



8.1 Appendix A: Conducted Output Power

Test Result

Band	Channel	Power(dBm)	Limit(dBm)	Verdict
Band II	9262	21.95	33	PASS
Band II	9400	22.01	33	PASS
Band II	9538	20.56	33	PASS
Band IV	1312	21.74	30	PASS
Band IV	1413	22.30	30	PASS
Band IV	1513	21.61	30	PASS
Band V	4132	24.27	38.5	PASS
Band V	4182	23.56	38.5	PASS
Band V	4233	23.29	38.5	PASS

Band	Channel	SubTest	Power(dBm)	Limit(dBm)	Verdict
Band II	9262	HSDPA_Sub0	20.94	33	PASS
Band II	9262	HSDPA_Sub1	20.22	33	PASS
Band II	9262	HSDPA_Sub2	20.13	33	PASS
Band II	9262	HSDPA_Sub3	20.40	33	PASS
Band II	9400	HSDPA_Sub0	21.05	33	PASS
Band II	9400	HSDPA_Sub1	20.53	33	PASS
Band II	9400	HSDPA_Sub2	20.51	33	PASS
Band II	9400	HSDPA_Sub3	20.53	33	PASS
Band II	9538	HSDPA_Sub0	19.43	33	PASS
Band II	9538	HSDPA_Sub1	19.90	33	PASS
Band II	9538	HSDPA_Sub2	19.91	33	PASS
Band II	9538	HSDPA_Sub3	19.91	33	PASS
Band IV	1312	HSDPA_Sub0	20.72	30	PASS
Band IV	1312	HSDPA_Sub1	20.08	30	PASS
Band IV	1312	HSDPA_Sub2	20.09	30	PASS
Band IV	1312	HSDPA_Sub3	20.27	30	PASS
Band IV	1413	HSDPA_Sub0	21.29	30	PASS
Band IV	1413	HSDPA_Sub1	20.77	30	PASS
Band IV	1413	HSDPA_Sub2	20.79	30	PASS
Band IV	1413	HSDPA_Sub3	20.60	30	PASS
Band IV	1513	HSDPA_Sub0	20.65	30	PASS
Band IV	1513	HSDPA_Sub1	19.97	30	PASS
Band IV	1513	HSDPA_Sub2	19.97	30	PASS
Band IV	1513	HSDPA_Sub3	20.15	30	PASS
Band V	4132	HSDPA_Sub0	23.36	38.5	PASS
Band V	4132	HSDPA_Sub1	22.89	38.5	PASS
Band V	4132	HSDPA_Sub2	22.72	38.5	PASS
Band V	4132	HSDPA_Sub3	22.90	38.5	PASS
Band V	4182	HSDPA_Sub0	22.65	38.5	PASS
Band V	4182	HSDPA_Sub1	22.18	38.5	PASS



Band V	4182	HSDPA_Sub2	22.32	38.5	PASS
Band V	4182	HSDPA_Sub3	22.31	38.5	PASS
Band V	4233	HSDPA_Sub0	22.35	38.5	PASS
Band V	4233	HSDPA_Sub1	21.88	38.5	PASS
Band V	4233	HSDPA_Sub2	21.92	38.5	PASS
Band V	4233	HSDPA_Sub3	21.91	38.5	PASS

Band	Channel	SubTest	Power(dBm)	Limit(dBm)	Verdict
Band II	9262	HSUPA_Sub1	20.16	33	PASS
Band II	9262	HSUPA_Sub2	19.62	33	PASS
Band II	9262	HSUPA_Sub3	19.55	33	PASS
Band II	9262	HSUPA_Sub4	20.10	33	PASS
Band II	9262	HSUPA_Sub5	20.94	33	PASS
Band II	9400	HSUPA_Sub1	20.71	33	PASS
Band II	9400	HSUPA_Sub2	20.08	33	PASS
Band II	9400	HSUPA_Sub3	19.99	33	PASS
Band II	9400	HSUPA_Sub4	20.40	33	PASS
Band II	9400	HSUPA_Sub5	21.12	33	PASS
Band II	9538	HSUPA_Sub1	19.48	33	PASS
Band II	9538	HSUPA_Sub2	19.65	33	PASS
Band II	9538	HSUPA_Sub3	19.36	33	PASS
Band II	9538	HSUPA_Sub4	19.03	33	PASS
Band II	9538	HSUPA_Sub5	20.10	33	PASS
Band IV	1312	HSUPA_Sub1	20.76	30	PASS
Band IV	1312	HSUPA_Sub2	20.03	30	PASS
Band IV	1312	HSUPA_Sub3	20.11	30	PASS
Band IV	1312	HSUPA_Sub4	20.51	30	PASS
Band IV	1312	HSUPA_Sub5	21.34	30	PASS
Band IV	1413	HSUPA_Sub1	21.53	30	PASS
Band IV	1413	HSUPA_Sub2	21.11	30	PASS
Band IV	1413	HSUPA_Sub3	20.29	30	PASS
Band IV	1413	HSUPA_Sub4	21.04	30	PASS
Band IV	1413	HSUPA_Sub5	22.31	30	PASS
Band IV	1513	HSUPA_Sub1	20.32	30	PASS
Band IV	1513	HSUPA_Sub2	19.84	30	PASS
Band IV	1513	HSUPA_Sub3	19.43	30	PASS
Band IV	1513	HSUPA_Sub4	20.05	30	PASS
Band IV	1513	HSUPA_Sub5	21.27	30	PASS
Band V	4132	HSUPA_Sub1	23.06	38.5	PASS
Band V	4132	HSUPA_Sub2	22.09	38.5	PASS
Band V	4132	HSUPA_Sub3	21.92	38.5	PASS
Band V	4132	HSUPA_Sub4	22.46	38.5	PASS
Band V	4132	HSUPA_Sub5	23.64	38.5	PASS
Band V	4182	HSUPA_Sub1	23.03	38.5	PASS



Band V	4182	HSUPA_Sub2	22.27	38.5	PASS
Band V	4182	HSUPA_Sub3	21.16	38.5	PASS
Band V	4182	HSUPA_Sub4	22.17	38.5	PASS
Band V	4182	HSUPA_Sub5	23.39	38.5	PASS
Band V	4233	HSUPA_Sub1	22.42	38.5	PASS
Band V	4233	HSUPA_Sub2	21.78	38.5	PASS
Band V	4233	HSUPA_Sub3	21.72	38.5	PASS
Band V	4233	HSUPA_Sub4	22.28	38.5	PASS
Band V	4233	HSUPA_Sub5	23.07	38.5	PASS



