

Produkte
Products



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #563

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ThinkPad Stack Wireless Access Point

Mode: TX 5825MHz

Model: R123

Manufacturer: Lenovo

Polarization: Vertical

Power Source: AC 120V/60Hz

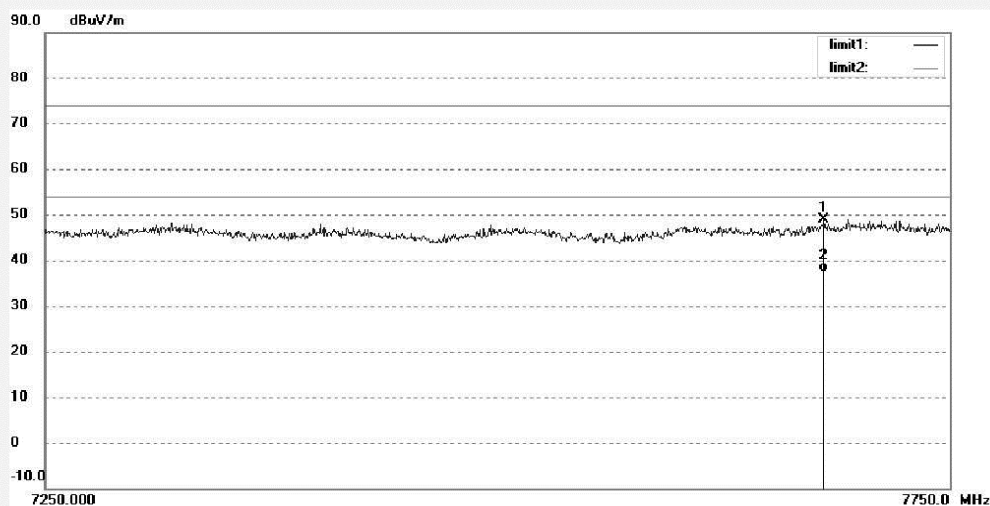
Date: 15/04/18/

Time:

Engineer Signature:

Distance: 3m

Note: 802.11a



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	7678.500	43.67	5.16	48.83	74.00	-25.17	peak			
2	7678.500	32.24	5.16	37.40	54.00	-16.60	AVG			

Produkte
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802.11n HT20
CH149



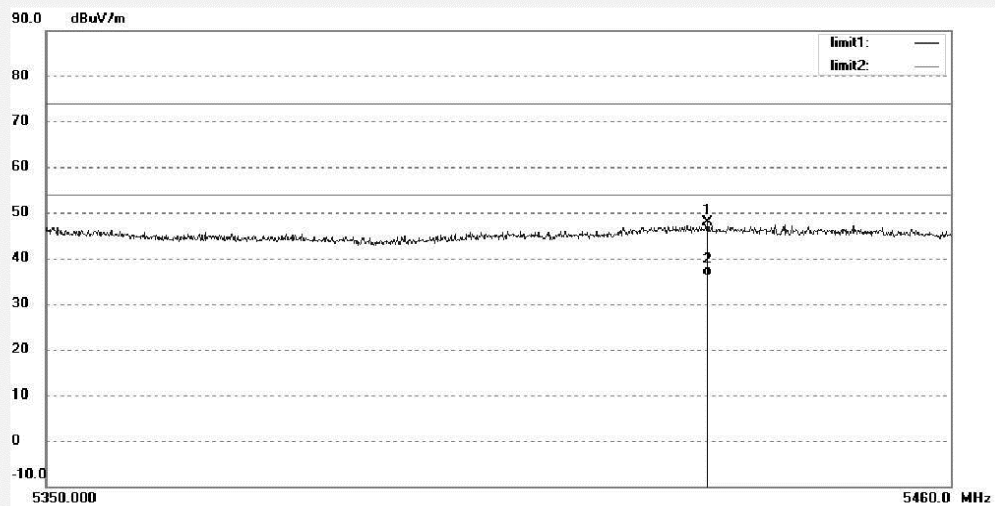
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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #564	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/04/18/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ThinkPad Stack Wireless Access Point	Engineer Signature:
Mode: TX 5745MHz	Distance: 3m
Model: R123	
Manufacturer: Lenovo	

Note: 802.11n HT20



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5430.300	46.99	0.82	47.81	74.00	-26.19	peak			
2	5430.300	35.28	0.82	36.10	54.00	-17.90	AVG			

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Site: 2# Chamber
Tel:+86-0755-26503290
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Job No.: lenovo #565

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ThinkPad Stack Wireless Access Point

Mode: TX 5745MHz

Model: R123

Manufacturer: Lenovo

Polarization: Horizontal

Power Source: AC 120V/60Hz

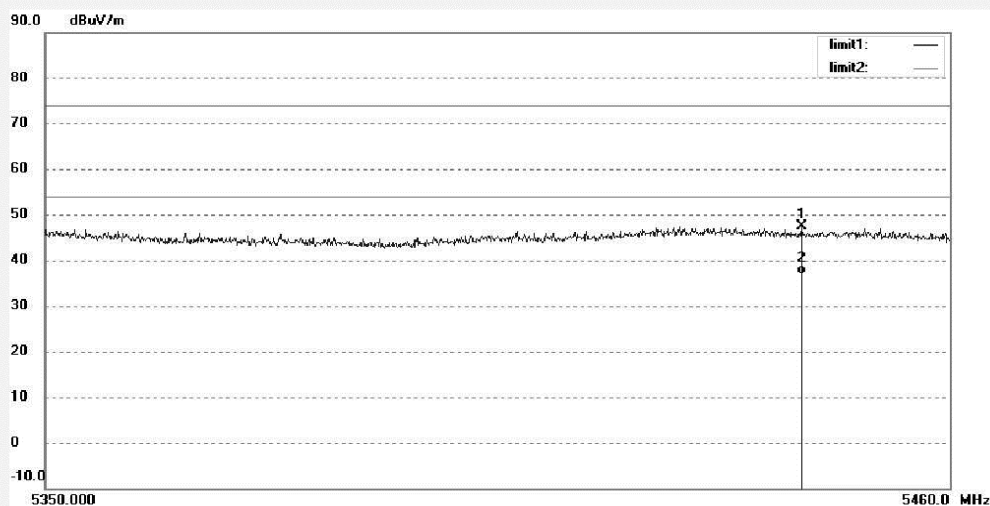
Date: 15/04/18/

Time:

Engineer Signature:

Distance: 3m

Note: 802.11n HT20



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5441.850	46.51	0.89	47.40	74.00	-26.60	peak			
2	5441.850	35.96	0.89	36.85	54.00	-17.15	AVG			

