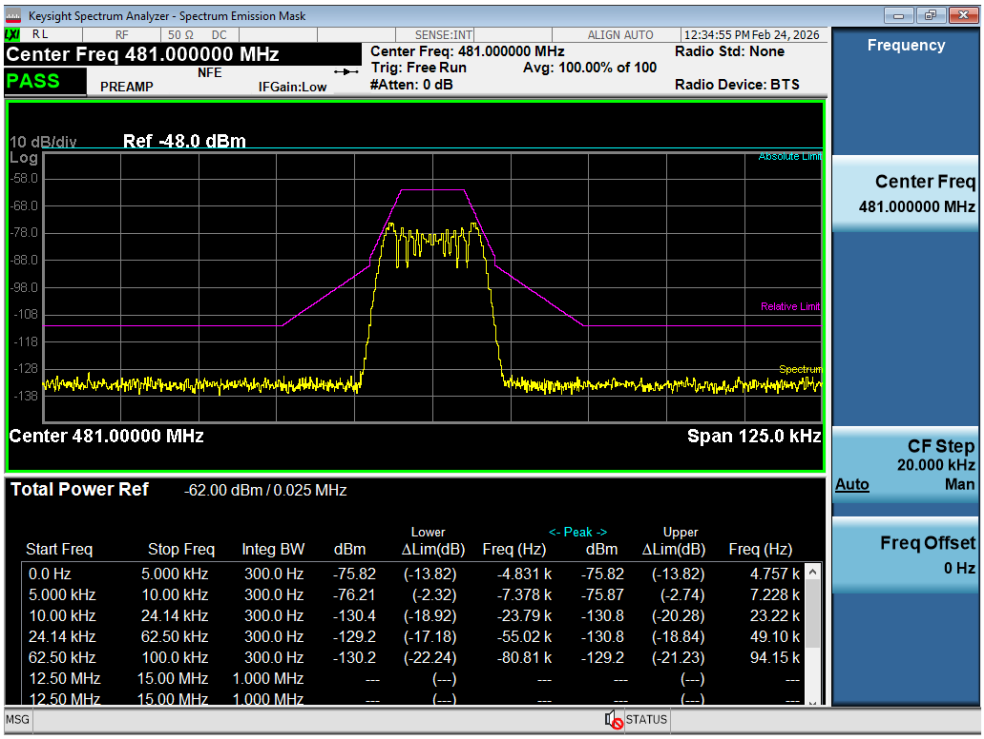

Output @ + 3 dB AGC threshold / UHF (450 ~ 512) / Downlink / FM (12.5 kHz) / Mask D





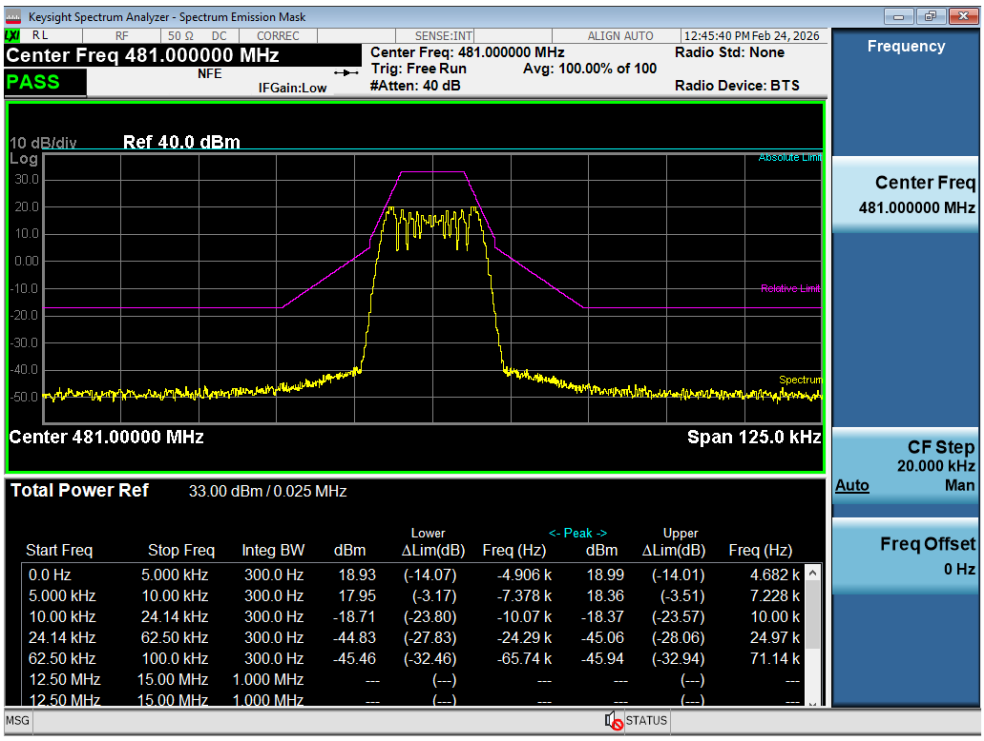

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input / UHF (450 ~ 512) / Downlink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | -75.82 | (-13.82) | -4.831 k | -75.82 | (-13.82) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | -76.21 | (-2.32) | -7.378 k | -75.87 | (-2.74) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -130.4 | (-18.92) | -23.79 k | -130.8 | (-20.28) | 23.22 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -129.2 | (-17.18) | -55.02 k | -130.8 | (-18.84) | 49.10 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -130.2 | (-22.24) | -80.81 k | -129.2 | (-21.23) | 94.15 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

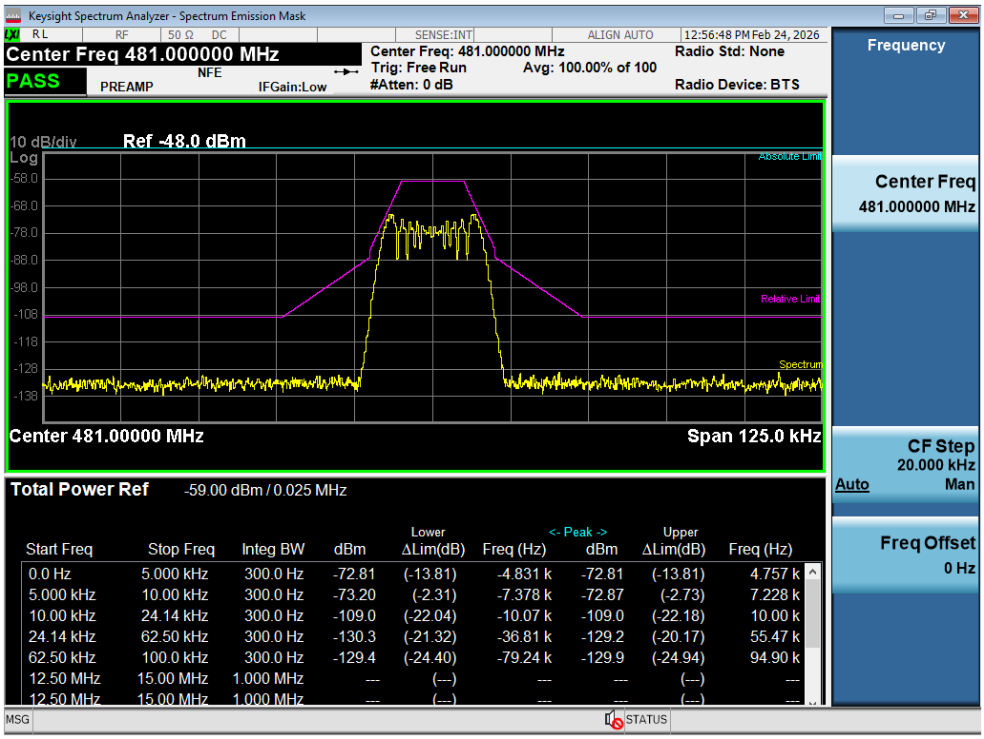
Output / UHF (450 ~ 512) / Downlink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | 18.93 | (-14.07) | -4.906 k | 18.99 | (-14.01) | 4.682 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | 17.95 | (-3.17) | -7.378 k | 18.36 | (-3.51) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -18.71 | (-23.80) | -10.07 k | -18.37 | (-23.57) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -44.83 | (-27.83) | -24.29 k | -45.06 | (-28.06) | 24.97 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -45.46 | (-32.46) | -65.74 k | -45.94 | (-32.94) | 71.14 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

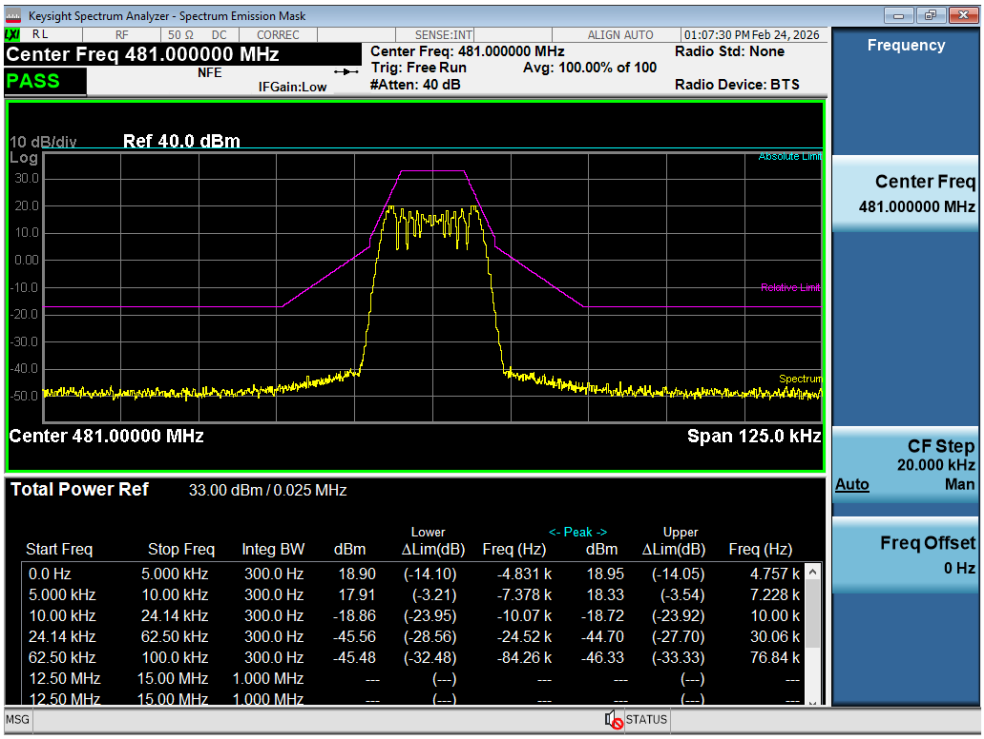

The report shall not be (partly) reproduced except in full without approval of the laboratory.