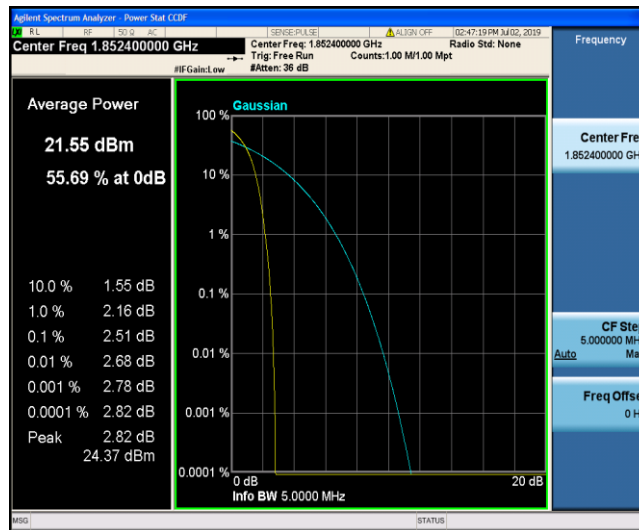
8.2 Appendix B: Peak-to-Average Ratio

Test Result

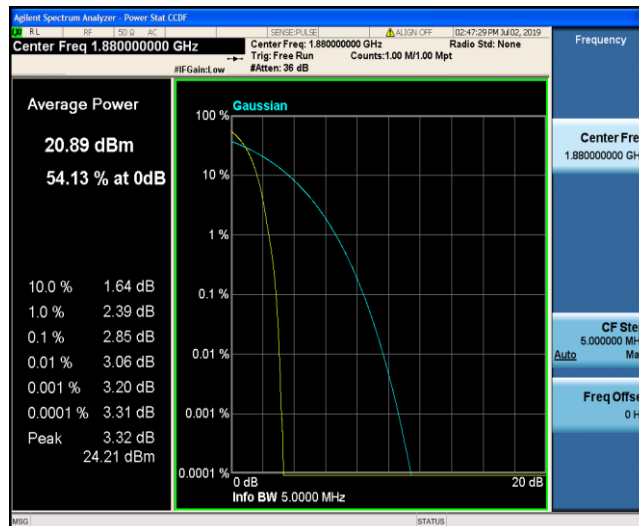
Band	Channel	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band II	9262	2.51	13	PASS
Band II	9400	2.85	13	PASS
Band II	9538	2.88	13	PASS
Band IV	1312	2.92	13	PASS
Band IV	1413	2.92	13	PASS
Band IV	1513	2.92	13	PASS
Band V	4132	3.02	13	PASS
Band V	4182	3.00	13	PASS
Band V	4233	3.03	13	PASS



