

Radiated Band Edge Result

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

3. Display the measurement of peak values.

Test Procedure:

The EUT and its simulators are placed on a turntable, which is 1.5 meter high above ground(Above 1GHz). The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

Let the EUT work in TX (Hopping off, Hopping on) modes measure it.

We select 2402MHz, 2480MHz TX frequency to transmit(Hopping off mode).

We select 2402-2480MHz TX frequency to transmit(Hopping on mode).

During the radiated emission test, the spectrum analyzer was set with the following configurations:

- 1.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz.
- 2.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
- 3.All modes of operation were investigated and the worst-case emissions are reported.

Non-hopping mode


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Site: 1# Chamber

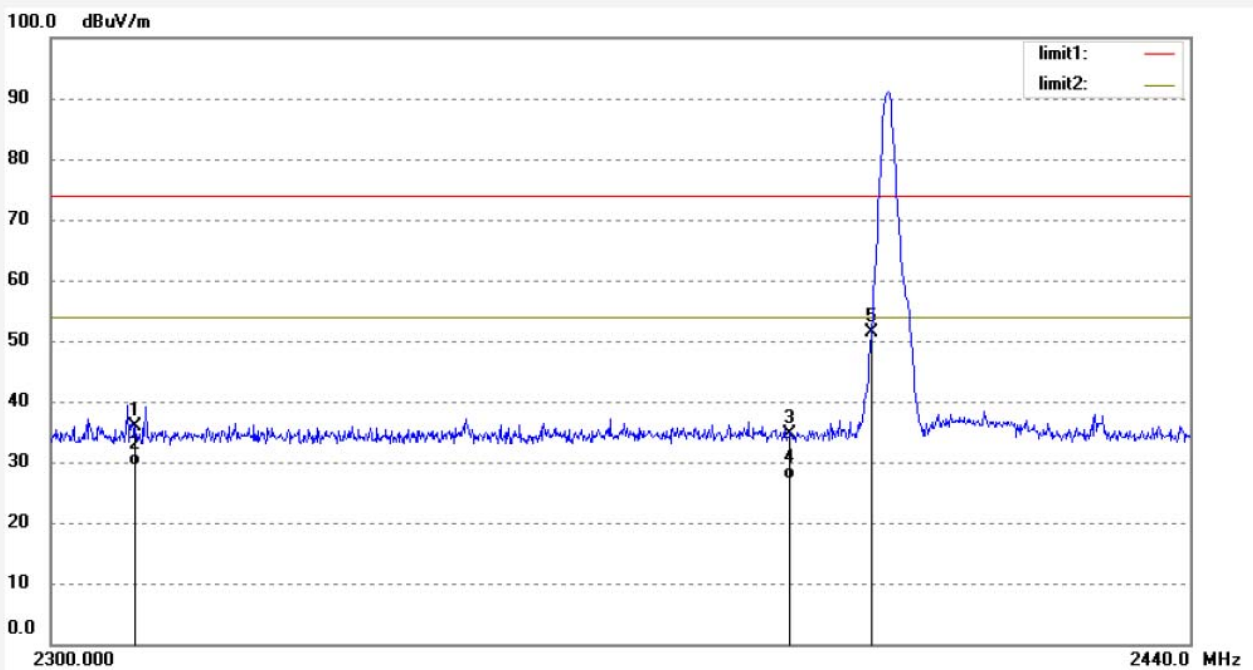
Tel:+86-0755-26503290

Fax:+86-0755-26503396

 Job No.: STAR2015 #1807
 Standard: FCC PK
 Test item: Radiation Test
 Temp.(C)/Hum.(%) 25 C / 55 %
 EUT: NYNE ROCK
 Mode: TX 2402MHz(GFSK)
 Model: NYNE ROCK
 Manufacturer: NYNE

 Polarization: Horizontal
 Power Source: AC 120V/60Hz
 Date: 2015/10/14
 Time: 16:37:57
 Engineer Signature:
 Distance: 3m

Note: Report No.:ATE20151955



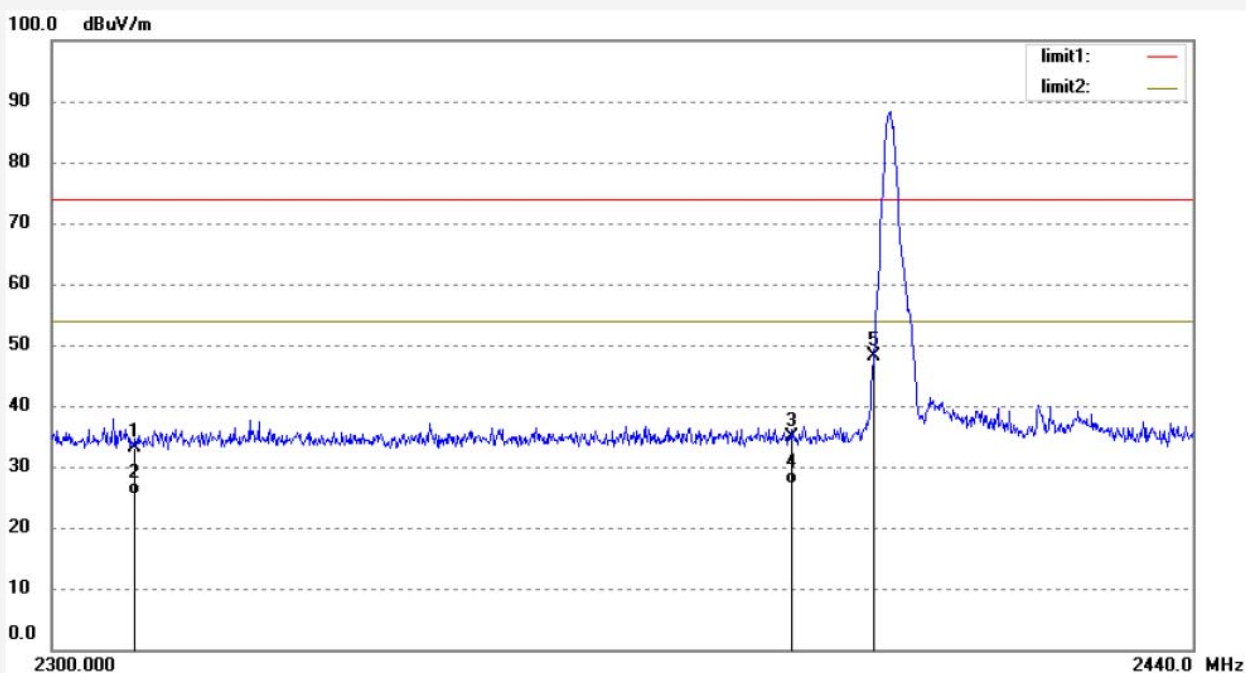
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	44.05	-8.21	35.84	74.00	-38.16	peak			
2	2310.000	37.60	-8.21	29.39	54.00	-24.61	peak			
3	2390.000	42.53	-8.00	34.53	74.00	-39.47	peak			
4	2390.000	35.06	-8.00	27.06	54.00	-26.94	peak			
5	2400.000	59.33	-7.97	51.36	74.00	-22.64	peak			

Note: Average measurement with peak detection at No.2&4

Job No.: STAR2015 #1806
 Standard: FCC PK
 Test item: Radiation Test
 Temp.(C)/Hum.(%) 25 C / 55 %
 EUT: NYNE ROCK
 Mode: TX 2402MHz(GFSK)
 Model: NYNE ROCK
 Manufacturer: NYNE

Polarization: Vertical
 Power Source: AC 120V/60Hz
 Date: 2015/10/14
 Time: 16:36:31
 Engineer Signature:
 Distance: 3m

Note: Report No.:ATE20151955



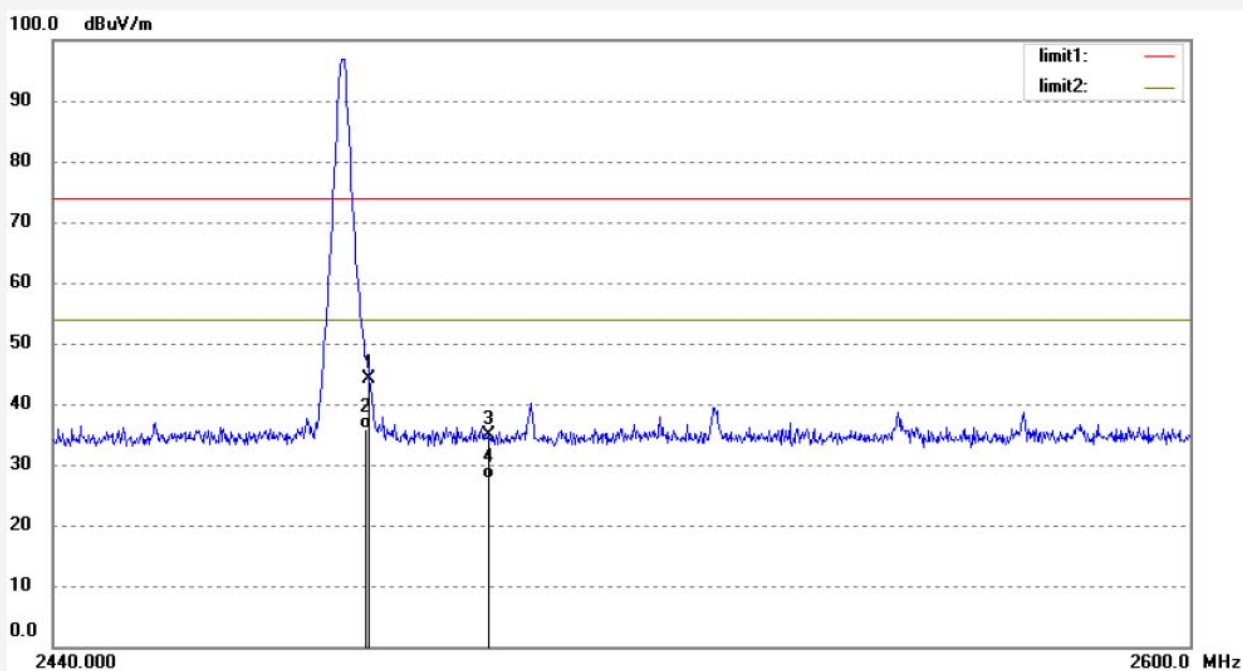
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1	2310.000	41.38	-8.21	33.17	74.00	-40.83	peak			
2	2310.000	33.69	-8.21	25.48	54.00	-28.52	peak			
3	2390.000	42.95	-8.00	34.95	74.00	-39.05	peak			
4	2390.000	35.06	-8.00	27.06	54.00	-26.94	peak			
5	2400.000	56.14	-7.97	48.17	74.00	-25.83	peak			

Note: Average measurement with peak detection at No.2&4

Job No.: STAR2015 #1804
 Standard: FCC PK
 Test item: Radiation Test
 Temp.(C)/Hum.(%) 25 C / 55 %
 EUT: NYNE ROCK
 Mode: TX 2480MHz(GFSK)
 Model: NYNE ROCK
 Manufacturer: NYNE

