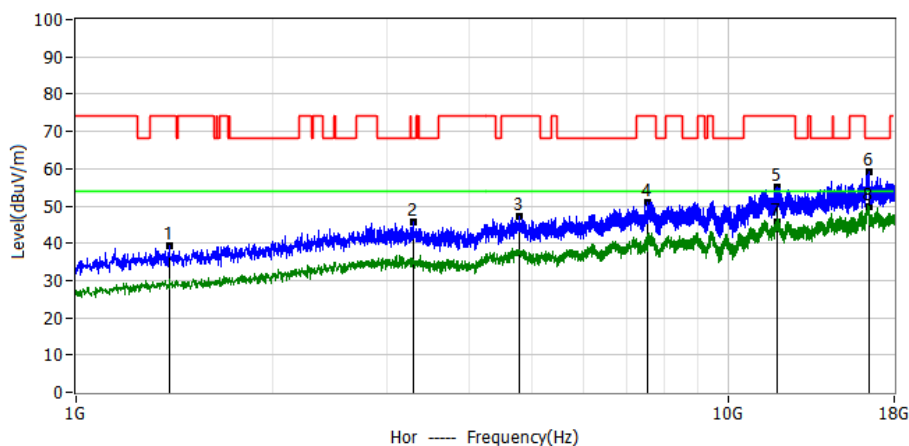
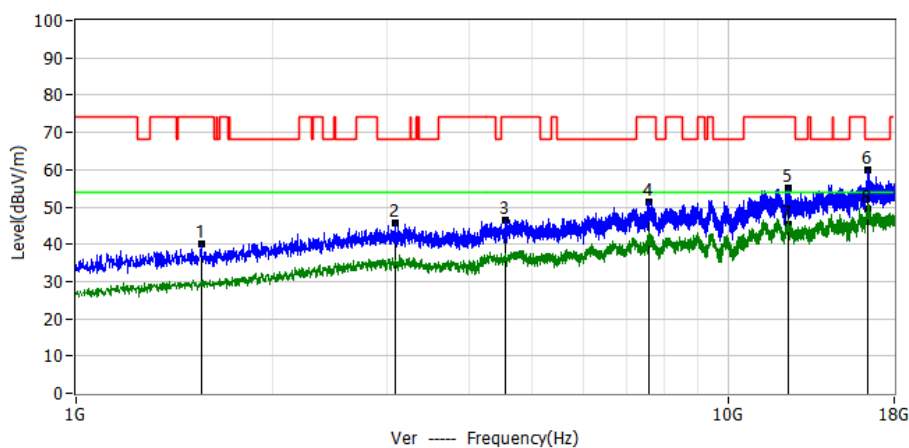




Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5500	
Note:	



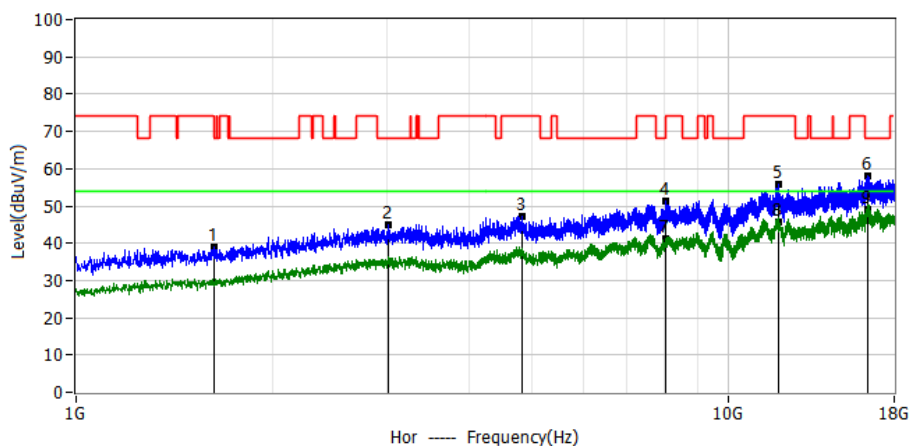
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1388.9000	60.77	-21.47	39.30	74.00	-34.70	PK	Hor
2*	3288.6000	54.28	-8.44	45.84	68.20	-22.40	PK	Hor
3*	4784.6000	53.11	-5.97	47.14	74.00	-26.90	PK	Hor
4*	7538.6000	55.38	-4.27	51.11	74.00	-22.90	PK	Hor
5*	11924.6000	52.90	2.18	55.08	74.00	-18.90	PK	Hor
6*	16470.0000	52.17	6.99	59.16	68.20	-9.00	PK	Hor
7*	11924.6000	43.42	2.18	45.60	54.00	-8.40	AV	Hor
8*	16470.0000	42.81	6.99	49.80	54.00	-4.20	AV	Hor



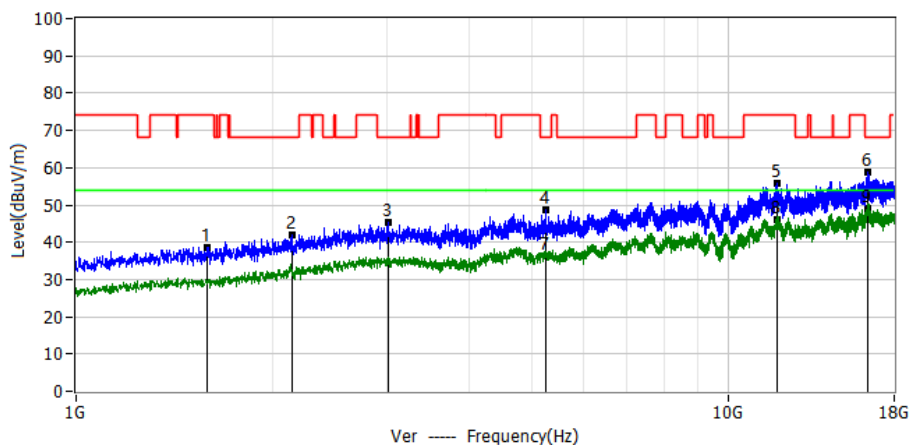
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1554.6000	60.68	-20.48	40.20	74.00	-33.80	PK	Ver
2*	3091.0000	53.95	-8.37	45.58	68.20	-22.60	PK	Ver
3*	4550.9000	52.40	-5.79	46.61	74.00	-27.40	PK	Ver
4*	7579.0000	55.39	-4.25	51.14	74.00	-22.90	PK	Ver
5*	12370.9000	52.74	2.30	55.04	74.00	-19.00	PK	Ver
6*	16363.7000	53.05	6.83	59.88	68.20	-8.30	PK	Ver
7*	12370.9000	43.10	2.30	45.40	54.00	-8.60	AV	Ver
8*	16363.7000	42.67	6.83	49.50	54.00	-4.50	AV	Ver



Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5580	
Note:	