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CH165

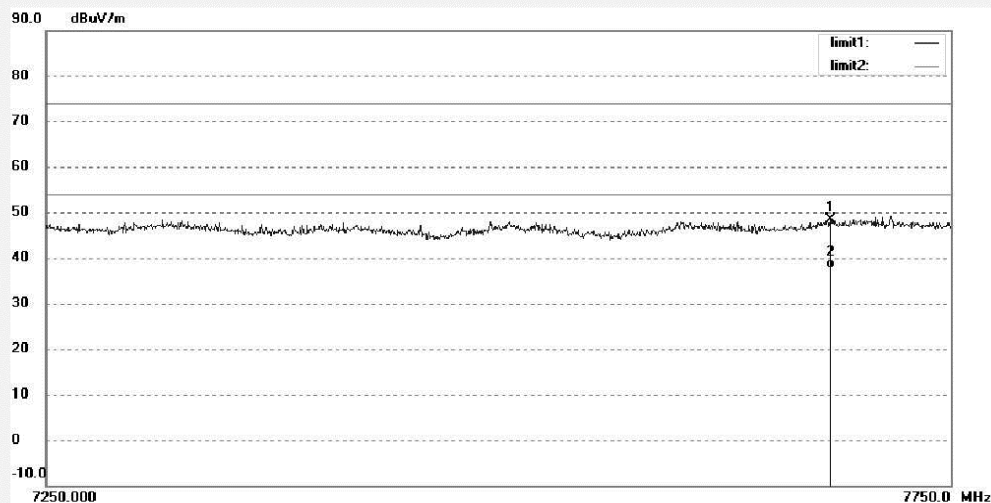


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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #566	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/04/18/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ThinkPad Stack Wireless Access Point	Engineer Signature:
Mode: TX 5825MHz	Distance: 3m
Model: R123	
Manufacturer: Lenovo	
Note: 802.11n HT20	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	7682.000	43.32	5.17	48.49	74.00	-25.51	peak			
2	7682.000	32.47	5.17	37.64	54.00	-16.36	AVG			

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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #567

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ThinkPad Stack Wireless Access Point

Mode: TX 5825MHz

Model: R123

Manufacturer: Lenovo

Polarization: Vertical

Power Source: AC 120V/60Hz

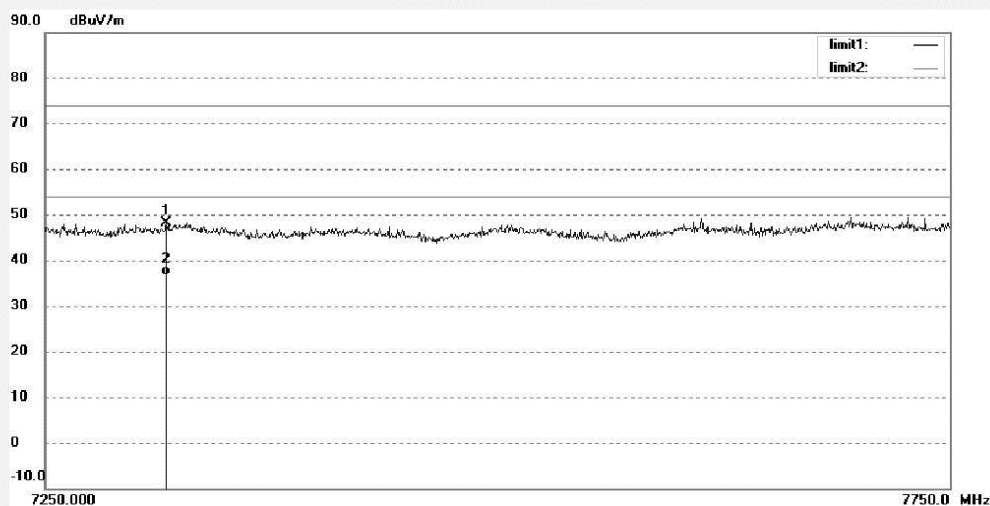
Date: 15/04/18/

Time:

Engineer Signature:

Distance: 3m

Note: 802.11n HT20



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	7315.500	44.87	3.23	48.10	74.00	-25.90	peak			
2	7315.500	33.42	3.23	36.65	54.00	-17.35	AVG			

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802.11n HT40
CH151



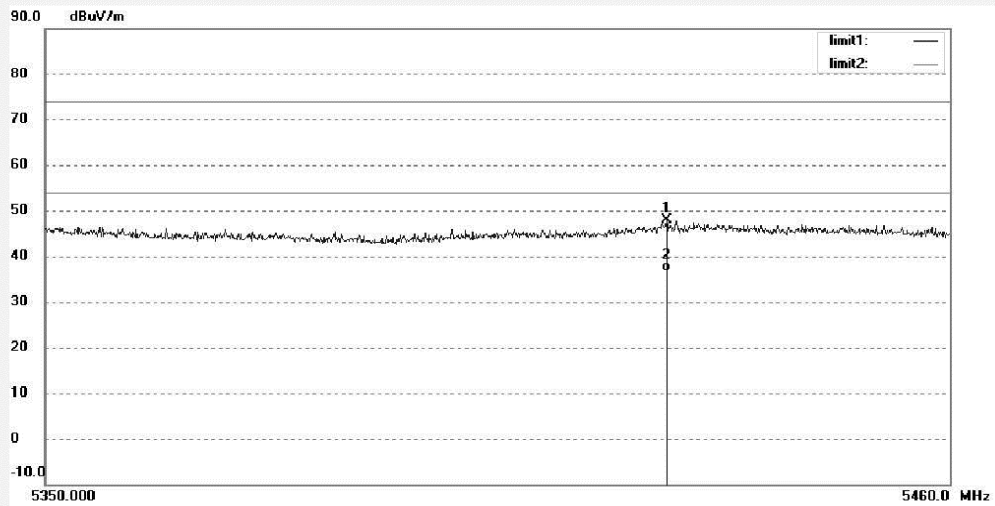
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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #568	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/04/18/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ThinkPad Stack Wireless Access Point	Engineer Signature:
Mode: TX 5755MHz	Distance: 3m
Model: R123	
Manufacturer: Lenovo	

Note: 802.11n HT40



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5425.350	46.98	0.81	47.79	74.00	-26.21	peak			
2	5425.350	35.85	0.81	36.66	54.00	-17.34	AVG			

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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #569

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ThinkPad Stack Wireless Access Point

Mode: TX 5755MHz

Model: R123

Manufacturer: Lenovo

Polarization: Horizontal

Power Source: AC 120V/60Hz

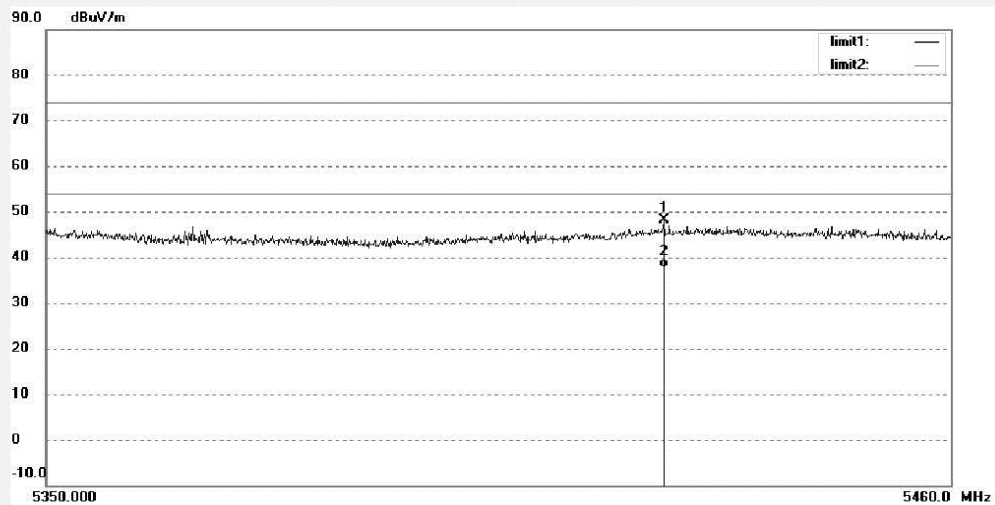
Date: 15/04/18/

Time:

Engineer Signature:

Distance: 3m

Note: 802.11n HT40



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5424.910	47.42	0.78	48.20	74.00	-25.80	peak			
2	5424.910	36.74	0.78	37.52	54.00	-16.48	AVG			

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CH159

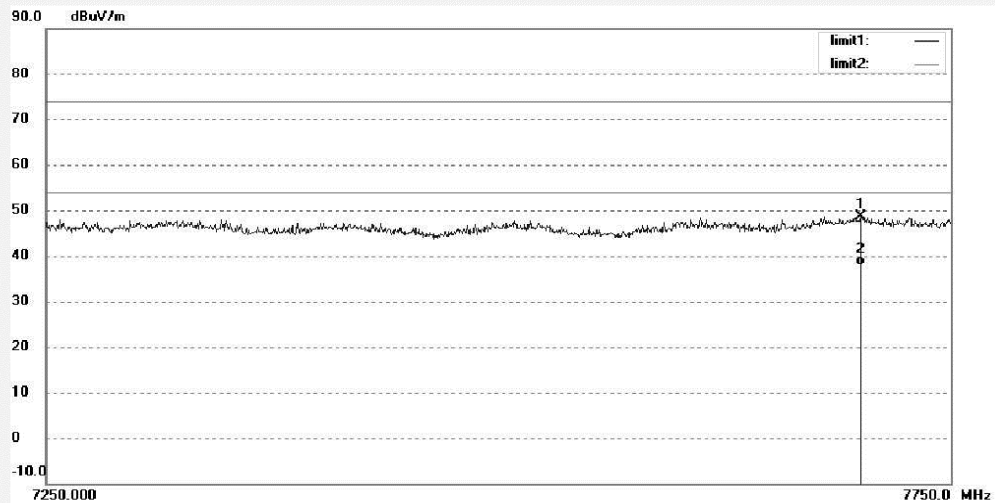


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Site: 2# Chamber
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Job No.: lenovo #570	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/04/18/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ThinkPad Stack Wireless Access Point	Engineer Signature:
Mode: TX 5795MHz	Distance: 3m
Model: R123	
Manufacturer: Lenovo	
Note: 802.11n HT40	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	7698.500	43.48	5.25	48.73	74.00	-25.27	peak			
2	7698.500	32.55	5.25	37.80	54.00	-16.20	AVG			

Produkte
Products

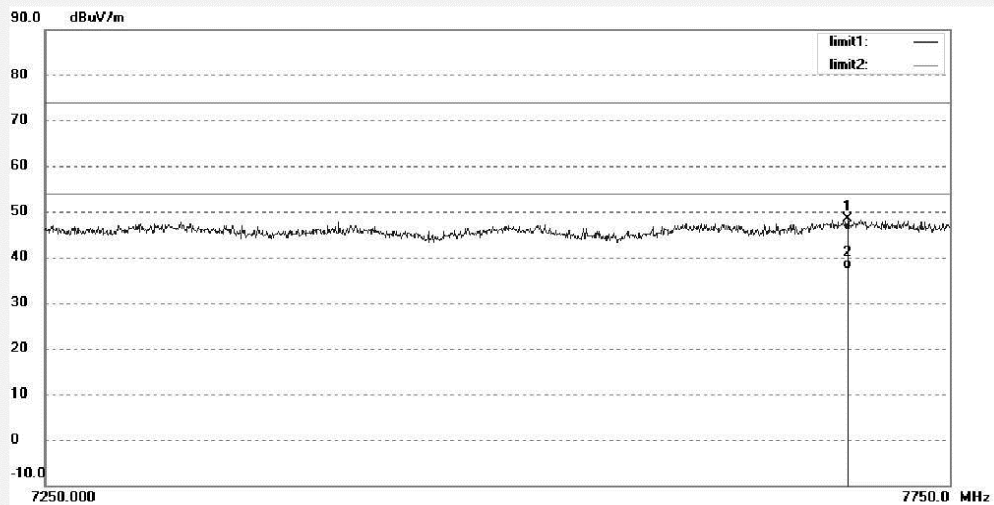


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Job No.: lenovo #571	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/04/18/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ThinkPad Stack Wireless Access Point	Engineer Signature:
Mode: TX 5795MHz	Distance: 3m
Model: R123	
Manufacturer: Lenovo	
Note: 802.11n HT40	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	7692.000	43.14	5.22	48.36	74.00	-25.64	peak			
2	7692.000	32.04	5.22	37.26	54.00	-16.74	AVG			

Produkte
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802.11ac VHT80
CH155



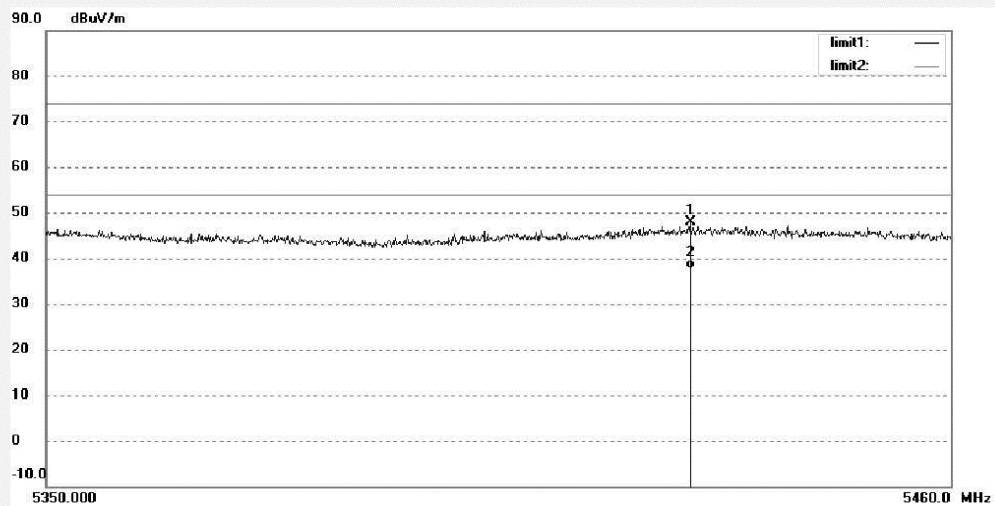
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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #572	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/04/18/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ThinkPad Stack Wireless Access Point	Engineer Signature:
Mode: TX 5775MHz	Distance: 3m
Model: R123	
Manufacturer: Lenovo	