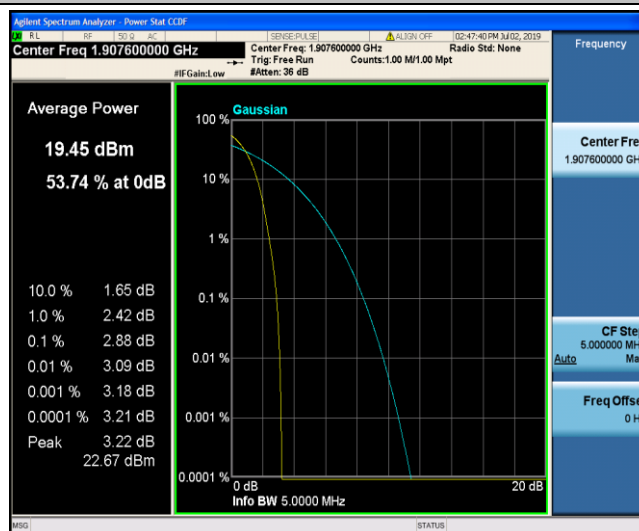
Test Graphs



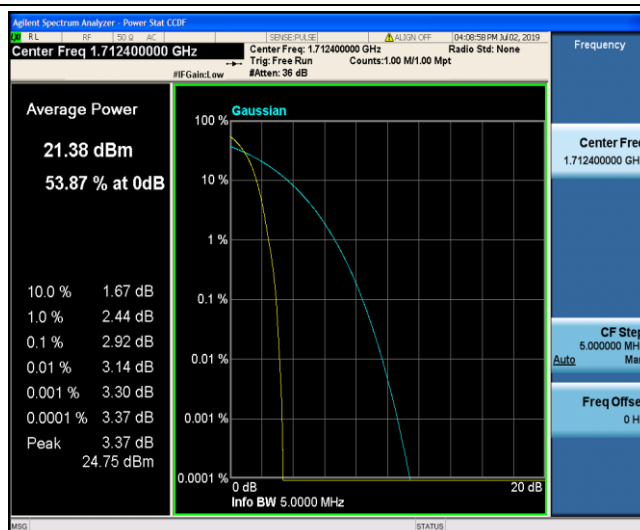
Band II_9262



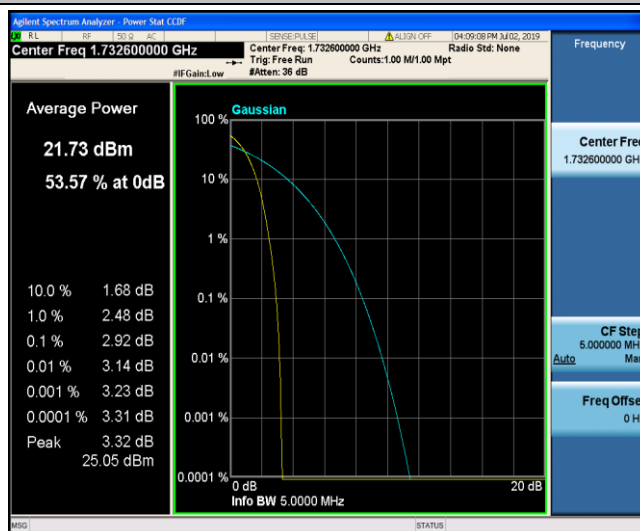
Band II_9400



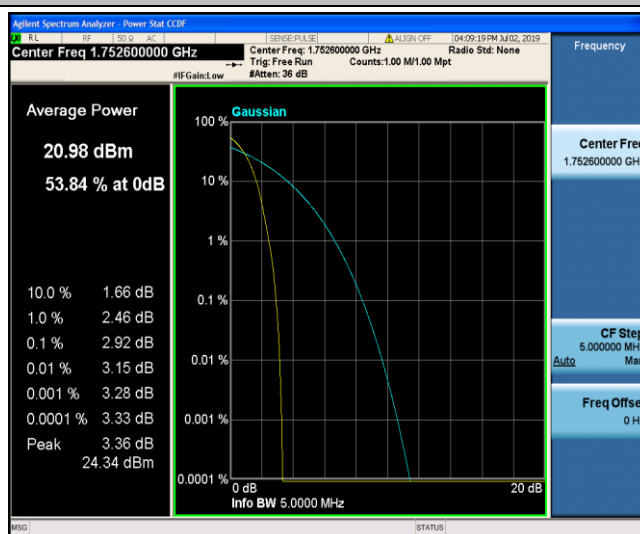
Band II_9538



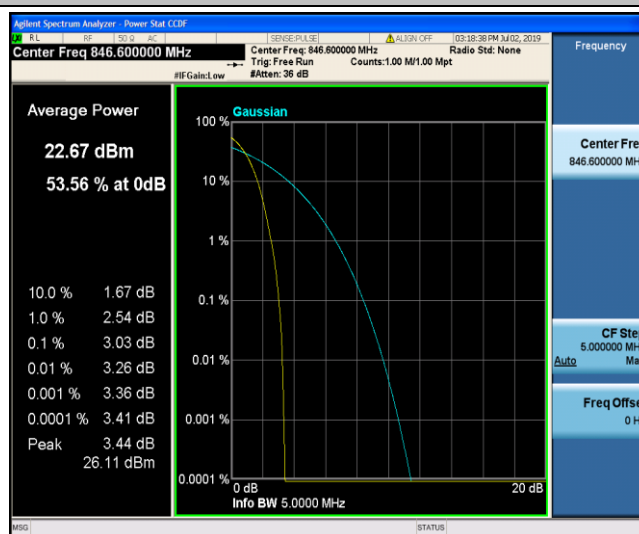
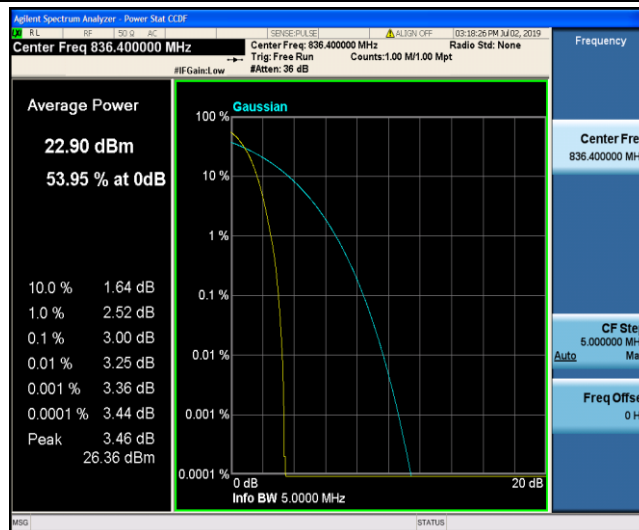
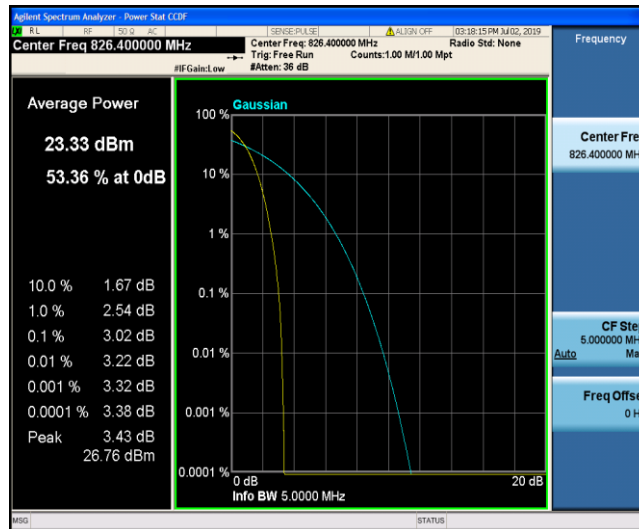
Band IV_1312



Band IV_1413



Band IV_1513





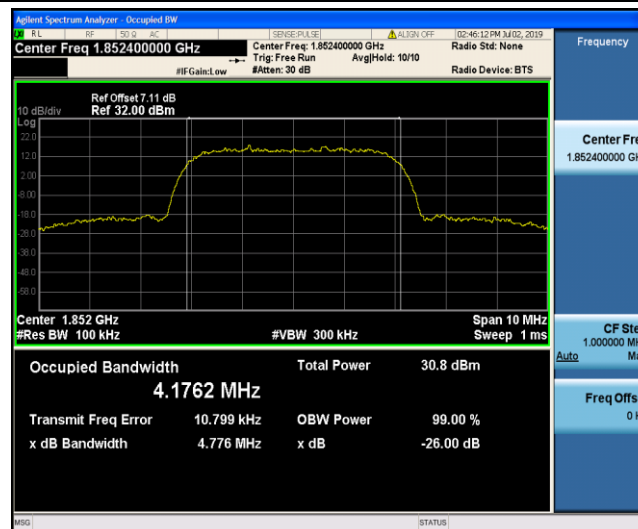
8.3 Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

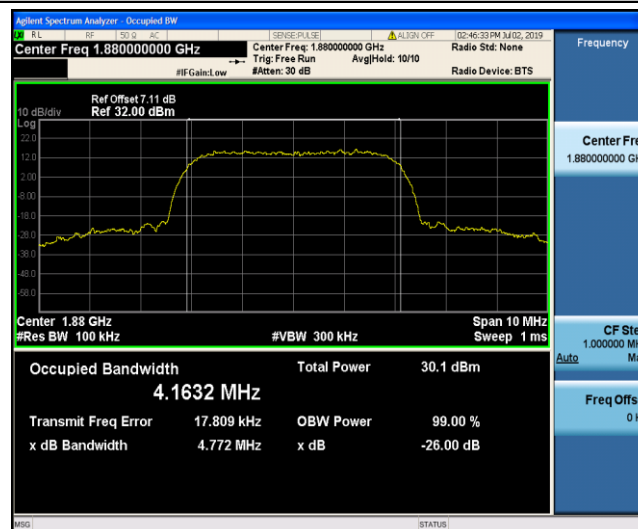
Band	Channel	Occupied Bandwidth (kHz)	26dB Bandwidth (kHz)	Limit(kHz)	Verdict
Band II	9262	4176.2	4776	---	PASS
Band II	9400	4163.2	4772	---	PASS
Band II	9538	4183.3	4762	---	PASS
Band IV	1312	4159.1	4744	---	PASS
Band IV	1413	4165.0	4744	---	PASS
Band IV	1513	4163.5	4753	---	PASS
Band V	4132	4152.8	4709	---	PASS
Band V	4182	4140.1	4725	---	PASS
Band V	4233	4137.7	4734	---	PASS



