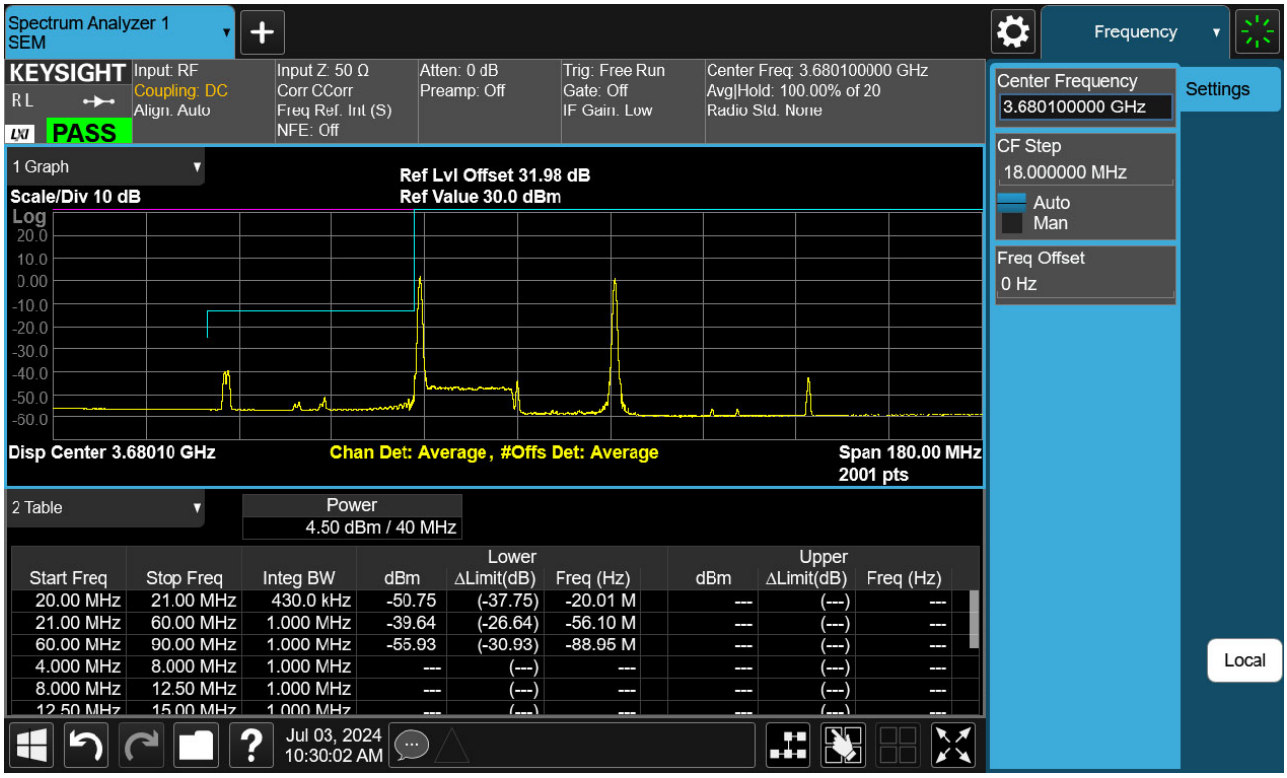
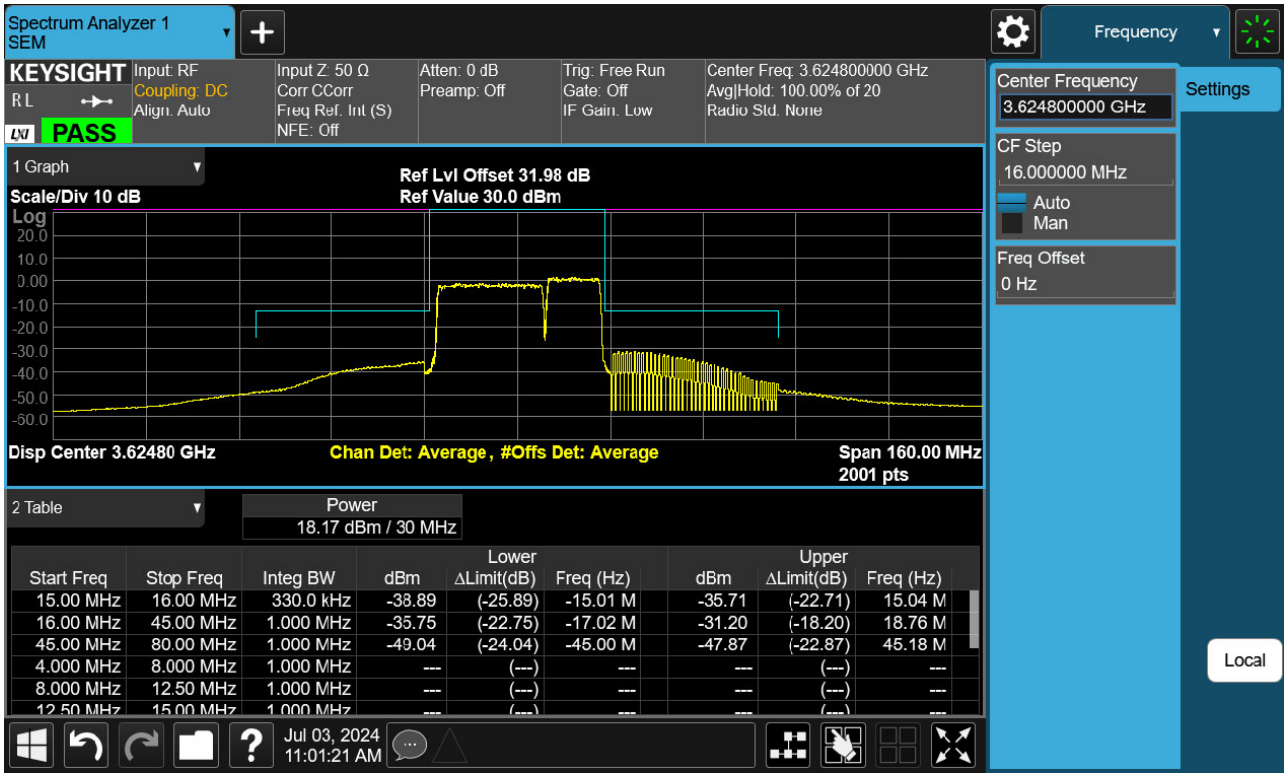
PCC 20MHz Ch56442 RB1 Offset0, SCC 20MHz Ch56640 RB1 Offset99-1