Note: 802.11ac VHT80



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5428.100	47.18	0.81	47.99	74.00	-26.01	peak			
2	5428.100	36.75	0.81	37.56	54.00	-16.44	AVG			

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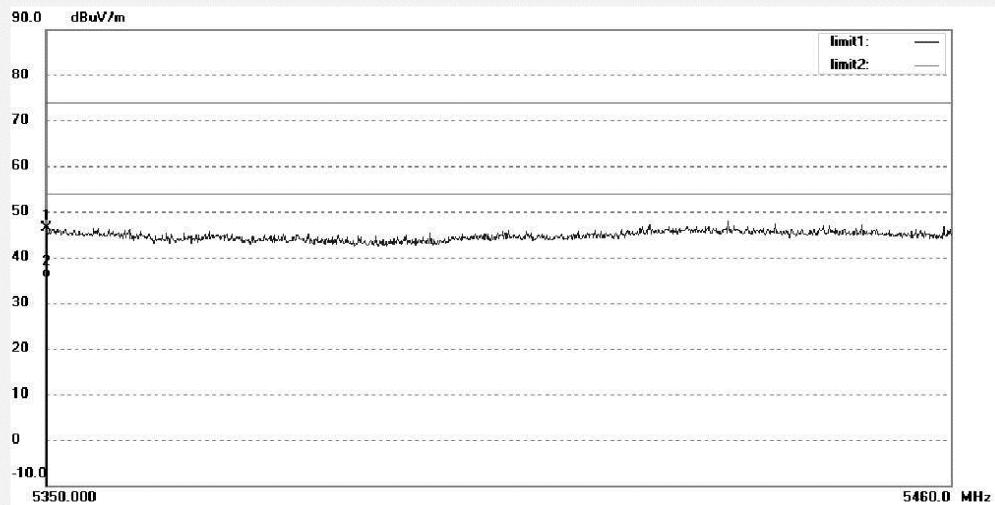
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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #573	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/04/18/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ThinkPad Stack Wireless Access Point	Engineer Signature:
Mode: TX 5775MHz	Distance: 3m
Model: R123	
Manufacturer: Lenovo	

Note: 802.11ac VHT80



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5350.000	45.54	0.84	46.38	74.00	-27.62	peak			
2	5350.000	34.45	0.84	35.29	54.00	-18.71	AVG			

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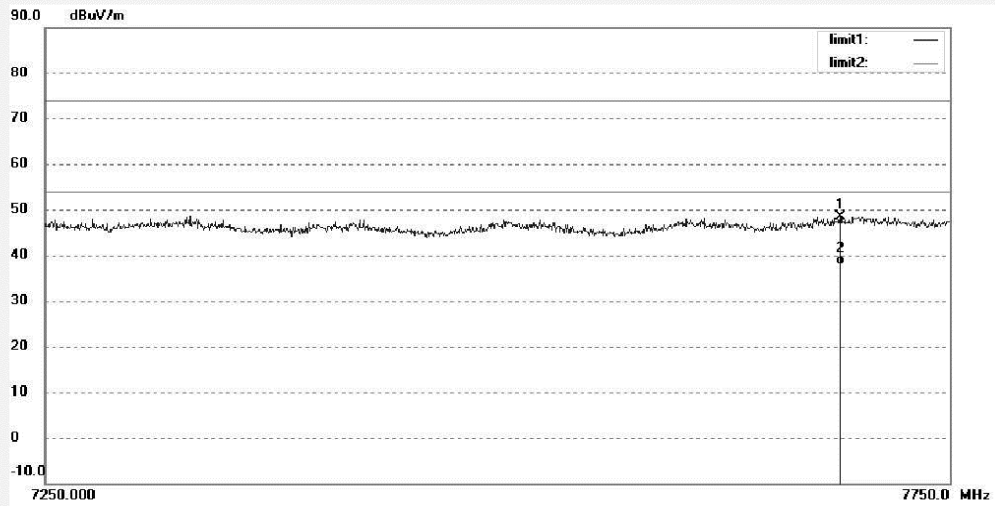
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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #574	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/04/18/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ThinkPad Stack Wireless Access Point	Engineer Signature:
Mode: TX 5775MHz	Distance: 3m
Model: R123	
Manufacturer: Lenovo	

Note: 802.11ac VHT80



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	7688.000	43.19	5.19	48.38	74.00	-25.62	peak			
2	7688.000	32.78	5.19	37.97	54.00	-16.03	AVG			

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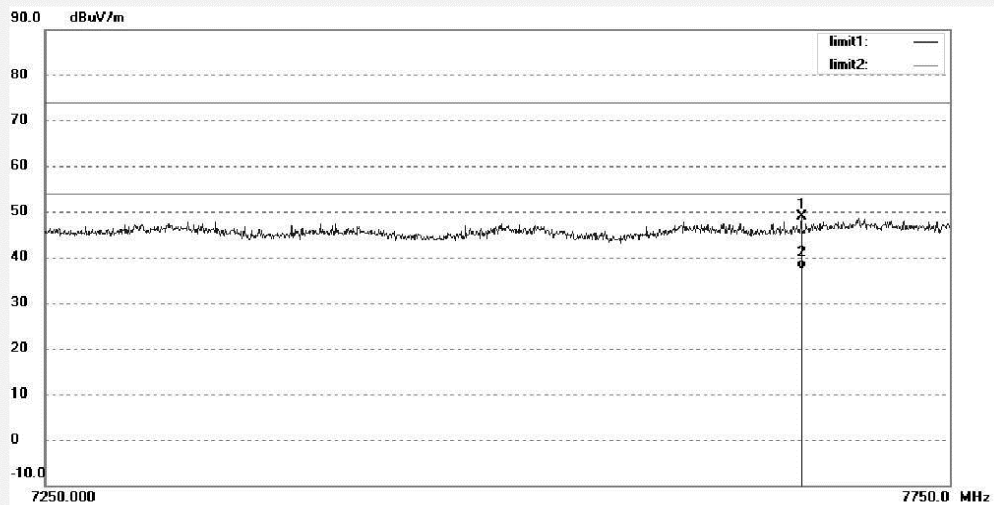
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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #575	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/04/18/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ThinkPad Stack Wireless Access Point	Engineer Signature:
Mode: TX 5775MHz	Distance: 3m
Model: R123	
Manufacturer: Lenovo	

Note: 802.11ac VHT80



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	7666.000	43.88	5.10	48.98	74.00	-25.02	peak			
2	7666.000	32.26	5.10	37.36	54.00	-16.64	AVG			

Appendix D

Test Results of Radiated Emissions and Conducted Emissions

APPENDIX D.1: TEST RESULTS OF RADIATED EMISSIONS 2
ACCESS TO USB DISK VIA WI-FI 2
ACCESS TO HDD DISK VIA WI-FI 6

APPENDIX D.2: TEST RESULTS OF CONDUCTED EMISSIONS..... 10
ACCESS TO HDD DISK VIA WI-FI 10
ACCESS TO USB DISK VIA WI-FI 12

