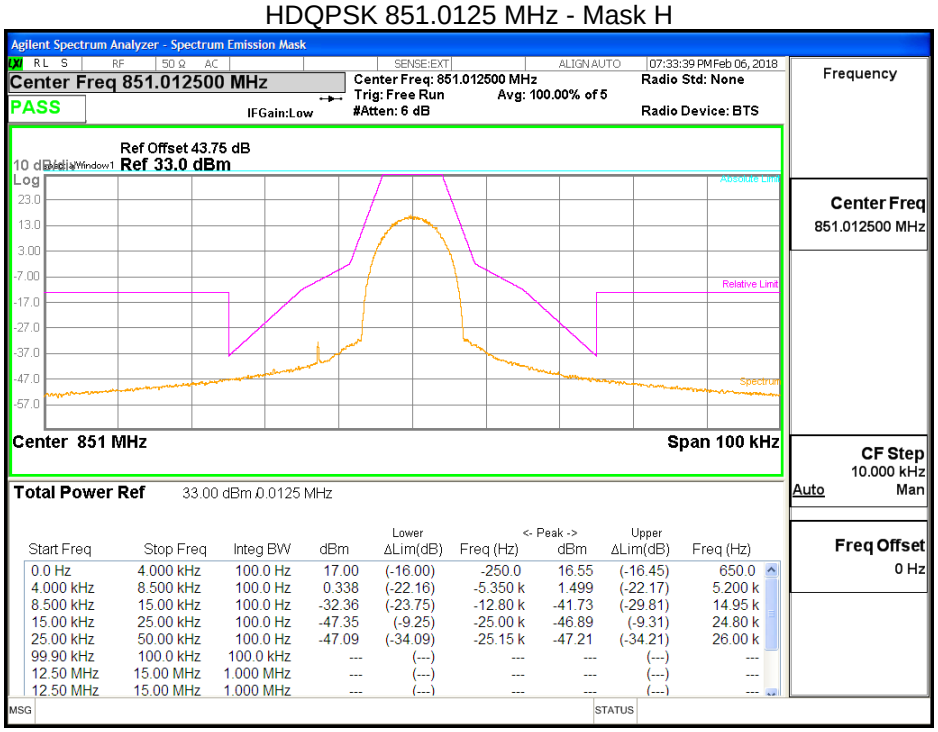
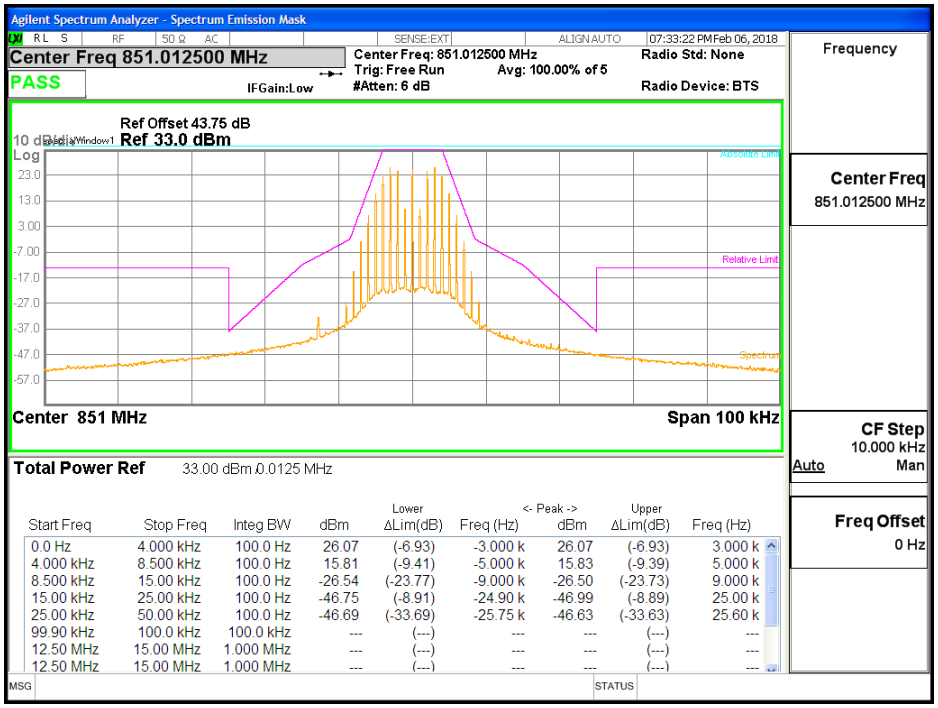
HDQPSK 851.0125 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	17.00	(-16.00)	-250.0	16.55	(-16.45)	650.0
4.000 kHz	8.500 kHz	100.0 Hz	0.338	(-22.16)	-5.350 k	1.499	(-22.17)	5.200 k
8.500 kHz	15.00 kHz	100.0 Hz	-32.36	(-23.75)	-12.80 k	-41.73	(-29.81)	14.95 k
15.00 kHz	25.00 kHz	100.0 Hz	-47.35	(-9.25)	-25.00 k	-46.89	(-9.31)	24.80 k
25.00 kHz	50.00 kHz	100.0 Hz	-47.09	(-34.09)	-25.15 k	-47.21	(-34.21)	26.00 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

FM 851.0125 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	26.07	(-6.93)	-3.000 k	26.07	(-6.93)	3.000 k
4.000 kHz	8.500 kHz	100.0 Hz	15.81	(-9.41)	-5.000 k	15.83	(-9.39)	5.000 k
8.500 kHz	15.00 kHz	100.0 Hz	-26.54	(-23.77)	-9.000 k	-26.50	(-23.73)	9.000 k
15.00 kHz	25.00 kHz	100.0 Hz	-46.75	(-8.91)	-24.90 k	-46.99	(-8.89)	25.00 k
25.00 kHz	50.00 kHz	100.0 Hz	-46.69	(-33.69)	-25.75 k	-46.63	(-33.63)	25.60 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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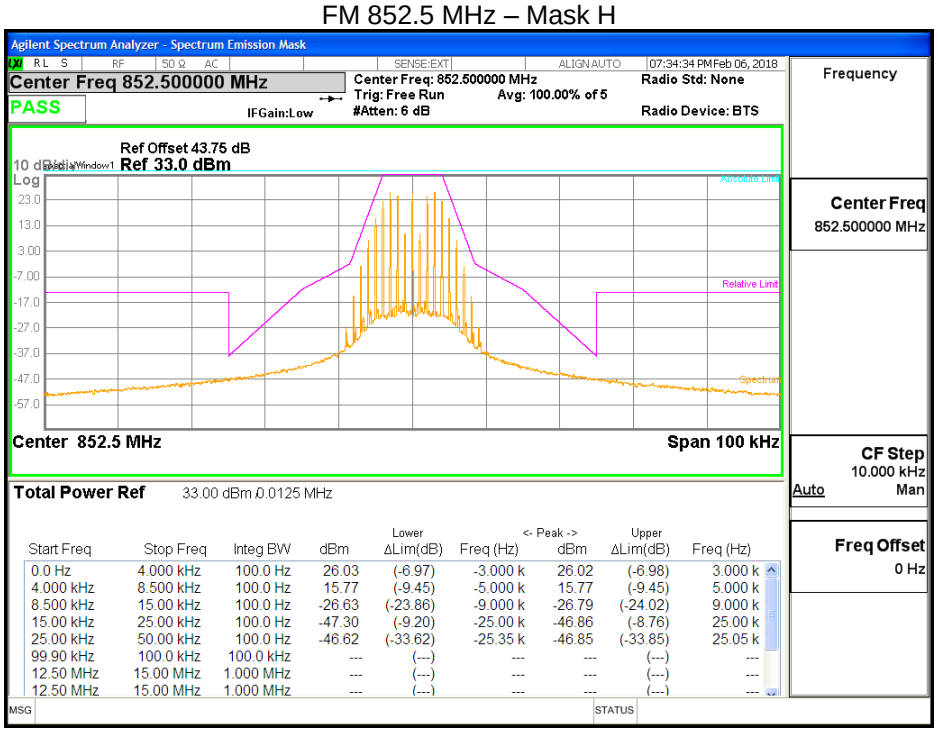
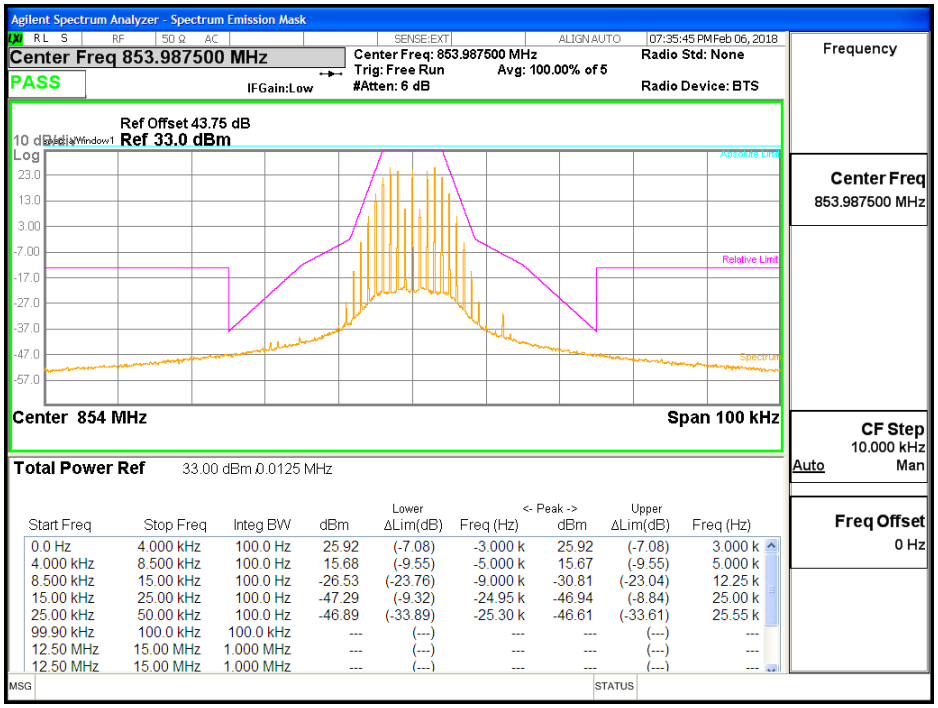
FM 852.5 MHz – Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	26.03	(-6.97)	-3.000 k	26.02	(-6.98)	3.000 k
4.000 kHz	8.500 kHz	100.0 Hz	15.77	(-9.45)	-5.000 k	15.77	(-9.45)	5.000 k
8.500 kHz	15.00 kHz	100.0 Hz	-26.63	(-23.86)	-9.000 k	-26.79	(-24.02)	9.000 k
15.00 kHz	25.00 kHz	100.0 Hz	-47.30	(-9.20)	-25.00 k	-46.86	(-8.76)	25.00 k
25.00 kHz	50.00 kHz	100.0 Hz	-46.62	(-33.62)	-25.35 k	-46.85	(-33.85)	25.05 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

FM 853.9875 MHz – Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	25.92	(-7.08)	-3.000 k	25.92	(-7.08)	3.000 k
4.000 kHz	8.500 kHz	100.0 Hz	15.68	(-9.55)	-5.000 k	15.67	(-9.55)	5.000 k
8.500 kHz	15.00 kHz	100.0 Hz	-26.53	(-23.76)	-9.000 k	-30.81	(-23.04)	12.25 k
15.00 kHz	25.00 kHz	100.0 Hz	-47.29	(-9.32)	-24.95 k	-46.94	(-8.84)	25.00 k
25.00 kHz	50.00 kHz	100.0 Hz	-46.89	(-33.89)	-25.30 k	-46.61	(-33.61)	25.55 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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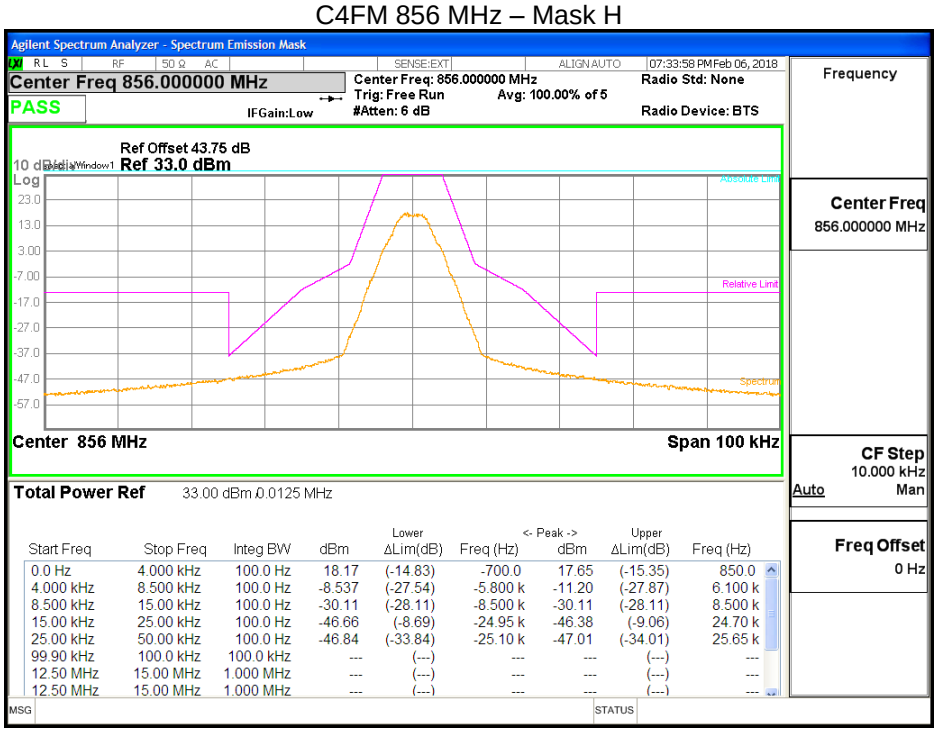
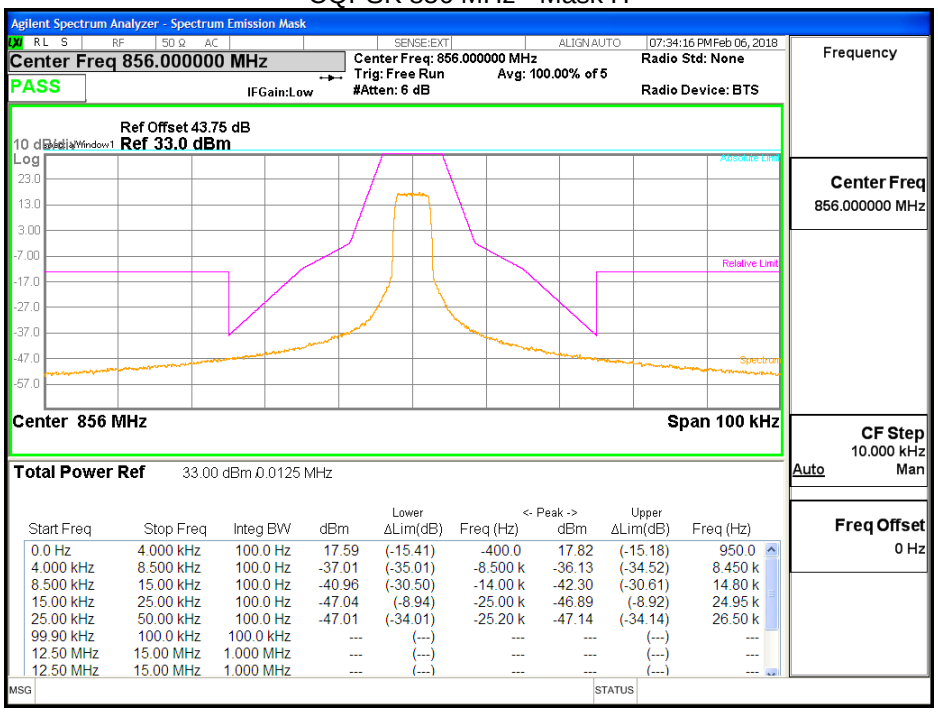
C4FM 856 MHz – Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	18.17	(-14.83)	-700.0	17.65	(-15.35)	850.0
4.000 kHz	8.500 kHz	100.0 Hz	-8.537	(-27.54)	-5.800 k	-11.20	(-27.87)	6.100 k
8.500 kHz	15.00 kHz	100.0 Hz	-30.11	(-28.11)	-8.500 k	-30.11	(-28.11)	8.500 k
15.00 kHz	25.00 kHz	100.0 Hz	-46.66	(-8.69)	-24.95 k	-46.38	(-9.06)	24.70 k
25.00 kHz	50.00 kHz	100.0 Hz	-46.84	(-33.84)	-25.10 k	-47.01	(-34.01)	25.65 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

CQPSK 856 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	17.59	(-15.41)	-400.0	17.82	(-15.18)	950.0
4.000 kHz	8.500 kHz	100.0 Hz	-37.01	(-35.01)	-8.500 k	-36.13	(-34.52)	8.450 k
8.500 kHz	15.00 kHz	100.0 Hz	-40.96	(-30.50)	-14.00 k	-42.30	(-30.61)	14.80 k
15.00 kHz	25.00 kHz	100.0 Hz	-47.04	(-8.94)	-25.00 k	-46.89	(-8.92)	24.95 k
25.00 kHz	50.00 kHz	100.0 Hz	-47.01	(-34.01)	-25.20 k	-47.14	(-34.14)	26.50 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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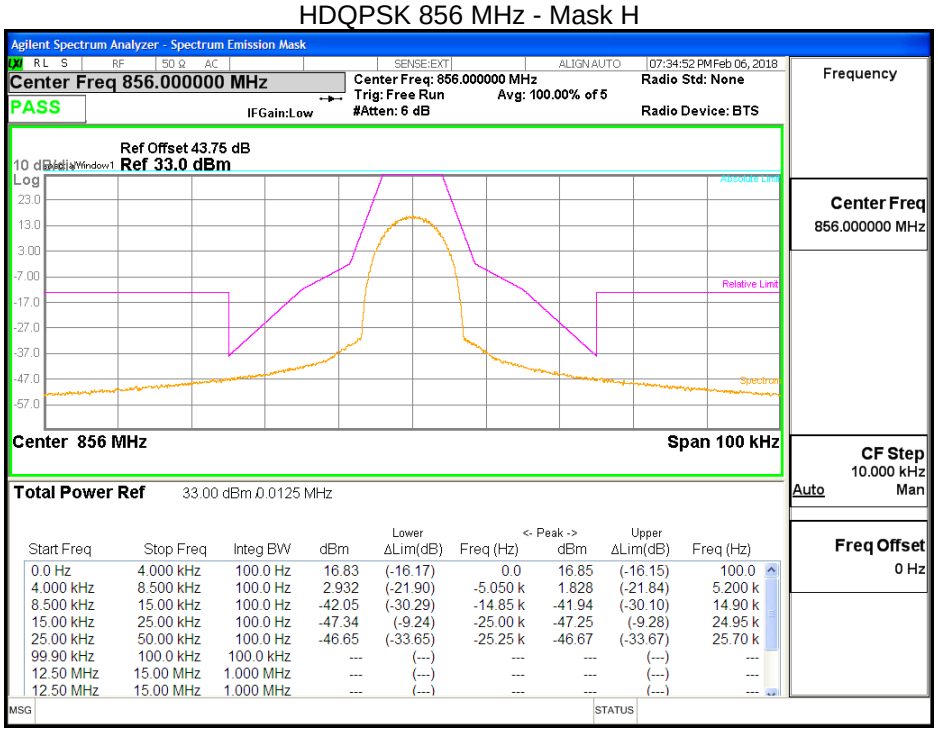
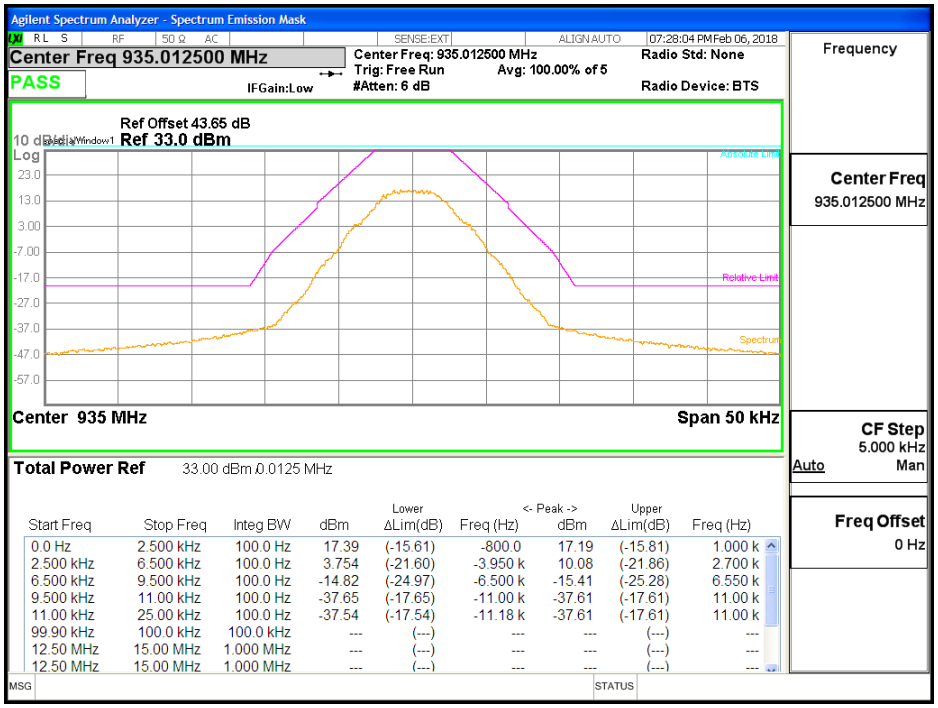
HDQPSK 856 MHz - Mask H