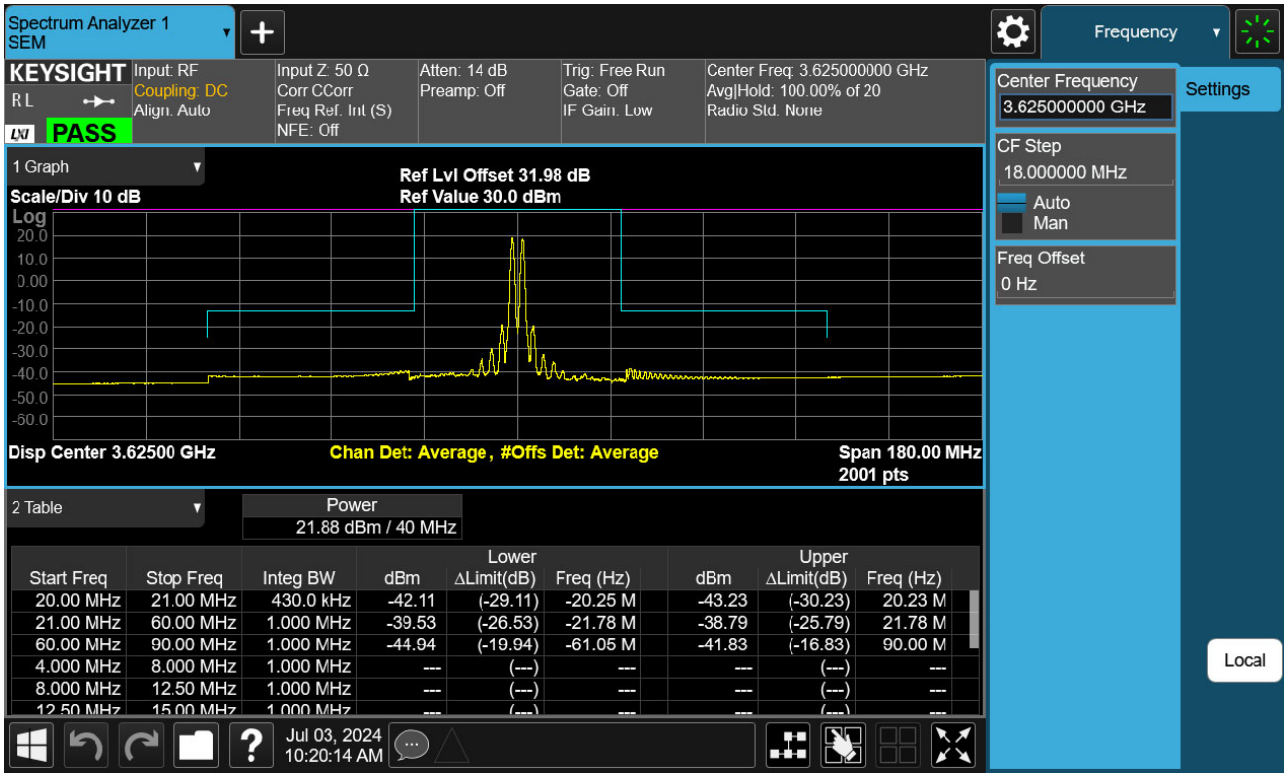


PCC 20MHz Ch55941 RB100 Offset0, SCC 10MHz Ch56085 RB50 Offset0

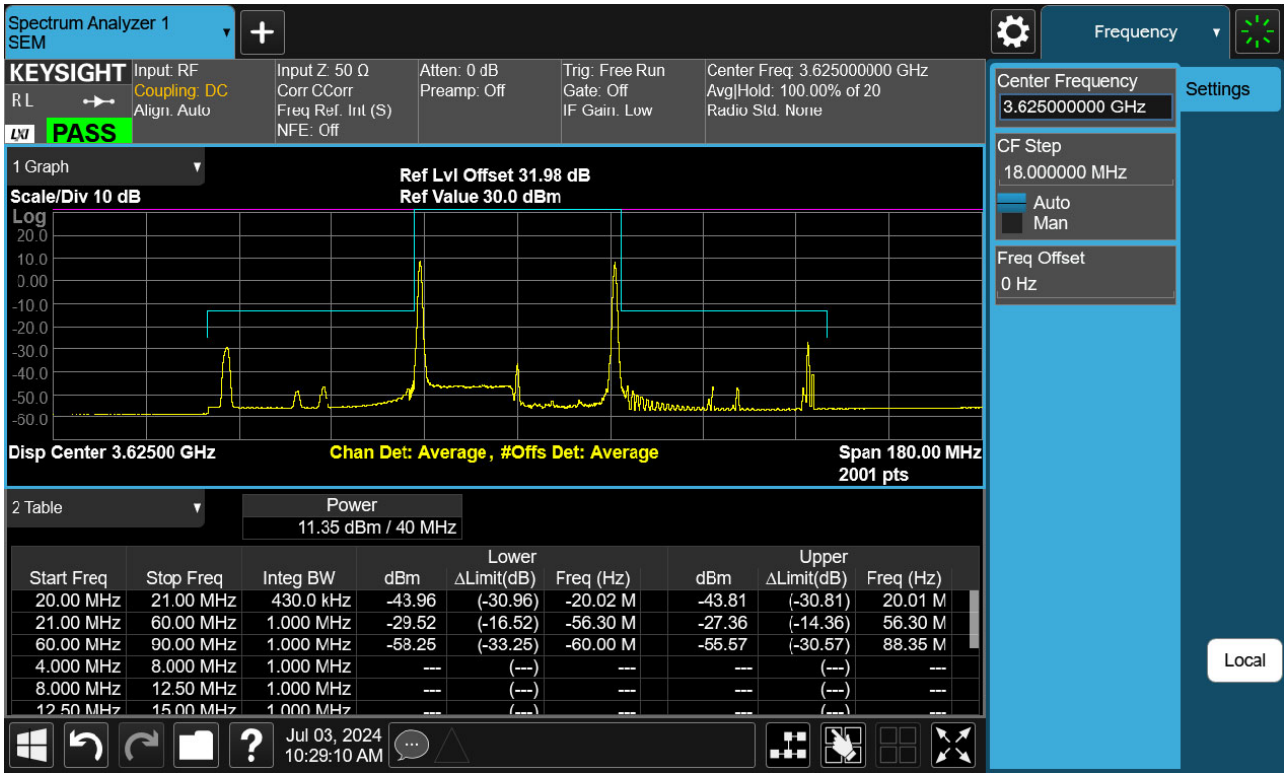


PCC 20MHz Ch55891 RB100 Offset0, SCC 20MHz Ch56089 RB100 Offset0

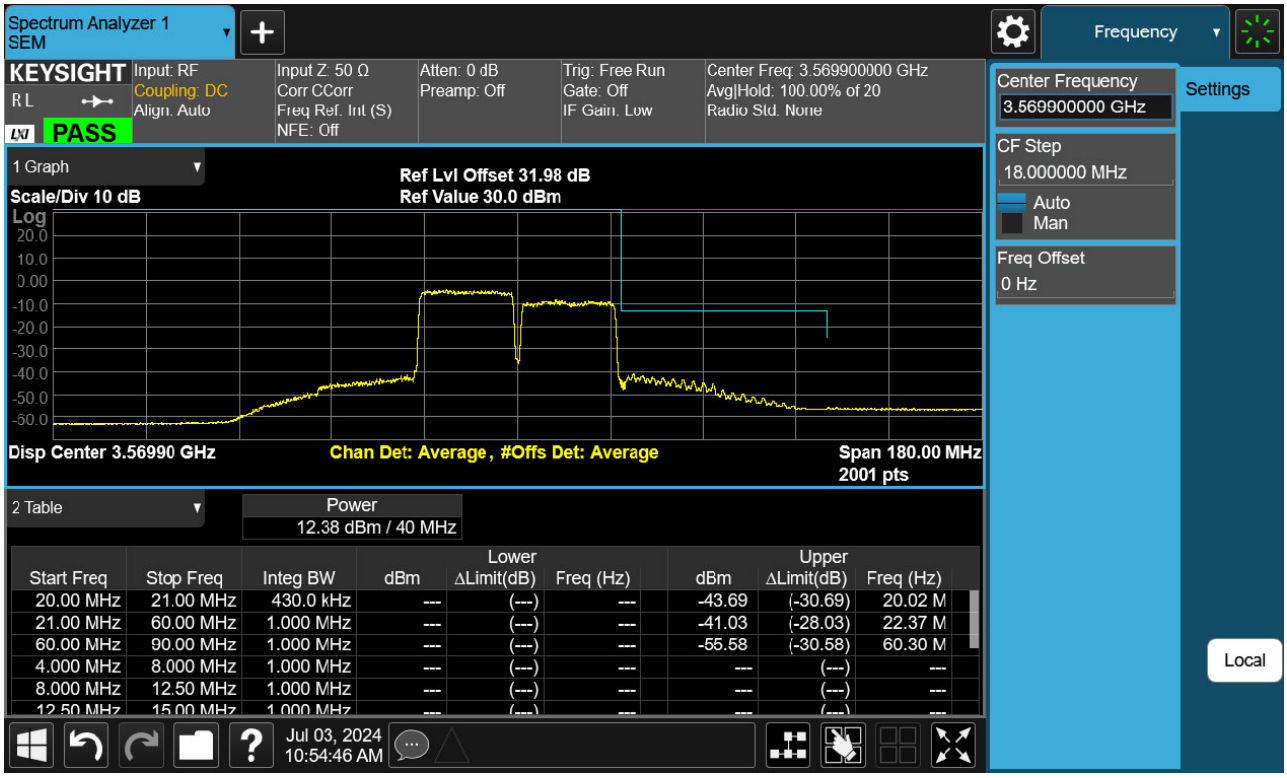
PCC 20MHz Ch55891 RB1 Offset99, SCC 20MHz Ch56089 RB1 Offset0