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Appendix D.1: Test Results of Radiated Emissions

Access to USB disk via Wi-Fi

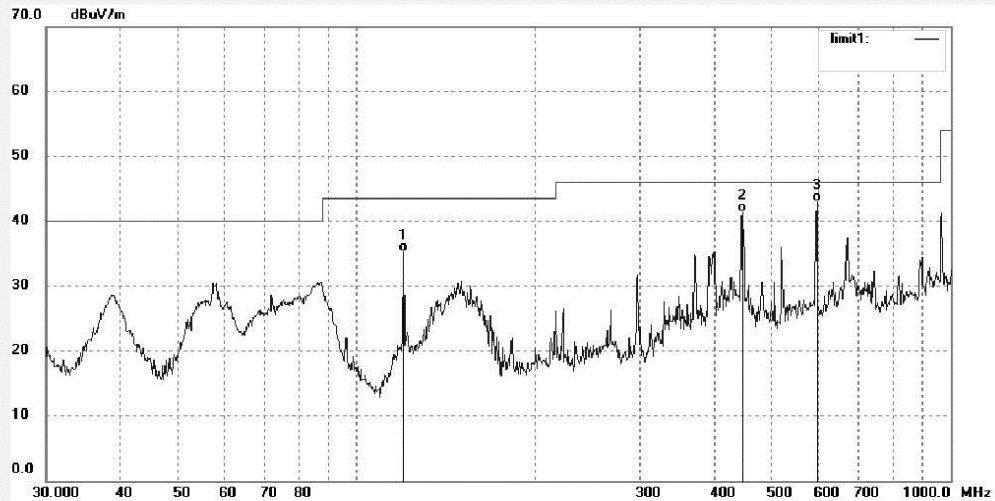


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Site: 2# Chamber
Tel:+86-0755-26503290
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Job No.: lenovo #847	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/04/27/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ThinkPad Stack Wireless Access Point	Engineer Signature:
Mode: Access to USB disk via WiFi	Distance: 3m
Model: R123	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	119.8555	48.34	-13.15	35.19	43.50	-8.31	QP			
2	446.4141	47.18	-5.84	41.34	46.00	-4.66	QP			
3	595.1327	45.99	-3.02	42.97	46.00	-3.03	QP			

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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #848

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ThinkPad Stack Wireless Access Point

Mode: Access to USB disk via WiFi

Model: R123

Manufacturer: Lenovo

Polarization: Horizontal

Power Source: AC 120V/60Hz

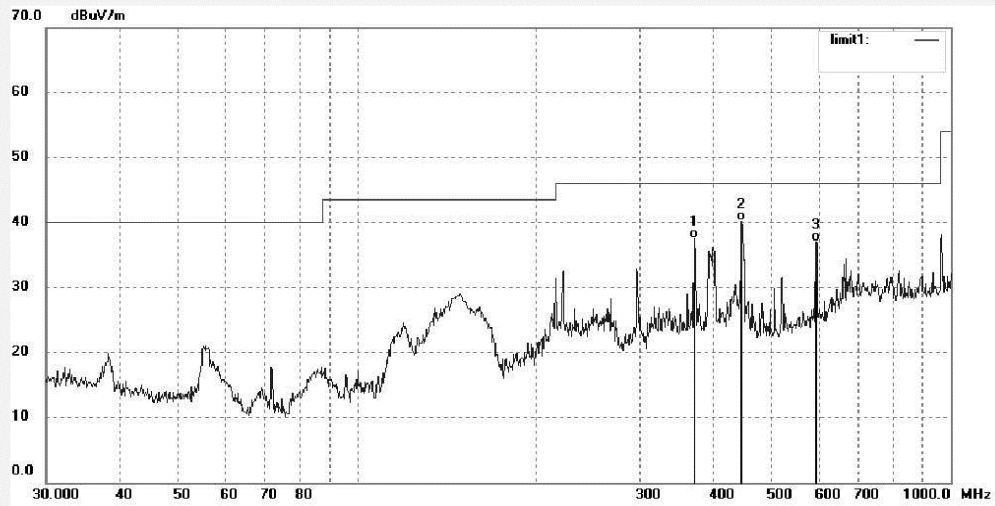
Date: 15/04/27/

Time:

Engineer Signature:

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	369.4045	44.98	-7.51	37.47	46.00	-8.53	QP			
2	444.8514	46.02	-5.86	40.16	46.00	-5.84	QP			
3	593.0497	39.96	-3.03	36.93	46.00	-9.07	QP			

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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #873

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ThinkPad Stack Wireless Access Point

Mode: Access to USB disk via WiFi

Model: R123

Manufacturer: Lenovo

Polarization: Horizontal

Power Source: AC 120V/60Hz

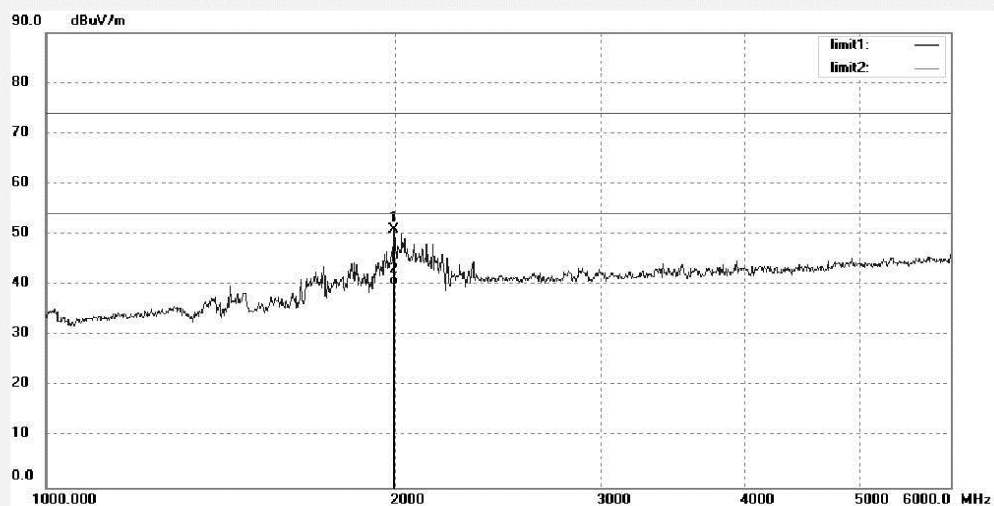
Date: 15/04/27/

Time:

Engineer Signature:

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1993.371	59.92	-9.04	50.88	74.00	-23.12	peak			
2	1993.371	48.98	-9.04	39.94	54.00	-14.06	AVG			

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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #874

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ThinkPad Stack Wireless Access Point