C4FM 935.0125 MHz - Mask J



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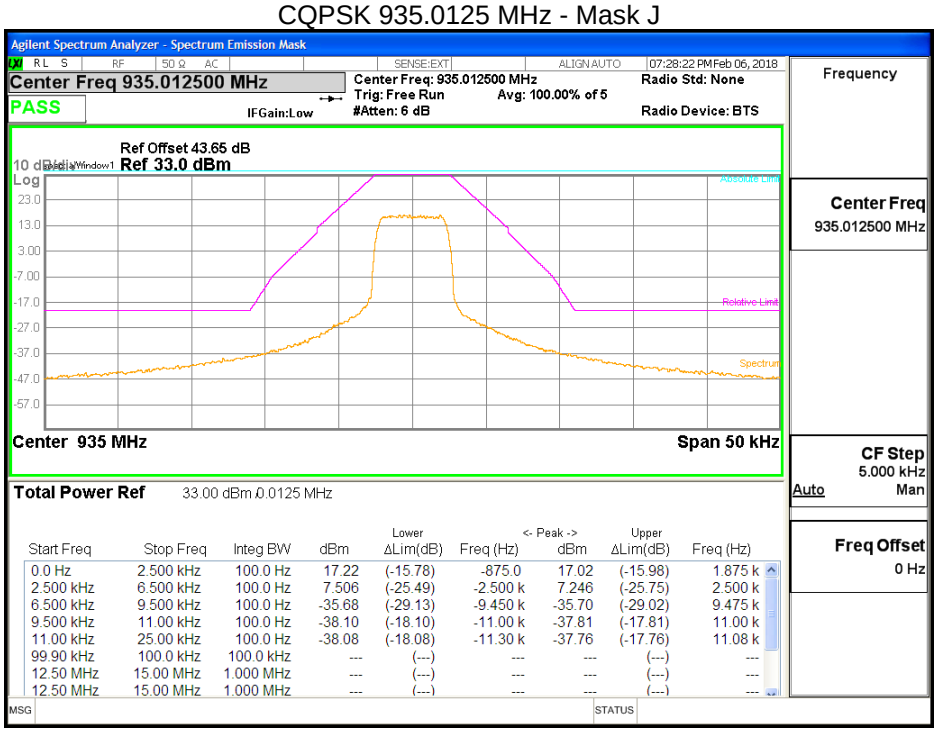
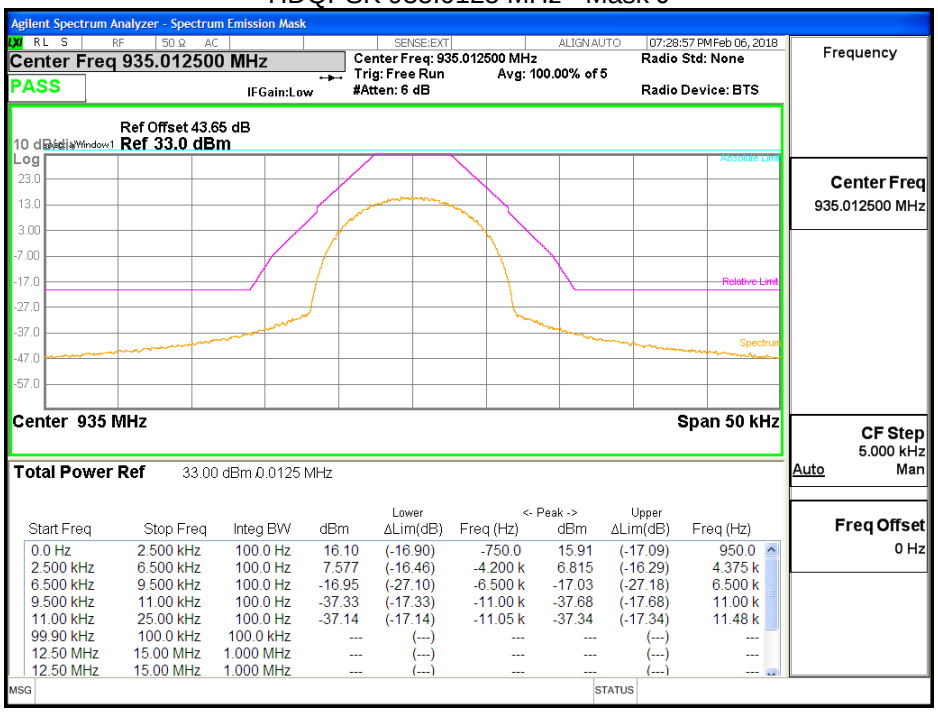
CQPSK 935.0125 MHz - Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	17.22	(-15.78)	-875.0	17.02	(-15.98)	1.875 k
2.500 kHz	6.500 kHz	100.0 Hz	7.506	(-25.49)	-2.500 k	7.246	(-25.75)	2.500 k
6.500 kHz	9.500 kHz	100.0 Hz	-35.68	(-29.13)	-9.450 k	-35.70	(-29.02)	9.475 k
9.500 kHz	11.00 kHz	100.0 Hz	-38.10	(-18.10)	-11.00 k	-37.81	(-17.81)	11.00 k
11.00 kHz	25.00 kHz	100.0 Hz	-38.08	(-18.08)	-11.30 k	-37.76	(-17.76)	11.08 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

HDQPSK 935.0125 MHz - Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	16.10	(-16.90)	-750.0	15.91	(-17.09)	950.0
2.500 kHz	6.500 kHz	100.0 Hz	7.577	(-16.46)	-4.200 k	6.815	(-16.29)	4.375 k
6.500 kHz	9.500 kHz	100.0 Hz	-16.95	(-27.10)	-6.500 k	-17.03	(-27.18)	6.500 k
9.500 kHz	11.00 kHz	100.0 Hz	-37.33	(-17.33)	-11.00 k	-37.68	(-17.68)	11.00 k
11.00 kHz	25.00 kHz	100.0 Hz	-37.14	(-17.14)	-11.05 k	-37.34	(-17.34)	11.48 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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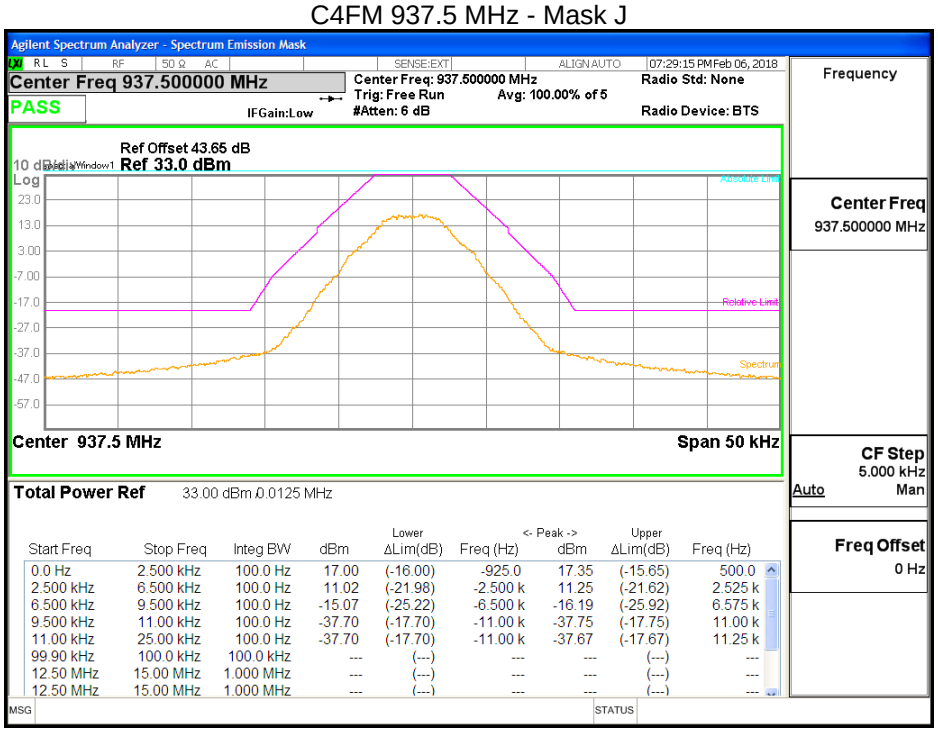
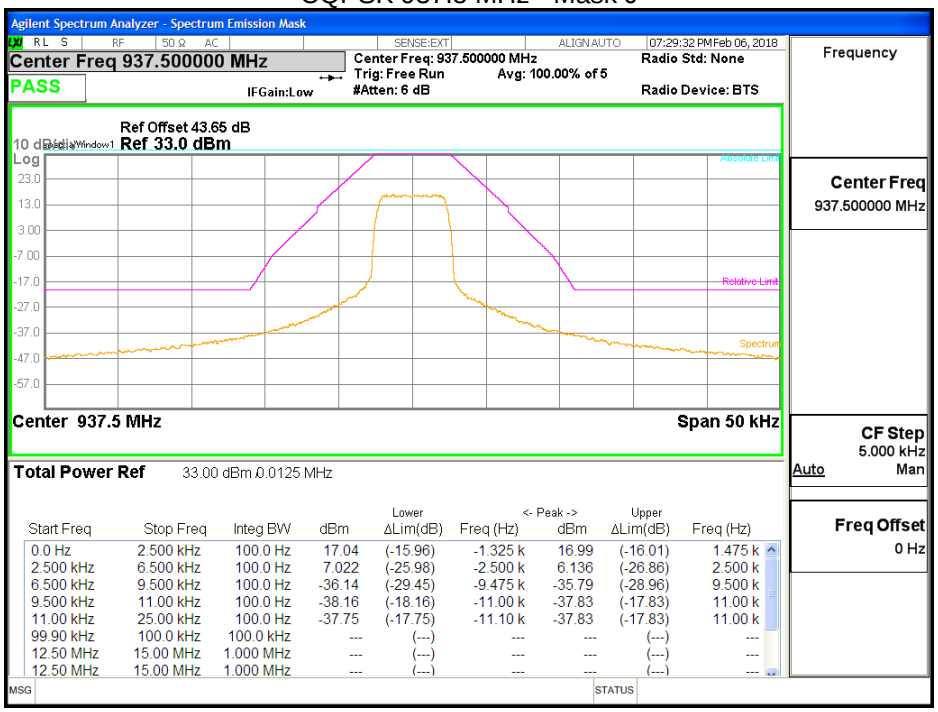
C4FM 937.5 MHz - Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	17.00	(-16.00)	-925.0	17.35	(-15.65)	500.0
2.500 kHz	6.500 kHz	100.0 Hz	11.02	(-21.98)	-2.500 k	11.25	(-21.62)	2.525 k
6.500 kHz	9.500 kHz	100.0 Hz	-15.07	(-25.22)	-6.500 k	-16.19	(-25.92)	6.575 k
9.500 kHz	11.00 kHz	100.0 Hz	-37.70	(-17.70)	-11.00 k	-37.75	(-17.75)	11.00 k
11.00 kHz	25.00 kHz	100.0 Hz	-37.70	(-17.70)	-11.00 k	-37.67	(-17.67)	11.25 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

CQPSK 937.5 MHz - Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	17.04	(-15.96)	-1.325 k	16.99	(-16.01)	1.475 k
2.500 kHz	6.500 kHz	100.0 Hz	7.022	(-25.98)	-2.500 k	6.136	(-26.86)	2.500 k
6.500 kHz	9.500 kHz	100.0 Hz	-36.14	(-29.45)	-9.475 k	-35.79	(-28.96)	9.500 k
9.500 kHz	11.00 kHz	100.0 Hz	-38.16	(-18.16)	-11.00 k	-37.83	(-17.83)	11.00 k
11.00 kHz	25.00 kHz	100.0 Hz	-37.75	(-17.75)	-11.10 k	-37.83	(-17.83)	11.00 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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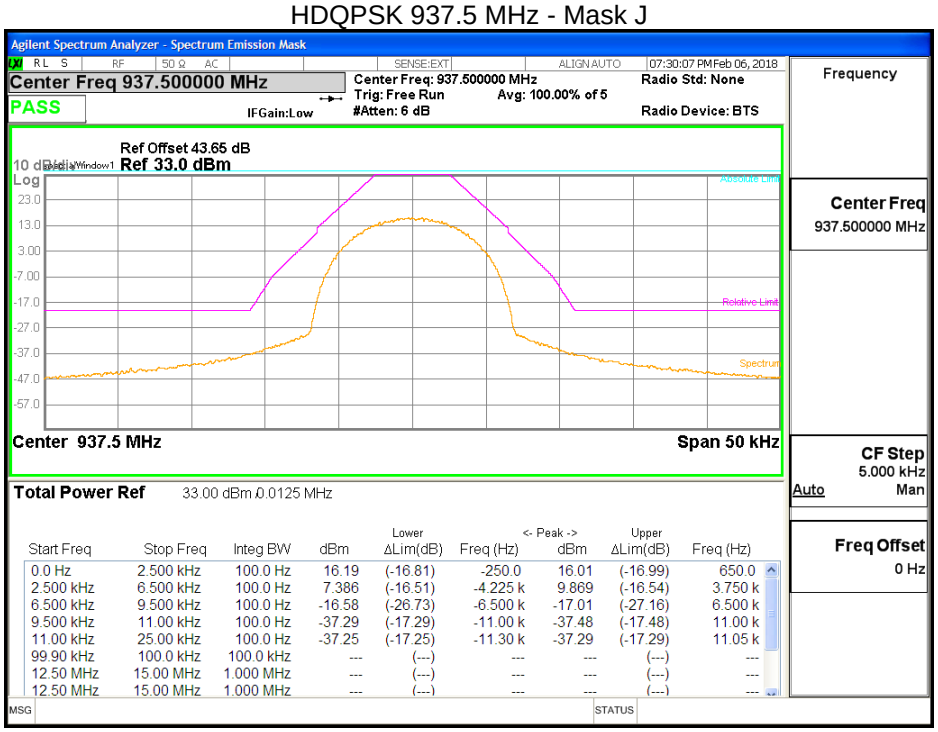
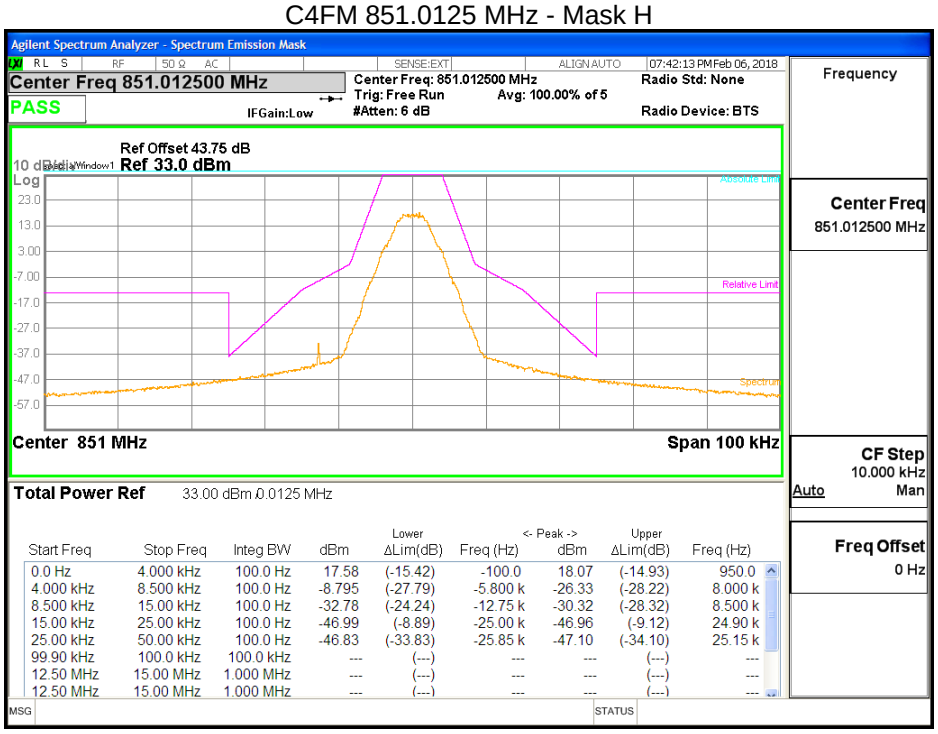
HDQPSK 937.5 MHz - Mask J



At Input Power 3 dB above AGC threshold

C4FM 851.0125 MHz - Mask H



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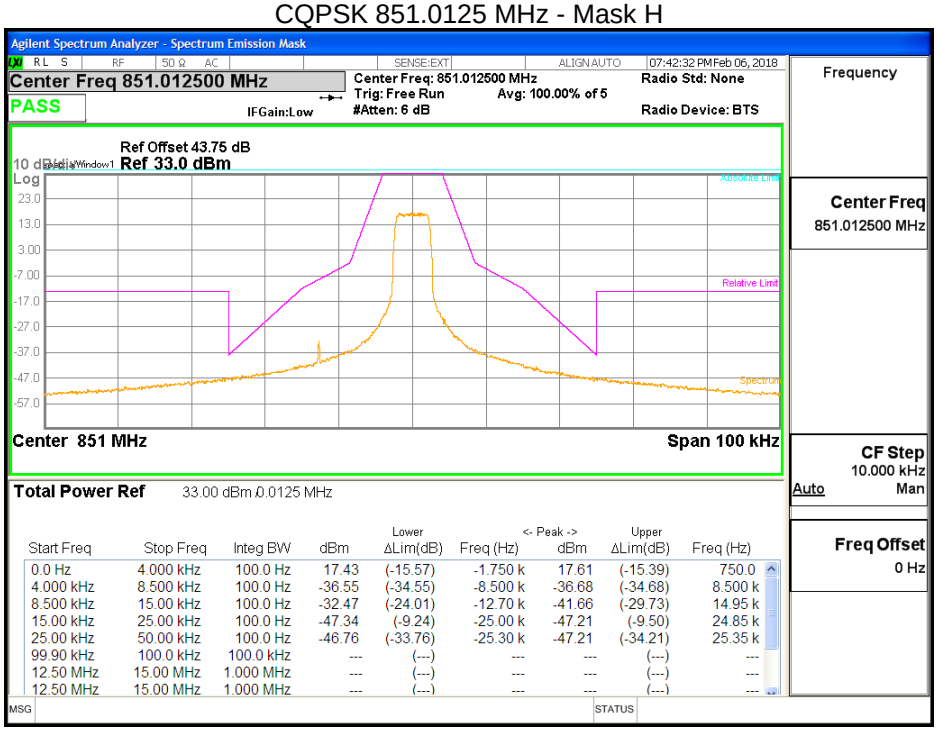
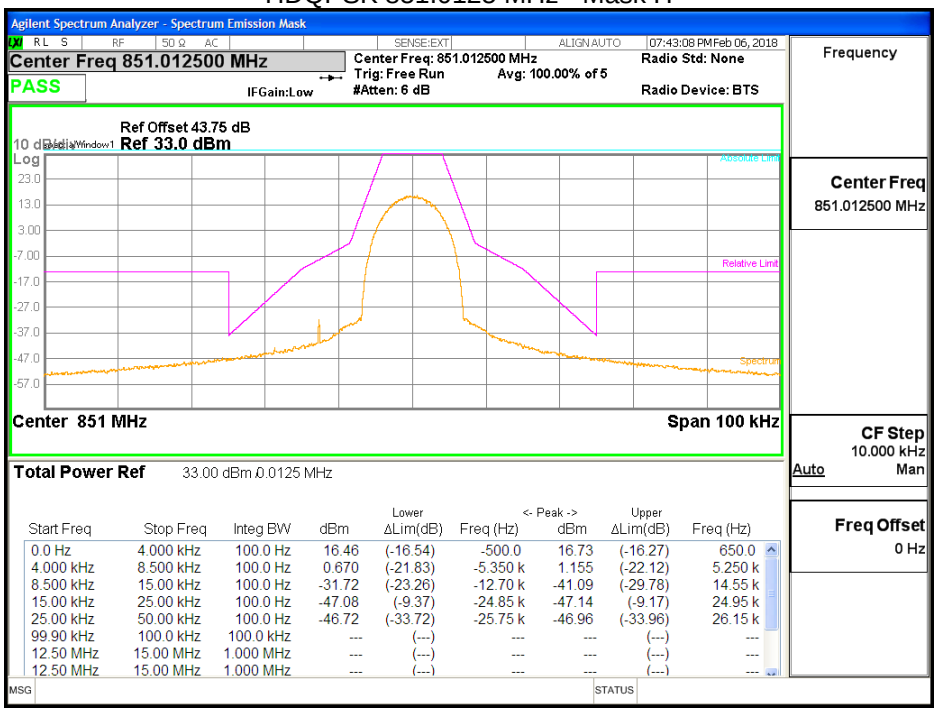
CQPSK 851.0125 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	ΔLim(dB)	Upper Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	17.43	(-15.57)	-1.750 k	17.61	(-15.39)	750.0
4.000 kHz	8.500 kHz	100.0 Hz	-36.55	(-34.55)	-8.500 k	-36.68	(-34.68)	8.500 k
8.500 kHz	15.00 kHz	100.0 Hz	-32.47	(-24.01)	-12.70 k	-41.66	(-29.73)	14.95 k
15.00 kHz	25.00 kHz	100.0 Hz	-47.34	(-9.24)	-25.00 k	-47.21	(-9.50)	24.85 k
25.00 kHz	50.00 kHz	100.0 Hz	-46.76	(-33.76)	-25.30 k	-47.21	(-34.21)	25.35 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