Input @ + 3 dB AGC threshold / UHF (450 ~ 512) / Downlink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | -72.81 | (-13.81) | -4.831 k | -72.81 | (-13.81) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | -73.20 | (-2.31) | -7.378 k | -72.87 | (-2.73) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -109.0 | (-22.04) | -10.07 k | -109.0 | (-22.18) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -130.3 | (-21.32) | -36.81 k | -129.2 | (-20.17) | 55.47 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -129.4 | (-24.40) | -79.24 k | -129.9 | (-24.94) | 94.90 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |

Output @ + 3 dB AGC threshold / UHF (450 ~ 512) / Downlink / FM (25 kHz) / Mask C




| Start Freq | Stop Freq | Integ BW | dBm | Lower ΔLim(dB) | Lower Freq (Hz) | <- Peak -> dBm | Upper ΔLim(dB) | Upper Freq (Hz) |
|---|---|---|---|---|---|---|---|---|
| 0.0 Hz | 5.000 kHz | 300.0 Hz | 18.90 | (-14.10) | -4.831 k | 18.95 | (-14.05) | 4.757 k |
| 5.000 kHz | 10.00 kHz | 300.0 Hz | 17.91 | (-3.21) | -7.378 k | 18.33 | (-3.54) | 7.228 k |
| 10.00 kHz | 24.14 kHz | 300.0 Hz | -18.86 | (-23.95) | -10.07 k | -18.72 | (-23.92) | 10.00 k |
| 24.14 kHz | 62.50 kHz | 300.0 Hz | -45.56 | (-28.56) | -24.52 k | -44.70 | (-27.70) | 30.06 k |
| 62.50 kHz | 100.0 kHz | 300.0 Hz | -45.48 | (-32.48) | -84.26 k | -46.33 | (-33.33) | 76.84 k |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | --- | (---) | --- | --- | (---) | --- |



The report shall not be (partly) reproduced except in full without approval of the laboratory.

## 5.5. INPUT/OUTPUT POWER AND AMPLIFIER/BOOSTER GAIN

**Test Requirement:**

**§ 2.1046 Measurements required: RF power output.**

(a) For transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in § 2.1033(c)(8). The electrical characteristics of the radio frequency load attached to the output terminals when this test is made shall be stated.

(b) For single sideband, independent sideband, and single channel, controlled carrier radiotelephone transmitters the procedure specified in paragraph (a) of this section shall be employed and, in addition, the transmitter shall be modulated during the test as specified and applicable in § 2.1046 (b) (1-5). In all tests, the input level of the modulating signal shall be such as to develop rated peak envelope power or carrier power, as appropriate, for the transmitter.

(c) For measurements conducted pursuant to paragraphs (a) and (b) of this section, all calculations and methods used by the applicant for determining carrier power or peak envelope power, as appropriate, on the basis of measured power in the radio frequency load attached to the transmitter output terminals shall be shown. Under the test conditions specified, no components of the emission spectrum shall exceed the limits specified in the applicable rule parts as necessary for meeting occupied bandwidth or emission limitations.

**§ 90.219 Use of signal boosters.**

(e) Device Specifications. In addition to the general rules for equipment certification in § 90.203(a)(2) and part 2, subpart J of this chapter, a signal booster must also meet the rules in this paragraph.

(1) The output power capability of a signal booster must be designed for deployments providing a radiated power not exceeding 5 Watts ERP for each retransmitted channel.



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**Test Procedures:**

Measurements were in accordance with the test methods section 4.5 of KDB 935210 D05 v01r04.

4.5.2 Measuring input and output power levels for determining amplifier/booster gain

Apply the same guidance as in 3.5.2 to measure the maximum input and output power levels necessary for computing the mean EUT gain, but with the following modifications:

a) Configure the signal generator for CW operation, instead of AWGN,

b) Select the spectrum analyzer positive peak detector, instead of the power averaging (rms) detector,

c) Activate the max hold function, instead of the trace averaging function,

d) Use in conjunction with the guidance in 4.5.3.

4.5.3 Power measurement Method 1: using a spectrum or signal analyzer

a) Set the span to at least 1 MHz.

b) Set the RBW 100 kHz.

c) Set the VBW to ≥ 3 × RBW.

d) Set the detector to PEAK with the trace to MAX HOLD.

e) Place a marker on the peak of the signal, and record the value as the maximum power.

f) Repeat step e) but with the EUT in place.

g) EUT gain may be calculated as described in 4.5.5.

4.5.5 Calculating amplifier, repeater, or industrial booster gain

After the input and output power levels have been measured as described in the preceding subclauses, the gain of the EUT can be determined from:

Gain (dB) = output power (dBm) − input power (dBm).

Report the gain for each authorized operating frequency band, and each test signal stimulus.

**Note:**

1. If the $f_0$ determined from the out-of-band rejection test is smaller or greater than the difference between the test signal's center frequency and the operating band block, the test is performed at the lowest or highest frequency at which the test signals can pass.
2. The Uplink/Downlink ERP is calculated as follows.
   - Uplink ERP = Uplink Output Power + Peak Ant. Gain(dBd)
     = 27.10 dBm + 7 dBd = 34.10 dBm
     = 27.27 dBm + 8 dBd = 35.27 dBm
   - Downlink ERP = Downlink Output Power + Peak Ant. Gain(dBd)
     = 33.42 dBm + (-0.65 dBd) = 32.77 dBm



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**Test Results:**

Tabular data of Input / Output Power and Gain

| Test Band | Link | Signal | $f_0$ Frequency | Input Power | Output Power | Gain | Peak Ant. Gain | E.R.P. | |
|---|---|---|---|---|---|---|---|---|---|
| | | | (MHz) | (dBm) | | (dB) | (dBd) | (dBm) | (W) |
| UHF (406.1 ~ 420) | Uplink | CW | 406.38 | -67.61 | 27.10 | 94.71 | 7.00 | 34.10 | 2.57 |
| | Downlink | | 406.93 | -61.67 | 33.42 | 95.09 | -0.65 | 32.77 | 1.89 |
| UHF (421 ~ 430) | Uplink | | 427.00 | -67.96 | 27.21 | 95.17 | 7.00 | 34.21 | 2.63 |
| | Downlink | | 429.63 | -61.88 | 32.58 | 94.46 | -0.65 | 31.93 | 1.56 |
| UHF (450 ~ 512) | Uplink | | 472.11 | -67.63 | 27.27 | 94.90 | 8.00 | 35.27 | 3.37 |
| | Downlink | | 480.11 | -61.94 | 32.92 | 94.86 | -0.65 | 32.27 | 1.69 |

Tabular data of Input / Output Power and Gain at 3 dB above the AGC threshold

| Test Band | Link | Signal | $f_0$ Frequency | Input Power | Output Power | Gain | Peak Ant. Gain | E.R.P. | |
|---|---|---|---|---|---|---|---|---|---|
| | | | (MHz) | (dBm) | | (dB) | (dBd) | (dBm) | (W) |
| UHF (406.1 ~ 420) | Uplink | CW | 406.38 | -64.52 | 27.50 | 92.02 | 7.00 | 34.50 | 2.82 |
| | Downlink | | 406.93 | -58.63 | 33.49 | 92.12 | -0.65 | 32.84 | 1.92 |
| UHF (421 ~ 430) | Uplink | | 427.00 | -65.01 | 27.26 | 92.27 | 7.00 | 34.26 | 2.67 |
| | Downlink | | 429.63 | -58.94 | 33.34 | 92.27 | -0.65 | 32.69 | 1.86 |
| UHF (450 ~ 512) | Uplink | | 472.11 | -64.79 | 27.23 | 92.01 | 8.00 | 35.23 | 3.33 |
| | Downlink | | 480.11 | -58.91 | 33.16 | 92.07 | -0.65 | 32.51 | 1.78 |



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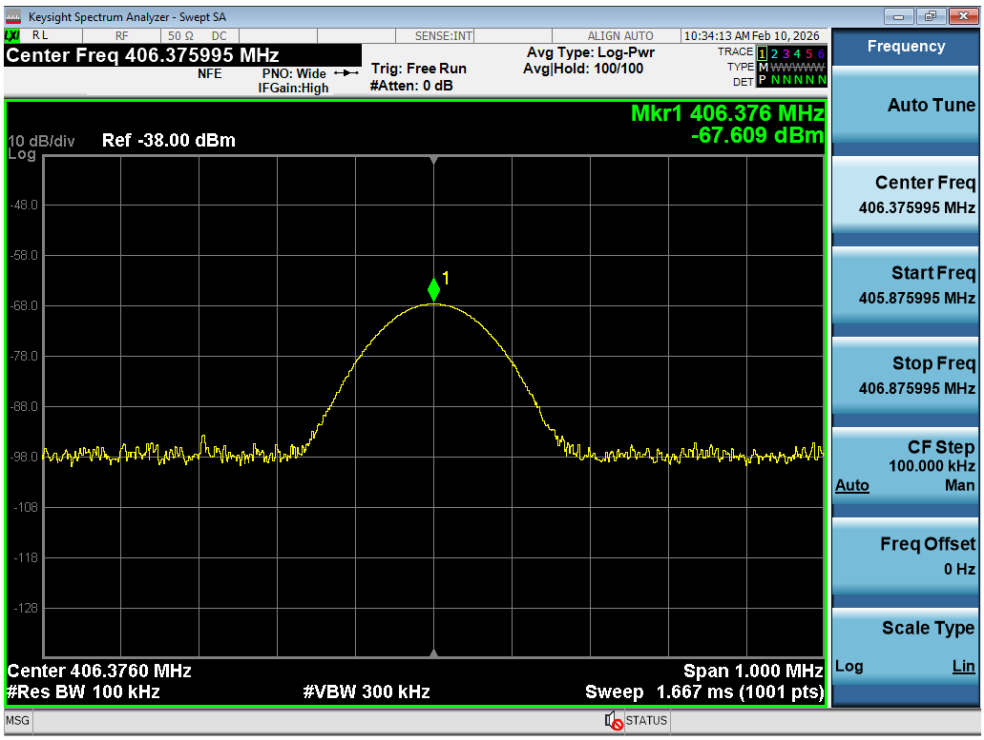
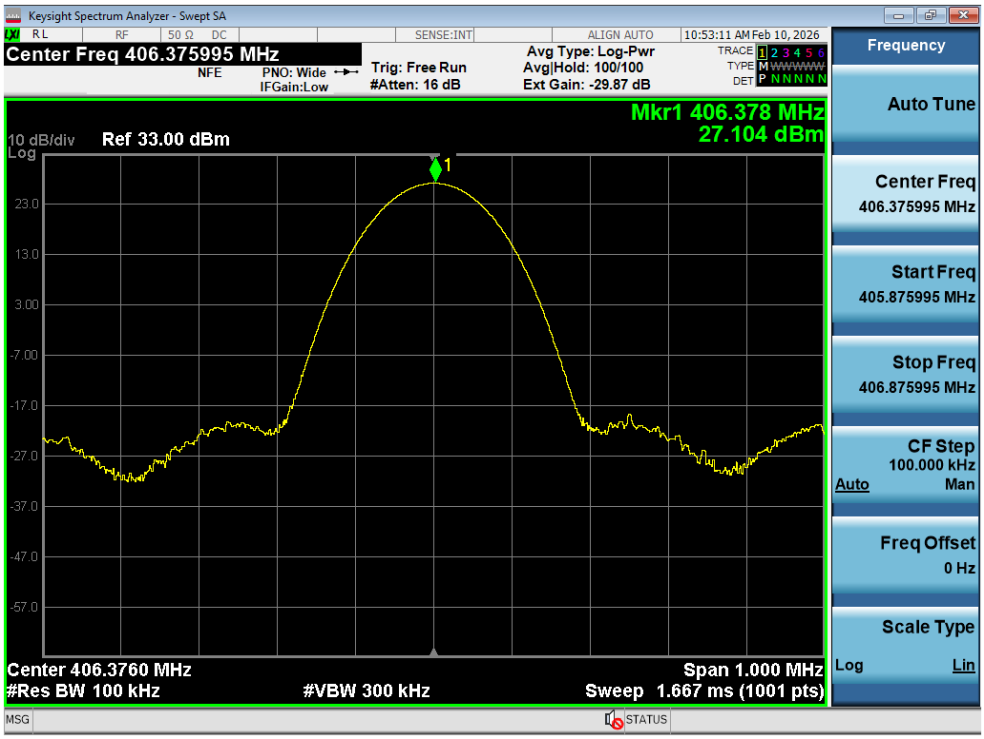
## Plot data of Input / Output Power