PCC 20MHz Ch55891 RB1 Offset0, SCC 20MHz Ch56089 RB1 Offset99

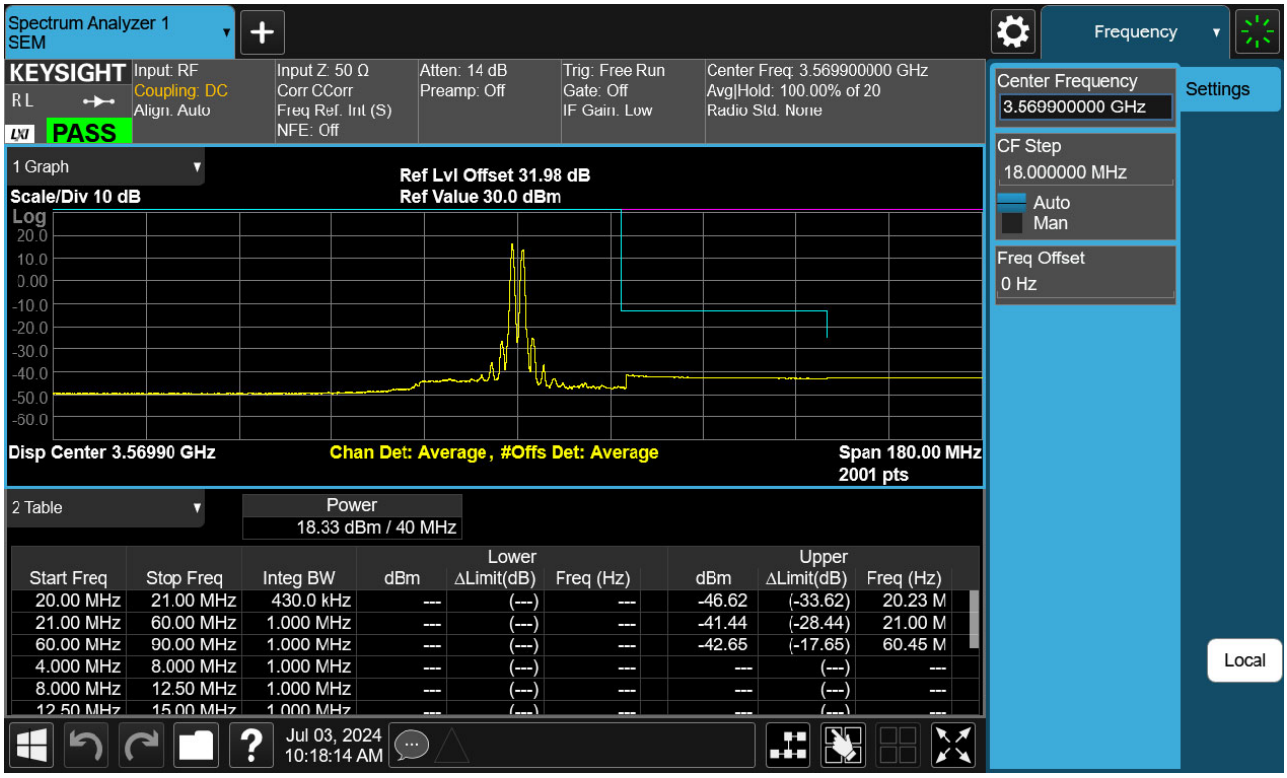


PCC 20MHz Ch55340 RB100 Offset0, SCC 20MHz Ch55538 RB100 Offset0-2

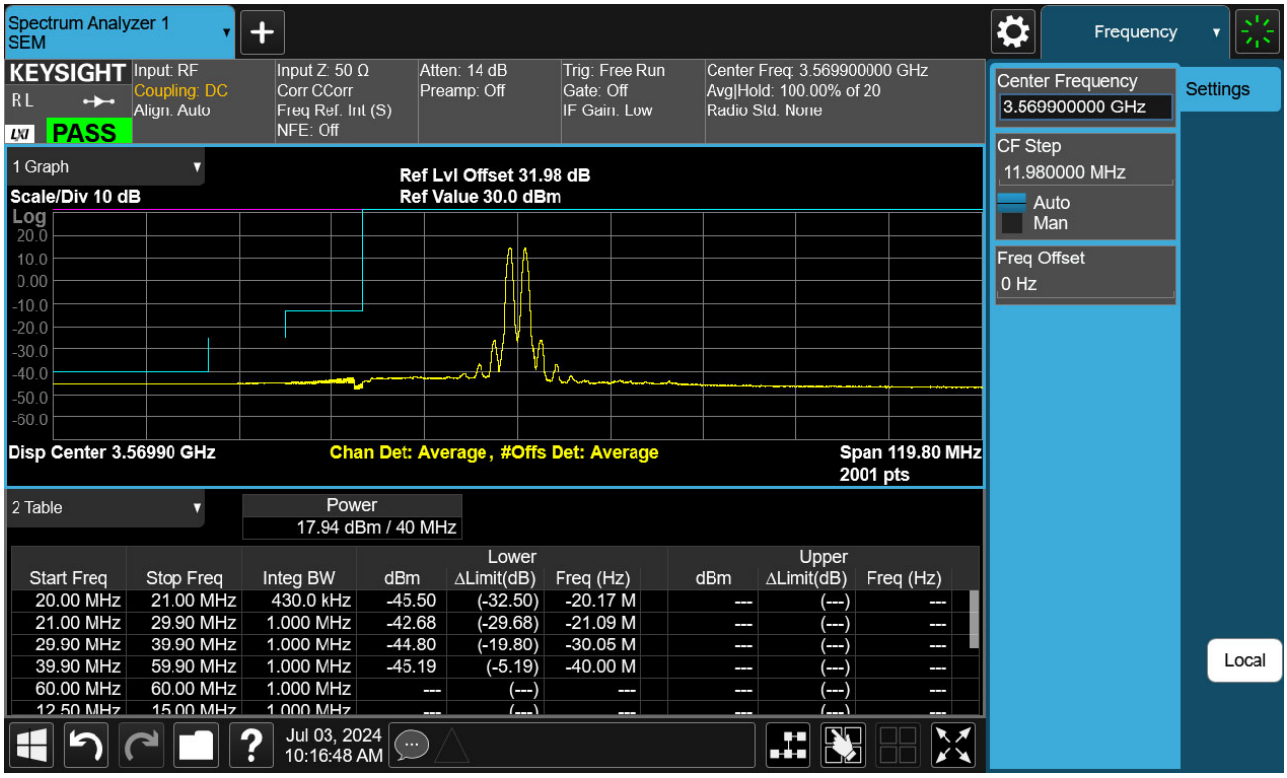


PCC 20MHz Ch55340 RB100 Offset0, SCC 20MHz Ch55538 RB100 Offset0-1

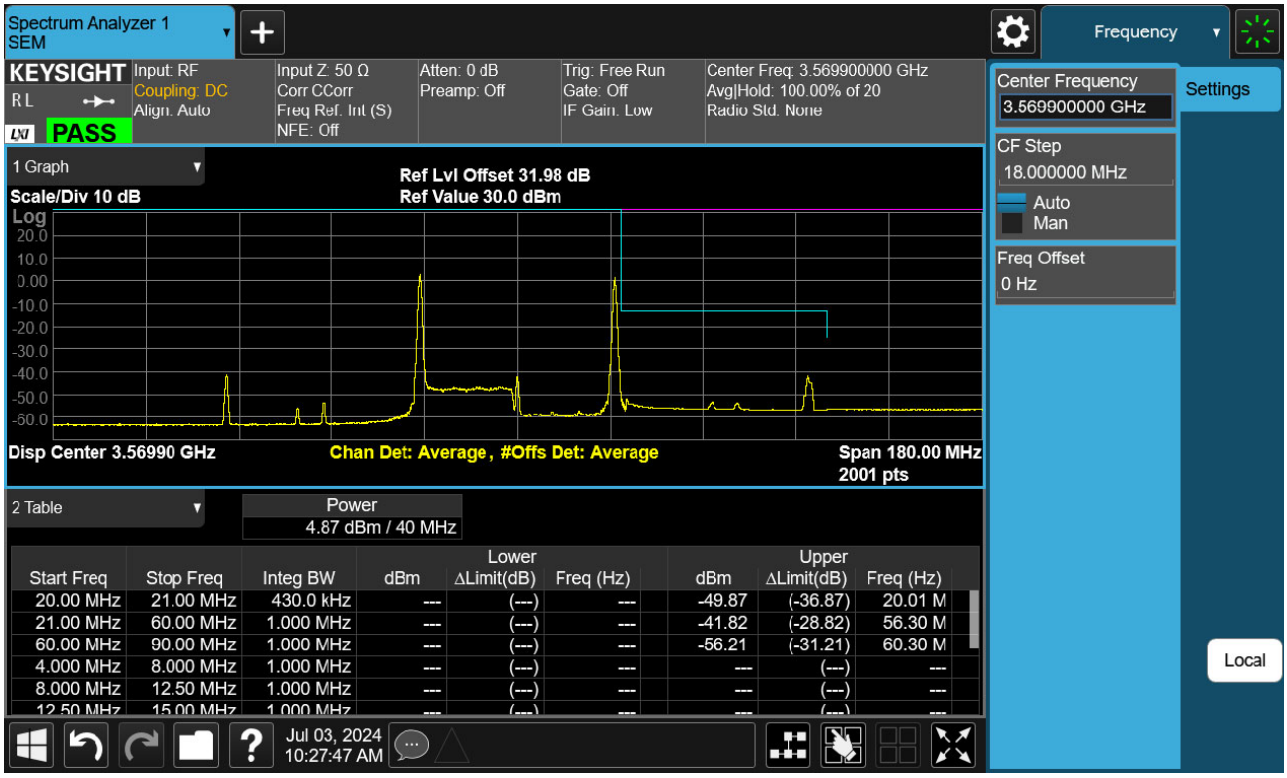
PCC 20MHz Ch55340 RB1 Offset99, SCC 20MHz Ch55538 RB1 Offset0-2



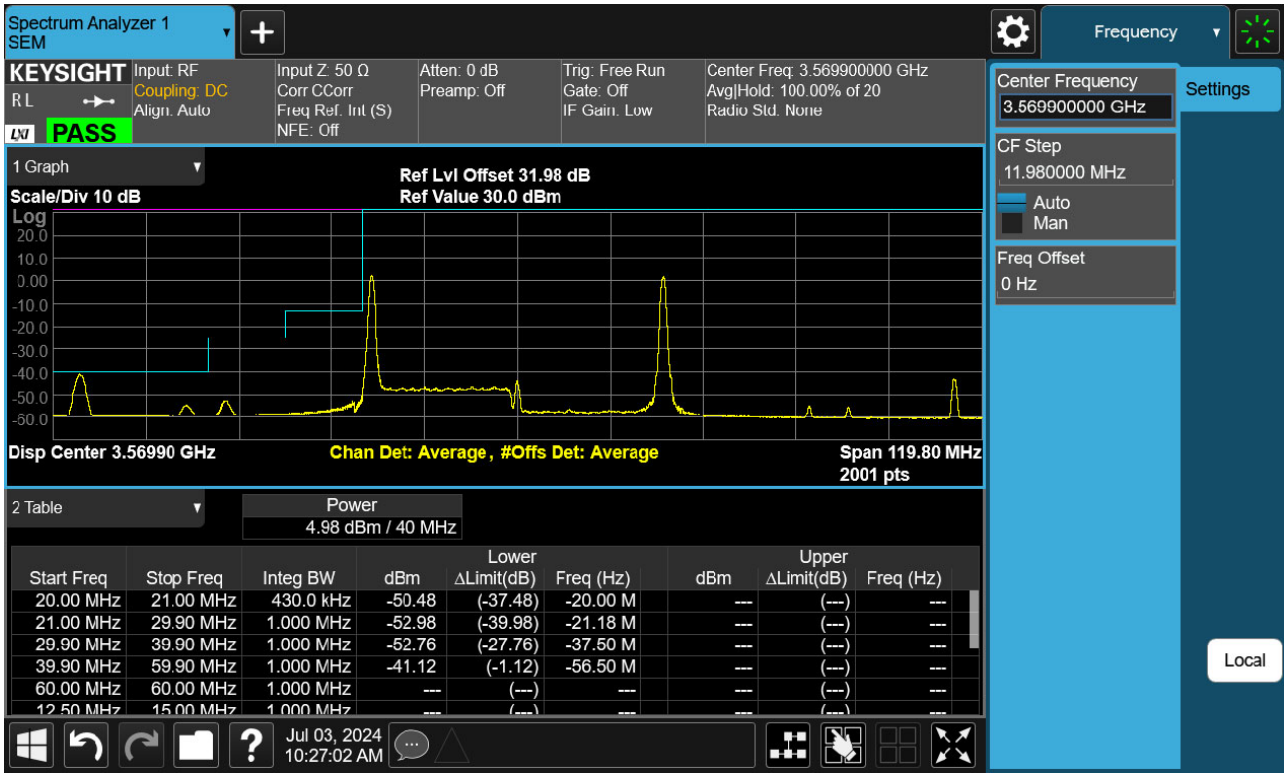
PCC 20MHz Ch55340 RB1 Offset99, SCC 20MHz Ch55538 RB1 Offset0-1



PCC 20MHz Ch55340 RB1 Offset0, SCC 20MHz Ch55538 RB1 Offset99-2



PCC 20MHz Ch55340 RB1 Offset0, SCC 20MHz Ch55538 RB1 Offset99-1



## 8.5 Frequency Stability / Variation Of Ambient Temperature

| | | |
|---|---|---|
| ▣ PCC Channel: | 55273 | |
| ▣ PCC Frequency: | 3553.3 | MHz |
| ▣ PCC BandWidth: | 5 | MHz |
| ▣ SCC Channel: | 55390 | |
| ▣ SCC Frequency: | 3565.0 | MHz |
| ▣ SCC BandWidth: | 20 | MHz |
| ▣ Voltage : | 3.880 | VDC |
| ▣ LIMIT: | Emission must remain in band | |

| Voltage (%) | Power (VDC) | Temp. (°C) | PPM | | Frequency Error (MHz) | |
|---|---|---|---|---|---|---|
| | | | PCC | SCC | PCC | SCC |
| 100 % | 3.880 | +20(Ref) | 0.029 | -0.029 | 3553.27150 | 3565.02892 |
| 100 % | | -30 | 0.028 | -0.031 | 3553.27184 | 3565.03143 |
| 100 % | | -20 | 0.027 | 0.015 | 3553.27251 | 3564.98529 |
| 100 % | | -10 | -0.037 | 0.025 | 3553.33704 | 3564.97487 |
| 100 % | | 0 | 0.027 | 0.029 | 3553.27266 | 3564.97096 |
| 100 % | | 10 | 0.023 | 0.017 | 3553.27719 | 3564.98276 |
| 100 % | | 30 | 0.026 | 0.029 | 3553.27386 | 3564.97124 |
| 100 % | | 40 | -0.037 | 0.038 | 3553.33727 | 3564.96178 |
| 100 % | | 50 | -0.045 | 0.023 | 3553.34511 | 3564.97721 |
| Batt. Endpoint | 3.300 | 20 | 0.032 | -0.043 | 3553.26808 | 3565.04313 |

- ▣ PCC Channel: 55295
- ▣ PCC Frequency: 3555.5 MHz
- ▣ PCC BandWidth: 10 MHz
- ▣ SCC Channel: 55439
- ▣ SCC Frequency: 3569.9 MHz
- ▣ SCC BandWidth: 20 MHz
- ▣ Voltage : 3.880 VDC
- ▣ LIMIT: Emission must remain in band

| Voltage (%) | Power (VDC) | Temp. (℃) | PPM | | Frequency Error (MHz) | |
|---|---|---|---|---|---|---|
| | | | PCC | SCC | PCC | SCC |
| 100 % | 3.880 | +20(Ref) | 0.035 | 0.033 | 3555.46489 | 3569.86710 |
| 100 % | | -30 | 0.024 | 0.029 | 3555.47602 | 3569.87105 |
| 100 % | | -20 | 0.037 | 0.036 | 3555.46345 | 3569.86430 |
| 100 % | | -10 | -0.043 | -0.049 | 3555.54274 | 3569.94937 |
| 100 % | | 0 | 0.032 | 0.024 | 3555.46768 | 3569.87630 |
| 100 % | | 10 | 0.024 | 0.022 | 3555.47592 | 3569.87821 |
| 100 % | | 30 | -0.047 | 0.021 | 3555.54724 | 3569.87948 |
| 100 % | | 40 | 0.036 | 0.018 | 3555.46379 | 3569.88159 |
| 100 % | | 50 | 0.031 | -0.046 | 3555.46853 | 3569.94595 |
| Batt. Endpoint | 3.300 | 20 | 0.031 | 0.035 | 3555.46859 | 3569.86527 |

▣ PCC Channel: 55318
▣ PCC Frequency: 3557.8 MHz
▣ PCC BandWidth: 15 MHz
▣ SCC Channel: 55489
▣ SCC Frequency: 3574.9 MHz
▣ SCC BandWidth: 20 MHz
▣ Voltage : 3.880 VDC
▣ LIMIT: Emission must remain in band

| Voltage (%) | Power (VDC) | Temp. (℃) | PPM | | Frequency Error (MHz) | |
|---|---|---|---|---|---|---|
| | | | PCC | SCC | PCC | SCC |
| 100 % | 3.880 | +20(Ref) | 0.024 | 0.031 | 3557.77625 | 3574.86932 |
| 100 % | | -30 | 0.028 | 0.037 | 3557.77161 | 3574.86309 |
| 100 % | | -20 | 0.034 | -0.029 | 3557.76589 | 3574.92853 |
| 100 % | | -10 | -0.048 | -0.030 | 3557.84764 | 3574.92998 |
| 100 % | | 0 | 0.034 | -0.048 | 3557.76629 | 3574.94832 |
| 100 % | | 10 | 0.022 | -0.038 | 3557.77762 | 3574.93825 |
| 100 % | | 30 | 0.037 | 0.026 | 3557.76330 | 3574.87360 |
| 100 % | | 40 | 0.021 | 0.030 | 3557.77889 | 3574.87037 |
| 100 % | | 50 | -0.038 | 0.021 | 3557.83799 | 3574.87868 |
| Batt. Endpoint | 3.300 | 20 | 0.019 | 0.035 | 3557.78140 | 3574.86523 |