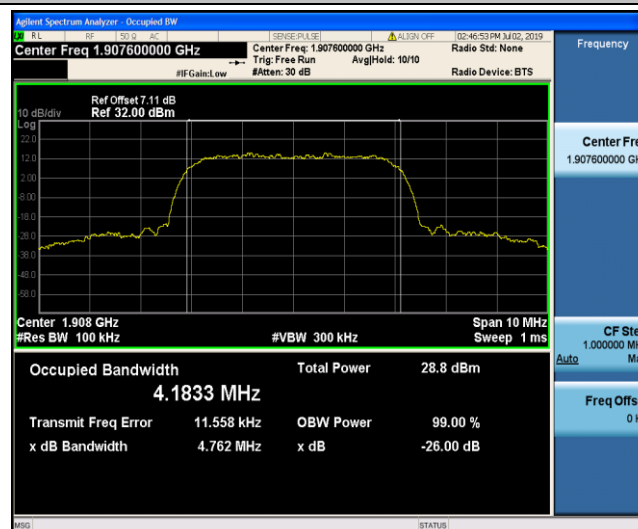
Test Graphs



Band II_9262



Band II_9400



Band II_9538

Agilent Spectrum Analyzer - Occupied BW

Center Freq: 1.712400000 GHz

Ref Offset 7.12 dB
Ref 32.00 dBm

Span 10 MHz
Sweep 1 ms

Occupied Bandwidth: 4.1591 MHz

Total Power: 30.7 dBm

Transmit Freq Error: 13.101 kHz

OBW Power: 99.00 %

x dB Bandwidth: 4.744 MHz

x dB: -26.00 dB

Agilent Spectrum Analyzer - Occupied BW

RL RF 50.0 AC [SERVICE:PULSE] ALIGN OFF 04/08/12 PM 3:02, 2019

Center Freq 1.732600000 GHz Center Freq 1.732600000 GHz Radio Std: None

#IFGain: low #Atten: 30 dB AvgHld: 10/10 Radio Device: BTS

Ref Offset 7.12 dB
Ref 32.00 dBm

Center 1.733 GHz Span 10 MHz
#Res BW 100 kHz #VBW 300 kHz Sweep 1 ms

Occupied Bandwidth 4.1650 MHz
Total Power 31.1 dBm

Transmit Freq Error 568 Hz OBW Power 99.00 %
x dB Bandwidth 4.744 MHz x dB -26.00 dB

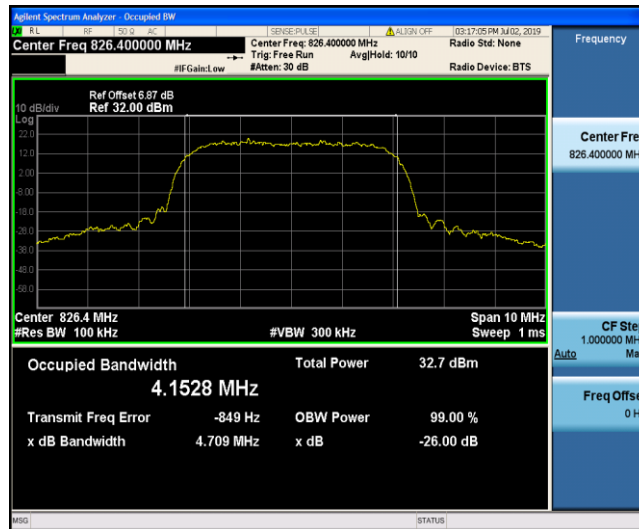
Agilent Spectrum Analyzer - Occupied BW

Center Freq 1.752600000 GHz
 Trig: Free Run
 Avg/Hold: 10/10
 Radio Std: None
 #FGainLow
 #Atten: 30 dB
 Radio Device: BTS

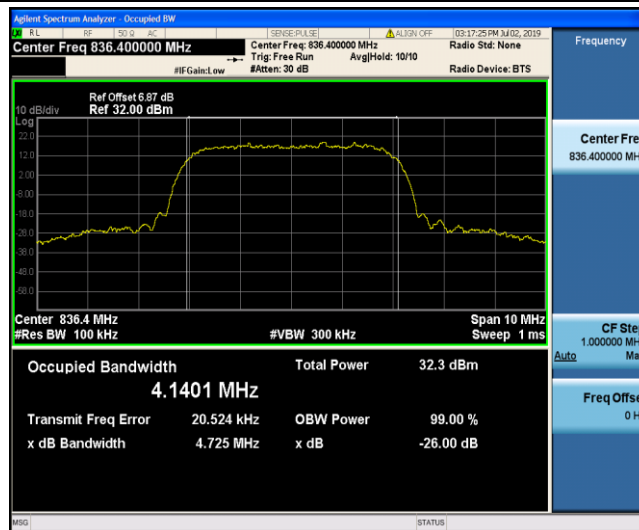
Ref Offset 7.12 dB
 Ref 32.00 dBm

Center Freq 1.753 GHz
 #Res BW 100 kHz
 #VBW 300 kHz
 Span 10 MHz
 Sweep 1 ms

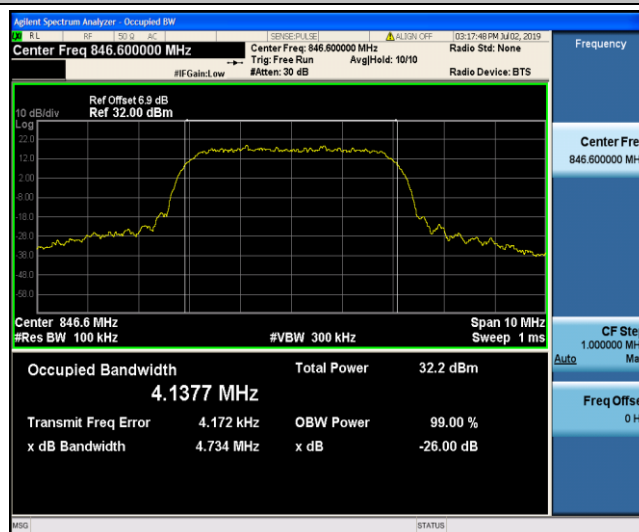
Occupied Bandwidth: 4.1635 MHz
 Total Power: 30.2 dBm
 Transmit Freq Error: 8.746 kHz
 OBW Power: 99.00 %
 x dB Bandwidth: 4.753 MHz
 x dB: -26.00 dB