Input / UHF (406.1 ~ 420) / Uplink




Output/ UHF (406.1 ~ 420) / Uplink



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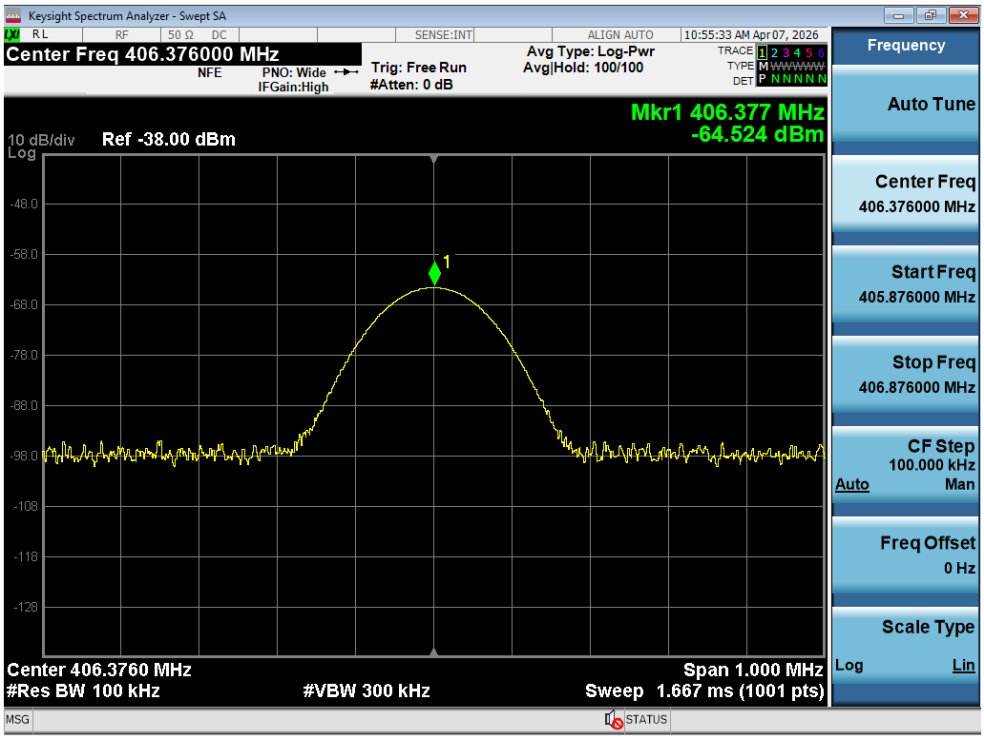
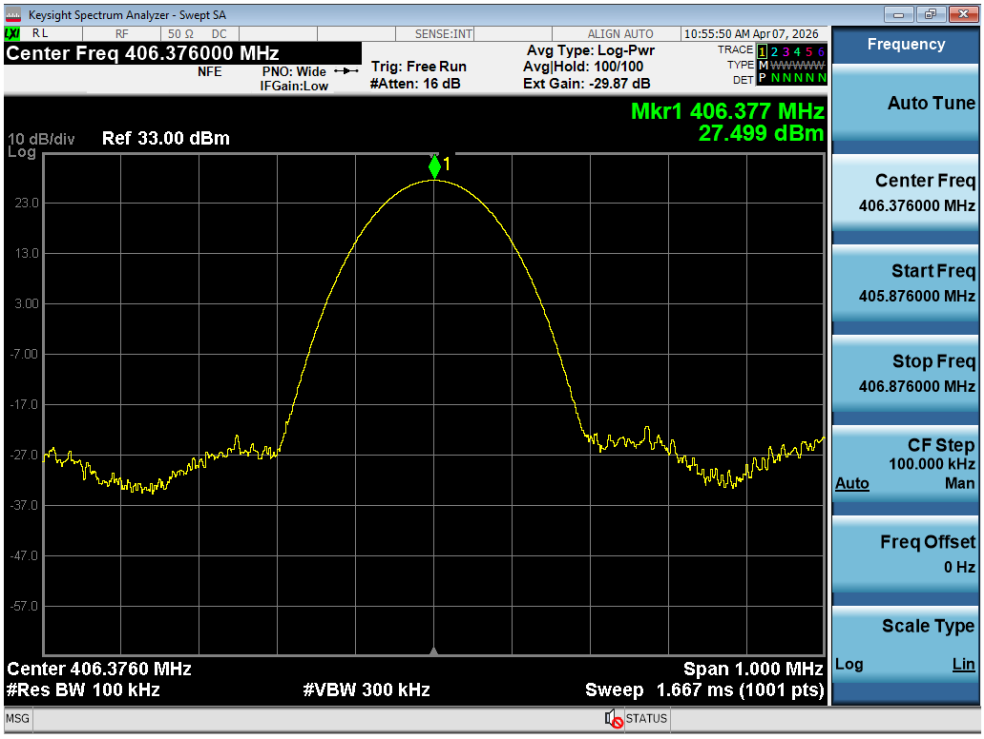
Input @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Uplink




Output @ + 3 dB AGC threshold/ UHF (406.1 ~ 420) / Uplink



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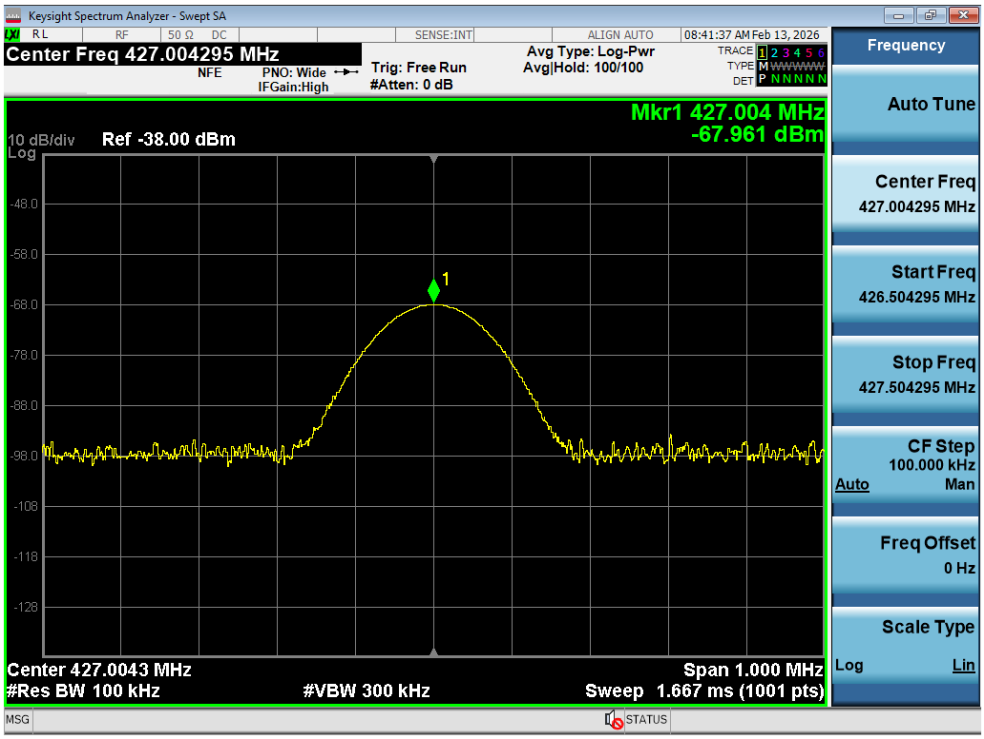
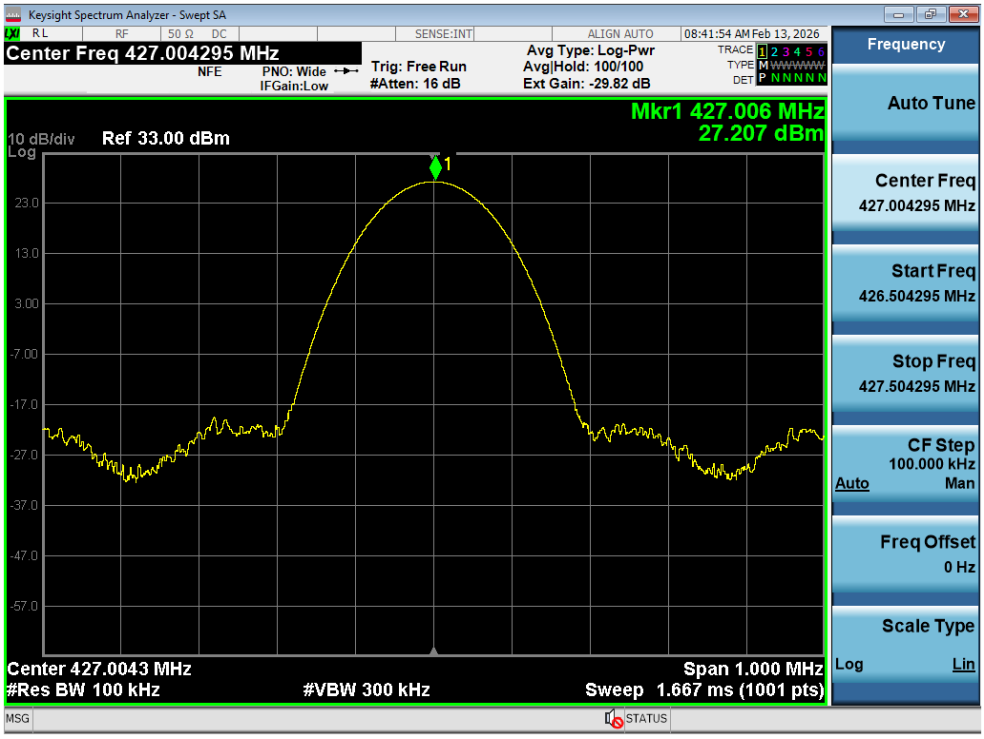
Input / UHF (421 ~ 430) / Uplink