▣ PCC Channel: 55340
▣ PCC Frequency: 3560.0 MHz
▣ PCC BandWidth: 20 MHz
▣ SCC Channel: 55538
▣ SCC Frequency: 3579.8 MHz
▣ SCC BandWidth: 20 MHz
▣ Voltage : 3.880 VDC
▣ LIMIT: Emission must remain in band

| Voltage (%) | Power (VDC) | Temp. (℃) | PPM | | Frequency Error (MHz) | |
|---|---|---|---|---|---|---|
| | | | PCC | SCC | PCC | SCC |
| 100 % | 3.880 | +20(Ref) | -0.044 | 0.031 | 3560.04390 | 3579.76949 |
| 100 % | | -30 | -0.033 | 0.022 | 3560.03291 | 3579.77770 |
| 100 % | | -20 | 0.020 | 0.019 | 3559.98017 | 3579.78139 |
| 100 % | | -10 | -0.045 | 0.023 | 3560.04509 | 3579.77713 |
| 100 % | | 0 | 0.032 | -0.030 | 3559.96789 | 3579.83040 |
| 100 % | | 10 | 0.025 | 0.016 | 3559.97472 | 3579.78380 |
| 100 % | | 30 | 0.041 | -0.044 | 3559.95910 | 3579.84397 |
| 100 % | | 40 | 0.031 | -0.046 | 3559.96927 | 3579.84554 |
| 100 % | | 50 | 0.032 | 0.031 | 3559.96837 | 3579.76881 |
| Batt. Endpoint | 3.300 | 20 | 0.040 | 0.030 | 3559.96044 | 3579.76974 |

▣ PCC Channel: 56523
▣ PCC Frequency: 3678.3 MHz
▣ PCC BandWidth: 5 MHz
▣ SCC Channel: 56640
▣ SCC Frequency: 3690.0 MHz
▣ SCC BandWidth: 20 MHz
▣ Voltage : 3.880 VDC
▣ LIMIT: Emission must remain in band

| Voltage (%) | Power (VDC) | Temp. (℃) | PPM | | Frequency Error (MHz) | |
|---|---|---|---|---|---|---|
| | | | PCC | SCC | PCC | SCC |
| 100 % | 3.880 | +20(Ref) | -0.037 | 0.032 | 3678.33670 | 3689.96777 |
| 100 % | | -30 | 0.024 | 0.030 | 3678.27552 | 3689.97006 |
| 100 % | | -20 | -0.032 | 0.027 | 3678.33184 | 3689.97312 |
| 100 % | | -10 | 0.038 | -0.046 | 3678.26171 | 3690.04625 |
| 100 % | | 0 | 0.037 | -0.034 | 3678.26281 | 3690.03388 |
| 100 % | | 10 | 0.029 | 0.027 | 3678.27055 | 3689.97333 |
| 100 % | | 30 | 0.023 | -0.034 | 3678.27705 | 3690.03423 |
| 100 % | | 40 | 0.028 | -0.036 | 3678.27229 | 3690.03606 |
| 100 % | | 50 | 0.028 | 0.022 | 3678.27229 | 3689.97755 |
| Batt. Endpoint | 3.300 | 20 | 0.042 | 0.017 | 3678.25814 | 3689.98266 |

▣ PCC Channel: 56496
▣ PCC Frequency: 3675.6 MHz
▣ PCC BandWidth: 10 MHz
▣ SCC Channel: 56640
▣ SCC Frequency: 3690.0 MHz
▣ SCC BandWidth: 20 MHz
▣ Voltage : 3.880 VDC
▣ LIMIT: Emission must remain in band

| Voltage (%) | Power (VDC) | Temp. (℃) | PPM | | Frequency Error (MHz) | |
|---|---|---|---|---|---|---|
| | | | PCC | SCC | PCC | SCC |
| 100 % | 3.880 | +20(Ref) | 0.039 | 0.022 | 3675.56051 | 3689.97770 |
| 100 % | | -30 | 0.028 | 0.020 | 3675.57164 | 3689.98028 |
| 100 % | | -20 | 0.028 | -0.041 | 3675.57156 | 3690.04063 |
| 100 % | | -10 | 0.031 | 0.037 | 3675.56906 | 3689.96267 |
| 100 % | | 0 | 0.015 | -0.043 | 3675.58528 | 3690.04304 |
| 100 % | | 10 | 0.033 | 0.029 | 3675.56656 | 3689.97091 |
| 100 % | | 30 | -0.042 | 0.031 | 3675.64190 | 3689.96944 |
| 100 % | | 40 | 0.033 | 0.033 | 3675.56656 | 3689.96748 |
| 100 % | | 50 | -0.038 | 0.025 | 3675.63787 | 3689.97529 |
| Batt. Endpoint | 3.300 | 20 | 0.040 | 0.027 | 3675.55969 | 3689.97329 |

| | | |
|---|---|---|
| ▣ PCC Channel: | 56469 | |
| ▣ PCC Frequency: | 3672.9 | MHz |
| ▣ PCC BandWidth: | 15 | MHz |
| ▣ SCC Channel: | 56640 | |
| ▣ SCC Frequency: | 3690.0 | MHz |
| ▣ SCC BandWidth: | 20 | MHz |
| ▣ Voltage : | 3.880 | VDC |
| ▣ LIMIT: | Emission must remain in band | |

| Voltage (%) | Power (VDC) | Temp. (℃) | PPM | | Frequency Error (MHz) | |
|---|---|---|---|---|---|---|
| | | | PCC | SCC | PCC | SCC |
| 100 % | 3.880 | +20(Ref) | 0.020 | -0.046 | 3672.87952 | 3690.04615 |
| 100 % | | -30 | -0.042 | 0.030 | 3672.94203 | 3689.96959 |
| 100 % | | -20 | -0.036 | -0.033 | 3672.93593 | 3690.03270 |
| 100 % | | -10 | 0.035 | -0.029 | 3672.86494 | 3690.02870 |
| 100 % | | 0 | 0.028 | 0.023 | 3672.87189 | 3689.97715 |
| 100 % | | 10 | 0.028 | -0.039 | 3672.87210 | 3690.03912 |
| 100 % | | 30 | 0.031 | 0.037 | 3672.86936 | 3689.96346 |
| 100 % | | 40 | 0.037 | 0.027 | 3672.86300 | 3689.97301 |
| 100 % | | 50 | 0.014 | 0.020 | 3672.88561 | 3689.98047 |
| Batt. Endpoint | 3.300 | 20 | 0.040 | 0.034 | 3672.86007 | 3689.96617 |

▣ PCC Channel: 56442
▣ PCC Frequency: 3670.2 MHz
▣ PCC BandWidth: 20 MHz
▣ SCC Channel: 56640
▣ SCC Frequency: 3690.0 MHz
▣ SCC BandWidth: 20 MHz
▣ Voltage : 3.880 MHz
▣ LIMIT: Emission must remain in band

| Voltage (%) | Power (VDC) | Temp. (℃) | PPM | | Frequency Error (MHz) | |
|---|---|---|---|---|---|---|
| | | | PCC | SCC | PCC | SCC |
| 100 % | 3.880 | +20(Ref) | 0.040 | -0.047 | 3670.16014 | 3690.04694 |
| 100 % | | -30 | 0.022 | 0.026 | 3670.17759 | 3689.97418 |
| 100 % | | -20 | 0.028 | 0.032 | 3670.17171 | 3689.96770 |
| 100 % | | -10 | 0.033 | 0.039 | 3670.16733 | 3689.96145 |
| 100 % | | 0 | 0.032 | -0.047 | 3670.16838 | 3690.04728 |
| 100 % | | 10 | 0.034 | 0.030 | 3670.16591 | 3689.97009 |
| 100 % | | 30 | -0.031 | 0.027 | 3670.23055 | 3689.97312 |
| 100 % | | 40 | -0.043 | 0.021 | 3670.24269 | 3689.97861 |
| 100 % | | 50 | -0.033 | 0.022 | 3670.23266 | 3689.97758 |
| Batt. Endpoint | 3.300 | 20 | -0.026 | 0.025 | 3670.22578 | 3689.97497 |

## 8.6 Radiated Spurious Emissions

- ▣ PCC Channel : 55340 (3560.0 MHz)
- ▣ PCC BW(MHz) : 20
- ▣ PCC RB/ RB Offset : 1/ 99
- ▣ SCC Channel : 55538 (3579.8 MHz)
- ▣ SCC BW(MHz) : 20
- ▣ SCC RB/ RB Offset : 1/ 0
- ▣ DISTANCE: 1 meters
- ▣ LIMIT: -40.0 dBm

| Freq.(MHz) | Measured Level [dBm] | Ant. Gain (dBi) | Substitute Level [dBm] | C.L | Pol. | Result (dBm) |
|---|---|---|---|---|---|---|
| 7 139.80 | -58.88 | 10.79 | -60.24 | 4.59 | H | -54.04 |
| 10 709.70 | -60.19 | 11.34 | -55.90 | 5.82 | V | -50.38 |
| 14 279.60 | -62.53 | 11.74 | -51.47 | 6.79 | V | -46.52 |

▣ PCC Channel : 55891 (3615.1 MHz)

▣ PCC BW(MHz) : 20

▣ PCC RB/ RB Offset : 1/ 99

▣ SCC Channel : 56089 (3634.9 MHz)

▣ SCC BW(MHz) : 20

▣ SCC RB/ RB Offset : 1/ 0

▣ DISTANCE: 1 meters

▣ LIMIT: -40.0 dBm

| Freq.(MHz) | Measured Level [dBm] | Ant. Gain (dBi) | Substitute Level [dBm] | C.L | Pol. | Result (dBm) |
|---|---|---|---|---|---|---|
| 7 250.00 | -58.03 | 10.74 | -59.96 | 4.64 | H | -53.86 |
| 10 875.00 | -61.19 | 11.04 | -54.24 | 5.72 | H | -48.92 |
| 14 500.00 | -62.69 | 11.45 | -51.50 | 6.81 | V | -46.86 |

▣ PCC Channel : 56442 (3670.2 MHz)

▣ PCC BW(MHz) : 20

▣ PCC RB/ RB Offset : 1/ 99

▣ SCC Channel : 56640 (3690.0 MHz)

▣ SCC BW(MHz) : 20

▣ SCC RB/ RB Offset : 1/ 0

▣ DISTANCE: 1 meters

▣ LIMIT: -40.0 dBm

| Freq.(MHz) | Measured Level [dBm] | Ant. Gain (dBi) | Substitute Level [dBm] | C.L | Pol. | Result (dBm) |
|---|---|---|---|---|---|---|
| 7 360.20 | -58.77 | 10.83 | -59.71 | 4.65 | H | -53.53 |
| 11 040.30 | -60.03 | 11.16 | -55.69 | 5.83 | V | -50.36 |
| 14 720.40 | -61.76 | 11.30 | -50.58 | 6.96 | H | -46.24 |