Mode: Access to USB disk via WiFi

Model: R123

Manufacturer: Lenovo

Polarization: Vertical

Power Source: AC 120V/60Hz

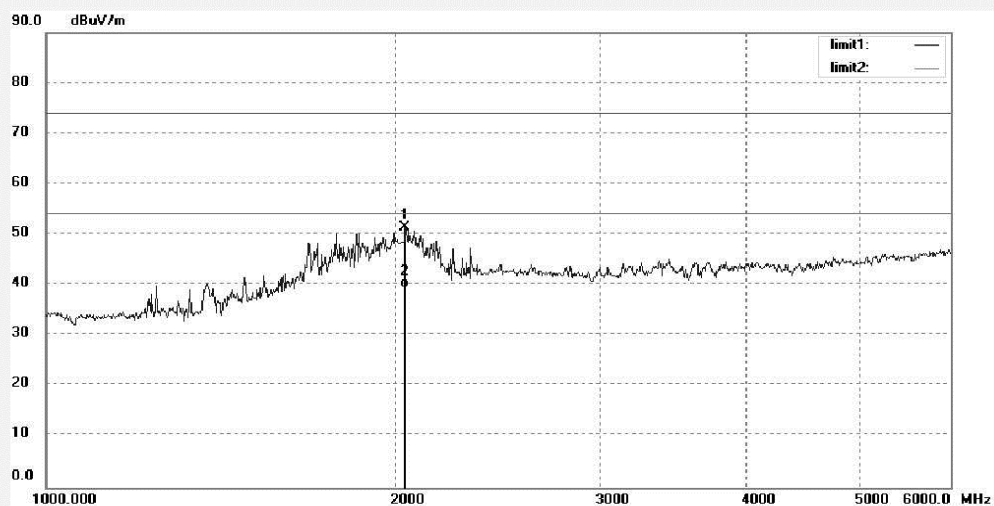
Date: 15/04/27/

Time:

Engineer Signature:

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2036.695	60.31	-8.97	51.34	74.00	-22.66	peak			
2	2036.695	48.53	-8.97	39.56	54.00	-14.44	AVG			

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Access to HDD disk via Wi-Fi



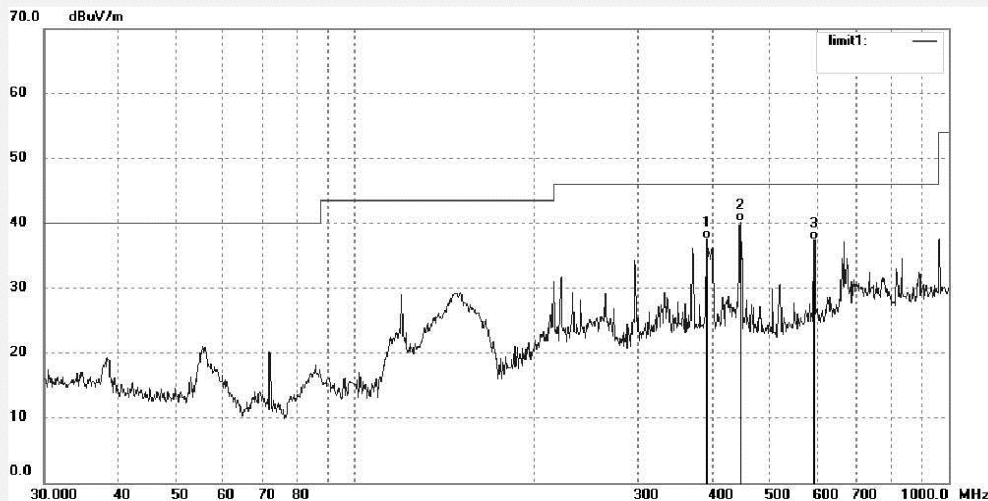
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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #849	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/04/27/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ThinkPad Stack Wireless Access Point	Engineer Signature:
Mode: Access to USB HDD via WiFi	Distance: 3m
Model: R123	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	392.0951	44.66	-7.14	37.52	46.00	-8.48	QP			
2	446.4141	45.96	-5.84	40.12	46.00	-5.88	QP			
3	593.0497	40.45	-3.03	37.42	46.00	-8.58	QP			

Produkte
Products



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #850

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: ThinkPad Stack Wireless Access Point

Mode: Access to USB HDD via WiFi

Model: R123

Manufacturer: Lenovo

Polarization: Vertical

Power Source: AC 120V/60Hz

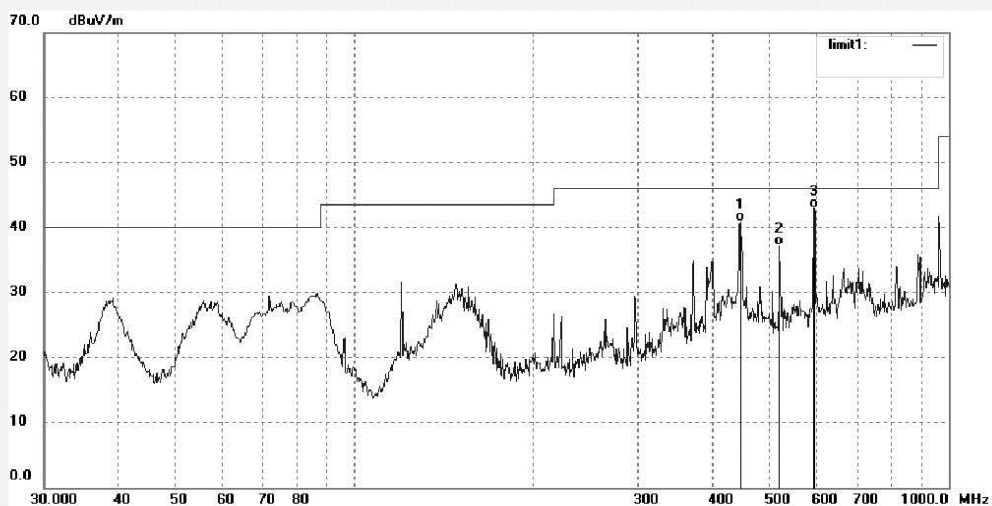
Date: 15/04/27/

Time:

Engineer Signature:

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	446.4141	46.71	-5.84	40.87	46.00	-5.13	QP			
2	519.0647	41.55	-4.36	37.19	46.00	-8.81	QP			
3	593.0497	45.97	-3.03	42.94	46.00	-3.06	QP			