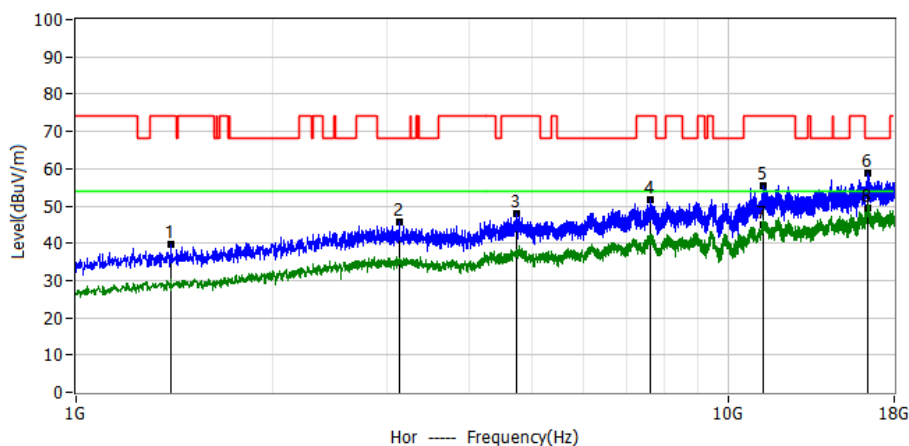
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1624.7000	58.71	-19.94	38.77	74.00	-35.20	PK	Hor
2*	3010.2000	53.42	-8.34	45.08	68.20	-23.10	PK	Hor
3*	4839.9000	53.34	-6.02	47.32	74.00	-26.70	PK	Hor
4*	8014.6000	55.17	-3.96	51.21	68.20	-17.00	PK	Hor
5*	11939.5000	53.44	2.18	55.62	74.00	-18.40	PK	Hor
6*	16368.0000	51.06	6.83	57.89	68.20	-10.30	PK	Hor
7*	8014.6000	45.16	-3.96	41.20	54.00	-12.80	AV	Hor
8*	11939.5000	43.42	2.18	45.60	54.00	-8.40	AV	Hor
9*	16368.0000	42.07	6.83	48.90	54.00	-5.10	AV	Hor



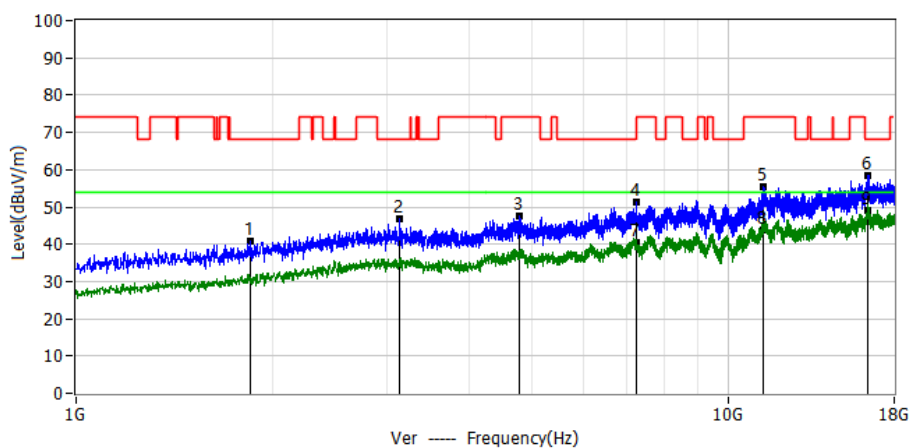
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1590.7000	58.98	-20.24	38.74	74.00	-35.30	PK	Ver
2*	2143.2000	56.67	-14.73	41.94	68.20	-26.30	PK	Ver
3*	3016.6000	53.51	-8.35	45.16	68.20	-23.00	PK	Ver
4*	5243.6000	55.68	-6.92	48.76	68.20	-19.40	PK	Ver
5*	11928.9000	53.46	2.18	55.64	74.00	-18.40	PK	Ver
6*	16378.6000	51.95	6.85	58.80	68.20	-9.40	PK	Ver
7*	5243.6000	43.12	-6.92	36.20	54.00	-17.80	AV	Ver
8*	11928.9000	44.02	2.18	46.20	54.00	-7.80	AV	Ver
9*	16378.6000	42.25	6.85	49.10	54.00	-4.90	AV	Ver



Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5700	
Note:	



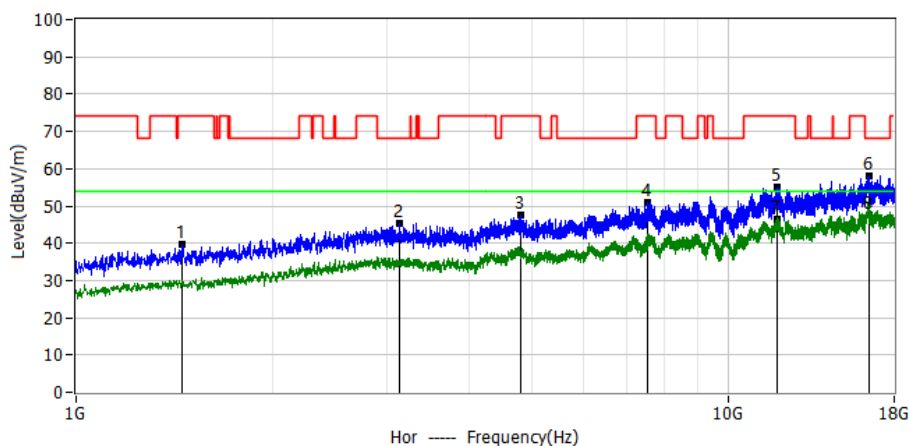
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1395.2000	61.00	-21.42	39.58	74.00	-34.40	PK	Hor
2*	3137.7000	54.05	-8.39	45.66	68.20	-22.50	PK	Hor
3*	4748.5000	54.07	-5.95	48.12	74.00	-25.90	PK	Hor
4*	7593.9000	55.89	-4.24	51.65	74.00	-22.40	PK	Hor
5*	11338.1000	53.52	1.83	55.35	74.00	-18.60	PK	Hor
6*	16387.1000	51.85	6.86	58.71	68.20	-9.50	PK	Hor
7*	11338.1000	43.07	1.83	44.90	54.00	-9.10	AV	Hor
8*	16387.1000	42.44	6.86	49.30	54.00	-4.70	AV	Hor



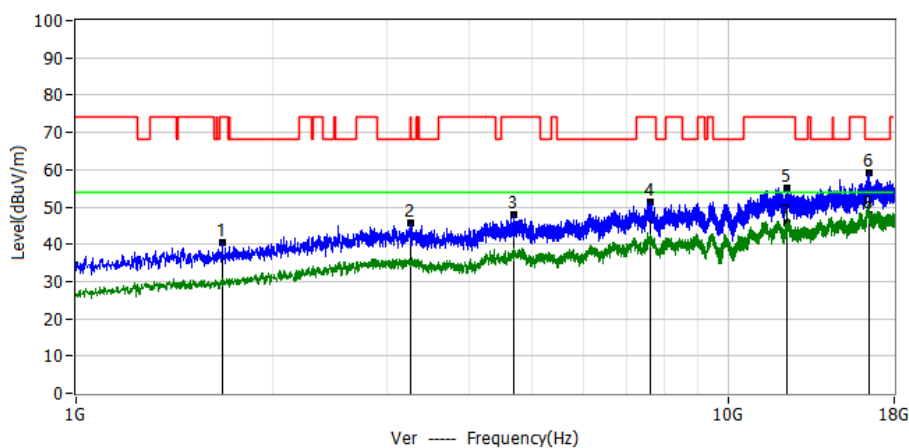
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1854.2000	58.43	-17.70	40.73	68.20	-27.50	PK	Ver
2*	3139.9000	55.11	-8.39	46.72	68.20	-21.50	PK	Ver
3*	4784.6000	53.69	-5.97	47.72	74.00	-26.30	PK	Ver
4*	7247.5000	56.39	-5.00	51.39	68.20	-16.80	PK	Ver
5*	11331.7000	53.55	1.83	55.38	74.00	-18.60	PK	Ver
6*	16391.4000	51.52	6.87	58.39	68.20	-9.80	PK	Ver
7*	7247.5000	45.30	-5.00	40.30	54.00	-13.70	AV	Ver
8*	11331.7000	41.97	1.83	43.80	54.00	-10.20	AV	Ver
9*	16391.4000	42.13	6.87	49.00	54.00	-5.00	AV	Ver



Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5745	
Note:	



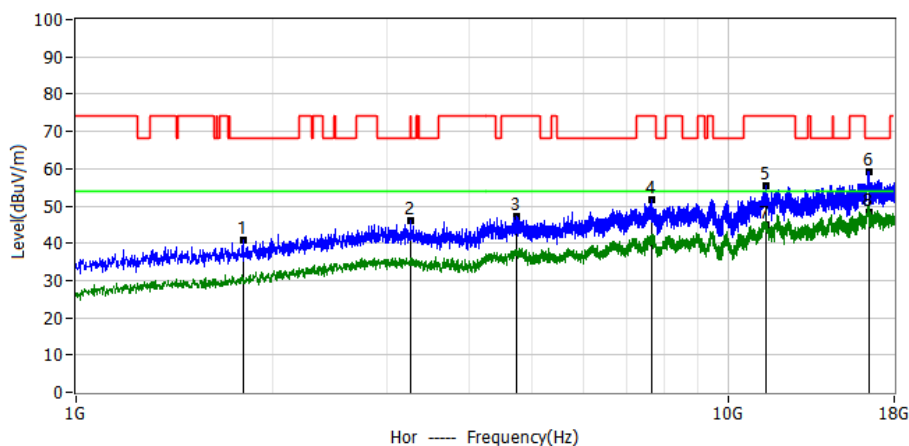
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1450.5000	60.67	-21.11	39.56	74.00	-34.40	PK	Hor
2*	3133.5000	53.81	-8.38	45.43	68.20	-22.80	PK	Hor
3*	4812.2000	53.52	-6.00	47.52	74.00	-26.50	PK	Hor
4*	7538.6000	55.23	-4.27	50.96	74.00	-23.00	PK	Hor
5*	11924.6000	52.97	2.18	55.15	74.00	-18.90	PK	Hor
6*	16448.7000	51.06	6.96	58.02	68.20	-10.20	PK	Hor
7*	11924.6000	44.42	2.18	46.60	54.00	-7.40	AV	Hor
8*	16448.7000	40.44	6.96	47.40	54.00	-6.60	AV	Hor



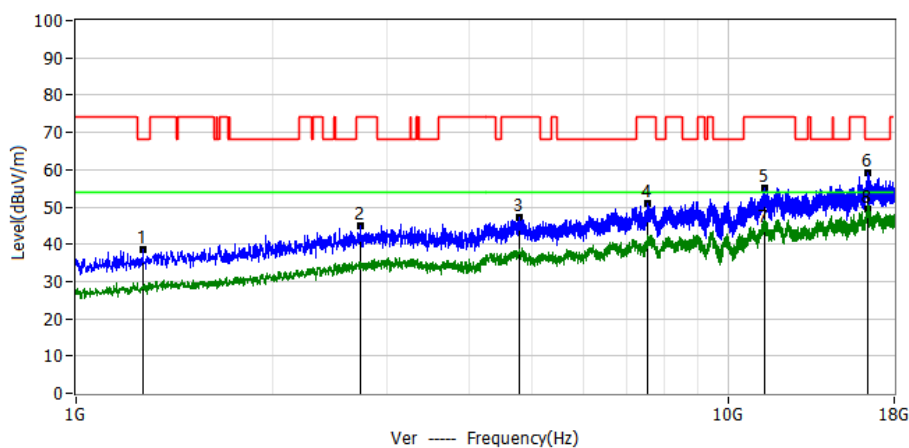
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1673.6000	59.80	-19.47	40.33	74.00	-33.70	PK	Ver
2*	3267.4000	54.23	-8.43	45.80	68.20	-22.40	PK	Ver
3*	4697.5000	53.70	-5.91	47.79	74.00	-26.20	PK	Ver
4*	7587.5000	55.42	-4.24	51.18	74.00	-22.80	PK	Ver
5*	12339.0000	52.75	2.29	55.04	74.00	-19.00	PK	Ver
6*	16446.6000	52.09	6.96	59.05	68.20	-9.20	PK	Ver
7*	12339.0000	43.41	2.29	45.70	54.00	-8.30	AV	Ver
8*	16446.6000	41.04	6.96	48.00	54.00	-6.00	AV	Ver



Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5785	
Note:	



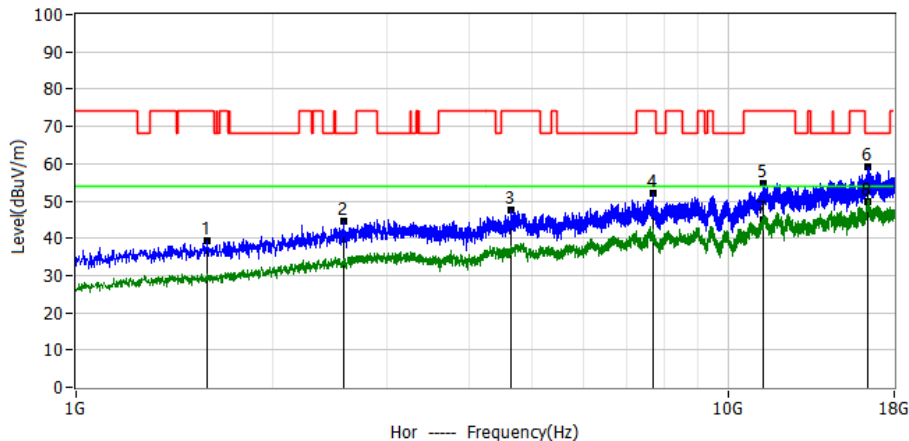
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1803.2000	59.01	-18.22	40.79	68.20	-27.40	PK	Hor
2*	3256.7000	54.49	-8.42	46.07	68.20	-22.10	PK	Hor
3*	4740.0000	53.02	-5.94	47.08	74.00	-26.90	PK	Hor
4*	7647.0000	55.92	-4.21	51.71	74.00	-22.30	PK	Hor
5*	11429.5000	53.39	1.88	55.27	74.00	-18.70	PK	Hor
6*	16476.4000	52.06	7.00	59.06	68.20	-9.10	PK	Hor
7*	11429.5000	42.92	1.88	44.80	54.00	-9.20	AV	Hor
8*	16476.4000	41.20	7.00	48.20	54.00	-5.80	AV	Hor



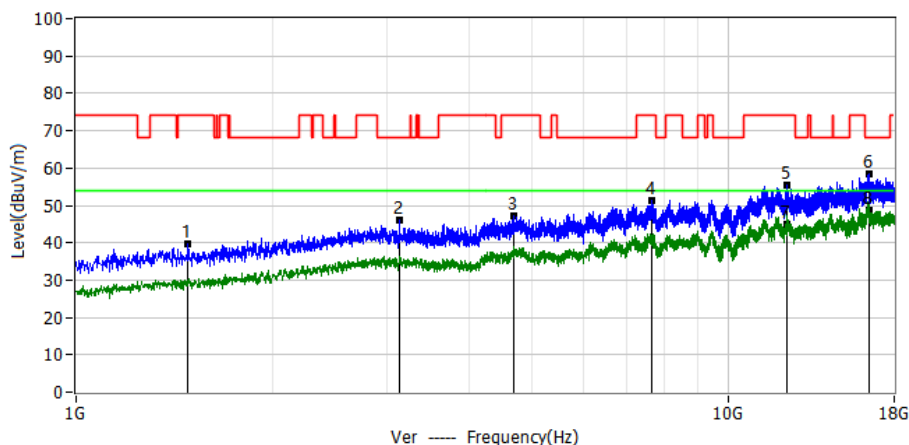
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1265.6000	61.06	-22.45	38.61	68.20	-29.60	PK	Ver
2*	2736.1000	54.65	-9.74	44.91	74.00	-29.10	PK	Ver
3*	4776.1000	53.27	-5.97	47.30	74.00	-26.70	PK	Ver
4*	7525.9000	55.31	-4.28	51.03	74.00	-23.00	PK	Ver
5*	11370.0000	53.14	1.85	54.99	74.00	-19.00	PK	Ver
6*	16378.6000	52.25	6.85	59.10	68.20	-9.10	PK	Ver
7*	11370.0000	42.45	1.85	44.30	54.00	-9.70	AV	Ver
8*	16378.6000	42.45	6.85	49.30	54.00	-4.70	AV	Ver



Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5825	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1588.6000	59.42	-20.25	39.17	74.00	-34.80	PK	Hor
2*	2574.6000	55.13	-10.59	44.54	68.20	-23.70	PK	Hor
3*	4652.9000	53.61	-5.87	47.74	74.00	-26.30	PK	Hor
4*	7661.9000	56.35	-4.20	52.15	74.00	-21.90	PK	Hor
5*	11342.4000	52.84	1.83	54.67	74.00	-19.30	PK	Hor
6*	16372.2000	52.35	6.84	59.19	68.20	-9.00	PK	Hor
7*	11342.4000	42.97	1.83	44.80	54.00	-9.20	AV	Hor
8*	16372.2000	42.86	6.84	49.70	54.00	-4.30	AV	Hor



No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1482.4000	60.52	-20.94	39.58	74.00	-34.40	PK	Ver
2*	3137.7000	54.60	-8.39	46.21	68.20	-22.00	PK	Ver
3*	4691.1000	53.01	-5.90	47.11	74.00	-26.90	PK	Ver
4*	7659.7000	55.53	-4.20	51.33	74.00	-22.70	PK	Ver
5*	12347.5000	52.98	2.29	55.27	74.00	-18.70	PK	Ver
6*	16459.4000	51.41	6.98	58.39	68.20	-9.80	PK	Ver
7*	12347.5000	42.81	2.29	45.10	54.00	-8.90	AV	Ver
8*	16459.4000	41.62	6.98	48.60	54.00	-5.40	AV	Ver

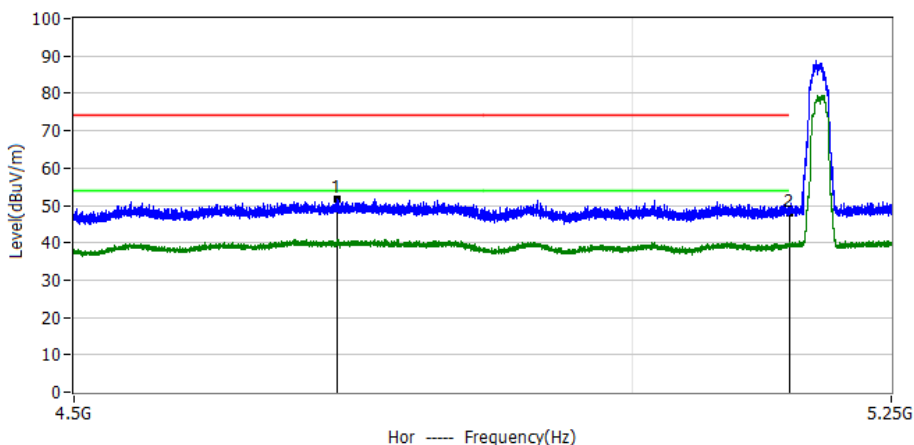
Remark:

In frequency ranges 18~25GHz no any other harmonic emissions detected which are tested to compliance with the limit. No recording in the test report. No any other emissions level which are attenuated less than 20dB below the limit. No recording in the test report.

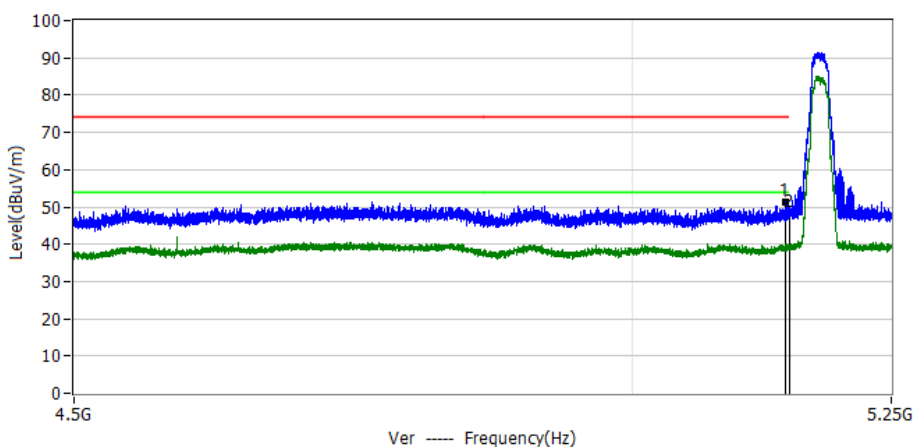


3.2.7 TEST RESULTS(Band edge Requirements)

Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5180	
Note:	



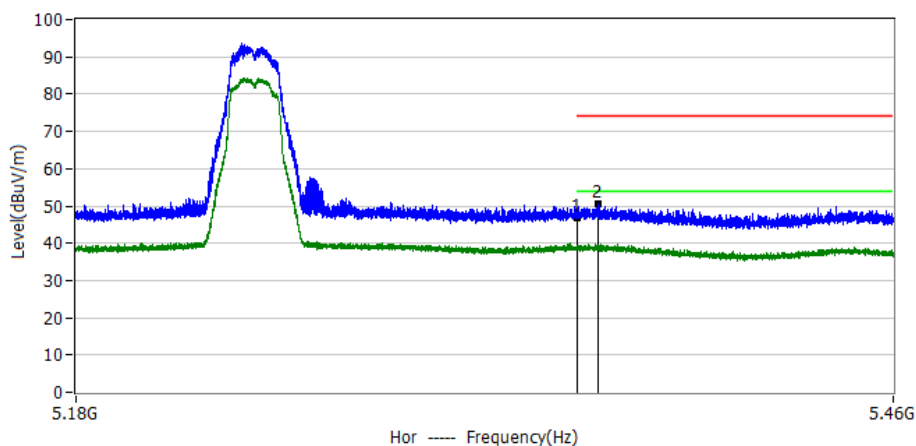
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.7294GHz	57.66	-5.93	51.73	74.00	-22.27	PK	Hor
2*	5.1500GHz	54.52	-6.62	47.90	74.00	-26.10	PK	Hor