HDQPSK 851.0125 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	ΔLim(dB)	Upper Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	16.46	(-16.54)	-500.0	16.73	(-16.27)	650.0
4.000 kHz	8.500 kHz	100.0 Hz	0.670	(-21.83)	-5.350 k	1.155	(-22.12)	5.250 k
8.500 kHz	15.00 kHz	100.0 Hz	-31.72	(-23.26)	-12.70 k	-41.09	(-29.78)	14.55 k
15.00 kHz	25.00 kHz	100.0 Hz	-47.08	(-9.37)	-24.85 k	-47.14	(-9.17)	24.95 k
25.00 kHz	50.00 kHz	100.0 Hz	-46.72	(-33.72)	-25.75 k	-46.96	(-33.96)	26.15 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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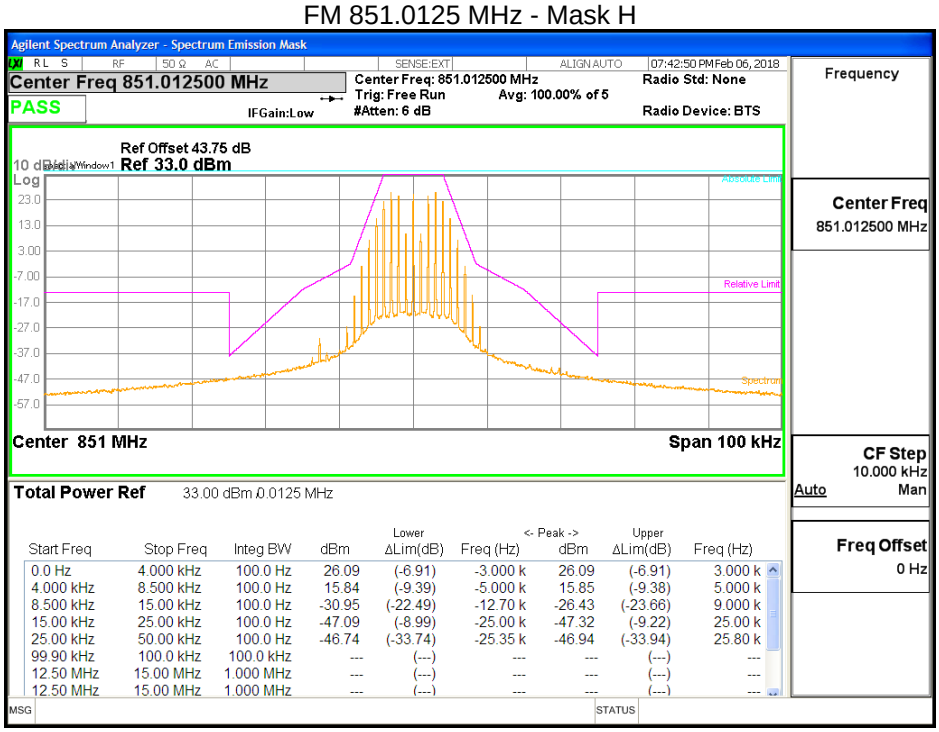
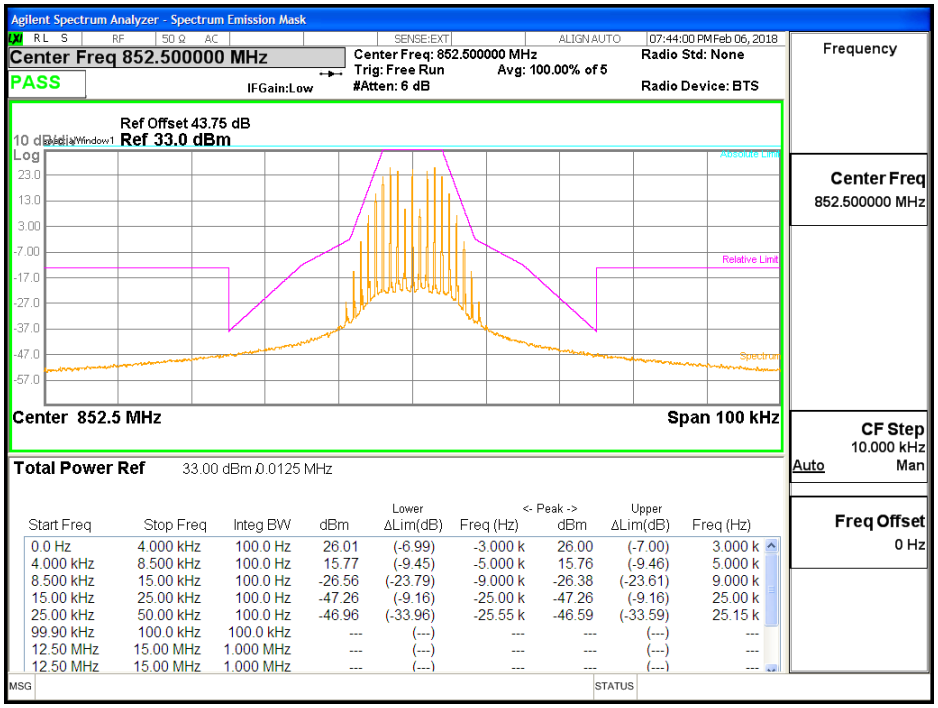
FM 851.0125 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	26.09	(-6.91)	-3.000 k	26.09	(-6.91)	3.000 k
4.000 kHz	8.500 kHz	100.0 Hz	15.84	(-9.39)	-5.000 k	15.85	(-9.38)	5.000 k
8.500 kHz	15.00 kHz	100.0 Hz	-30.95	(-22.49)	-12.70 k	-26.43	(-23.66)	9.000 k
15.00 kHz	25.00 kHz	100.0 Hz	-47.09	(-8.99)	-25.00 k	-47.32	(-9.22)	25.00 k
25.00 kHz	50.00 kHz	100.0 Hz	-46.74	(-33.74)	-25.35 k	-46.94	(-33.94)	25.80 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

FM 852.5 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	26.01	(-6.99)	-3.000 k	26.00	(-7.00)	3.000 k
4.000 kHz	8.500 kHz	100.0 Hz	15.77	(-9.45)	-5.000 k	15.76	(-9.46)	5.000 k
8.500 kHz	15.00 kHz	100.0 Hz	-26.56	(-23.79)	-9.000 k	-26.38	(-23.61)	9.000 k
15.00 kHz	25.00 kHz	100.0 Hz	-47.26	(-9.16)	-25.00 k	-47.26	(-9.16)	25.00 k
25.00 kHz	50.00 kHz	100.0 Hz	-46.96	(-33.96)	-25.55 k	-46.59	(-33.59)	25.15 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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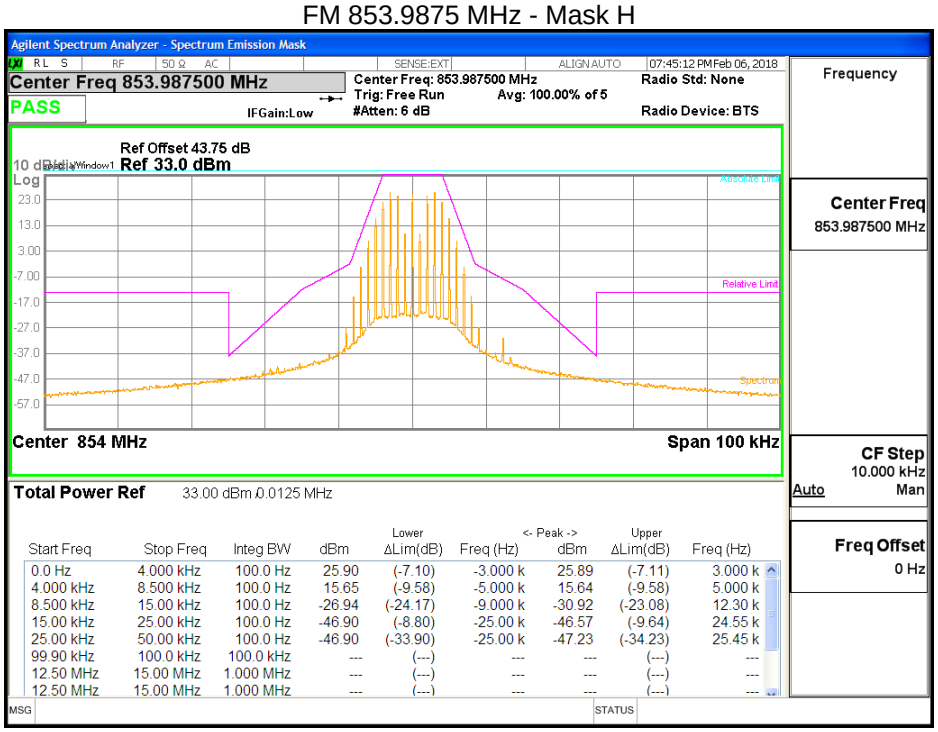
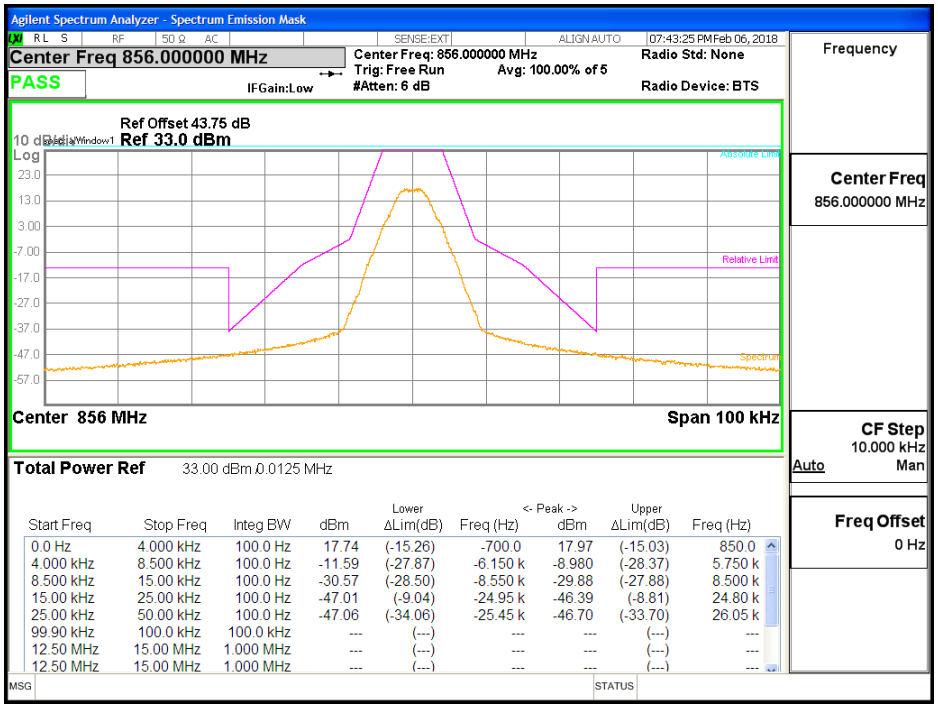
FM 853.9875 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	25.90	(-7.10)	-3.000 k	25.89	(-7.11)	3.000 k
4.000 kHz	8.500 kHz	100.0 Hz	15.65	(-9.58)	-5.000 k	15.64	(-9.58)	5.000 k
8.500 kHz	15.00 kHz	100.0 Hz	-26.94	(-24.17)	-9.000 k	-30.92	(-23.08)	12.30 k
15.00 kHz	25.00 kHz	100.0 Hz	-46.90	(-8.80)	-25.00 k	-46.57	(-9.64)	24.55 k
25.00 kHz	50.00 kHz	100.0 Hz	-46.90	(-33.90)	-25.00 k	-47.23	(-34.23)	25.45 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

C4FM 856 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	17.74	(-15.26)	-700.0	17.97	(-15.03)	850.0
4.000 kHz	8.500 kHz	100.0 Hz	-11.59	(-27.87)	-6.150 k	-8.980	(-28.37)	5.750 k
8.500 kHz	15.00 kHz	100.0 Hz	-30.57	(-28.50)	-8.550 k	-29.88	(-27.88)	8.500 k
15.00 kHz	25.00 kHz	100.0 Hz	-47.01	(-9.04)	-24.95 k	-46.39	(-8.81)	24.80 k
25.00 kHz	50.00 kHz	100.0 Hz	-47.06	(-34.06)	-25.45 k	-46.70	(-33.70)	26.05 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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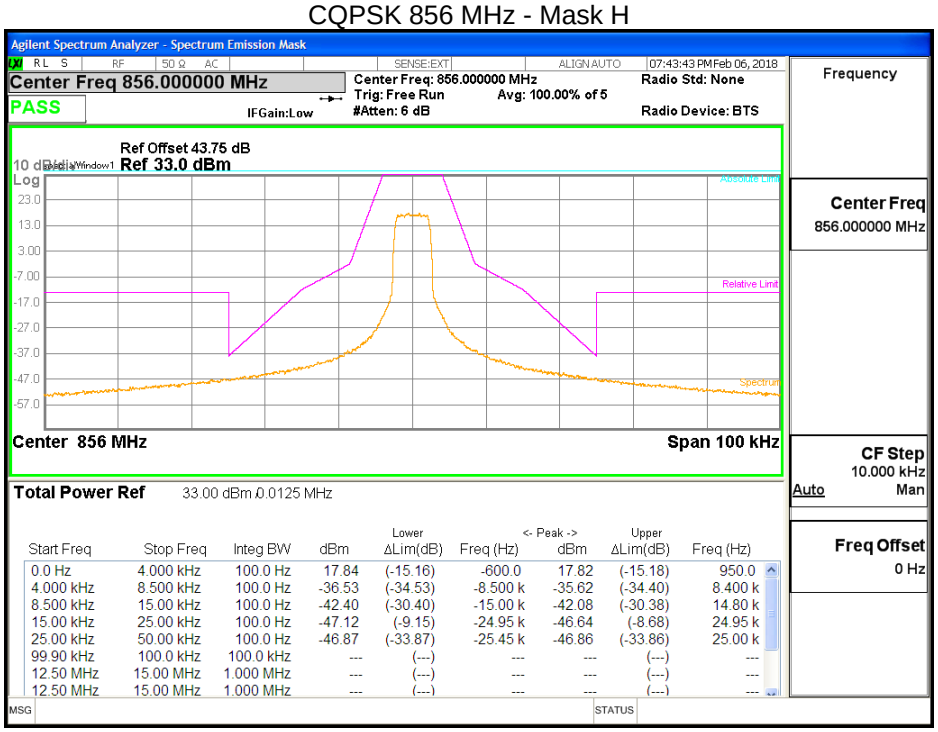
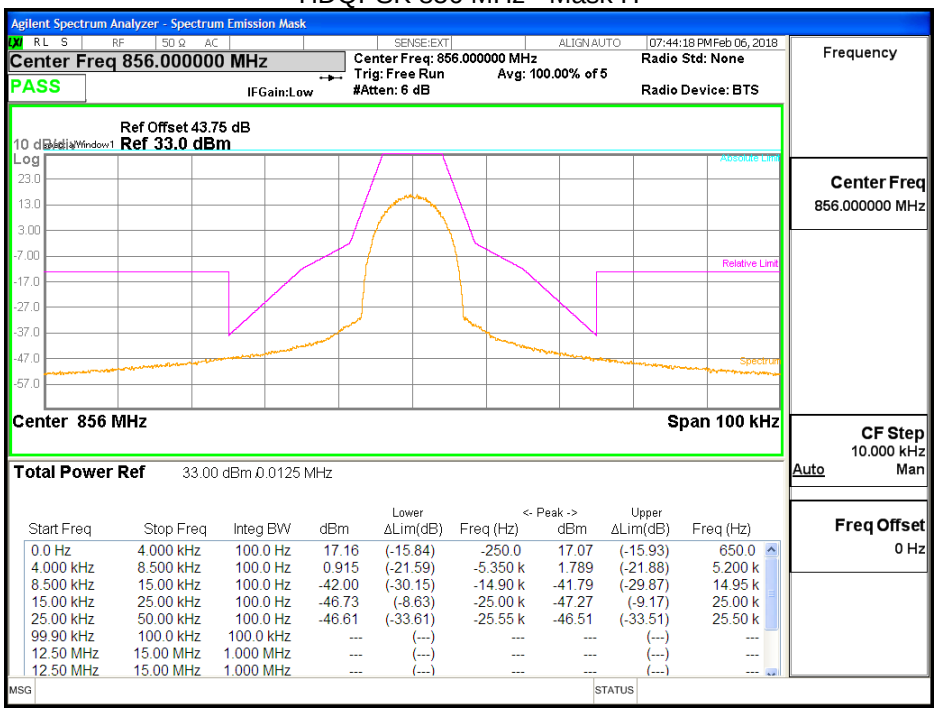
CQPSK 856 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	17.84	(-15.16)	-600.0	17.82	(-15.18)	950.0
4.000 kHz	8.500 kHz	100.0 Hz	-36.53	(-34.53)	-8.500 k	-35.62	(-34.40)	8.400 k
8.500 kHz	15.00 kHz	100.0 Hz	-42.40	(-30.40)	-15.00 k	-42.08	(-30.38)	14.80 k
15.00 kHz	25.00 kHz	100.0 Hz	-47.12	(-9.15)	-24.95 k	-46.64	(-8.68)	24.95 k
25.00 kHz	50.00 kHz	100.0 Hz	-46.87	(-33.87)	-25.45 k	-46.86	(-33.86)	25.00 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

HDQPSK 856 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	17.16	(-15.84)	-250.0	17.07	(-15.93)	650.0
4.000 kHz	8.500 kHz	100.0 Hz	0.915	(-21.59)	-5.350 k	1.789	(-21.88)	5.200 k
8.500 kHz	15.00 kHz	100.0 Hz	-42.00	(-30.15)	-14.90 k	-41.79	(-29.87)	14.95 k
15.00 kHz	25.00 kHz	100.0 Hz	-46.73	(-8.63)	-25.00 k	-47.27	(-9.17)	25.00 k
25.00 kHz	50.00 kHz	100.0 Hz	-46.61	(-33.61)	-25.55 k	-46.51	(-33.51)	25.50 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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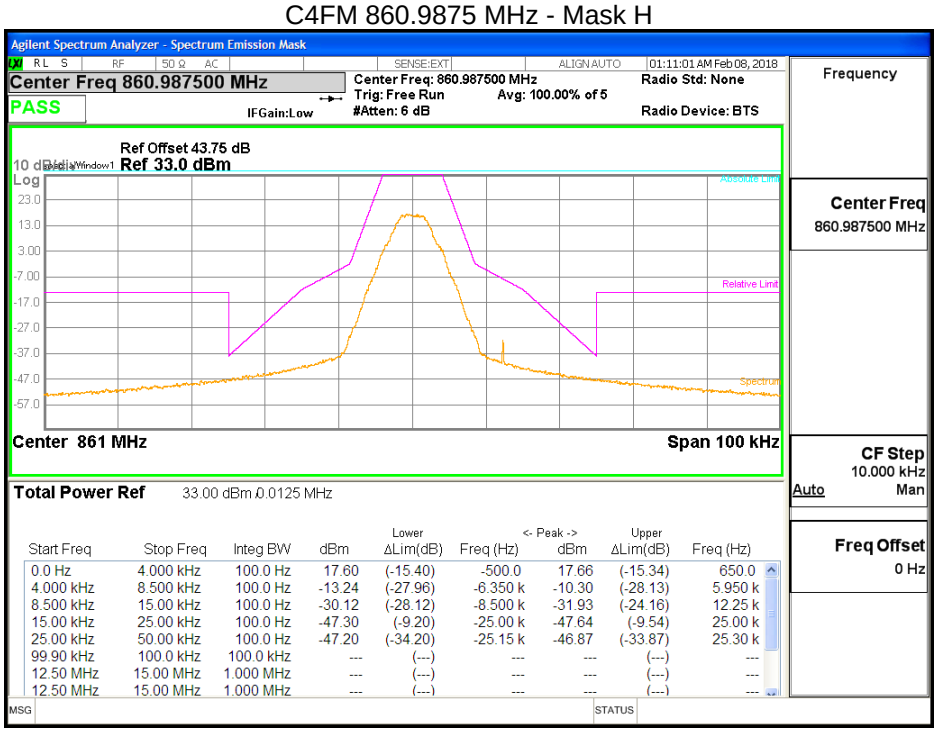
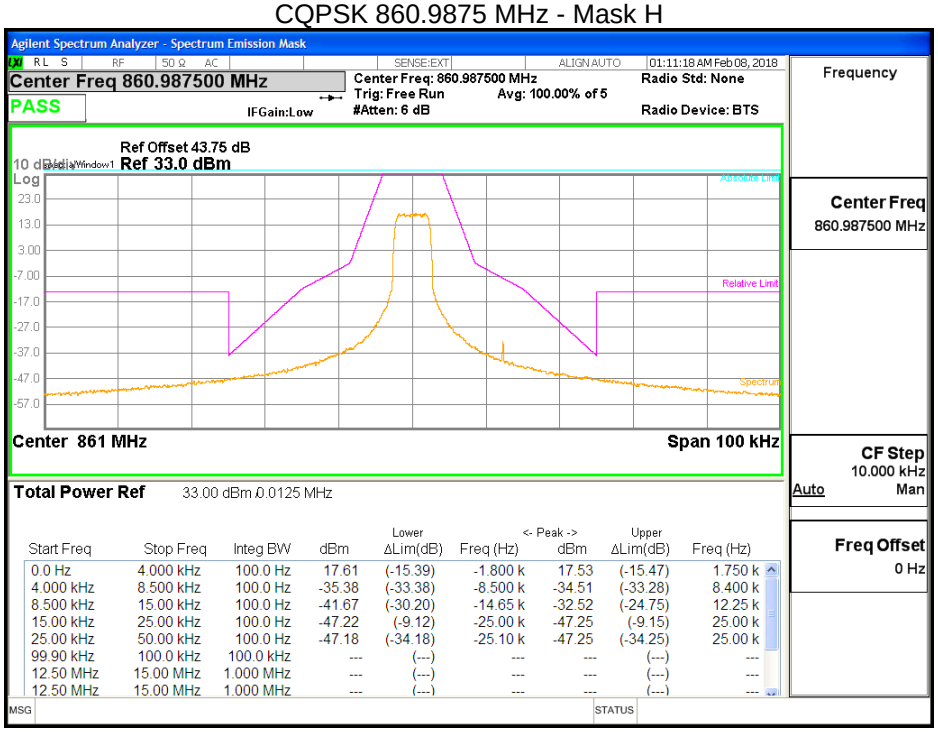
C4FM 860.9875 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	17.60	(-15.40)	-500.0	17.66	(-15.34)	650.0
4.000 kHz	8.500 kHz	100.0 Hz	-13.24	(-27.96)	-6.350 k	-10.30	(-28.13)	5.950 k
8.500 kHz	15.00 kHz	100.0 Hz	-30.12	(-28.12)	-8.500 k	-31.93	(-24.16)	12.25 k
15.00 kHz	25.00 kHz	100.0 Hz	-47.30	(-9.20)	-25.00 k	-47.64	(-9.54)	25.00 k
25.00 kHz	50.00 kHz	100.0 Hz	-47.20	(-34.20)	-25.15 k	-46.87	(-33.87)	25.30 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