Produkte
Products



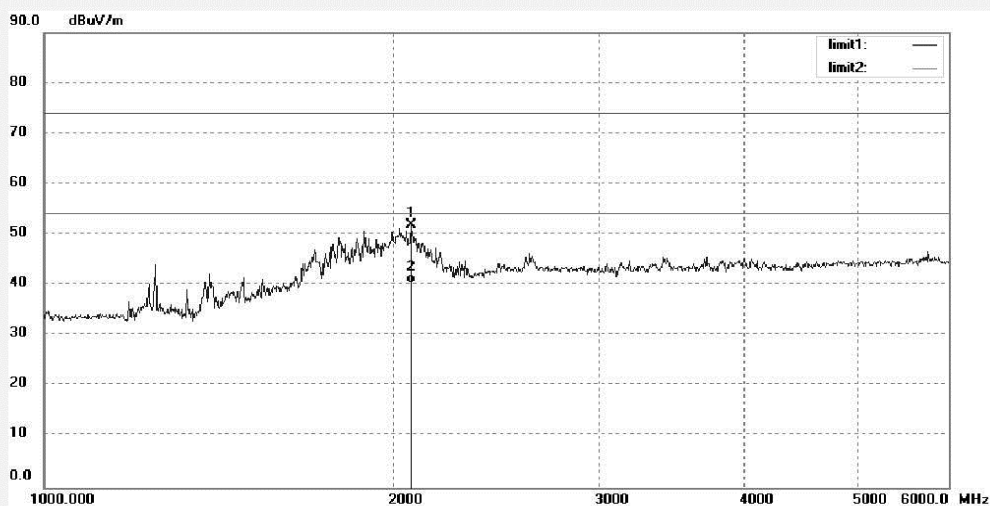
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Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #875	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/04/27/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ThinkPad Stack Wireless Access Point	Engineer Signature:
Mode: Access to USB HDD via WiFi	Distance: 3m
Model: R123	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2069.805	60.61	-8.76	51.85	74.00	-22.15	peak			
2	2069.805	49.08	-8.76	40.32	54.00	-13.68	AVG			

Produkte
Products



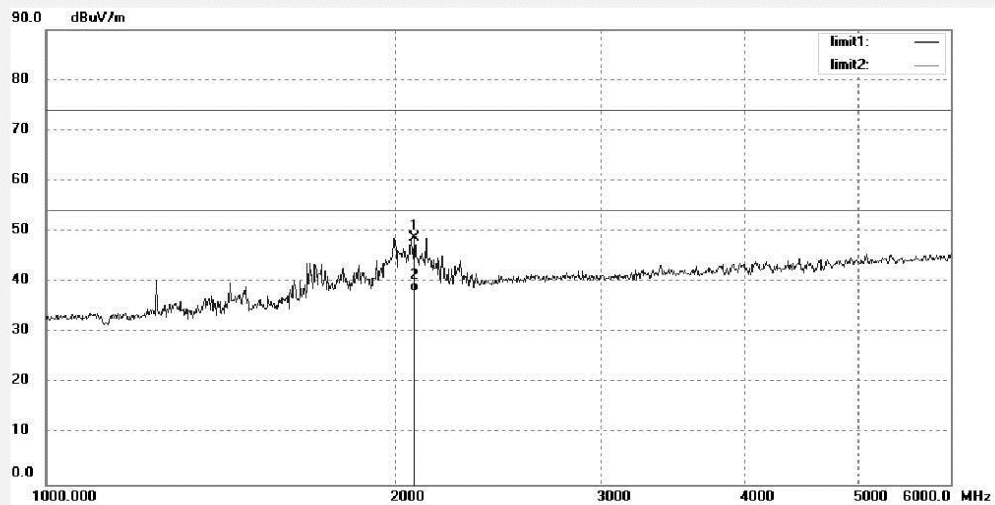
ACCURATE TECHNOLOGY CO., LTD.

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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: lenovo #876	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 15/04/27/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ThinkPad Stack Wireless Access Point	Engineer Signature:
Mode: Access to USB HDD via WiFi	Distance: 3m
Model: R123	
Manufacturer: Lenovo	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2073.517	57.49	-8.72	48.77	74.00	-25.23	peak			
2	2073.517	46.78	-8.72	38.06	54.00	-15.94	AVG			

Appendix D.2: Test Results of Conducted Emissions

Access to HDD disk via Wi-Fi

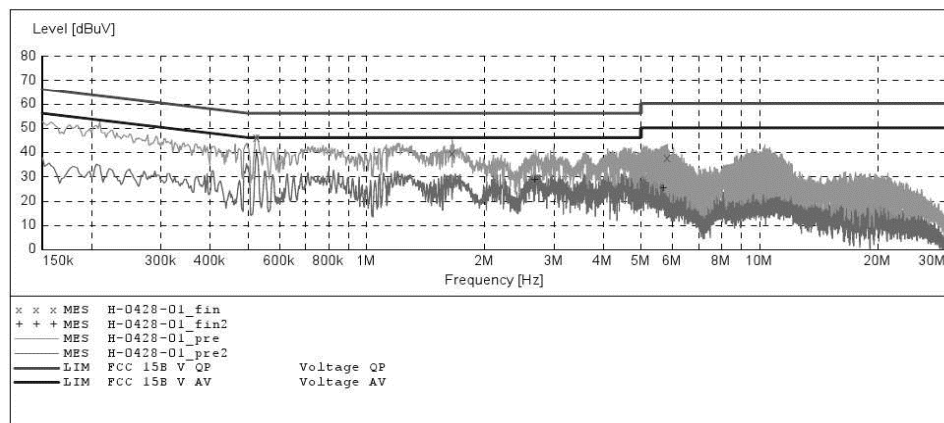
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CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: ThinkPad Stack Wireless Access Point M/N:R123
 Manufacturer: Lenovo
 Operating Condition: Access to USB HDD via WiFi
 Test Site: 1#Shielding Room
 Operator: LAN
 Test Specification: L 120V/60Hz
 Comment: Mains Port
 Start of Test: 2015-4-28 /

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 NSLK8126 2008
 Average



MEASUREMENT RESULT: "H-0428-01_fin"

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.526000	46.00	11.5	56	10.0	QP	L1	GND
1.656000	39.30	11.6	56	16.7	QP	L1	GND
5.838500	37.40	11.8	60	22.6	QP	L1	GND

MEASUREMENT RESULT: "H-0428-01_fin2"

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.526000	39.60	11.5	46	6.4	AV	L1	GND
2.688500	28.50	11.7	46	17.5	AV	L1	GND
5.694500	24.90	11.8	50	25.1	AV	L1	GND

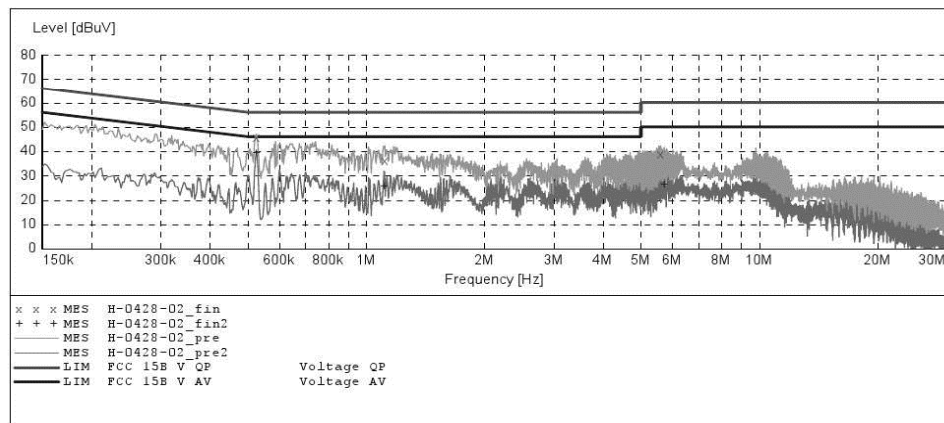
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: ThinkPad Stack Wireless Access Point M/N:R123
 Manufacturer: Lenovo
 Operating Condition: Access to USB HDD via WiFi
 Test Site: 1#Shielding Room
 Operator: LAN
 Test Specification: N 120V/60Hz
 Comment: Mains Port
 Start of Test: 2015-4-28 /