Output/ UHF (421 ~ 430) / Uplink



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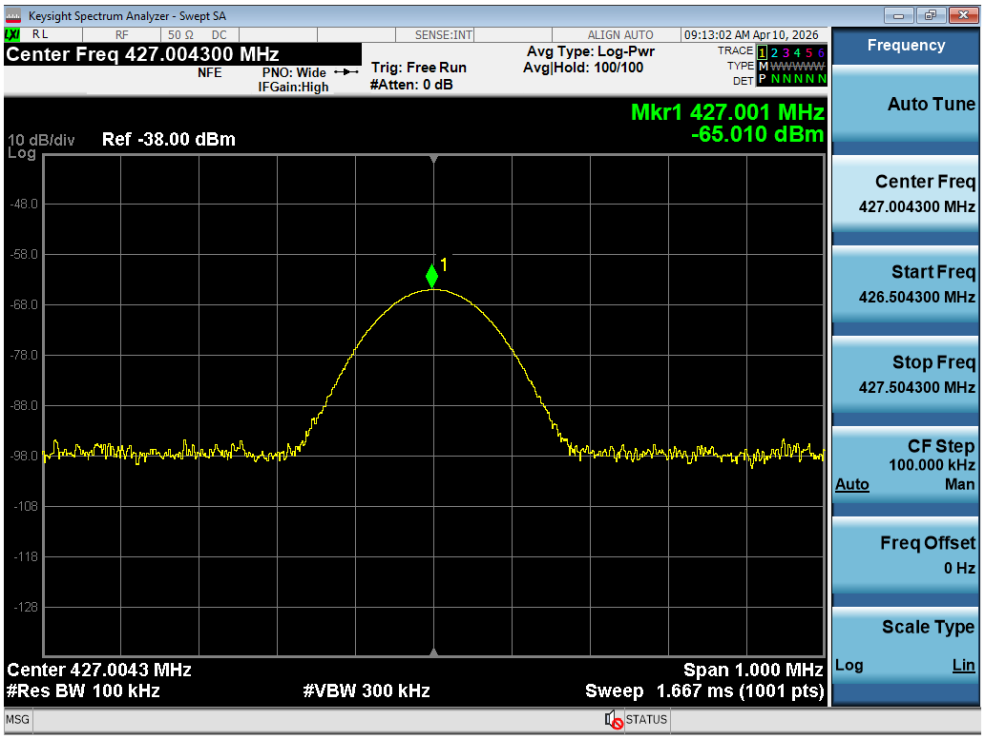
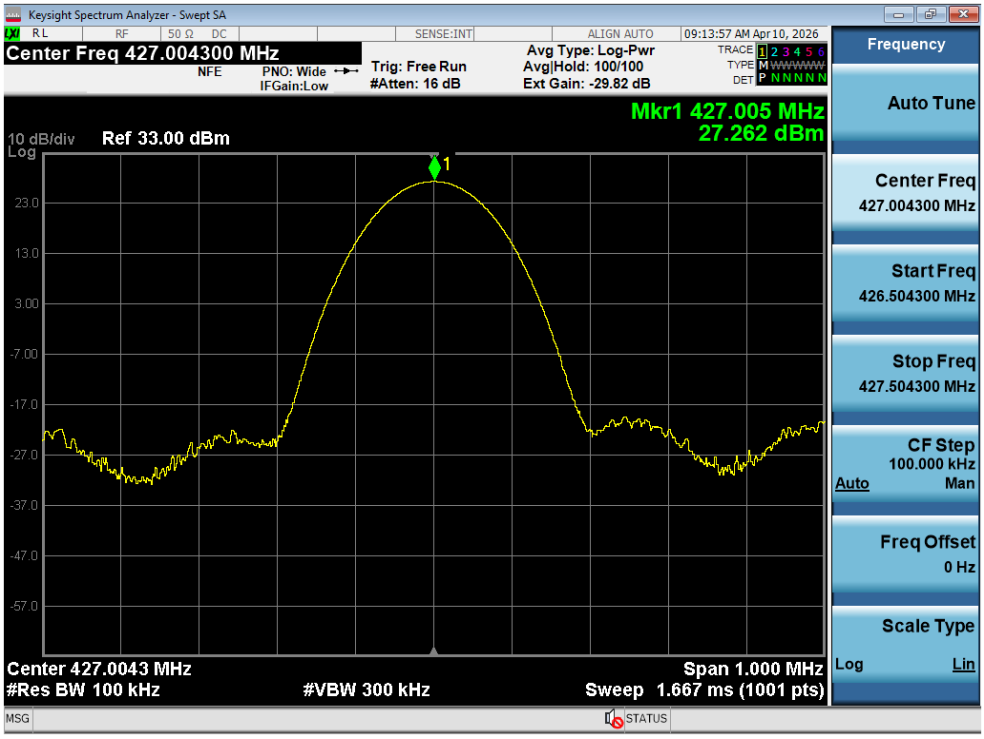
Input @ + 3 dB AGC threshold / UHF (421 ~ 430) / Uplink




Output @ + 3 dB AGC threshold/ UHF (421 ~ 430) / Uplink



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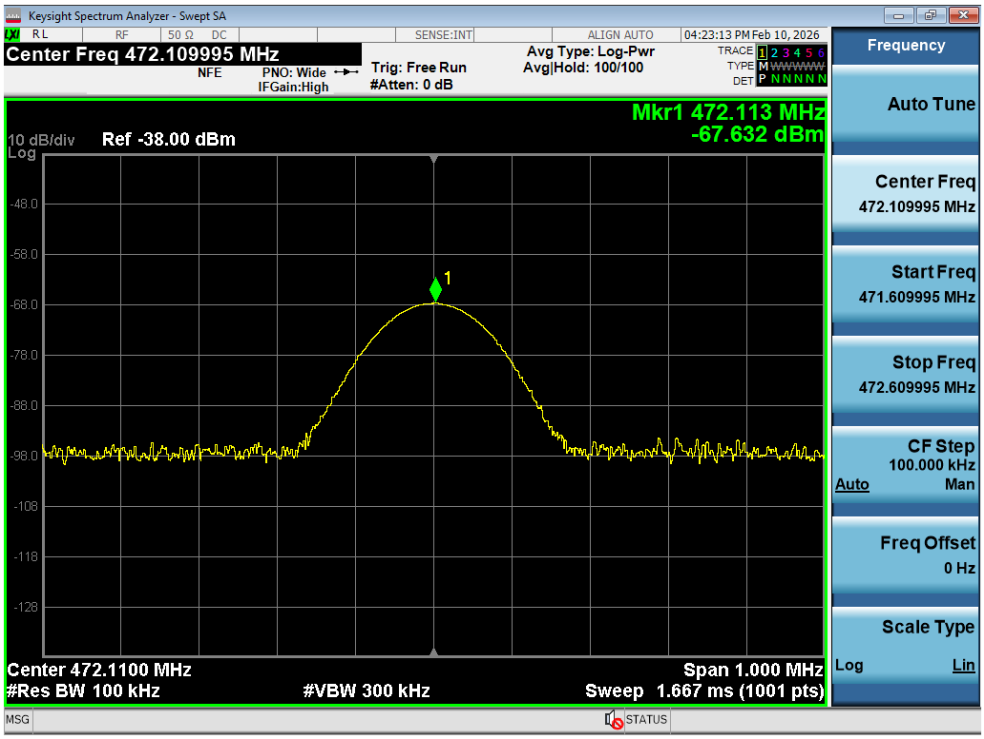
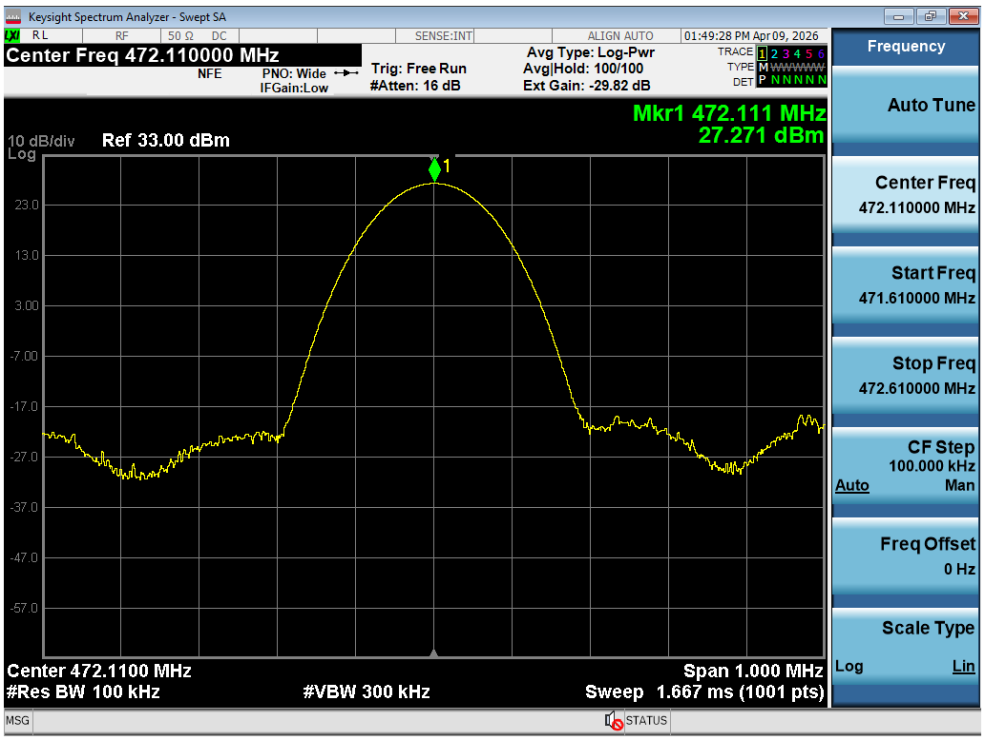
Input / UHF (450 ~ 512) / Uplink




Output/ UHF (450 ~ 512) / Uplink



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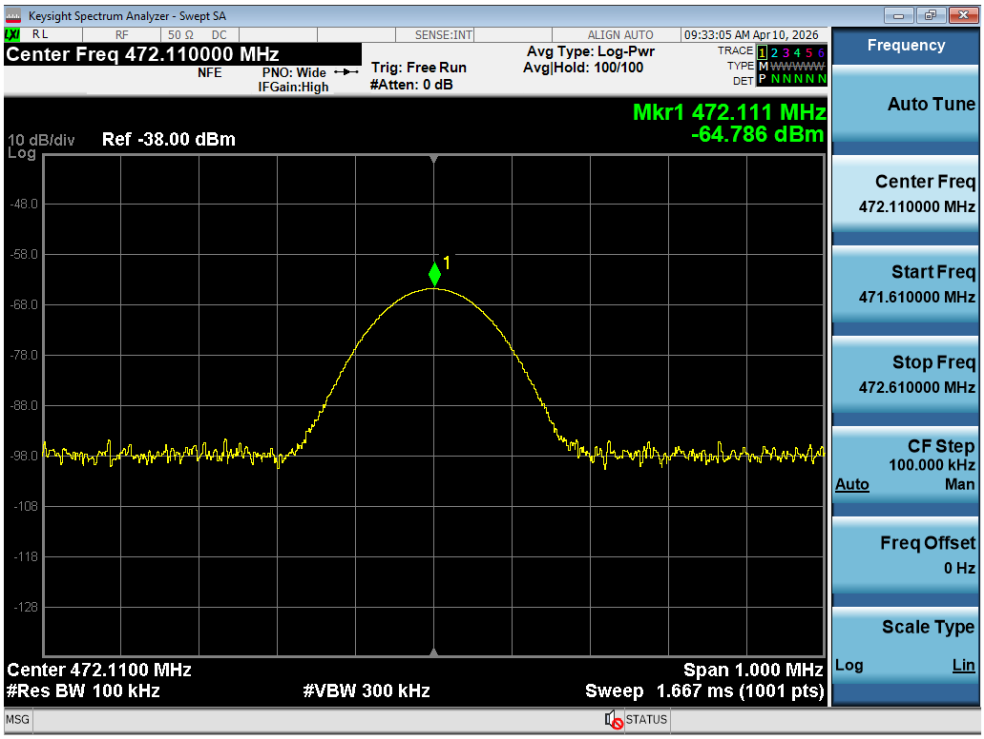
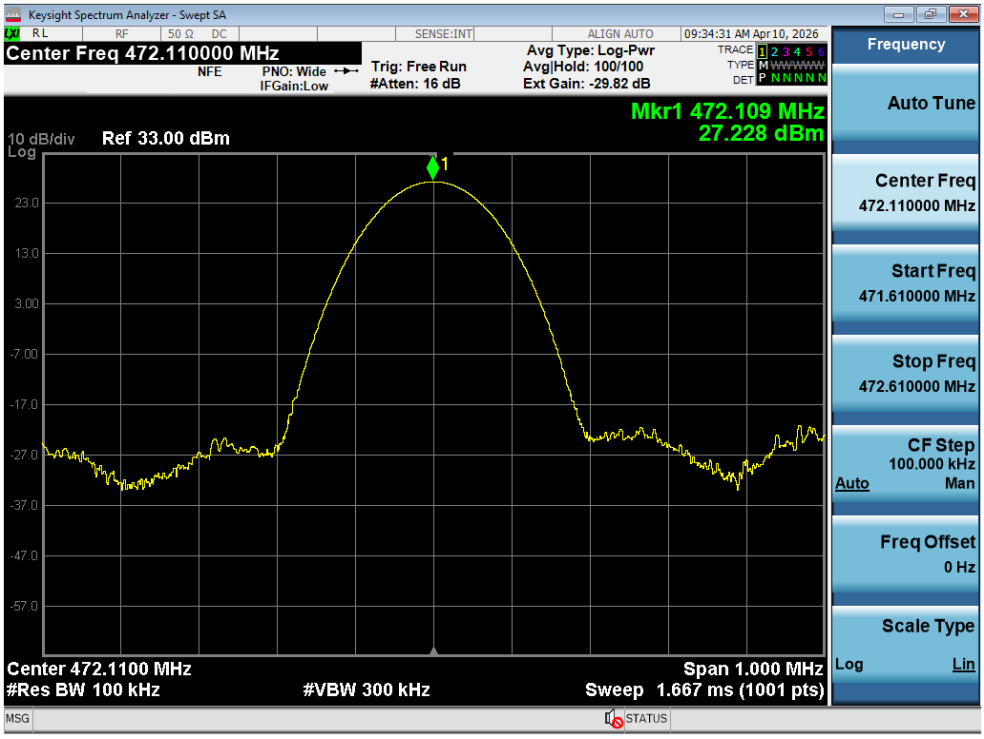
Input @ + 3 dB AGC threshold / UHF (450 ~ 512) / Uplink