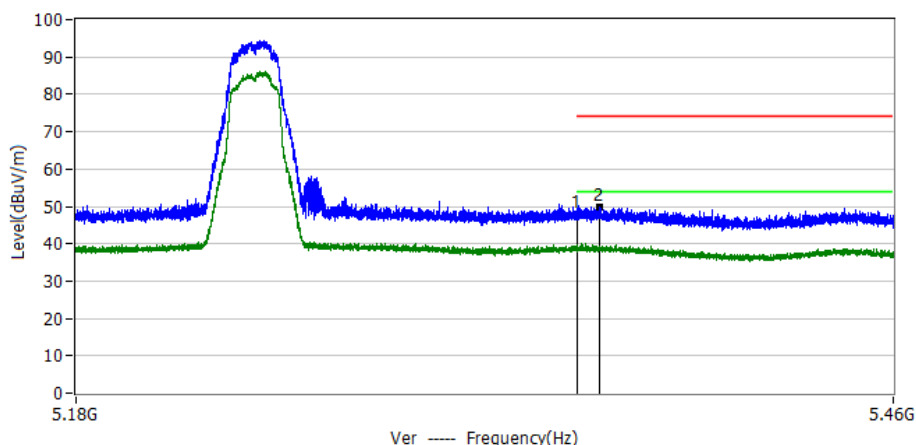
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	5.1466GHz	57.95	-6.61	51.34	74.00	-22.66	PK	Ver
2*	5.1500GHz	55.02	-6.62	48.40	74.00	-25.60	PK	Ver



Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5240	
Note:	



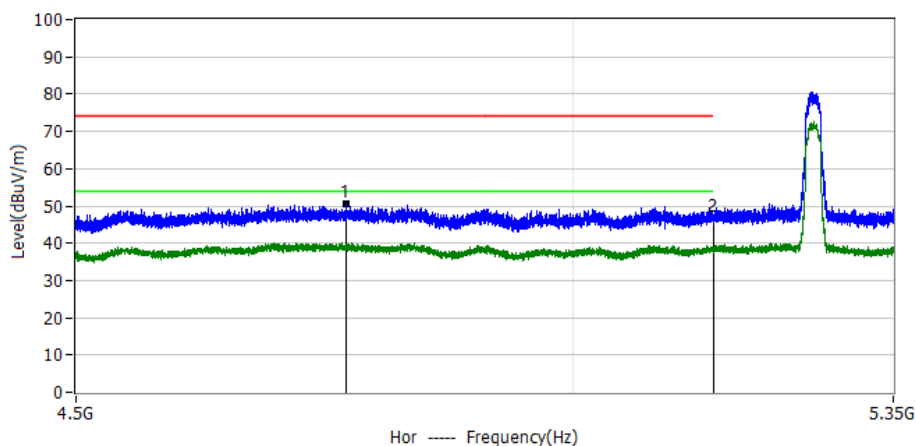
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	5.3500GHz	54.26	-7.26	47.00	74.00	-27.00	PK	Hor
2*	5.3570GHz	57.81	-7.28	50.53	74.00	-23.47	PK	Hor



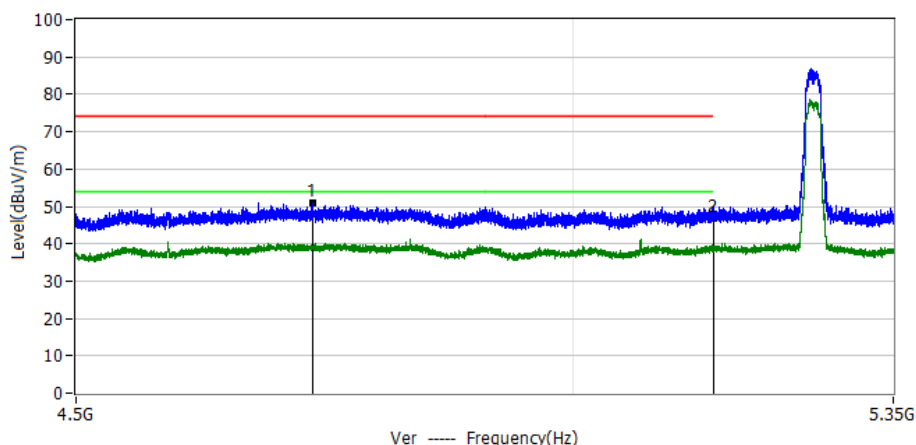
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	5.3500GHz	55.26	-7.26	48.00	74.00	-26.00	PK	Ver
2*	5.3577GHz	57.25	-7.28	49.97	74.00	-24.03	PK	Ver



Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5260	
Note:	



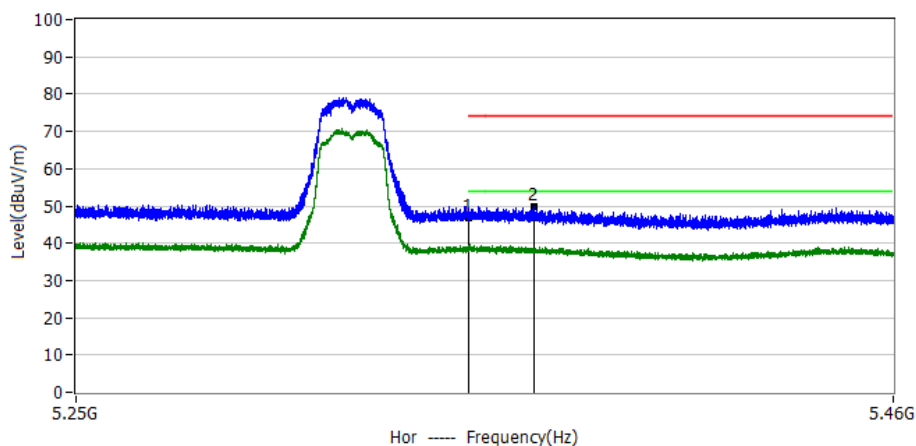
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.7651GHz	56.38	-5.96	50.42	74.00	-23.58	PK	Hor
2*	5.1500GHz	53.62	-6.62	47.00	74.00	-27.00	PK	Hor



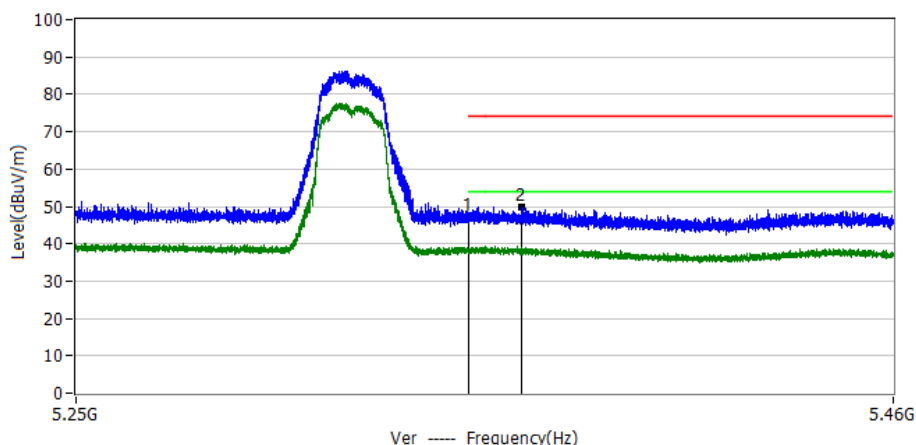
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.7314GHz	56.88	-5.93	50.95	74.00	-23.05	PK	Ver
2*	5.1500GHz	53.32	-6.62	46.70	74.00	-27.30	PK	Ver



Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5320	
Note:	