## 8.7 Occupied Bandwidth

| PCC | | | | | SCC | | | | | Data (MHz) |
|---|---|---|---|---|---|---|---|---|---|---|
| BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | |
| 5 | 55898 | 3615.8 | QPSK | 25/ 0 | 20 | 56015 | 3627.5 | QPSK | 100/ 0 | 22.745 |
| 10 | 55896 | 3615.6 | QPSK | 50/ 0 | 20 | 56040 | 3630 | QPSK | 100/ 0 | 27.658 |
| 15 | 55893 | 3615.3 | QPSK | 75/ 0 | 20 | 56064 | 3632.4 | QPSK | 100/ 0 | 32.479 |
| 20 | 55965 | 3622.5 | QPSK | 100/ 0 | 5 | 56082 | 3634.2 | QPSK | 25/ 0 | 22.837 |
| 20 | 55941 | 3620.1 | QPSK | 100/ 0 | 10 | 56085 | 3634.5 | QPSK | 50/ 0 | 27.786 |
| 20 | 55916 | 3617.6 | QPSK | 100/ 0 | 15 | 56087 | 3634.7 | QPSK | 75/ 0 | 32.656 |
| 20 | 55891 | 3615.1 | QPSK | 100/ 0 | 20 | 56089 | 3634.9 | QPSK | 100/ 0 | 37.427 |

| PCC | | | | | SCC | | | | | Data (MHz) |
|---|---|---|---|---|---|---|---|---|---|---|
| BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | |
| 5 | 55898 | 3615.8 | 16QAM | 25/ 0 | 20 | 56015 | 3627.5 | 16QAM | 100/ 0 | 22.782 |
| 10 | 55896 | 3615.6 | 16QAM | 50/ 0 | 20 | 56040 | 3630.0 | 16QAM | 100/ 0 | 27.683 |
| 15 | 55893 | 3615.3 | 16QAM | 75/ 0 | 20 | 56064 | 3632.4 | 16QAM | 100/ 0 | 32.548 |
| 20 | 55965 | 3622.5 | 16QAM | 100/ 0 | 5 | 56082 | 3634.2 | 16QAM | 25/ 0 | 22.864 |
| 20 | 55941 | 3620.1 | 16QAM | 100/ 0 | 10 | 56085 | 3634.5 | 16QAM | 50/ 0 | 27.855 |
| 20 | 55916 | 3617.6 | 16QAM | 100/ 0 | 15 | 56087 | 3634.7 | 16QAM | 75/ 0 | 32.527 |
| 20 | 55891 | 3615.1 | 16QAM | 100/ 0 | 20 | 56089 | 3634.9 | 16QAM | 100/ 0 | 37.248 |

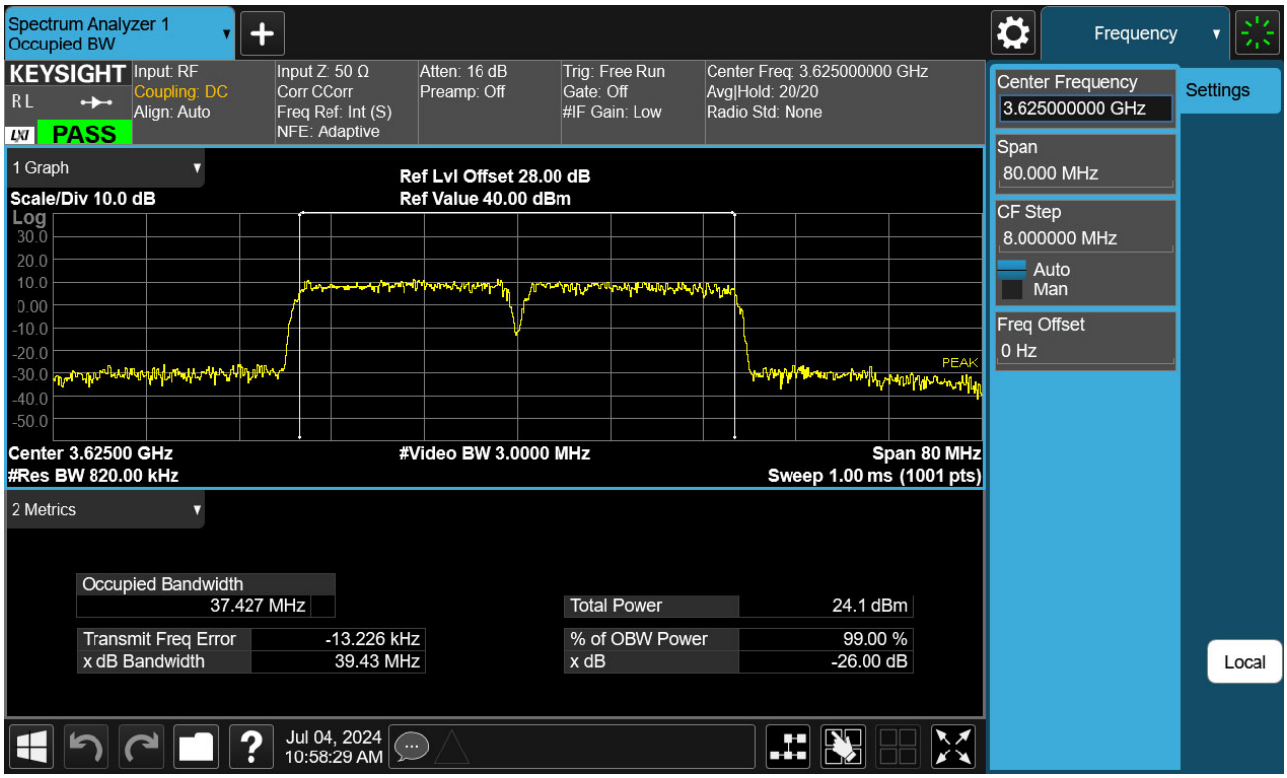
| PCC | | | | | SCC | | | | | Data (MHz) |
|---|---|---|---|---|---|---|---|---|---|---|
| BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | |
| 5 | 55898 | 3615.8 | 64QAM | 25/ 0 | 20 | 56015 | 3627.5 | 64QAM | 100/ 0 | 22.890 |
| 10 | 55896 | 3615.6 | 64QAM | 50/ 0 | 20 | 56040 | 3630 | 64QAM | 100/ 0 | 27.683 |
| 15 | 55893 | 3615.3 | 64QAM | 75/ 0 | 20 | 56064 | 3632.4 | 64QAM | 100/ 0 | 32.564 |
| 20 | 55965 | 3622.5 | 64QAM | 100/ 0 | 5 | 56082 | 3634.2 | 64QAM | 25/ 0 | 22.850 |
| 20 | 55941 | 3620.1 | 64QAM | 100/ 0 | 10 | 56085 | 3634.5 | 64QAM | 50/ 0 | 27.695 |
| 20 | 55916 | 3617.6 | 64QAM | 100/ 0 | 15 | 56087 | 3634.7 | 64QAM | 75/ 0 | 32.596 |
| 20 | 55891 | 3615.1 | 64QAM | 100/ 0 | 20 | 56089 | 3634.9 | 64QAM | 100/ 0 | 37.420 |

| PCC | | | | | SCC | | | | | Data (MHz) |
|---|---|---|---|---|---|---|---|---|---|---|
| BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | |
| 5 | 55898 | 3615.8 | 256QAM | 25/ 0 | 20 | 56015 | 3627.5 | 256QAM | 100/ 0 | 22.695 |
| 10 | 55896 | 3615.6 | 256QAM | 50/ 0 | 20 | 56040 | 3630.0 | 256QAM | 100/ 0 | 27.711 |
| 15 | 55893 | 3615.3 | 256QAM | 75/ 0 | 20 | 56064 | 3632.4 | 256QAM | 100/ 0 | 32.532 |
| 20 | 55965 | 3622.5 | 256QAM | 100/ 0 | 5 | 56082 | 3634.2 | 256QAM | 25/ 0 | 22.902 |
| 20 | 55941 | 3620.1 | 256QAM | 100/ 0 | 10 | 56085 | 3634.5 | 256QAM | 50/ 0 | 27.638 |
| 20 | 55916 | 3617.6 | 256QAM | 100/ 0 | 15 | 56087 | 3634.7 | 256QAM | 75/ 0 | 32.564 |
| 20 | 55891 | 3615.1 | 256QAM | 100/ 0 | 20 | 56089 | 3634.9 | 256QAM | 100/ 0 | 37.463 |

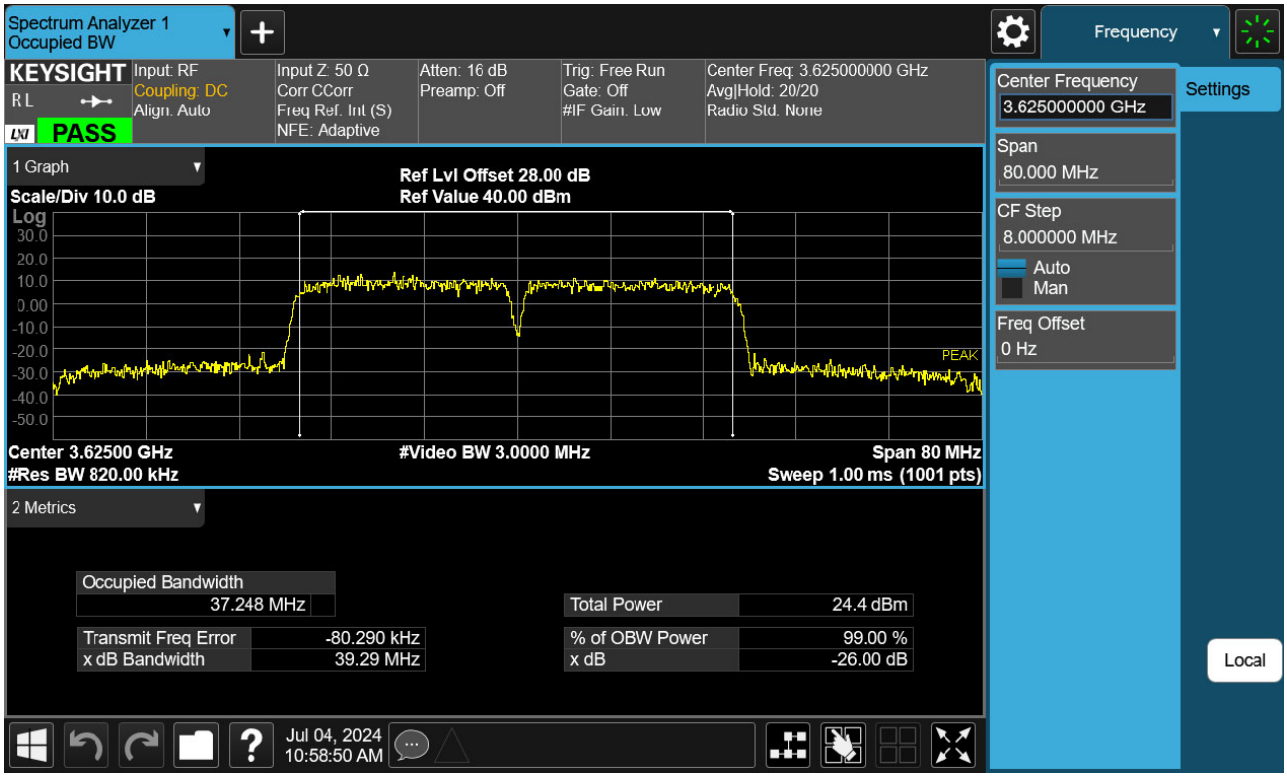
Note:

In order to simplify the report, attached plots were only Max.Bandwidth(20+20)