Output @ + 3 dB AGC threshold/ UHF (450 ~ 512) / Uplink



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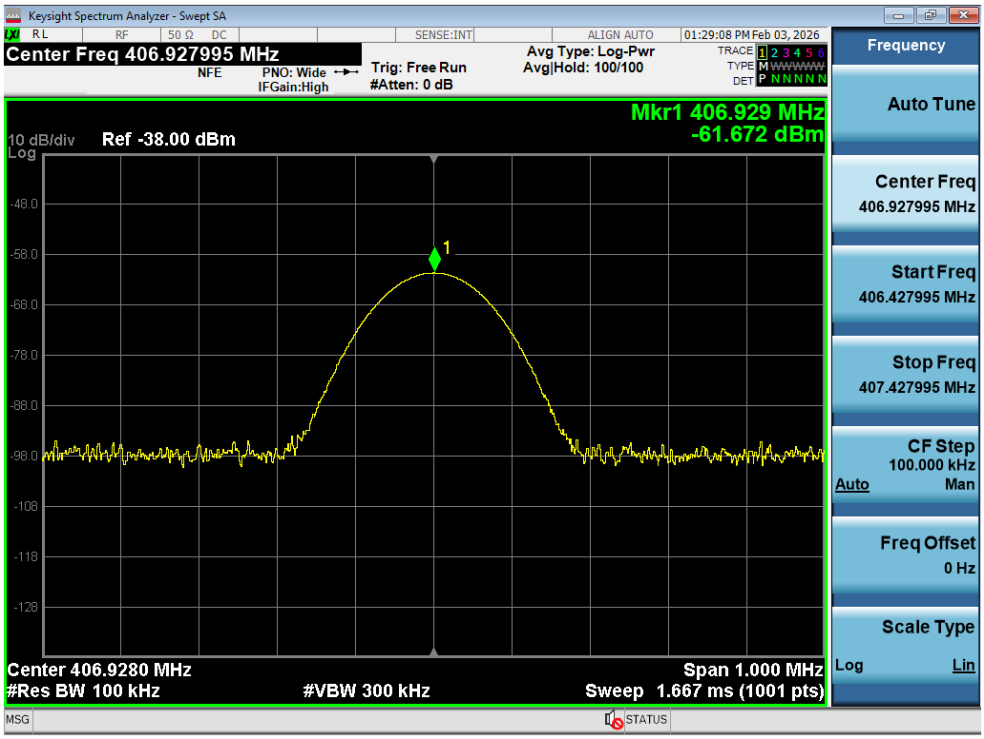
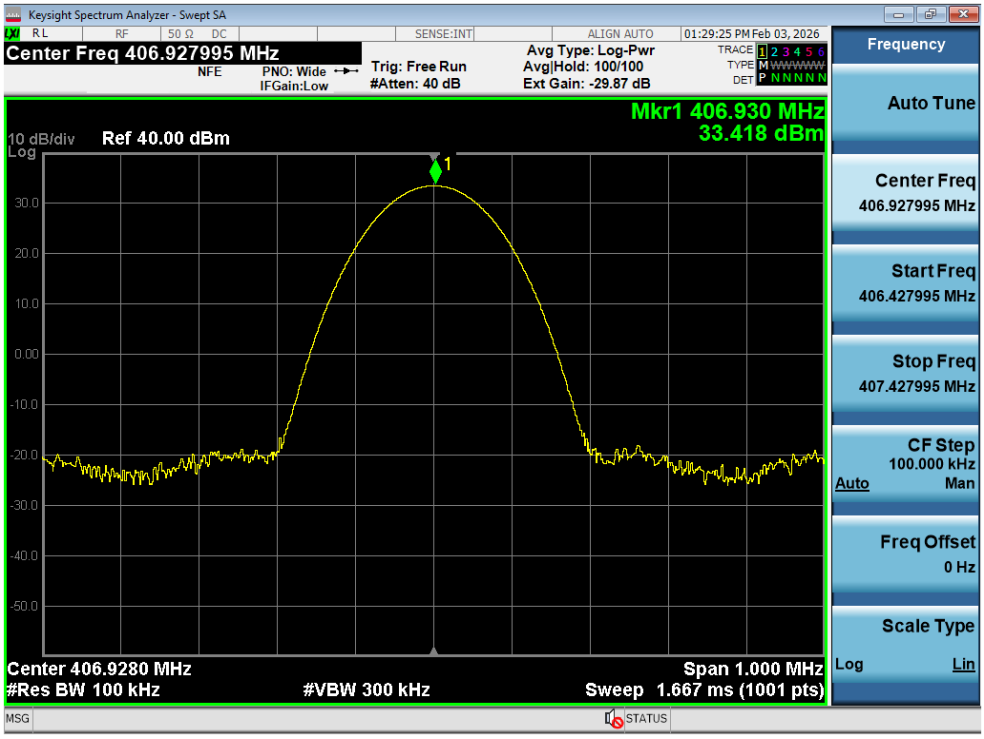
Input / UHF (406.1 ~ 420) / Downlink




Output/ UHF (406.1 ~ 420) / Downlink



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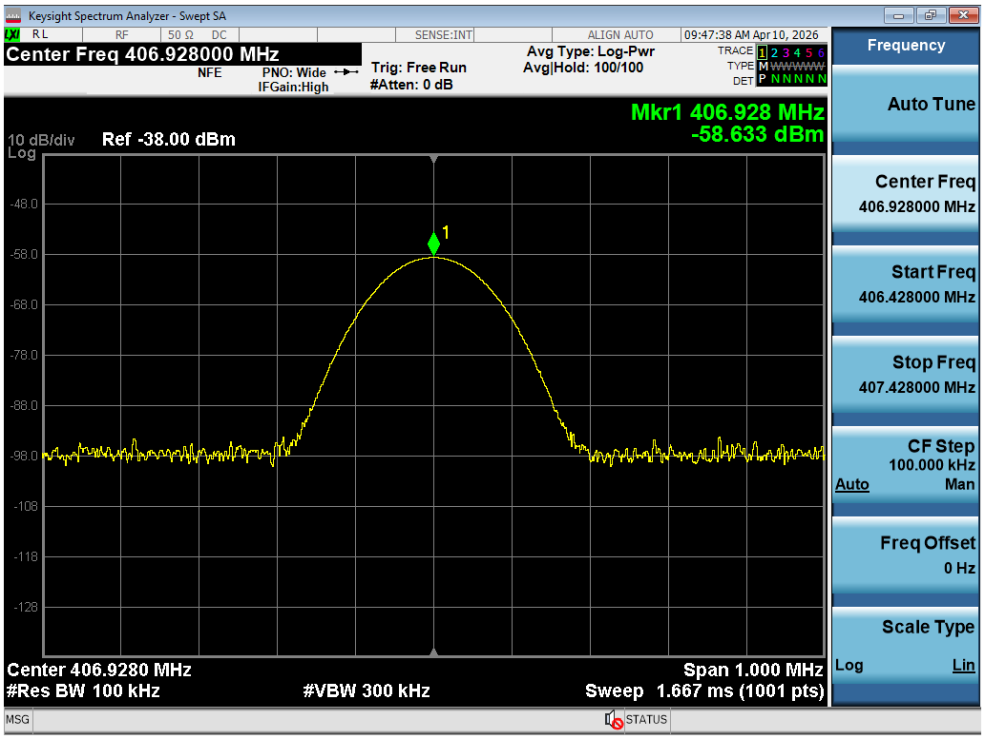
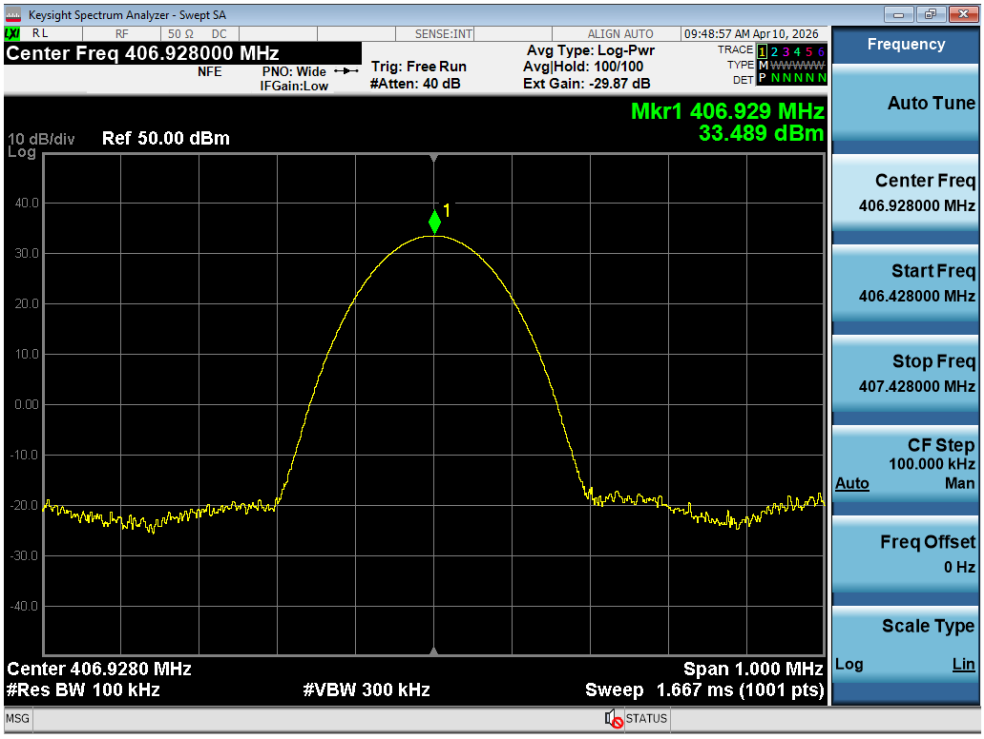
Input @ + 3 dB AGC threshold / UHF (406.1 ~ 420) / Downlink