Band V_4132



Band V_4182



Band V_4233



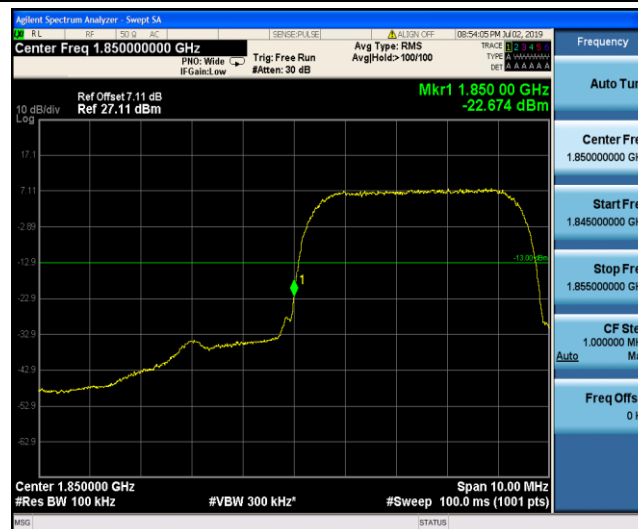
8.4 Appendix D: Band Edge

Test Result

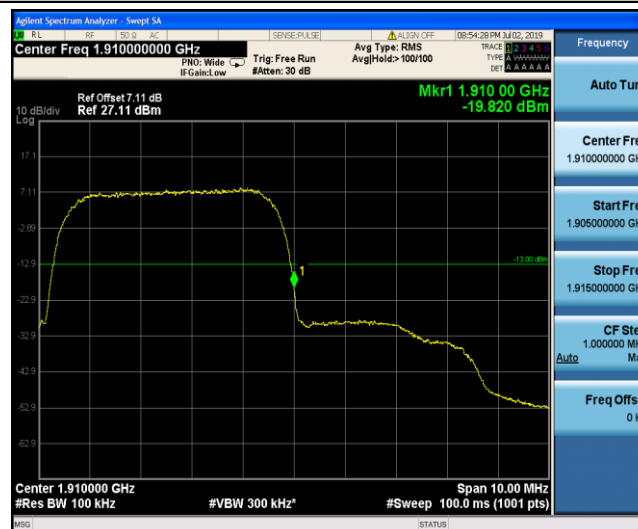
Band	Channel	Value(dBm)	Limit(dBm)	Verdict
Band II	9262	-22.67	-13	PASS
Band II	9538	-19.82	-13	PASS
Band IV	1312	-20.21	-13	PASS
Band IV	1513	-20.56	-13	PASS
Band V	4132	-17.13	-13	PASS
Band V	4233	-20.82	-13	PASS