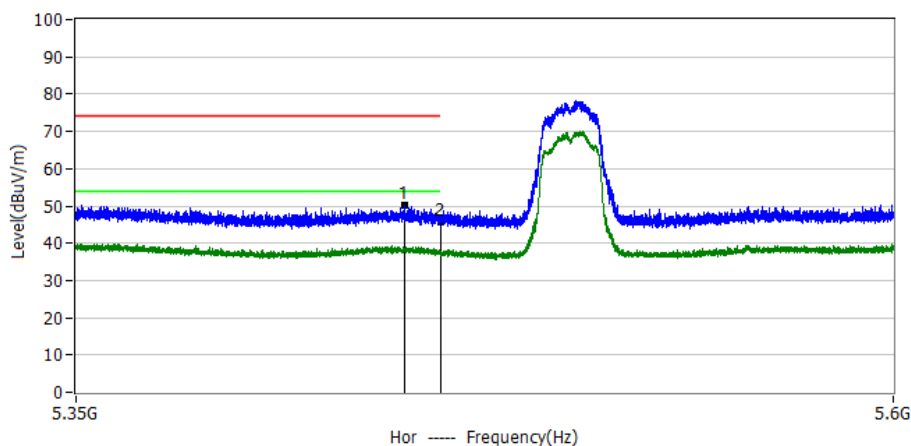
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	5.3500GHz	54.06	-7.26	46.80	74.00	-27.20	PK	Hor
2*	5.3667GHz	57.21	-7.31	49.90	74.00	-24.10	PK	Hor



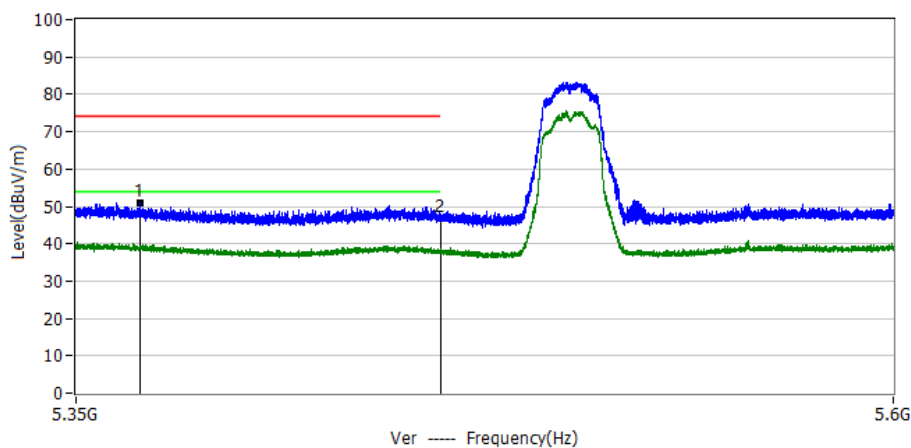
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	5.3500GHz	54.36	-7.26	47.10	74.00	-26.90	PK	Ver
2*	5.3633GHz	57.23	-7.30	49.93	74.00	-24.07	PK	Ver



Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5500	
Note:	



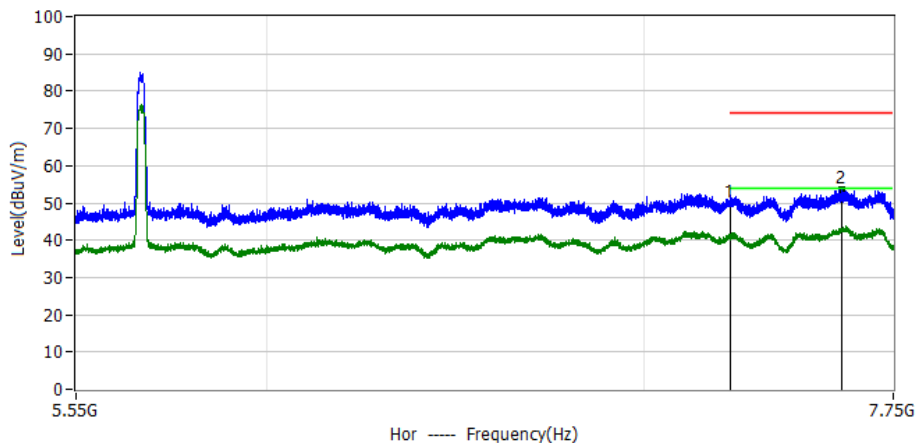
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	5.4490GHz	57.83	-7.58	50.25	74.00	-23.75	PK	Hor
2*	5.4600GHz	53.31	-7.61	45.70	74.00	-28.30	PK	Hor



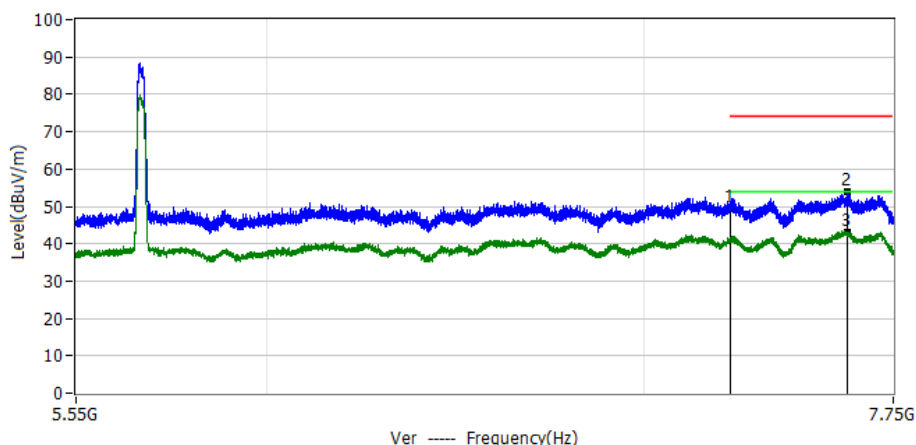
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	5.3692GHz	58.18	-7.32	50.86	74.00	-23.14	PK	Ver
2*	5.4600GHz	54.41	-7.61	46.80	74.00	-27.20	PK	Ver



Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5700	
Note:	



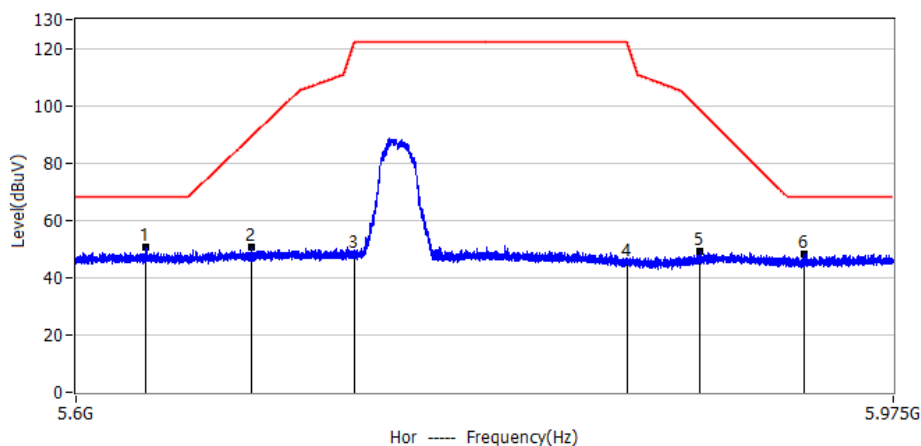
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	7.2500GHz	54.89	-4.99	49.90	74.00	-24.10	PK	Hor
2*	7.5905GHz	57.79	-4.24	53.55	74.00	-20.45	PK	Hor