Output @ + 3 dB AGC threshold/ UHF (406.1 ~ 420) / Downlink



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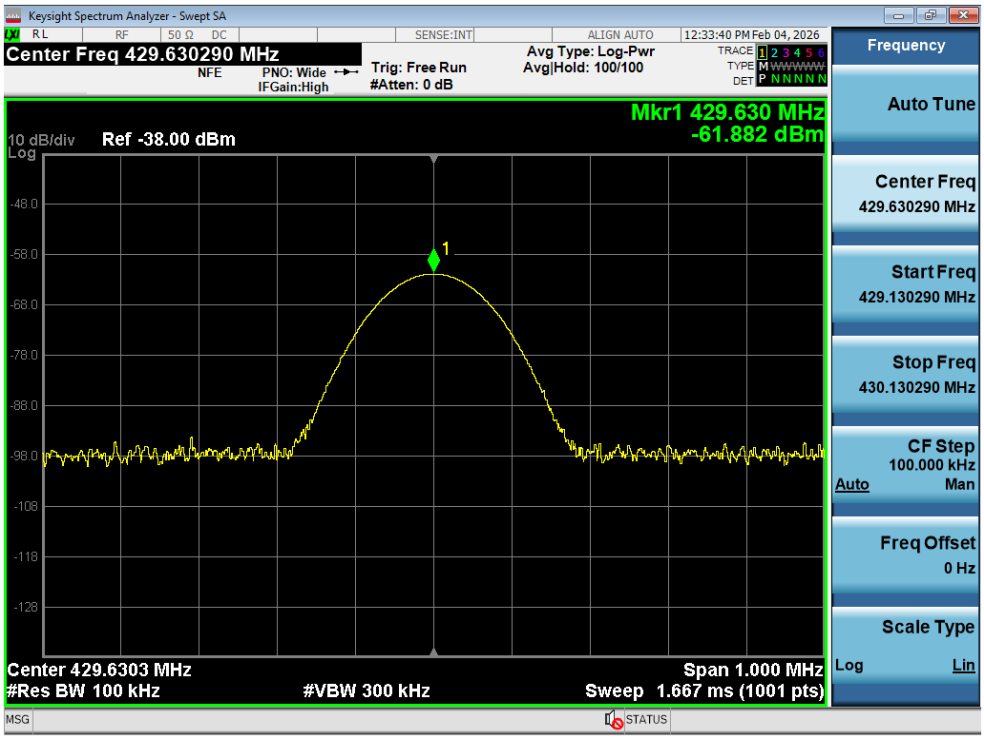
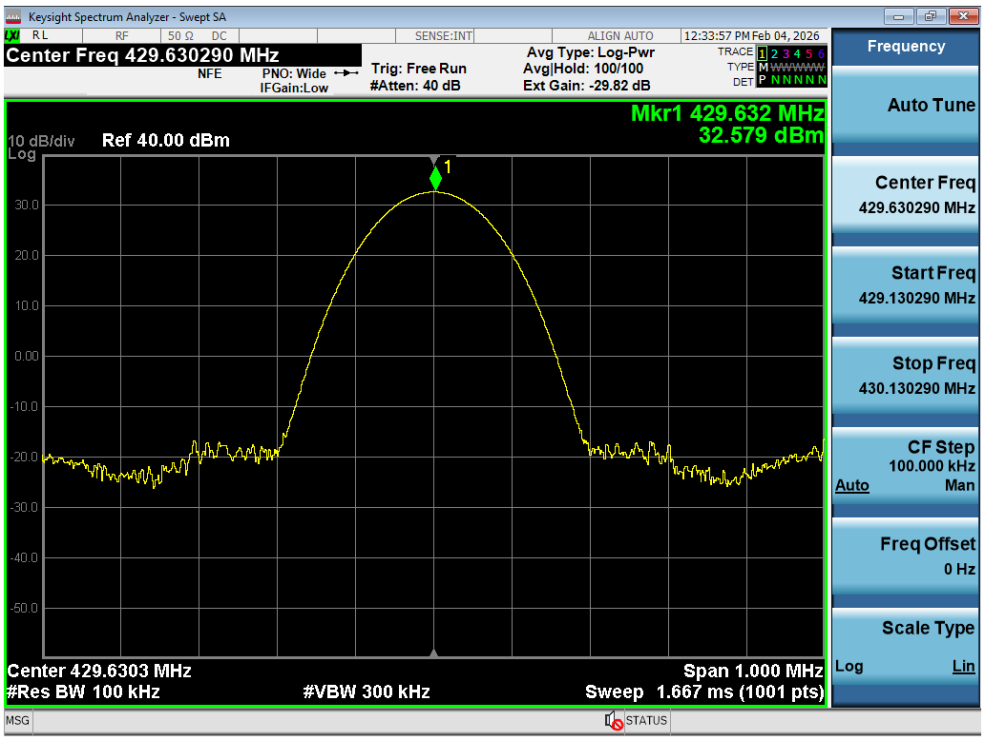
Input / UHF (421 ~ 430) / Downlink




Output/ UHF (421 ~ 430) / Downlink



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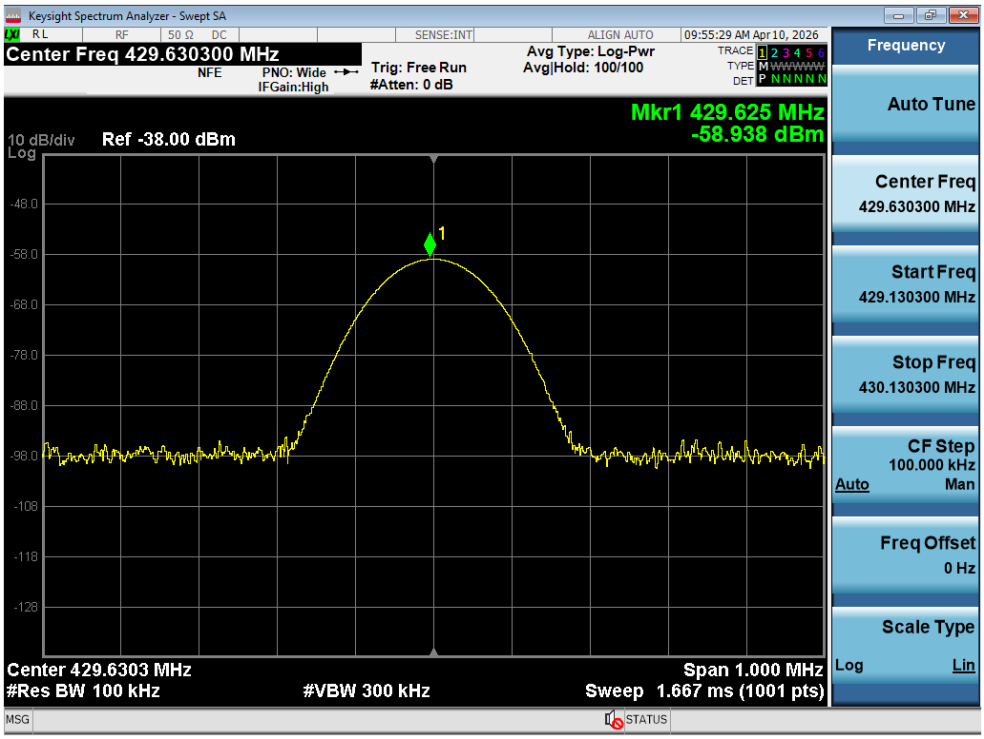
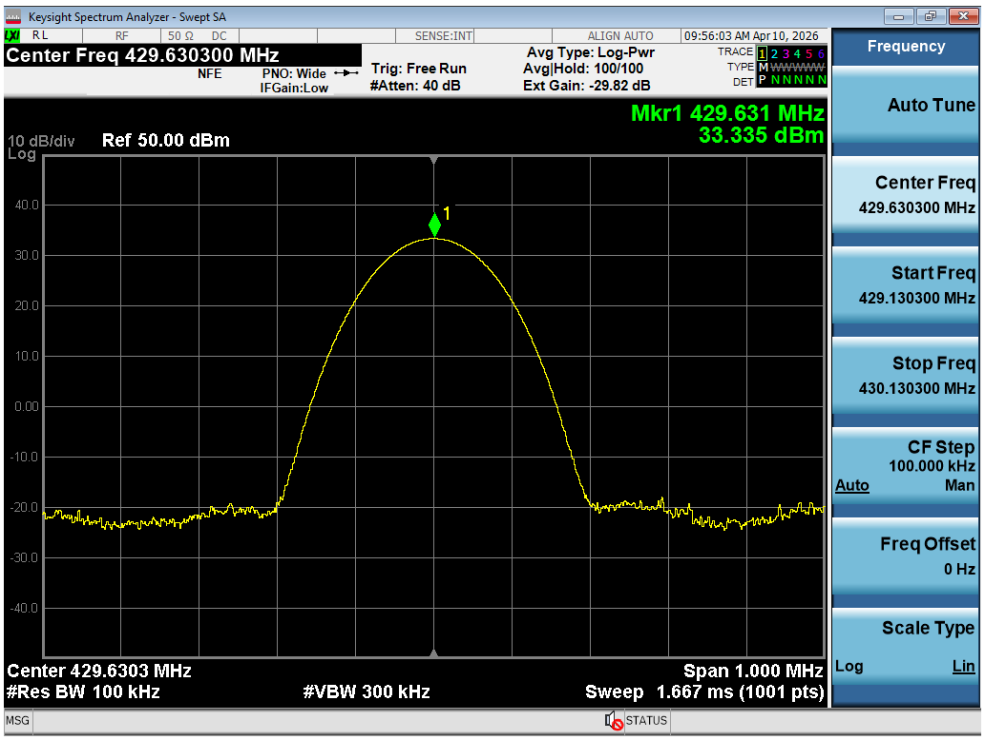
Input @ + 3 dB AGC threshold / UHF (421 ~ 430) / Downlink