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 NSLK8126 2008
 Average



MEASUREMENT RESULT: "H-0428-02_fin"

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.526000	45.40	11.5	56	10.6	QP	N	GND
1.116000	36.00	11.6	56	20.0	QP	N	GND
5.613500	38.60	11.8	60	21.4	QP	N	GND

MEASUREMENT RESULT: "H-0428-02_fin2"

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.526000	39.10	11.5	46	6.9	AV	N	GND
1.112000	25.40	11.6	46	20.6	AV	N	GND
5.730500	26.00	11.8	50	24.0	AV	N	GND

Access to USB disk via Wi-Fi

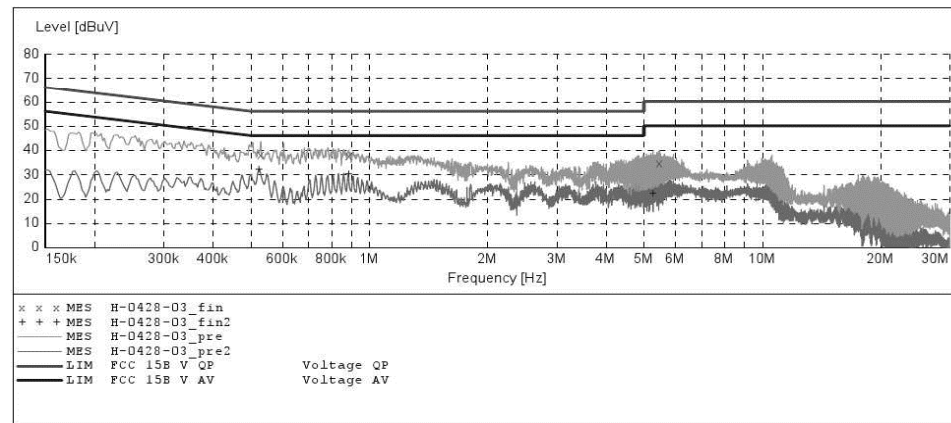
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: ThinkPad Stack Wireless Access Point M/N:R123
Manufacturer: Lenovo
Operating Condition: Access to USB disk via WiFi
Test Site: 1#Shielding Room
Operator: LAN
Test Specification: N 120V/60Hz
Comment: Mains Port
Start of Test: 2015-4-28 /

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 NSLK8126 2008
Average



MEASUREMENT RESULT: "H-0428-03_fin"

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.530000	37.90	11.5	56	18.1	QP	N	GND
0.888000	37.50	11.6	56	18.5	QP	N	GND
5.474000	34.50	11.8	60	25.5	QP	N	GND

MEASUREMENT RESULT: "H-0428-03_fin2"

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.524000	31.80	11.5	46	14.2	AV	N	GND
0.886000	29.70	11.6	46	16.3	AV	N	GND
5.271500	21.90	11.8	50	28.1	AV	N	GND

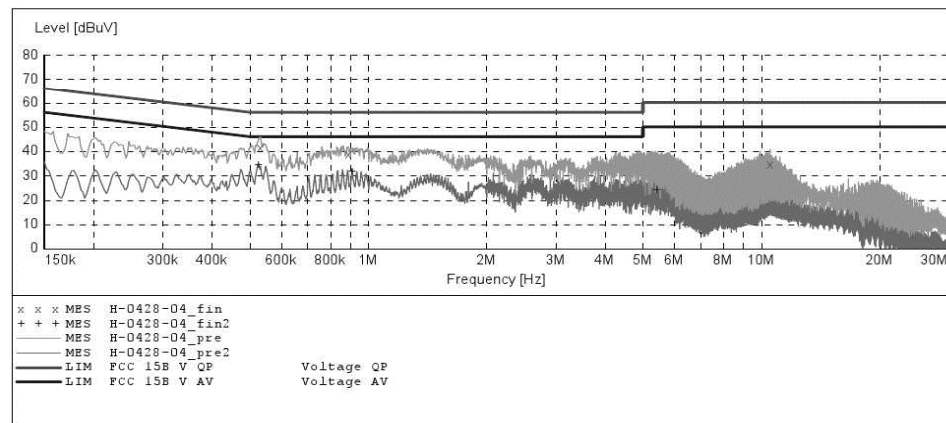
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: ThinkPad Stack Wireless Access Point M/N:R123
 Manufacturer: Lenovo
 Operating Condition: Access to USB disk via WiFi
 Test Site: 1#Shielding Room
 Operator: LAN
 Test Specification: L 120V/60Hz
 Comment: Mains Port
 Start of Test: 2015-4-28 /

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 NSLK8126 2008
 Average



MEASUREMENT RESULT: "H-0428-04_fin"

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.532000	41.30	11.5	56	14.7	QP	L1	GND
0.890000	38.70	11.6	56	17.3	QP	L1	GND
10.527500	34.40	11.9	60	25.6	QP	L1	GND

MEASUREMENT RESULT: "H-0428-04_fin2"

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.526000	34.10	11.5	46	11.9	AV	L1	GND
0.910000	31.40	11.6	46	14.6	AV	L1	GND
5.420000	23.80	11.8	50	26.2	AV	L1	GND

Appendix E

Test Results of RF Exposure

APPENDIX E.1: RF EXPOSURE COMPLIANCE.....	2
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Appendix E.1: RF Exposure Compliance

Radio Frequency Exposure Compliance

RESULT:

Passed

Test standard : FCC 1.1310
RSS-102 Issue 5
FCC KDB publication 447498 D01 v05

This device is mobile device, and the applicant declares that the minimum separation distance is greater than 20cm. Therefore MPE measurement or computational modeling should be used to determine compliance.

MPE Calculation
According to the formula

$$Pd = \frac{P_{out} * G}{4R^2\pi}$$

Where

Pd = power density in mW/cm² or W/m²

Pout = output power to antenna in mW or W

G = Antenna gain in numeric

π = 3.14159

R = Distance between observation point and the center of radiator in cm or m

In here

Pout = 17.53dBm = 56.62mW

G = 1.35dBi = 1.36 (numeric)

R = 20cm

For Wi-Fi operation:

$$Pd = \frac{P_{out} * G}{4R^2\pi} = \frac{56.62 * 1.36}{4 * 20^2 * 3.14159} = 0.0153mW / cm^2 < 1mW/cm^2 \text{ for FCC limit}$$

$$Pd = \frac{P_{out} * G}{4R^2\pi} = \frac{0.05662 * 1.36}{4 * 0.2^2 * 3.14159} = 0.153W / m^2 < 5.4W/m^2 \text{ for IC limit}$$

The summed maximum permissible exposure (MPE) level is 0.0153mW/cm² and 0.153W/m². It is less than MPE limit 1mW/cm² for FCC and 5.4W/m² for IC, therefore the device compliance with MPE limit.