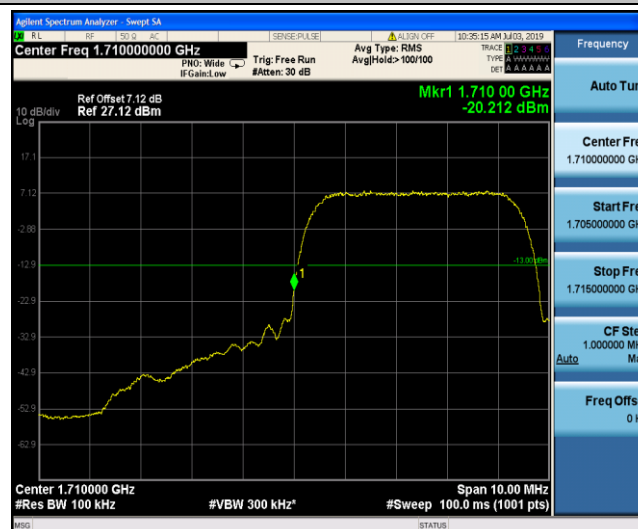
Test Graphs



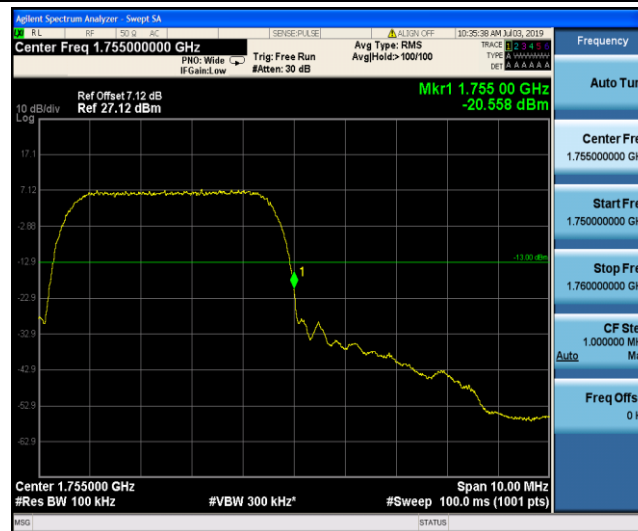
Band II_9262



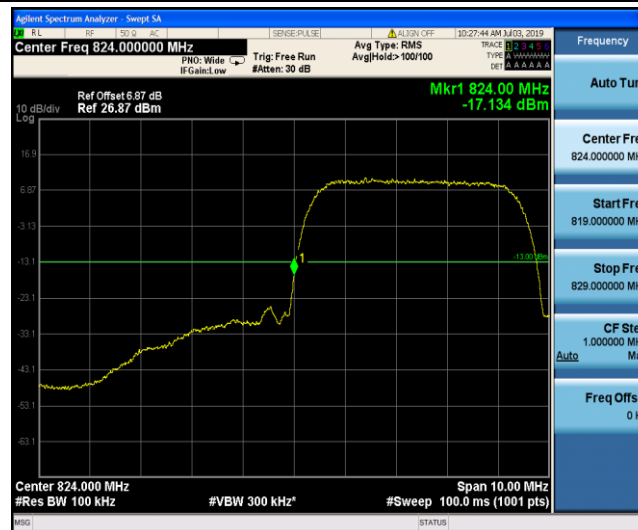
Band II_9538



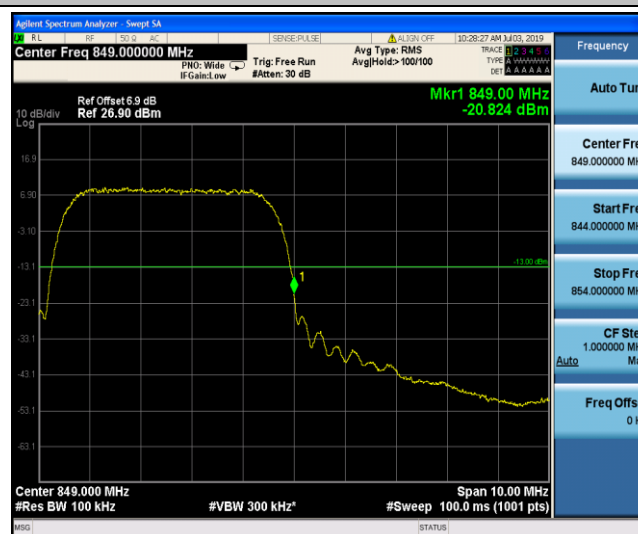
Band IV_1312



Band IV_1513



Band V_4132



Band V_4233



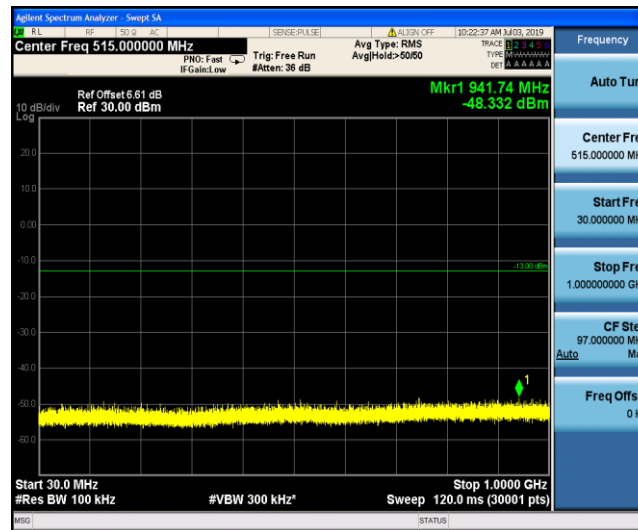
8.5 Appendix E: Conducted Spurious Emission

Test Result

Band	Channel	Frequency Rang(Mhz)	Value(dBm)	Limit(dBm)	Verdict
Band II	9262	30~1000	-48.33	-13	PASS
Band II	9262	1000~20000	-37.59	-13	PASS
Band II	9400	30~1000	-48.28	-13	PASS
Band II	9400	1000~20000	-37.58	-13	PASS
Band II	9538	30~1000	-48.55	-13	PASS
Band II	9538	1000~20000	-37.54	-13	PASS
Band IV	1312	30~1000	-47.56	-13	PASS
Band IV	1312	1000~20000	-37.63	-13	PASS
Band IV	1413	30~1000	-47.82	-13	PASS
Band IV	1413	1000~20000	-37.55	-13	PASS
Band IV	1513	30~1000	-47.21	-13	PASS
Band IV	1513	1000~20000	-37.45	-13	PASS
Band V	4132	30~1000	-47.17	-13	PASS
Band V	4132	1000~20000	-37.55	-13	PASS
Band V	4182	30~1000	-48.61	-13	PASS
Band V	4182	1000~20000	-37.71	-13	PASS
Band V	4233	30~1000	-48.46	-13	PASS
Band V	4233	1000~20000	-37.40	-13	PASS