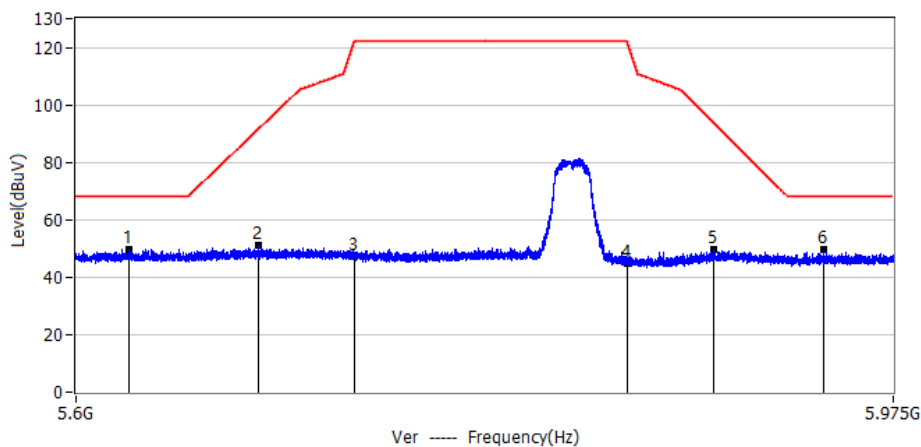
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	7.2500GHz	54.29	-4.99	49.30	74.00	-24.70	PK	Ver
2*	7.6051GHz	58.26	-4.23	54.03	74.00	-19.97	PK	Ver
3*	7.6051GHz	47.13	-4.23	42.90	54.00	-11.10	AV	Ver



Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5745	
Note:	



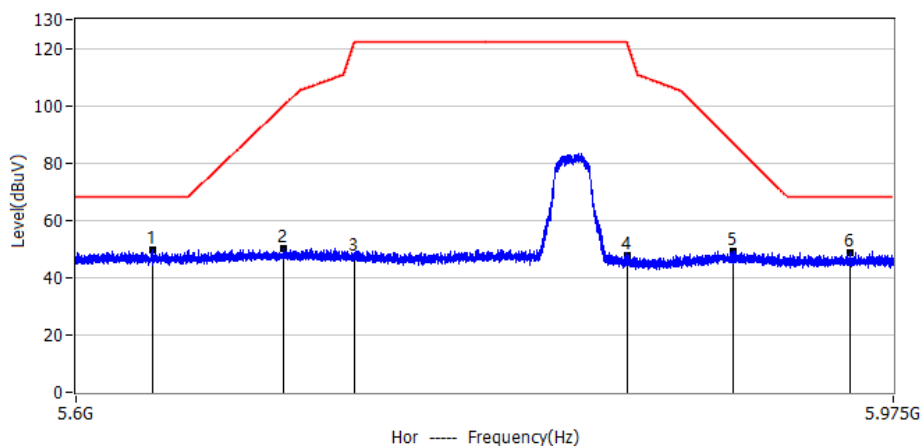
No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	5.6310GHz	58.17	-7.69	50.48	68.20	-17.72	PK	Hor
2*	5.6785GHz	58.13	-7.67	50.46	89.34	-38.88	PK	Hor
3*	5.7250GHz	56.05	-7.65	48.40	122.20	-73.80	PK	Hor
4*	5.8500GHz	52.80	-7.60	45.20	122.20	-77.00	PK	Hor
5*	5.8843GHz	56.62	-7.59	49.03	98.26	-49.23	PK	Hor
6*	5.9329GHz	56.01	-7.57	48.44	68.20	-19.76	PK	Hor



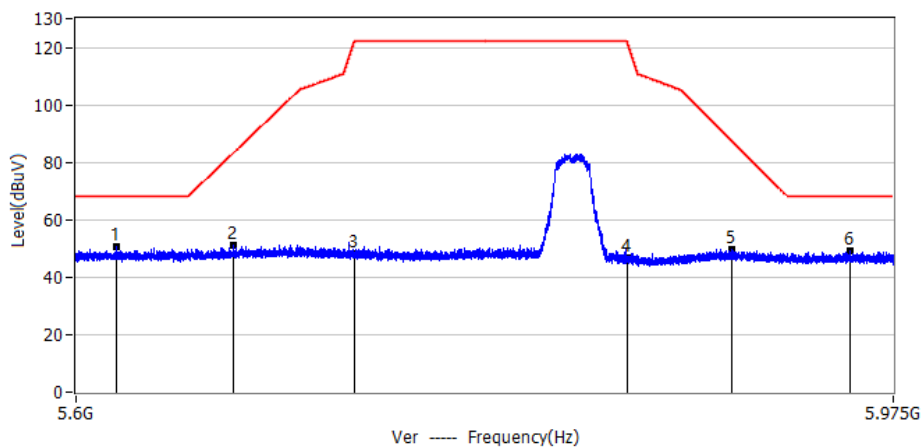
No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	5.6233GHz	57.17	-7.69	49.48	68.20	-18.72	PK	Ver
2*	5.6817GHz	58.91	-7.67	51.24	91.66	-40.43	PK	Ver
3*	5.7250GHz	54.65	-7.65	47.00	122.20	-75.20	PK	Ver
4*	5.8500GHz	52.50	-7.60	44.90	122.20	-77.30	PK	Ver
5*	5.8903GHz	57.21	-7.58	49.63	93.81	-44.18	PK	Ver
6*	5.9420GHz	56.98	-7.56	49.42	68.20	-18.78	PK	Ver



Project: LGT23J048	Test Engineer: Xiangdong Ma
EUT: NAUTIZ X2-V	Temperature: 28.2°C
M/N: NAUTIZ X2-V	Humidity: 61%RH
Test Voltage: Battery	Test Data: 2023-10-28
Test Mode: 802.11a 5745	
Note:	



No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	5.6344GHz	57.58	-7.69	49.89	68.20	-18.31	PK	Hor
2*	5.6931GHz	57.83	-7.66	50.17	100.14	-49.98	PK	Hor
3*	5.7250GHz	54.75	-7.65	47.10	122.20	-75.10	PK	Hor
4*	5.8500GHz	55.20	-7.60	47.60	122.20	-74.60	PK	Hor
5*	5.8995GHz	56.98	-7.58	49.40	87.01	-37.61	PK	Hor
6*	5.9545GHz	56.32	-7.56	48.76	68.20	-19.44	PK	Hor



No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	5.6177GHz	58.26	-7.69	50.57	68.20	-17.63	PK	Ver
2*	5.6703GHz	58.88	-7.67	51.21	83.27	-32.06	PK	Ver
3*	5.7250GHz	55.65	-7.65	48.00	122.20	-74.20	PK	Ver
4*	5.8500GHz	54.20	-7.60	46.60	122.20	-75.60	PK	Ver
5*	5.8987GHz	57.40	-7.58	49.82	87.60	-37.78	PK	Ver
6*	5.9548GHz	56.65	-7.56	49.09	68.20	-19.11	PK	Ver
7*	5.7250GHz	NaN	-7.65	NaN	NaN	NaN		Ver
8*	5.8500GHz	NaN	-7.60	NaN	NaN	NaN		Ver



4. POWER SPECTRAL DENSITY TEST

4.1 LIMIT

1. For mobile and portable client devices in the 5.15-5.25 GHz band, , the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
2. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
3. For the band 5.725-5.850 GHz, the peak power spectral density shall not exceed 30 dBm in any 500kHz band. If transmitting antenna directional gain is greater than 6 dBi, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.2 TEST PROCEDURE

1. The setting follows Method SA-1 of FCC KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.

For devices operating in the band, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (*i.e.*, 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

- a) Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ kHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10 \log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the sections 5.c) and 5.d) above, since $RBW=100 \text{ KHZ}$ is available on nearly all spectrum analyzers.

4.3 DEVIATION FROM STANDARD

No deviation.



4.4 TEST SETUP



4.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

4.6 TEST RESULTS

For the measurement records, refer to the appendix I.



5. BANDWIDTH MEASUREMENT

5.1 EMISSION BANDWIDTH (EBW) 26 BANDWID PROCEDURES / LIMIT

The following procedure shall be used for measuring 26 bandwidth.