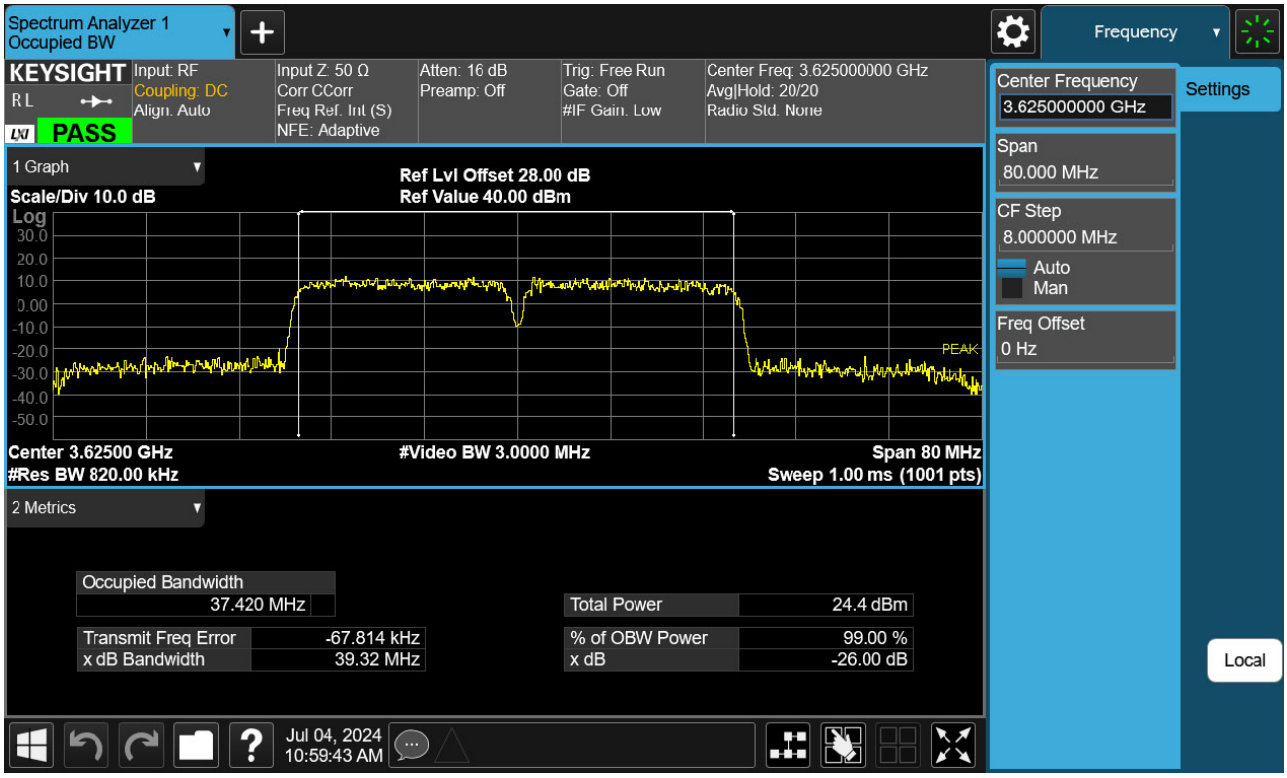
PCC 20 MHz Ch55891 RB100 Offset0, SCC 20 MHz Ch56089 RB100 Offset0_(QPSK)



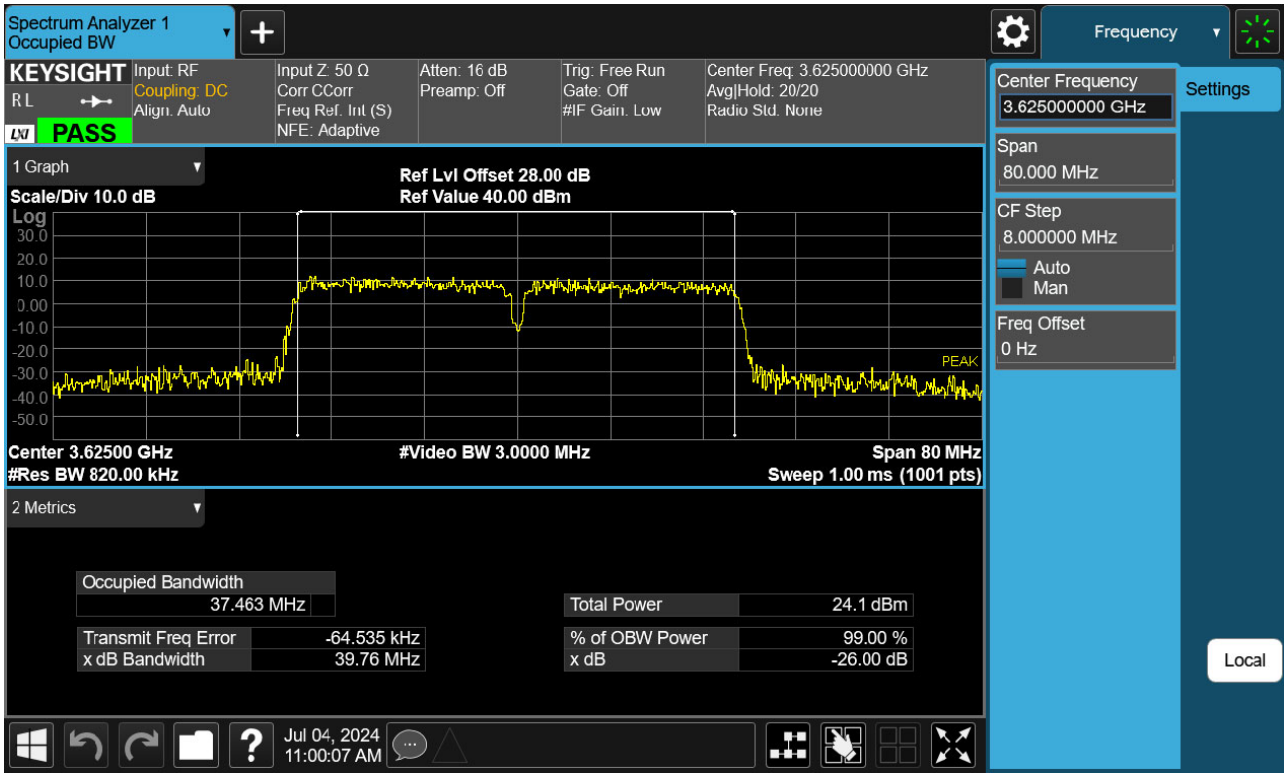
PCC 20 MHz Ch55891 RB100 Offset0, SCC 20 MHz Ch56089 RB100 Offset0_(16QAM)



PCC 20 MHz Ch55891 RB100 Offset0, SCC 20 MHz Ch56089 RB100 Offset0_(64QAM)



PCC 20 MHz Ch55891 RB100 Offset0, SCC 20 MHz Ch56089 RB100 Offset0_(256QAM))



## 8.8 Peak- to- Average Ratio

| PCC | | | | | SCC | | | | | Data (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | |
| 5 | 55898 | 3615.8 | QPSK | 25/ 0 | 20 | 56015 | 3627.5 | QPSK | 100/ 0 | 6.33 |
| 10 | 55896 | 3615.6 | QPSK | 50/ 0 | 20 | 56040 | 3630 | QPSK | 100/ 0 | 6.41 |
| 15 | 55893 | 3615.3 | QPSK | 75/ 0 | 20 | 56064 | 3632.4 | QPSK | 100/ 0 | 6.44 |
| 20 | 55965 | 3622.5 | QPSK | 100/ 0 | 5 | 56082 | 3634.2 | QPSK | 25/ 0 | 6.33 |
| 20 | 55941 | 3620.1 | QPSK | 100/ 0 | 10 | 56085 | 3634.5 | QPSK | 50/ 0 | 6.39 |
| 20 | 55916 | 3617.6 | QPSK | 100/ 0 | 15 | 56087 | 3634.7 | QPSK | 75/ 0 | 6.41 |
| 20 | 55891 | 3615.1 | QPSK | 100/ 0 | 20 | 56089 | 3634.9 | QPSK | 100/ 0 | 7.09 |

| PCC | | | | | SCC | | | | | Data (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | |
| 5 | 55898 | 3615.8 | 16QAM | 25/ 0 | 20 | 56015 | 3627.5 | 16QAM | 100/ 0 | 6.89 |
| 10 | 55896 | 3615.6 | 16QAM | 50/ 0 | 20 | 56040 | 3630.0 | 16QAM | 100/ 0 | 6.91 |
| 15 | 55893 | 3615.3 | 16QAM | 75/ 0 | 20 | 56064 | 3632.4 | 16QAM | 100/ 0 | 6.91 |
| 20 | 55965 | 3622.5 | 16QAM | 100/ 0 | 5 | 56082 | 3634.2 | 16QAM | 25/ 0 | 6.83 |
| 20 | 55941 | 3620.1 | 16QAM | 100/ 0 | 10 | 56085 | 3634.5 | 16QAM | 50/ 0 | 6.80 |
| 20 | 55916 | 3617.6 | 16QAM | 100/ 0 | 15 | 56087 | 3634.7 | 16QAM | 75/ 0 | 6.86 |
| 20 | 55891 | 3615.1 | 16QAM | 100/ 0 | 20 | 56089 | 3634.9 | 16QAM | 100/ 0 | 7.87 |

| PCC | | | | | SCC | | | | | Data (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | |
| 5 | 55898 | 3615.8 | 64QAM | 25/ 0 | 20 | 56015 | 3627.5 | 64QAM | 100/ 0 | 6.97 |
| 10 | 55896 | 3615.6 | 64QAM | 50/ 0 | 20 | 56040 | 3630 | 64QAM | 100/ 0 | 6.93 |
| 15 | 55893 | 3615.3 | 64QAM | 75/ 0 | 20 | 56064 | 3632.4 | 64QAM | 100/ 0 | 7.00 |
| 20 | 55965 | 3622.5 | 64QAM | 100/ 0 | 5 | 56082 | 3634.2 | 64QAM | 25/ 0 | 7.02 |
| 20 | 55941 | 3620.1 | 64QAM | 100/ 0 | 10 | 56085 | 3634.5 | 64QAM | 50/ 0 | 6.95 |
| 20 | 55916 | 3617.6 | 64QAM | 100/ 0 | 15 | 56087 | 3634.7 | 64QAM | 75/ 0 | 6.97 |
| 20 | 55891 | 3615.1 | 64QAM | 100/ 0 | 20 | 56089 | 3634.9 | 64QAM | 100/ 0 | 8.15 |

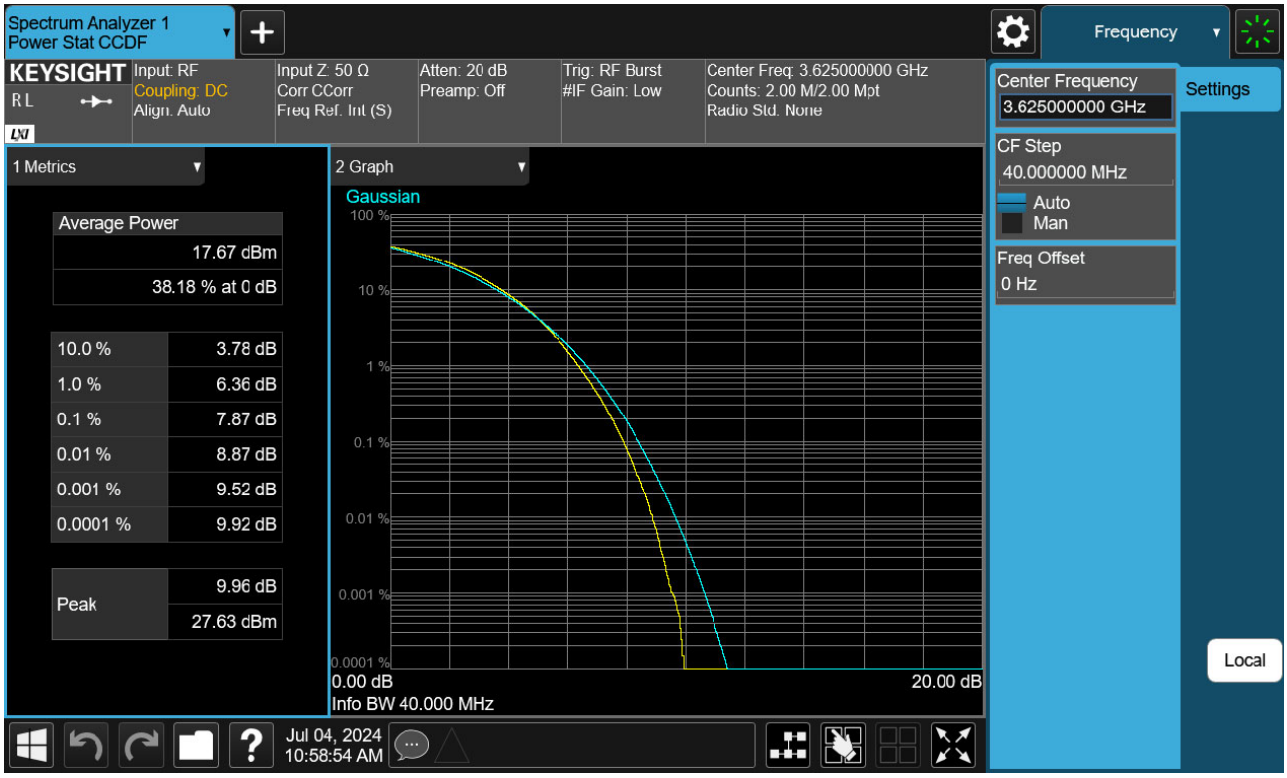
| PCC | | | | | SCC | | | | | Data (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | BW [MHz] | Ch | Freq [MHz] | Mod | RB/ Offset | |
| 5 | 55898 | 3615.8 | 256QAM | 25/ 0 | 20 | 56015 | 3627.5 | 256QAM | 100/ 0 | 7.05 |
| 10 | 55896 | 3615.6 | 256QAM | 50/ 0 | 20 | 56040 | 3630 | 256QAM | 100/ 0 | 7.09 |
| 15 | 55893 | 3615.3 | 256QAM | 75/ 0 | 20 | 56064 | 3632.4 | 256QAM | 100/ 0 | 7.12 |
| 20 | 55965 | 3622.5 | 256QAM | 100/ 0 | 5 | 56082 | 3634.2 | 256QAM | 25/ 0 | 7.00 |
| 20 | 55941 | 3620.1 | 256QAM | 100/ 0 | 10 | 56085 | 3634.5 | 256QAM | 50/ 0 | 7.04 |
| 20 | 55916 | 3617.6 | 256QAM | 100/ 0 | 15 | 56087 | 3634.7 | 256QAM | 75/ 0 | 7.06 |
| 20 | 55891 | 3615.1 | 256QAM | 100/ 0 | 20 | 56089 | 3634.9 | 256QAM | 100/ 0 | 8.31 |