CQPSK 860.9875 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	17.61	(-15.39)	-1.800 k	17.53	(-15.47)	1.750 k
4.000 kHz	8.500 kHz	100.0 Hz	-35.38	(-33.38)	-8.500 k	-34.51	(-33.28)	8.400 k
8.500 kHz	15.00 kHz	100.0 Hz	-41.67	(-30.20)	-14.65 k	-32.52	(-24.75)	12.25 k
15.00 kHz	25.00 kHz	100.0 Hz	-47.22	(-9.12)	-25.00 k	-47.25	(-9.15)	25.00 k
25.00 kHz	50.00 kHz	100.0 Hz	-47.18	(-34.18)	-25.10 k	-47.25	(-34.25)	25.00 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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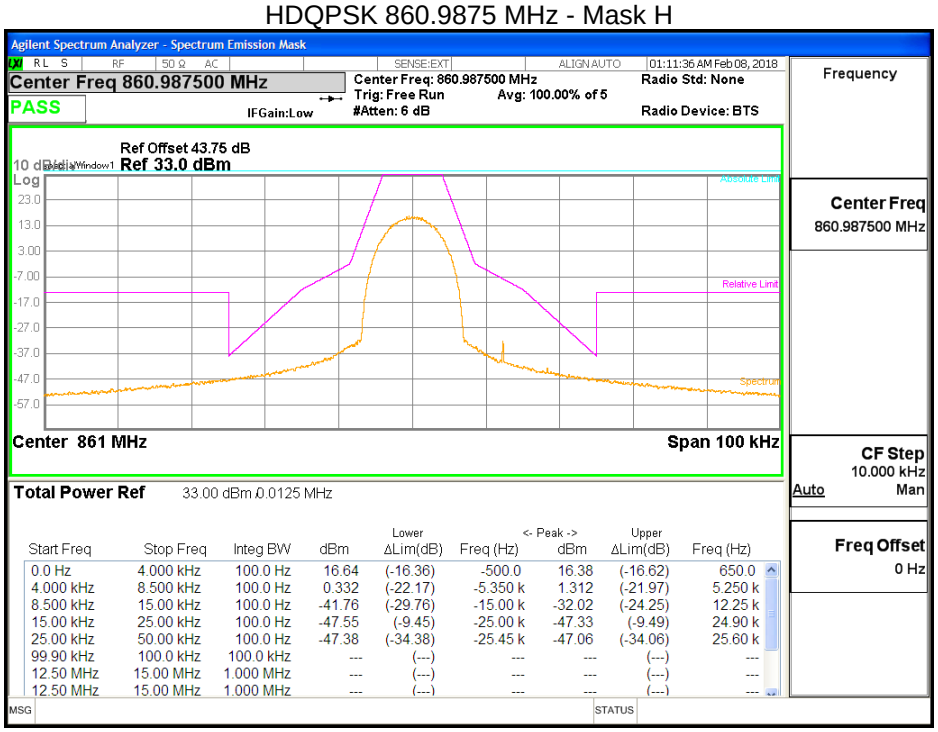
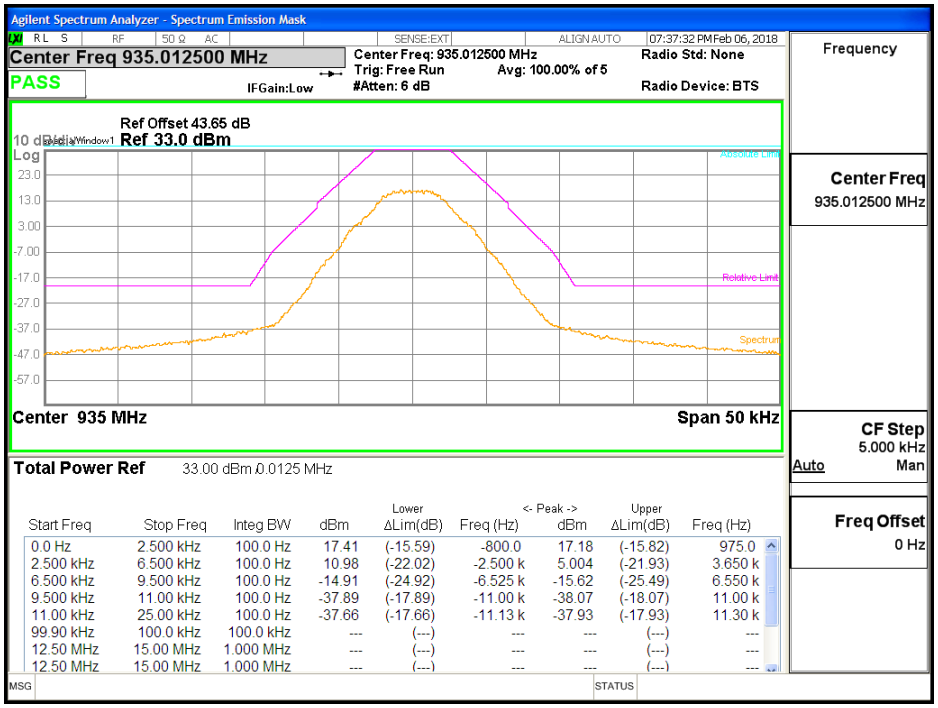
HDQPSK 860.9875 MHz - Mask H



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	4.000 kHz	100.0 Hz	16.64	(-16.36)	-500.0	16.38	(-16.62)	650.0
4.000 kHz	8.500 kHz	100.0 Hz	0.332	(-22.17)	-5.350 k	1.312	(-21.97)	5.250 k
8.500 kHz	15.00 kHz	100.0 Hz	-41.76	(-29.76)	-15.00 k	-32.02	(-24.25)	12.25 k
15.00 kHz	25.00 kHz	100.0 Hz	-47.55	(-9.45)	-25.00 k	-47.33	(-9.49)	24.90 k
25.00 kHz	50.00 kHz	100.0 Hz	-47.38	(-34.38)	-25.45 k	-47.06	(-34.06)	25.60 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

C4FM 935.0125 MHz - Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	17.41	(-15.59)	-800.0	17.18	(-15.82)	975.0
2.500 kHz	6.500 kHz	100.0 Hz	10.98	(-22.02)	-2.500 k	5.004	(-21.93)	3.650 k
6.500 kHz	9.500 kHz	100.0 Hz	-14.91	(-24.92)	-6.525 k	-15.62	(-25.49)	6.550 k
9.500 kHz	11.00 kHz	100.0 Hz	-37.89	(-17.89)	-11.00 k	-38.07	(-18.07)	11.00 k
11.00 kHz	25.00 kHz	100.0 Hz	-37.66	(-17.66)	-11.13 k	-37.93	(-17.93)	11.30 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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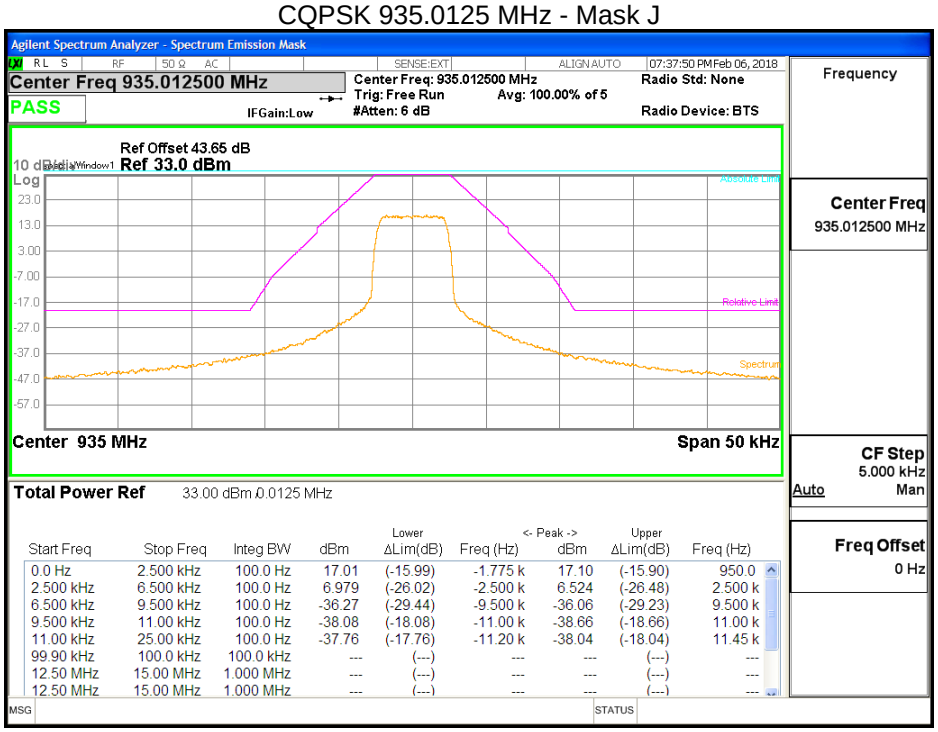
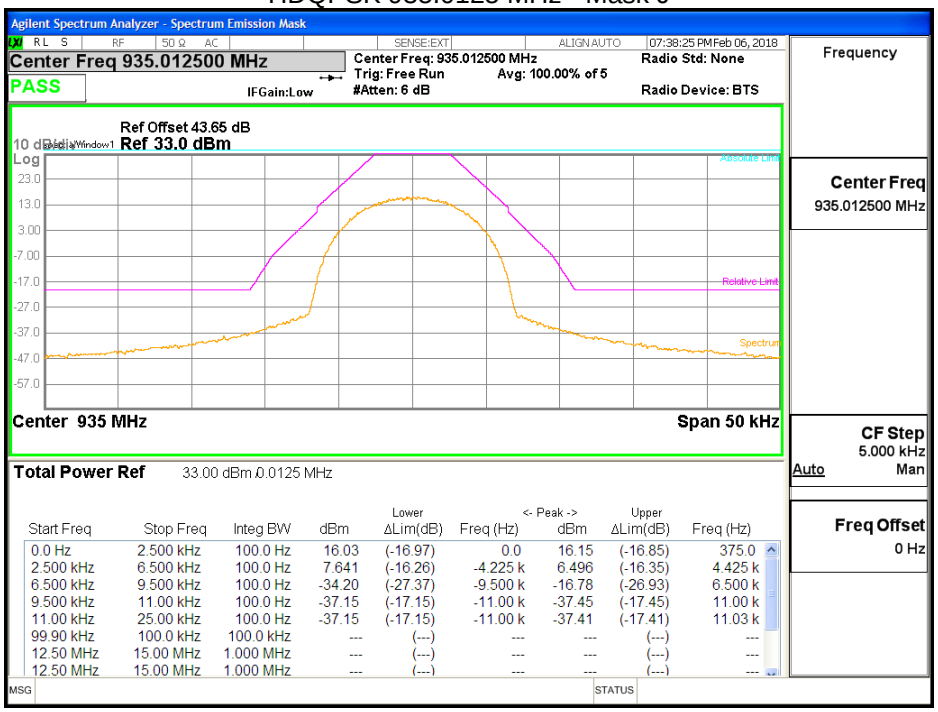
CQPSK 935.0125 MHz - Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	17.01	(-15.99)	-1.775 k	17.10	(-15.90)	950.0
2.500 kHz	6.500 kHz	100.0 Hz	6.979	(-26.02)	-2.500 k	6.524	(-26.48)	2.500 k
6.500 kHz	9.500 kHz	100.0 Hz	-36.27	(-29.44)	-9.500 k	-36.06	(-29.23)	9.500 k
9.500 kHz	11.00 kHz	100.0 Hz	-38.08	(-18.08)	-11.00 k	-38.66	(-18.66)	11.00 k
11.00 kHz	25.00 kHz	100.0 Hz	-37.76	(-17.76)	-11.20 k	-38.04	(-18.04)	11.45 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

HDQPSK 935.0125 MHz - Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	16.03	(-16.97)	0.0	16.15	(-16.85)	375.0
2.500 kHz	6.500 kHz	100.0 Hz	7.641	(-16.26)	-4.225 k	6.496	(-16.35)	4.425 k
6.500 kHz	9.500 kHz	100.0 Hz	-34.20	(-27.37)	-9.500 k	-16.78	(-26.93)	6.500 k
9.500 kHz	11.00 kHz	100.0 Hz	-37.15	(-17.15)	-11.00 k	-37.45	(-17.45)	11.00 k
11.00 kHz	25.00 kHz	100.0 Hz	-37.15	(-17.15)	-11.00 k	-37.41	(-17.41)	11.03 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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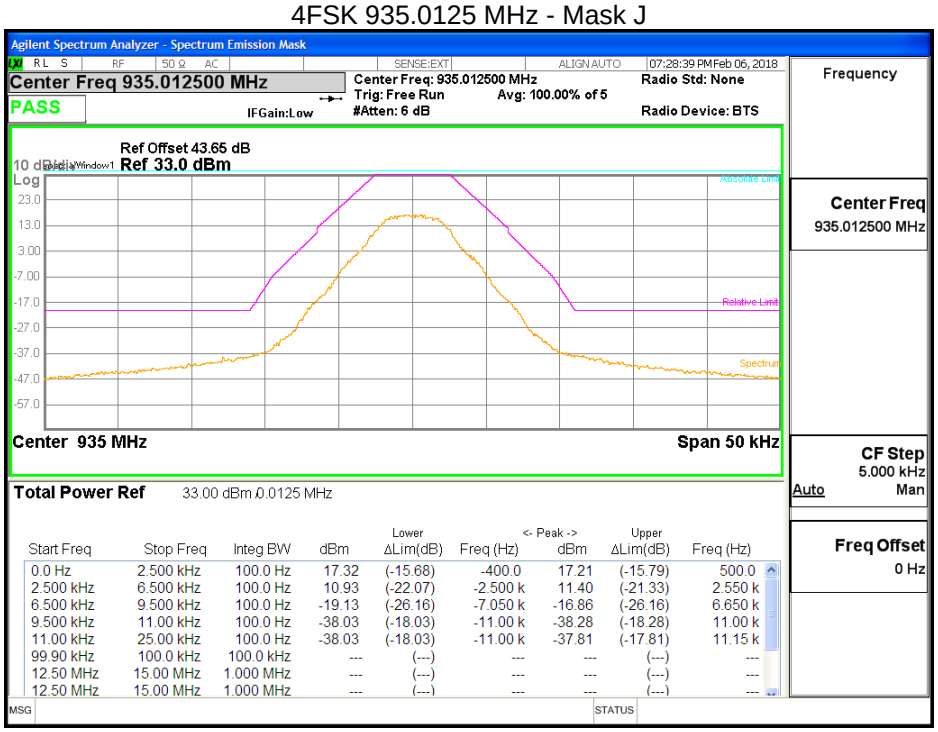
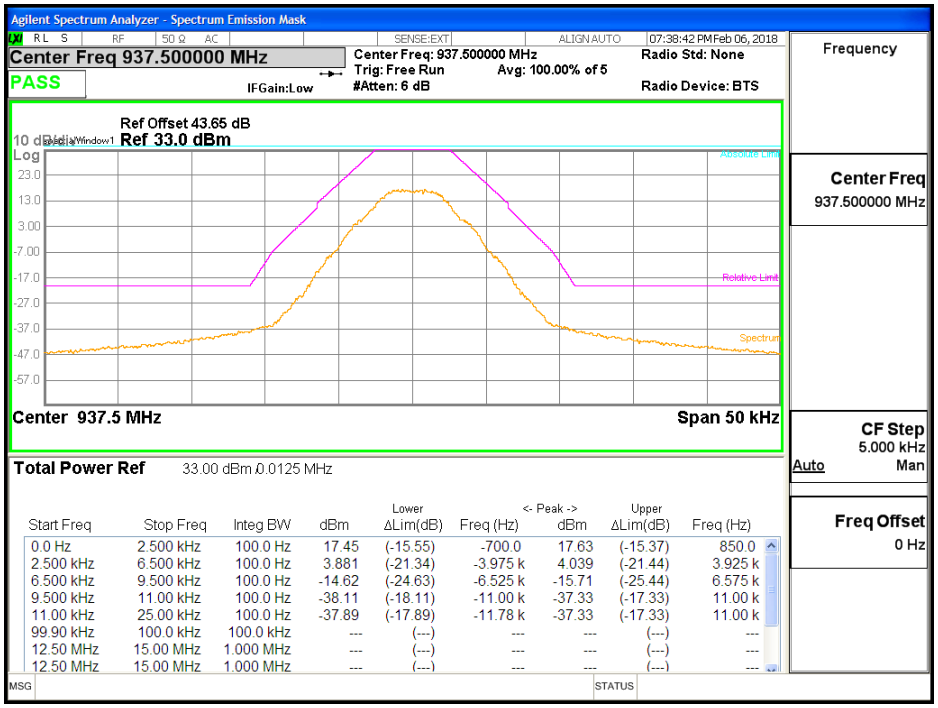
4FSK 935.0125 MHz - Mask J



C4FM 937.5 MHz - Mask J



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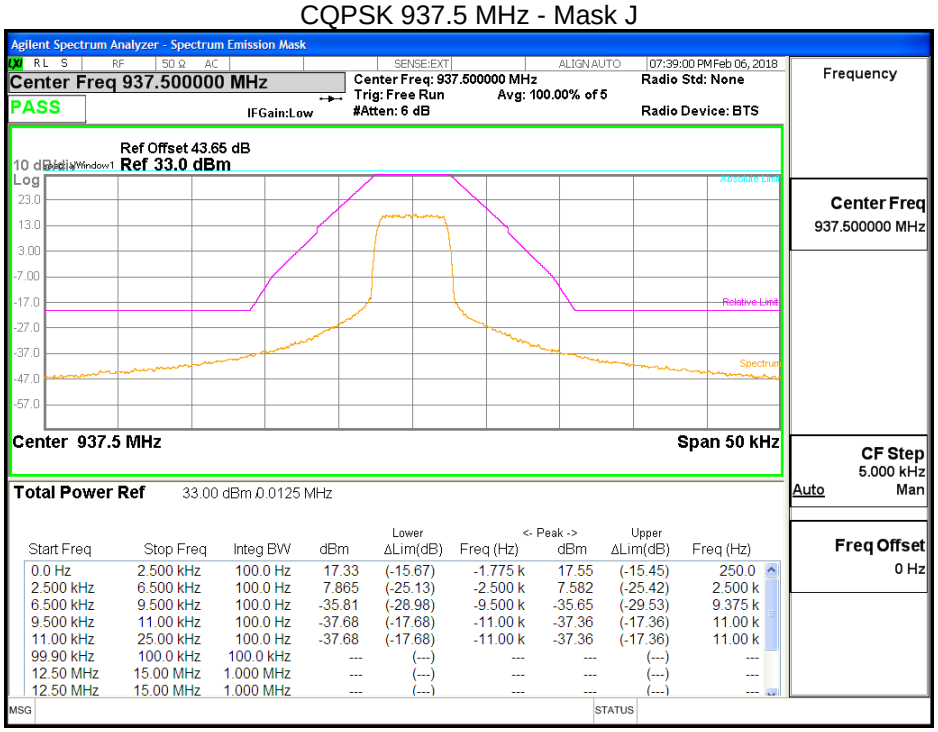
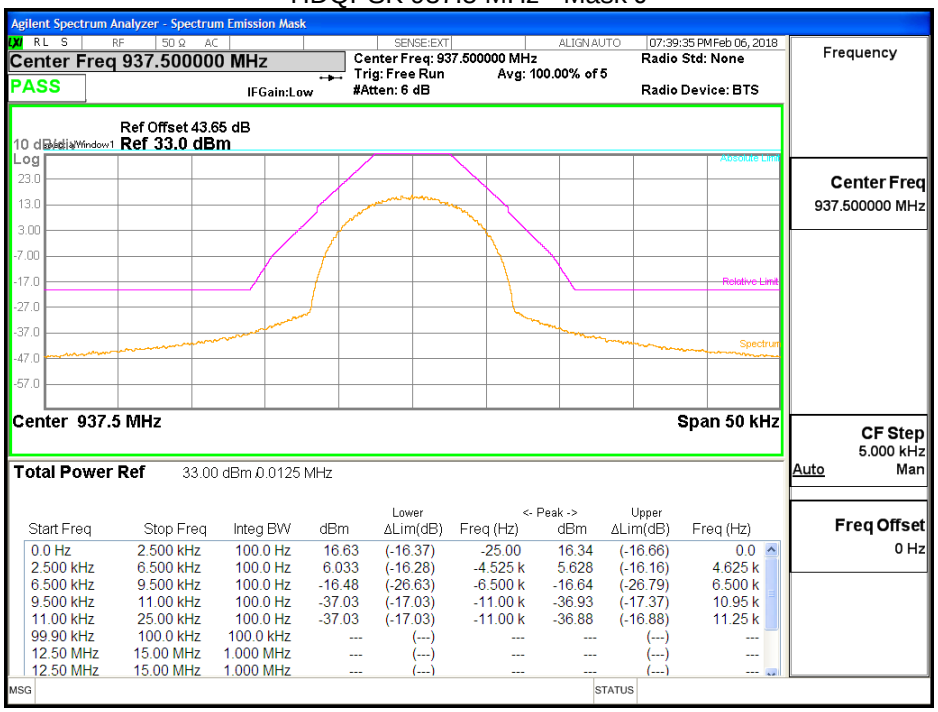
CQPSK 937.5 MHz - Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	17.33	(-15.67)	-1.775 k	17.55	(-15.45)	250.0
2.500 kHz	6.500 kHz	100.0 Hz	7.865	(-25.13)	-2.500 k	7.582	(-25.42)	2.500 k
6.500 kHz	9.500 kHz	100.0 Hz	-35.81	(-28.98)	-9.500 k	-35.65	(-29.53)	9.375 k
9.500 kHz	11.00 kHz	100.0 Hz	-37.68	(-17.68)	-11.00 k	-37.36	(-17.36)	11.00 k
11.00 kHz	25.00 kHz	100.0 Hz	-37.68	(-17.68)	-11.00 k	-37.36	(-17.36)	11.00 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

HDQPSK 937.5 MHz - Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	16.63	(-16.37)	-25.00	16.34	(-16.66)	0.0
2.500 kHz	6.500 kHz	100.0 Hz	6.033	(-16.28)	-4.525 k	5.628	(-16.16)	4.625 k
6.500 kHz	9.500 kHz	100.0 Hz	-16.48	(-26.63)	-6.500 k	-16.64	(-26.79)	6.500 k
9.500 kHz	11.00 kHz	100.0 Hz	-37.03	(-17.03)	-11.00 k	-36.93	(-17.37)	10.95 k
11.00 kHz	25.00 kHz	100.0 Hz	-37.03	(-17.03)	-11.00 k	-36.88	(-16.88)	11.25 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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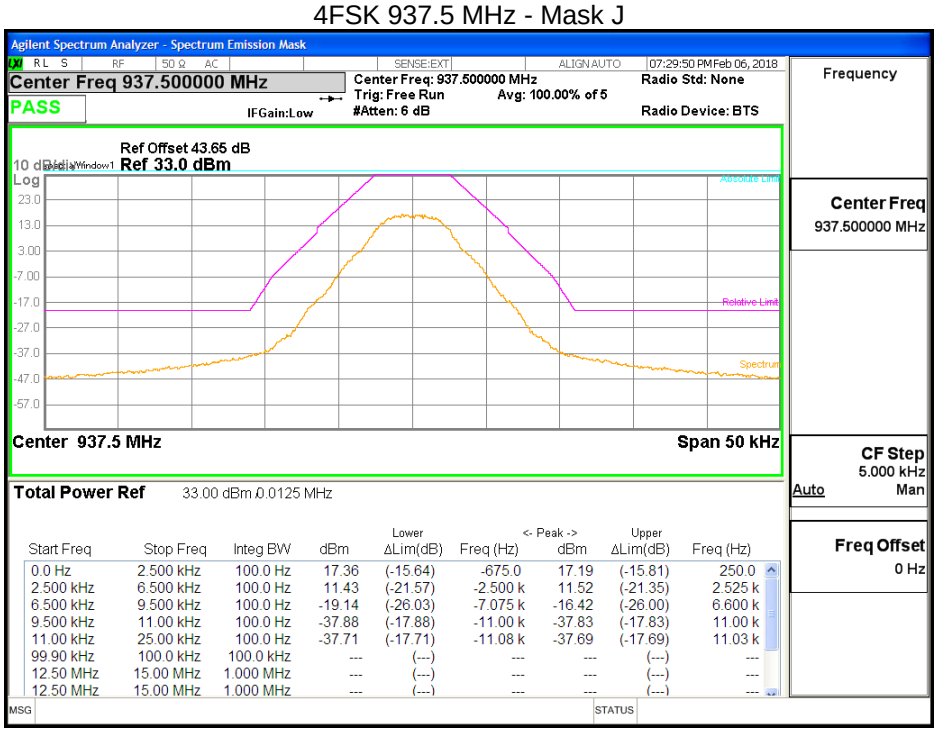
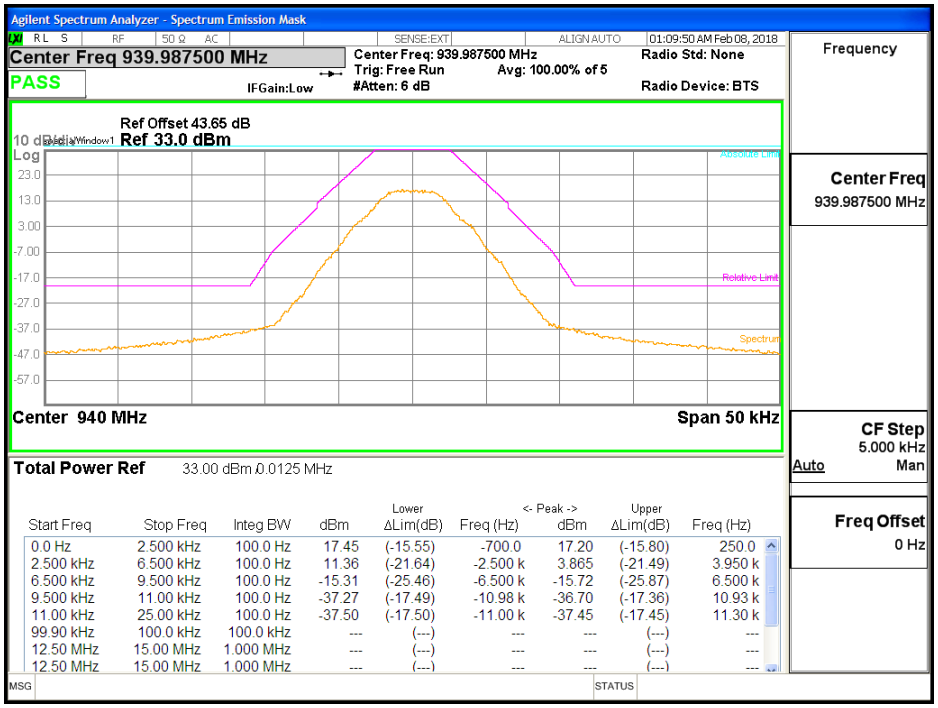
4FSK 937.5 MHz - Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	17.36	(-15.64)	-675.0	17.19	(-15.81)	250.0
2.500 kHz	6.500 kHz	100.0 Hz	11.43	(-21.57)	-2.500 k	11.52	(-21.35)	2.525 k
6.500 kHz	9.500 kHz	100.0 Hz	-19.14	(-26.03)	-7.075 k	-16.42	(-26.00)	6.600 k
9.500 kHz	11.00 kHz	100.0 Hz	-37.88	(-17.88)	-11.00 k	-37.83	(-17.83)	11.00 k
11.00 kHz	25.00 kHz	100.0 Hz	-37.71	(-17.71)	-11.08 k	-37.69	(-17.69)	11.03 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