5.1.1 TEST PROCEDURE

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW \geq RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.5 TEST RESULTS

For the measurement records, refer to the appendix I.



5.2 OCCUPIED BANDWIDTH (99%) TEST APPLIED PROCEDURES / LIMIT

The following procedure shall be used for measuring (99 %) power bandwidth.

5.2.1 TEST PROCEDURE

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures v02r01.

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW $\geq 3 \cdot$ RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

5.2.2 DEVIATION FROM STANDARD

No deviation.

5.2.3 TEST SETUP



5.2.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.2.5 TEST RESULTS

For the measurement records, refer to the appendix I.



5.3 MINIMUM EMISSION BANDWIDTH(6 DB) PROCEDURES / LIMIT

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth.

5.3.1 TEST PROCEDURE

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures v02r01.
 - a) Set RBW = 100 kHz.
 - b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
 - c) Detector = Peak.
 - d) Trace mode = max hold.
 - e) Sweep = auto couple.
 - f) Allow the trace to stabilize.
 - g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.3.2 DEVIATION FROM STANDARD

No deviation.

5.3.3 TEST SETUP



5.3.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.3.5 TEST RESULTS

For the measurement records, refer to the appendix I.



6. MAXIMUM CONDUCTED OUTPUT POWER

6.1 LIMIT

For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz, if transmitting antennas of directional gain greater than 6 dBi are used.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used.

FCC Part15 (15.407) , Subpart E				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.407(a) (1) (iv)	Output Power	0.25 watt	5150-5250	PASS
		The lesser of 250 mW or $11 \text{ dBm} + 10 \log (26 \text{ dB emission bandwidth})$	5250-5350 5470-5725	
15.407(a) (3)		1 watt	5725-5825	

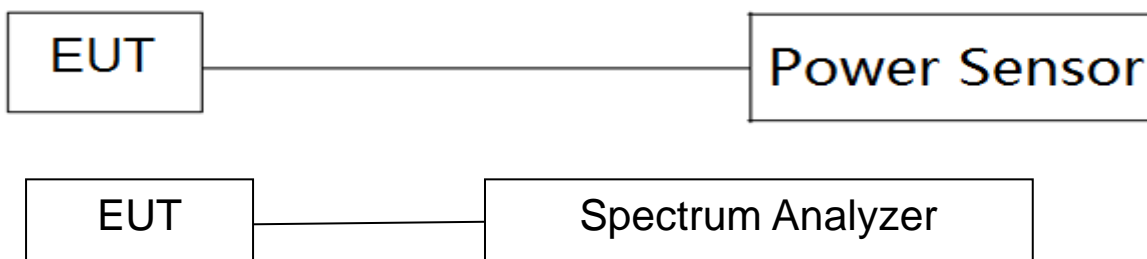
6.2 TEST PROCEDURE

The EUT was directly connected to the Power Sensor&PC

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 5 Unless otherwise a special operating condition is specified in the follows during the testing.

6.6 TEST RESULTS

For the measurement records, refer to the appendix I.



7. AUTOMATICALLY DISCONTINUE TRANSMISSION

7.1 LIMIT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

7.2 TEST RESULT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission



8. ANTENNA REQUIREMENT

8.1 STANDARD REQUIREMENT

Part 15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

8.2 EUT ANTENNA

The EUT antenna is FPC Antenna. It comply with the standard requirement.



APPENDIX I: TEST RESULTS

Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	96.94	0.13	0.72
NVNT	a	5200	Ant1	96.94	0.13	0.72
NVNT	a	5240	Ant1	96.94	0.13	0.72
NVNT	a	5260	Ant1	97.01	0.13	0.72
NVNT	a	5300	Ant1	96.94	0.13	0.72
NVNT	a	5320	Ant1	96.94	0.13	0.72
NVNT	a	5500	Ant1	96.94	0.13	0.72
NVNT	a	5580	Ant1	96.94	0.13	0.72
NVNT	a	5700	Ant1	96.94	0.13	0.72
NVNT	a	5745	Ant1	96.94	0.13	0.72
NVNT	a	5785	Ant1	96.94	0.13	0.72
NVNT	a	5825	Ant1	96.94	0.13	0.72
NVNT	n20	5180	Ant1	96.23	0.17	0.85
NVNT	n20	5200	Ant1	96.23	0.17	0.85
NVNT	n20	5240	Ant1	96.23	0.17	0.85
NVNT	n20	5260	Ant1	96.23	0.17	0.85
NVNT	n20	5300	Ant1	96.23	0.17	0.85
NVNT	n20	5320	Ant1	96.23	0.17	0.85
NVNT	n20	5500	Ant1	96.23	0.17	0.85
NVNT	n20	5580	Ant1	96.23	0.17	0.85
NVNT	n20	5700	Ant1	96.23	0.17	0.85
NVNT	n20	5745	Ant1	96.23	0.17	0.85
NVNT	n20	5785	Ant1	96.23	0.17	0.85
NVNT	n20	5825	Ant1	96.23	0.17	0.85
NVNT	n40	5190	Ant1	93.2	0.31	1.7
NVNT	n40	5230	Ant1	93.2	0.31	1.7
NVNT	n40	5270	Ant1	93.19	0.31	1.7
NVNT	n40	5310	Ant1	93.2	0.31	1.7
NVNT	n40	5510	Ant1	93.04	0.31	1.7
NVNT	n40	5550	Ant1	93.2	0.31	1.7
NVNT	n40	5670	Ant1	93.2	0.31	1.7
NVNT	n40	5755	Ant1	93.2	0.31	1.7
NVNT	n40	5795	Ant1	93.2	0.31	1.7
NVNT	ac20	5180	Ant1	96.76	0.14	0.76
NVNT	ac20	5200	Ant1	96.83	0.14	0.76
NVNT	ac20	5240	Ant1	96.76	0.14	0.76
NVNT	ac20	5260	Ant1	96.76	0.14	0.76
NVNT	ac20	5300	Ant1	96.76	0.14	0.76
NVNT	ac20	5320	Ant1	96.76	0.14	0.76
NVNT	ac20	5500	Ant1	96.76	0.14	0.76
NVNT	ac20	5580	Ant1	96.76	0.14	0.76
NVNT	ac20	5700	Ant1	96.76	0.14	0.76
NVNT	ac20	5745	Ant1	96.76	0.14	0.76
NVNT	ac20	5785	Ant1	96.83	0.14	0.76
NVNT	ac20	5825	Ant1	96.76	0.14	0.76
NVNT	ac40	5190	Ant1	93.82	0.28	1.53
NVNT	ac40	5230	Ant1	93.82	0.28	1.53
NVNT	ac40	5270	Ant1	93.82	0.28	1.53
NVNT	ac40	5310	Ant1	93.82	0.28	1.53
NVNT	ac40	5510	Ant1	93.68	0.28	1.53



NVNT	ac40	5550	Ant1	93.82	0.28	1.53
NVNT	ac40	5670	Ant1	93.82	0.28	1.53
NVNT	ac40	5755	Ant1	93.82	0.28	1.53
NVNT	ac40	5795	Ant1	93.82	0.28	1.53
NVNT	ac80	5210	Ant1	87.52	0.58	3.36
NVNT	ac80	5290	Ant1	87.5	0.58	3.36
NVNT	ac80	5530	Ant1	87.52	0.58	3.36
NVNT	ac80	5610	Ant1	87.52	0.58	3.36
NVNT	ac80	5775	Ant1	87.52	0.58	3.36