Polarization: Horizontal
 Power Source: AC 120V/60Hz
 Date: 2015/10/14
 Time: 16:33:43
 Engineer Signature:
 Distance: 3m

Note: Report No.:ATE20151955



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	51.84	-7.76	44.08	74.00	-29.92	peak			
2	2483.500	43.67	-7.76	35.91	54.00	-18.09	peak			
3	2500.000	42.65	-7.71	34.94	74.00	-39.06	peak			
4	2500.000	35.23	-7.71	27.52	54.00	-26.48	peak			

Note: Average measurement with peak detection at No.2&4



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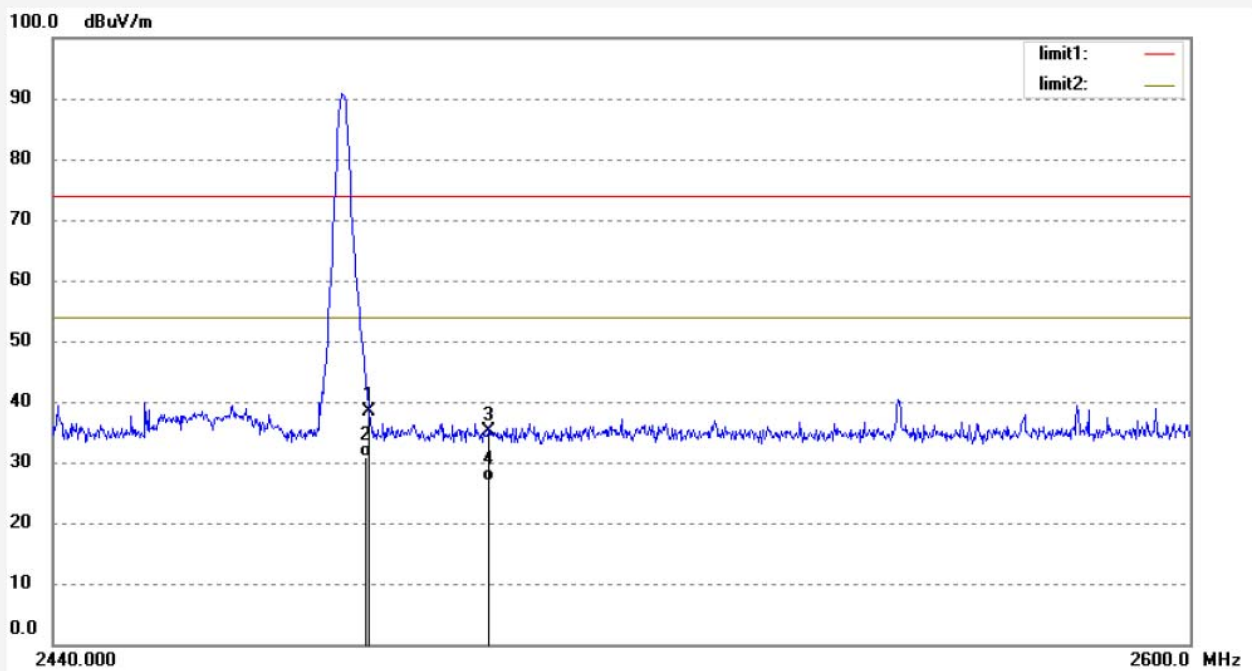
Tel:+86-0755-26503290

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Job No.: STAR2015 #1805
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: NYNE ROCK
Mode: TX 2480MHz(GFSK)
Model: NYNE ROCK
Manufacturer: NYNE

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 2015/10/14
Time: 16:34:52
Engineer Signature:
Distance: 3m

Note: Report No.:ATE20151955



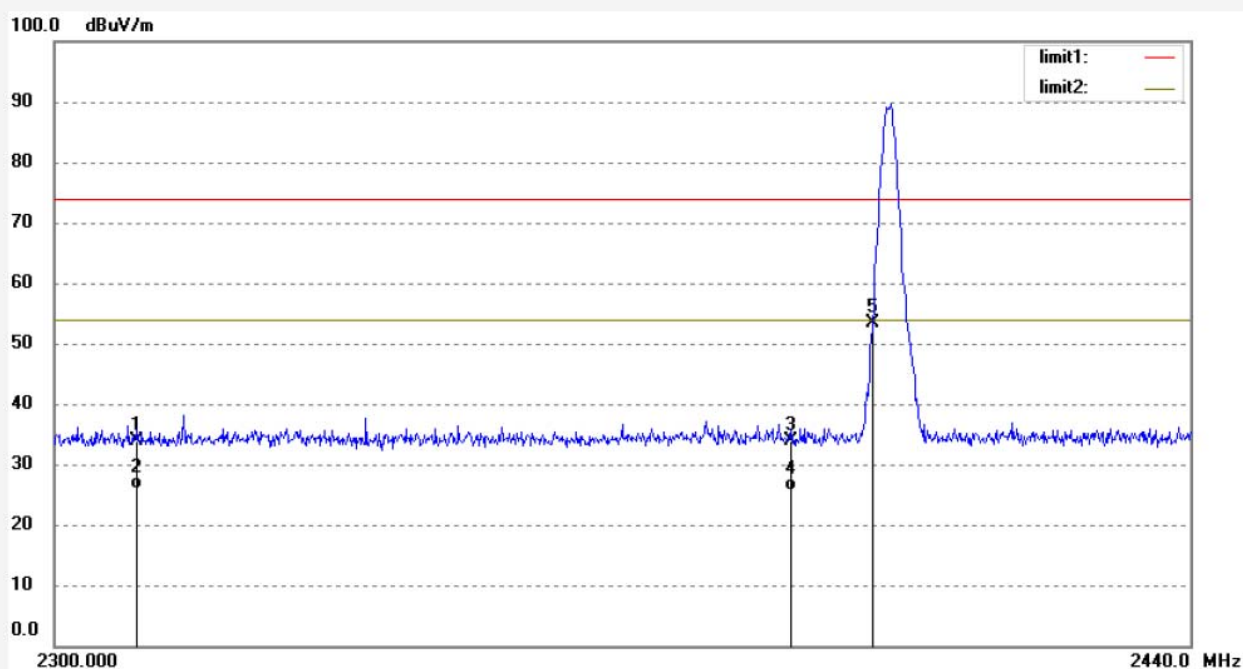
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1	2483.500	46.21	-7.76	38.45	74.00	-35.55	peak			
2	2483.500	38.61	-7.76	30.85	54.00	-23.15	peak			
3	2500.000	42.80	-7.71	35.09	74.00	-38.91	peak			
4	2500.000	34.55	-7.71	26.84	54.00	-27.16	peak			

Note: Average measurement with peak detection at No.2&4

Job No.: STAR2015 #1808
 Standard: FCC PK
 Test item: Radiation Test
 Temp.(C)/Hum.(%) 25 C / 55 %
 EUT: NYNE ROCK
 Mode: TX 2402MHz(pi/4DQPSK)
 Model: NYNE ROCK
 Manufacturer: NYNE

Polarization: Horizontal
 Power Source: AC 120V/60Hz
 Date: 2015/10/14
 Time: 16:39:43
 Engineer Signature:
 Distance: 3m

Note: Report No.:ATE20151955



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	42.02	-8.21	33.81	74.00	-40.19	peak			
2	2310.000	34.09	-8.21	25.88	54.00	-28.12	peak			
3	2390.000	41.88	-8.00	33.88	74.00	-40.12	peak			
4	2390.000	33.62	-8.00	25.62	54.00	-28.38	peak			
5	2400.000	61.42	-7.97	53.45	74.00	-20.55	peak			

Note: Average measurement with peak detection at No.2&4



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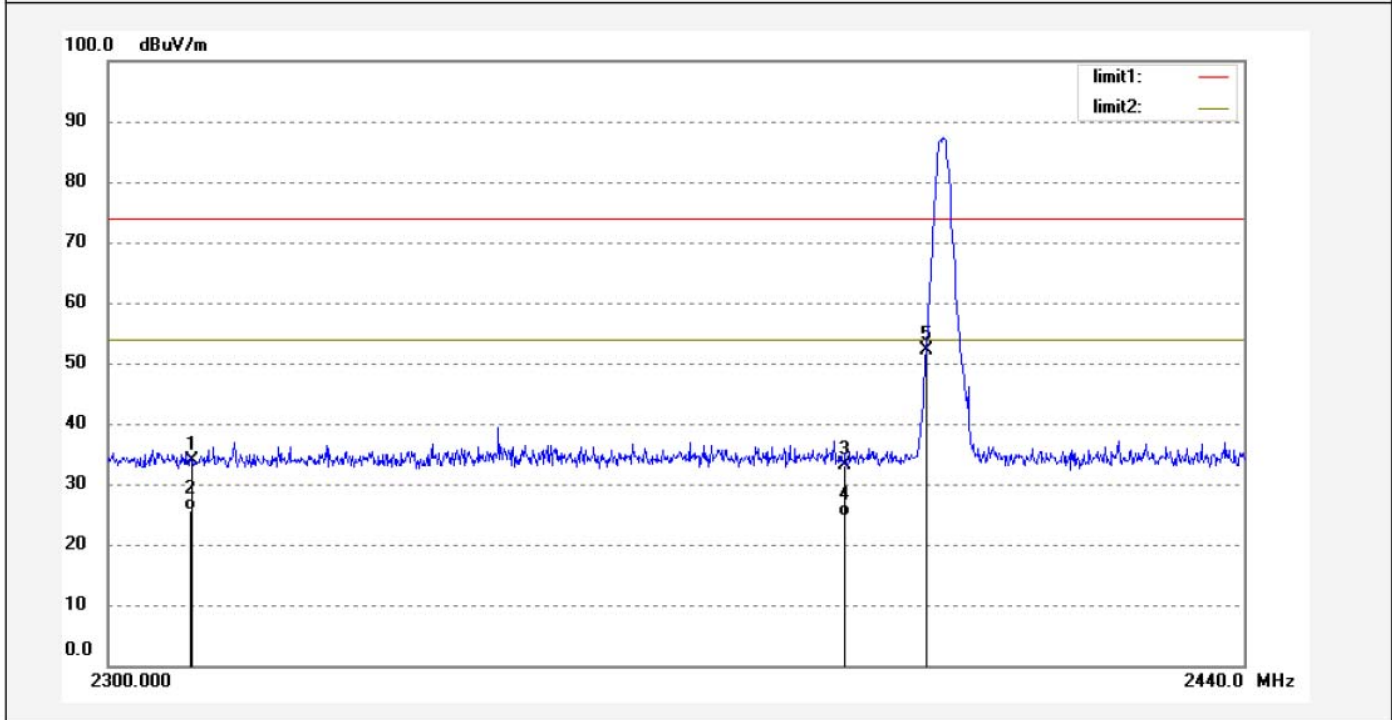
Site: 1# Chamber