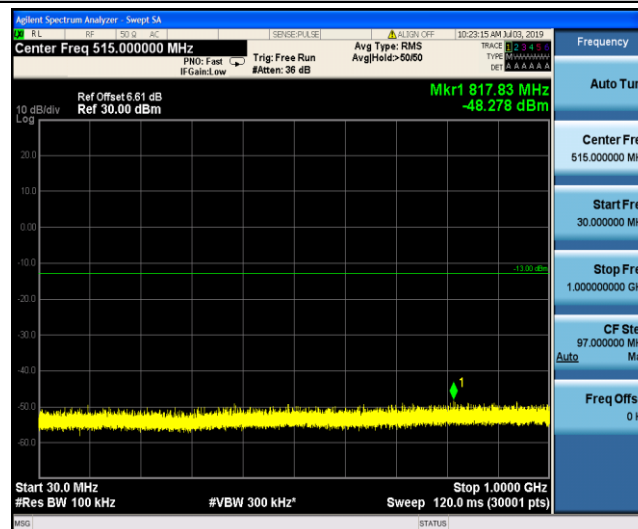
Test Graphs



Band II_9262



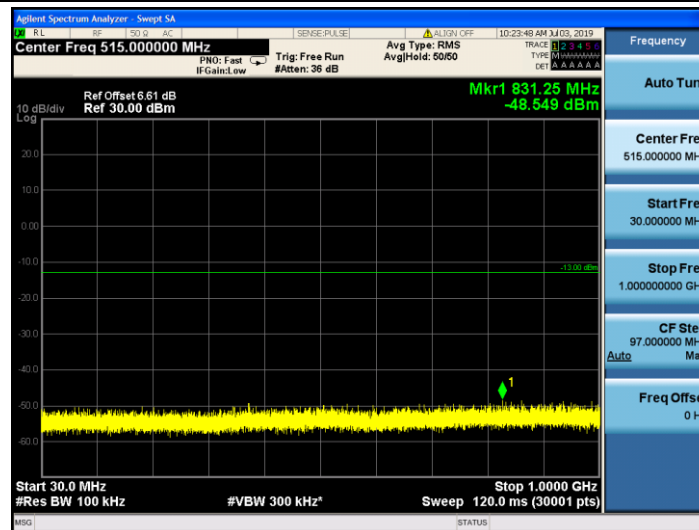
Band II_9262



Band II_9400



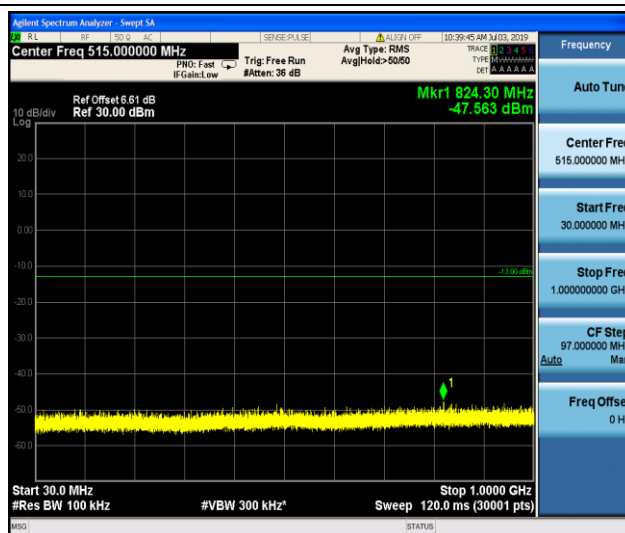
Band II_9400



Band II_9538



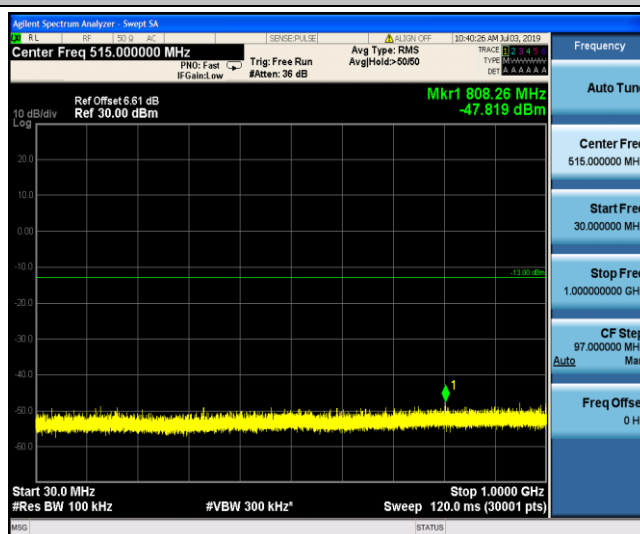
Band II_9538



Band IV_1312



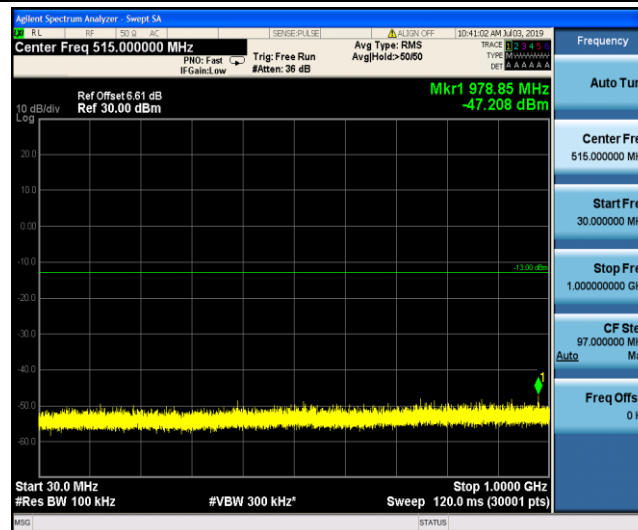
Band IV_1312



Band IV_1413



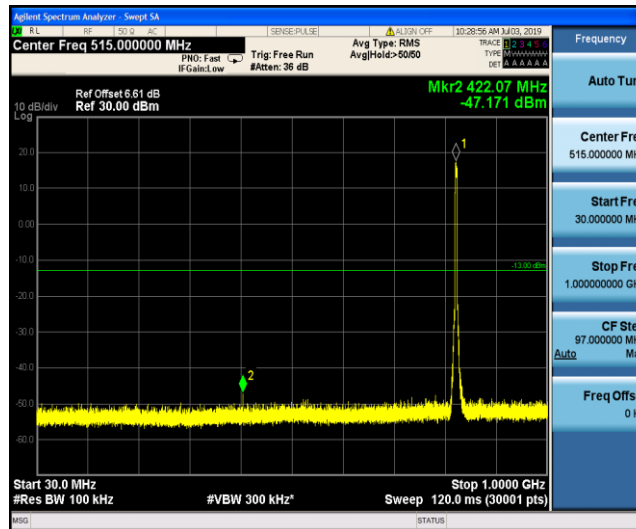
Band IV_1413



Band IV_1513



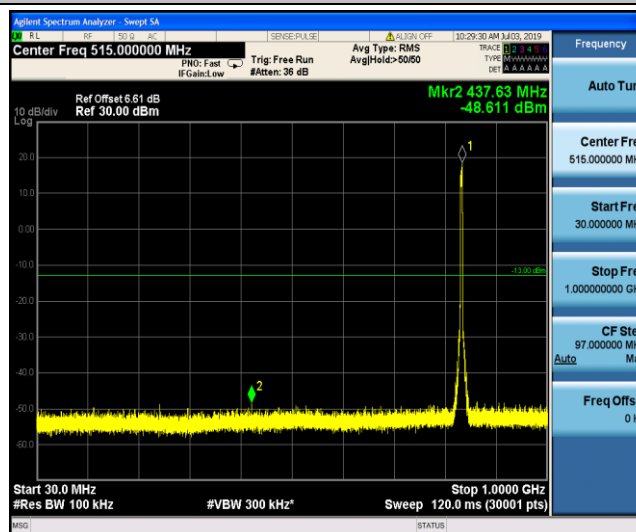
Band IV_1513



Band V_4132



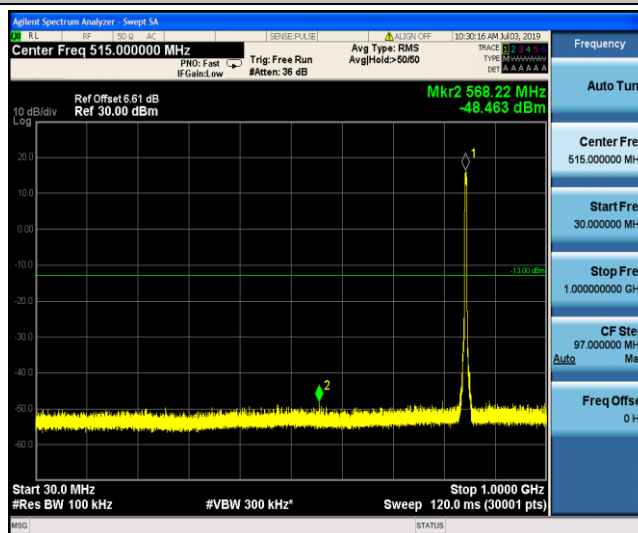
Band V_4132



Band V_4182



Band V_4182



Band V_4233



Band V_4233



8.6 Appendix F: Frequency Stability

Test Result

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band II	9262	VL	TN	6.71	0.003622	2.5	PASS
Band II	9262	VN	TN	6.38	0.003444	2.5	PASS
Band II	9262	VH	TN	7.10	0.003830	2.5	PASS
Band II	9400	VL	TN	-0.17	-0.000091	2.5	PASS
Band II	9400	VN	TN	0.47	0.000251	2.5	PASS
Band II	9400	VH	TN	0.33	0.000175	2.5	PASS
Band II	9538	VL	TN	-5.34	-0.002801	2.5	PASS
Band II	9538	VN	TN	-6.12	-0.003206	2.5	PASS
Band II	9538	VH	TN	-6.32	-0.003311	2.5	PASS
Band IV	1312	VL	TN	28.51	0.016649	2.5	PASS
Band IV	1312	VN	TN	26.89	0.015701	2.5	PASS
Band IV	1312	VH	TN	28.45	0.016612	2.5	PASS
Band IV	1413	VL	TN	2.47	0.001424	2.5	PASS
Band IV	1413	VN	TN	3.12	0.001800	2.5	PASS
Band IV	1413	VH	TN	3.60	0.002076	2.5	PASS
Band IV	1513	VL	TN	-17.67	-0.010080	2.5	PASS
Band IV	1513	VN	TN	-17.37	-0.009913	2.5	PASS
Band IV	1513	VH	TN	-17.10	-0.009758	2.5	PASS
Band V	4132	VL	TN	2.42	0.002934	2.5	PASS
Band V	4132	VN	TN	3.31	0.004007	2.5	PASS
Band V	4132	VH	TN	3.68	0.004449	2.5	PASS
Band V	4182	VL	TN	1.49	0.001779	2.5	PASS
Band V	4182	VN	TN	1.46	0.001745	2.5	PASS
Band V	4182	VH	TN	0.28	0.000334	2.5	PASS
Band V	4233	VL	TN	-0.79	-0.000938	2.5	PASS
Band V	4233	VN	TN	-0.59	-0.000693	2.5	PASS
Band V	4233	VH	TN	-1.10	-0.001301	2.5	PASS



Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band II	9262	VN	-30	6.19	0.003340	2.5	PASS
Band II	9262	VN	-20	6.24	0.003371	2.5	PASS
Band II	9262	VN	-10	6.37	0.003437	2.5	PASS
Band II	9262	VN	0	6.44	0.003475	2.5	PASS
Band II	9262	VN	10	5.41	0.002923	2.5	PASS
Band II	9262	VN	20	5.96	0.003216	2.5	PASS
Band II	9262	VN	30	6.41	0.003460	2.5	PASS
Band II	9262	VN	40	5.69	0.003074	2.5	PASS
Band II	9262	VN	50	6.10	0.003294	2.5	PASS
Band II	9400	VN	-30	-0.22	-0.000118	2.5	PASS
Band II	9400	VN	-20	0.72	0.000384	2.5	PASS
Band II	9400	VN	-10	0.10	0.000053	2.5	PASS
Band II	9400	VN	0	-1.16	-0.000616	2.5	PASS
Band II	9400	VN	10	-1.27	-0.000677	2.5	PASS
Band II	9400	VN	20	-0.22	-0.000118	2.5	PASS
Band II	9400	VN	30	-0.92	-0.000491	2.5	PASS
Band II	9400	VN	40	0.87	0.000464	2.5	PASS
Band II	9400	VN	50	0.41	0.000217	2.5	PASS
Band II	9538	VN	-30	-6.68	-0.003502	2.5	PASS
Band II	9538	VN	-20	-4.98	-0.002610	2.5	PASS
Band II	9538	VN	-10	-3.86	-0.002021	2.5	PASS
Band II	9538	VN	0	-6.16	-0.003228	2.5	PASS
Band II	9538	VN	10	-7.67	-0.004019	2.5	PASS
Band II	9538	VN	20	-3.35	-0.001755	2.5	PASS
Band II	9538	VN	30	-7.15	-0.003746	2.5	PASS
Band II	9538	VN	40	-4.93	-0.002583	2.5	PASS
Band II	9538	VN	50	-6.14	-0.003217	2.5	PASS
Band IV	1312	VN	-30	26.32	0.015371	2.5	PASS
Band IV	1312	VN	-20	28.80	0.016820	2.5	PASS
Band IV	1312	VN	-10	26.81	0.015659	2.5	PASS
Band IV	1312	VN	0	27.48	0.016048	2.5	PASS
Band IV	1312	VN	10	25.46	0.014870	2.5	PASS
Band IV	1312	VN	20	26.06	0.015221	2.5	PASS
Band IV	1312	VN	30	26.37	0.015400	2.5	PASS
Band IV	1312	VN	40	26.44	0.015442	2.5	PASS
Band IV	1312	VN	50	26.40	0.015417	2.5	PASS
Band IV	1413	VN	-30	2.37	0.001366	2.5	PASS
Band IV	1413	VN	-20	3.53	0.002039	2.5	PASS
Band IV	1413	VN	-10	2.38	0.001375	2.5	PASS
Band IV	1413	VN	0	3.15	0.001816	2.5	PASS
Band IV	1413	VN	10	2.58	0.001490	2.5	PASS
Band IV	1413	VN	20	3.13	0.001804	2.5	PASS
Band IV	1413	VN	30	3.48	0.002006	2.5	PASS
Band IV	1413	VN	40	3.35	0.001936	2.5	PASS
Band IV	1413	VN	50	3.63	0.002093	2.5	PASS
Band IV	1513	VN	-30	-17.39	-0.009921	2.5	PASS
Band IV	1513	VN	-20	-14.75	-0.008415	2.5	PASS
Band IV	1513	VN	-10	-17.05	-0.009729	2.5	PASS



Band IV	1513	VN	0	-16.72	-0.009538	2.5	PASS
Band IV	1513	VN	10	-16.44	-0.009378	2.5	PASS
Band IV	1513	VN	20	-17.06	-0.009733	2.5	PASS
Band IV	1513	VN	30	-15.25	-0.008701	2.5	PASS
Band IV	1513	VN	40	-16.54	-0.009440	2.5	PASS
Band IV	1513	VN	50	-15.99	-0.009121	2.5	PASS
Band V	4132	VN	-30	6.47	0.007833	2.5	PASS
Band V	4132	VN	-20	5.36	0.006483	2.5	PASS
Band V	4132	VN	-10	5.19	0.006275	2.5	PASS
Band V	4132	VN	0	5.24	0.006344	2.5	PASS
Band V	4132	VN	10	5.15	0.006232	2.5	PASS
Band V	4132	VN	20	5.19	0.006275	2.5	PASS
Band V	4132	VN	30	5.26	0.006370	2.5	PASS
Band V	4132	VN	40	5.61	0.006794	2.5	PASS
Band V	4132	VN	50	5.34	0.006465	2.5	PASS
Band V	4182	VN	-30	1.61	0.001924	2.5	PASS
Band V	4182	VN	-20	-0.79	-0.000949	2.5	PASS
Band V	4182	VN	-10	-0.06	-0.000068	2.5	PASS
Band V	4182	VN	0	-2.22	-0.002651	2.5	PASS
Band V	4182	VN	10	0.91	0.001086	2.5	PASS
Band V	4182	VN	20	0.99	0.001189	2.5	PASS
Band V	4182	VN	30	-1.06	-0.001266	2.5	PASS
Band V	4182	VN	40	-2.90	-0.003472	2.5	PASS
Band V	4182	VN	50	-0.96	-0.001146	2.5	PASS
Band V	4233	VN	-30	-1.19	-0.001402	2.5	PASS
Band V	4233	VN	-20	-0.60	-0.000710	2.5	PASS
Band V	4233	VN	-10	-0.87	-0.001022	2.5	PASS
Band V	4233	VN	0	-0.94	-0.001107	2.5	PASS
Band V	4233	VN	10	-1.24	-0.001462	2.5	PASS
Band V	4233	VN	20	-0.81	-0.000955	2.5	PASS
Band V	4233	VN	30	-0.30	-0.000355	2.5	PASS
Band V	4233	VN	40	-0.97	-0.001141	2.5	PASS
Band V	4233	VN	50	-2.15	-0.002543	2.5	PASS

-----End of the Report -----