Note:

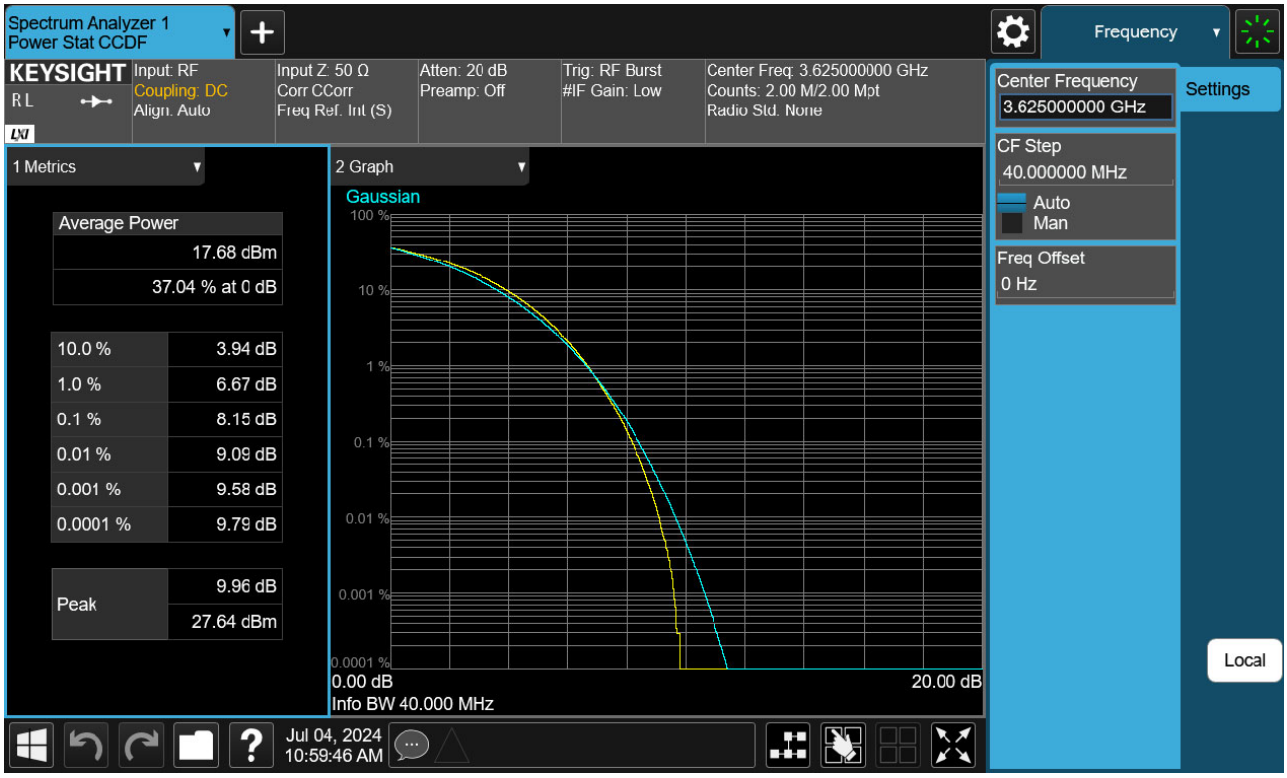
In order to simplify the report, attached plots were only Max.Bandwidth(20+20)

PCC 20 MHz Ch55891 RB100 Offset0, SCC 20 MHz Ch56089 RB100 Offset0_(QPSK)

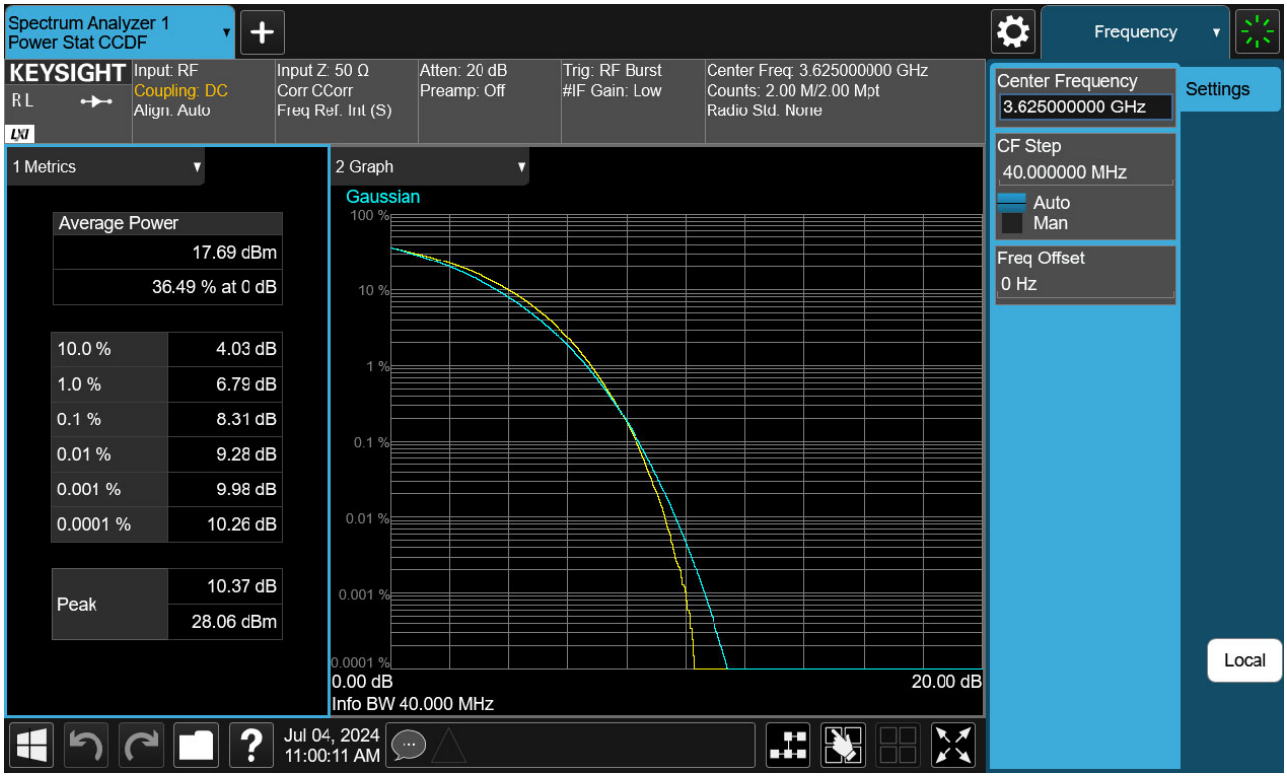
PCC 20 MHz Ch55891 RB100 Offset0, SCC 20 MHz Ch56089 RB100 Offset0_(16QAM)



PCC 20 MHz Ch55891 RB100 Offset0, SCC 20 MHz Ch56089 RB100 Offset0_(64QAM)



PCC 20 MHz Ch55891 RB100 Offset0, SCC 20 MHz Ch56089 RB100 Offset0_(256QAM)



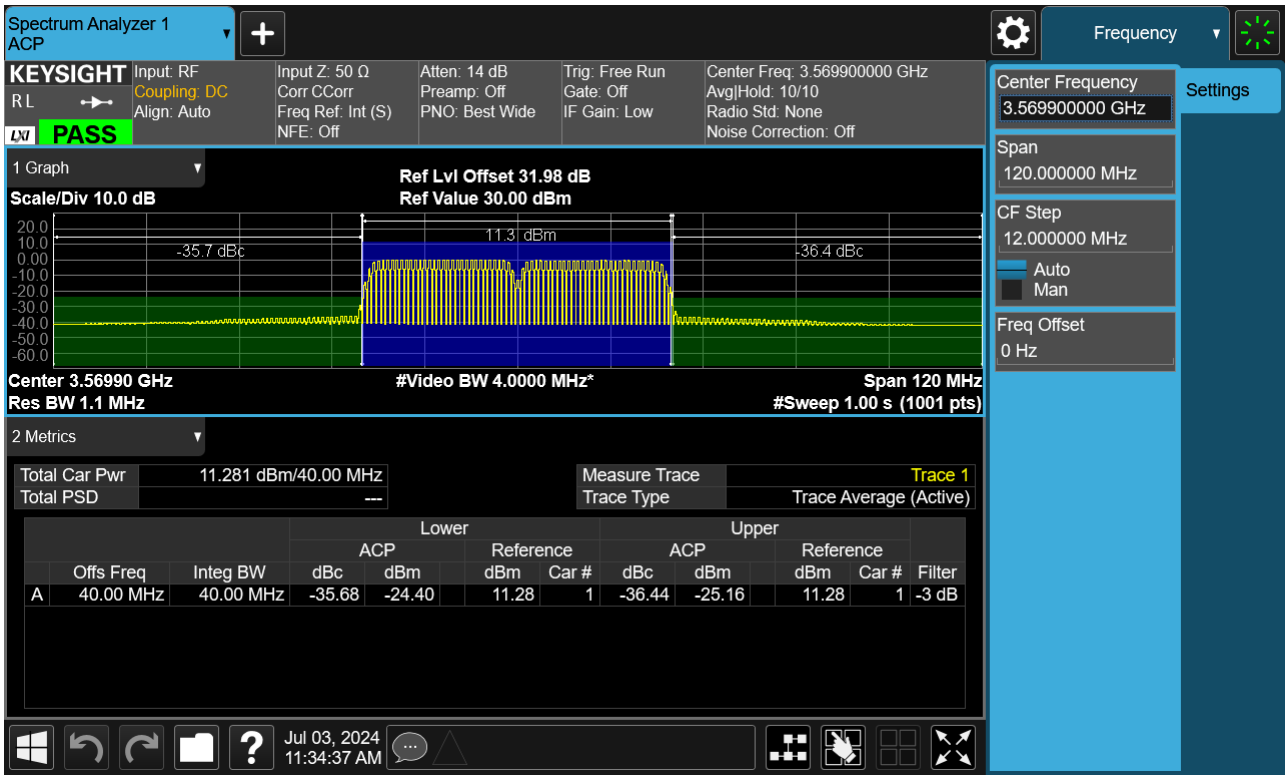
## 8.9 Adjacent Channel Leakage Ratio(ACLR)

| Operating frequency | PCC | | | | SCC | | | | Adjacent Channel Leakage Ratio(dB) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | BW [MHz] | Ch. | Freq. (MHz) | RB/ Offset | BW [MHz] | Ch. | Freq. (MHz) | RB/ Offset | Lower Side | Upper Side |
| Low | 20 | 55340 | 3560.0 | 100/0 | 20 | 55538 | 3579.8 | 100/0 | 35.68 | 36.44 |
| Mid | 20 | 55891 | 3615.1 | 100/0 | 20 | 56089 | 3634.9 | 100/0 | 38.31 | 39.32 |
| Mid | 20 | 55941 | 3620.1 | 100/0 | 10 | 56085 | 3634.5 | 50/0 | 40.74 | 40.44 |
| High | 20 | 56442 | 3670.2 | 100/0 | 20 | 56640 | 3690.0 | 100/0 | 35.44 | 35.21 |
| Limit (dB) | | | | | | | | | ACLR > 30 dB | ACLR > 30 dB |