C4FM 939.9875 MHz - Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	17.45	(-15.55)	-700.0	17.20	(-15.80)	250.0
2.500 kHz	6.500 kHz	100.0 Hz	11.36	(-21.64)	-2.500 k	3.865	(-21.49)	3.950 k
6.500 kHz	9.500 kHz	100.0 Hz	-15.31	(-25.46)	-6.500 k	-15.72	(-25.87)	6.500 k
9.500 kHz	11.00 kHz	100.0 Hz	-37.27	(-17.49)	-10.98 k	-36.70	(-17.36)	10.93 k
11.00 kHz	25.00 kHz	100.0 Hz	-37.50	(-17.50)	-11.00 k	-37.45	(-17.45)	11.30 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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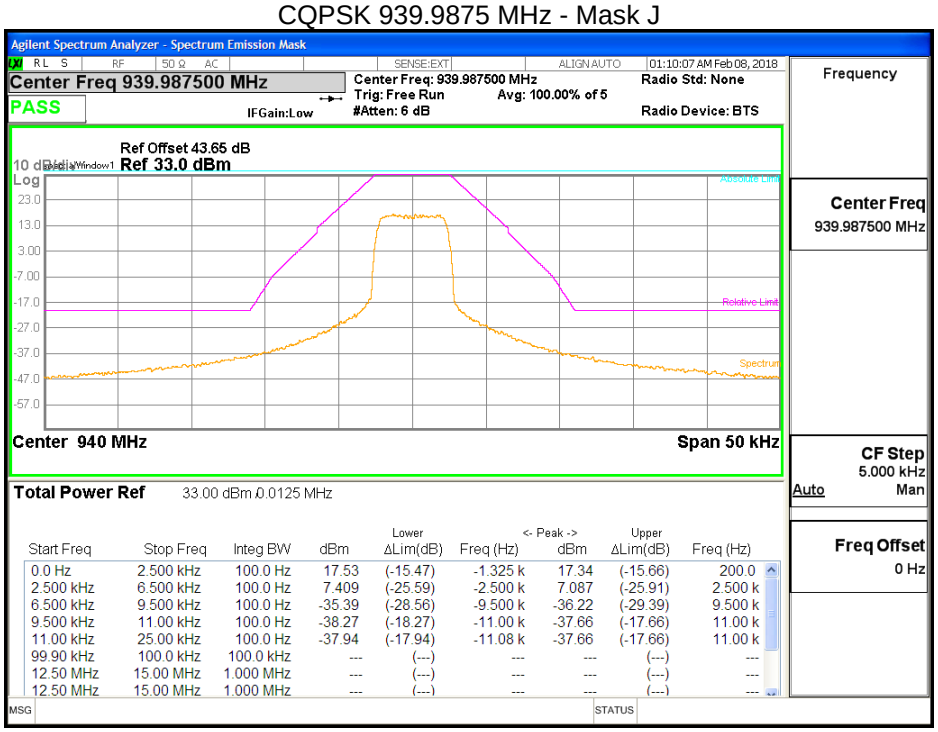
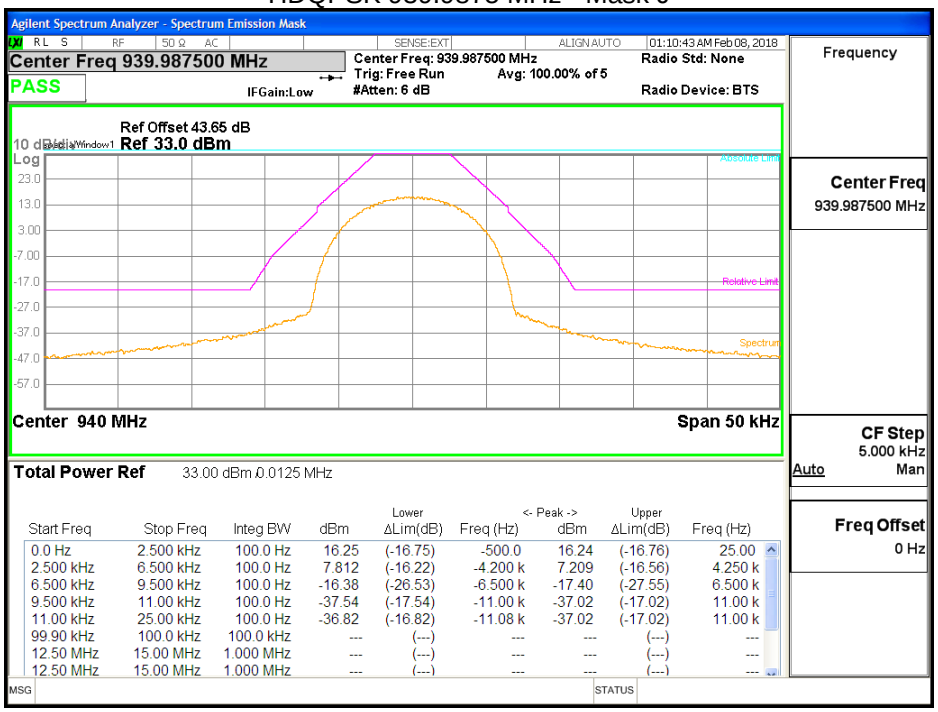
CQPSK 939.9875 MHz - Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	17.53	(-15.47)	-1.325 k	17.34	(-15.66)	200.0
2.500 kHz	6.500 kHz	100.0 Hz	7.409	(-25.59)	-2.500 k	7.087	(-25.91)	2.500 k
6.500 kHz	9.500 kHz	100.0 Hz	-35.39	(-28.56)	-9.500 k	-36.22	(-29.39)	9.500 k
9.500 kHz	11.00 kHz	100.0 Hz	-38.27	(-18.27)	-11.00 k	-37.66	(-17.66)	11.00 k
11.00 kHz	25.00 kHz	100.0 Hz	-37.94	(-17.94)	-11.08 k	-37.66	(-17.66)	11.00 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

HDQPSK 939.9875 MHz - Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	16.25	(-16.75)	-500.0	16.24	(-16.76)	25.00
2.500 kHz	6.500 kHz	100.0 Hz	7.812	(-16.22)	-4.200 k	7.209	(-16.56)	4.250 k
6.500 kHz	9.500 kHz	100.0 Hz	-16.38	(-26.53)	-6.500 k	-17.40	(-27.55)	6.500 k
9.500 kHz	11.00 kHz	100.0 Hz	-37.54	(-17.54)	-11.00 k	-37.02	(-17.02)	11.00 k
11.00 kHz	25.00 kHz	100.0 Hz	-36.82	(-16.82)	-11.08 k	-37.02	(-17.02)	11.00 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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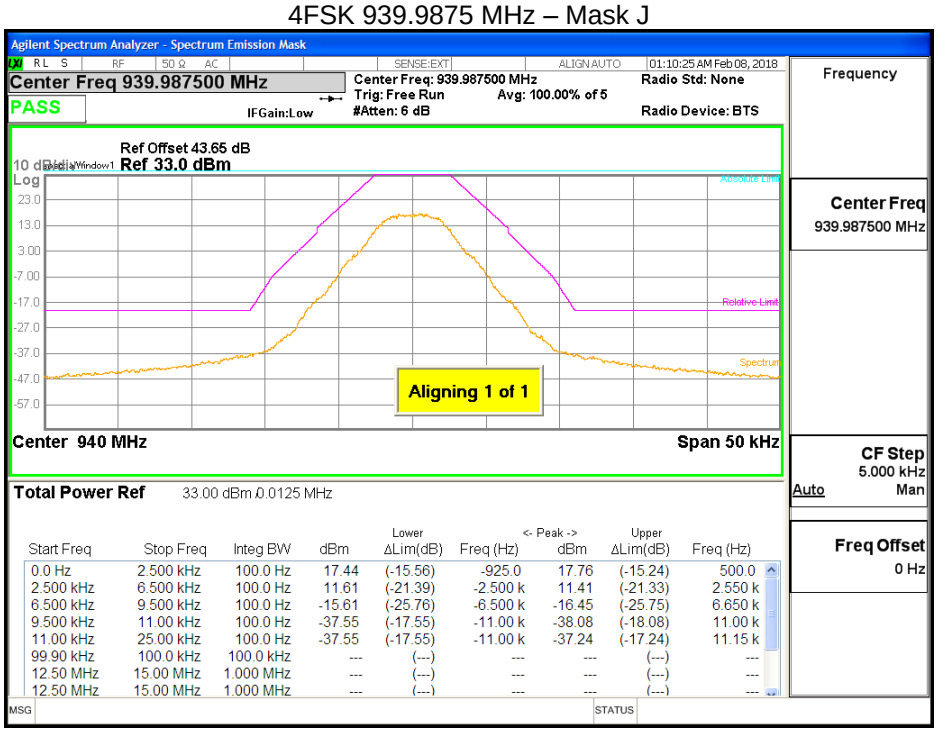
4FSK 939.9875 MHz – Mask J



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
0.0 Hz	2.500 kHz	100.0 Hz	17.44	(-15.56)	-925.0	17.76	(-15.24)	500.0
2.500 kHz	6.500 kHz	100.0 Hz	11.61	(-21.39)	-2.500 k	11.41	(-21.33)	2.550 k
6.500 kHz	9.500 kHz	100.0 Hz	-15.61	(-25.76)	-6.500 k	-16.45	(-25.75)	6.650 k
9.500 kHz	11.00 kHz	100.0 Hz	-37.55	(-17.55)	-11.00 k	-38.08	(-18.08)	11.00 k
11.00 kHz	25.00 kHz	100.0 Hz	-37.55	(-17.55)	-11.00 k	-37.24	(-17.24)	11.15 k
99.90 kHz	100.0 kHz	100.0 kHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
12.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---

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Frequency Stability

The hdHost and hd33 are sychronized to the same reference clock. Therefore there is no frequency error after down and up frequency conversion are performed.

The frequency stability check is not applicable to the EUT.

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Passband Gain and Bandwidth & Out of Band Rejection

Governing Doc	FCC KDB 935210 D05 Indus Booster Basic Meas v01r02: October, 2017	Room Temperature (°C)	24
Test Procedure	ANSI/TIA-603- E-2016; FCC KDB 935210 D05 Indus Booster Basic Meas v01r02: October, 2017	Relative Humidity (%)	33.9
Test Location	Burnaby	Barometric Pressure (kPa)	102.6
Test Engineer	Sophie Piao/Jeremy Lee	Date	Feb 06, 2018
EUT Voltage	☒ DC	☐ 120VAC @ 60Hz	

Test Equipment Used	Manufacturer	Model	Serial Number	Calibration	Calibration due
Signal Generator	Keysight	N5172B	MY53050270	08/04/17	08/04/18
Spectrum Analyzer	Keysight	N9010A	MY50520285	08/07/17	08/07/18
40dB Attenuator	Aeroflex Winschel	58-40-43	n/p	CVP	CVP

Note) CVP = Calibration Verification Performed internally, n/p = not provided.

Frequency Range:	☒ Product Passband ± 250%
Detector:	☒ Peak
RBW/VBW:	☒0.1% of 5 times of passband bandwidth
Type of Facility:	☒ Tabletop
Distance:	☒ Direct

Compliant ☒ Non-Compliant ☐ Not Applicable ☐

Test setup

Description of test set-up:

The procedure used was ANSI/TIA-603-E-2016 and FCC KDB 935210 D05 Indus Booster Basic Meas v01r02. The signal booster was set to maximum gain. A swept CW signal was set to the range of ±250 % of the product pass band. The CW ampltitude was set to 3 dB below the AGC threshold so that the ALC should not activate throughout the test.

After the max-hold sweep trace was completed, a marker was set to the peak amplitude, and a 20dB bandwidth was measured between two additional markers fall 20 dB from the peak.

The EUT was set to **Operation Mode #1 with configuration Mode #1.**

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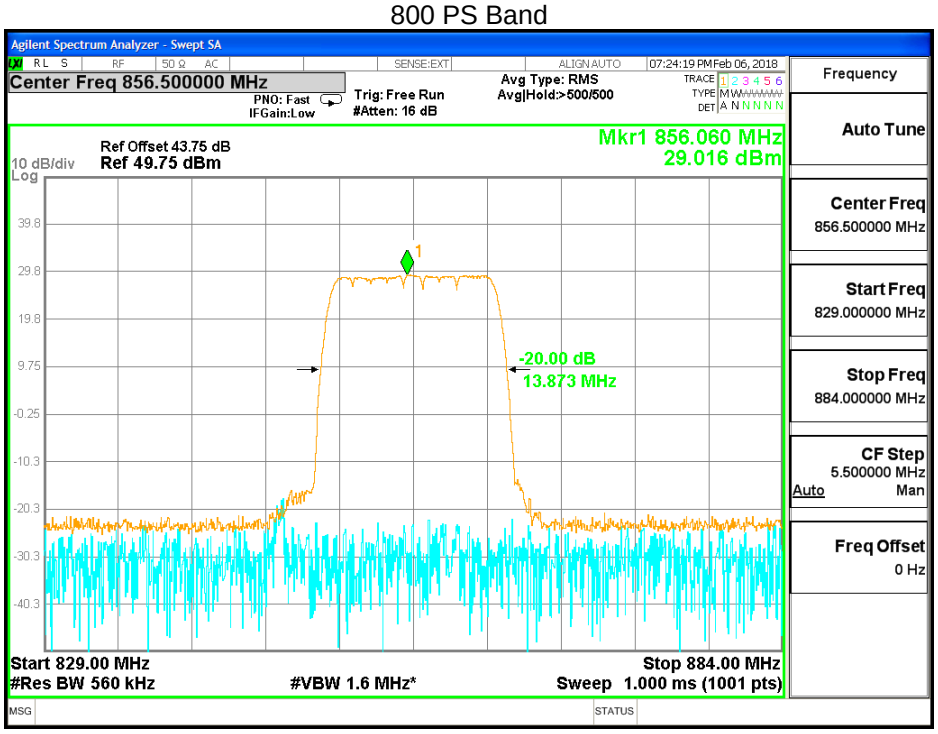
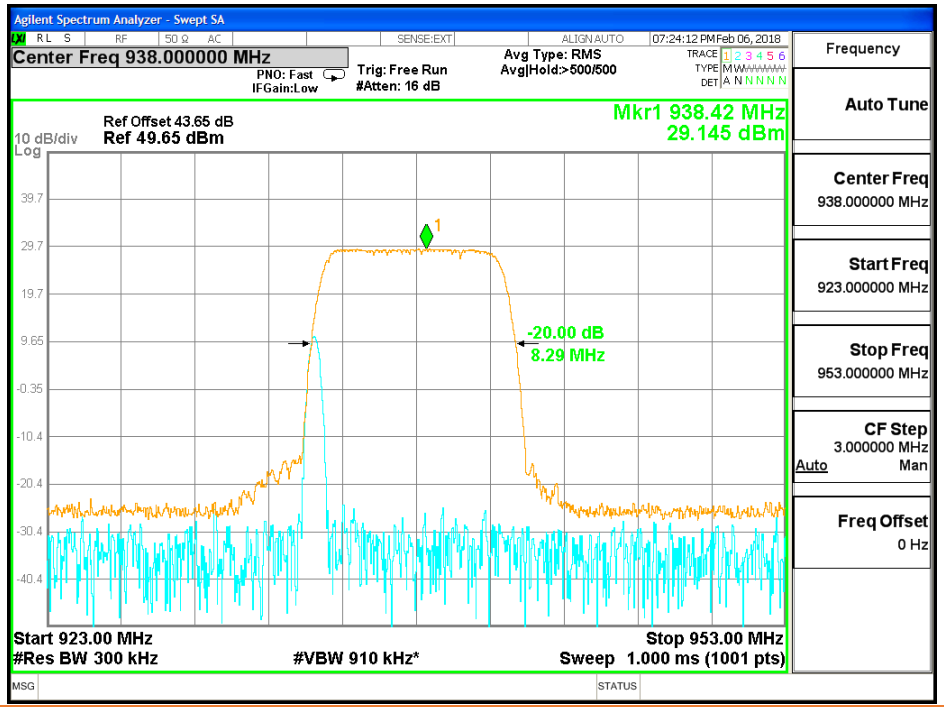
Results

800 PS Band



900 PS Band



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Intermodulation

Governing Doc	FCC Part 90.219	Room Temperature (°C)	24
Test Procedure	ANSI/TIA-603- E-2016; FCC KDB 935210 D05 Indus Booster Basic Meas v01r02: October, 2017	Relative Humidity (%)	33.9
Test Location	Burnaby	Barometric Pressure (kPa)	102.6
Test Engineer	Sophie Piao/Jeremy Lee	Date	Feb 06, 2018
EUT Voltage	☒ DC	☐ 120VAC @ 60Hz	

Test Equipment Used	Manufacturer	Model	Serial Number	Calibration	Calibration due
Signal Generator	Keysight	N5172B	MY53050270	08/04/17	08/04/18
Spectrum Analyzer	Keysight	N9010A	MY50520285	08/07/17	08/07/18
40dB Attenuator	Aeroflex Winschel	58-40-43	n/p	CVP	CVP

Note) CVP = Calibration Verification Performed internally, n/p = not provided.

Frequency Range:	☒ Max Gain Frequency ± 50kHz
Detector:	☒ Average
RBW/VBW:	☒100/910Hz
Type of Facility:	☒ Tabletop
Distance:	☒ Direct

On 800band: The intermodulation product of 2 tone is below the -13dBm ERP emission limit with input power

- 0.5dBm below AGC threshold and
- 3 dB above AGC threshold

On 900band: The intermodulation product of 2 tone is below the -20dBm ERP emission limit with input power

- 0.5dBm below AGC threshold and
- 3 dB above AGC threshold

with distribution loss ≥ 1dB.