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Job No.: STAR2015 #1809	Polarization: Vertical
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2015/10/14
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 16:40:41
EUT: NYNE ROCK	Engineer Signature:
Mode: TX 2402MHz(pi/4DQPSK)	Distance: 3m
Model: NYNE ROCK	
Manufacturer: NYNE	

Note: Report No.:ATE20151955



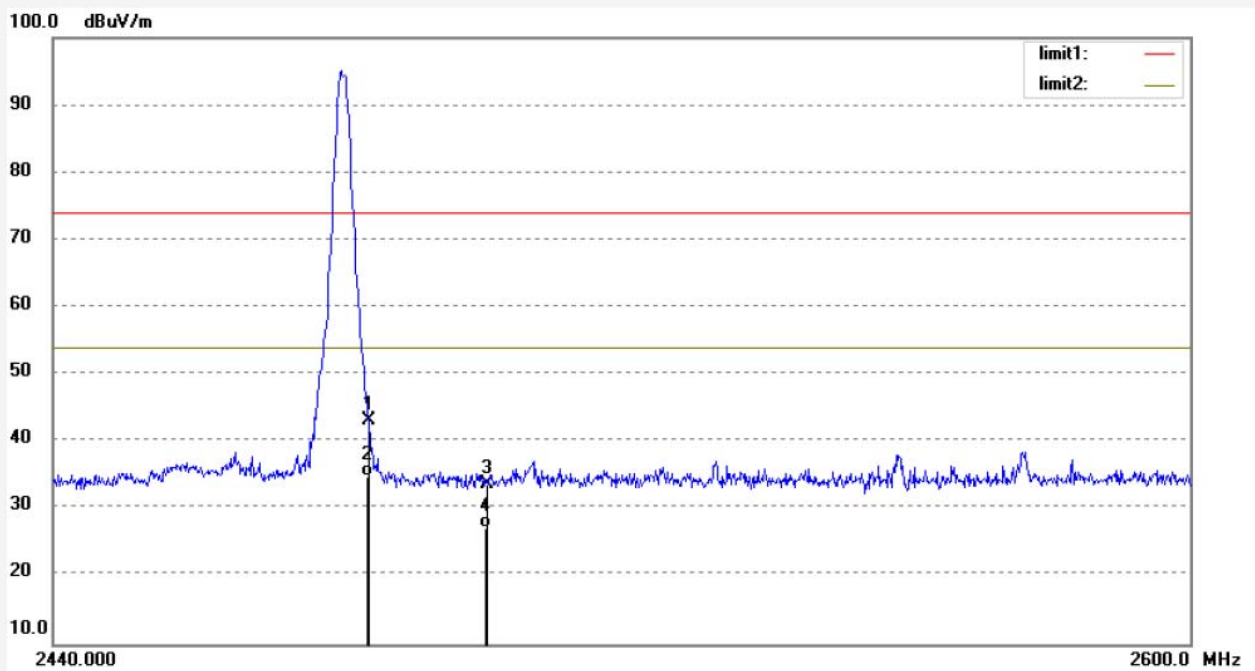
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	42.03	-8.21	33.82	74.00	-40.18	peak			
2	2310.000	33.90	-8.21	25.69	54.00	-28.31	peak			
3	2390.000	41.20	-8.00	33.20	74.00	-40.80	peak			
4	2390.000	32.69	-8.00	24.69	54.00	-29.31	peak			
5	2400.000	60.22	-7.97	52.25	74.00	-21.75	peak			

Note: Average measurement with peak detection at No.2&4

Job No.: STAR2015 #1811
 Standard: FCC PK
 Test item: Radiation Test
 Temp.(C)/Hum.(%) 25 C / 55 %
 EUT: NYNE ROCK
 Mode: TX 2480MHz(pi/4DQPSK)
 Model: NYNE ROCK
 Manufacturer: NYNE

Polarization: Horizontal
 Power Source: AC 120V/60Hz
 Date: 2015/10/14
 Time: 16:42:58
 Engineer Signature:
 Distance: 3m

Note: Report No.:ATE20151955

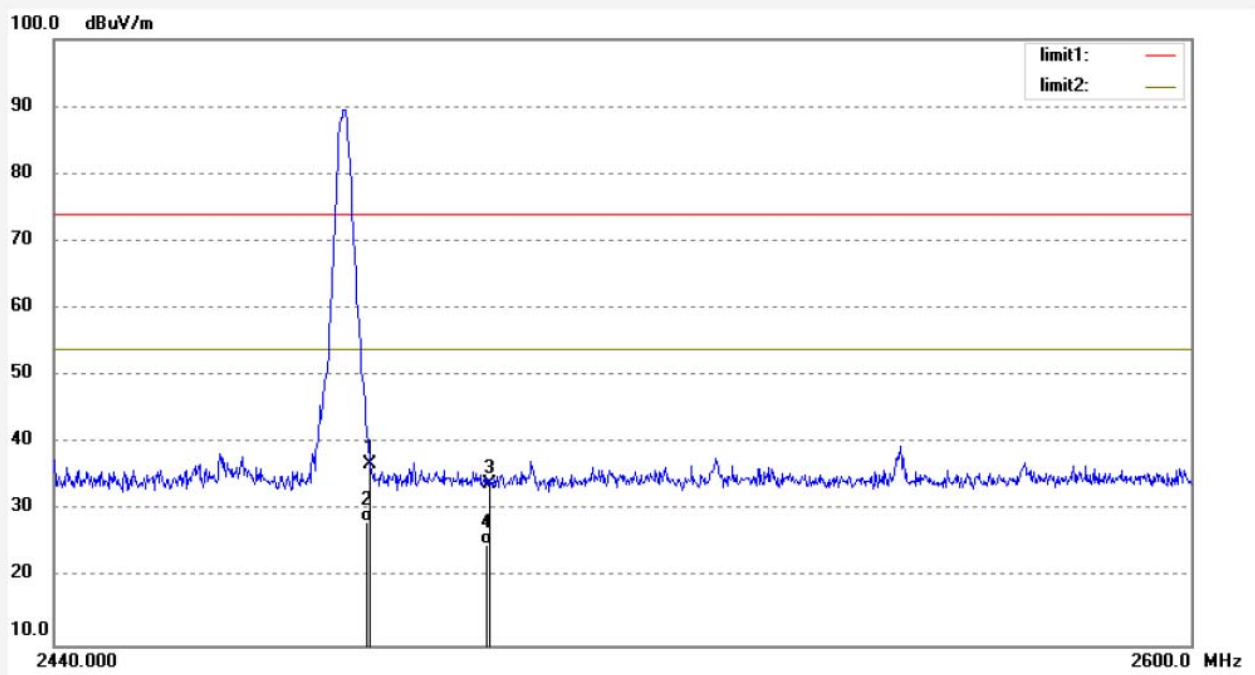


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	50.99	-7.76	43.23	74.00	-30.77	peak			
2	2483.500	42.69	-7.76	34.93	54.00	-19.07	peak			
3	2500.000	41.40	-7.71	33.69	74.00	-40.31	peak			
4	2500.000	35.00	-7.71	27.29	54.00	-26.71	peak			

Note: Average measurement with peak detection at No.2&4

Job No.: STAR2015 #1810	Polarization: Vertical
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2015/10/14
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 16:42:01
EUT: NYNE ROCK	Engineer Signature:
Mode: TX 2480MHz(pi/4QPSK)	Distance: 3m
Model: NYNE ROCK	
Manufacturer: NYNE	

Note: Report No.:ATE20151955



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	44.73	-7.76	36.97	74.00	-37.03	peak			
2	2483.500	36.09	-7.76	28.33	54.00	-25.67	peak			
3	2500.000	41.56	-7.71	33.85	74.00	-40.15	peak			
4	2500.000	32.65	-7.71	24.94	54.00	-29.06	peak			

Note: Average measurement with peak detection at No.2&4



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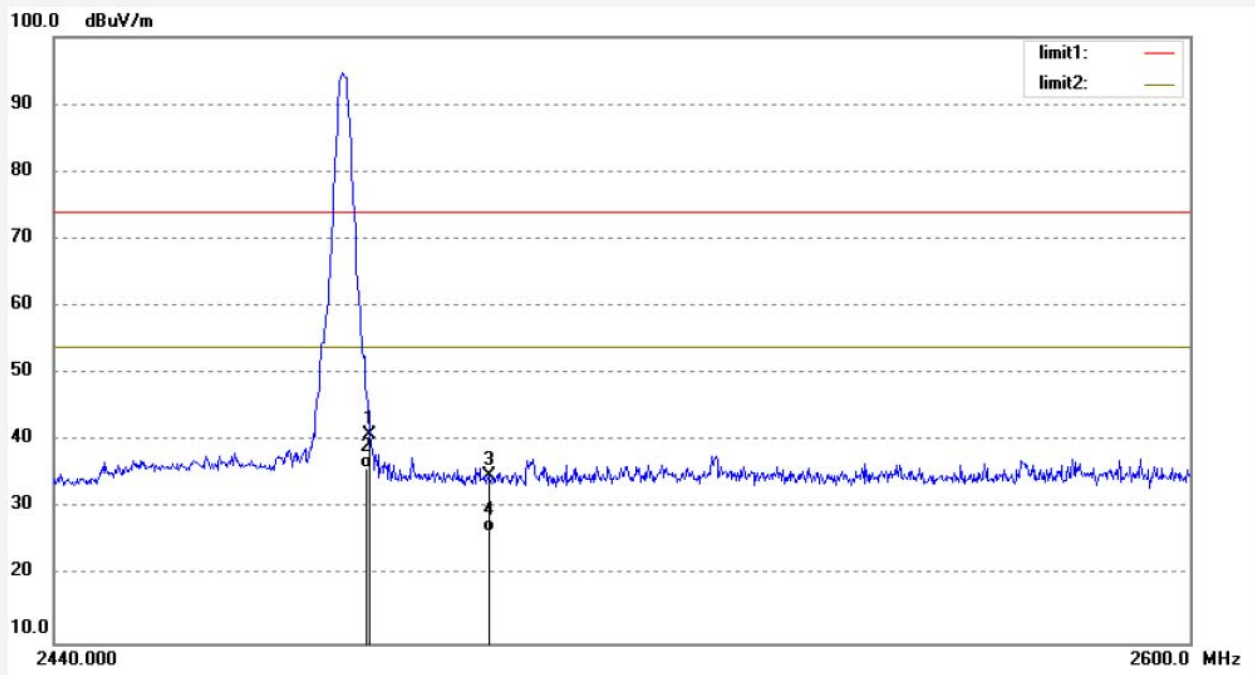
Site: 1# Chamber

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Fax:+86-0755-26503396

Job No.: STAR2015 #1812	Polarization: Horizontal
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2015/10/14
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 16:44:46
EUT: NYNE ROCK	Engineer Signature:
Mode: TX 2480MHz(8DPSK)	Distance: 3m
Model: NYNE ROCK	
Manufacturer: NYNE	