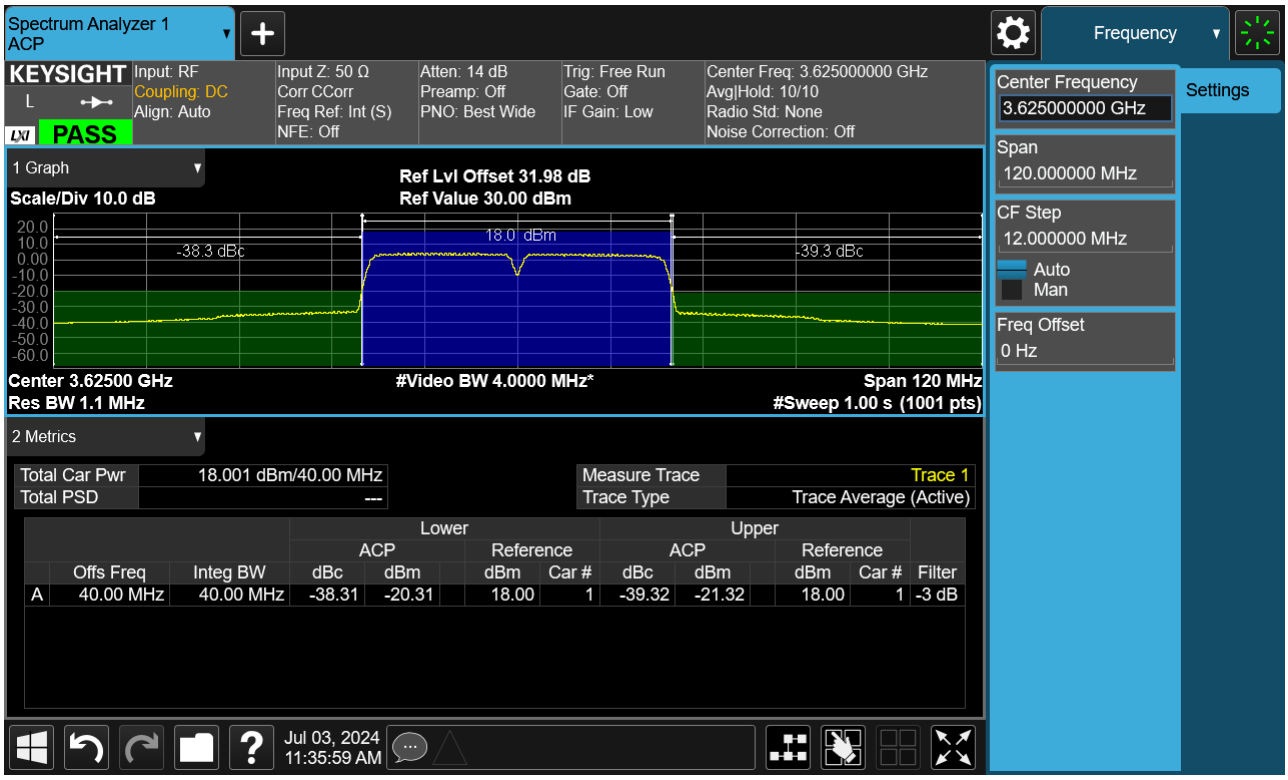
Note:

1. Modulation : 16QAM
2. Duty Cycle factor already applied on the factor.
   - Duty Cycle factor(dB) = 3.979
   - Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter

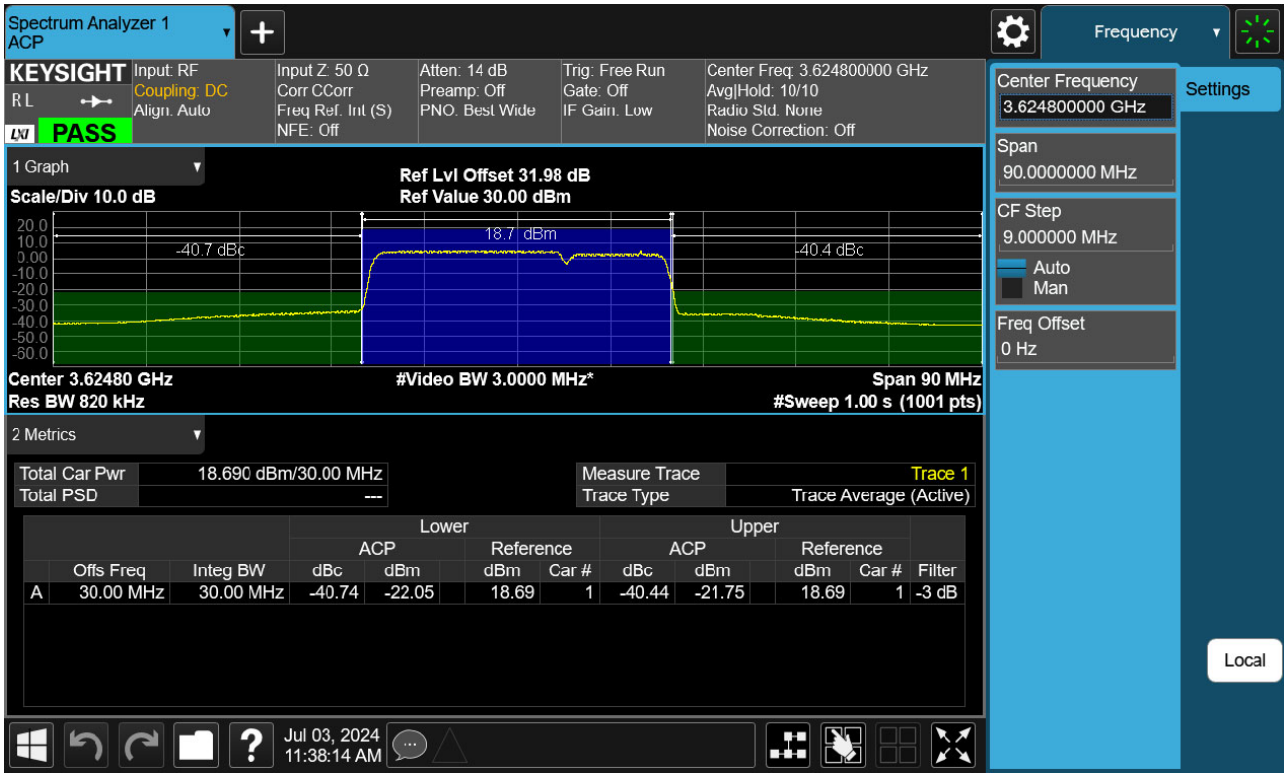
PCC 20 MHz Ch55340 RB100 Offset0, SCC 20 MHz Ch55538 RB100 Offset0



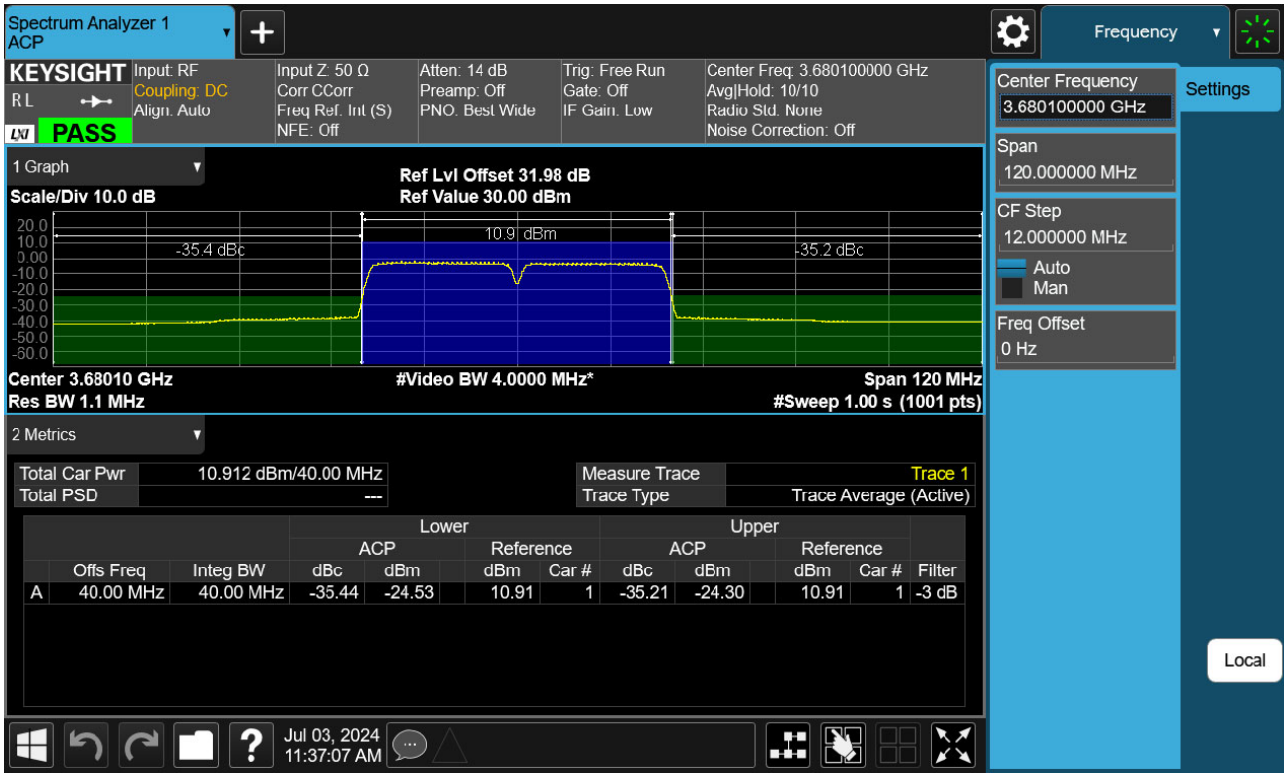
PCC 20MHz Ch55891 RB100 Offset0, SCC 20MHz Ch56089 RB100 Offset0



PCC 20MHz Ch55941 RB100 Offset0, SCC 10MHz Ch56085 RB50 Offset0



PCC 20MHz Ch56442 RB100 Offset0, SCC 20MHz Ch56640 RB100 Offset0



## 9. ANNEX A_ TEST SETUP PHOTO

Please refer to test setup photo file no. as follows;

| No. | Description |
|---|---|
| 1 | HCT-RF-2407-FC044-P |