Compliant ☒ Non-Compliant ☐ Not Applicable ☐

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Test setup

Description of test set-up:
The procedure used was ANSI/TIA-603-E-2016. Two tones (CW) method was used. The input power to the amplifier was set at maximum drive level by combining the two tones. The two tones were chosen in such a way (1) the third order intermodulation product frequencies are located within the pass band of the DUT and (2) they produce the worst-case emissions out of band. All signals were modulated. Based on FCC KDB 935210 D05 Indus Booster Basic Meas v01r02: 2017, the two tone was located on either side of the maximum gain frequence in the passing band, and separated with the available spacing, which is 12.5kHz in 800 MHz band and 900 MHz band. Measurements were performed with modulated -tone at identical input amplitude which produced integrated maximum rated output power. The EUT was set to **Operation Mode #1 with configuration Mode #1.**

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Results Summary

800 Band

2 Tone Frequency (MHz)	856.05375 & 856.06625	IMD Limit (-13 dBm)
3rd Order Intermodulation at Maximum Output Power at RF Port (dBm)	-18.617	-
3rd Order Intermodulation at ALC Actvie at RF Port (dBm)	-17.966	-
Minimum Distribution Loss Between RF Port and the Antenna Radiation (dB)	0	-
3rd Order Intermodulation at Maximum Output Power after Attenuation (dBm)	-18.617	PASS
3rd Order Intermodulation at ALC Actvie after Attenuation (dBm)	-17.966	PASS

900 Band

2 Tone Frequency (MHz)	938.41375 & 938.42625	IMD Limit (-20 dBm)
3rd Order Intermodulation at Maximum Output Power at RF Port (dBm)	-19.552	-
3rd Order Intermodulation at ALC Actvie at RF Port (dBm)	-19.396	-
Minimum Distribution Loss Between RF Port and the Antenna Radiation (dB)	1	-
3rd Order Intermodulation at Maximum Output Power after Attenuation (dBm)	-20.552	PASS
3rd Order Intermodulation at ALC Actvie after Attenuation (dBm)	-20.396	PASS

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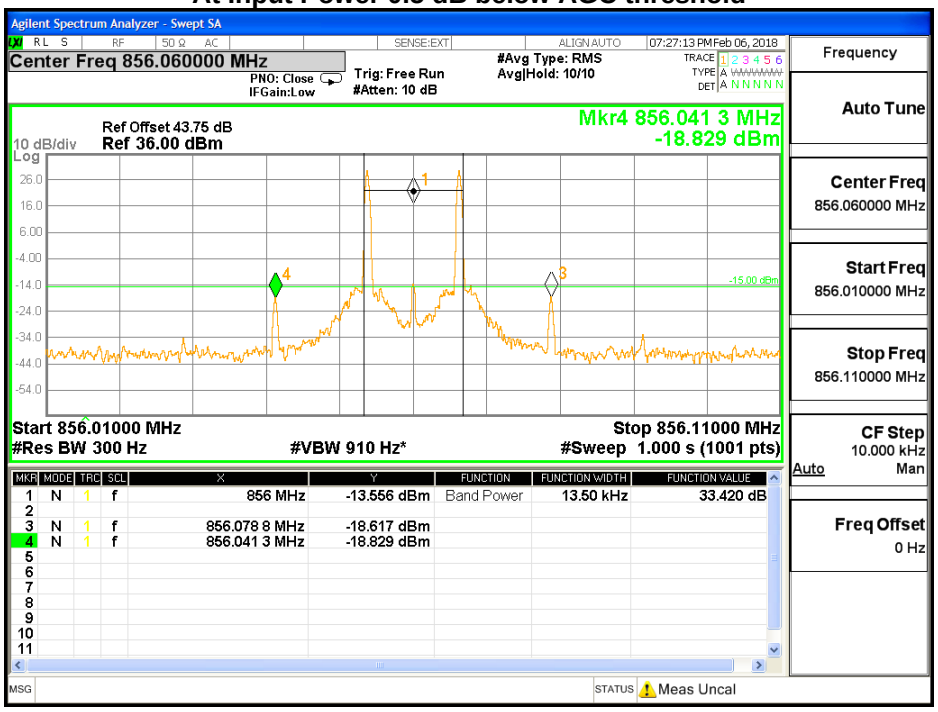
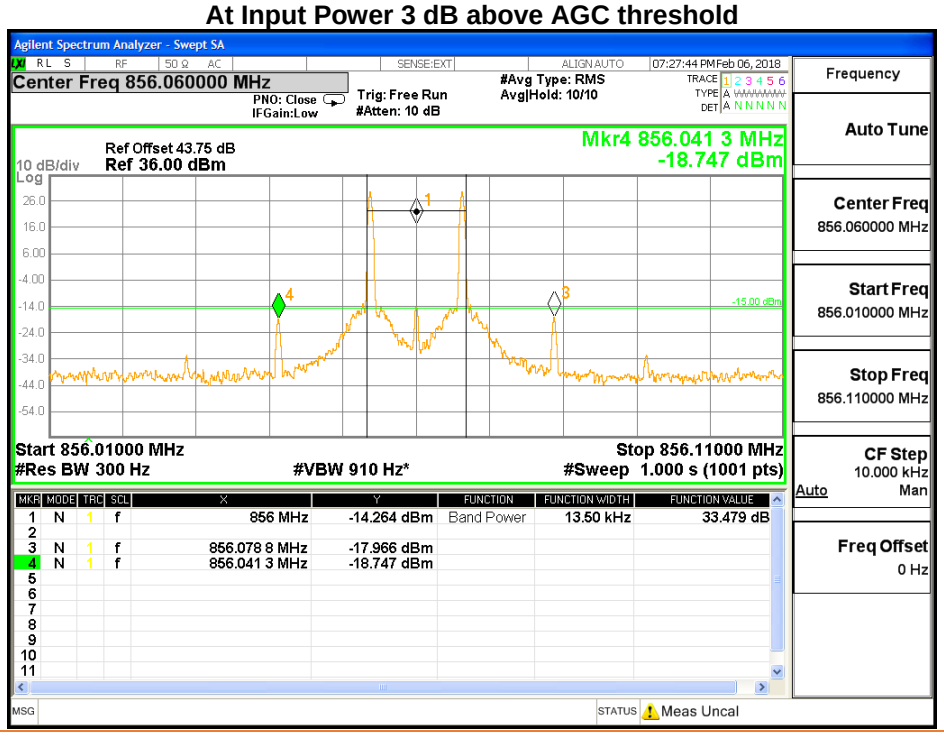
Results Screenshots

On the maximum gain channel 856.06 MHz:

At Input Power 0.5 dB below AGC threshold



At Input Power 3 dB above AGC threshold



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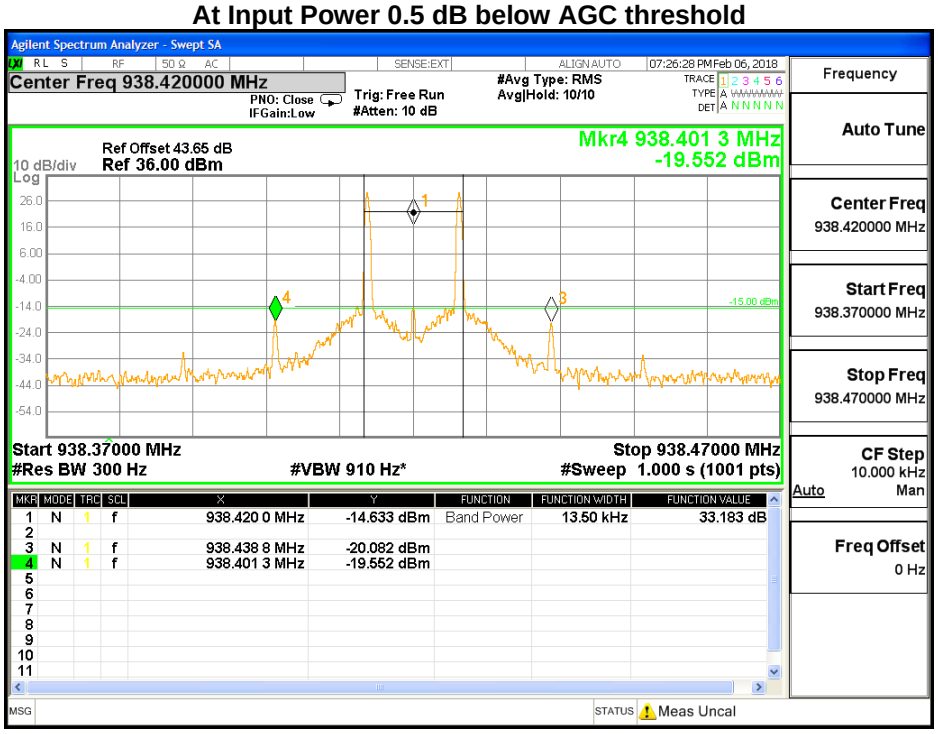
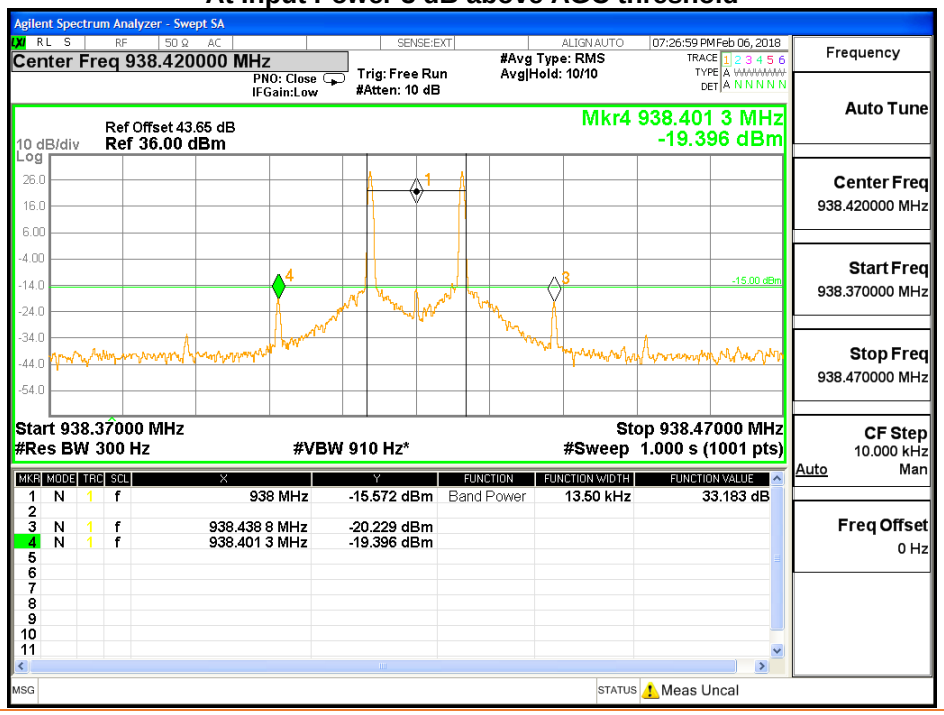
On the maximum gain channel 938.42 MHz:

At Input Power 0.5 dB below AGC threshold



At Input Power 3 dB above AGC threshold



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Input/output Power and Amplifier/Booster Gain

Governing Doc	FCC Part 90.219	Room Temperature (°C)	24
Test Procedure	ANSI/TIA-603-E-2016; FCC KDB 935210 D05 Indus Booster Basic Meas v01r02: October 27, 2017	Relative Humidity (%)	33.9
Test Location	Burnaby	Barometric Pressure (kPa)	102.6
Test Engineer	Sophie Piao/Jeremy Lee	Date	Feb 06, 2018
EUT Voltage	☒ DC	☐ 120VAC @ 60Hz	

Test Equipment Used	Manufacturer	Model	Identifier	Calibration	Calibration due
Signal Generator	Keysight	N5172B	MY53050270	08/04/17	08/04/18
Spectrum Analyzer	Keysight	N9010A	MY50520285	08/07/17	08/07/18
40dB Attenuator	Aeroflex Winschel	58-40-43	n/p	CVP	CVP

Note) CVP = Calibration Verification Performed internally, n/p = not provided.

Span:	☒ Max Gain Frequency ± 1500kHz
Detector:	☒ Peak
RBW/VBW:	☒100k Hz/ 300 kHz
Type of Facility:	☒ Tabletop
Distance:	☒ Direct

Maximum booster gain is 43.4 dB.

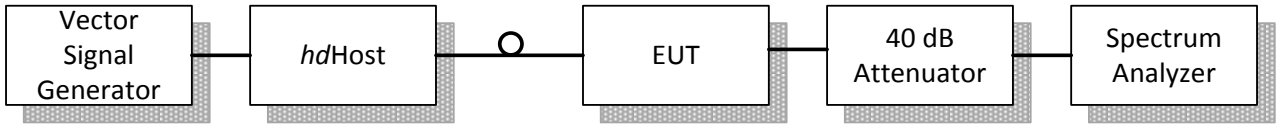
Compliant ☒ Non-Compliant ☐ Not Applicable ☐

Test setup

Description of test set-up:

The procedure used was ANSI/TIA-603-E-2016 and FCC KDB 935210 D05 Indus Booster Basic Meas v01r02:. A CW tone was input at the frequency where the system gain is the maximum in the pass band, with the nominal input power level -10 dBm. The spectrum analyzer was connected to the output RF port via a 50 Ohm 40 dB attenuator. The maximum hold trace and peak detector was used to capture the output power. The output power minus the input power (-10dBm) equals to the booster gain in dB.

The EUT was set to **Operation Mode #1 with configuration Mode #1.**



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Results

	800 band	900 band
DL Gain	43.4 dB	43.3 dB

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Noise Figure

Governing Doc	FCC Part 90.219	Room Temperature (°C)	24
Test Procedure	ANSI/TIA-603-E-2016; FCC KDB 935210 D05 Indus Booster Basic Meas v01r02: October 27, 2017	Relative Humidity (%)	35.5
Test Location	Burnaby	Barometric Pressure (kPa)	102.1
Test Engineer	Sophie Piao/Jeremy Lee	Date	Feb 13, 2018
EUT Voltage	☒ DC	☐ 120VAC @ 60Hz	

Test Equipment Used	Manufacturer	Model	Serial Number	Calibration	Calibration due
Spectrum Analyzer	Keysight	N9010A	MY50520285	08/07/17	08/07/18

Frequency Range:	☒ 2 times of the passband on each band
Detector:	☒ Average
RBW:	☒910 kHz
Type of Facility:	☒ Tabletop
Distance:	☒ Direct

Noise Figure on each band is less than the 9 dB required.

Compliant ☒ Non-Compliant ☐ Not Applicable ☐

Test setup

Description of test set-up:

Based on FCC KDB 935210 D05 Indus Booster Basic Meas v01r02: 2017, the system maximum gain and the noise density is measured.Measurements were performed within the EUT's passband.

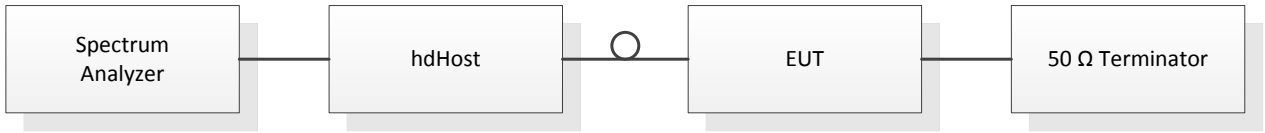
The noise figure is then calculated by NF = NP – Gain + KTB Noise; where

NP is in band noise power per Herz,

Gain is measured at the maximum noise frequence with -55 dBm input signal in UL.

KTB Noise is 174dB/Hz at room temperature.

The EUT was set to **Operation Mode #1 with configuration Mode #1.**



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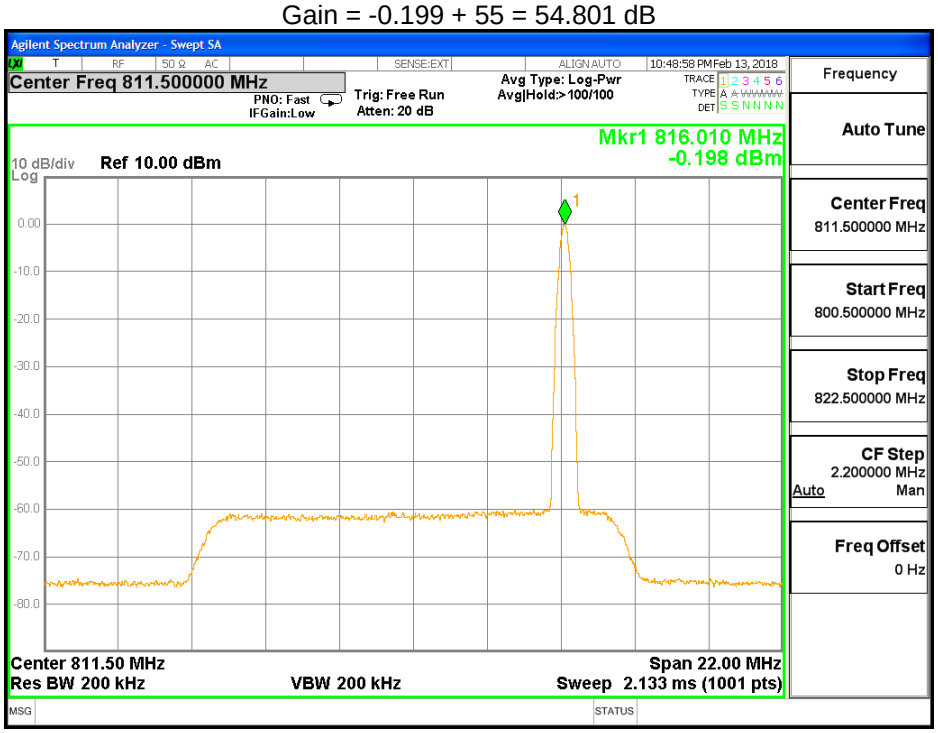
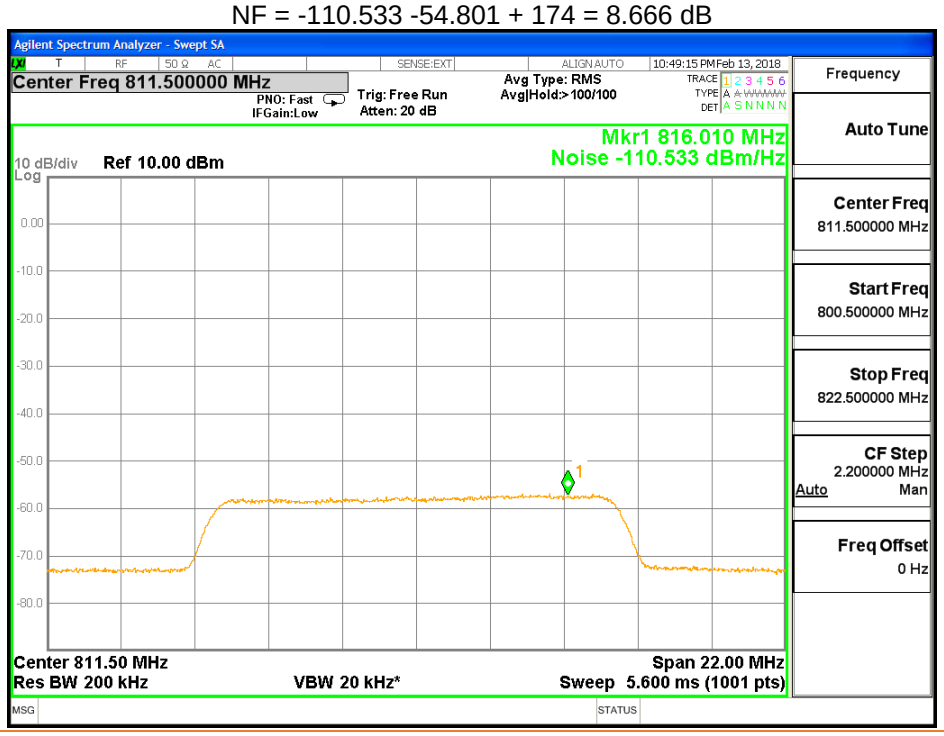
Results

800 MHz band

Gain = -0.199 + 55 = 54.801 dB



NF = -110.533 -54.801 + 174 = 8.666 dB



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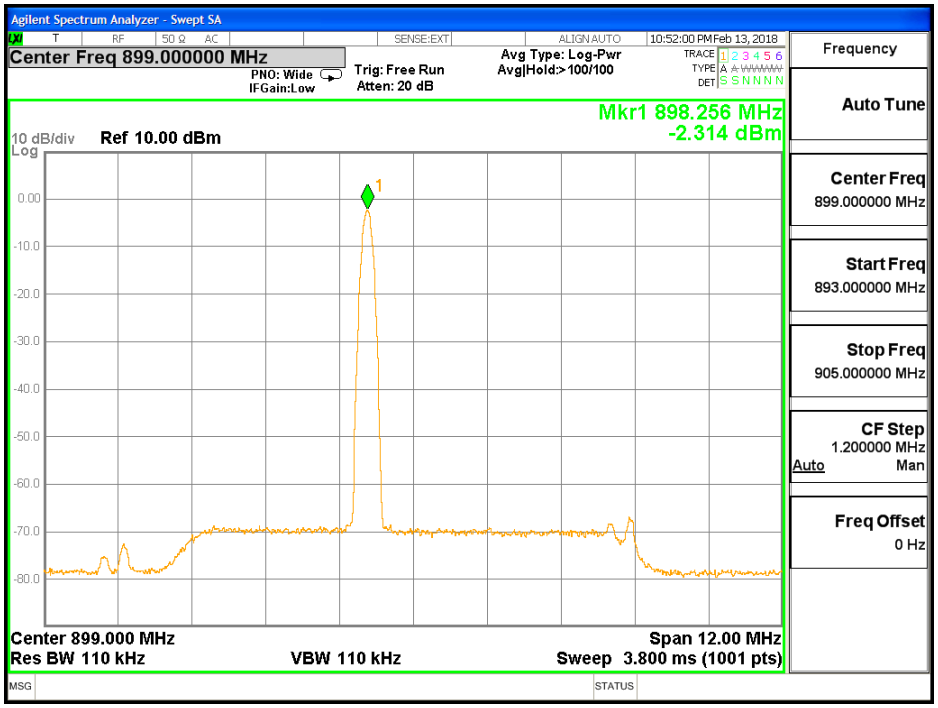
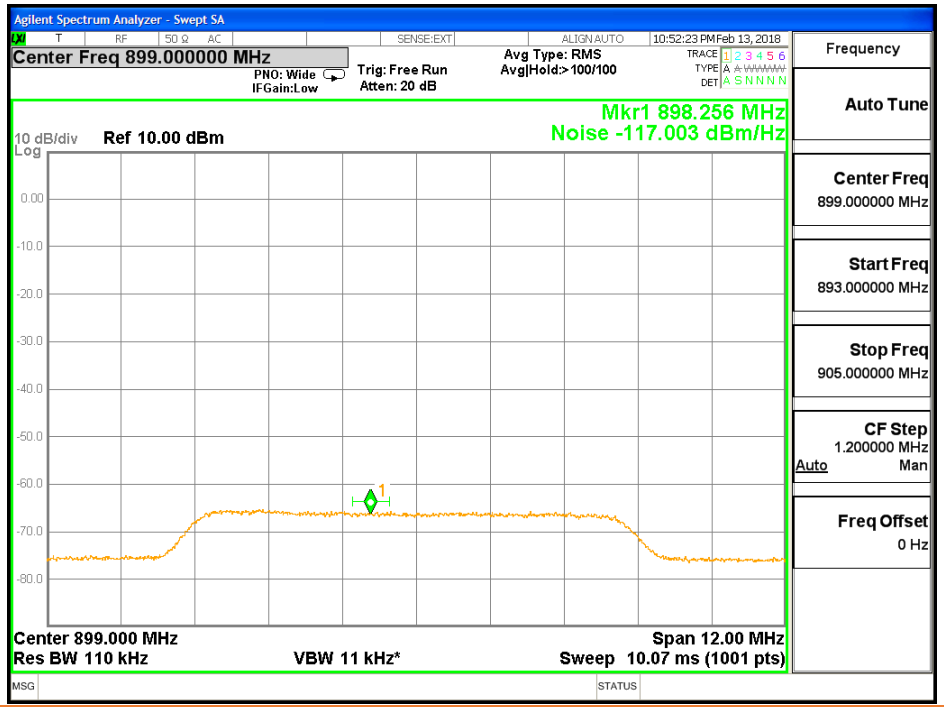
900 MHz band

Gain = -2.314 + 55 = 52.686 dB



NF = -117.003 -52.686 + 174 = 4.311 dB



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Radiated Emissions - Enclosure

Governing Doc	FCC Part 2.1053, FCC Part 90.210 & FCC Part 90.219	Room Temperature (°C)	23.6
Test Procedure	ANSI TIA-603-D	Relative Humidity (%)	36.0
Test Location	Richmond	Barometric Pressure (kPa)	101.9
Test Engineer	Daniel Lee	Date	02 February 2018
EUT Voltage	☒ DC	☐ 120VAC @ 60Hz	

Test Equipment Used	Manufacturer	Model	Identifier	Calibration date	Calibration
Spectrum Analyzer	KeySight	N9038A	702	18-Apr-2017	18-Apr-2018
Broadband Antenna	Sunol	JB1	371	29-Mar-2016	29-Mar-2018
Loop Antenna	ComPower	AL-130	241	11-Nov-2017	11-Nov-2019
Horn Antenna	A.H Systems	SAS-571	227C	22-Sep-2016	22-Sep-2018
RF Preamplifier	Agilent	8449B	273	NCR	NCR
EMC Shielded Enclosure	USC	USC-26	374	NCR[1]	NCR[1]

Note1) NCR = No Calibration Required, but NSA was done at 2015.