Note: Report No.:ATE20151955

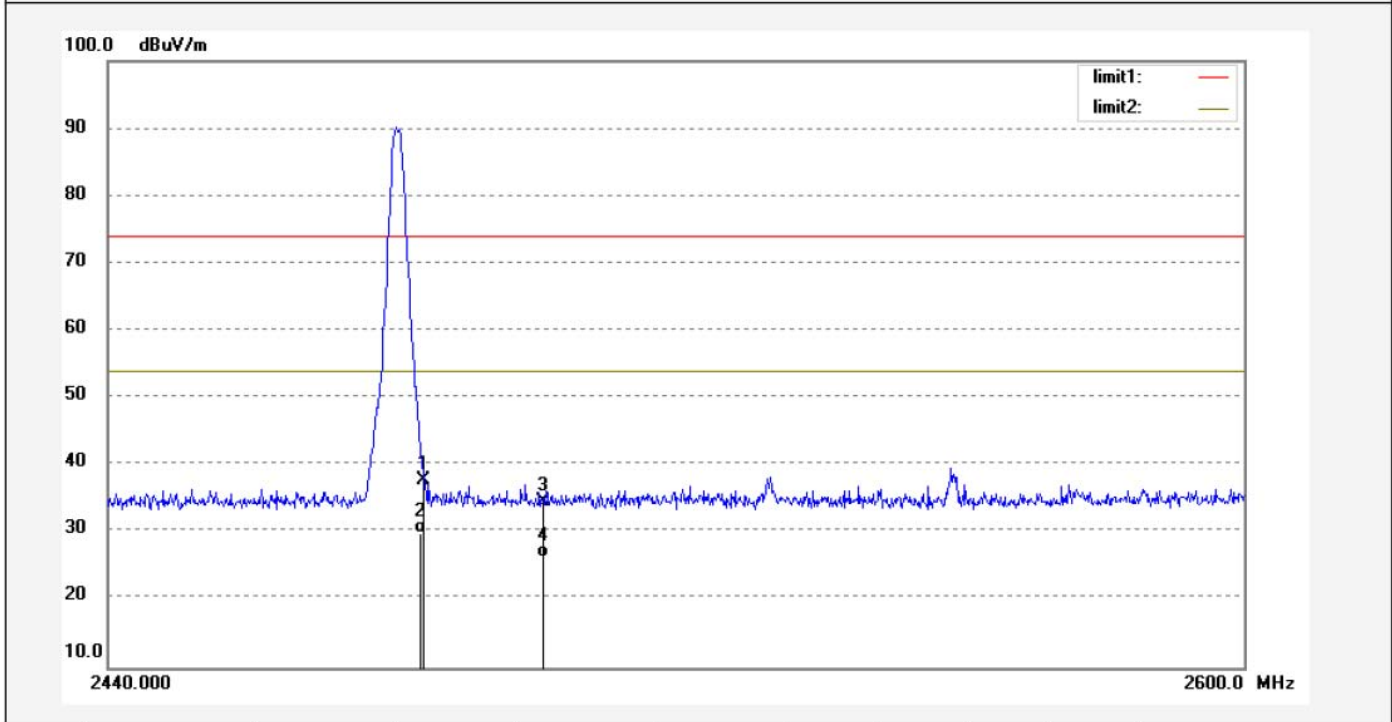


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	48.75	-7.76	40.99	74.00	-33.01	peak			
2	2483.500	43.69	-7.76	35.93	54.00	-18.07	peak			
3	2500.000	42.61	-7.71	34.90	74.00	-39.10	peak			
4	2500.000	34.14	-7.71	26.43	54.00	-27.57	peak			

Note: Average measurement with peak detection at No.2&4

Job No.: STAR2015 #1813	Polarization: Vertical
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2015/10/14
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 16:46:28
EUT: NYNE ROCK	Engineer Signature:
Mode: TX 2480MHz(8DPSK)	Distance: 3m
Model: NYNE ROCK	
Manufacturer: NYNE	

Note: Report No.:ATE20151955



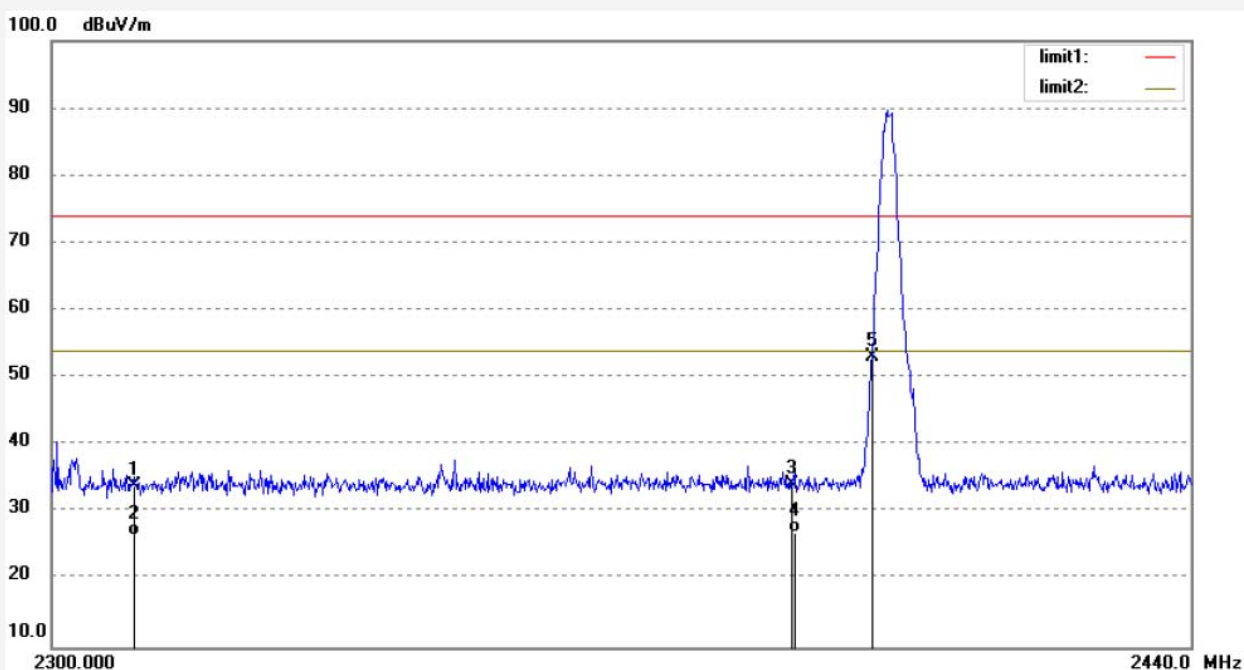
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	45.63	-7.76	37.87	74.00	-36.13	peak			
2	2483.500	37.69	-7.76	29.93	54.00	-24.07	peak			
3	2500.000	42.31	-7.71	34.60	74.00	-39.40	peak			
4	2500.000	34.09	-7.71	26.38	54.00	-27.62	peak			

Note: Average measurement with peak detection at No.2&4

Job No.: STAR2015 #1815
 Standard: FCC PK
 Test item: Radiation Test
 Temp.(C)/Hum.(%) 25 C / 55 %
 EUT: NYNE ROCK
 Mode: TX 2402MHz(8DPSK)
 Model: NYNE ROCK
 Manufacturer: NYNE

Polarization: Horizontal
 Power Source: AC 120V/60Hz
 Date: 2015/10/14
 Time: 16:48:59
 Engineer Signature:
 Distance: 3m

Note: Report No.:ATE20151955

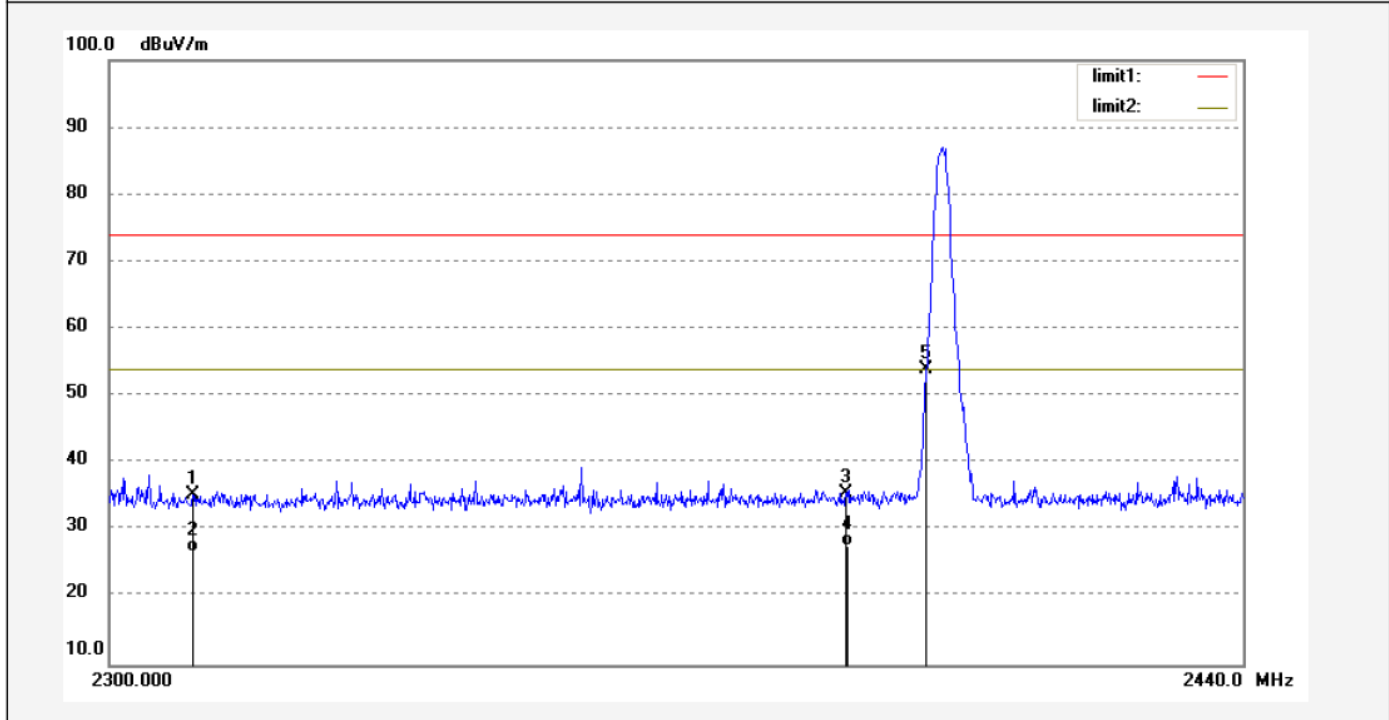


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	42.14	-8.21	33.93	74.00	-40.07	peak			
2	2310.000	34.69	-8.21	26.48	54.00	-27.52	peak			
3	2390.000	42.14	-8.00	34.14	74.00	-39.86	peak			
4	2390.000	35.00	-8.00	27.00	54.00	-27.00	peak			
5	2400.000	61.14	-7.97	53.17	74.00	-20.83	peak			