Output @ + 3 dB AGC threshold/ UHF (421 ~ 430) / Downlink



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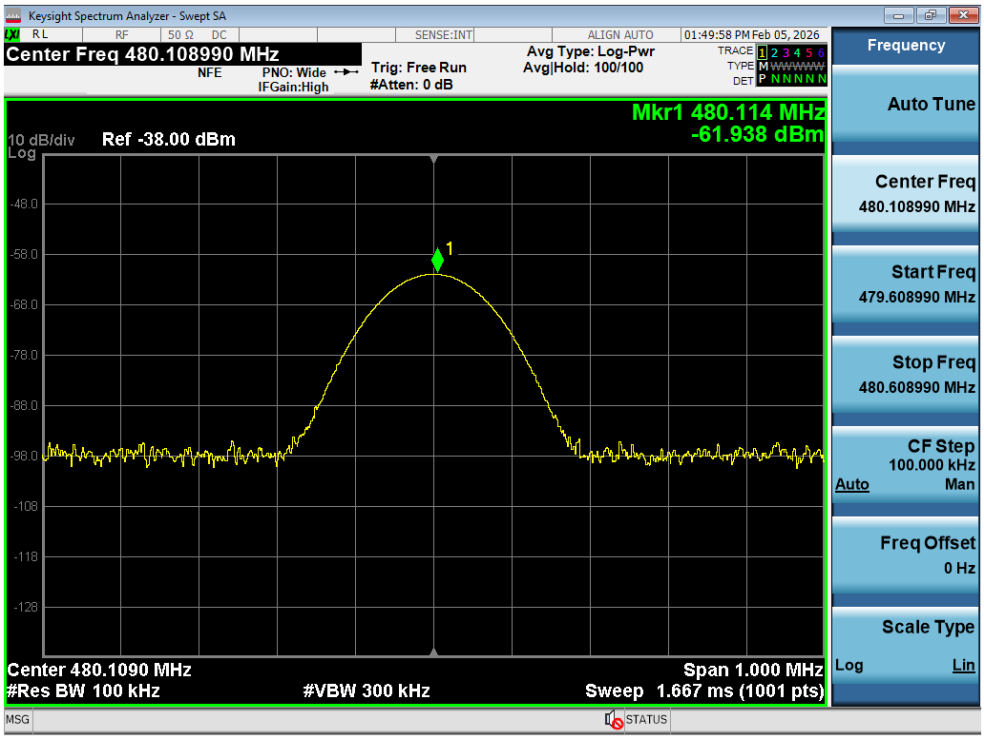
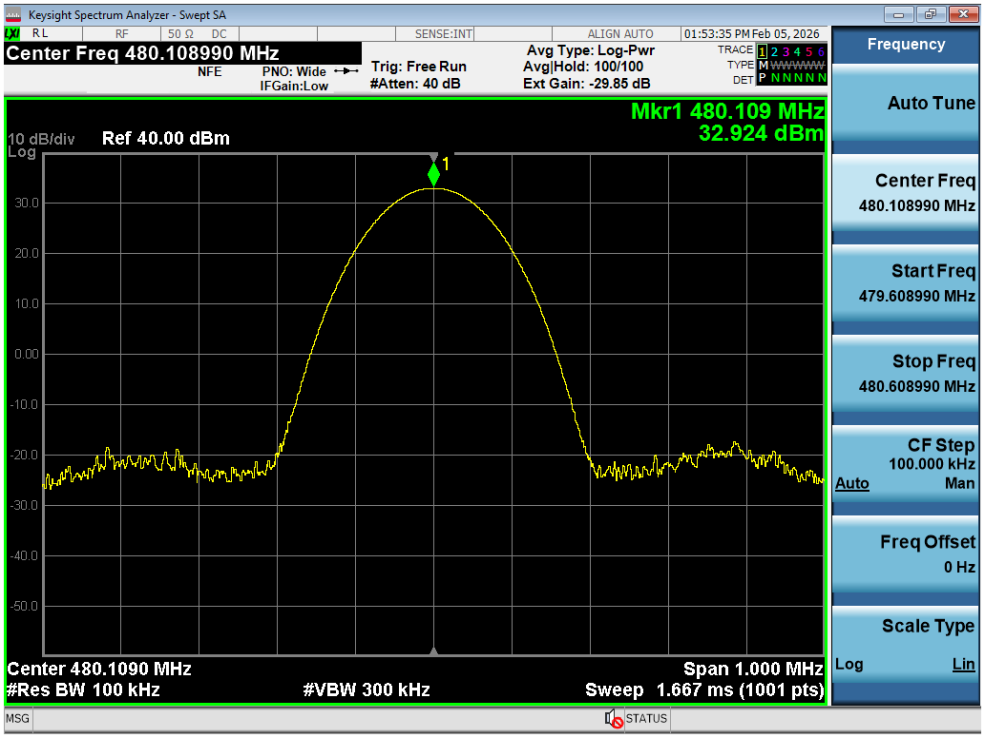
Input / UHF (450 ~ 512) / Downlink




Output/ UHF (450 ~ 512) / Downlink



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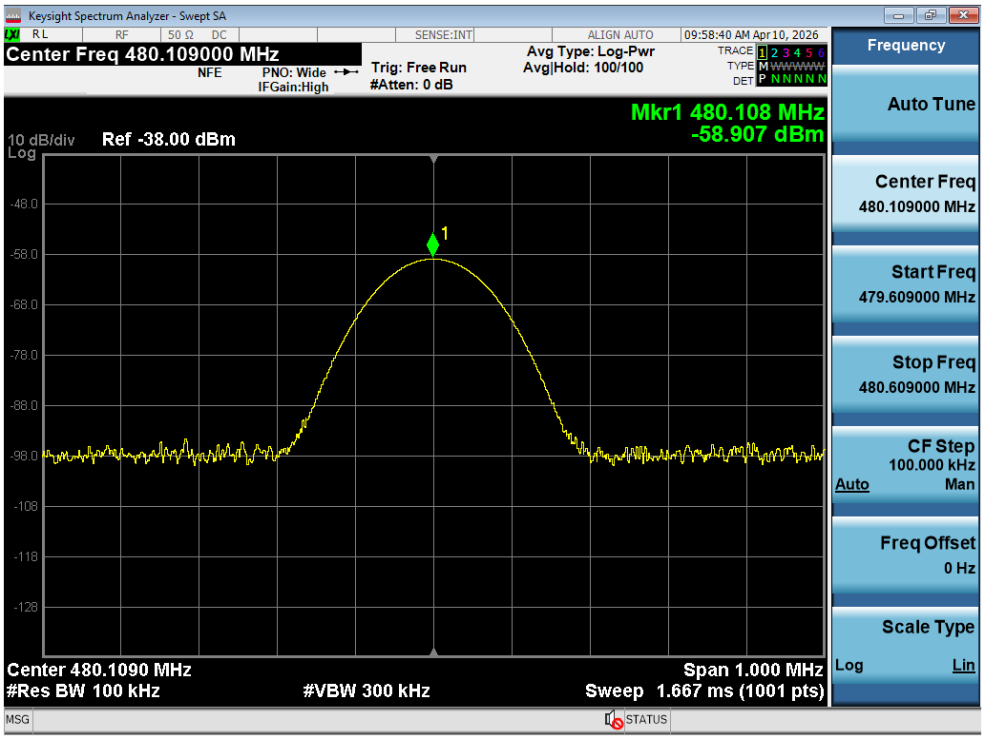
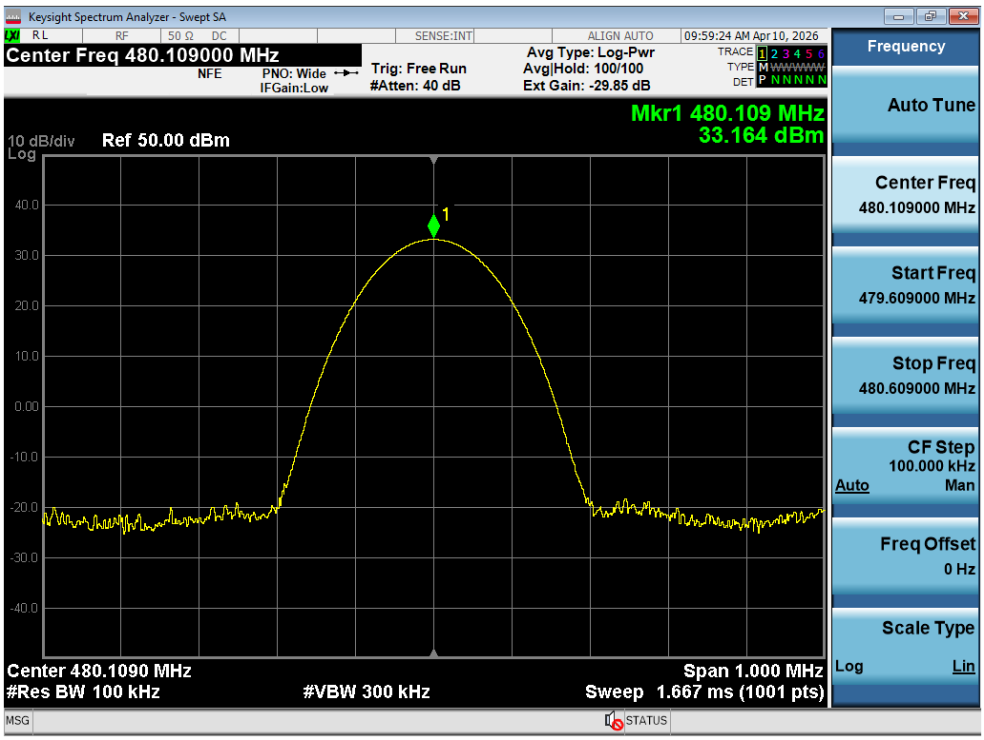
Input @ + 3 dB AGC threshold / UHF (450 ~ 512) / Downlink




Output @ + 3 dB AGC threshold/ UHF (450 ~ 512) / Downlink



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## 5.6. NOISE FIGURE

**Test Requirements:**

**§ 90.219 Use of signal boosters.**

(e) Device Specifications. In addition to the general rules for equipment certification in § 90.203(a)(2) and part 2, subpart J of this chapter, a signal booster must also meet the rules in this paragraph.

(2) The noise figure of a signal booster must not exceed 9 dB in either direction.

**Test Procedures:**

Measurements were in accordance with Agilent Application Note 57-1, 'The Direct Noise Measurement Method". The output power of the device is measured with an input termination at a temperature of approximately 290K. If the gain of the device and noise bandwidth of the measurement system is known, the noise factor can be determined.

$$F_{sys} = \frac{N_o}{kT_oBG}$$

$F_{sys}$ = System Noise Factor

$N_0$ = Output Noise Power

k = Boltzmann's Constant

$T_0$ = Standard Noise Temperature (290K)

B = Noise Bandwidth

G = Gain

'$kT_0B$' calculation result for 1 MHz noise bandwidth is -114 dBm/MHz.

'Gain' value can be obtained from the test performed previously.

For measure the 'output noise power', perform the following procedure.

a) Remove a signal generator from the input port of EUT then terminate it.

b) Turn off the AGC function in EUT.

c) Connect a spectrum analyzer to output port of EUT.

d) Set the RBW 1 MHz. and set the VBW to ≥ 3 × RBW.

e) Measure the maximum output noise power for EUT pass band.

After the measurement, calculate the noise figure according to the following formular.

Noise Figure = Noise Output Power - kT0B - Gain



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**Test Results:**

| Test Band | Link | Input Power (dBm) | Output Power (dBm) | Gain (dB) | $kT_0B$ (dBm/MHz) | Measured Value (dBm) | Noise Figure (dB) |
|---|---|---|---|---|---|---|---|
| UHF (406.1 ~ 420) | Uplink | -67.61 | 27.10 | 94.71 | -114 | -21.13 | -1.84 |
| | Downlink | -61.67 | 33.42 | 95.09 | -114 | -19.59 | -0.68 |
| UHF (421 ~ 430) | Uplink | -67.96 | 27.21 | 95.17 | -114 | -19.92 | -1.08 |
| | Downlink | -61.88 | 32.58 | 94.46 | -114 | -20.28 | -0.74 |
| UHF (450 ~ 512) | Uplink | -67.63 | 27.27 | 94.90 | -114 | -20.73 | -1.64 |
| | Downlink | -61.94 | 32.92 | 94.86 | -114 | -19.28 | -0.14 |



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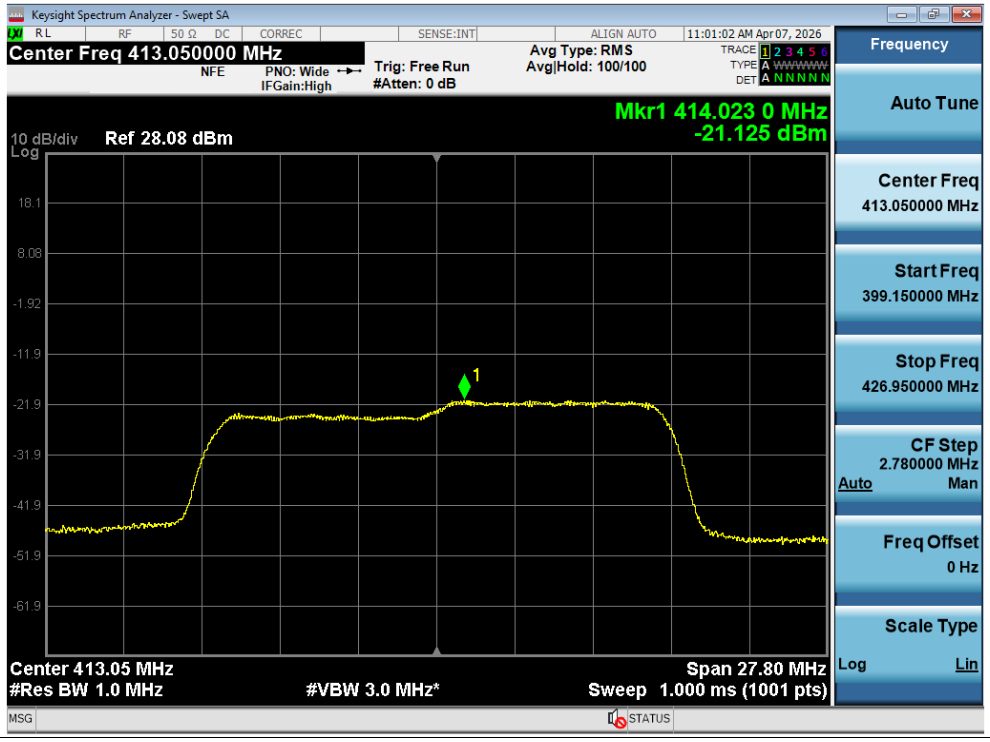
## Plot data of Noise Figure

Noise Figure / UHF (406.1 ~ 420) / Uplink




Noise Figure / UHF (421 ~ 430) / Uplink

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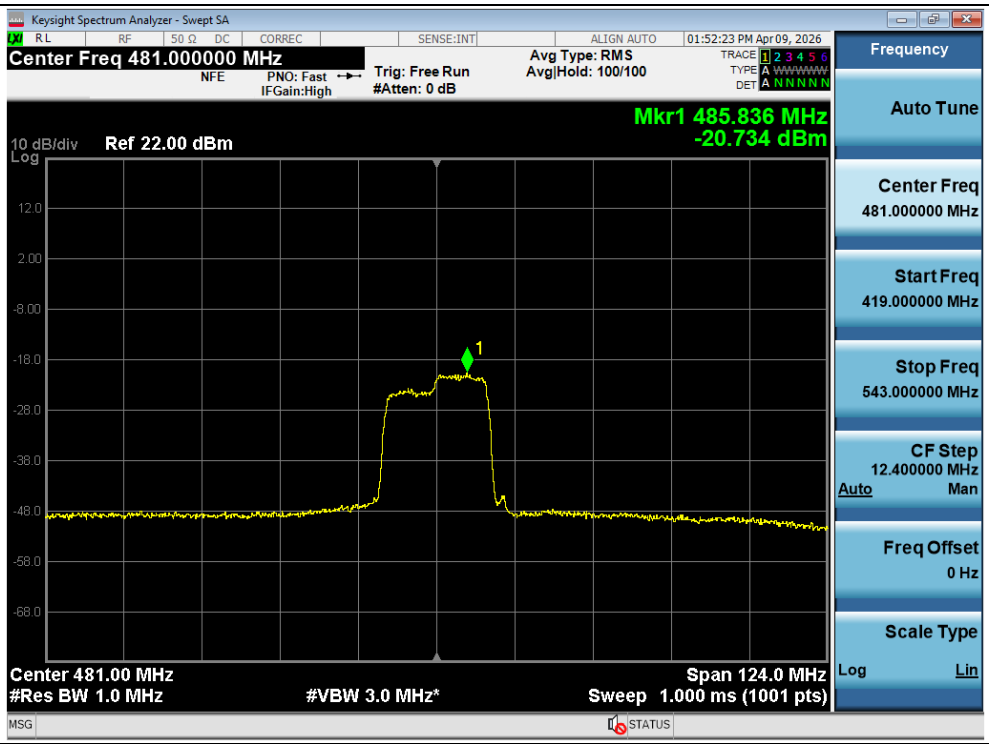
Noise Figure / UHF (450 ~ 512) / Uplink



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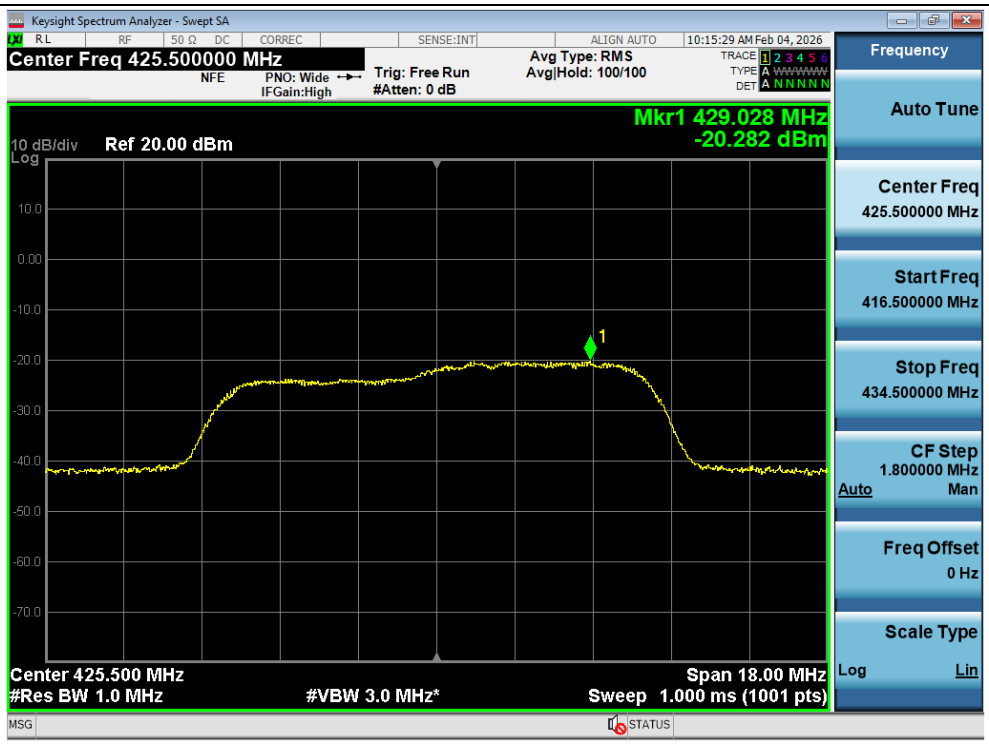
Noise Figure / UHF (406.1 ~ 420) / Downlink

Noise Figure / UHF (421 ~ 430) / Downlink



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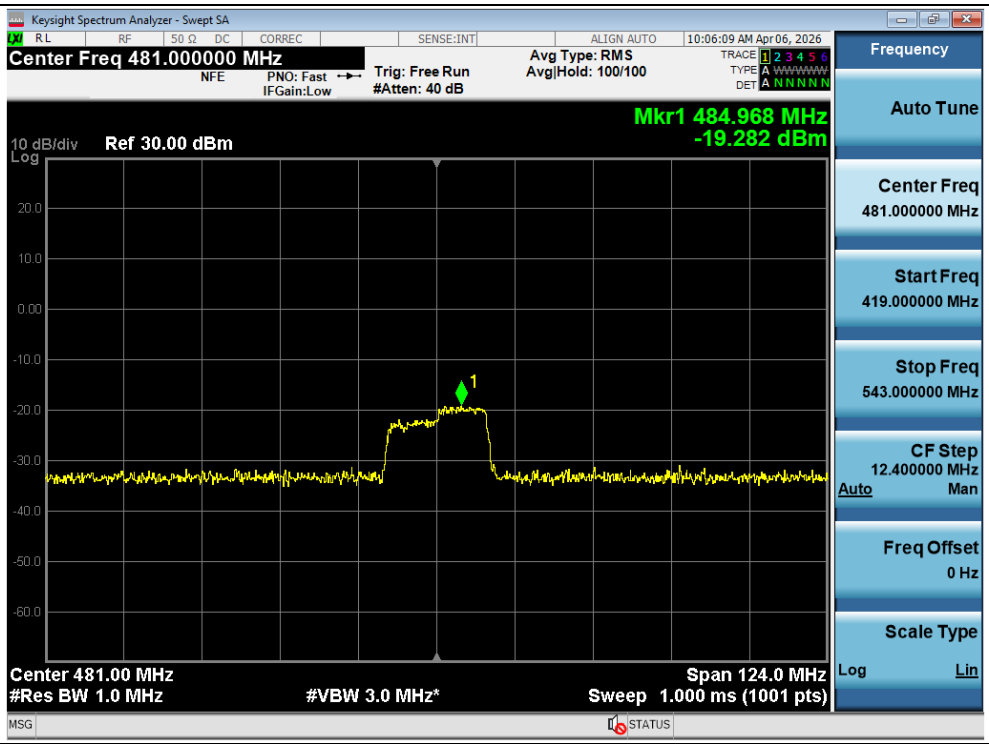
Noise Figure / UHF (450 ~ 512) / Downlink



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## 5.7. OUT-OF-BAND/OUT-OF-BLOCK EMISSIONS AND SPURIOUS EMISSIONS

**§ 2.1051 Measurements required: Spurious emissions at antenna terminals.**

The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in § 2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

**§ 90.219 Use of signal boosters.**

(e) Device Specifications. In addition to the general rules for equipment certification in § 90.203(a)(2) and part 2, subpart J of this chapter, a signal booster must also meet the rules in this paragraph.

(3) Spurious emissions from a signal booster must not exceed −13 dBm within any 100 kHz measurement bandwidth.

**Test Procedures:**

Measurements were in accordance with the test methods section 4.7 of KDB 935210 D05 v01r04.

Spurious emissions shall be measured using a single test signal sequentially tuned to frequencies within each authorized frequency band of operation.

Intermodulation products shall be measured using two CW signals with all available channel spacing with the center between these channels being equal to the center frequency $f_0$ as determined from Out-of-band rejection test.

4.7.2 Out-of-band/out-of-block emissions conducted measurements

a) Connect a signal generator to the input of the EUT.
b) If the signal generator is not capable of producing two independent modulated carriers simultaneously, then two discrete signal generators can be connected, with an appropriate combining network to support the two-signal test.
c) Configure the two signal generators to produce CW on frequencies spaced consistent with $f_0$, with amplitude levels set to just below the AGC threshold.
d) Connect a spectrum analyzer to the EUT output.
e) Set the span to 100 kHz.
f) Set RBW = 300 Hz with VBW ≥ 3 × RBW.
g) Set the detector to power averaging (rms).
h) Place a marker on highest intermodulation product amplitude.
i) Capture the plot for inclusion in the test report.
j) Repeat steps c) to h) with the composite input power level set to 3 dB above the AGC threshold.
k) Repeat steps b) to i) for all operational bands.



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4.7.3 EUT spurious emissions conducted measurements

a) Connect a signal generator to the input of the EUT.

b) Configure the signal generator to produce a CW signal.

c) Set the frequency of the CW signal to the center channel of the EUT passband.

d) Set the output power level so that the resultant signal is just below the AGC threshold.

e) Connect a spectrum analyzer to the output of the EUT, using appropriate attenuation as necessary.

f) Set the RBW = 100 kHz. (i.e., for 30 MHz to 1 GHz PLMRS and/or PSRS booster devices)

g) Set the VBW = 3 × RBW.

h) Set the Sweep time = auto-couple.

i) Set the detector to PEAK.

j) Set the spectrum analyzer start frequency to 30 MHz (or the lowest radio frequency signal generated in the EUT, without going below 9 kHz if the EUT has additional internal clock frequencies), and the stop frequency to 10 times the highest allowable frequency of the EUT passband.

k) Select MAX HOLD, and use the marker peak function to find the highest emission(s) outside the passband. (This could be either at a frequency lesser or greater than the passband frequencies.)

l) Capture a plot for inclusion in the test report.

m) Repeat steps c) to l) for each authorized frequency band/block of operation.



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