Frequency Range:	☒ 9kHz-30MHz	☒ 30-1000MHz	☒ 1-10GHz
Detector:	☒ Peak (for Prescan)	☒ Quasi-Peak(for Formal))	☒ Average(for Formal)
RBW/VBW:	☒ 9/30kHz	☒ 120/300kHz	☒ 1/3MHz
Type of Facility:	☒ SAC	☐ FSOATS	☐ *in-situ*
Distance:	☒ 3meter	☐ 10meter	☐ 1meter
Arrangement of EUT:	☒ Table-top only	☐ Floor-standing only	☐ Rack Mounted

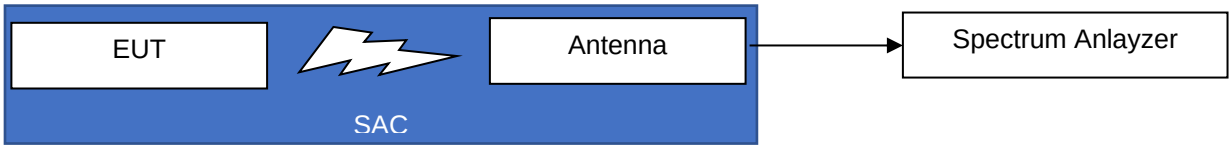
Compliant ☒ Non-Compliant ☐ Not Applicable ☐

Test setup

Description of test set-up:

The EUT was placed on a nonconducting platform (i.e., an “EUT support table”), of nominal size 1 m by 1.5 m, whose top surface is nominally 80 cm above the reference ground plane. The EUT was set up on 3 meters away from the EUT. The EUT was set continually on its Radio, 2W Max., which was downlinked from hdHOST. And the output of RF was terminated via 40dB attenuator, for rejecting the high power of carrier. The lowest, middle and highest channels were used for measuring of all radiated spurious emisions .

The EUT was set to **Operation Mode #1 with configuration Mode #1.**



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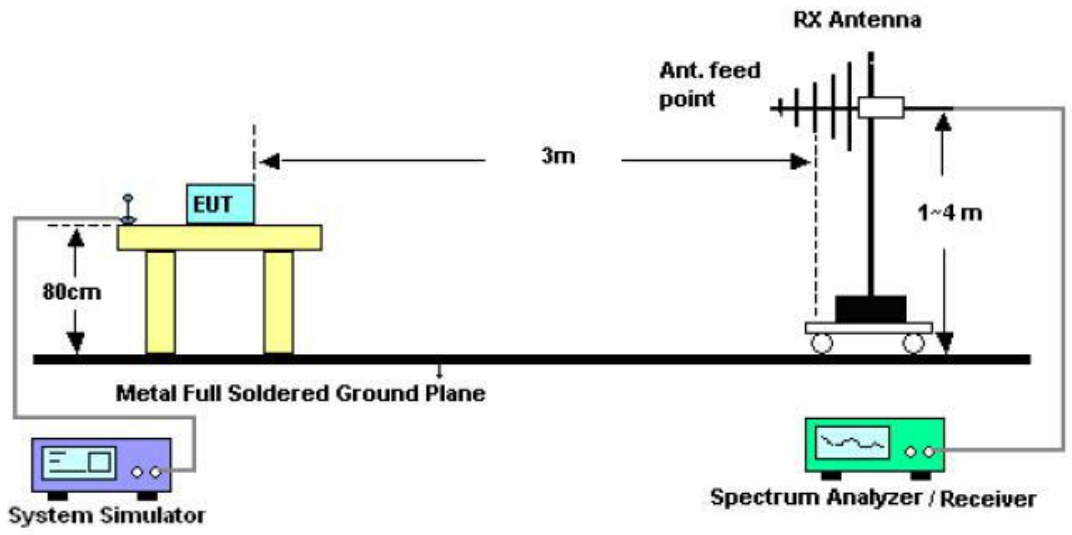
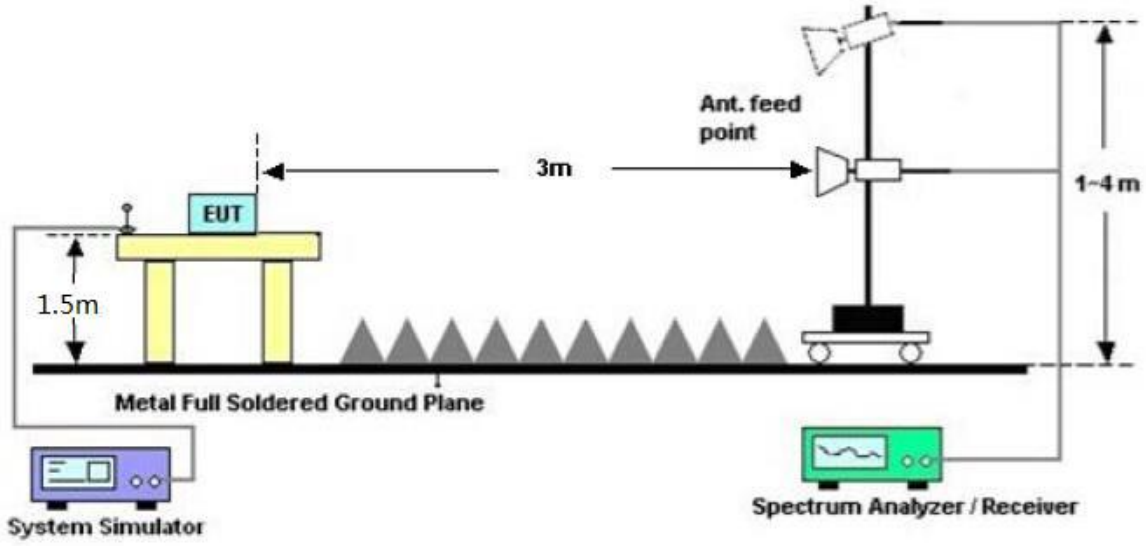
- Radiated Emission 30 to 1,000MHz, with JB-1



- Radiated Emission 1 to 10GHz, with SAS-571



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Measurement Procedure

Testing was performed in accordance with the test standard(s) referenced in the test summary section of this report. The Equipment Under Test (EUT) was configured based upon the requirements of the applicable test standard. Initially, the primary emission frequencies are identified by positioning a broadband receive antenna three meter from the EUT.

Scans were made with an EMC Analyzer, controlled by EMC Test Software, Tile7!, from 30kHz to 18GHz with the receiver in the peak mode. The receiver IF bandwidth was 9kHz,120 kHz or 1MHz as appropriate for the frequency and scan step was about 30kHz. To ensure that the maximum emission at each discrete frequency of interest is observed, the receive antenna is varied in height from one to four meters and rotated to produce horizontal and vertical polarities while the turntable is rotated to determine the worst emitting configuration. Under 30MHz was only tested at 1meter height and Antenna was changed both polarization, Horizontal and Vertical. Measurements were then made using CISPR quasi peak when the peak readings were within 10dB of the limit line. The numerical results are included herein to demonstrate compliance.

Test Result

The output of EUT was set to 2 Watt(+33dBm).
1. the PASS level of Spurious for 800MHz Band is: 43 + 10log(P) = 43 + 10log(2) = 46.0dB attenuation = -13dBm. Since of radiated measurement was performed at 3 meters, the limit line was converted to dBuV/m using the formulas ad outlined in KDB 971168: -13 dBm ERP = 84.38 dBuV/m at 3 meters.

2. the PASS level of Spurious for 900MHz Band is: 50 + 10log(P) = 50 + 10log(2) = 53.0dB attenuation = -20dBm. Since of radiated measurement was performed at 3 meters, the limit line was converted to dBuV/m using the formulas ad outlined in KDB 971168: -20 dBm ERP = 77.38 dBuV/m at 3 meters.

Spurious Emission level (dBuV/m) = Detected level (dBuV) + Path Loss(dB) + Antenna Factor (dB/m) - Preamplifier's Gain (dB)

Graphical Representation for Emission - Radiated 30kHz to 30MHz

Spectrum was scanned manually from 30kHz to 30MHz. No automated plot is available for this frequency range. No spurious emissions from the product were detectable

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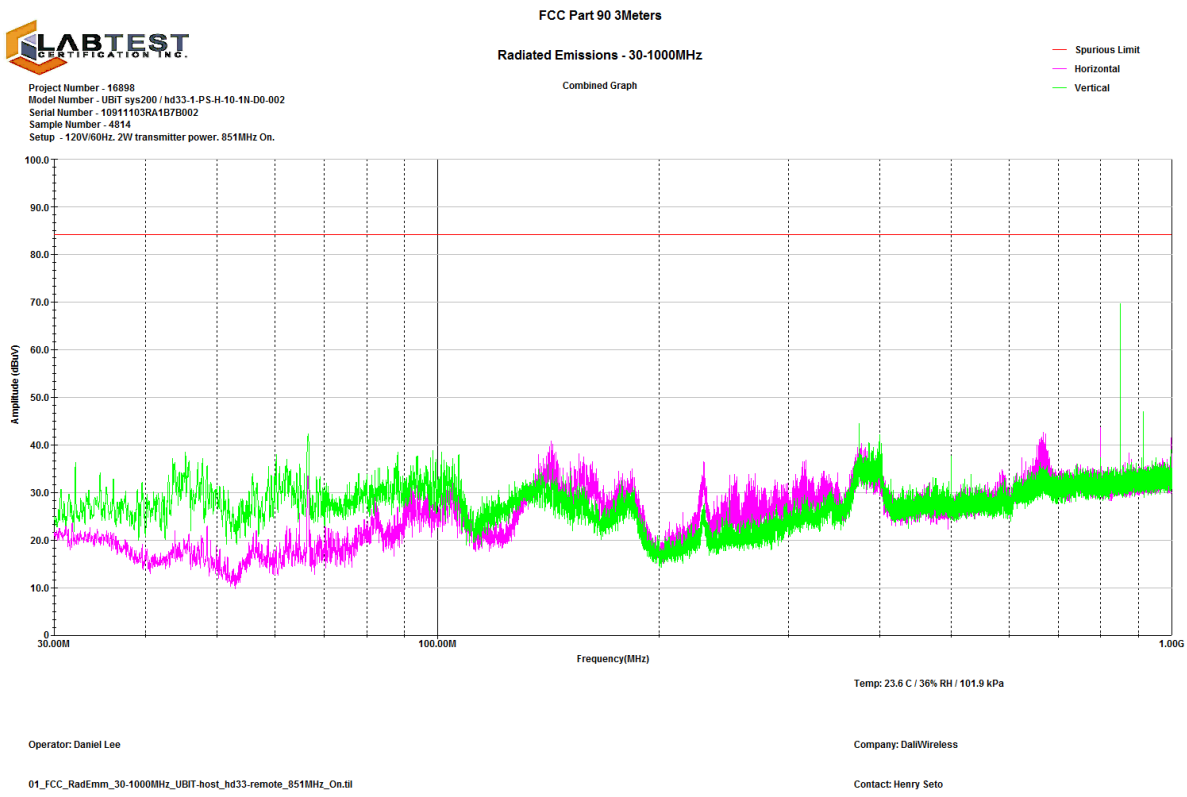
Graphical and Table Representation for Emission - Radiated 30MHz to 1GHz

- Signal On_851MHz, Terminated.



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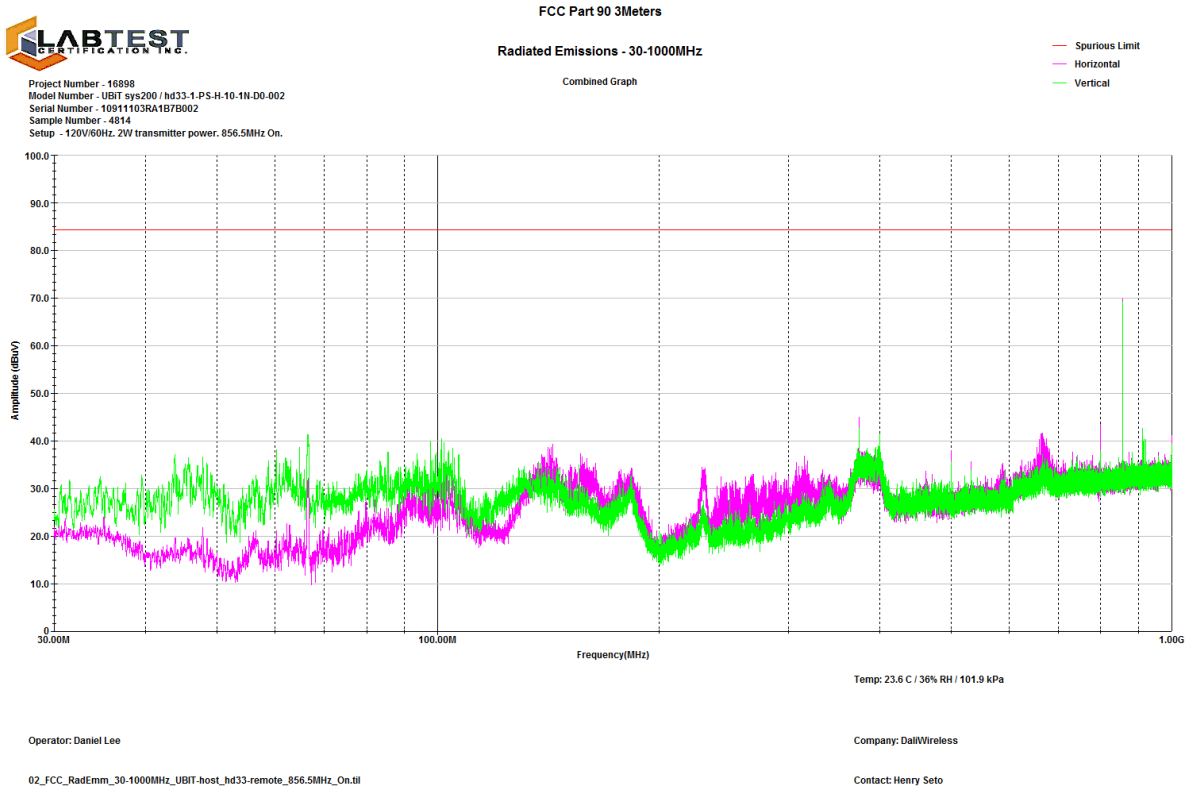
- Signal On_856.5MHz, Terminated.



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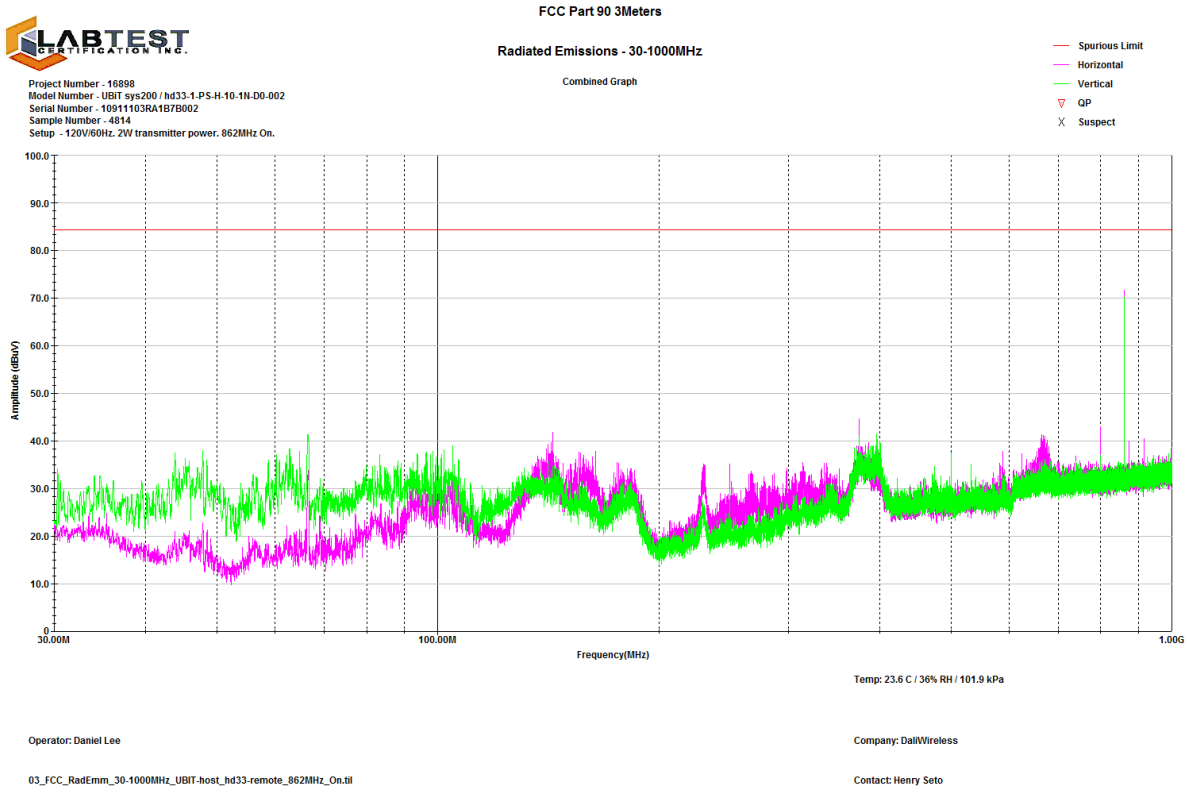
- Signal On_862MHz, Terminated.



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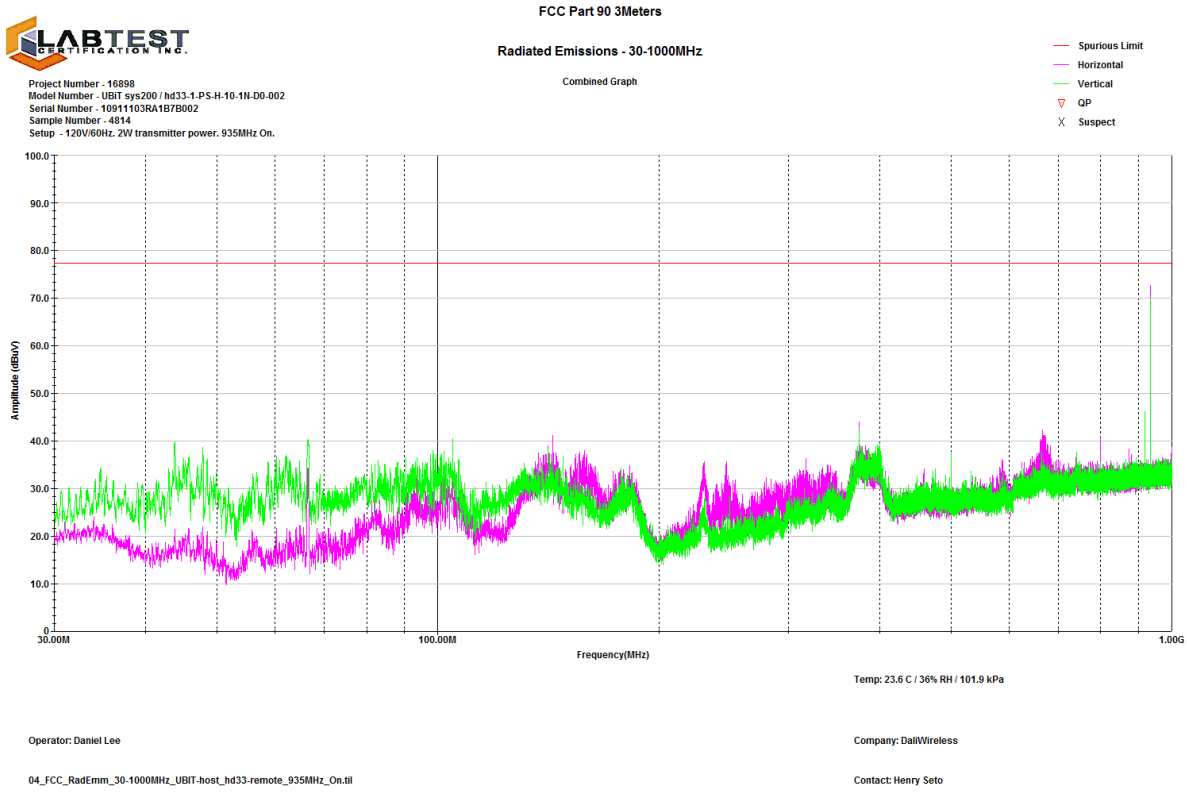
- Signal On_935MHz, Terminated.



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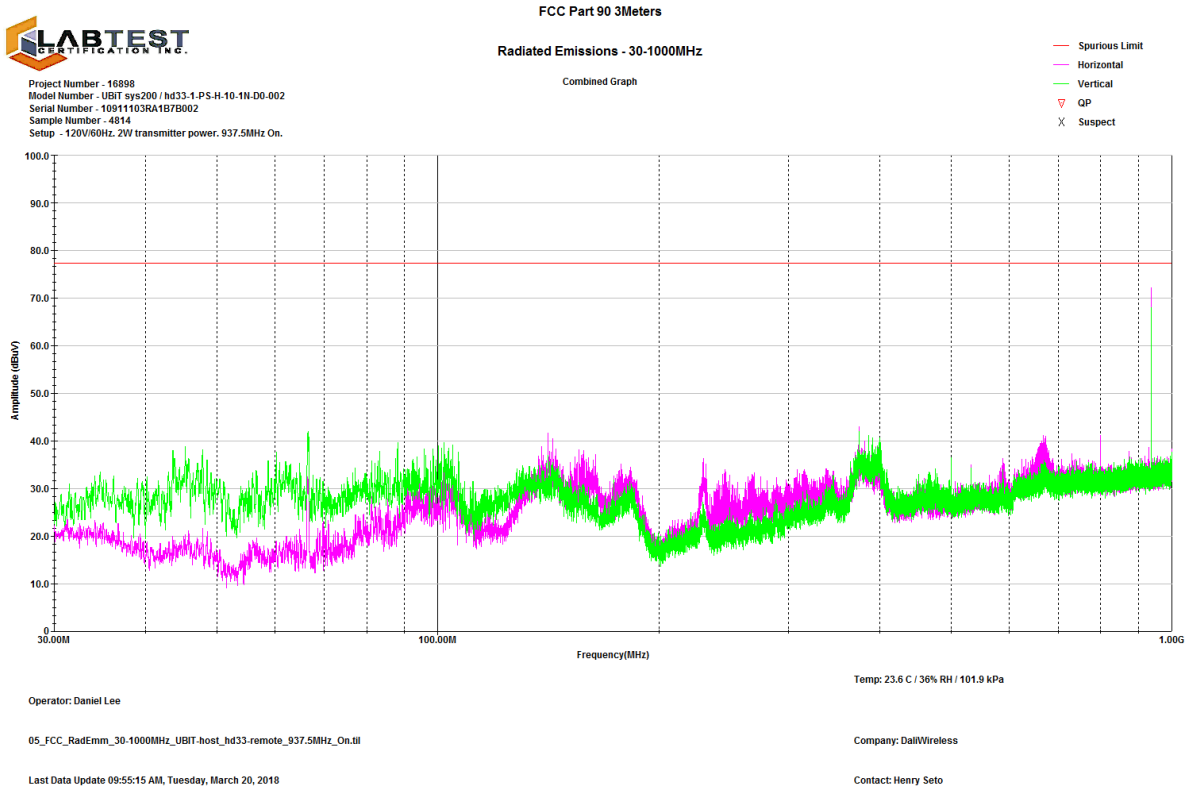
- Signal On_937.5MHz, Terminated.