Note: Average measurement with peak detection at No.2&4

Job No.: STAR2015 #1814	Polarization: Vertical
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2015/10/14
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 16:47:55
EUT: NYNE ROCK	Engineer Signature:
Mode: TX 2402MHz(8DPSK)	Distance: 3m
Model: NYNE ROCK	
Manufacturer: NYNE	

Note: Report No.:ATE20151955



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	43.53	-8.21	35.32	74.00	-38.68	peak			
2	2310.000	35.01	-8.21	26.80	54.00	-27.20	peak			
3	2390.000	43.45	-8.00	35.45	74.00	-38.55	peak			
4	2390.000	35.69	-8.00	27.69	54.00	-26.31	peak			
5	2400.000	61.87	-7.97	53.90	74.00	-20.10	peak			

Note: Average measurement with peak detection at No.2&4

Hopping mode


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Site: 1# Chamber

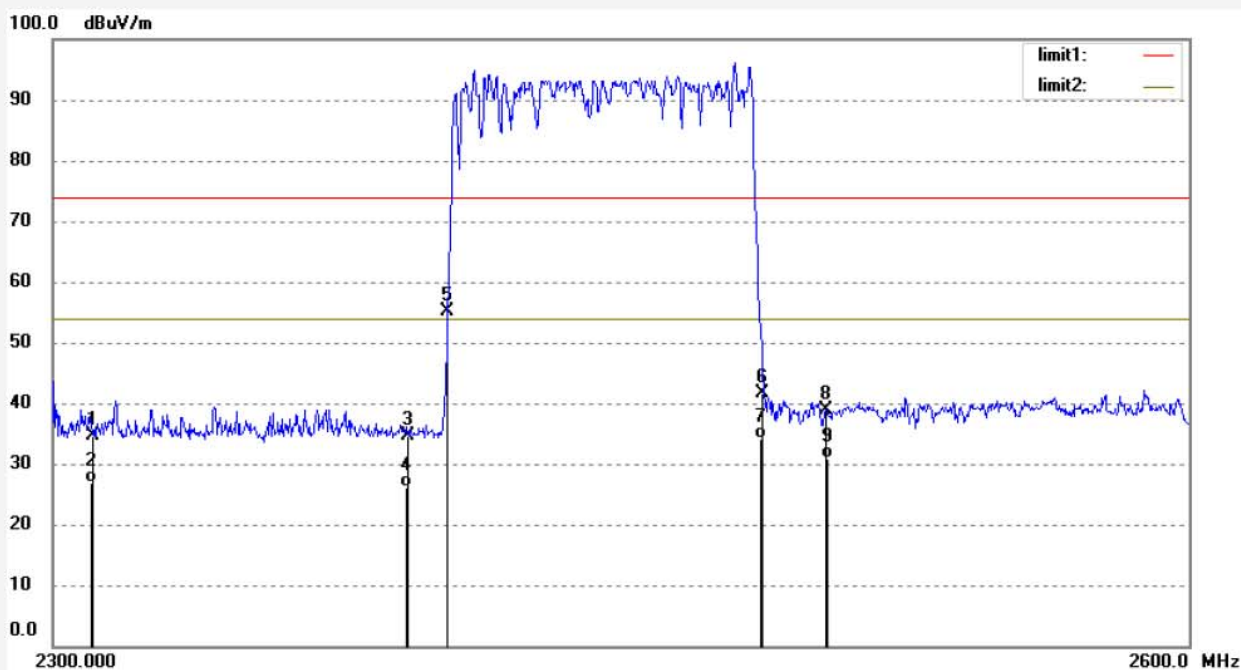
Tel:+86-0755-26503290

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 Job No.: STAR2015 #1820
 Standard: FCC PK
 Test item: Radiation Test
 Temp.(C)/Hum.(%) 25 C / 55 %
 EUT: NYNE ROCK
 Mode: HOPPING (GFSK)
 Model: NYNE ROCK
 Manufacturer: NYNE

 Polarization: Horizontal
 Power Source: AC 120V/60Hz
 Date: 2015/10/14
 Time: 17:05:44
 Engineer Signature:
 Distance: 3m

Note: Report No.:ATE20151955



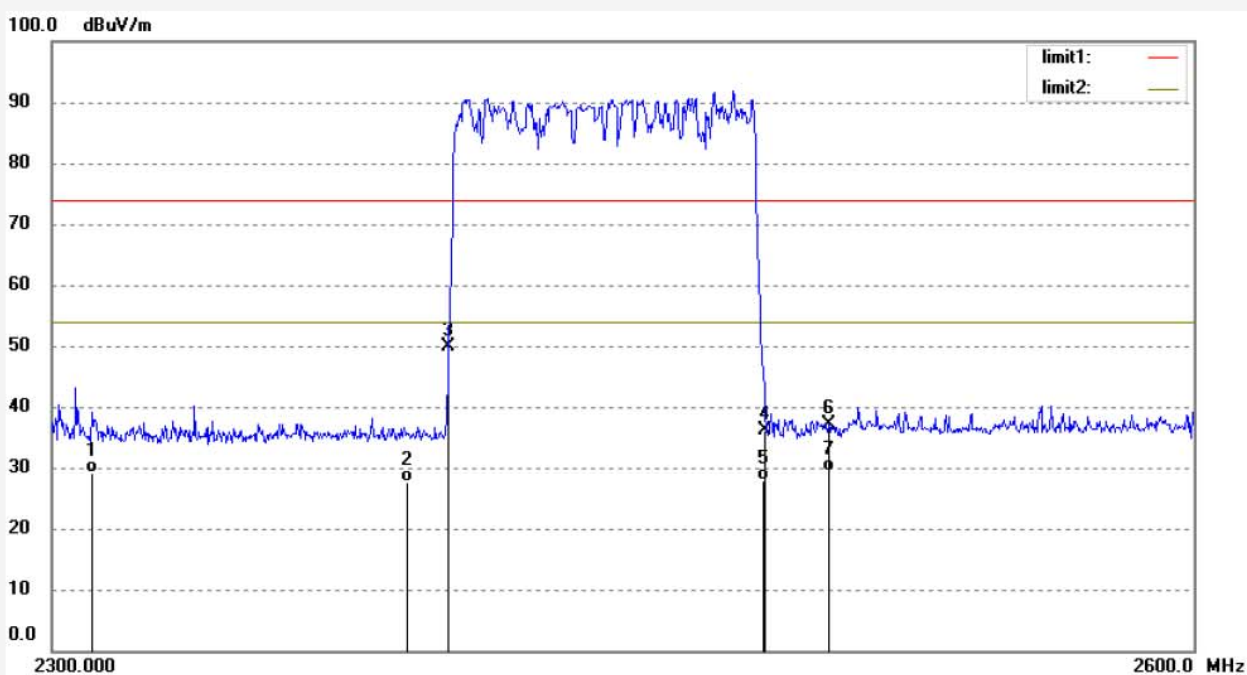
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	42.96	-8.21	34.75	74.00	-39.25	peak			
2	2310.000	35.14	-8.21	26.93	54.00	-27.07	peak			
3	2390.000	42.65	-8.00	34.65	74.00	-39.35	peak			
4	2390.000	34.25	-8.00	26.25	54.00	-27.75	peak			
5	2400.000	63.07	-7.97	55.10	74.00	-18.90	peak			
6	2483.500	49.33	-7.76	41.57	74.00	-32.43	peak			
7	2483.500	42.00	-7.76	34.24	54.00	-19.76	peak			
8	2500.000	46.57	-7.71	38.86	74.00	-35.14	peak			
9	2500.000	38.64	-7.71	30.93	54.00	-23.07	peak			

Note: Average measurement with peak detection at No.2, 4, 7, 9

Job No.: STAR2015 #1821
 Standard: FCC PK
 Test item: Radiation Test
 Temp.(C)/Hum.(%) 25 C / 55 %
 EUT: NYNE ROCK
 Mode: HOPPING (GFSK)
 Model: NYNE ROCK
 Manufacturer: NYNE

Polarization: Vertical
 Power Source: AC 120V/60Hz
 Date: 2015/10/14
 Time: 17:08:42
 Engineer Signature:
 Distance: 3m

Note: Report No.:ATE20151955



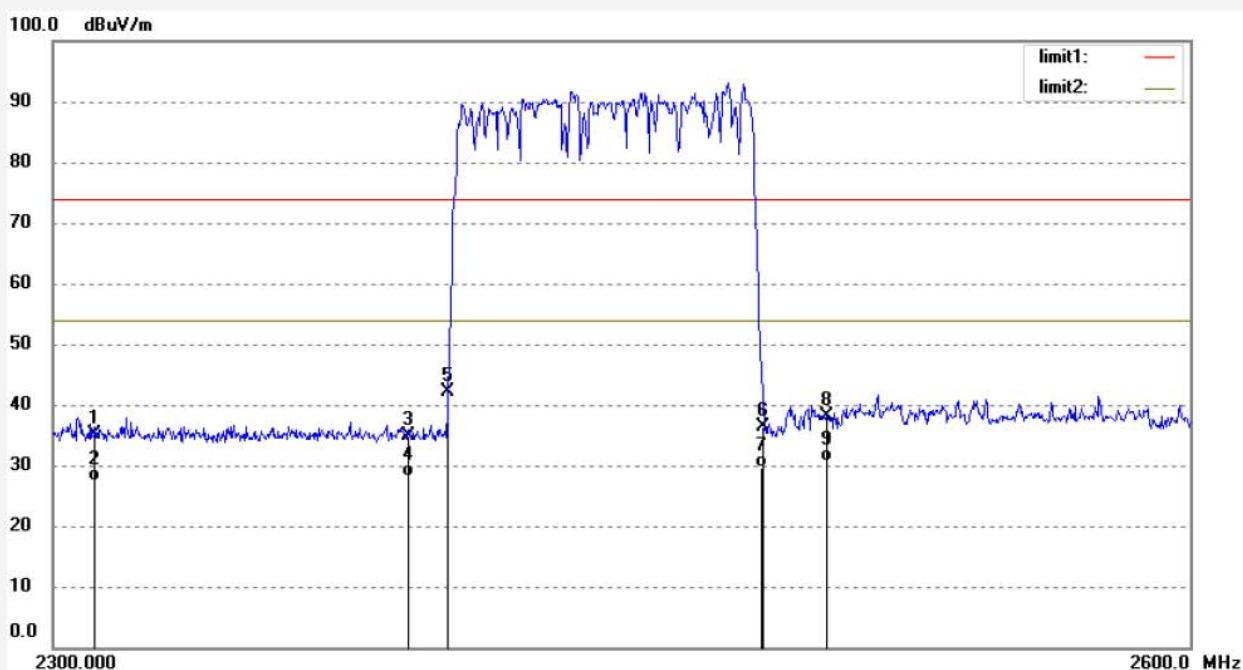
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	37.36	-8.21	29.15	54.00	-24.85	peak			
2	2390.000	35.69	-8.00	27.69	54.00	-26.31	peak			
3	2400.000	57.89	-7.97	49.92	74.00	-24.08	peak			
4	2483.500	43.86	-7.76	36.10	74.00	-37.90	peak			
5	2483.500	35.60	-7.76	27.84	54.00	-26.16	peak			
6	2500.000	44.77	-7.71	37.06	74.00	-36.94	peak			
7	2500.000	36.99	-7.71	29.28	54.00	-24.72	peak			

Note: Average measurement with peak detection at No.1, 2, 5, 7

Job No.: STAR2015 #1819
 Standard: FCC PK
 Test item: Radiation Test
 Temp.(C)/Hum.(%) 25 C / 55 %
 EUT: NYNE ROCK
 Mode: HOPPING (pi/4DQPSK)
 Model: NYNE ROCK
 Manufacturer: NYNE

Polarization: Horizontal
 Power Source: AC 120V/60Hz
 Date: 2015/10/14
 Time: 17:02:04
 Engineer Signature:
 Distance: 3m

Note: Report No.:ATE20151955



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	43.30	-8.21	35.09	74.00	-38.91	peak			
2	2310.000	35.67	-8.21	27.46	54.00	-26.54	peak			
3	2390.000	42.86	-8.00	34.86	74.00	-39.14	peak			
4	2390.000	36.13	-8.00	28.13	54.00	-25.87	peak			
5	2400.000	50.16	-7.97	42.19	74.00	-31.81	peak			
6	2483.500	44.18	-7.76	36.42	74.00	-37.58	peak			
7	2483.500	37.36	-7.76	29.60	54.00	-24.40	peak			
8	2500.000	45.85	-7.71	38.14	74.00	-35.86	peak			
9	2500.000	38.30	-7.71	30.59	54.00	-23.41	peak			

Note: Average measurement with peak detection at No.2, 4, 7, 9

Job No.: STAR2015 #1818

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: NYNE ROCK

Mode: HOPPING (pi/4DQPSK)

Model: NYNE ROCK

Manufacturer: NYNE

Polarization: Vertical

Power Source: AC 120V/60Hz

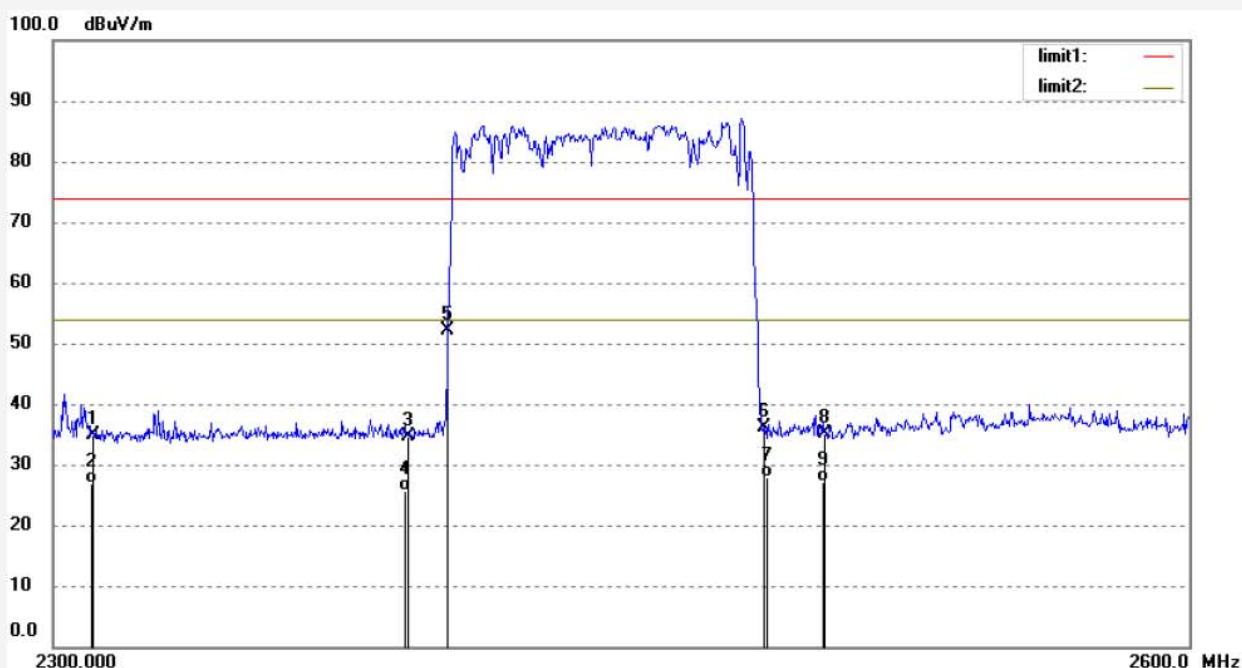
Date: 2015/10/14

Time: 16:59:18

Engineer Signature:

Distance: 3m

Note: Report No.:ATE20151955



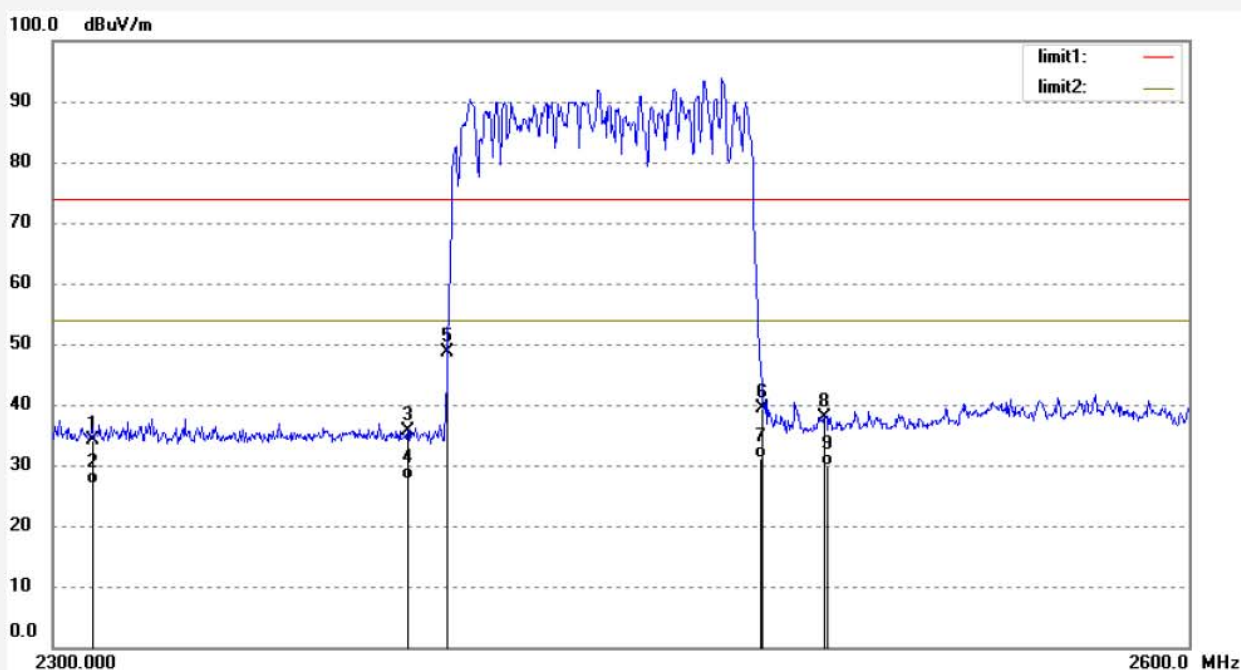
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	43.19	-8.21	34.98	74.00	-39.02	peak			
2	2310.000	35.14	-8.21	26.93	54.00	-27.07	peak			
3	2390.000	42.60	-8.00	34.60	74.00	-39.40	peak			
4	2390.000	33.69	-8.00	25.69	54.00	-28.31	peak			
5	2400.000	60.17	-7.97	52.20	74.00	-21.80	peak			
6	2483.500	43.77	-7.76	36.01	74.00	-37.99	peak			
7	2483.500	35.69	-7.76	27.93	54.00	-26.07	peak			
8	2500.000	42.91	-7.71	35.20	74.00	-38.80	peak			
9	2500.000	34.90	-7.71	27.19	54.00	-26.81	peak			

Note: Average measurement with peak detection at No.2, 4, 7, 9

Job No.: STAR2015 #1816
 Standard: FCC PK
 Test item: Radiation Test
 Temp.(C)/Hum.(%) 25 C / 55 %
 EUT: NYNE ROCK
 Mode: HOPPING (8DPSK)
 Model: NYNE ROCK
 Manufacturer: NYNE

Polarization: Horizontal
 Power Source: AC 120V/60Hz
 Date: 2015/10/14
 Time: 16:53:17
 Engineer Signature:
 Distance: 3m

Note: Report No.:ATE20151955



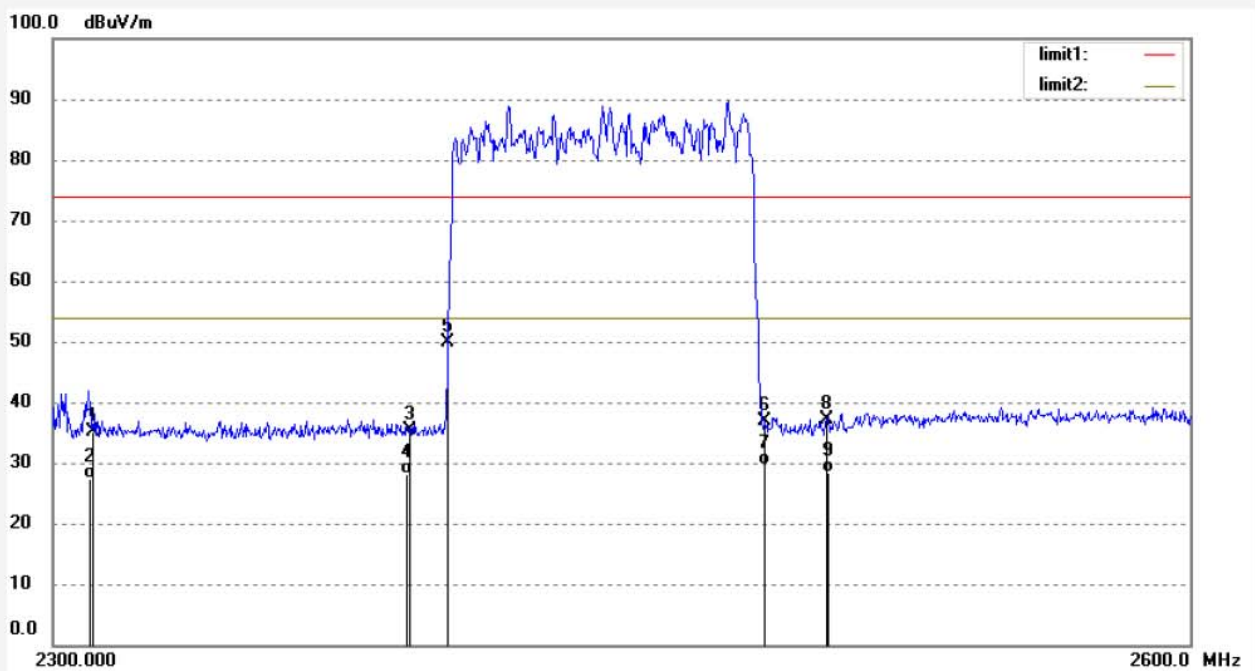
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	42.41	-8.21	34.20	74.00	-39.80	peak			
2	2310.000	35.14	-8.21	26.93	54.00	-27.07	peak			
3	2390.000	43.58	-8.00	35.58	74.00	-38.42	peak			
4	2390.000	35.67	-8.00	27.67	54.00	-26.33	peak			
5	2400.000	56.51	-7.97	48.54	74.00	-25.46	peak			
6	2483.500	47.23	-7.76	39.47	74.00	-34.53	peak			
7	2483.500	39.00	-7.76	31.24	54.00	-22.76	peak			
8	2500.000	45.65	-7.71	37.94	74.00	-36.06	peak			
9	2500.000	37.60	-7.71	29.89	54.00	-24.11	peak			