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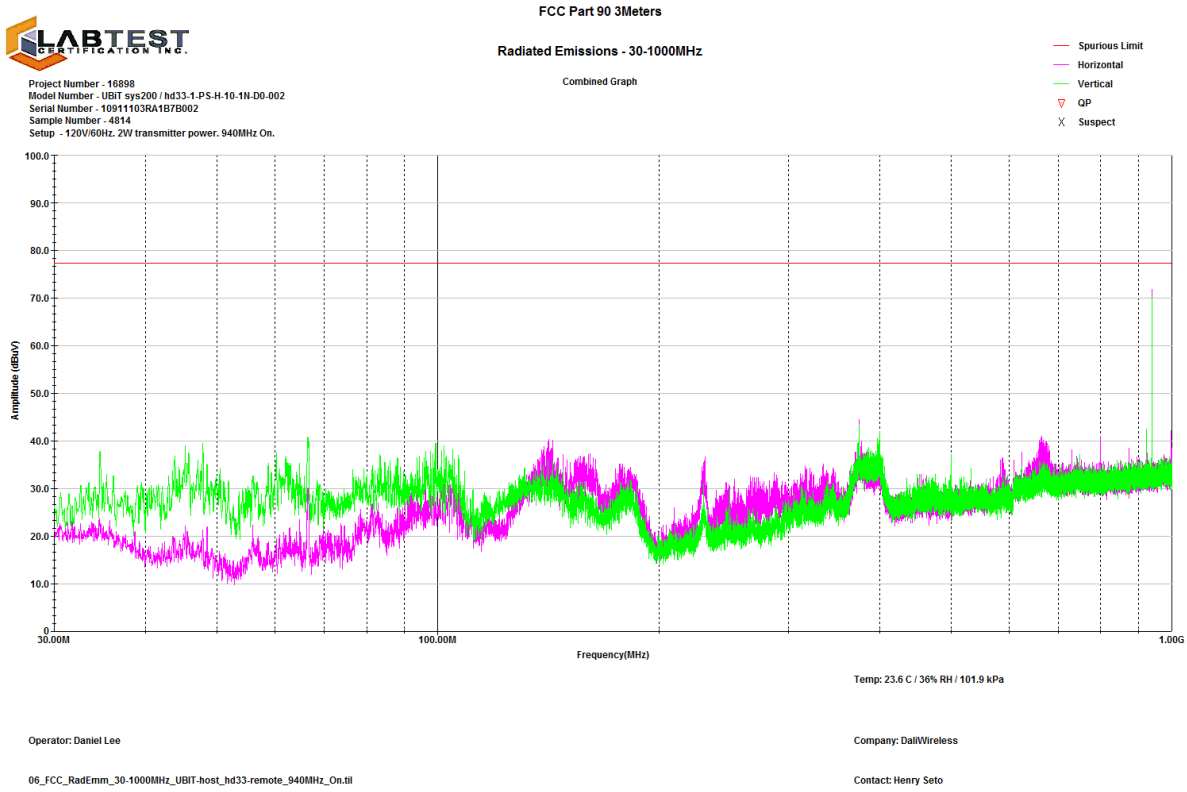
- Signal On_940MHz, Terminated.



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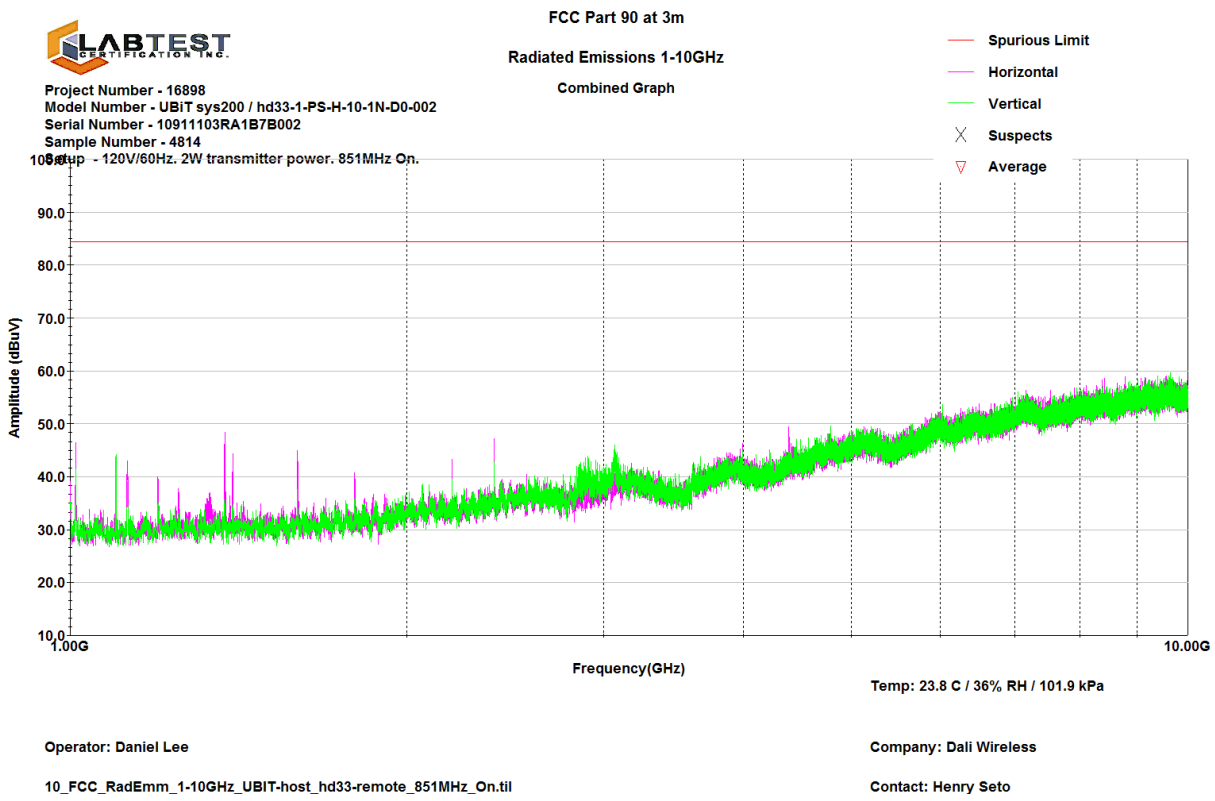
Graphical and Table Representation for Emission - Radiated 1 to 10GHz

- Signal On_851MHz, Terminated.



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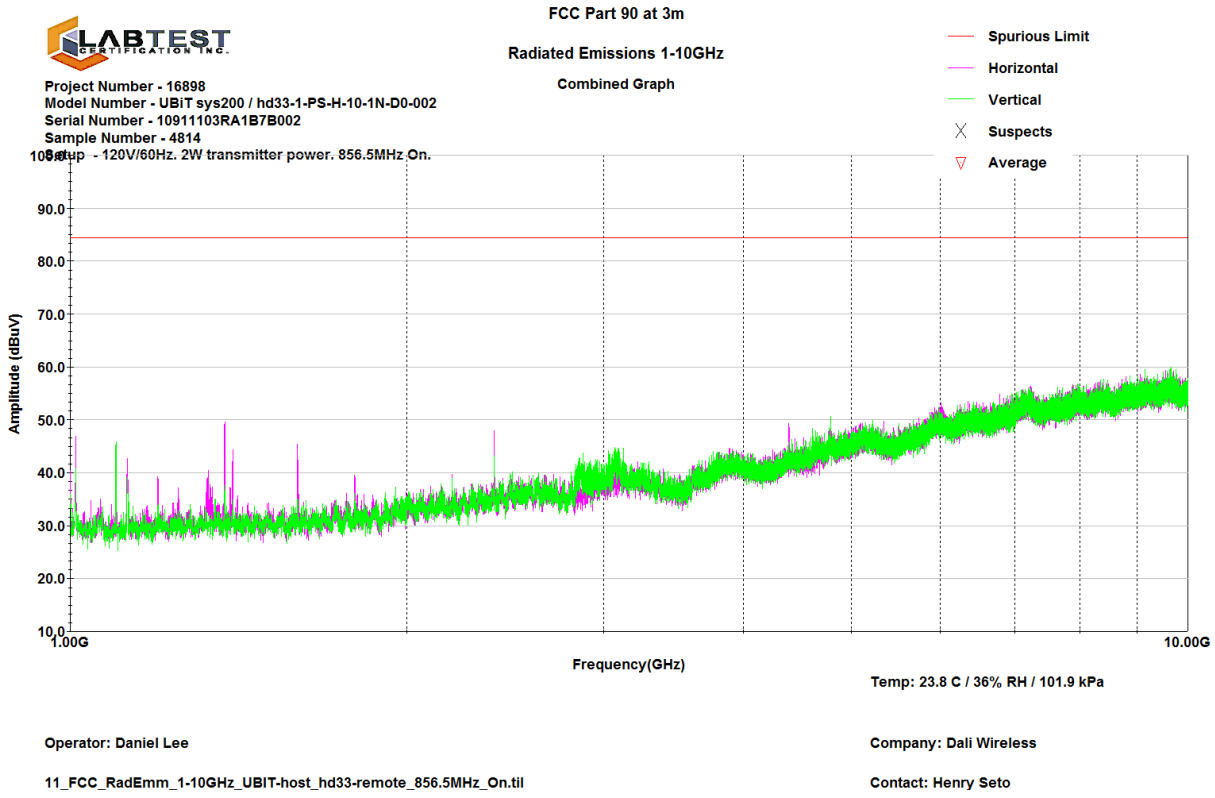
- Signal On_856.5MHz, Terminated.



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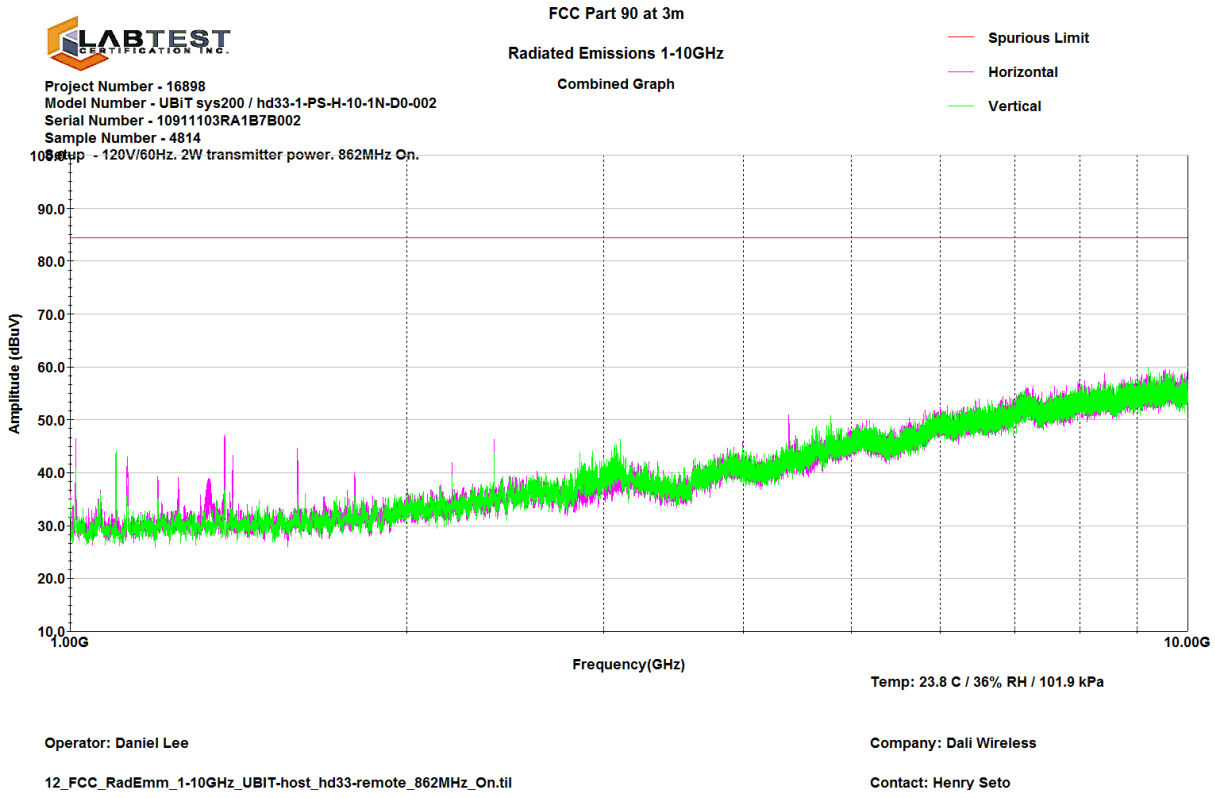
- Signal On_862MHz, Terminated.



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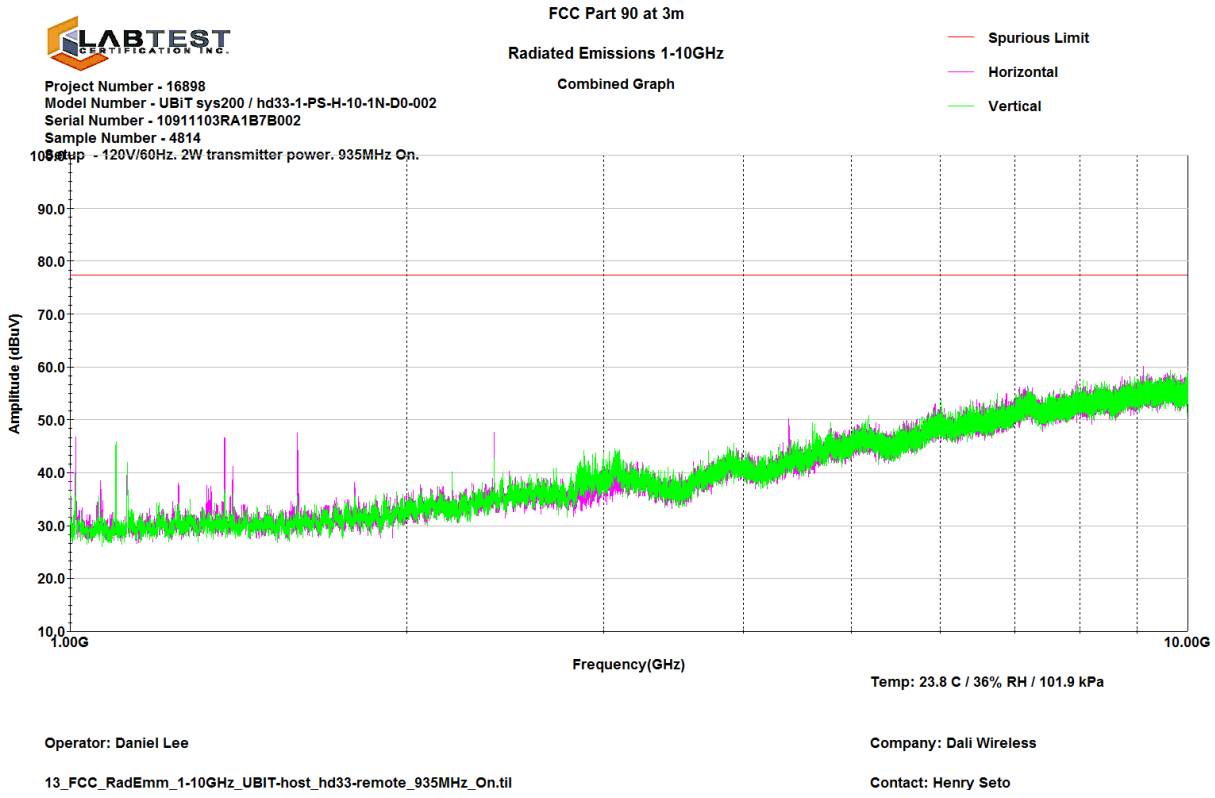
- Signal On_935MHz, Terminated.



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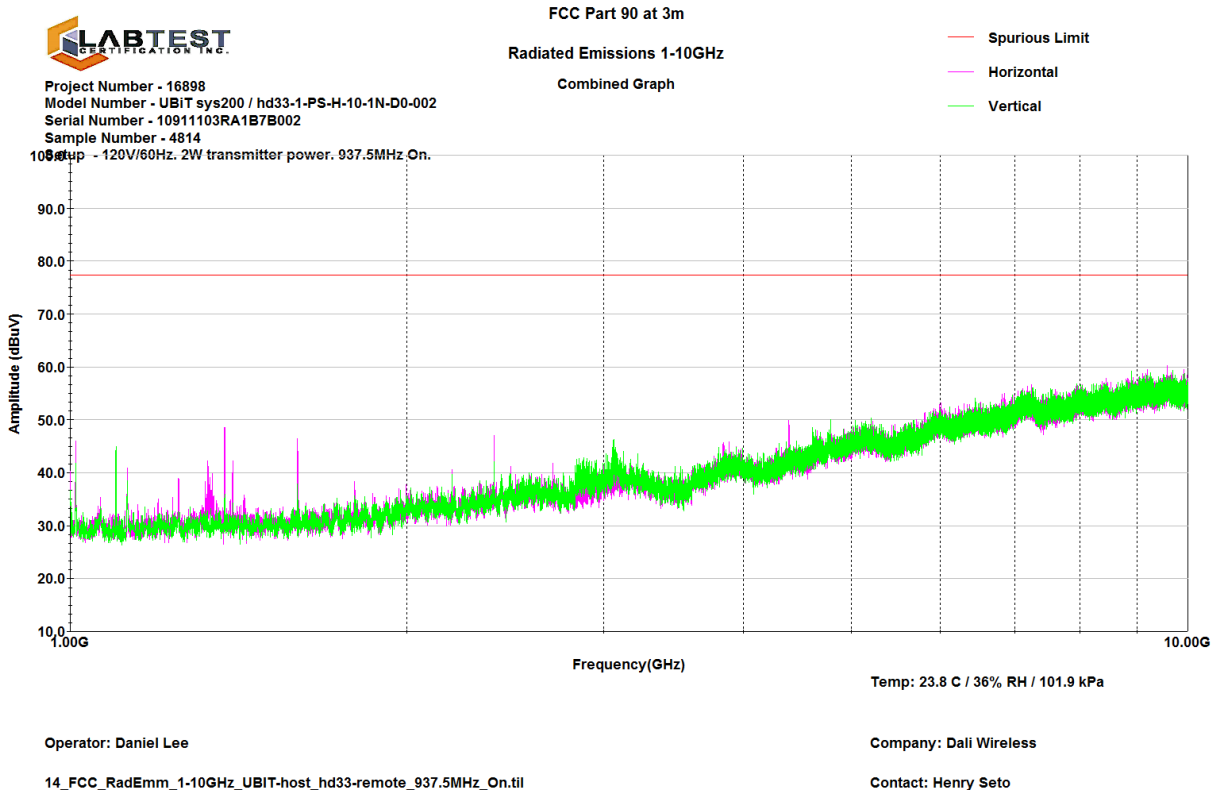
- Signal On_937.5MHz, Terminated.



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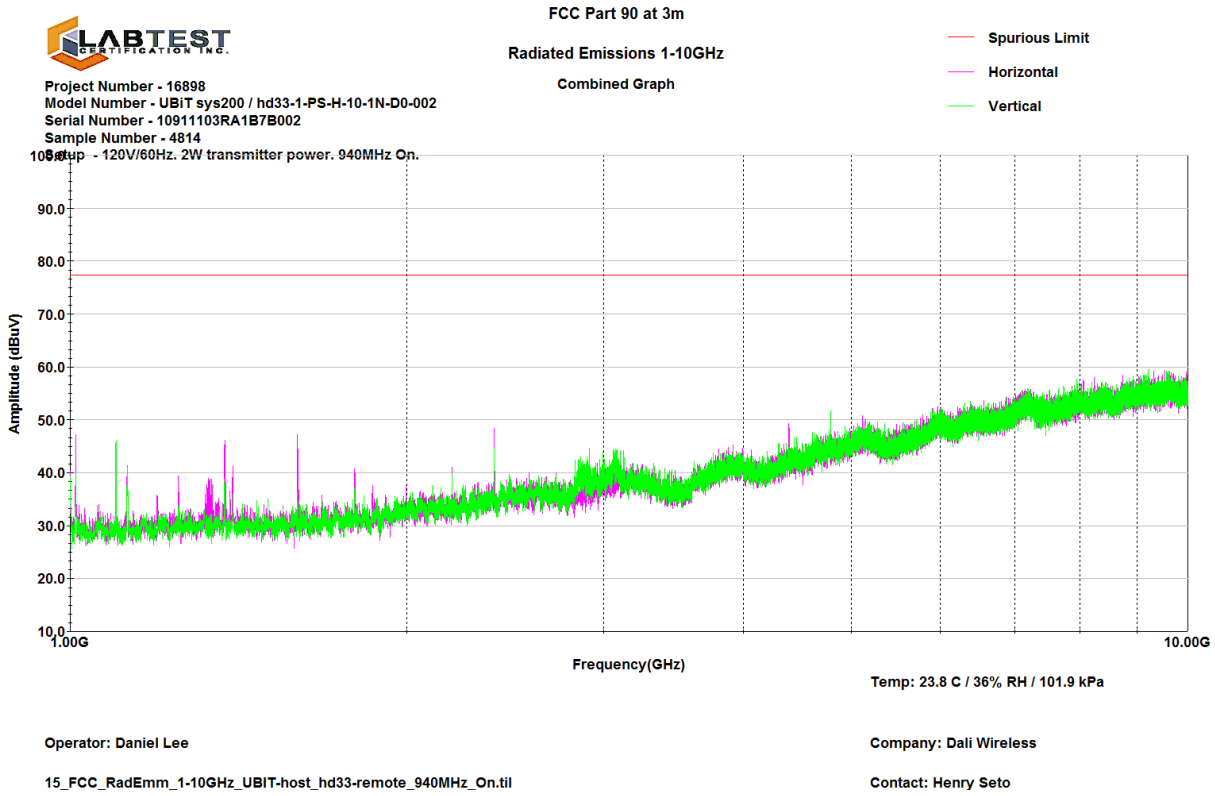
- Signal On_940MHz, Terminated.



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