Note: Average measurement with peak detection at No.2, 4, 7, 9

Job No.: STAR2015 #1817
 Standard: FCC PK
 Test item: Radiation Test
 Temp.(C)/Hum.(%) 25 C / 55 %
 EUT: NYNE ROCK
 Mode: HOPPING (8DPSK)
 Model: NYNE ROCK
 Manufacturer: NYNE

Polarization: Vertical
 Power Source: AC 120V/60Hz
 Date: 2015/10/14
 Time: 16:56:01
 Engineer Signature:
 Distance: 3m

Note: Report No.:ATE20151955



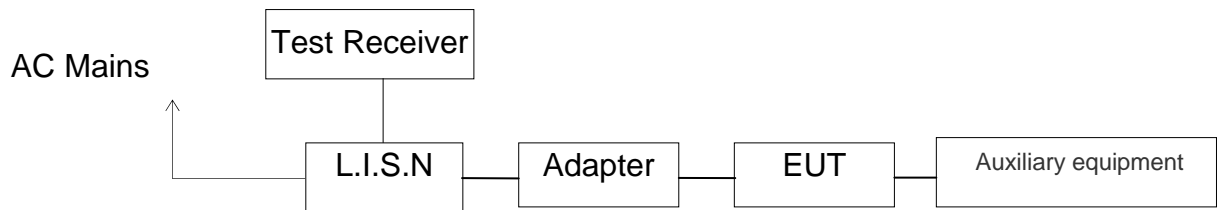
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2310.000	43.46	-8.21	35.25	74.00	-38.75	peak			
2	2310.000	35.69	-8.21	27.48	54.00	-26.52	peak			
3	2390.000	43.38	-8.00	35.38	74.00	-38.62	peak			
4	2390.000	36.03	-8.00	28.03	54.00	-25.97	peak			
5	2400.000	57.93	-7.97	49.96	74.00	-24.04	peak			
6	2483.500	44.54	-7.76	36.78	74.00	-37.22	peak			
7	2483.500	37.30	-7.76	29.54	54.00	-24.46	peak			
8	2500.000	44.79	-7.71	37.08	74.00	-36.92	peak			
9	2500.000	36.14	-7.71	28.43	54.00	-25.57	peak			

Note: Average measurement with peak detection at No.2, 4, 7, 9

12.AC POWER LINE CONDUCTED EMISSION FOR FCC PART

15 SECTION 15.207(A)

12.1.Block Diagram of Test Setup



(EUT: NYNE ROCK)

12.2.Power Line Conducted Emission Measurement Limits

Frequency (MHz)	Limit dB(μV)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0

NOTE1: The lower limit shall apply at the transition frequencies.
 NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

12.3.Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

12.4.Operating Condition of EUT

12.4.1.Setup the EUT and simulator as shown as Section 5.1.

12.4.2.Turn on the power of all equipment.

12.4.3.Let the EUT work in test mode and measure it.

12.5. Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2009 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

12.6. Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150kHz to 30MHz is checked.

Test mode : BT communicating(AC 120V/60Hz)

MEASUREMENT RESULT: "ROCKA016_fin"

2015-10-12 13:54

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.154000	53.80	10.4	66	12.0	QP	L1	GND
0.316000	40.00	11.1	60	19.8	QP	L1	GND
0.398000	43.10	11.3	58	14.8	QP	L1	GND

MEASUREMENT RESULT: "ROCKA016_fin2"

2015-10-12 13:54

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.158000	40.40	10.4	56	15.2	AV	L1	GND
0.316000	36.70	11.1	50	13.1	AV	L1	GND
0.390000	37.90	11.3	48	10.2	AV	L1	GND

MEASUREMENT RESULT: "ROCKA017_fin"

2015-10-12 13:56

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.174000	49.50	10.5	65	15.3	QP	N	GND
0.306000	39.00	11.0	60	21.1	QP	N	GND
0.392000	43.70	11.3	58	14.3	QP	N	GND

MEASUREMENT RESULT: "ROCKA017_fin2"

2015-10-12 13:56

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.174000	38.50	10.5	55	16.3	AV	N	GND
0.302000	32.70	11.0	50	17.5	AV	N	GND
0.384000	34.80	11.2	48	13.4	AV	N	GND

Test mode : BT communicating(AC 240V/60Hz)								
MEASUREMENT RESULT: "ROCKA008_fin"								
2015-10-12 11:13								
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE	
MHz	dBµV	dB	dBµV	dB				
0.168000	47.00	10.5	65	18.1	QP	L1	GND	
0.200000	44.10	10.6	64	19.5	QP	L1	GND	
0.404000	42.70	11.3	58	15.1	QP	L1	GND	
MEASUREMENT RESULT: "ROCKA008_fin2"								
2015-10-12 11:13								
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE	
MHz	dBµV	dB	dBµV	dB				
0.164000	37.60	10.4	55	17.7	AV	L1	GND	
0.202000	36.60	10.6	54	16.9	AV	L1	GND	
0.406000	35.10	11.3	48	12.6	AV	L1	GND	
MEASUREMENT RESULT: "ROCKA010_fin"								
2015-10-12 11:18								
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE	
MHz	dBµV	dB	dBµV	dB				
0.176000	48.00	10.5	65	16.7	QP	N	GND	
0.254000	41.30	10.8	62	20.3	QP	N	GND	
0.402000	34.40	11.3	58	23.4	QP	N	GND	
MEASUREMENT RESULT: "ROCKA010_fin2"								
2015-10-12 11:18								
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE	
MHz	dBµV	dB	dBµV	dB				
0.174000	42.50	10.5	55	12.3	AV	N	GND	
0.262000	33.50	10.9	51	17.9	AV	N	GND	
0.406000	39.60	11.3	48	8.1	AV	N	GND	

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are attached as below.

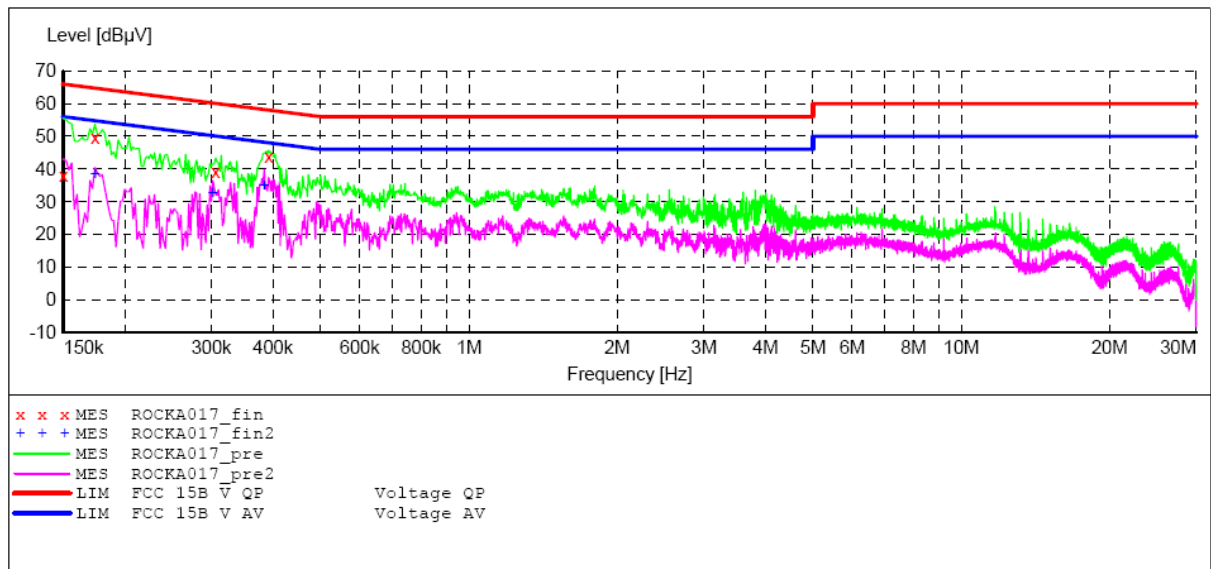
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: NYNE ROCK M/N:NYNE ROCK
 Manufacturer: NYNE
 Operating Condition: BT communicating
 Test Site: 2#Shielding Room
 Operator: star
 Test Specification: N 120V/60Hz
 Comment: Report No.:ATE20151955
 Start of Test: 2015-10-12 / 13:54:39

SCAN TABLE: "V 150K-30MHZ fin"

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	4.5 kHz	QuasiPeak	1.0 s	9 kHz	LISN(ESH3-Z5)
Average						



MEASUREMENT RESULT: "ROCKA017_fin"

2015-10-12 13:56

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.174000	49.50	10.5	65	15.3	QP	N	GND
0.306000	39.00	11.0	60	21.1	QP	N	GND
0.392000	43.70	11.3	58	14.3	QP	N	GND

MEASUREMENT RESULT: "ROCKA017_fin2"

2015-10-12 13:56

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.174000	38.50	10.5	55	16.3	AV	N	GND
0.302000	32.70	11.0	50	17.5	AV	N	GND
0.384000	34.80	11.2	48	13.4	AV	N	GND

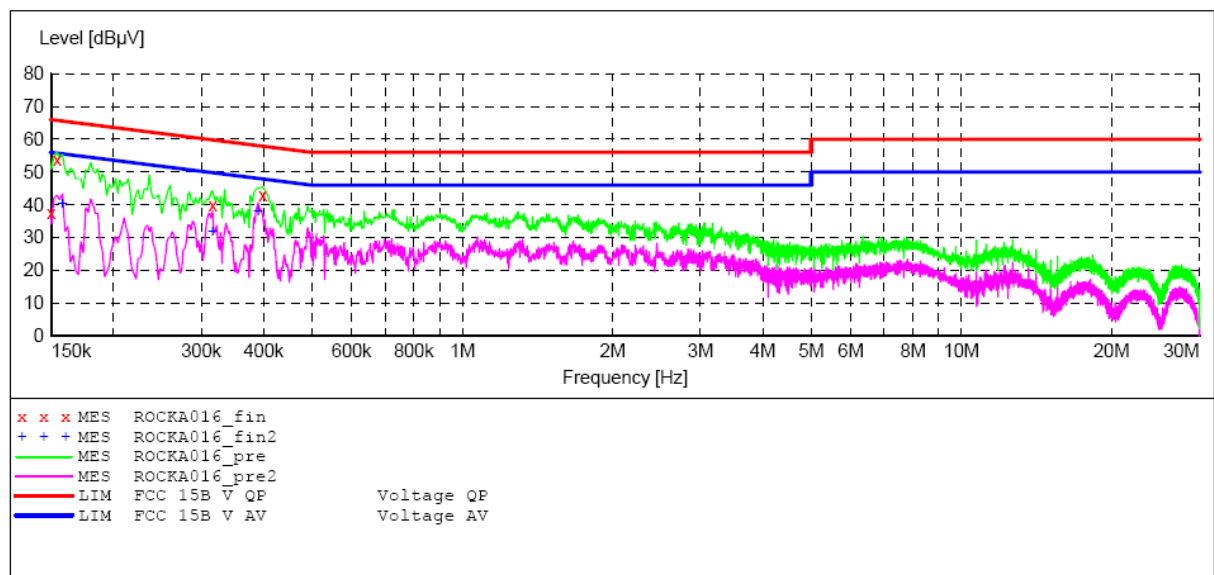
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: NYNE ROCK M/N:NYNE ROCK
 Manufacturer: NYNE
 Operating Condition: BT communicating
 Test Site: 2#Shielding Room
 Operator: star
 Test Specification: L 120V/60Hz
 Comment: Report No.:ATE20151955
 Start of Test: 2015-10-12 / 13:52:36

SCAN TABLE: "V 150K-30MHZ fin"

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	4.5 kHz	QuasiPeak	1.0 s	9 kHz	LISN(ESH3-Z5)
Average						



MEASUREMENT RESULT: "ROCKA016_fin"

2015-10-12 13:54

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.154000	53.80	10.4	66	12.0	QP	L1	GND
0.316000	40.00	11.1	60	19.8	QP	L1	GND
0.398000	43.10	11.3	58	14.8	QP	L1	GND

MEASUREMENT RESULT: "ROCKA016_fin2"

2015-10-12 13:54

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.158000	40.40	10.4	56	15.2	AV	L1	GND
0.316000	36.70	11.1	50	13.1	AV	L1	GND
0.390000	37.90	11.3	48	10.2	AV	L1	GND

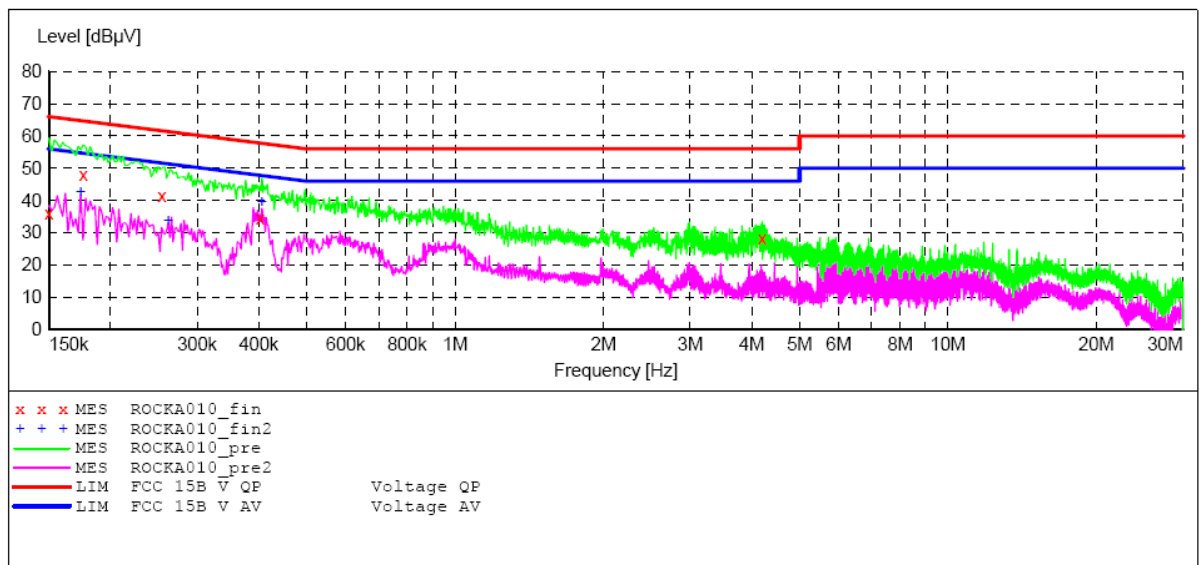
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: NYNE ROCK M/N:NYNE ROCK
 Manufacturer: NYNE
 Operating Condition: BT communicating
 Test Site: 2#Shielding Room
 Operator: star
 Test Specification: N 240V/60Hz
 Comment: Report No.:ATE20151955
 Start of Test: 2015-10-12 / 11:16:35

SCAN TABLE: "V 150K-30MHZ fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN(ESH3-Z5)
 Average



MEASUREMENT RESULT: "ROCKA010_fin"

2015-10-12 11:18

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.176000	48.00	10.5	65	16.7	QP	N	GND
0.254000	41.30	10.8	62	20.3	QP	N	GND
0.402000	34.40	11.3	58	23.4	QP	N	GND

MEASUREMENT RESULT: "ROCKA010_fin2"

2015-10-12 11:18

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.174000	42.50	10.5	55	12.3	AV	N	GND
0.262000	33.50	10.9	51	17.9	AV	N	GND
0.406000	39.60	11.3	48	8.1	AV	N	GND

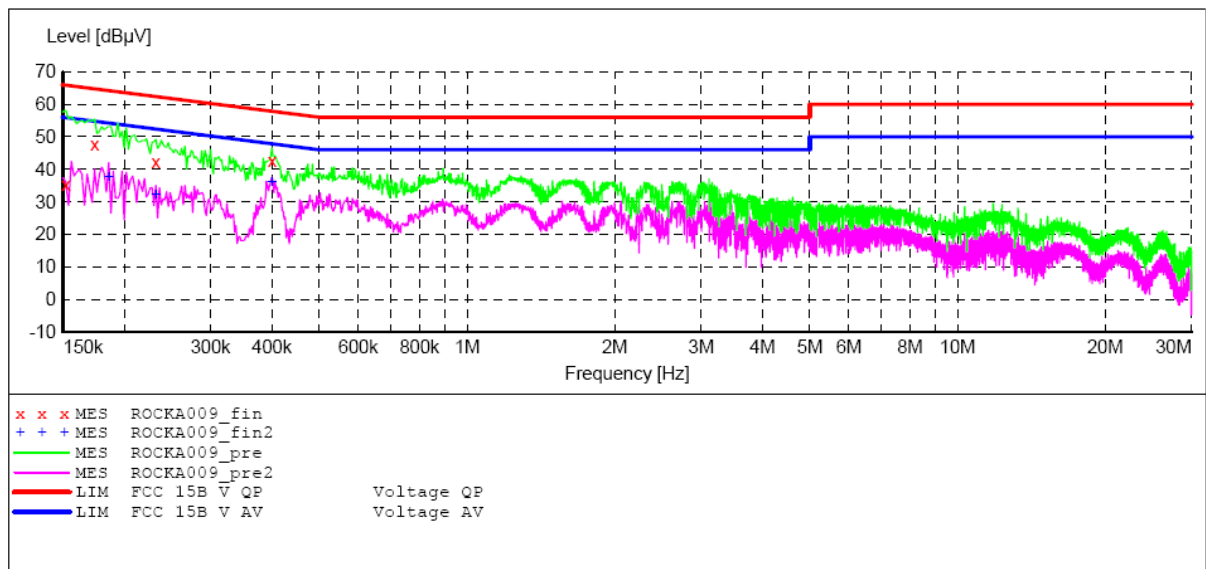
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: NYNE ROCK M/N:NYNE ROCK
 Manufacturer: NYNE
 Operating Condition: BT communicating
 Test Site: 2#Shielding Room
 Operator: star
 Test Specification: L 240V/60Hz
 Comment: Report No.:ATE20151955
 Start of Test: 2015-10-12 / 11:14:25

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN(ESH3-Z5)
 Average



MEASUREMENT RESULT: "ROCKA009_fin"

2015-10-12 11:16

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.174000	47.80	10.5	65	17.0	QP	L1	GND
0.232000	42.30	10.8	62	20.1	QP	L1	GND
0.400000	42.80	11.3	58	15.1	QP	L1	GND

MEASUREMENT RESULT: "ROCKA009_fin2"

2015-10-12 11:16

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.186000	37.70	10.6	54	16.5	AV	L1	GND
0.232000	32.00	10.8	52	20.4	AV	L1	GND
0.400000	36.10	11.3	48	11.8	AV	L1	GND

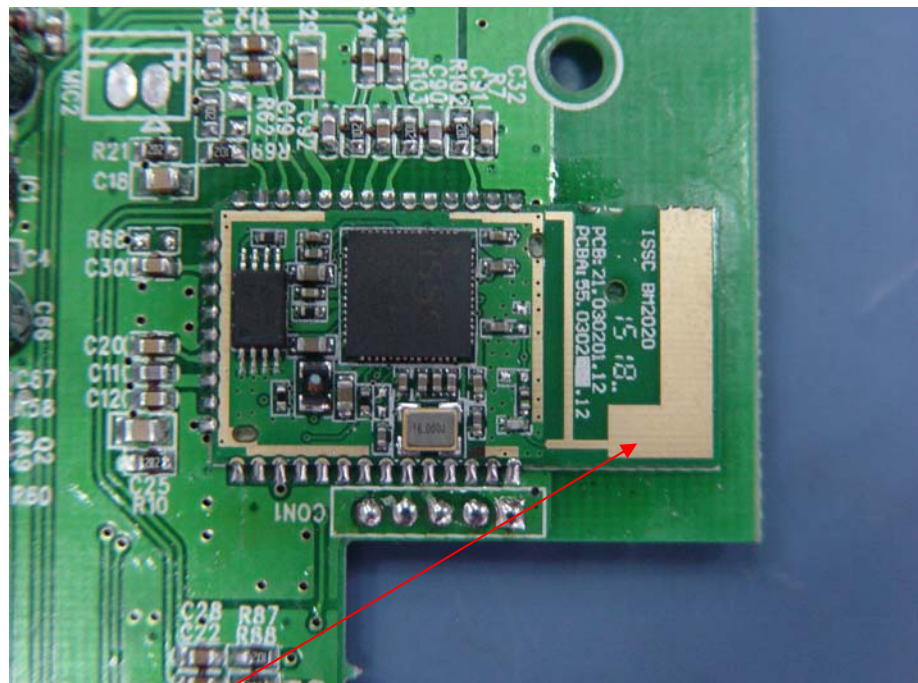
13.ANTENNA REQUIREMENT

13.1.The Requirement

According to Section 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.

13.2.Antenna Construction

The antenna is PCB Layout antenna, no consideration of replacement. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna