

7.4.3 Radiated Emissions

Date	: December 2, 2016		
Temperature	: 26.6 [°C]		
Humidity	: 26.6 [%]	Test engineer	:
Test place	: 3m Semi-anechoic chamber		<u>Taiki Watanabe</u>
Date	: December 8, 2016		
Temperature	: 21.1 [°C]		
Humidity	: 21.8 [%]	Test engineer	:
Test place	: 3m Semi-anechoic chamber		<u>Taiki Watanabe</u>
Date	: December 9, 2016		
Temperature	: 21.1 [°C]		
Humidity	: 21.8 [%]	Test engineer	:
Test place	: 3m Semi-anechoic chamber		<u>Taiki Watanabe</u>
Date	: December 12, 2016		
Temperature	: 21.5 [°C]		
Humidity	: 22.6 [%]	Test engineer	:
Test place	: 3m Semi-anechoic chamber		<u>Taiki Watanabe</u>
Date	: December 13, 2016		
Temperature	: 21.1 [°C]		
Humidity	: 22.5 [%]	Test engineer	:
Test place	: 3m Semi-anechoic chamber		<u>Taiki Watanabe</u>
Date	: December 14, 2016		
Temperature	: 21.1 [°C]		
Humidity	: 23.6 [%]	Test engineer	:
Test place	: 3m Semi-anechoic chamber		<u>Taiki Watanabe</u>
Date	: December 22, 2016		
Temperature	: 23.1 [°C]		
Humidity	: 24.5 [%]	Test engineer	:
Test place	: 3m Semi-anechoic chamber		<u>Kazunori Saito</u>
Date	: December 23, 2016		
Temperature	: 22.8 [°C]		
Humidity	: 23.8 [%]	Test engineer	:
Test place	: 3m Semi-anechoic chamber		<u>Kazunori Saito</u>



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**[IEEE802.11a]
(5.2GHz Band)**

Mode	Channel	Frequency (MHz)	Frequency (MHz)	ANT H/V	Detector PK/AV	Reading (dBμV)	C.F (dB)	DCF (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
802.11a	36	5180	10360.00	H	PK	45.1	10.5		55.6	68.2	12.6
	40	5200	10400.00	H	PK	46.0	10.6		56.6	68.2	11.6
	48	5240	10480.00	H	PK	45.6	10.8		56.4	68.2	11.8

(5.3GHz Band)

Mode	Channel	Frequency (MHz)	Frequency (MHz)	ANT H/V	Detector PK/AV	Reading (dBμV)	C.F (dB)	DCF (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
802.11a	52	5260	10520.00	H	PK	45.4	10.8		56.2	68.2	12.0
	56	5280	10560.00	V	PK	45.6	10.8		56.4	68.2	11.8
			10640.00	V	PK	51.0	10.8		61.8	74.0	12.2
	64	5320	10640.00	V	AV	40.2	10.8		51.0	54.0	3.0

(5.6GHz Band)

Mode	Channel	Frequency (MHz)	Frequency (MHz)	ANT H/V	Detector PK/AV	Reading (dBμV)	C.F (dB)	DCF (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
802.11a	100	5500	5466.50	H	PK	49.7	10.1		59.8	68.2	8.4
			5467.00	V	PK	50.2	10.1		60.3	68.2	7.9
			11000.00	V	PK	48.5	10.9		59.4	74.0	14.6
			11000.00	V	AV	36.9	10.9		47.8	54.0	6.2
	116	5580	11160.00	V	PK	47.9	10.9		58.8	74.0	15.2
			11160.00	V	AV	42.1	10.9		53.0	54.0	1.0
	140	5700	11400.00	V	PK	47.1	11.1		58.2	74.0	15.8
			11400.00	V	AV	35.9	11.1		47.0	54.0	7.0

Note:

1. Emission Level (Margin) = Limit - [Reading + C.F (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 30MHz to 1000MHz at the 3 meters distance.
3. No emission was detected in the receive mode.



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[IEEE802.11n (HT20)]**(5.2GHz Band)**

Mode	Channel	Frequency (MHz)	Frequency (MHz)	ANT H/V	Detector PK/AV	Reading (dBμV)	C.F (dB)	DCF (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
802.11n (20MHz)	36	5180	10360.00	V	PK	48.0	10.5		58.5	68.2	9.7
	40	5200	10400.00	V	PK	47.1	10.6		57.7	68.2	10.5
	48	5240	10480.00	V	PK	46.4	10.8		57.2	68.2	11.0

(5.3GHz Band)

Mode	Channel	Frequency (MHz)	Frequency (MHz)	ANT H/V	Detector PK/AV	Reading (dBμV)	C.F (dB)	DCF (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
802.11n (20MHz)	52	5260	10520.00	H	PK	46.9	10.8		57.7	68.2	10.5
	56	5280	10560.00	V	PK	48.4	10.8		59.2	68.2	9.0
			10640.00	V	PK	50.6	10.8		61.4	74.0	12.6
	64	5320	10640.00	V	AV	39.3	10.8		50.1	54.0	3.9

(5.6GHz Band)

Mode	Channel	Frequency (MHz)	Frequency (MHz)	ANT H/V	Detector PK/AV	Reading (dBμV)	C.F (dB)	DCF (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
802.11n (20MHz)	100	5500	5465.17	H	PK	50.4	10.1		60.5	68.2	7.7
			5461.10	V	PK	50.3	10.1		60.4	68.2	7.8
			11000.00	V	PK	49.9	10.9		60.8	74.0	13.2
			11000.00	V	AV	37.1	10.9		48.0	54.0	6.0
	116	5580	11160.00	V	PK	48.6	10.9		59.5	74.0	14.5
			11160.00	V	AV	36.1	10.9		47.0	54.0	7.0
	140	5700	11400.00	V	PK	47.7	11.1		58.8	74.0	15.2
			11400.00	V	AV	36.1	11.1		47.2	54.0	6.8

Note:

1. Emission Level (Margin) = Limit - [Reading + C.F (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 30MHz to 1000MHz at the 3 meters distance.
3. No emission was detected in the receive mode.



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[IEEE802.11n (HT40)] (5.2GHz Band)

Mode	Channel	Frequency (MHz)	Frequency (MHz)	ANT HV	Detector PK/AV	Reading (dBμV)	C.F (dB)	DCF (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
802.11n (40MHz)	38	5190	10380.00	V	PK	48.1	10.5		58.6	68.2	9.6
	46	5230	10460.00	V	PK	46.4	10.7		57.1	68.2	11.1

(5.3GHz Band)

Mode	Channel	Frequency (MHz)	Frequency (MHz)	ANT HV	Detector PK/AV	Reading (dBμV)	C.F (dB)	DCF (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
802.11n (40MHz)	54	5270	10540.00	V	PK	46.8	10.8		57.6	68.2	10.6
	62	5310	10620.00	V	PK	47.8	10.8		58.6	74.0	15.4
			10620.00	V	AV	36.2	10.8		47.0	54.0	7.0

(5.6GHz Band)

Mode	Channel	Frequency (MHz)	Frequency (MHz)	ANT HV	Detector PK/AV	Reading (dBμV)	C.F (dB)	DCF (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
802.11n (40MHz)	102	5510	5468.36	H	PK	49.8	10.1		59.9	68.2	8.3
			5466.79	V	PK	50.2	10.1		60.3	68.2	7.9
			11020.00	V	PK	48.0	10.9		58.9	74.0	15.1
			11020.00	V	AV	36.1	10.9		47.0	54.0	7.0
	110	5550	11100.00	V	PK	47.9	10.9		58.8	74.0	15.2
			11100.00	V	AV	35.4	10.9		46.3	54.0	7.7
	134	5670	11340.00	V	PK	46.9	11.1		58.0	74.0	16.0
			11340.00	V	AV	35.9	11.1		47.0	54.0	7.0

Note:

1. Emission Level (Margin) = Limit - [Reading + C.F (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 30MHz to 1000MHz at the 3 meters distance.
3. No emission was detected in the receive mode.



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[IEEE802.11ac (HT80)]
(5.2GHz Band)

Mode	Channel	Frequency (MHz)	Frequency (MHz)	ANT H/V	Detector PK/AV	Reading (dBµV)	C.F (dB)	DCF (dB)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
802.11ac (80MHz)	42	5210	10420.00	V	PK	48.1	10.6		58.7	68.2	9.5

(5.3GHz Band)

Mode	Channel	Frequency (MHz)	Frequency (MHz)	ANT H/V	Detector PK/AV	Reading (dBµV)	C.F (dB)	DCF (dB)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
802.11ac (80MHz)	58	5290	10580.00	V	PK	46.4	10.8		57.2	68.2	11.0

(5.6GHz Band)

Mode	Channel	Frequency (MHz)	Frequency (MHz)	ANT H/V	Detector PK/AV	Reading (dBµV)	C.F (dB)	DCF (dB)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
802.11ac (80MHz)	106	5530	5469.10	H	PK	49.4	10.1		59.5	68.2	8.7
			5469.10	V	PK	50.1	10.1		60.2	68.2	8.0
			11060.00	V	PK	47.4	10.9		58.3	74.0	15.7
			11060.00	V	AV	35.3	10.9	0.19	46.4	54.0	7.6
	122	5610	11220.00	V	PK	47.5	10.9		58.4	74.0	15.6
			11220.00	V	AV	35.7	10.9	0.19	46.8	54.0	7.2

Note:

1. Emission Level (Margin) = Limit - [Reading + C.F (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 30MHz to 1000MHz at the 3 meters distance.
3. No emission was detected in the receive mode.

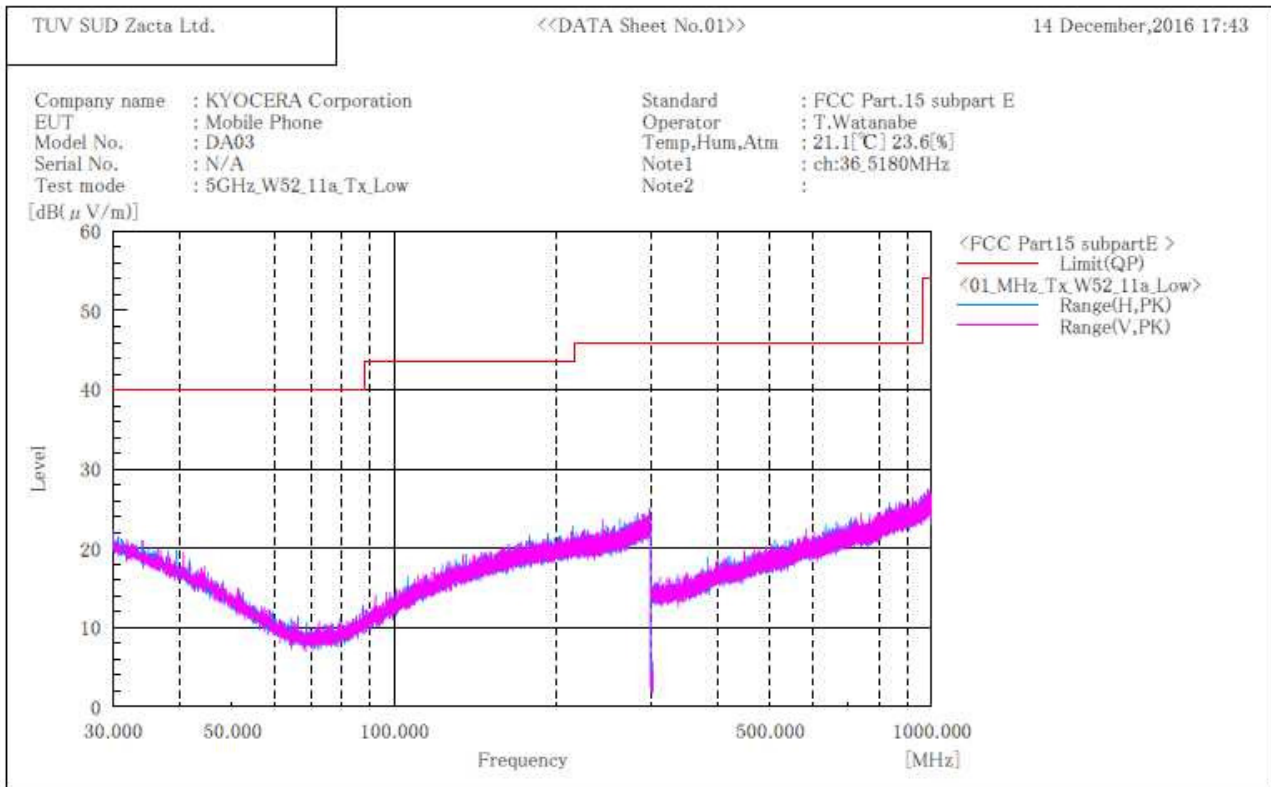


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7.4.4 Measurement chart
7.4.4.1 Transmission mode

[11a]
W52 / Channel Low
BELOW 1GHz

***** RADIATED EMISSION *****
 [3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

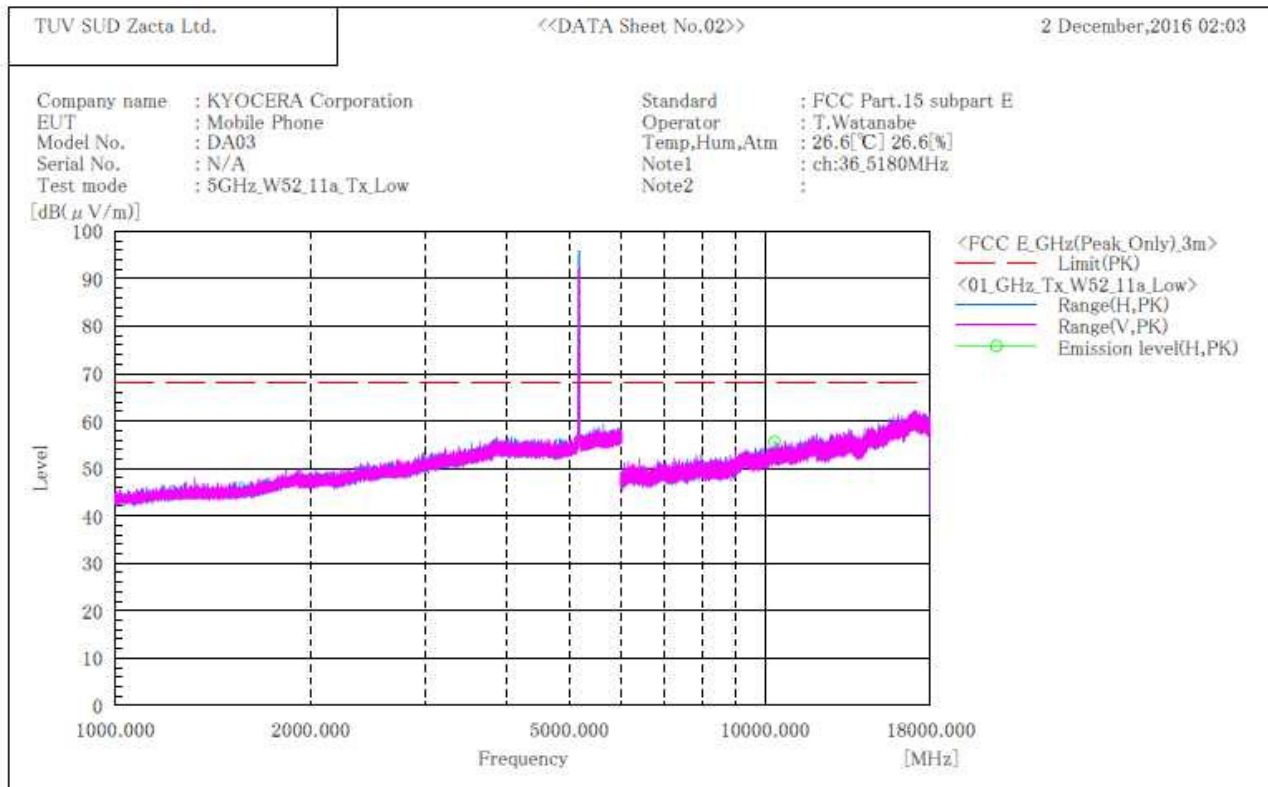
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



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**[11a]
W52 / Channel Low
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	10360.000	H	45.1	10.5	55.6	68.2	12.6	150.0	0.0	

Note:

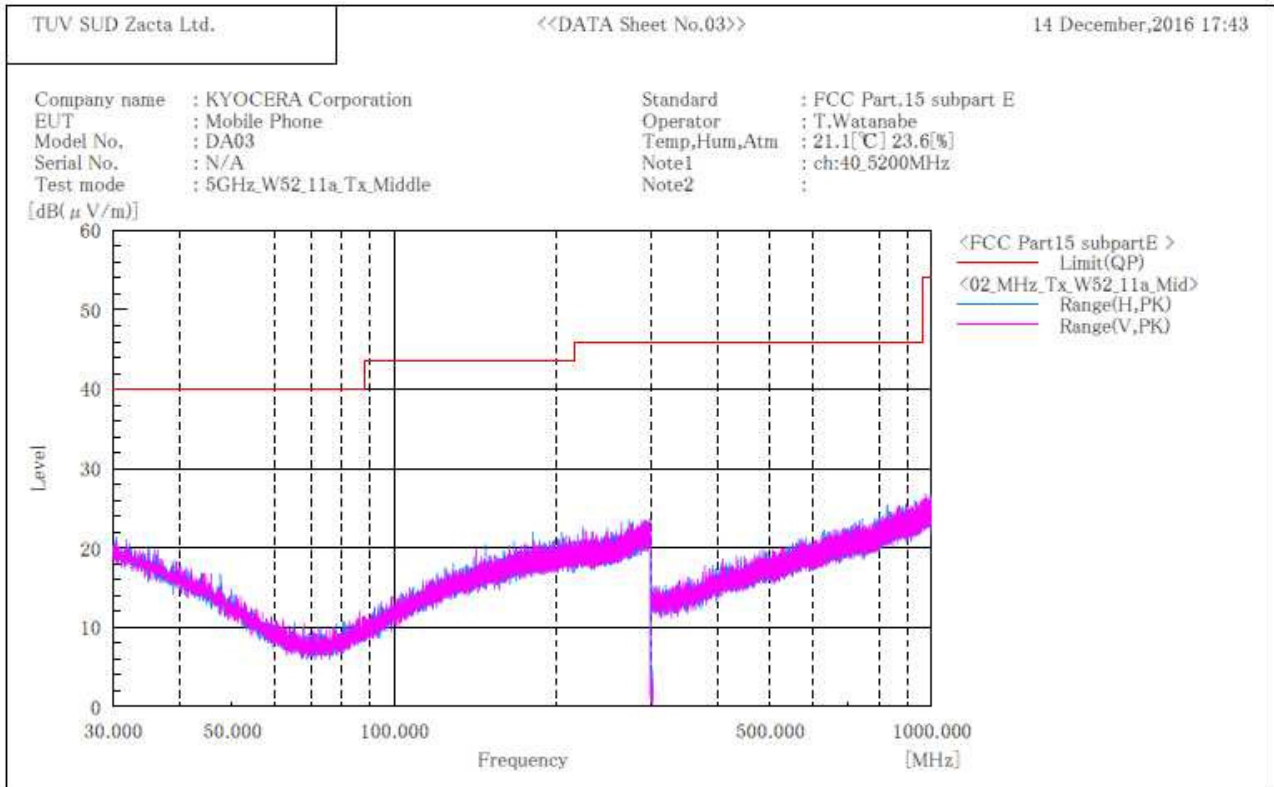
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



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**[11a]
W52 / Channel Middle
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

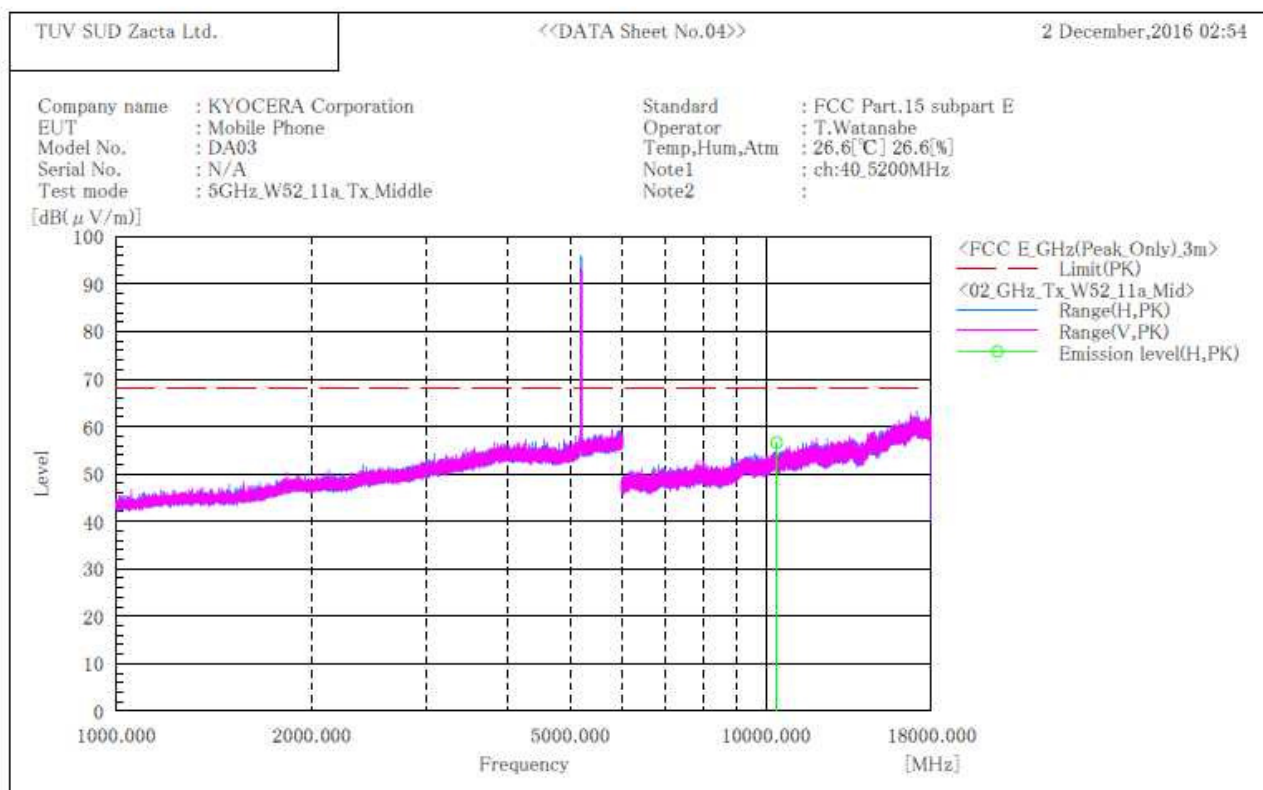
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



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**[11a]
W52 / Channel Middle
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	10400.000	H	46.0	10.6	56.6	68.2	11.6	156.0	0.0	

Note:

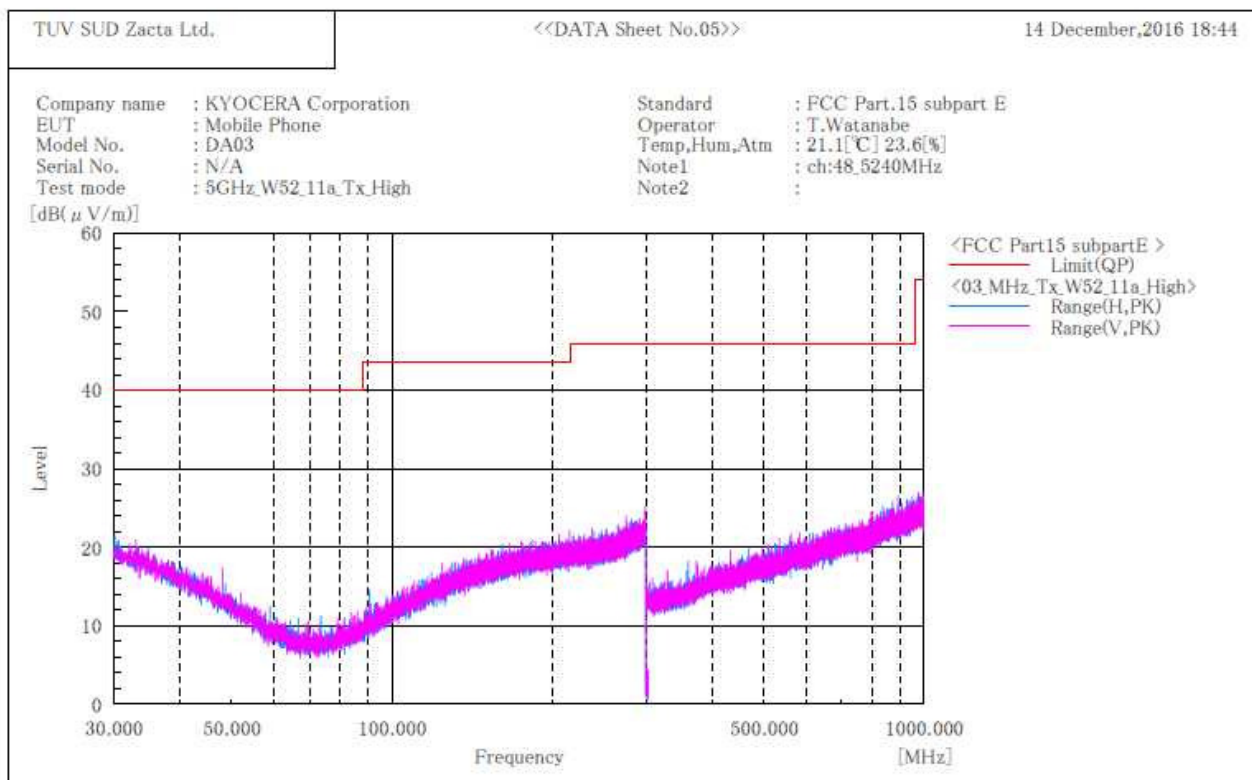
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



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**[11a]
W52 / Channel High
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c. f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

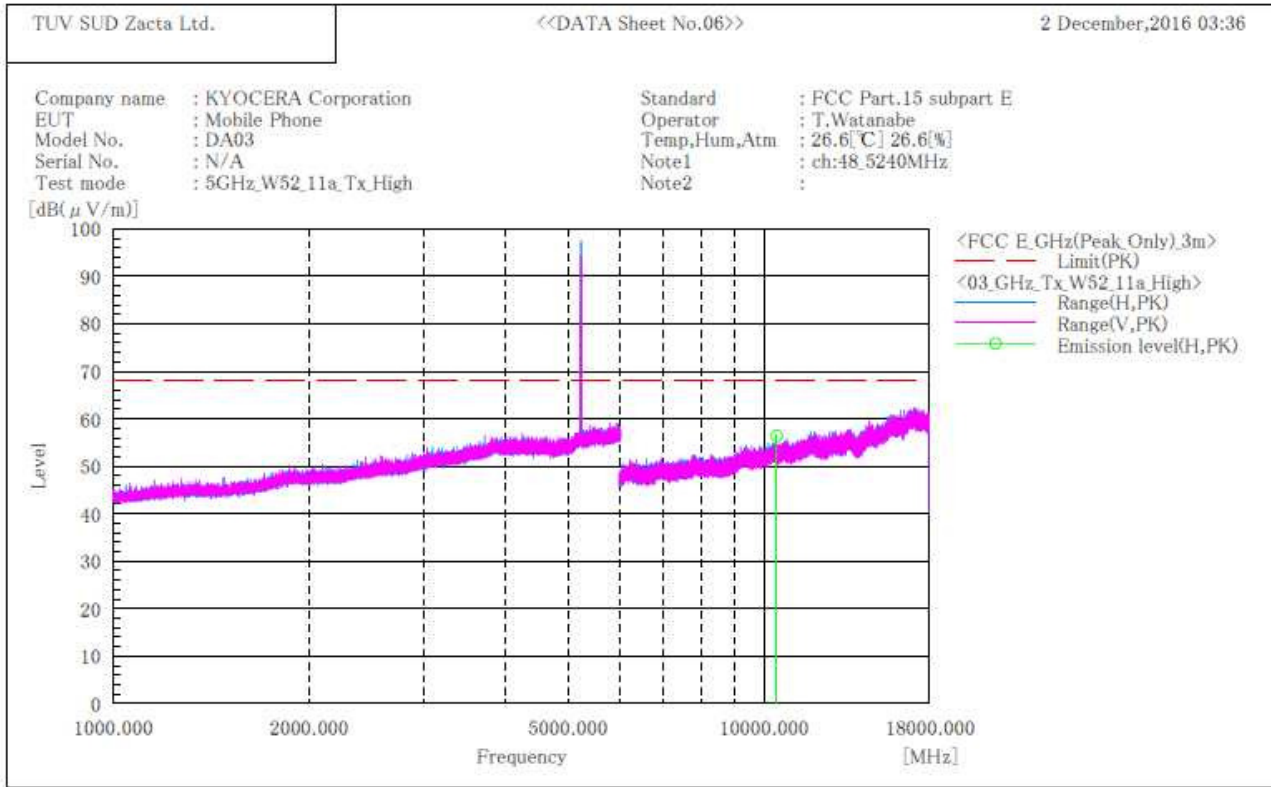
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



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**[11a]
W52 / Channel High
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	10480.000	H	45.6	10.8	56.4	68.2	11.8	150.0	0.0	

Note:

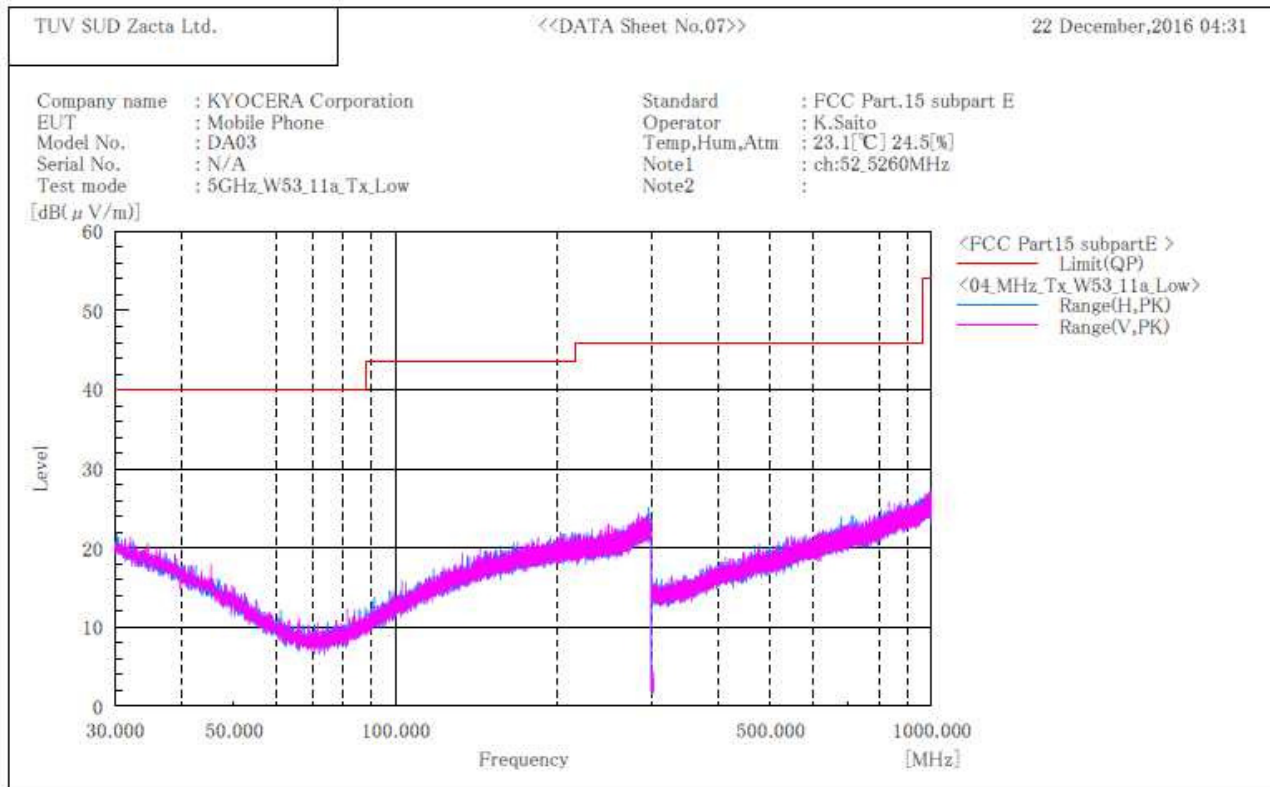
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11a]
W53 / Channel Low
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c. f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

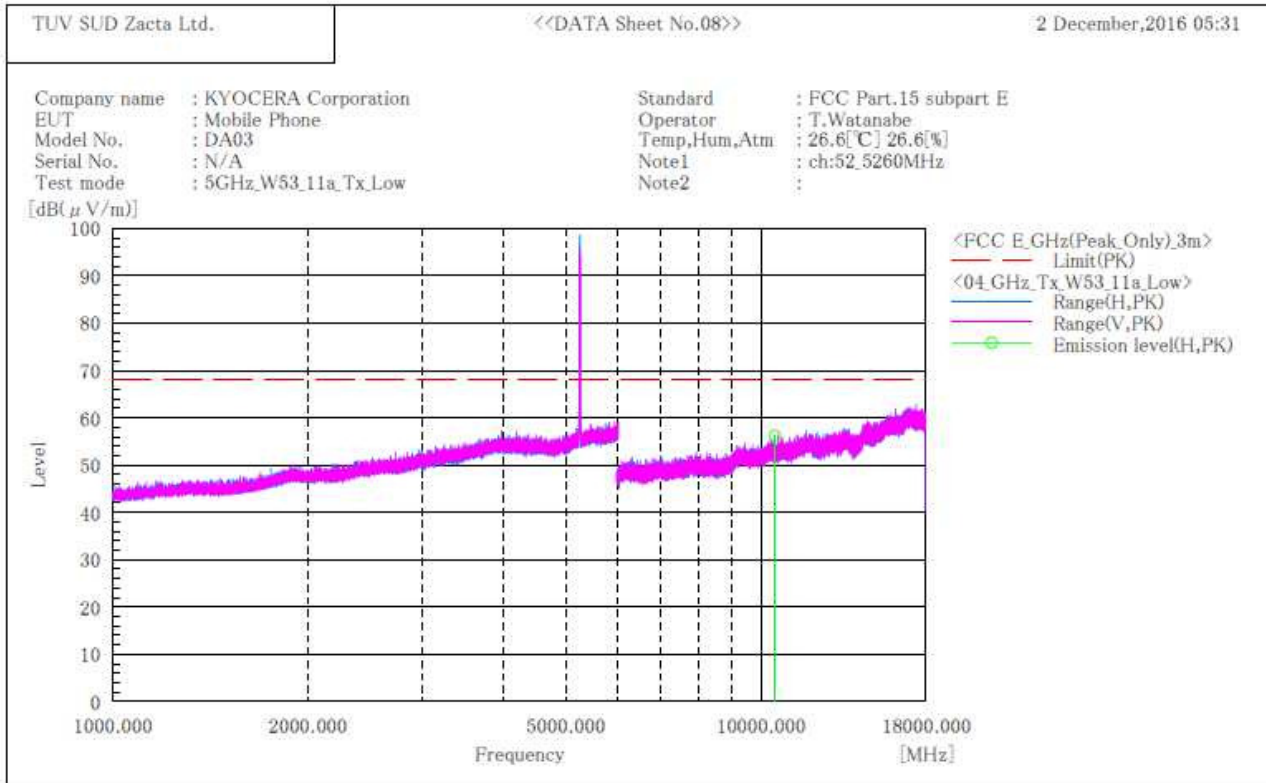
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11a]
W53 / Channel Low
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	10520.000	H	45.4	10.8	56.2	68.2	12.0	148.0	0.0	

Note:

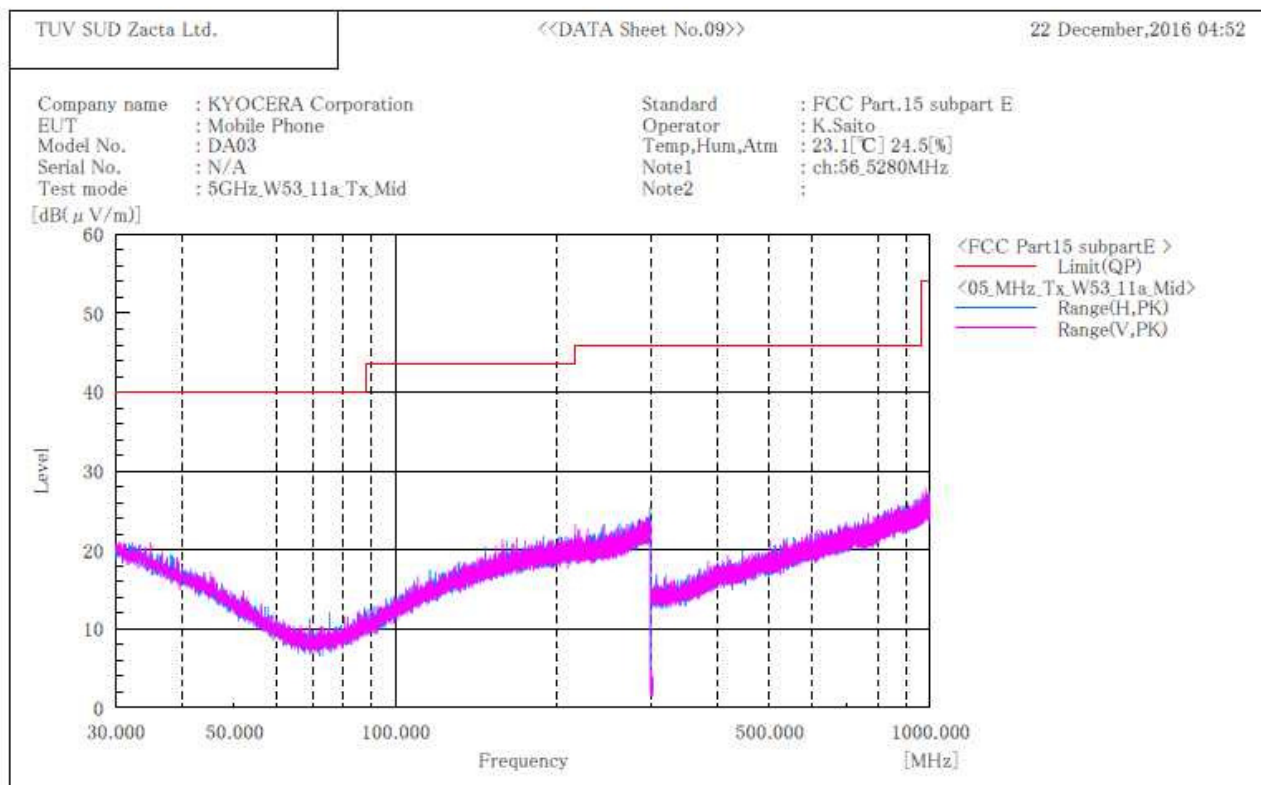
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11a]
W53 / Channel Middle
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(I/m)]	[cm]	[°]	

Note:

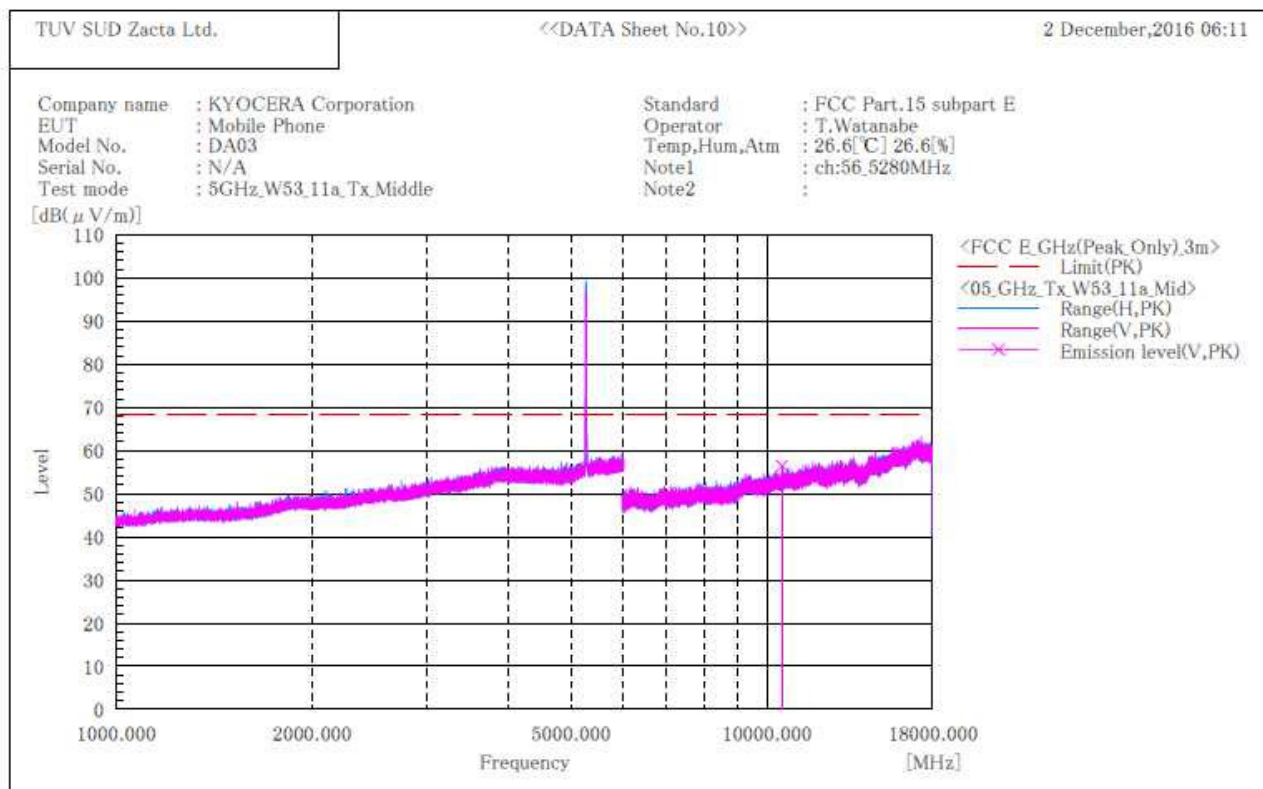
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



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**[11a]
W53 / Channel Middle
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	c, f [dB(1/m)]	Result PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	10560.000	V	45.6	10.8	56.4	68.2	11.8	140.0	183.0	

Note:

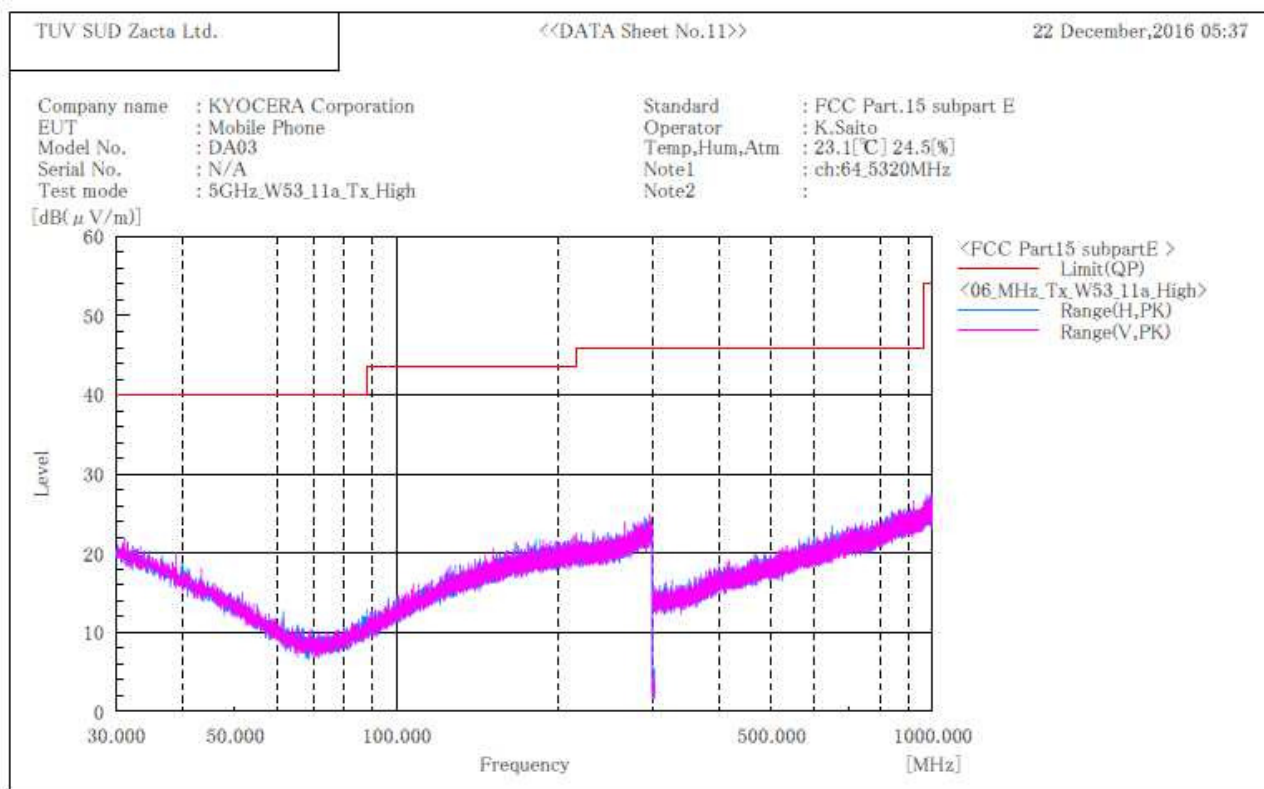
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



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**[11a]
W53 / Channel High
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

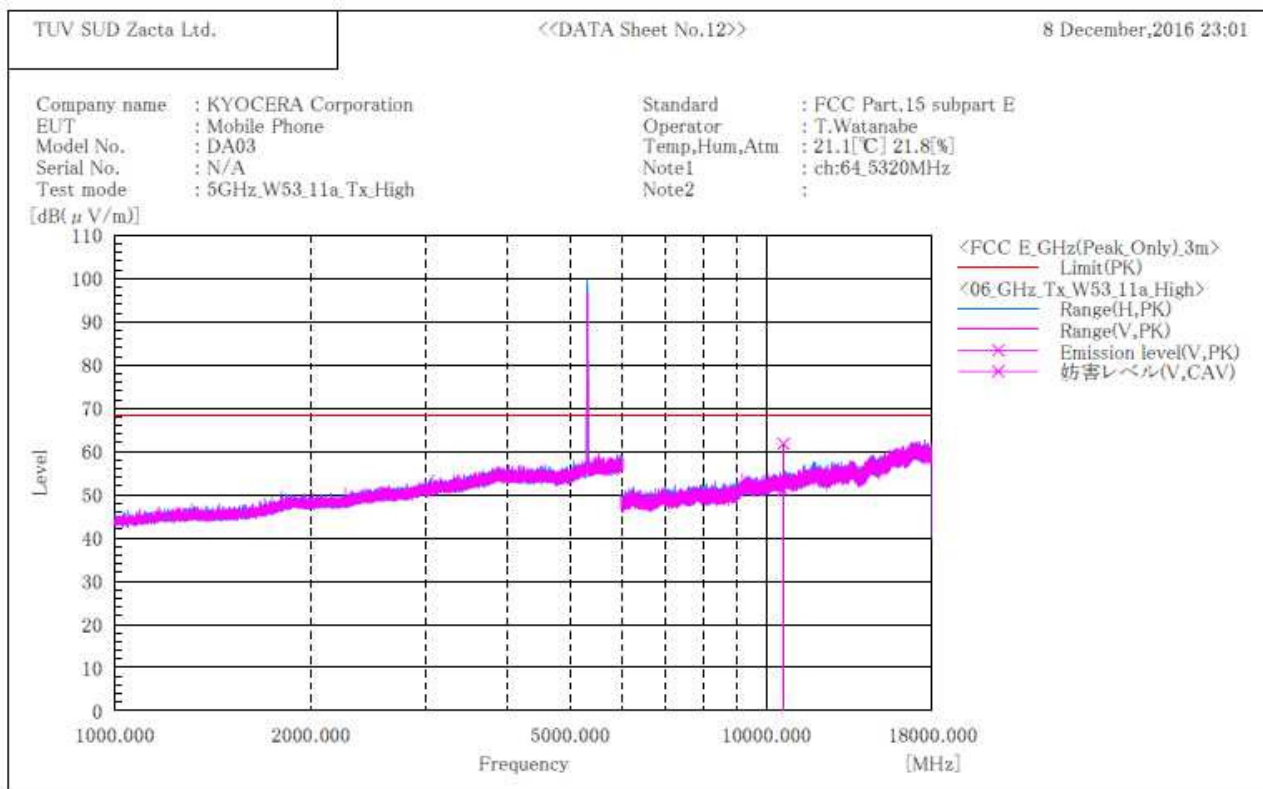
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



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**[11a]
W53 / Channel High
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency	(P)	Reading PK	Reading CAV	c. f	Result PK	Result CAV	Limit PK	Margin PK	Margin CAV	Height	Angle	Remark
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]	
1	10640.000	V	51.0	40.2	10.8	61.8	51.0	74.0	12.2	3.0	107.0	156.0	

Note:

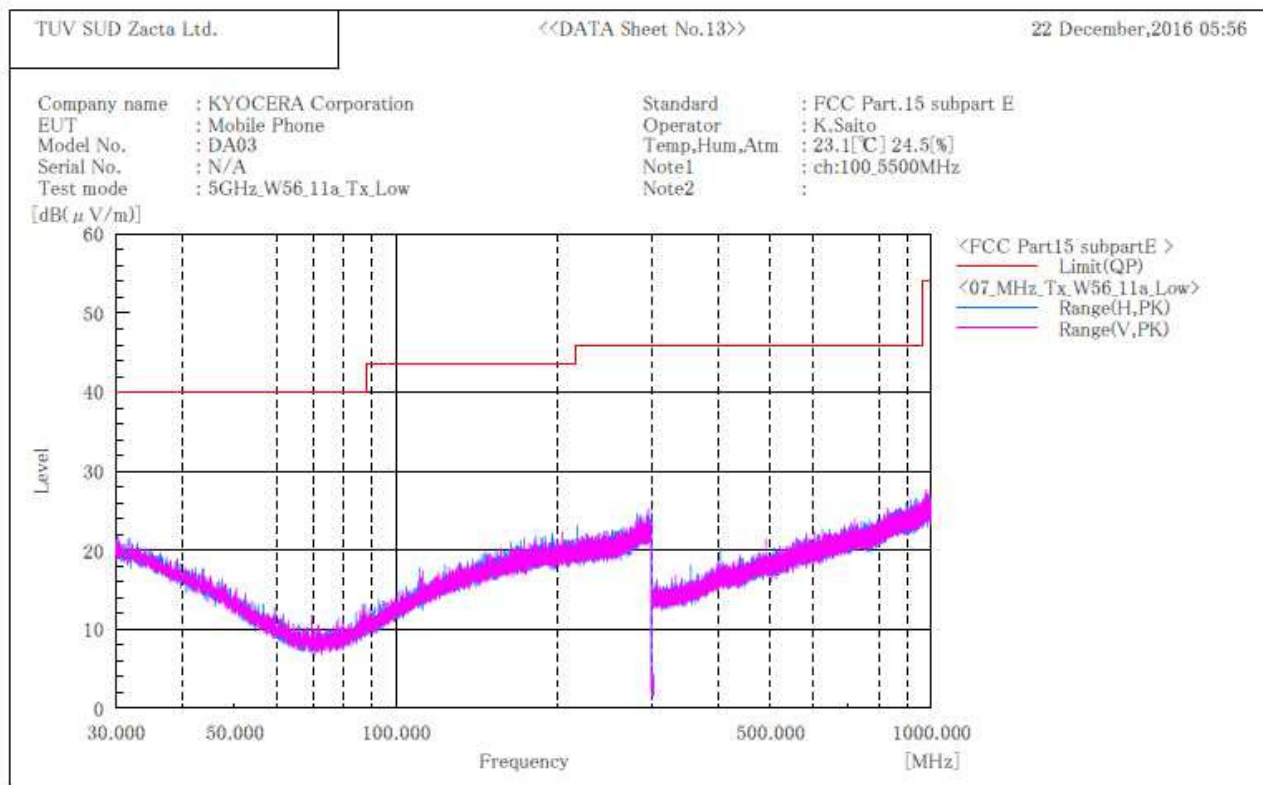
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11a]
W56 / Channel Low
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

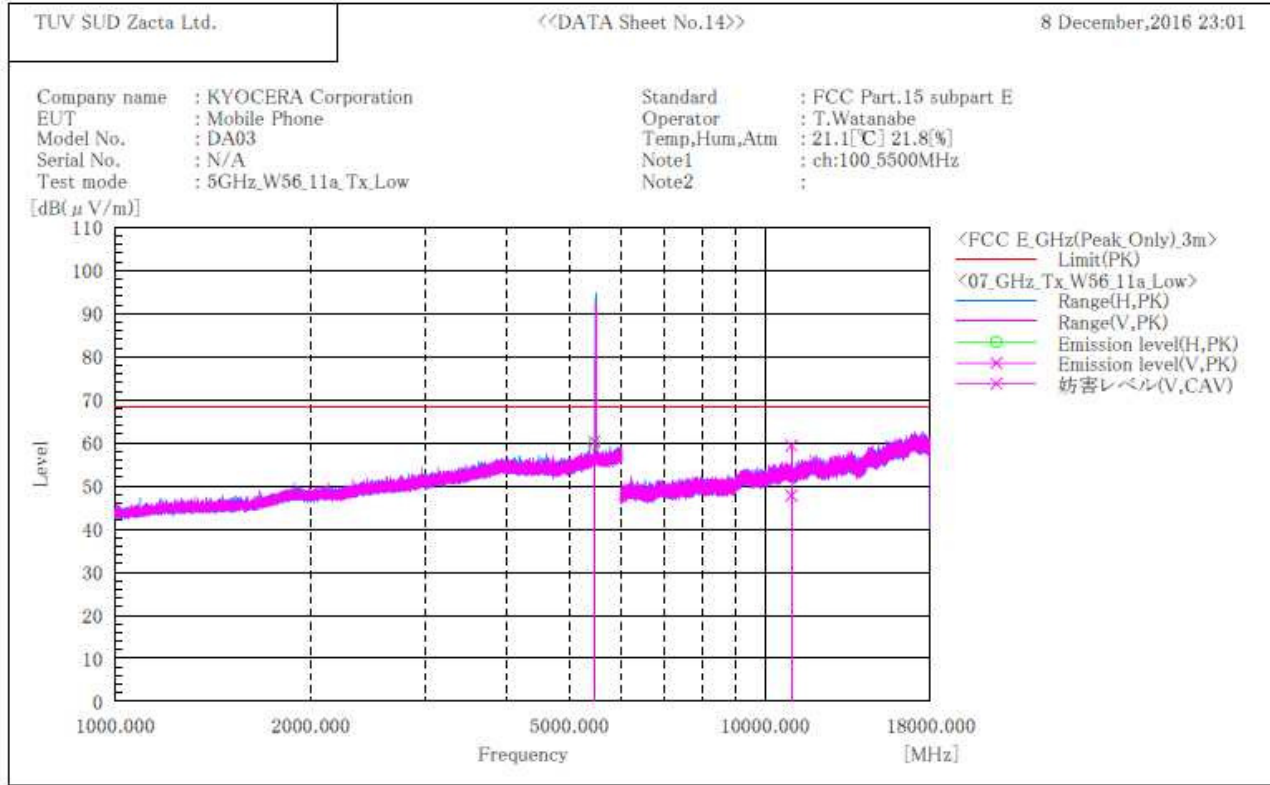
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11a]
W56 / Channel Low
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	Reading CAV [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Result CAV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [°]	Remark
1	5466.535	H	49.7	---	10.1	59.8	---	68.2	8.4	---	140.0	227.0	
2	5467.000	V	50.2	---	10.1	60.3	---	68.2	7.9	---	103.0	152.0	
3	11000.000	V	48.5	36.9	10.9	59.4	47.8	74.0	14.6	6.2	127.0	316.0	

Note:

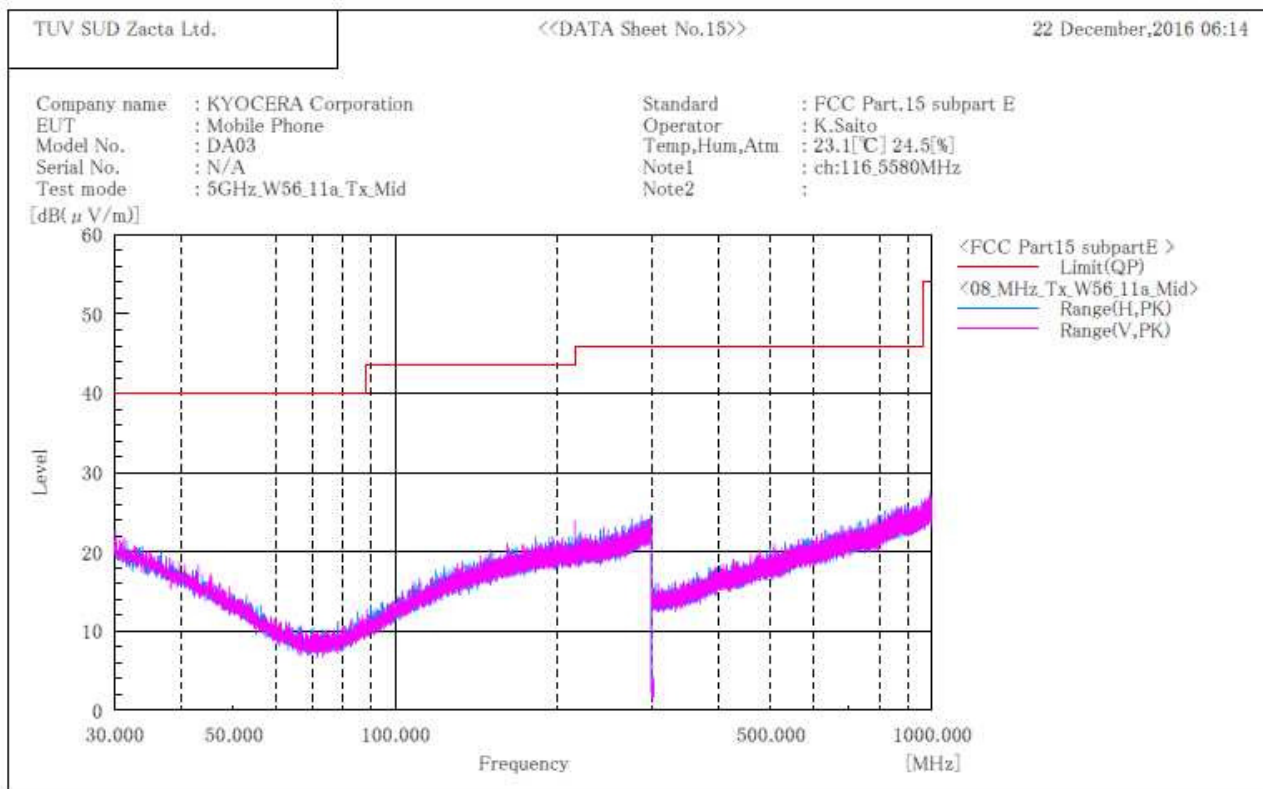
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11a]
W56 / Channel Middle
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P) [MHz]	c. f [dB(1/m)]	Height [cm]	Angle [°]	Remark
-----	------------------------	-------------------	----------------	---------------	--------

Note:

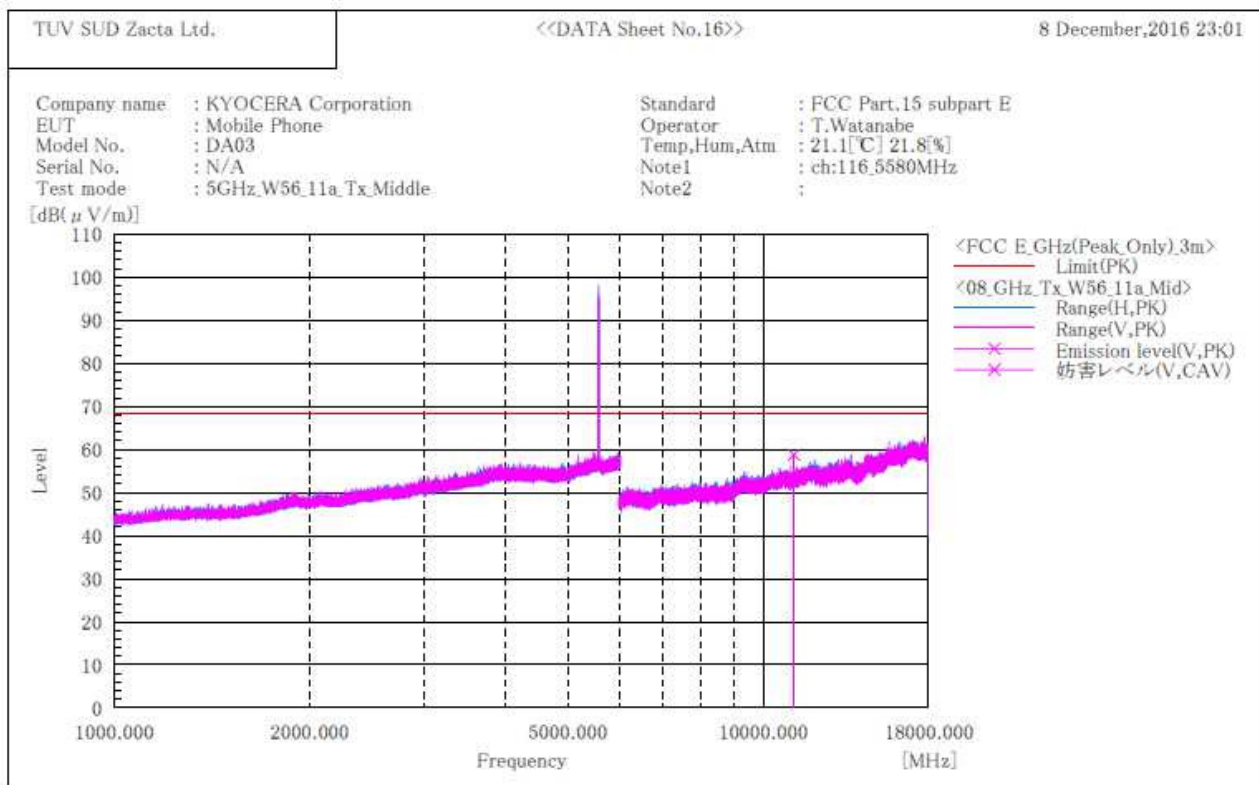
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11a]
W56 / Channel Middle
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	Reading CAV [dB(μV)]	c.f [dB(1/m)]	Result PK [dB(μV/m)]	Result CAV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [°]	Remark
1	11160.000	V	47.9	42.1	10.9	58.8	53.0	74.0	15.2	1.0	112.0	141.0	

Note:

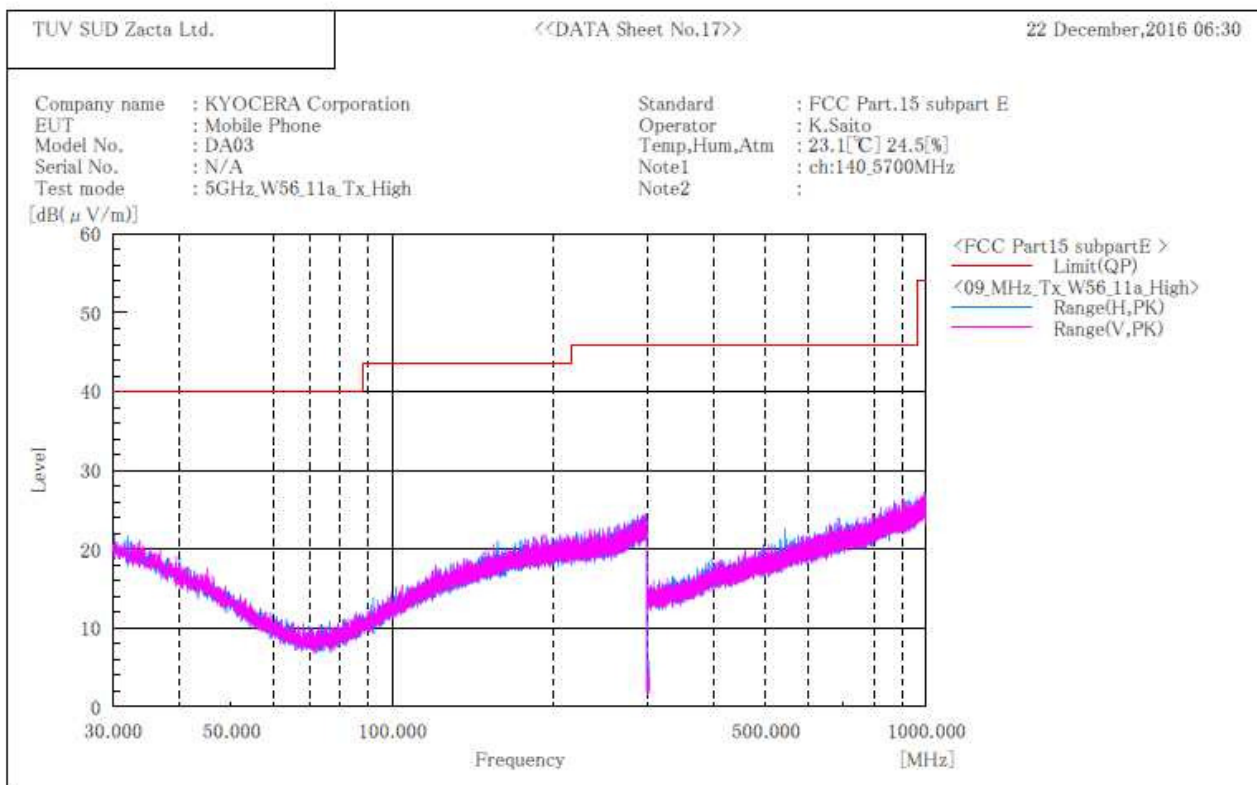
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11a]
W56 / Channel High
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

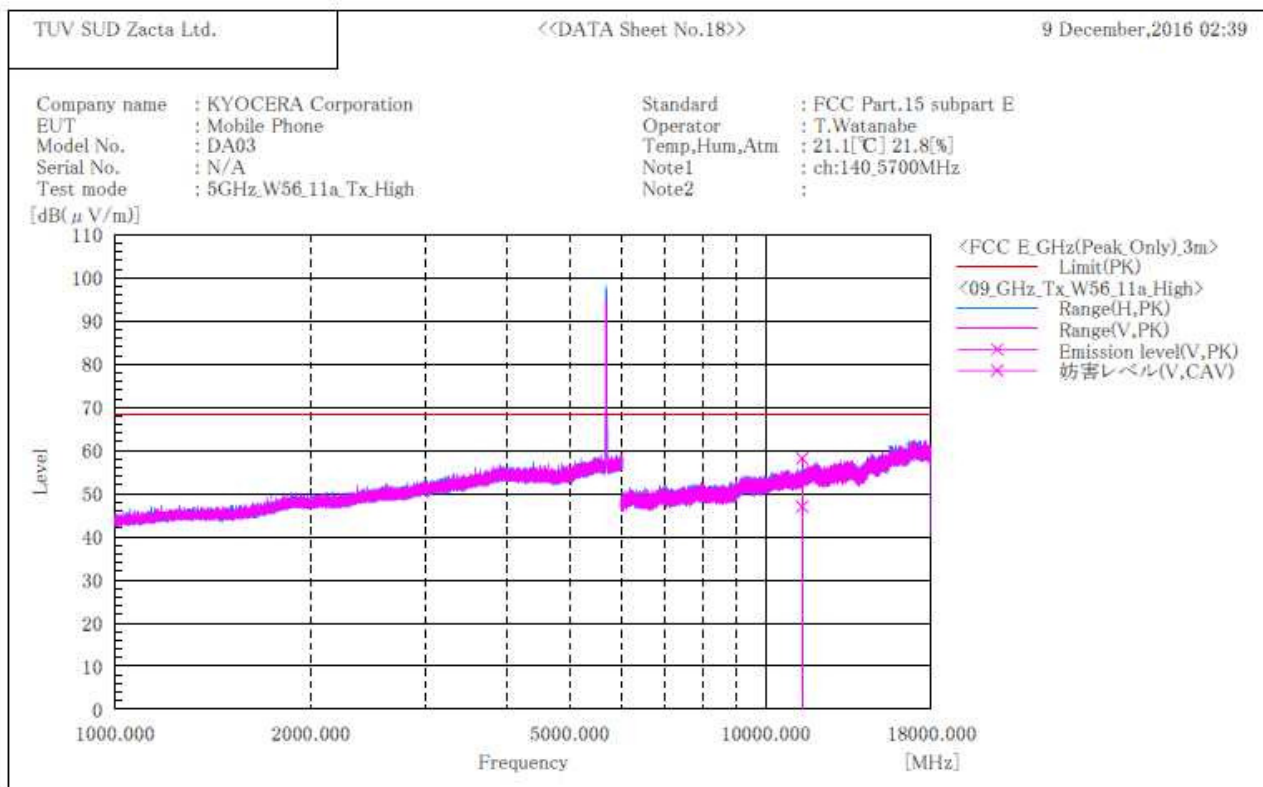
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11a]
W56 / Channel High
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	Reading CAV [dB(μV)]	c.f [dB(1/m)]	Result PK [dB(μV/m)]	Result CAV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [°]	Remark
1	11400.000	V	47.1	35.9	11.1	58.2	47.0	74.0	15.8	7.0	114.0	137.0	

Note:

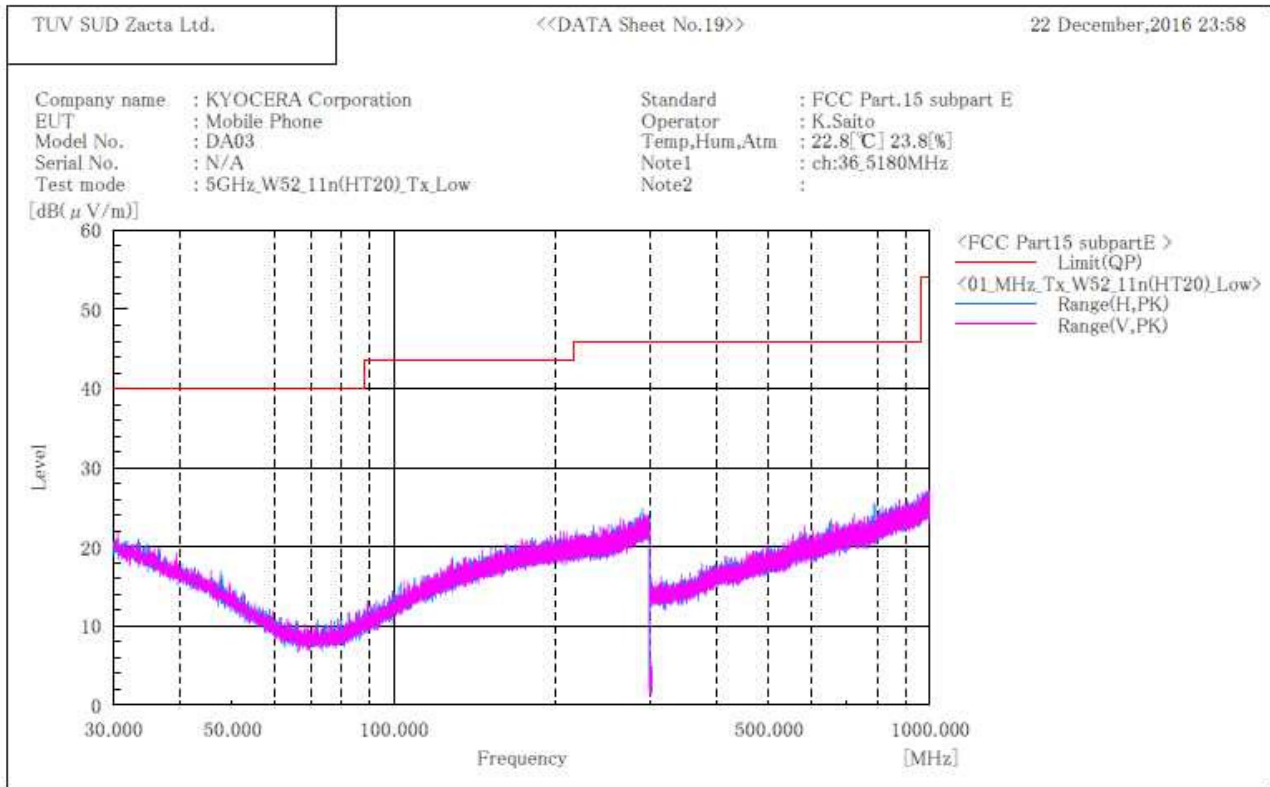
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W52 / Channel Low
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

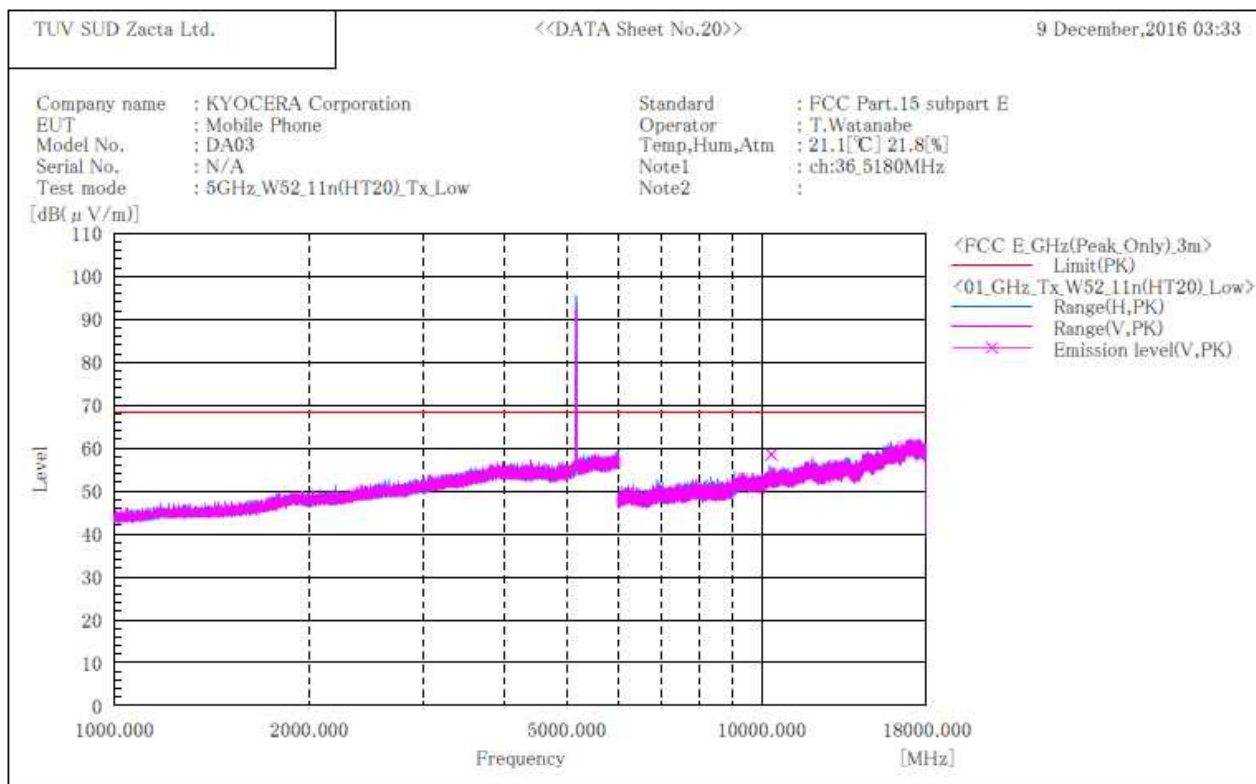
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W52 / Channel Low
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	10360.000	V	48.0	10.5	58.5	68.2	9.7	145.0	345.0	

Note:

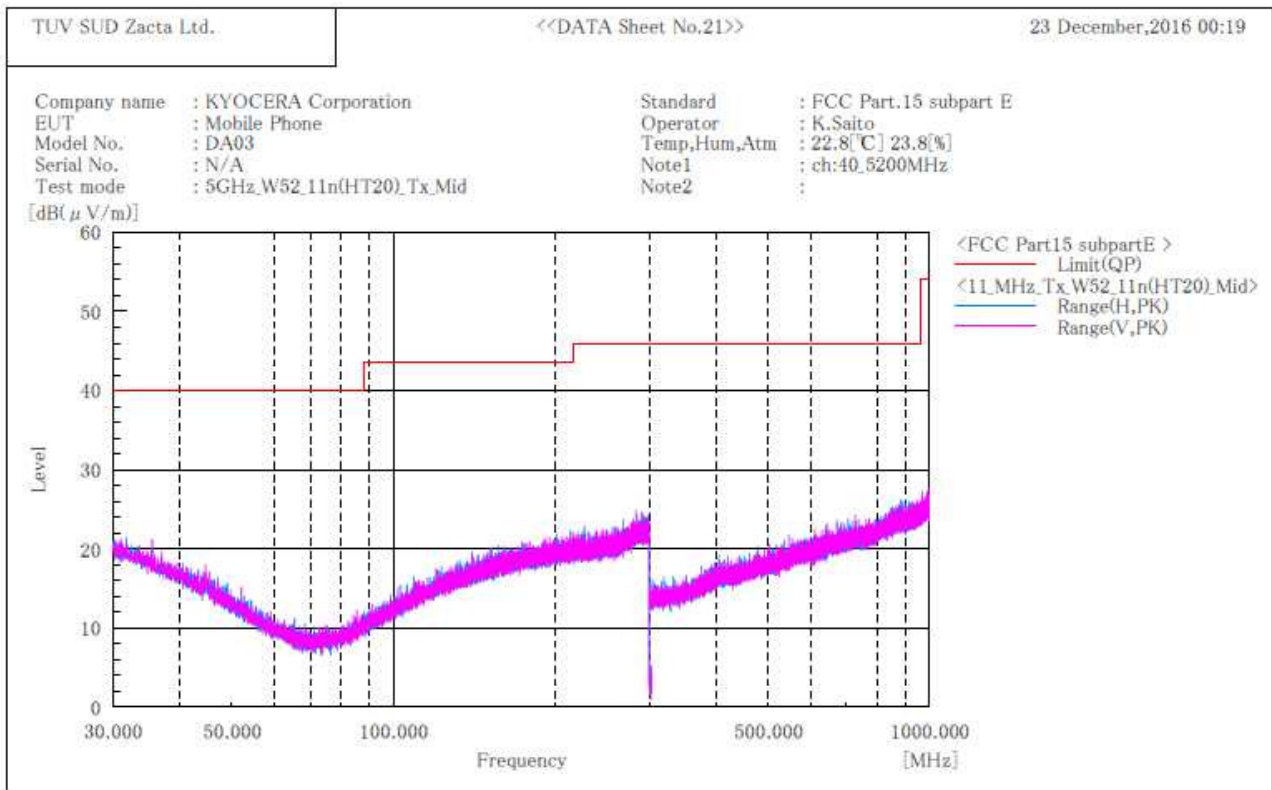
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W52 / Channel Middle
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

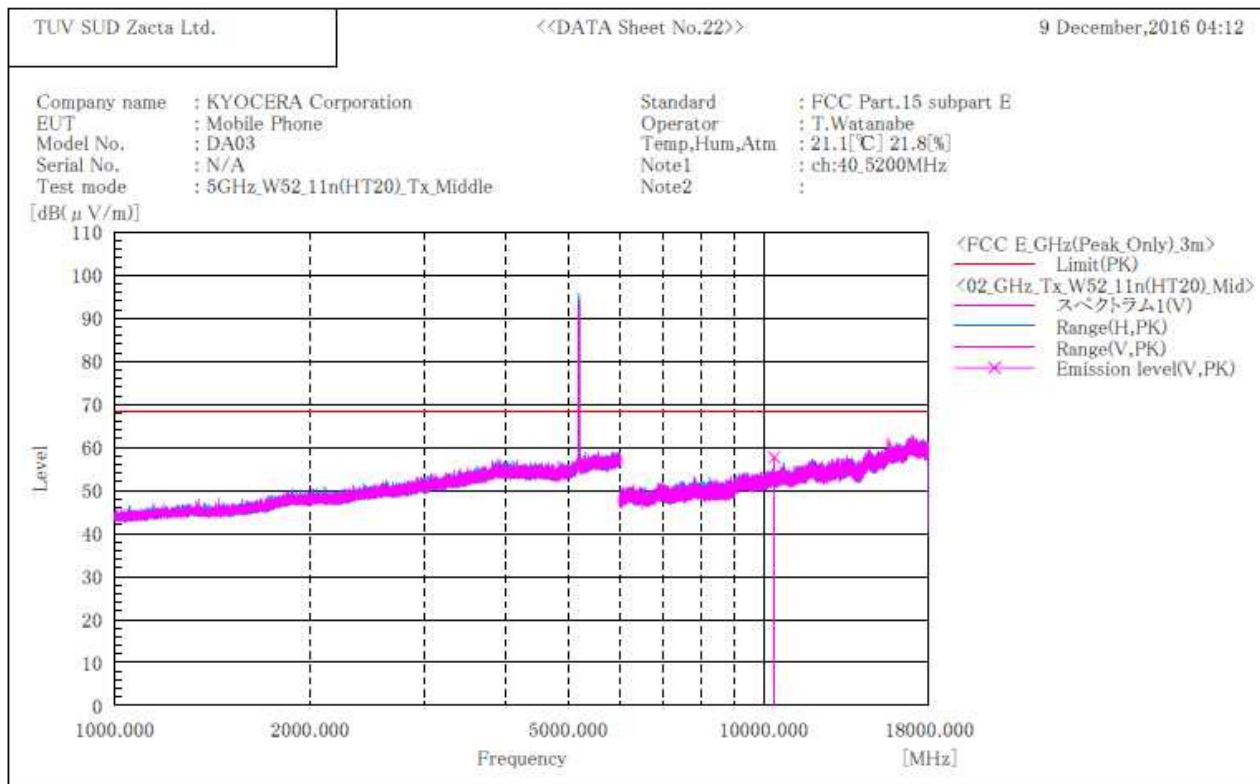
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W52 / Channel Middle
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	10400.000	V	47.1	10.6	57.7	68.2	10.5	124.0	177.0	

Note:

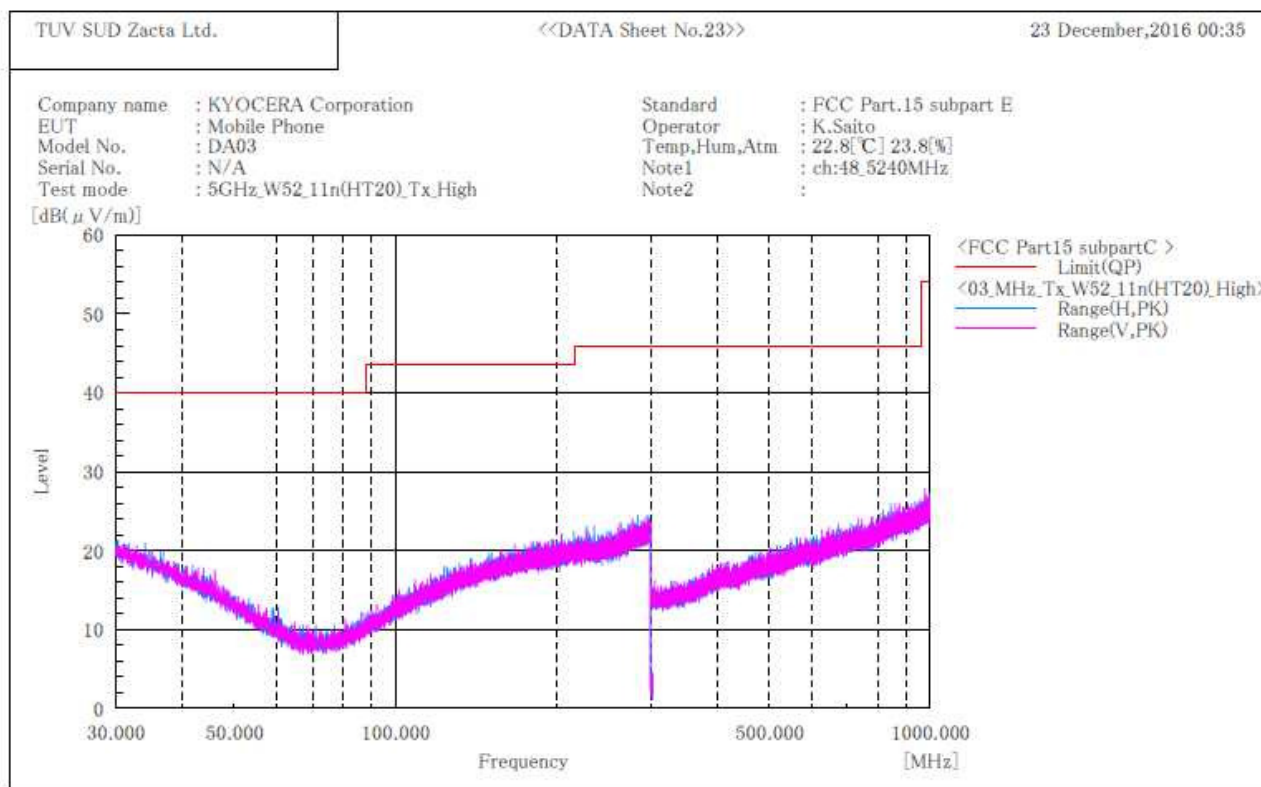
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W52 / Channel High
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c. f	Height	Angle	Remark
	[MHz]	[dB (1/m)]	[cm]	[°]	

Note:

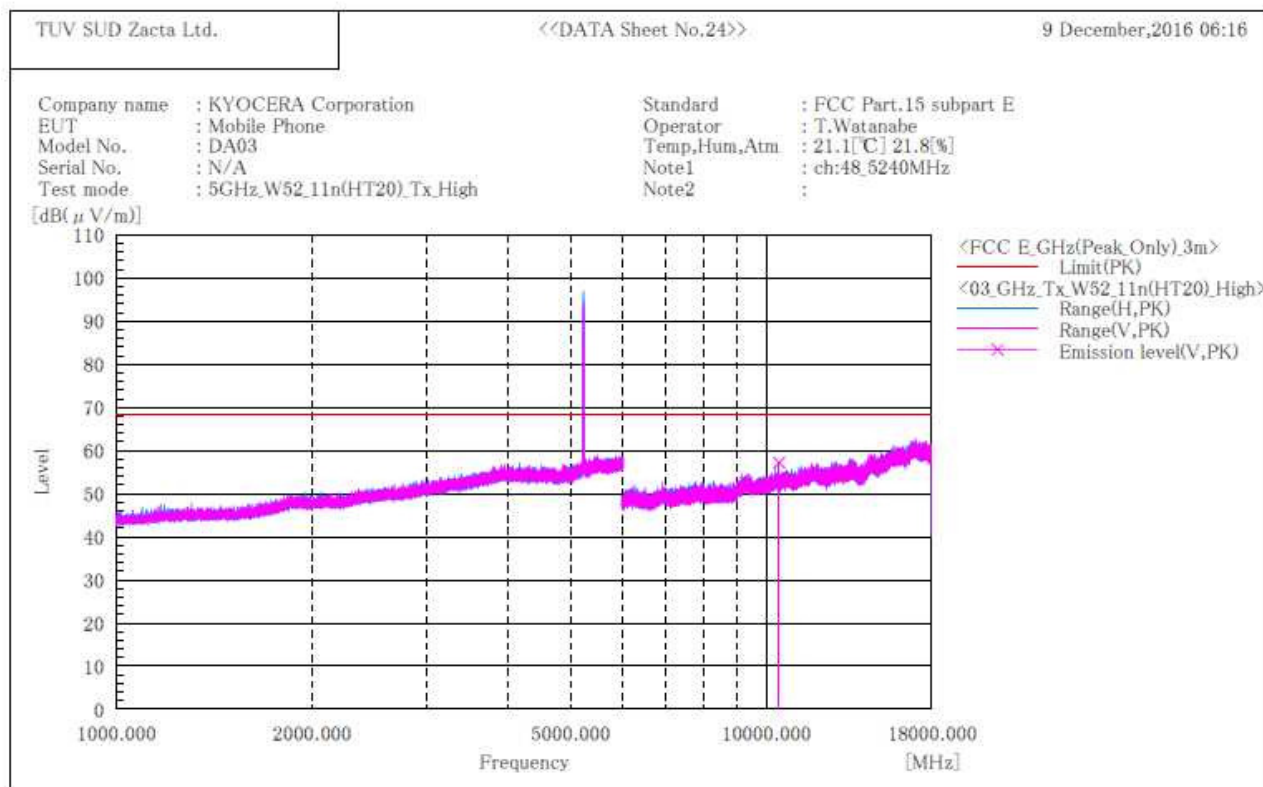
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W52 / Channel High
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	10480.000	V	46.4	10.8	57.2	68.2	11.0	123.0	184.0	

Note:

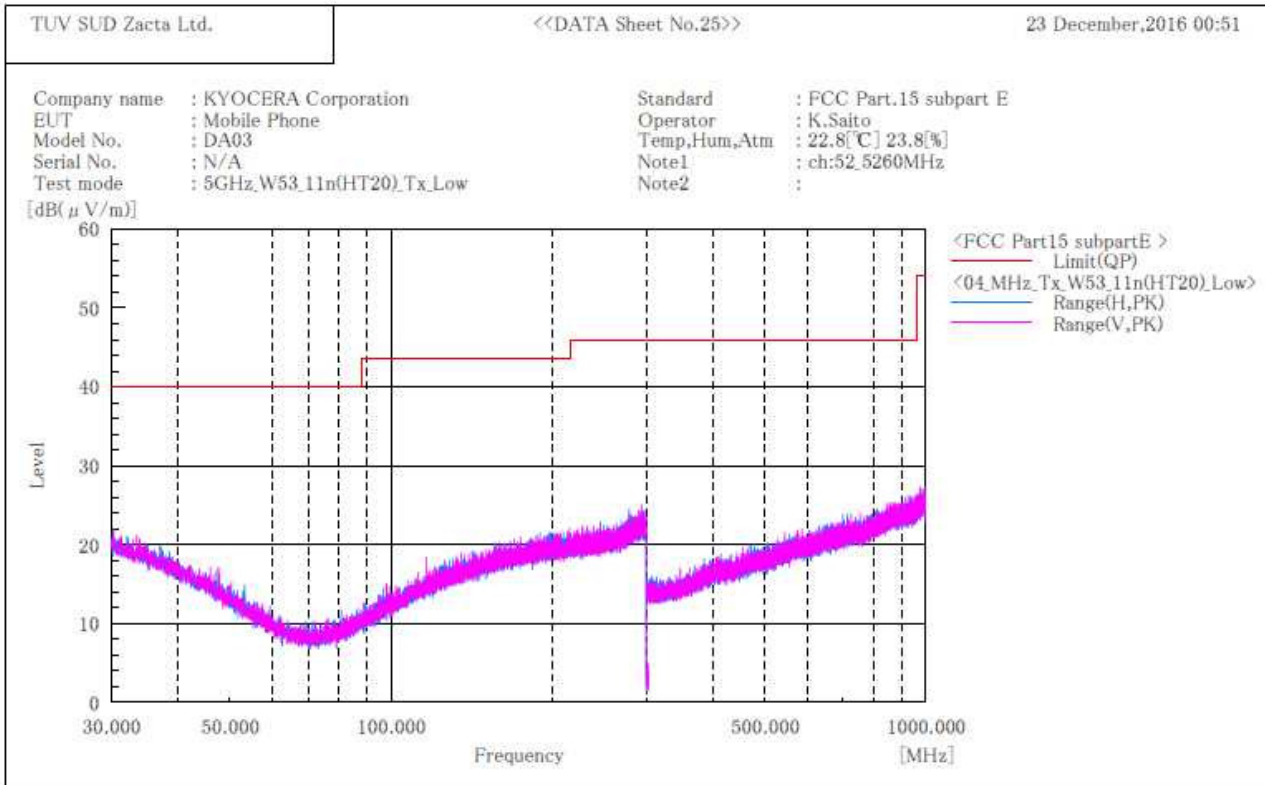
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W53 / Channel Low
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

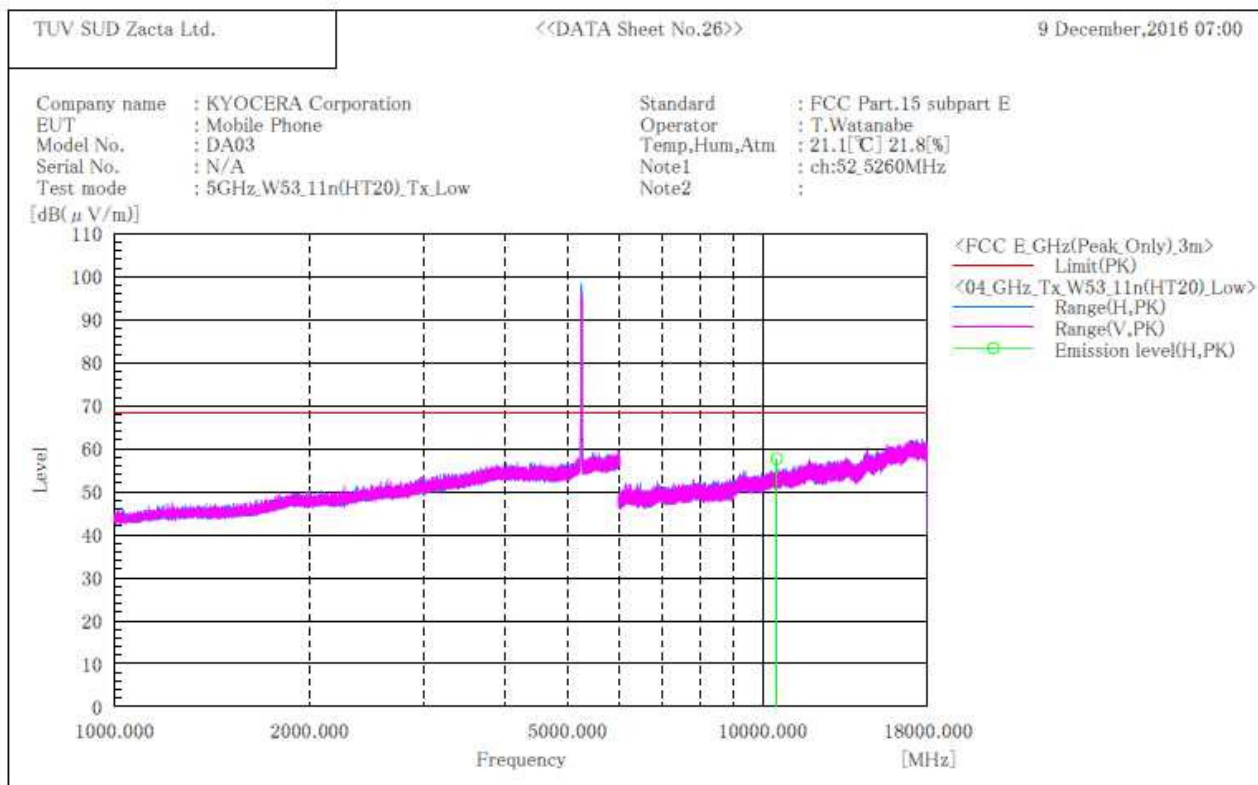
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W53 / Channel Low
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	10520.000	H	46.9	10.8	57.7	68.2	10.5	128.0	165.0	

Note:

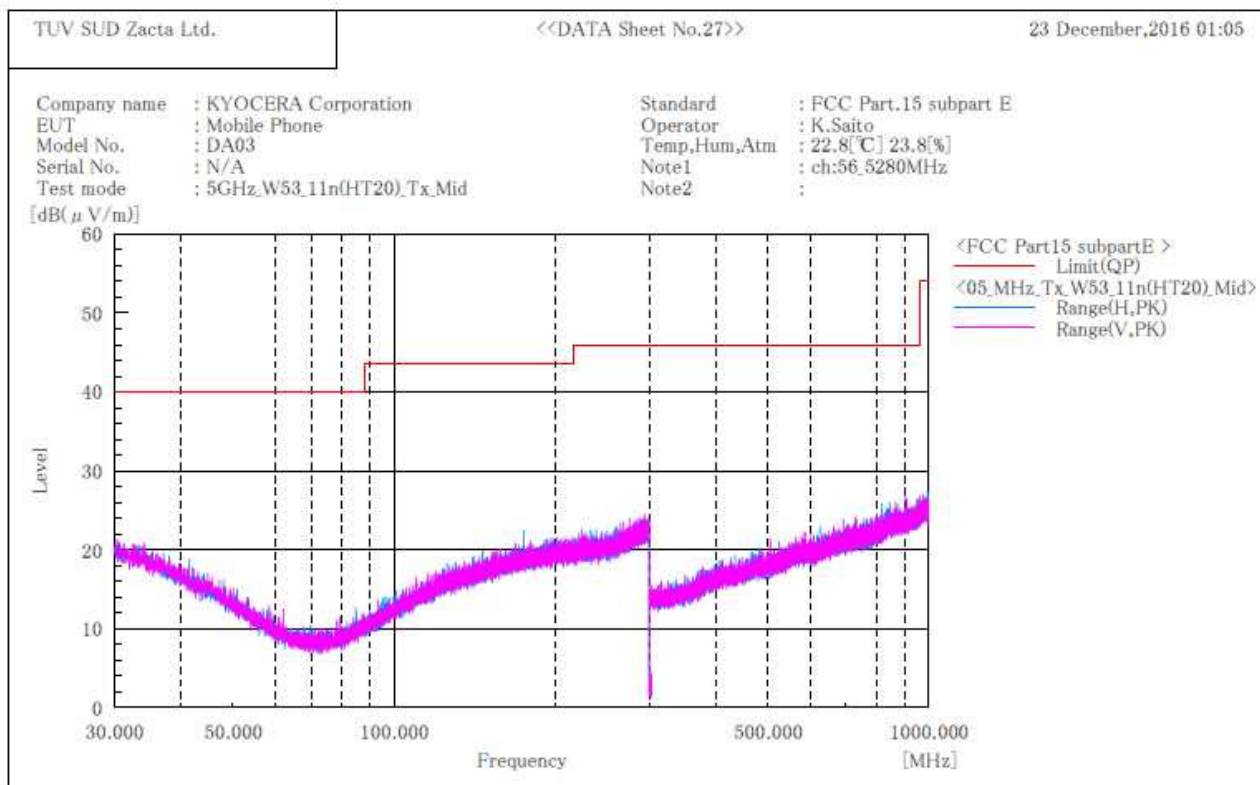
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W53 / Channel Middle
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

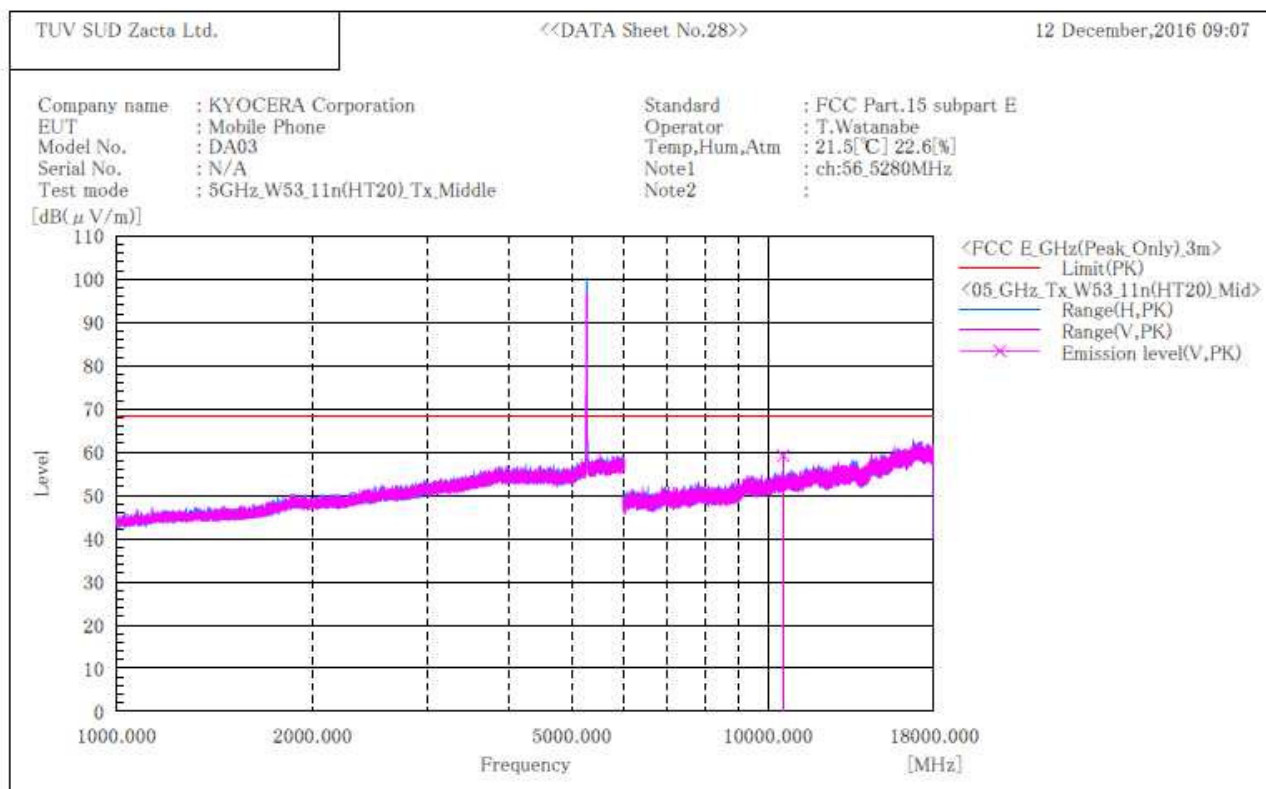
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W53 / Channel Middle
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	Reading PK	c. f	Result PK	Limit PK	Margin PK	Height	Angle	Remark
	[MHz]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[cm]	[°]	
1	10560.000	48.4	10.8	59.2	68.2	9.0	134.0	308.0	

Note:

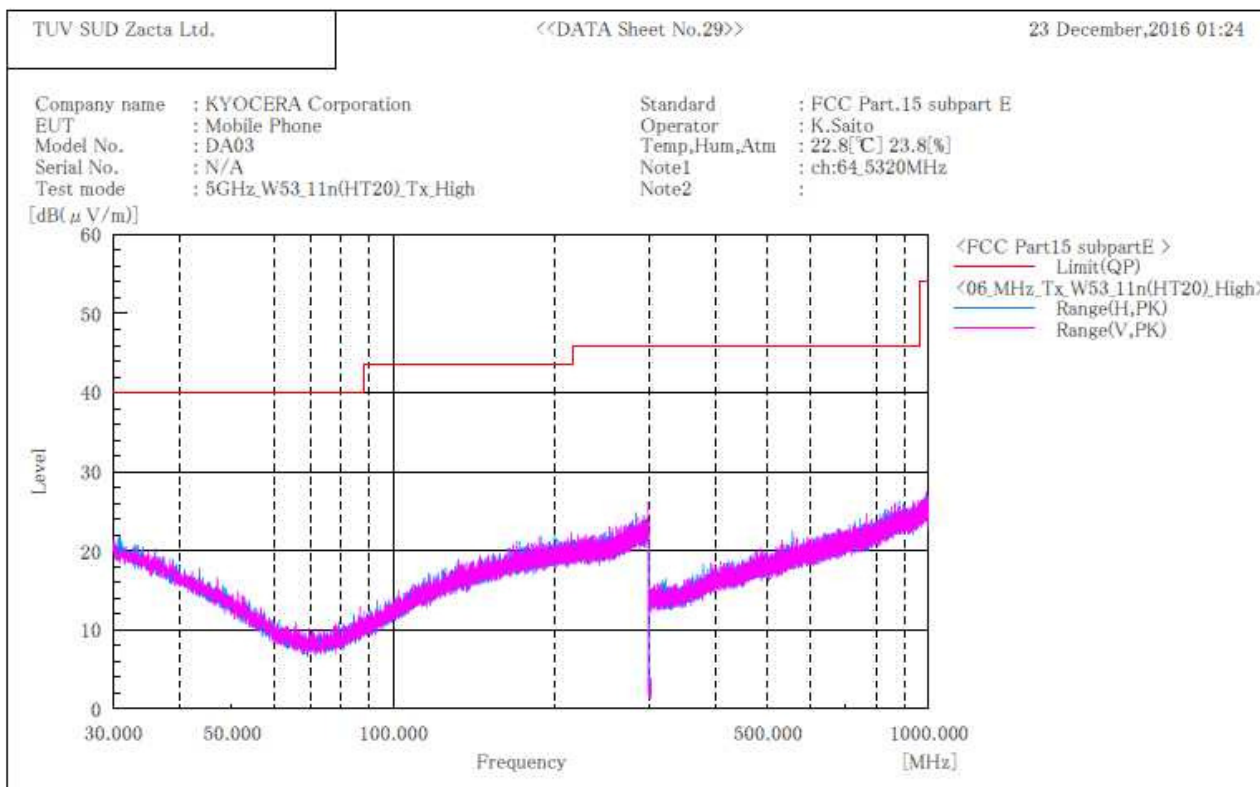
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W53 / Channel High
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

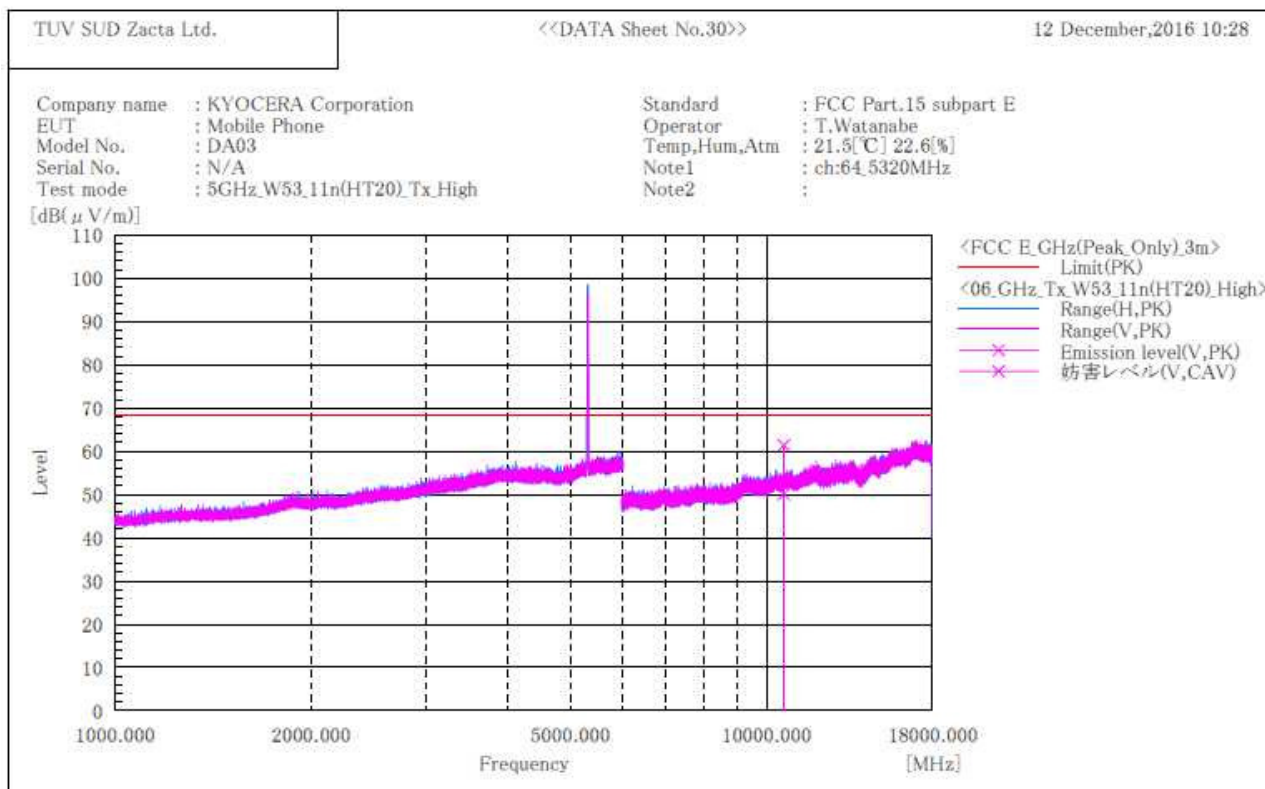
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W53 / Channel High
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	Reading CAV [dB(μV)]	c.f [dB(1/m)]	Result PK [dB(μV/m)]	Result CAV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [°]	Remark
1.	10640.000	V	50.6	39.3	10.8	61.4	50.1	74.0	12.6	3.9	122.0	310.0	

Note:

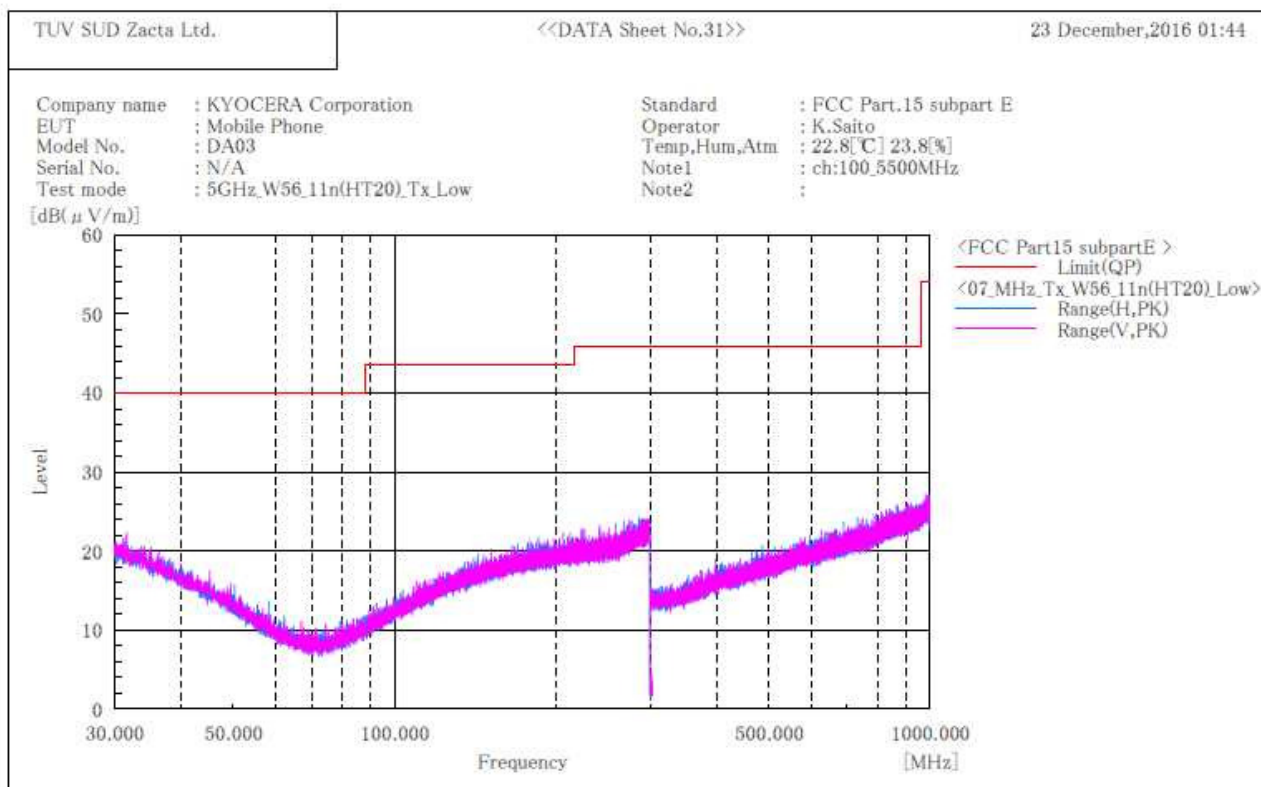
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W56 / Channel Low
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c. f	Height	Angle	Remark
	[MHz]	[dB (1/m)]	[cm]	[°]	

Note:

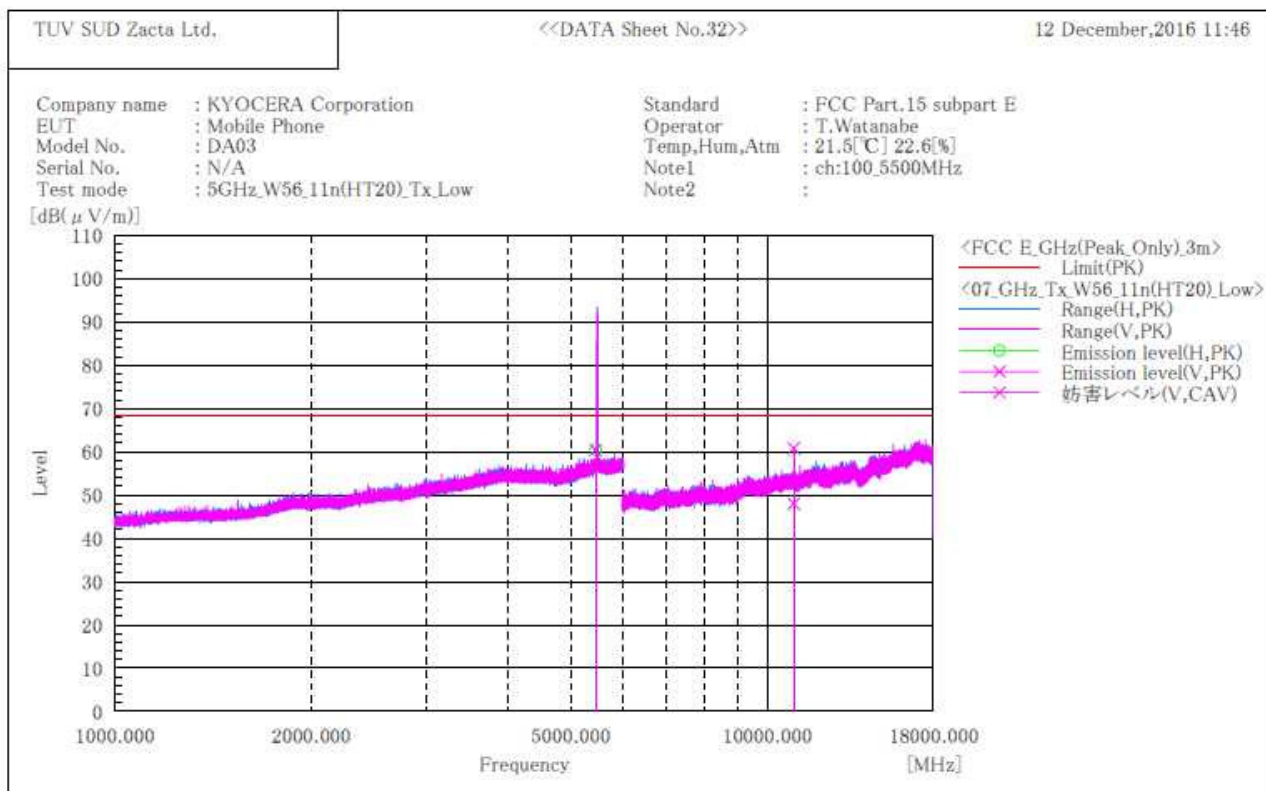
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W56 / Channel Low
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	Reading CAV [dB(μV)]	c.f [dB(1/m)]	Result PK [dB(μV/m)]	Result CAV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [°]	Remark
1	5465.170	H	50.4		10.1	60.5		68.2	7.7		123.0	209.0	
2	5461.100	V	50.3		10.1	60.4		68.2	7.8		128.0	154.0	
3	11000.000	V	49.9	37.1	10.9	60.8	48.0	74.0	13.2	6.0	120.0	312.0	

Note:

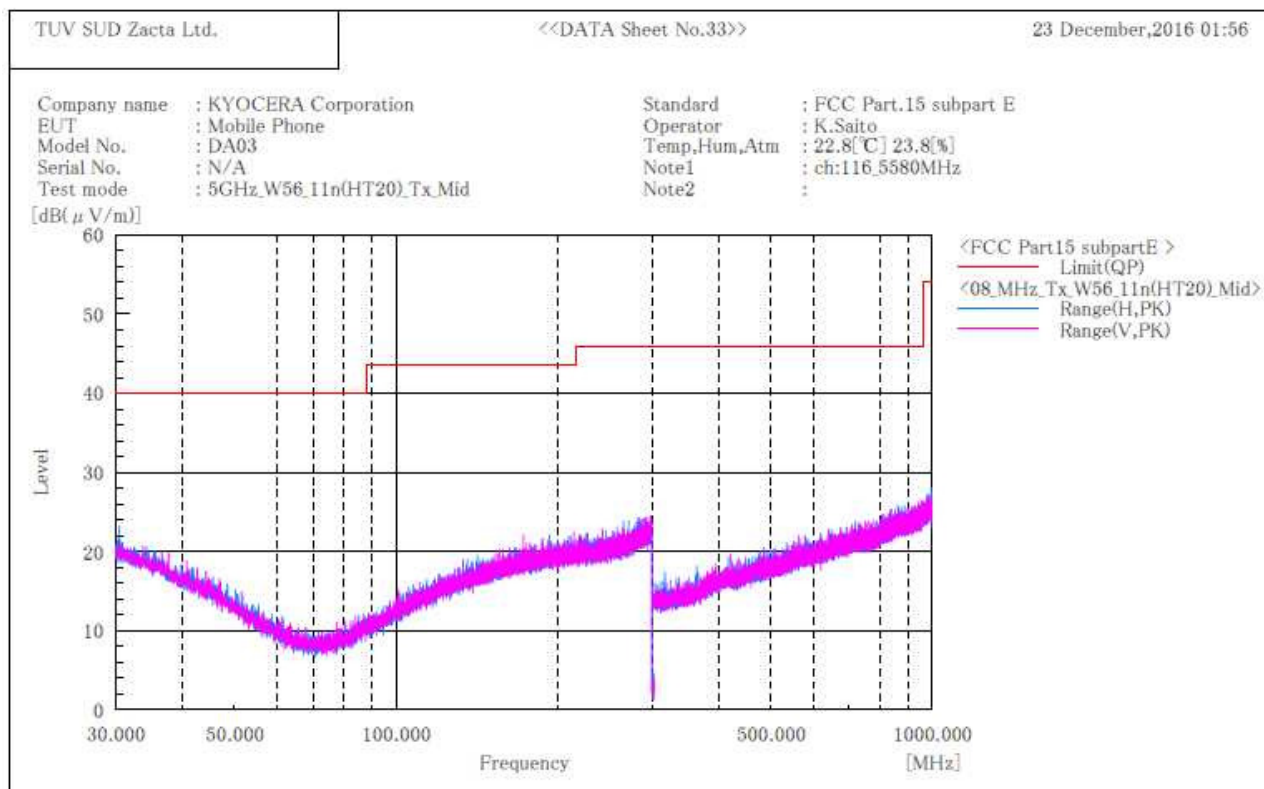
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W56 / Channel Middle
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

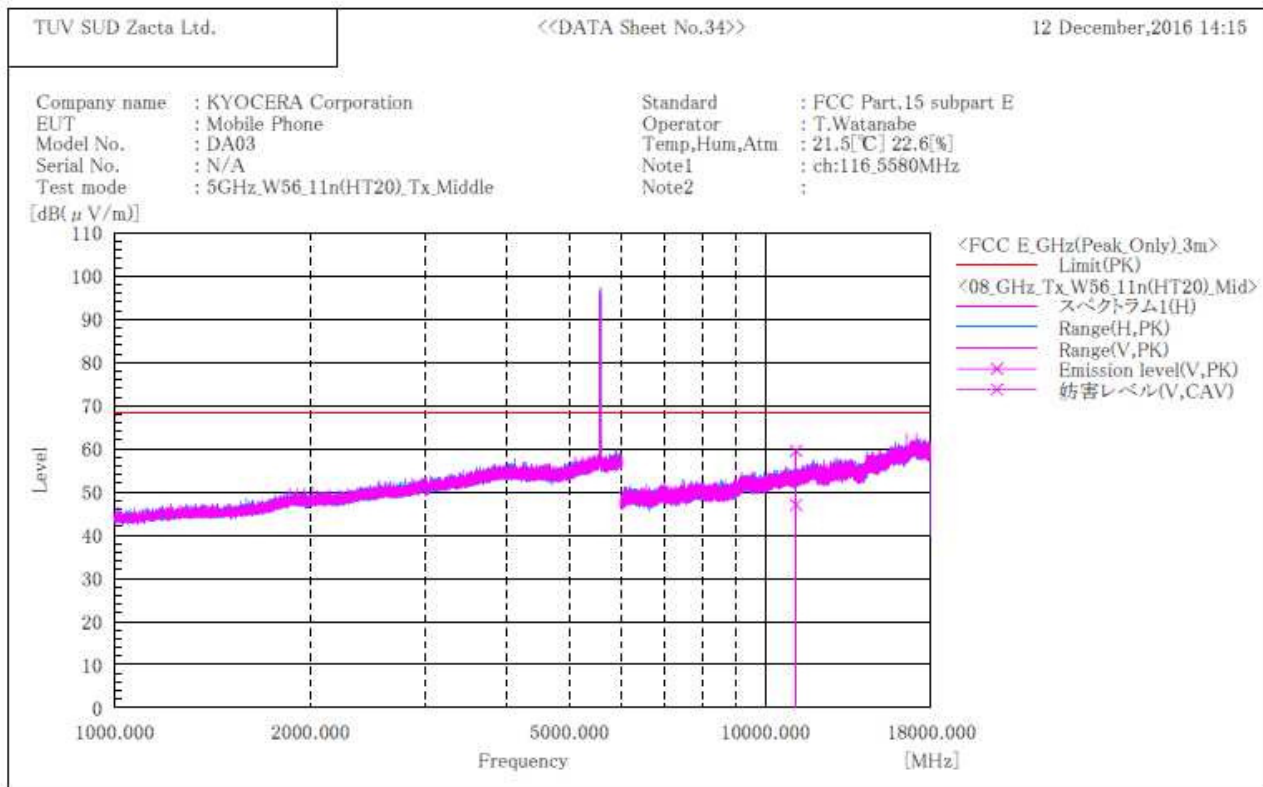
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W56 / Channel Middle
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	Reading CAV [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Result CAV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [°]	Remark
1	11160.000	V	48.6	36.1	10.9	59.5	47.0	74.0	14.5	7.0	111.0	312.0	

Note:

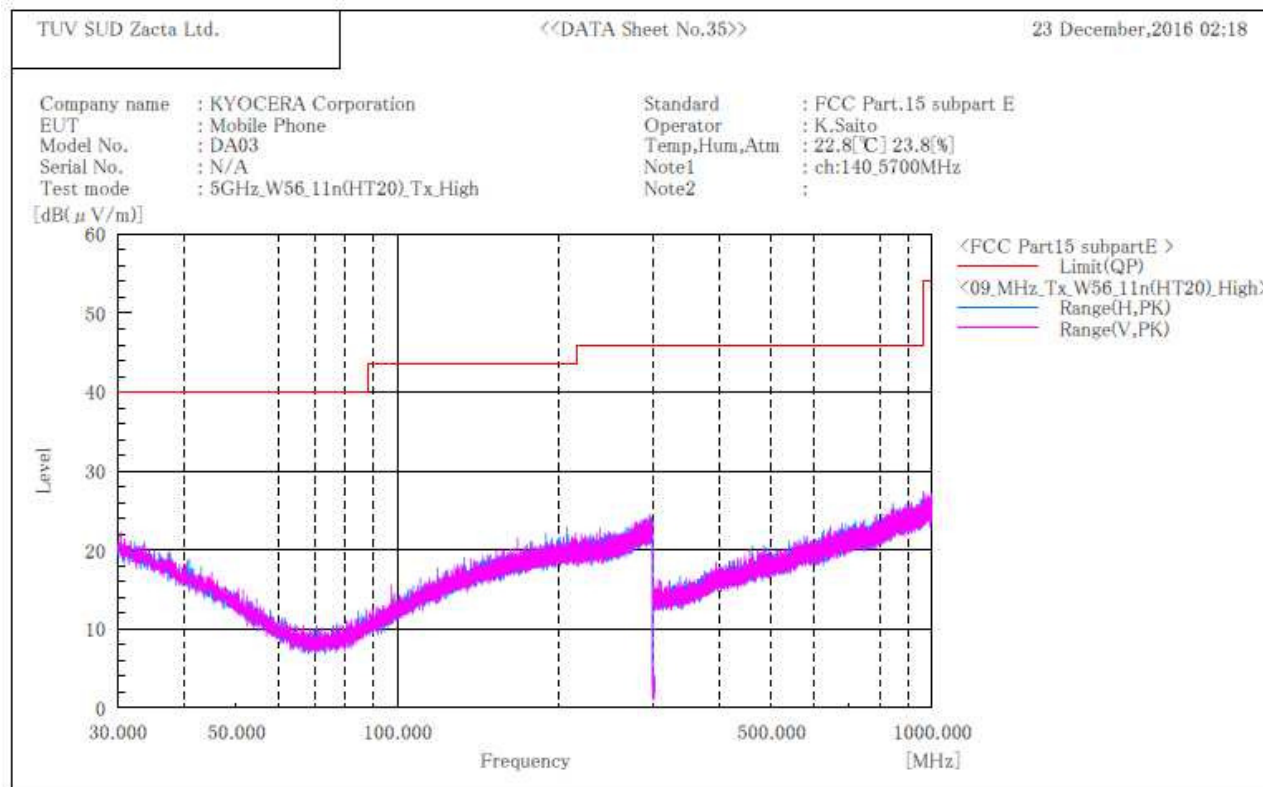
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W56 / Channel High
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c. f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

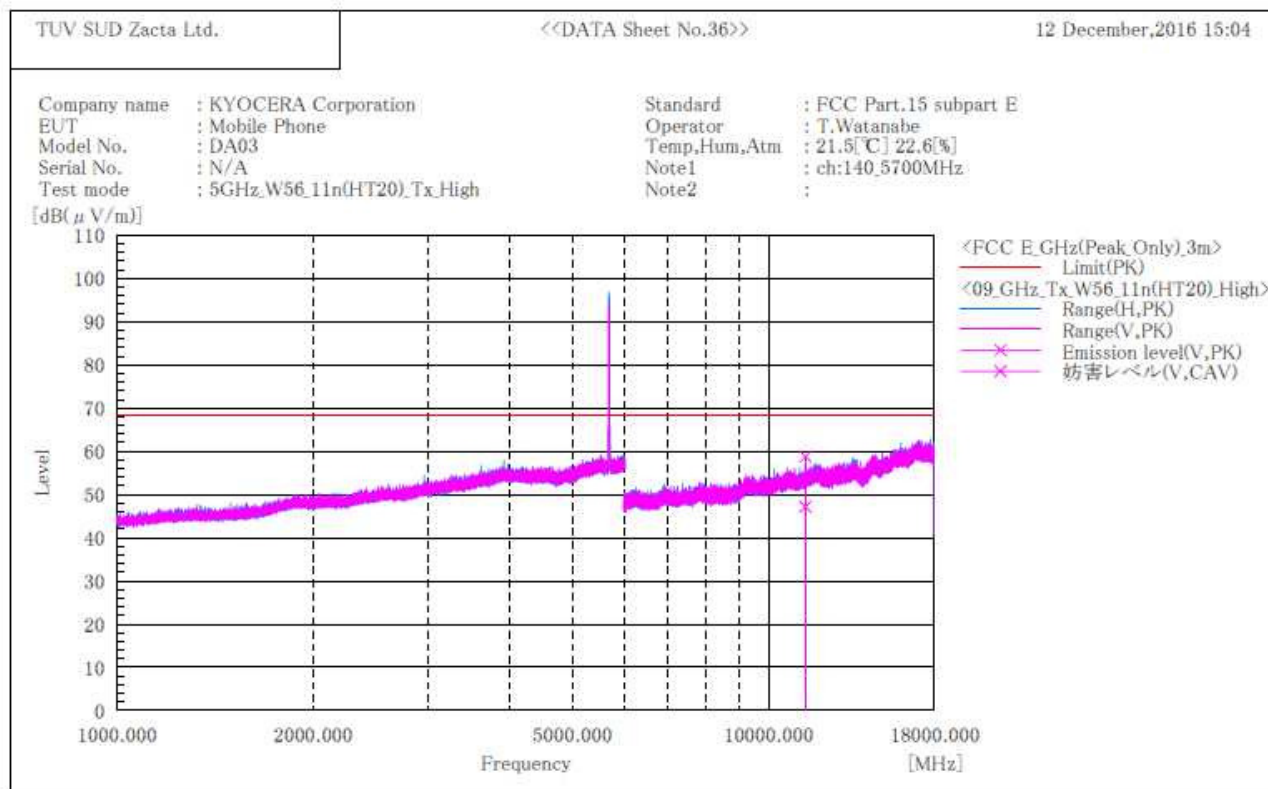
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT20)]
W56 / Channel High
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency	(P)	Reading PK	Reading CAV	c.f	Result PK	Result CAV	Limit PK	Margin PK	Margin CAV	Height	Angle	Remark
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]	
1	11400.000	V	47.7	36.1	11.1	58.8	47.2	74.0	15.2	6.8	110.0	135.0	

Note:

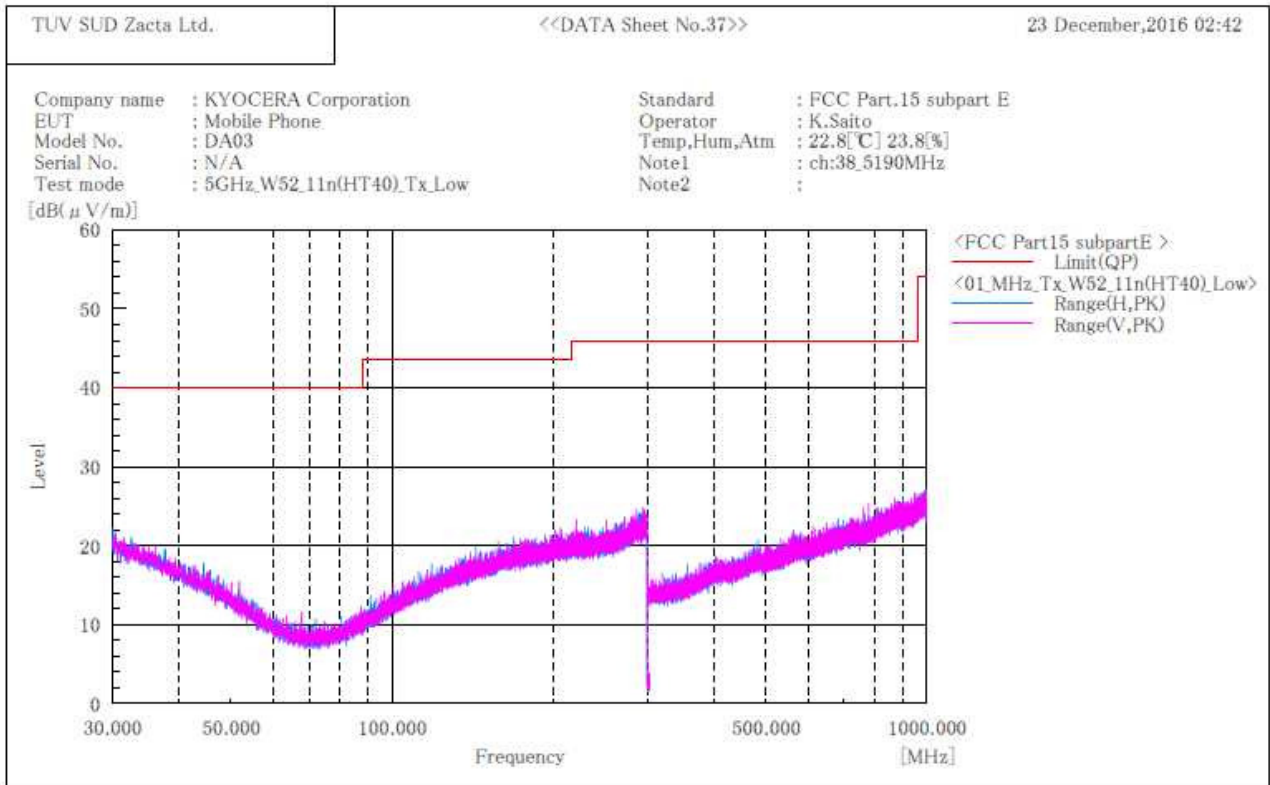
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W52 / Channel Low
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c. f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

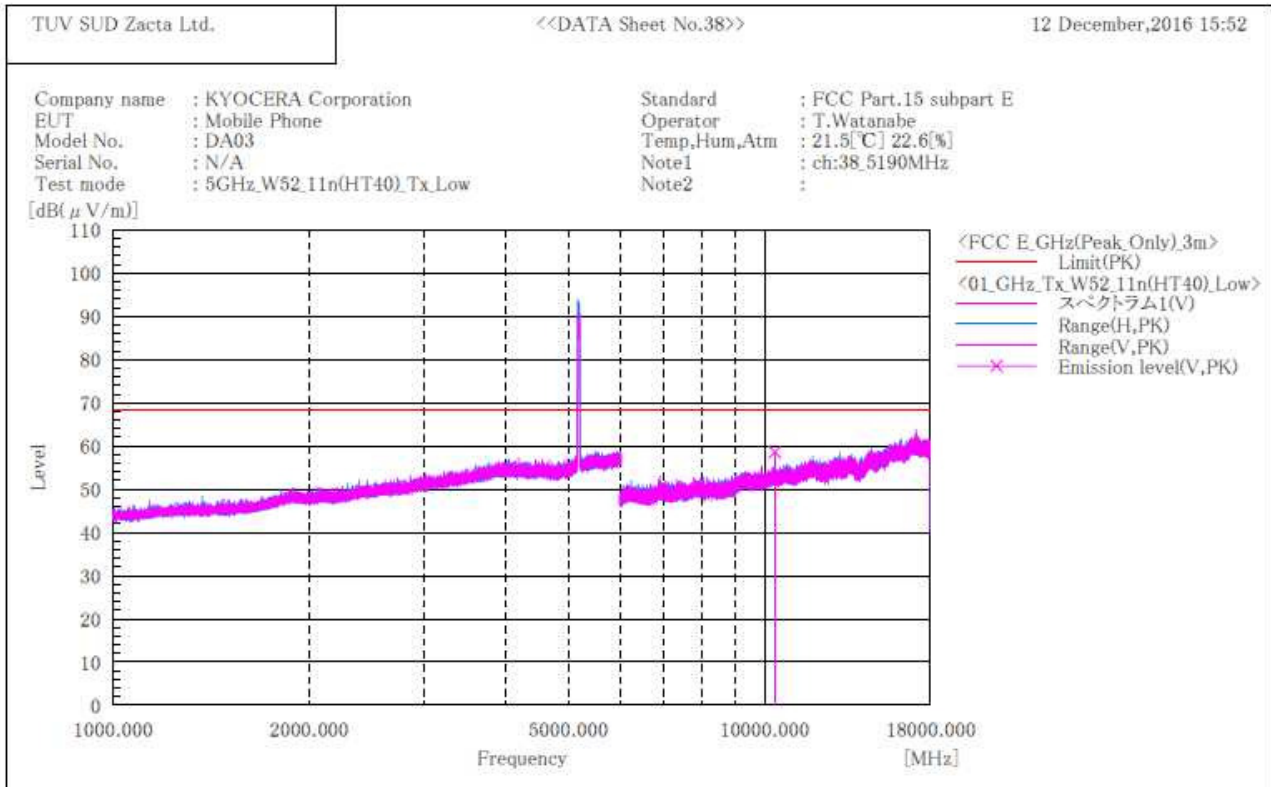
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W52 / Channel Low
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	10380.000	V	48.1	10.5	58.6	68.2	9.6	114.0	307.0	

Note:

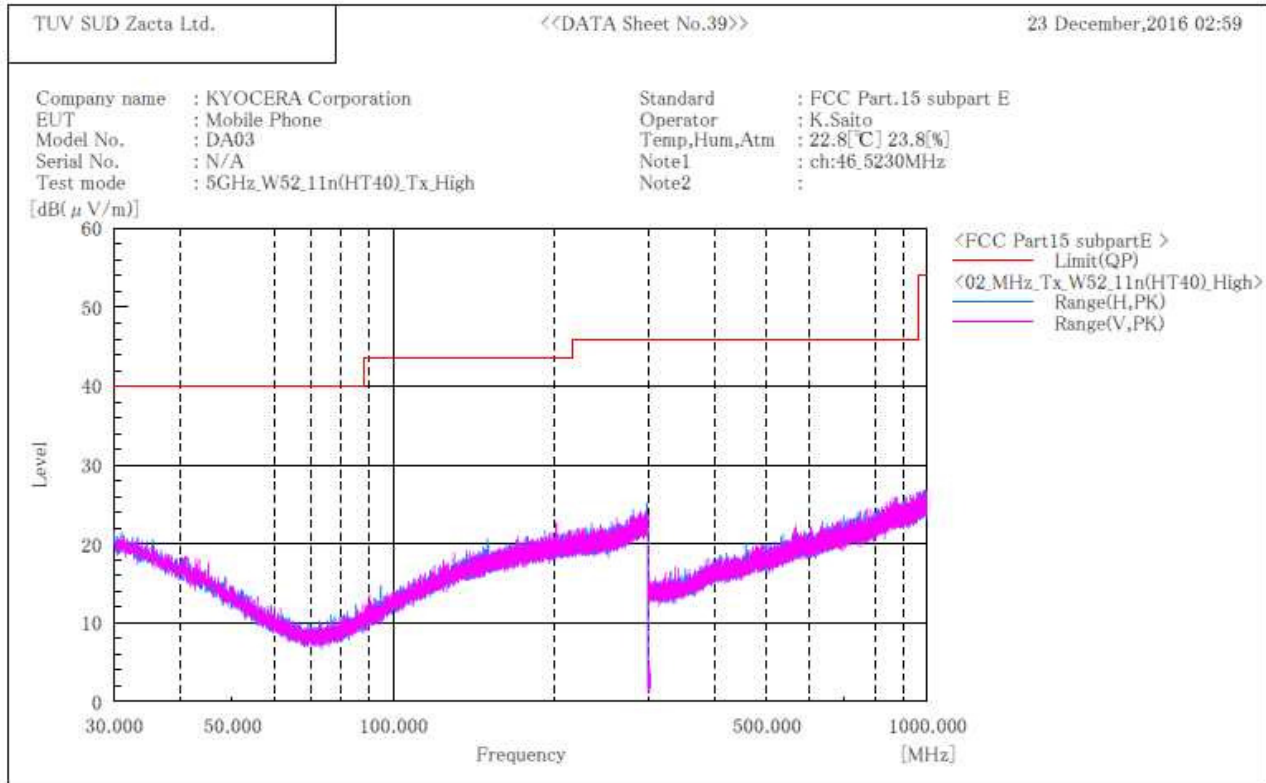
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W52 / Channel High
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

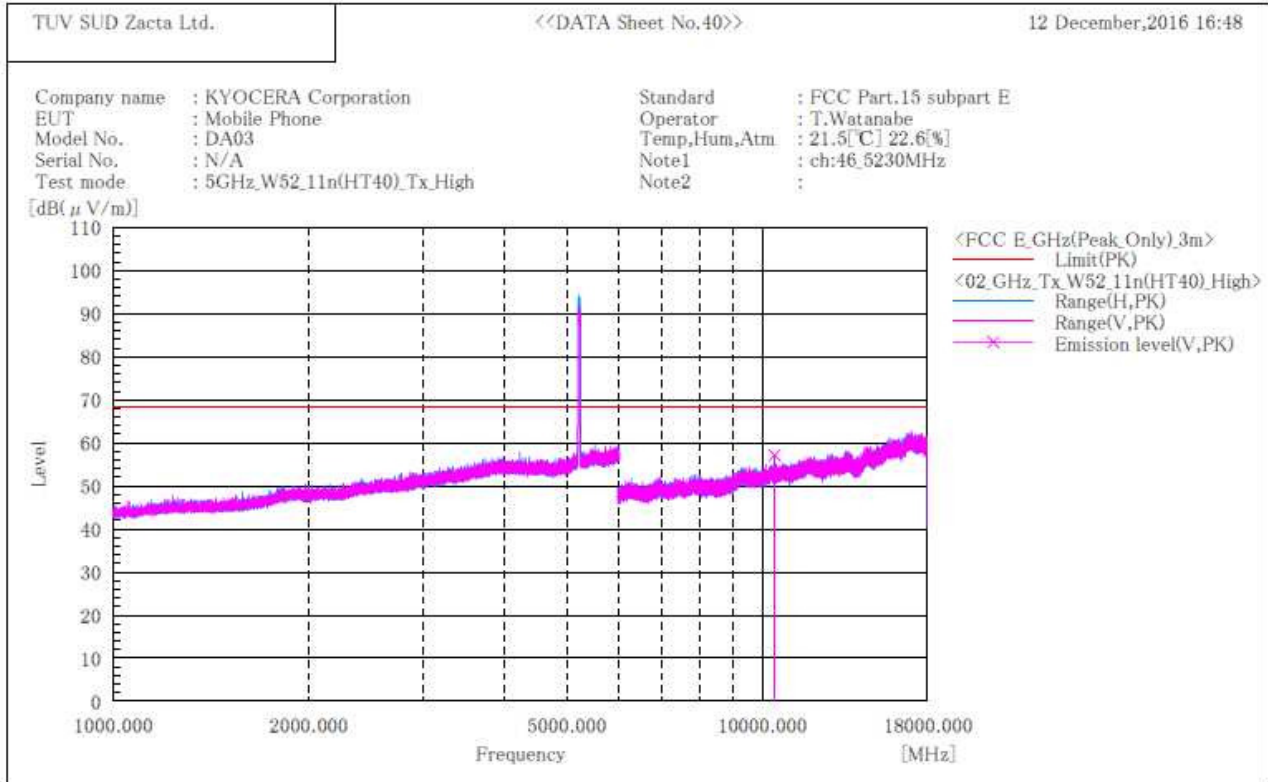
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W52 / Channel High
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	10460.000	V	46.4	10.7	57.1	68.2	11.1	103.0	59.0	

Note:

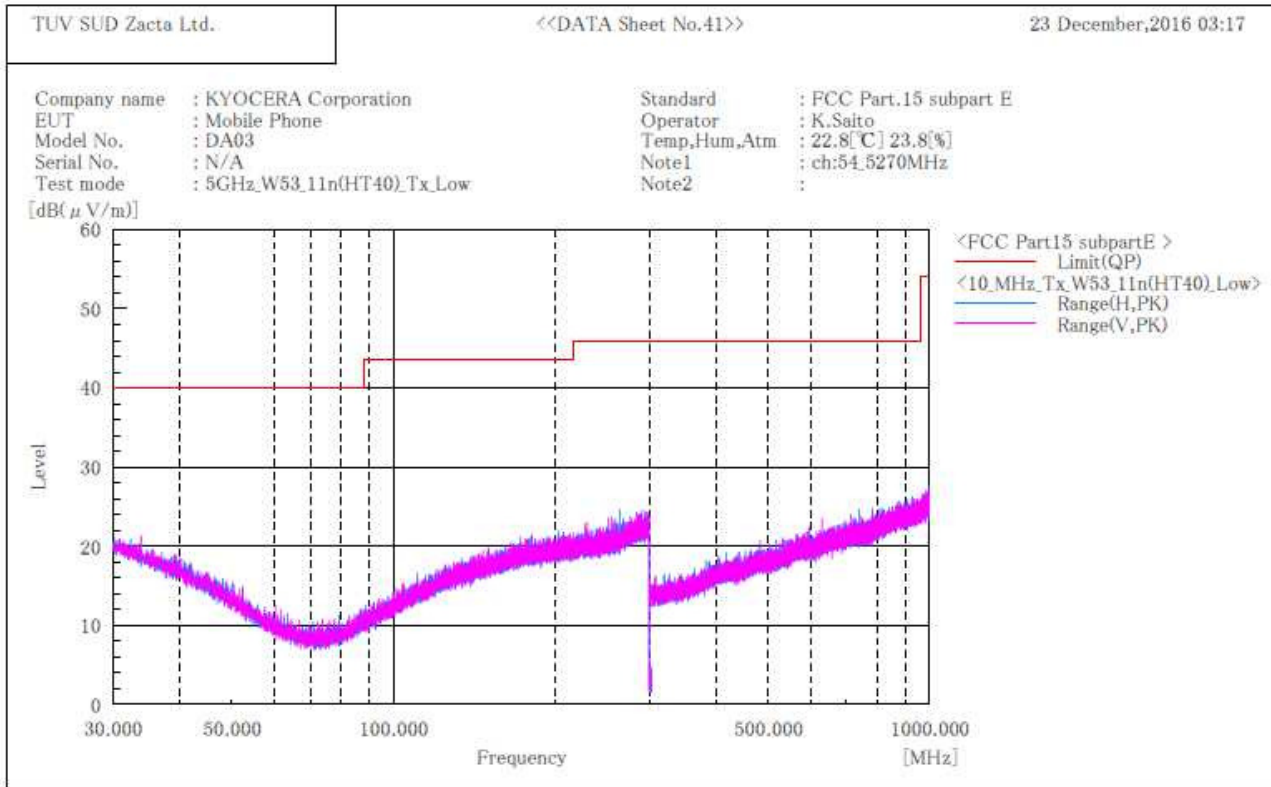
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W53 / Channel Low
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

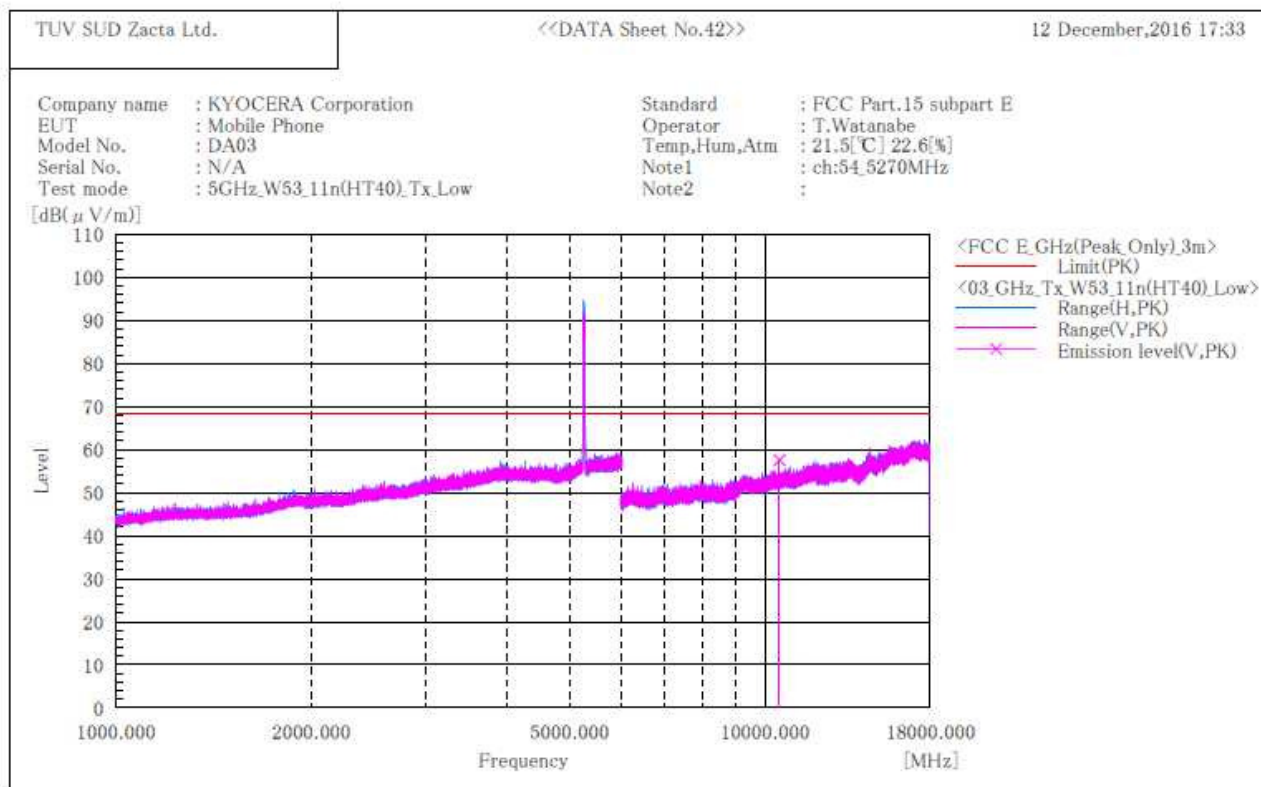
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W53 / Channel Low
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	10540.000	V	46.8	10.8	57.6	68.2	10.6	124.0	8.0	

Note:

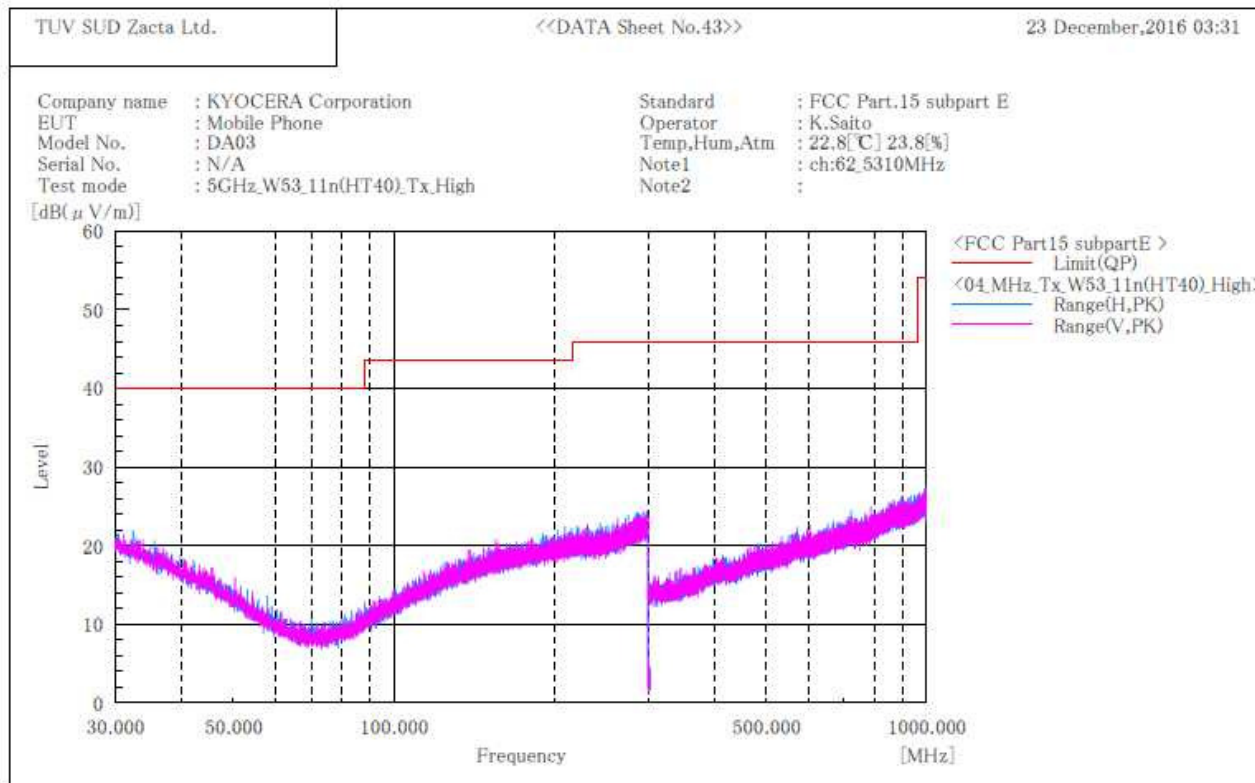
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W53 / Channel High
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P) [MHz]	c.f [dB(1/m)]	Height [cm]	Angle [°]	Remark
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Note:

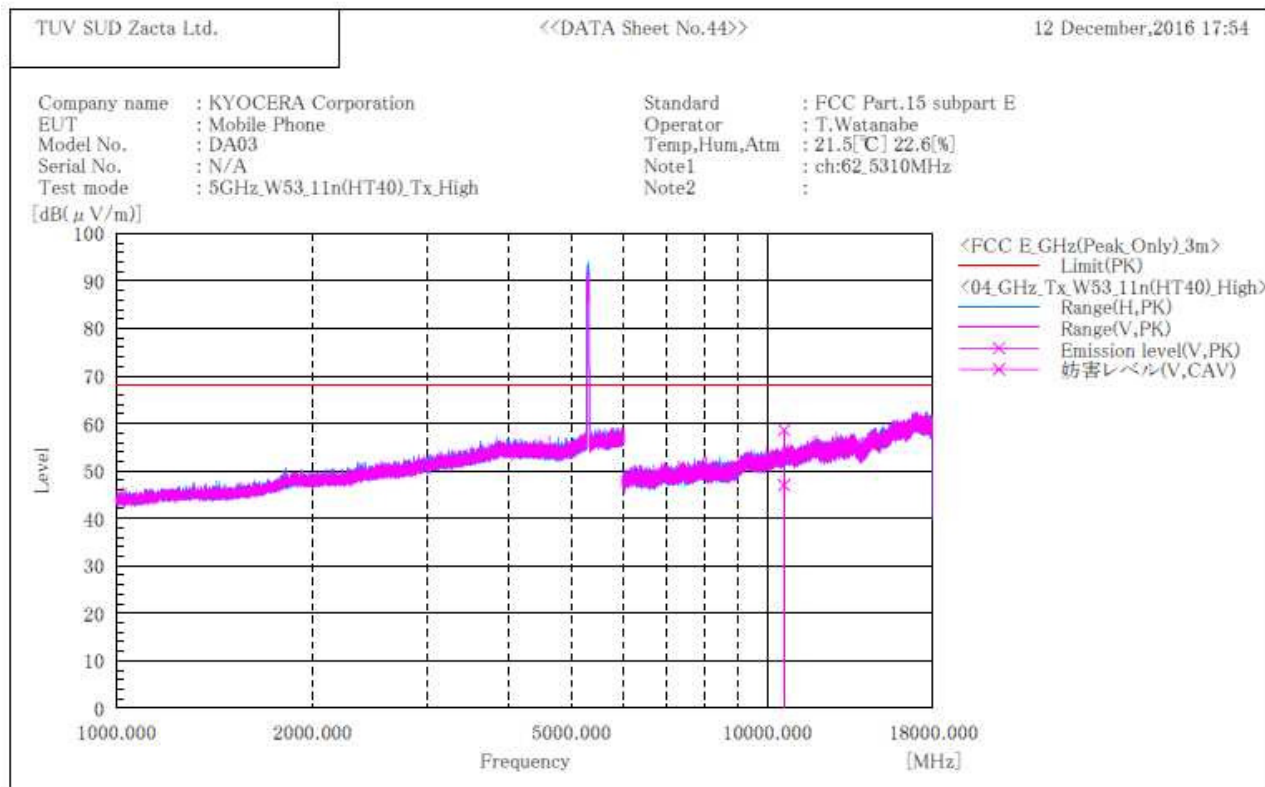
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W53 / Channel High
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	Reading CAV [dB(μV)]	c.f [dB(1/m)]	Result PK [dB(μV/m)]	Result CAV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [°]	Remark
1	10620.000	V	47.8	36.2	10.8	58.6	47.0	74.0	15.4	7.0	123.0	156.0	

Note:

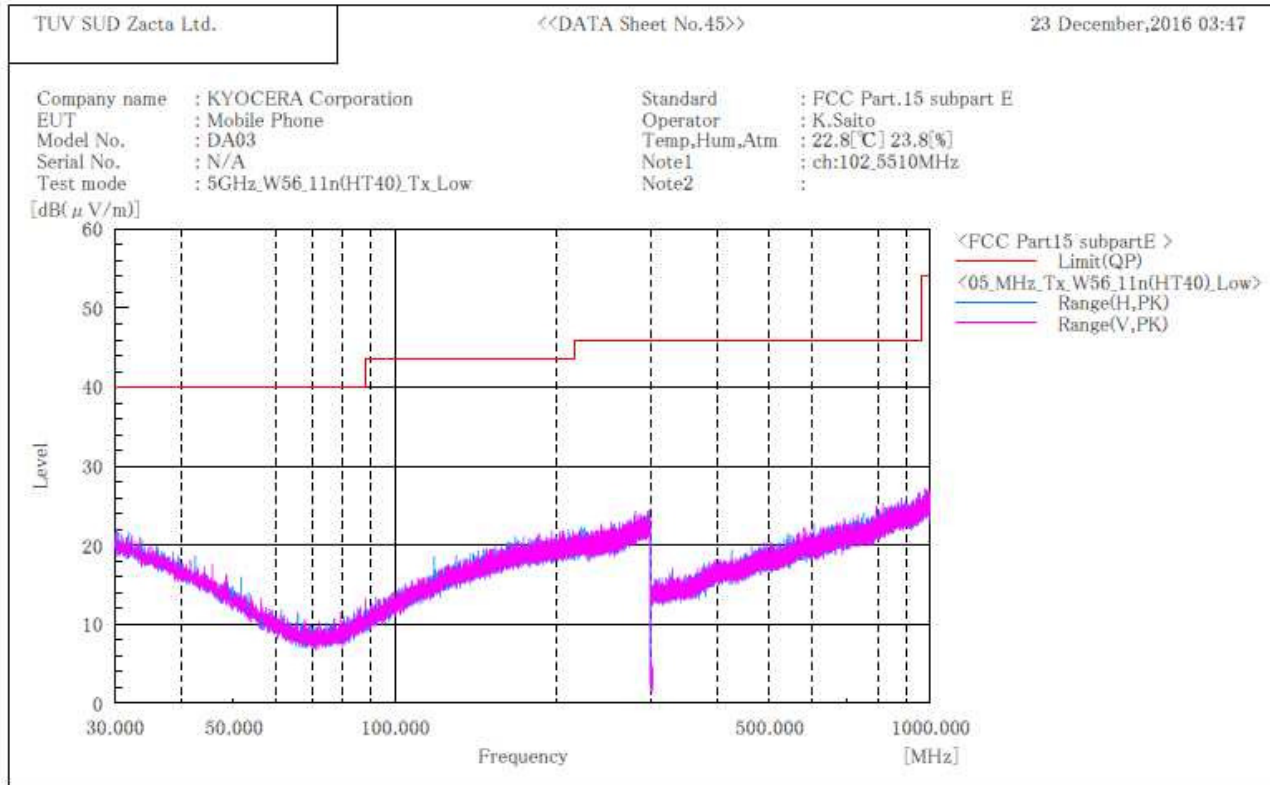
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W56 / Channel Low
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

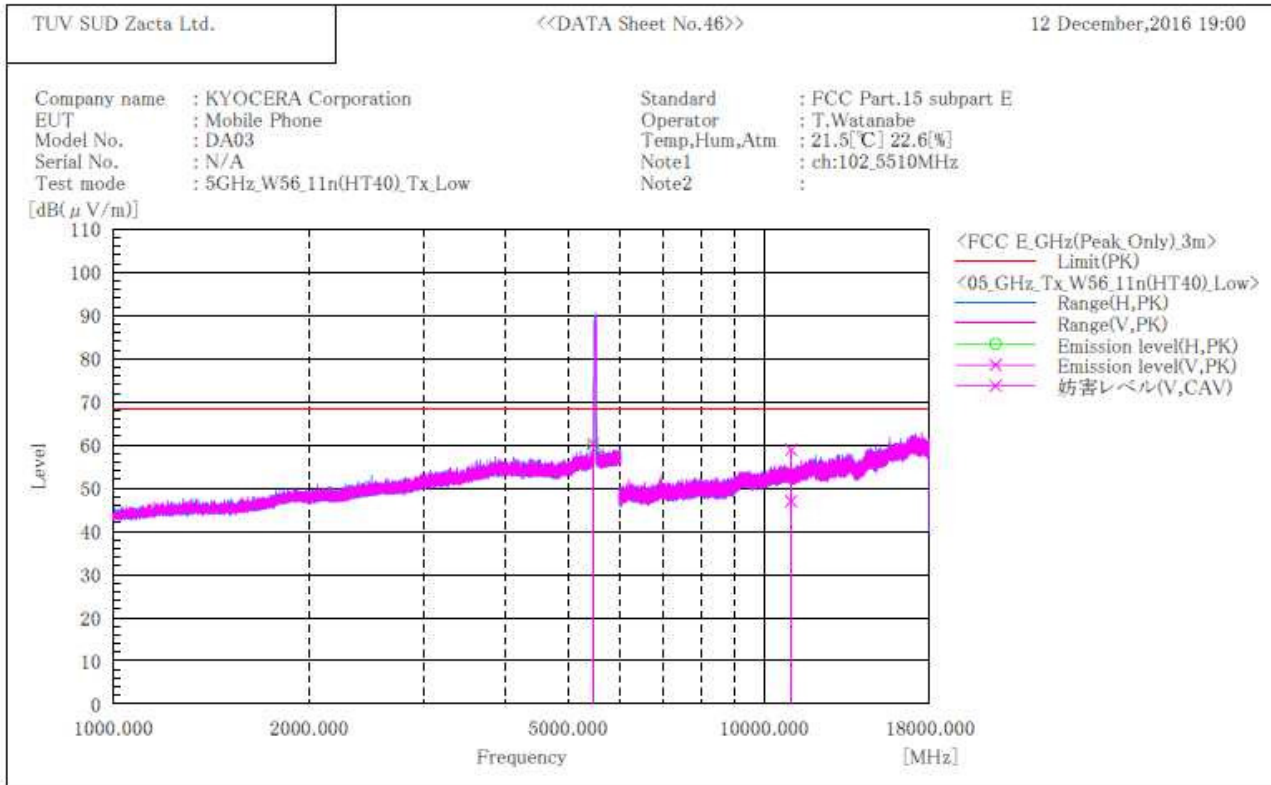
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W56 / Channel Low
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	Reading CAV [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Result CAV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [°]	Remark
1	5468.360	H	49.8	—	10.1	59.9	—	68.2	8.3	—	146.0	231.0	
2	5466.790	V	50.2	—	10.1	60.3	—	68.2	7.9	—	131.0	151.0	
3	11020.060	V	48.0	36.1	10.9	58.9	47.0	74.0	15.1	7.0	102.0	309.0	

Note:

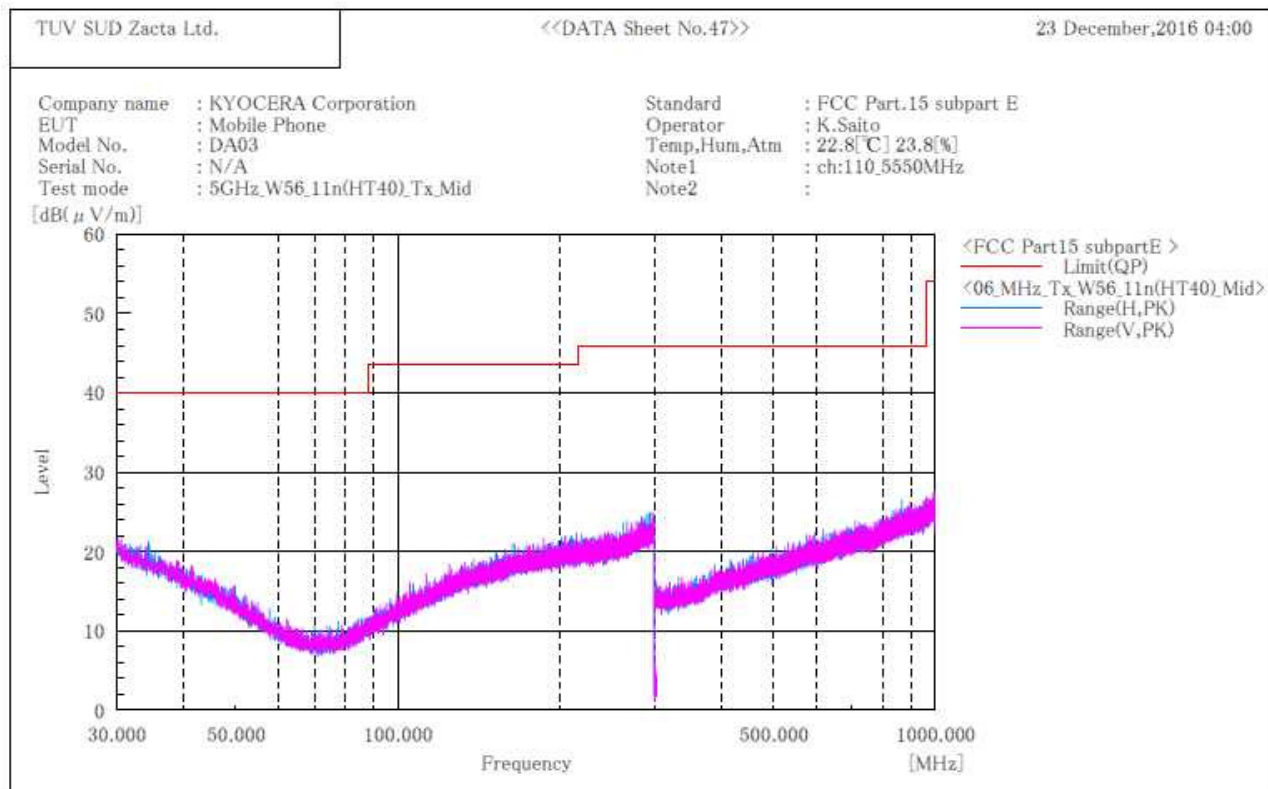
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W56 / Channel Middle
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c. f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

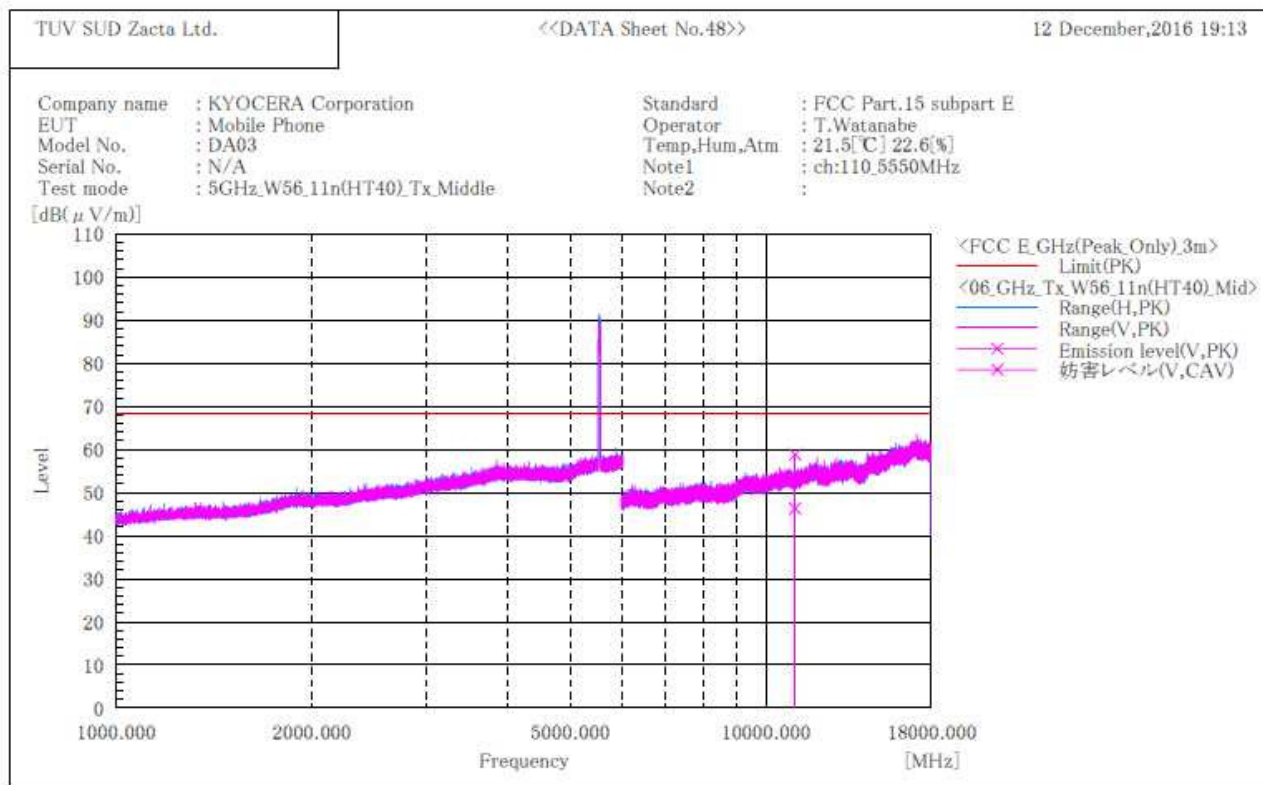
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W56 / Channel Middle
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	Reading CAV [dB(μV)]	c.f [dB(1/m)]	Result PK [dB(μV/m)]	Result CAV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [°]	Remark
1	11100.000	V	47.9	35.4	10.9	58.8	46.3	74.0	15.2	7.7	110.0	310.0	

Note:

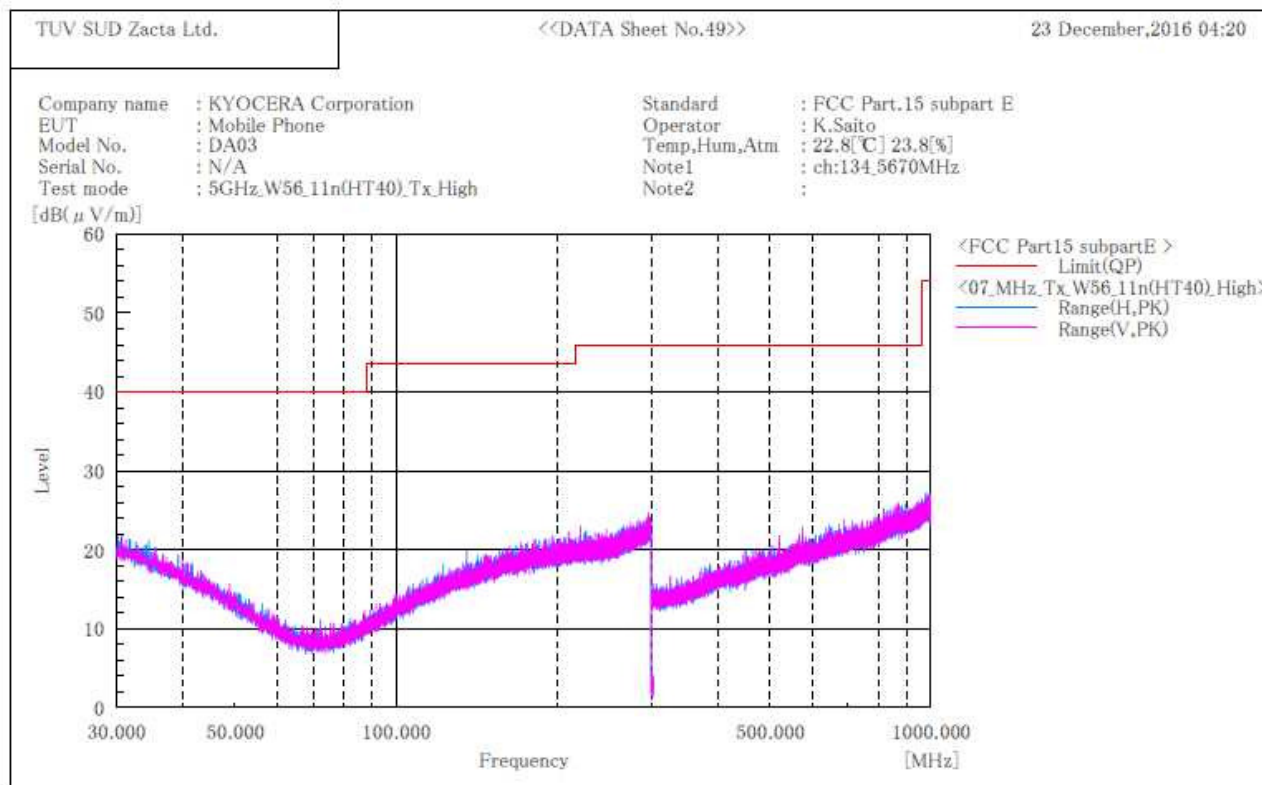
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W56 / Channel High
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

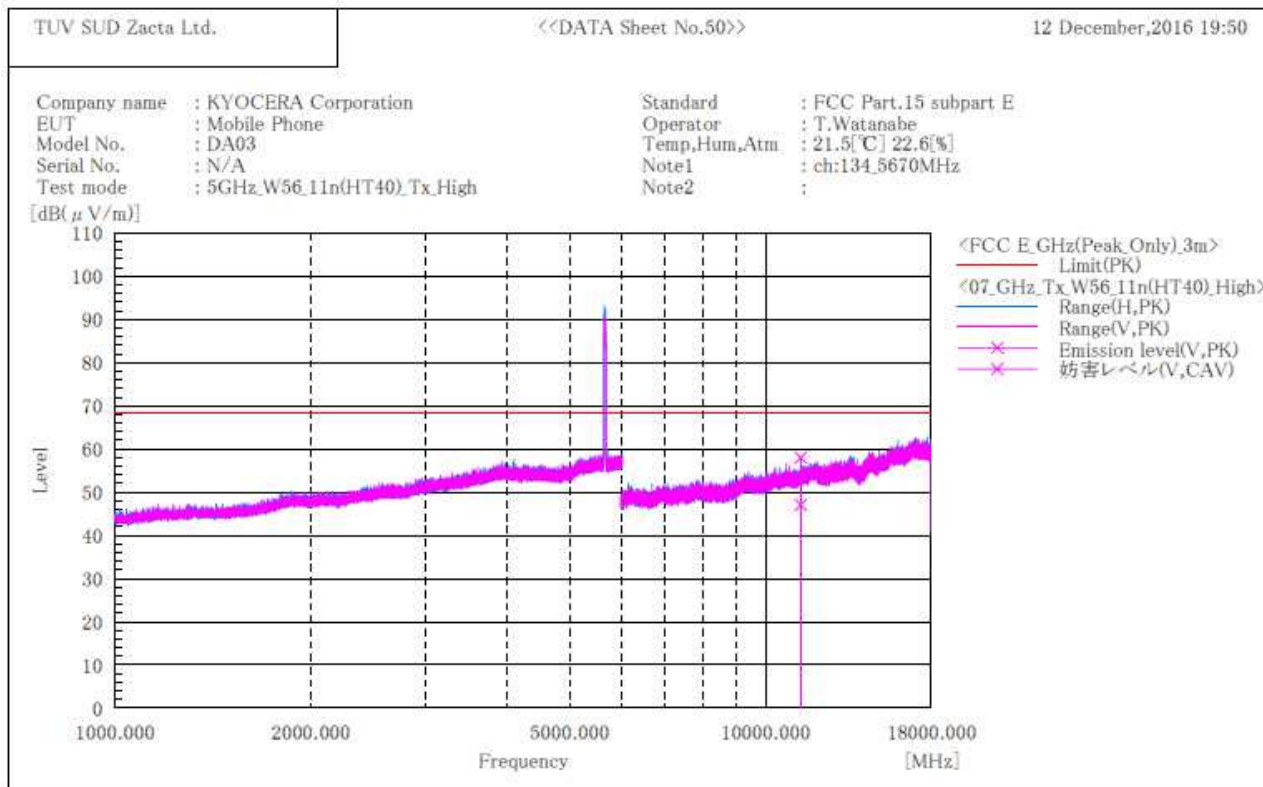
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT40)]
W56 / Channel High
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	Reading CAV [dB(μV)]	c. f [dB(1/m)]	Result PK [dB(μV/m)]	Result CAV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [°]	Remark
1	11340.000	V	46.9	35.9	11.1	58.0	47.0	74.0	16.0	7.0	127.0	138.0	

Note:

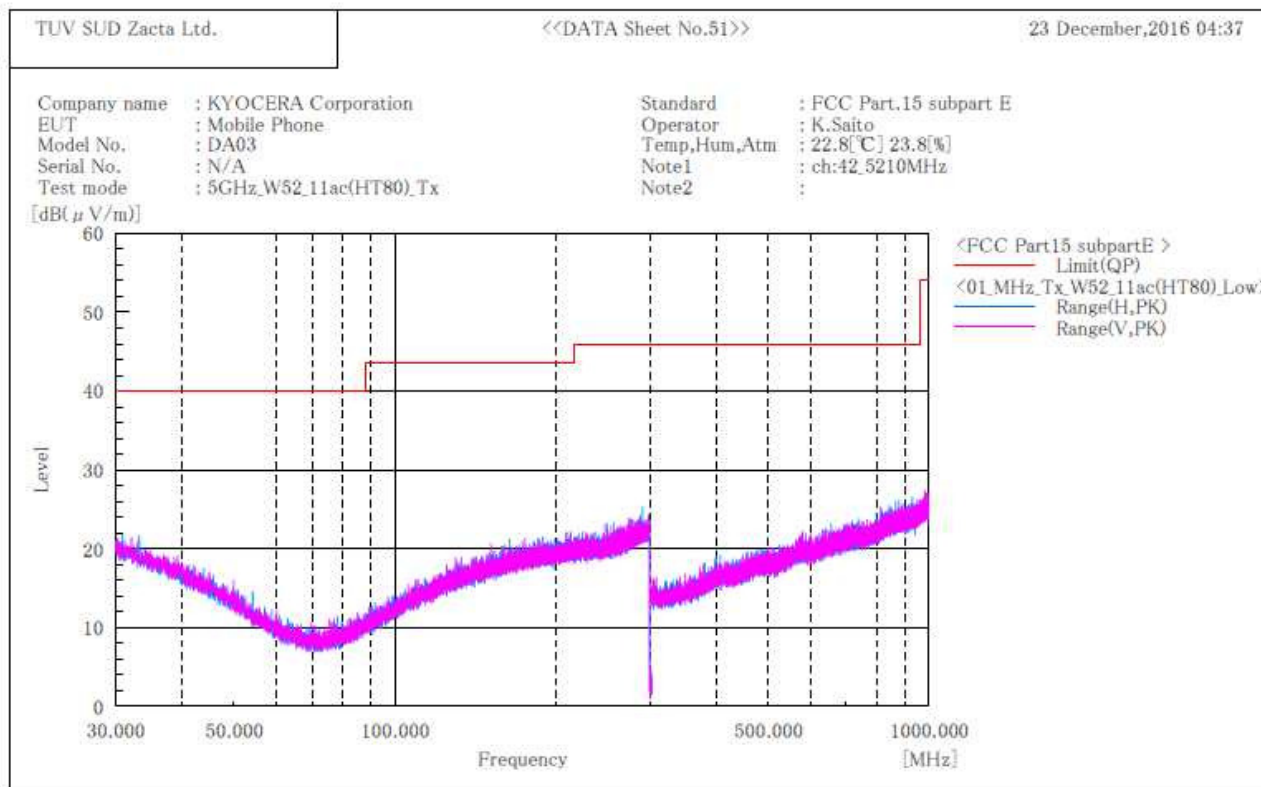
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT80)]
W52
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

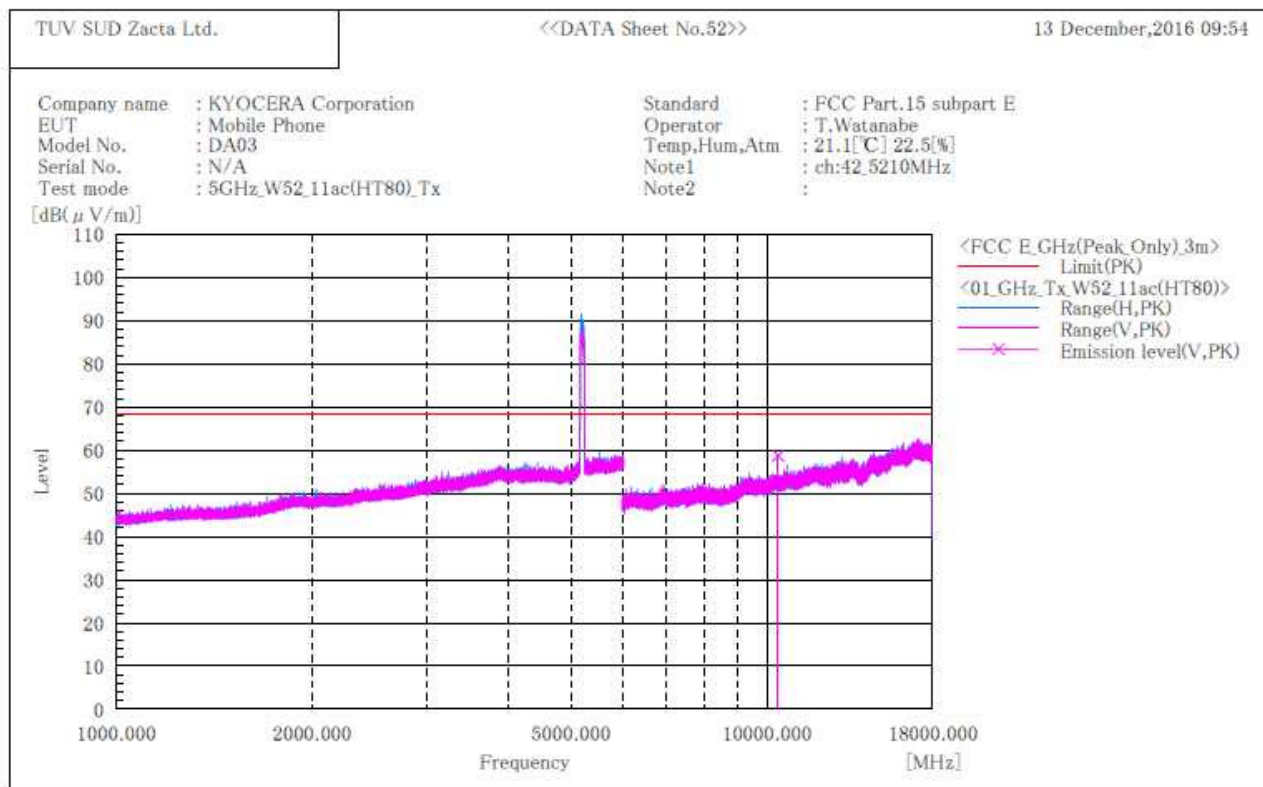
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

[11n(HT80)]
W52
ABOVE 1GHz

***** RADIATED EMISSION *****
 [3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	Reading PK	c. f	Result PK	Limit PK	Margin PK	Height	Angle	Remark
	[MHz]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[cm]	[°]	
1	10420.000	48.1	10.6	58.7	68.2	9.5	125.0	308.0	

Note:

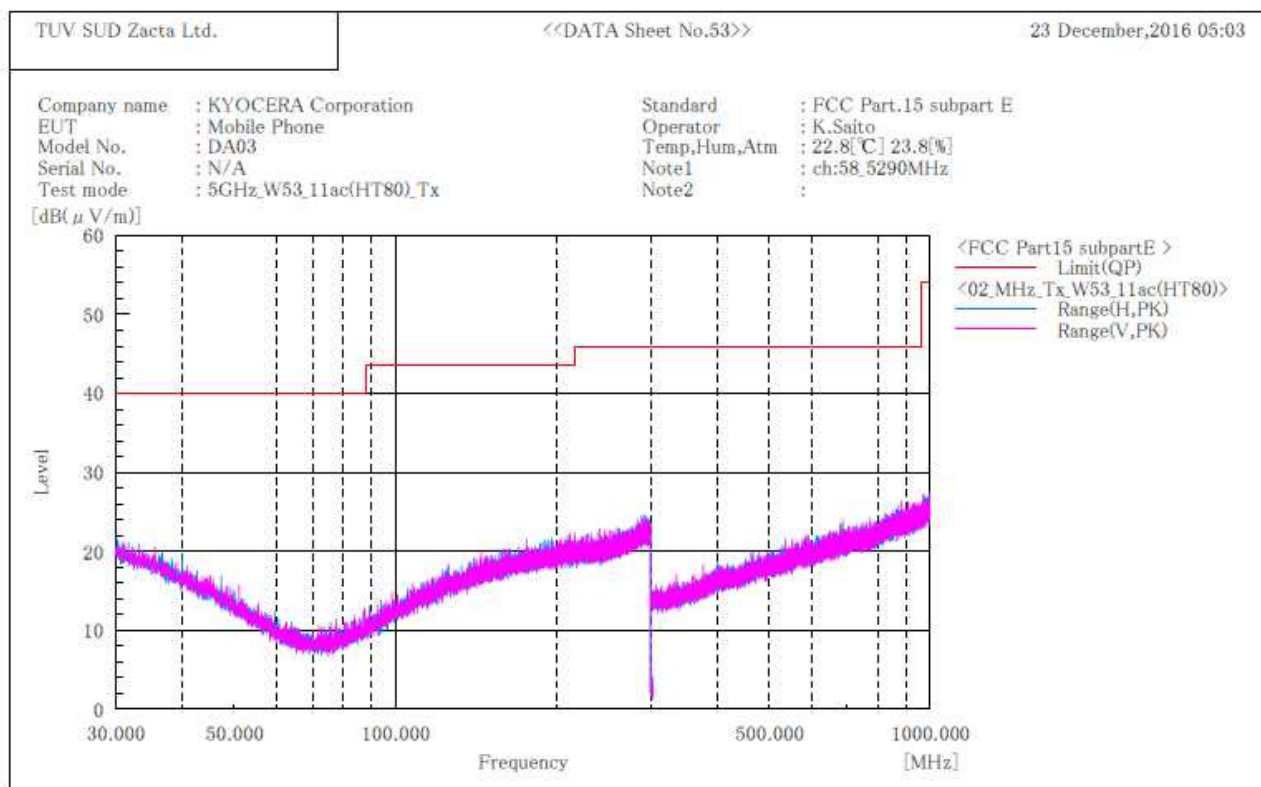
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT80)]
W53
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

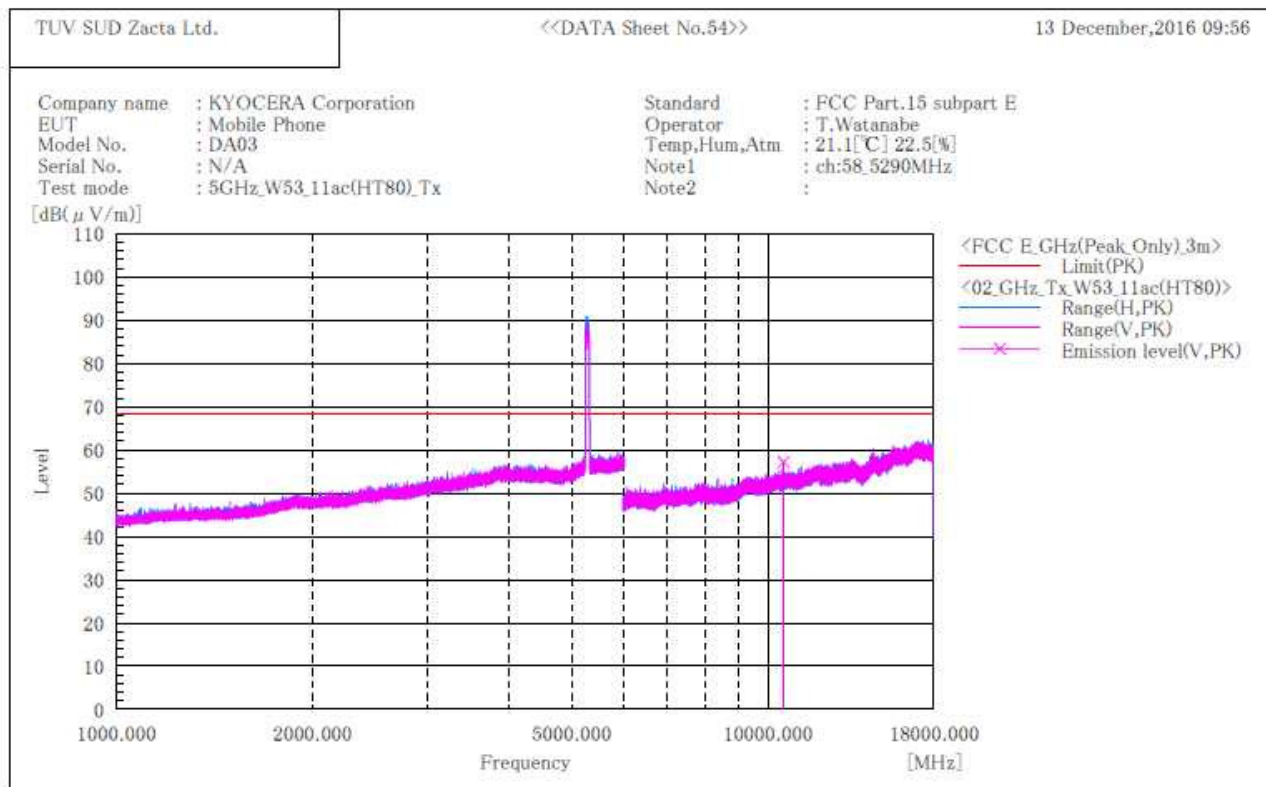
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT80)]
W53
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	Reading PK	c. f	Result PK	Limit PK	Margin PK	Height	Angle	Remark
	[MHz]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[cm]	[°]	
1	10580.000	46.4	10.8	57.2	68.2	11.0	113.0	311.0	

Note:

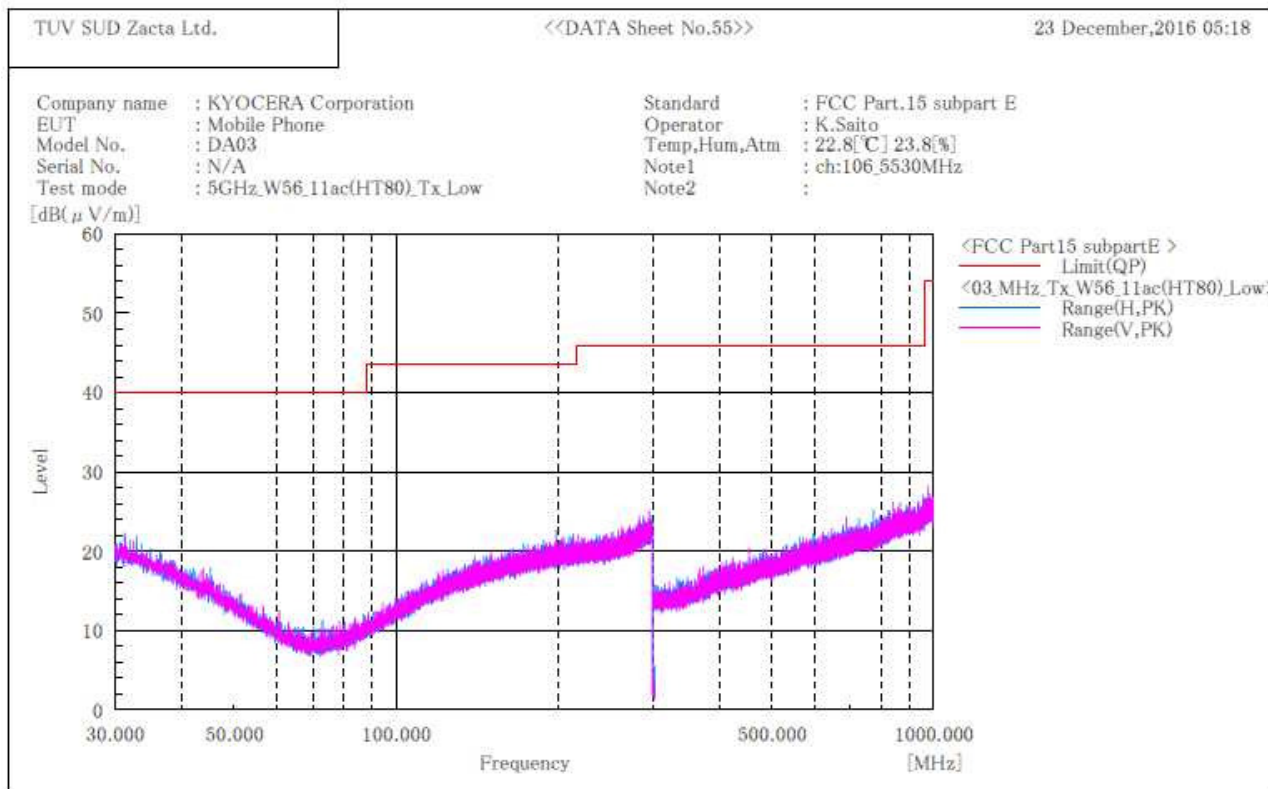
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT80)]
W56 / Channel Low
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

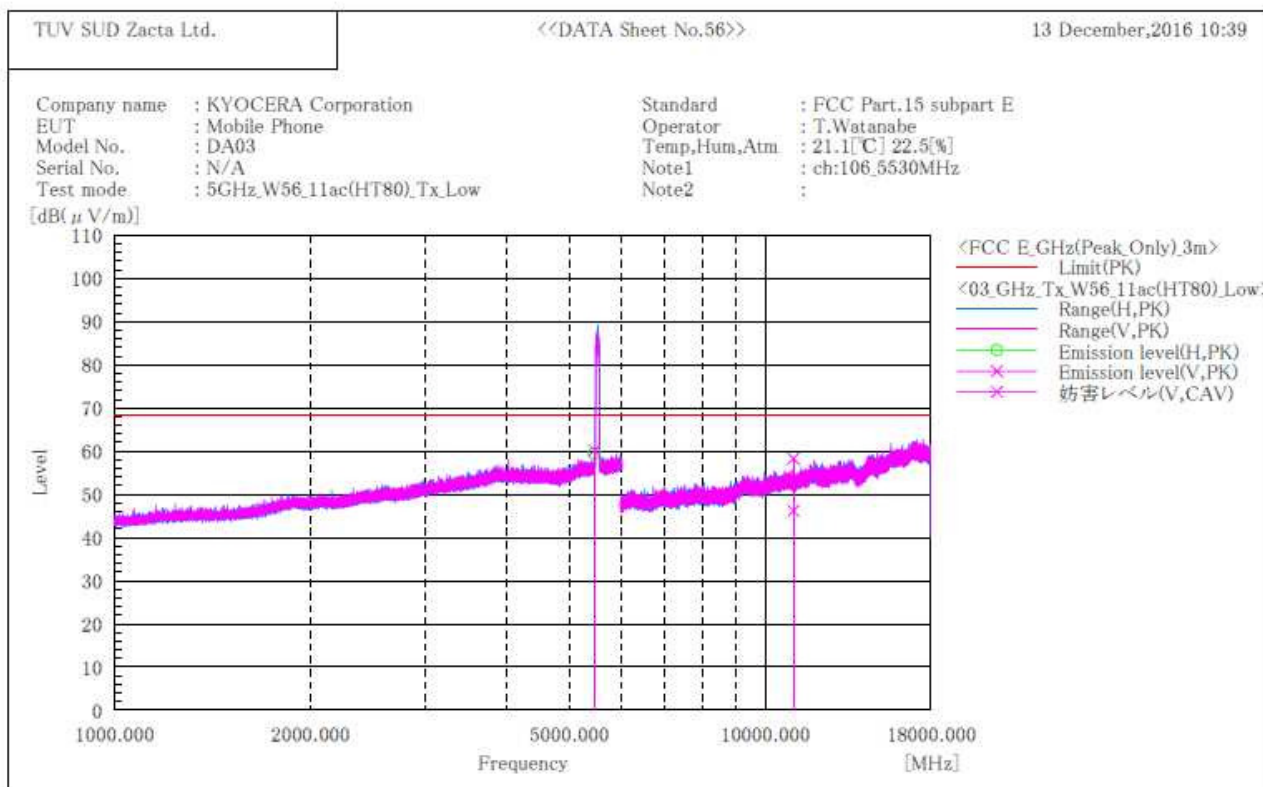
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT80)]
W56 / Channel Low
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	Reading CAV [dB(μV)]	c.f [dB(1/m)]	Result PK [dB(μV/m)]	Result CAV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [°]	Remark
1	5468.710	H	49.4		10.1	59.5		68.2	8.7		133.0	229.0	
2	5467.828	V	50.1		10.1	60.2		68.2	8.0		112.0	149.0	
3	11060.000	V	47.4	35.3	10.9	58.3	46.2	74.0	15.7	7.8	123.0	52.0	

Note:

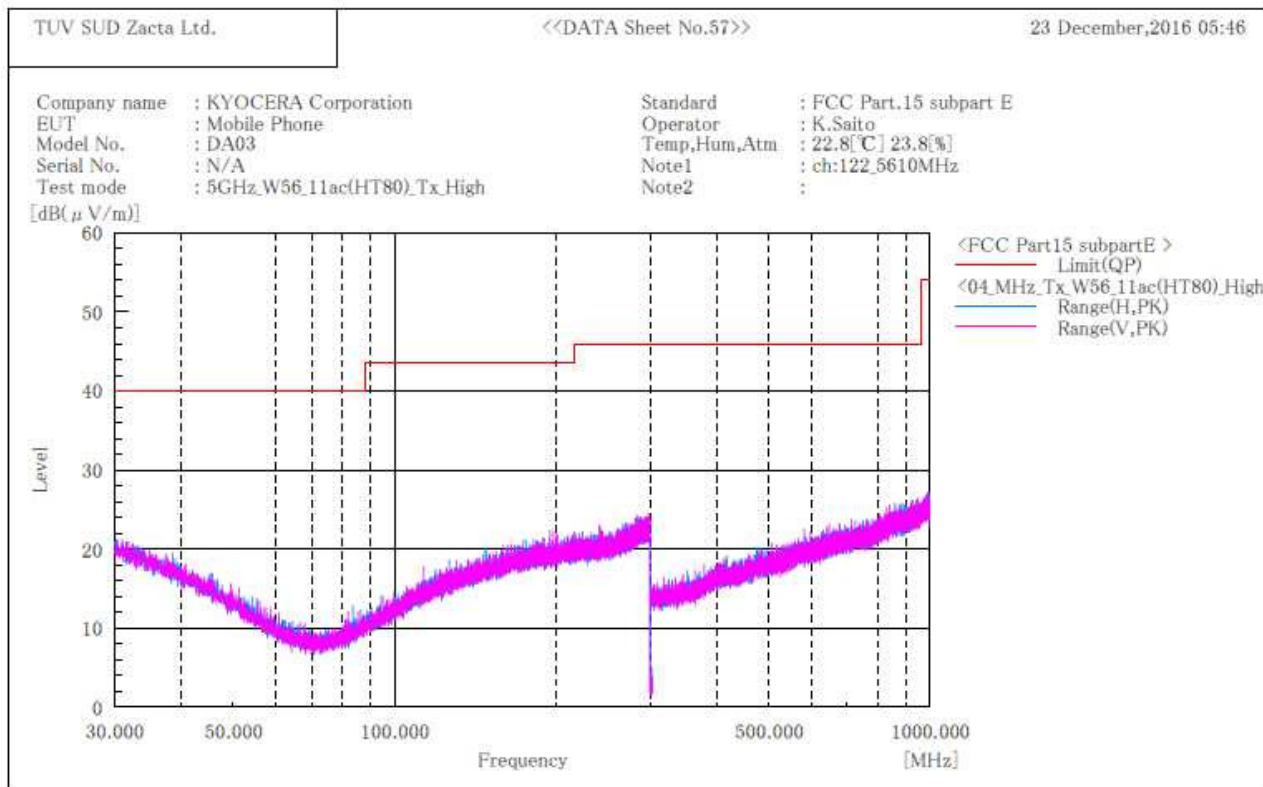
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.



Zacta

**[11n(HT80)]
W56 / Channel High
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

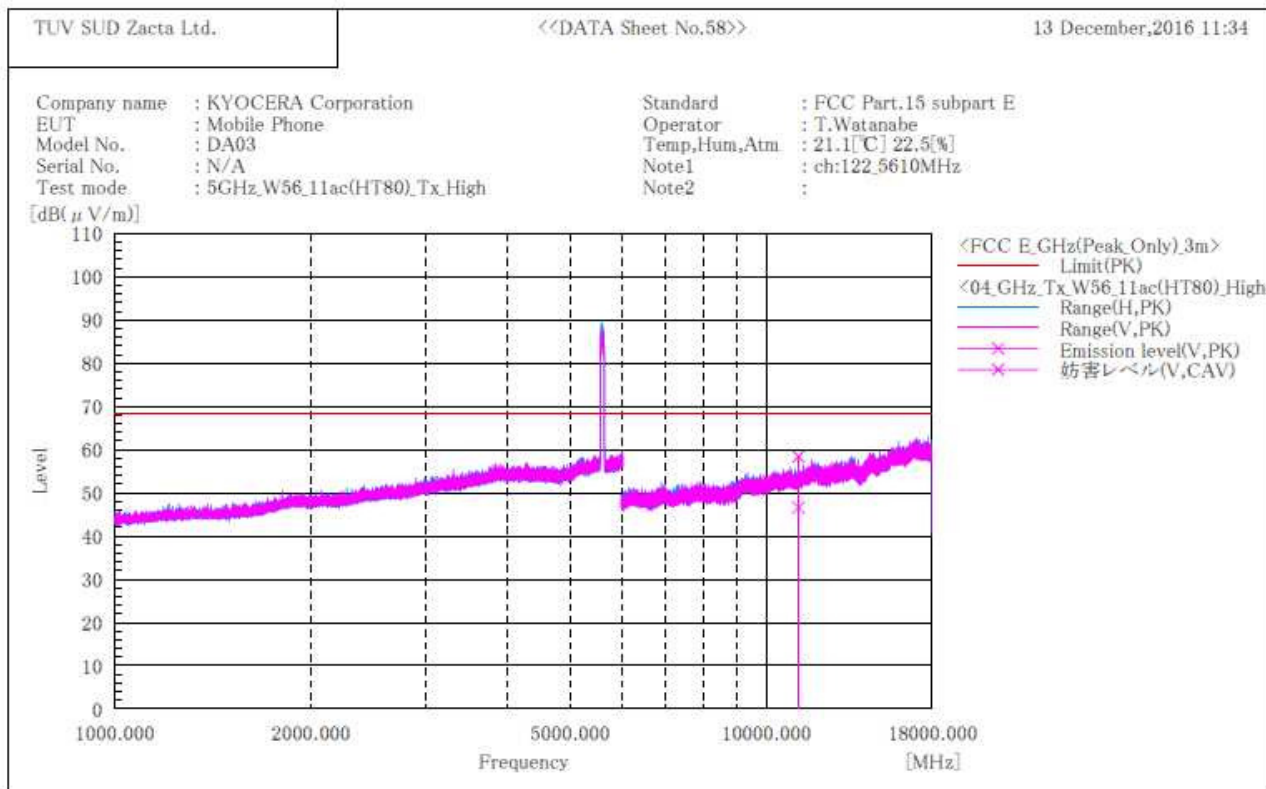
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.



Zacta

**[11n(HT80)]
W56 / Channel High
ABOVE 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	Reading CAV [dB(μV)]	c.f. [dB(1/m)]	Result PK [dB(μV/m)]	Result CAV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [°]	Remark
1	11220.000	V	47.5	35.7	10.9	58.4	46.6	74.0	15.6	7.4	125.0	144.0	

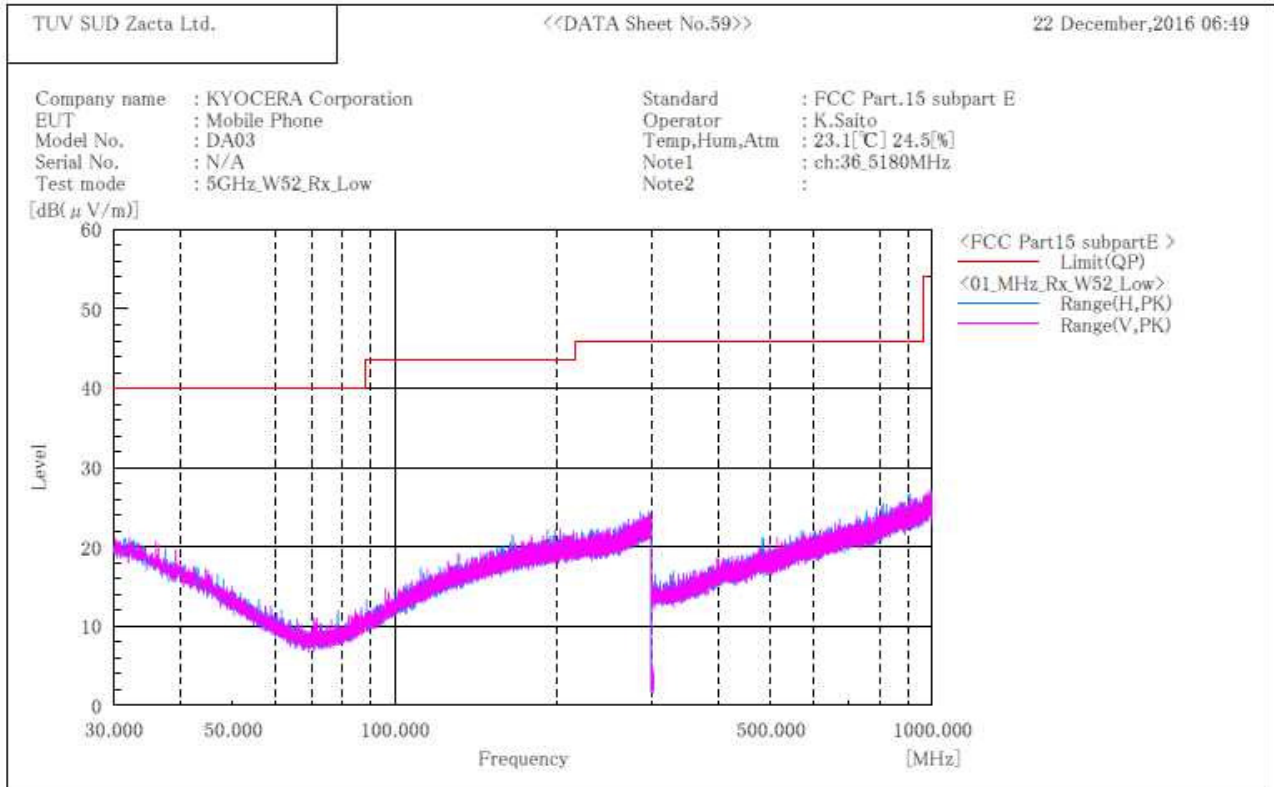
Note:

1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 40GHz at the 3 meters distance.

7.4.4.2 Receive mode

W52 / Channel Low
BELOW 1GHz

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c. f	Height	Angle	Remark
	[MHz]	[dB (1/m)]	[cm]	[°]	

Note:

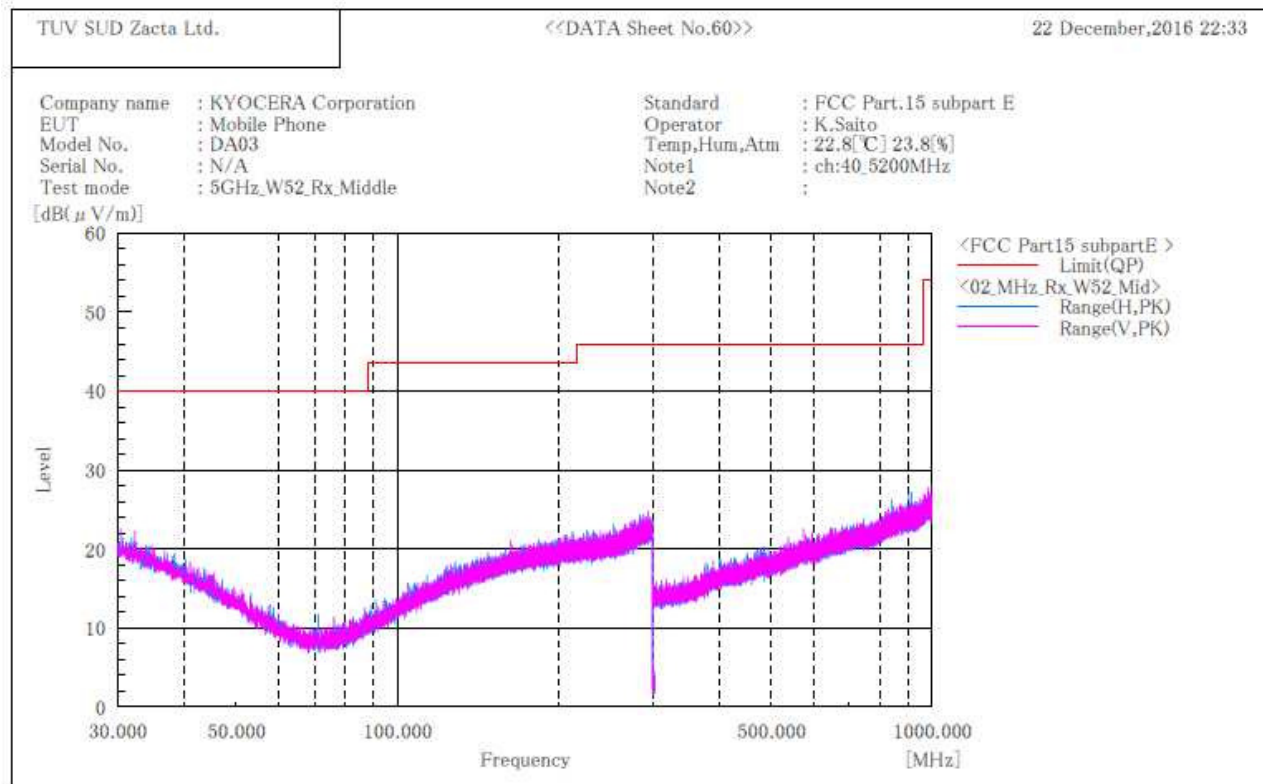
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz and 1GHz to 40GHz at the 3 meters distance.



Zacta

**W52 / Channel Middle
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c. f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

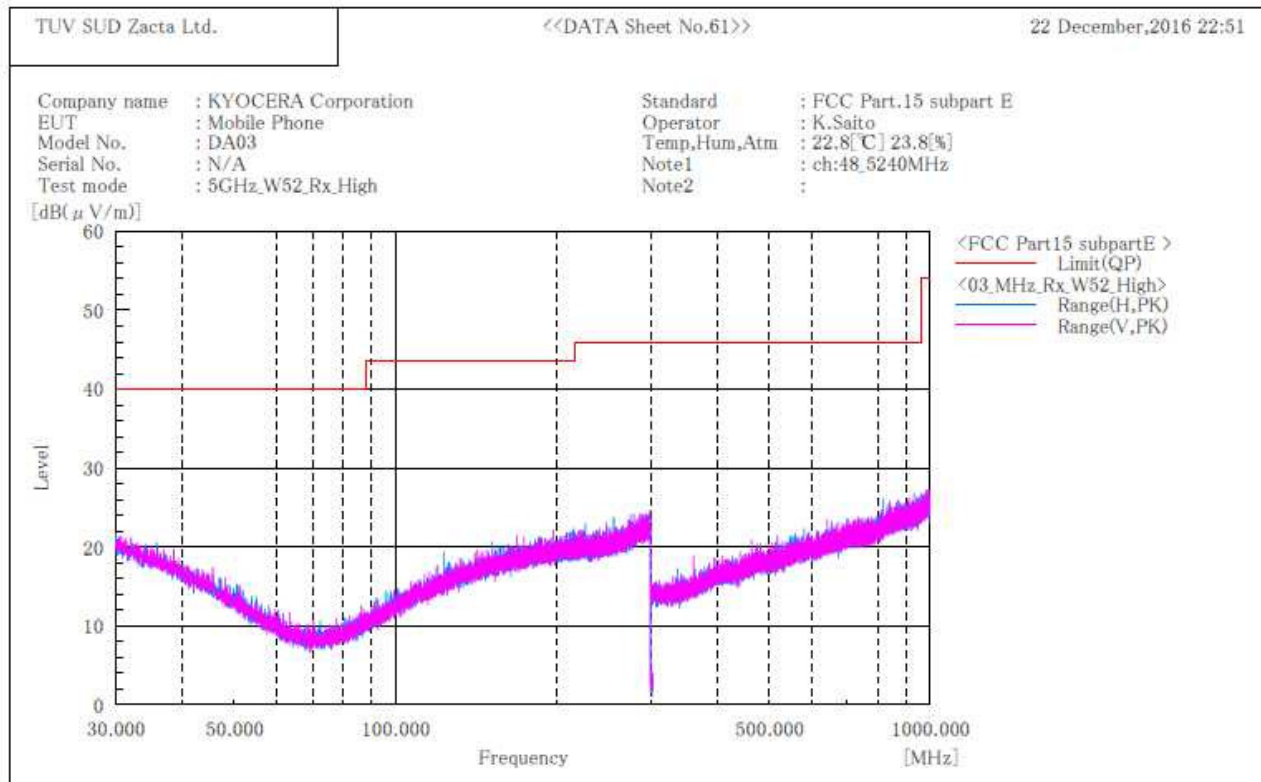
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz and 1GHz to 40GHz at the 3 meters distance.



Zacta

**W52 / Channel High
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

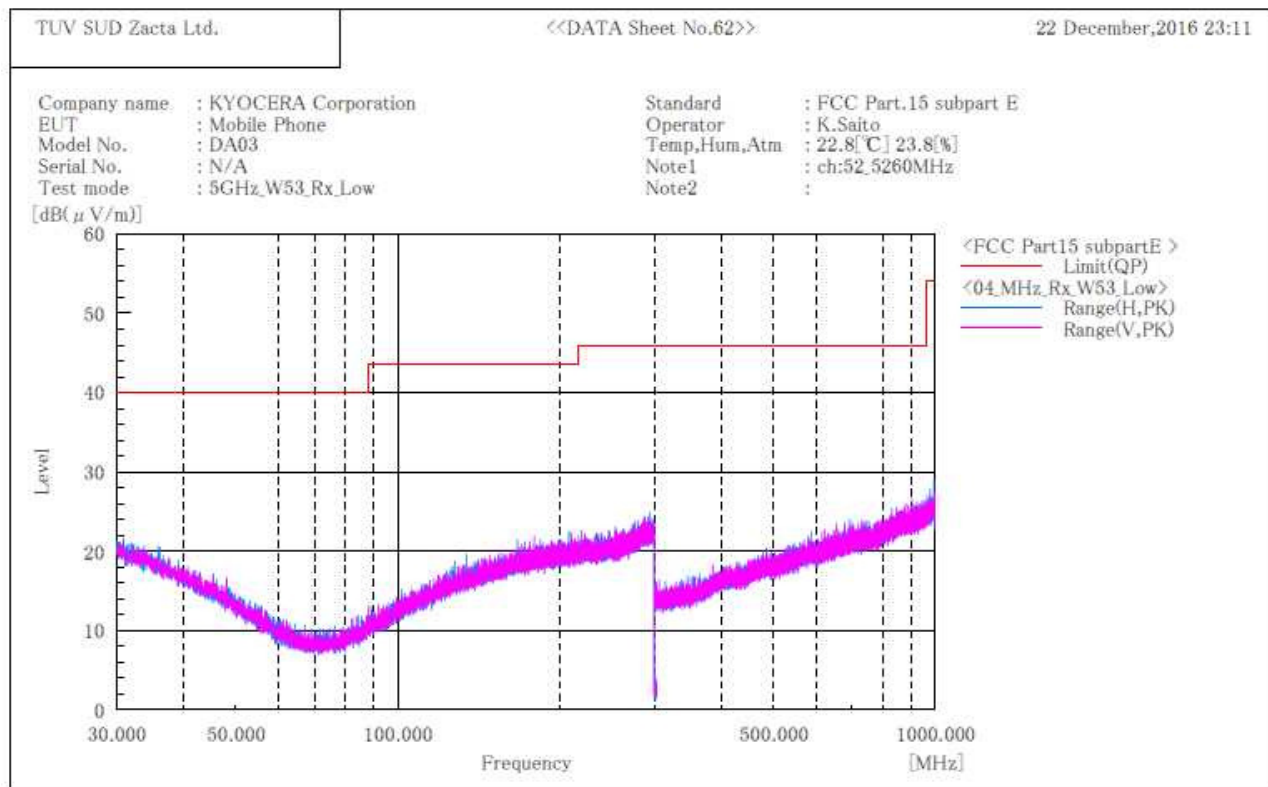
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz and 1GHz to 40GHz at the 3 meters distance.



Zacta

**W53 / Channel Low
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

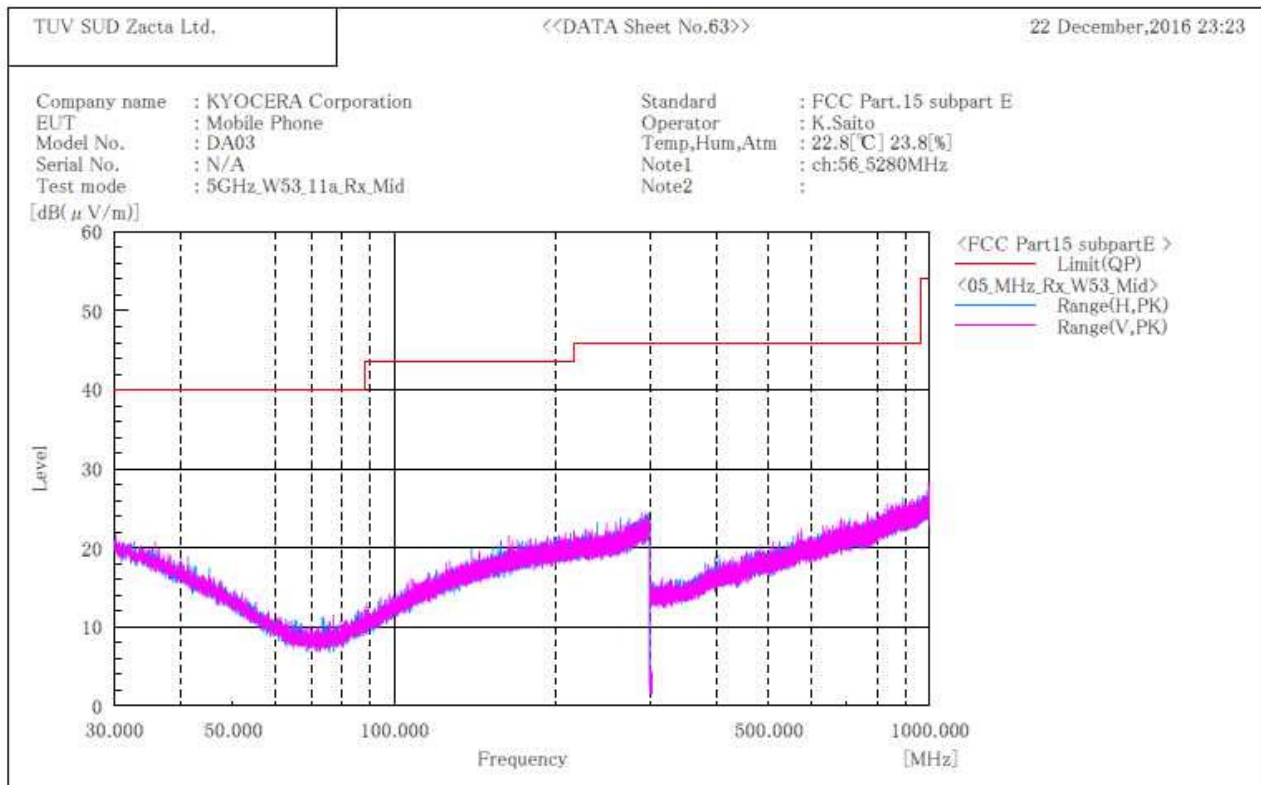
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz and 1GHz to 40GHz at the 3 meters distance.



Zacta

**W53 / Channel Middle
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

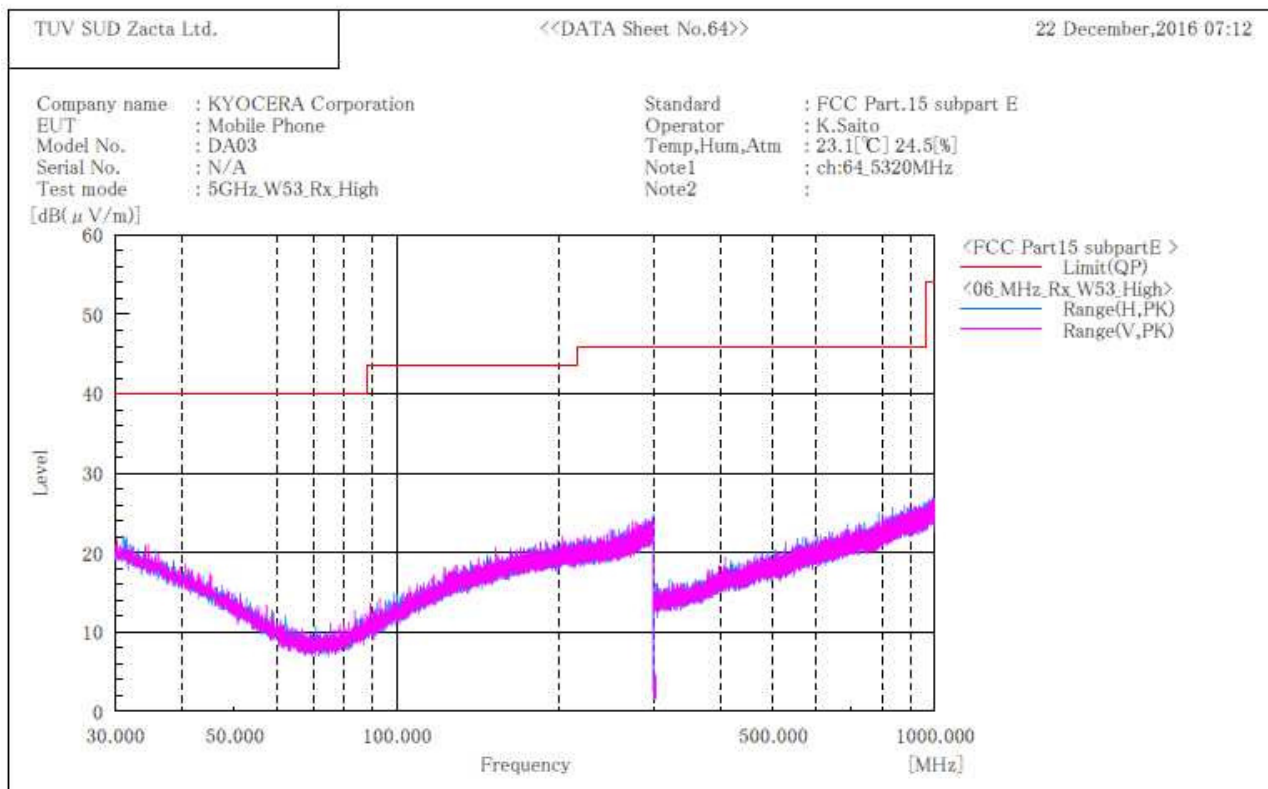
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz and 1GHz to 40GHz at the 3 meters distance.



Zacta

**W53 / Channel High
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c. f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

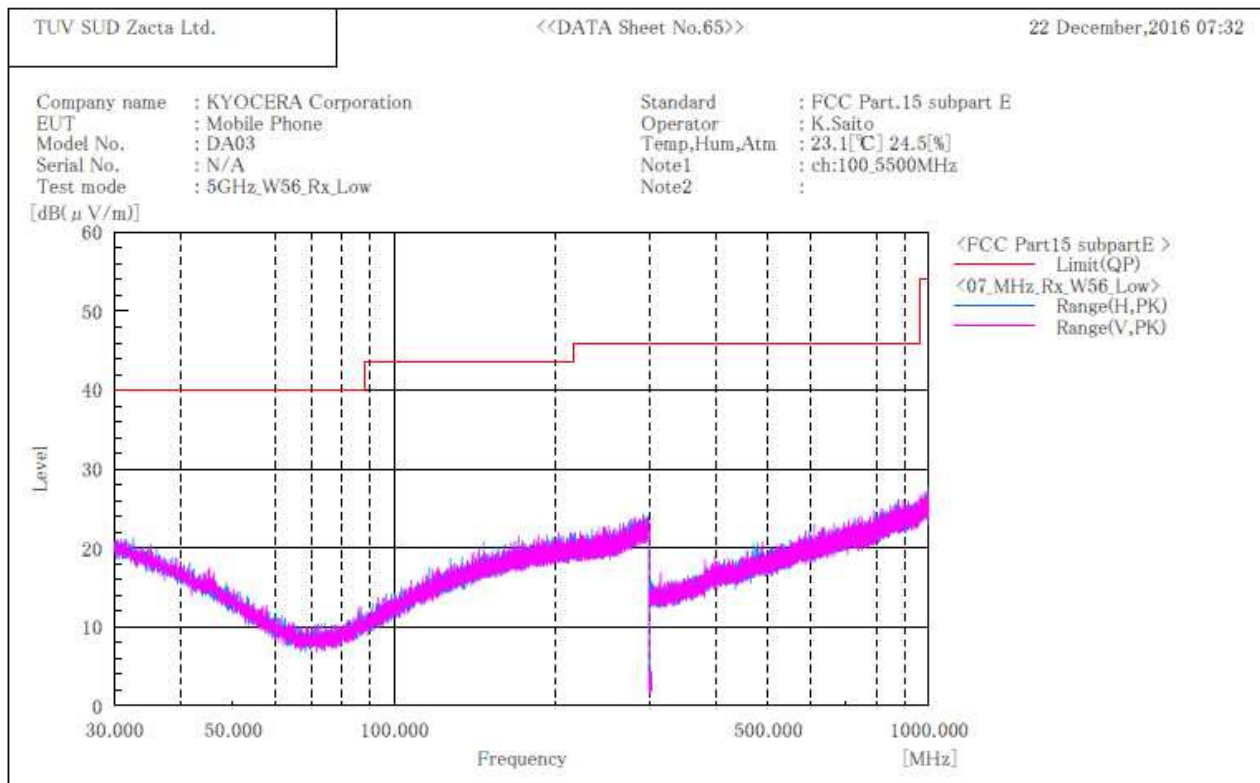
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz and 1GHz to 40GHz at the 3 meters distance.



Zacta

**W56 / Channel Low
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

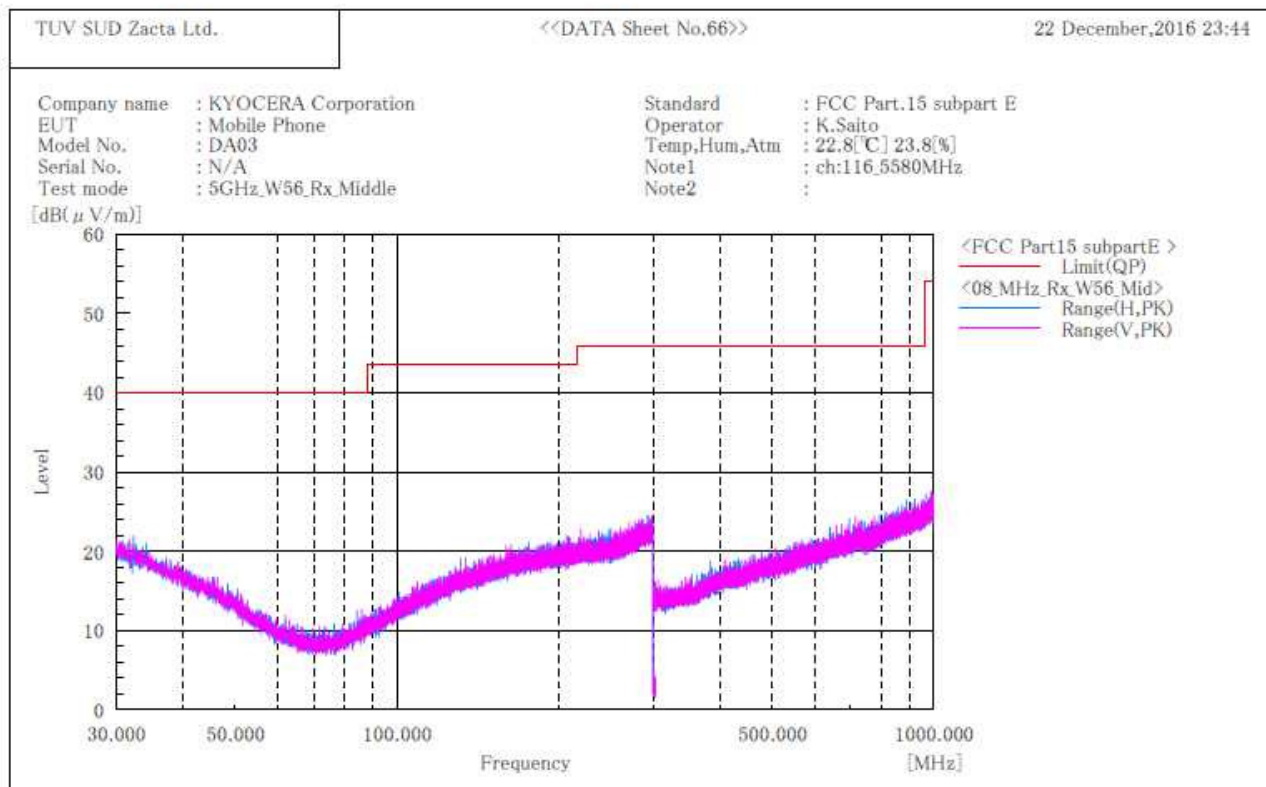
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz and 1GHz to 40GHz at the 3 meters distance.



Zacta

**W56 / Channel Middle
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c.f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

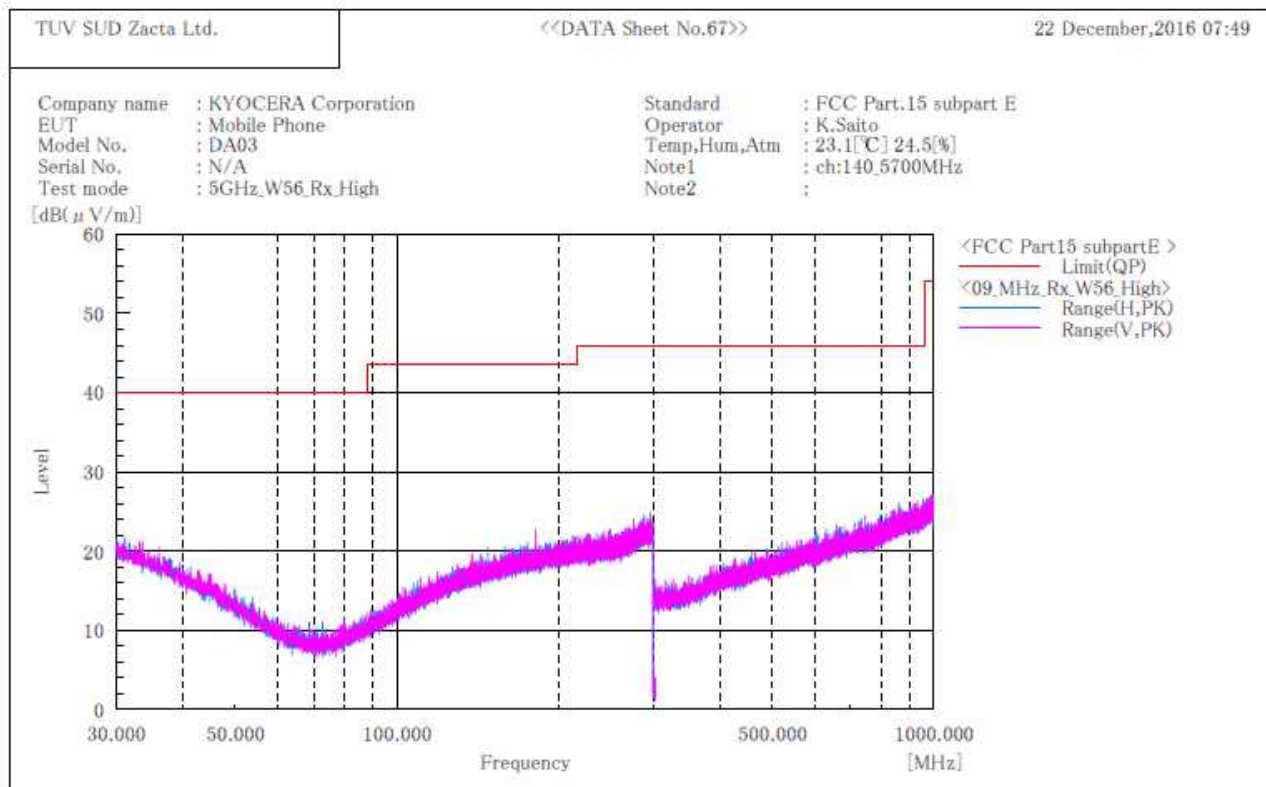
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz and 1GHz to 40GHz at the 3 meters distance.



Zacta

**W56 / Channel High
BELOW 1GHz**

***** RADIATED EMISSION *****
[3m Semi-anechoic chamber]



Final Result

No.	Frequency (P)	c. f	Height	Angle	Remark
	[MHz]	[dB(1/m)]	[cm]	[°]	

Note:

1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz and 1GHz to 40GHz at the 3 meters distance.

8. Frequency Stability

8.1 Measurement procedure [FCC 15.407(g)]

The EUT was placed of an inside of an constant temperature chamber as the temperature in the chamber was varied between -30°C and $+60^{\circ}\text{C}$. The temperature was incremented by 10°C intervals and the unit was allowed to stabilize at each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channels center frequency was recorded.

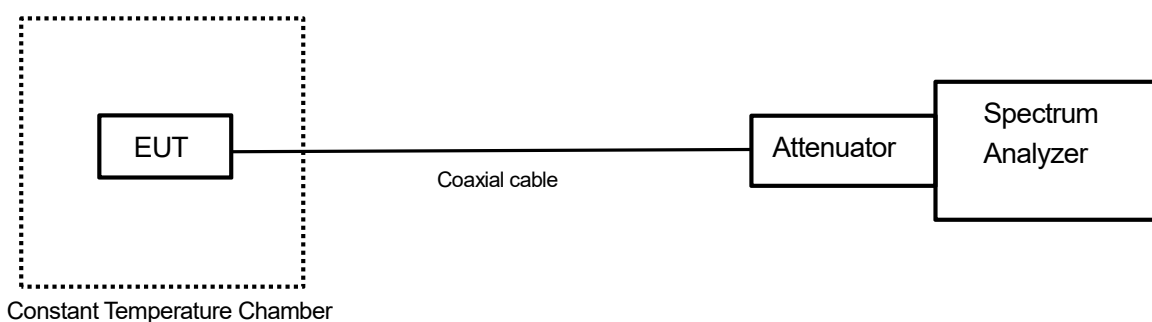
The EUT was set to operate with following conditions.

- 5.2GHz Band, 5.3GHz Band, 5.6GHz Band

The test mode of EUT is as follows.

- Tx mode

- Test configuration



8.2 Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified.

8.3 Measurement result

Date : November 16, 2016
 Temperature : 26.3 [°C]
 Humidity : 37.1 [%]
 Test place : Shielded room No.4

Test engineer : Tadahiro Seino

[Channel: 36 (5180MHz)]

Power Supply [V]	Temperature [°C]	Measurements	Frequency	Measurements	Frequency	Measurements	Frequency	Measurements	Frequency
		Frequency (startup) [Hz]	Tolerance (startup) [ppm]	Frequency (2mins) [Hz]	Tolerance (2mins) [ppm]	Frequency (5mins) [Hz]	Tolerance (5mins) [ppm]	Frequency (10mins) [Hz]	Tolerance (10mins) [ppm]
3.80	25(Ref.)	518006258	0.0000000	5180004711	-0.29864829	5180004711	-0.29864829	5180010189	0.75887939
	60	5180000034	-1.20145029	5180010135	0.74845469	5180010135	0.74845469	5180009113	0.55115764
	50	5180002619	-0.70250880	5179992327	-2.68937899	5179992327	-2.68937899	5180008745	0.48011525
	40	5180020407	2.73146388	5180010444	0.80810713	5180010444	0.80810713	5180011690	1.04864738
	30	5180004133	-0.41023116	5180014972	1.68223735	5180014972	1.68223735	5180000688	-1.07528828
	20	5180011100	0.93474791	5180005795	-0.08938213	5180005795	-0.08938213	5179993569	-2.44961094
	10	5180005667	-0.11409253	5180007781	0.29401509	5180007781	0.29401509	5180010857	0.88783677
	0	5180011473	1.00675554	5180027503	4.10134640	5180027503	4.10134640	5180008127	0.36081037
	-10	5180009006	0.53050129	5179994112	-2.34478481	5179994112	-2.34478481	5180002692	-0.68841616
	-20	5180015681	1.81910977	5180028588	4.31080560	5180028588	4.31080560	5180012795	1.26196759
	-30	5180000180	-1.17335766	5179995121	-2.14999740	5179995121	-2.14999740	5179970879	-6.82991453
3.42	25	5180008290	0.39227752	5180005061	-0.23108080	5180005061	-0.23108080	5180019888	2.63127095
4.18	25	5180011068	0.92857031	5180001229	-0.97084825	5180001229	-0.97084825	5180004355	-0.36737407

[Channel: 64 (5320MHz)]

Power Supply [V]	Temperature [°C]	Measurements	Frequency	Measurements	Frequency	Measurements	Frequency	Measurements	Frequency
		Frequency (startup) [Hz]	Tolerance (startup) [ppm]	Frequency (2mins) [Hz]	Tolerance (2mins) [ppm]	Frequency (5mins) [Hz]	Tolerance (5mins) [ppm]	Frequency (10mins) [Hz]	Tolerance (10mins) [ppm]
3.80	25(Ref.)	5320017268	0.0000000	5320007421	-1.85093384	5320010312	-1.30751455	5320019464	0.41278062
	60	5319990890	-4.95825458	5319975586	-7.83493697	5320019479	0.41560015	5320022982	1.07405666
	50	5320021154	0.73044876	5319996798	-3.84773187	5320015507	-0.33101396	5320002678	-2.74247230
	40	5320016498	-0.14473637	5320016447	-0.15432281	5320010447	-1.28213870	5320008351	-1.67612238
	30	5320012291	-0.93552328	5320006492	-2.02555734	5320032058	2.78006616	5320009403	-1.47837866
	20	5320015219	-0.38514913	5319994027	-4.36859484	5320026513	1.73777631	5320014421	-0.53514864
	10	5320011406	-1.10187612	5320017365	0.01823302	5320021718	0.83646345	5320015227	-0.38364537
	0	5320014007	-0.61296794	5319996286	-3.94397216	5320024238	1.31014612	5320022446	0.97330511
	-10	5320003797	-2.53213464	5320007160	-1.89999383	5320014641	-0.49379539	5320017081	-0.03515026
	-20	5319982064	-6.61727175	5320027742	1.96879060	5320004848	-2.33457889	5320001402	-2.98232115
	-30	5320001612	-2.94284759	5320000853	-3.08551630	5319986456	-5.79171052	5320007727	-1.79341523
3.42	25	5320016278	-0.18608962	5320008283	-1.68890429	5320010185	-1.33138666	5320002191	-2.83401336
4.18	25	5320013973	-0.61935889	5320019993	0.51221638	5320024997	1.45281483	5320007990	-1.74397930

[Channel: 140 (5700MHz)]

Power Supply [V]	Temperature [°C]	Measurements	Frequency	Measurements	Frequency	Measurements	Frequency	Measurements	Frequency
		Frequency (startup) [Hz]	Tolerance (startup) [ppm]	Frequency (2mins) [Hz]	Tolerance (2mins) [ppm]	Frequency (5mins) [Hz]	Tolerance (5mins) [ppm]	Frequency (10mins) [Hz]	Tolerance (10mins) [ppm]
3.80	25(Ref.)	5699996749	0.00000000	5700001508	0.83491276	5700013288	2.90158060	5700003240	1.13877258
	60	5700012477	2.75929982	5700020837	4.22596732	5700022409	4.50175695	5699995982	-0.13456148
	50	5700037720	7.18789884	5699991061	-0.99789531	5700010965	2.49403651	5700010221	2.36351012
	40	5700018117	3.74877407	5700013153	2.87789638	5699996001	-0.13122815	5699985353	-1.99929939
	30	5700002072	0.93386018	5700007308	1.85245720	5700007482	1.88298353	5700017895	3.70982668
	20	5700001399	0.81578994	5699999117	0.41543883	5699997427	0.11894744	5700004619	1.38070254
	10	5699999610	0.50193011	5700008341	2.03368537	5700014643	3.13930004	5700003977	1.26807090
	0	5700021856	4.40473935	5700017566	3.65210735	5700005118	1.46824645	5700030340	5.89316126
	-10	5699993060	-0.64719335	5700004800	1.41245695	5700014140	3.05105437	5700008016	1.97666779
	-20	5700013581	2.95298414	5699988313	-1.48000084	5699995586	-0.20403520	5700020167	4.10842340
	-30	5700002799	1.06140411	5700014241	3.06877368	5699992972	-0.66263196	5699998109	0.23859663
3.42	25	5700018679	3.84737062	5700003414	1.16929891	5700014173	3.05684385	5700015710	3.32649313
4.18	25	5700001209	0.78245659	5700013555	2.94842273	5700018276	3.77666882	5700014899	3.18421234

9. AC Power Line Conducted Emissions

9.1 Measurement procedure [FCC 15.207]

Test was applied by following conditions.

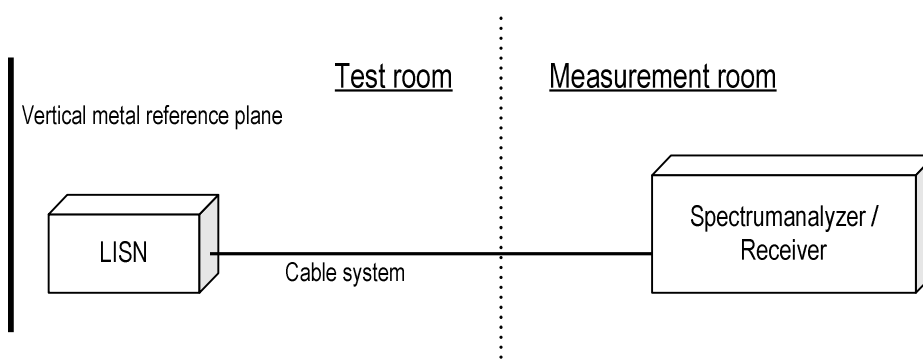
Test method	: ANSI C63.10
Frequency range	: 0.15MHz to 30MHz
Test place	: 3m Semi-anechoic chamber
EUT was placed on	: FRP table / (W)2.0m × (D)1.0m × (H)0.8m
Vertical Metal Reference Plane	: (W)2.0m × (H)2.0m 0.4m away from EUT
Test receiver setting	
- Detector	: Quasi-peak, Average
- Bandwidth	: 9kHz

EUT and peripherals are connected to 50Ω/50μH Line Impedance Stabilization Network (LISN) which are connected to reference ground plane, and are placed 80cm away from EUT. Excess of AC power cable is bundled in center.

LISN for peripheral is terminated in 50Ω.

EUT operating mode is selected to emit the maximum noise. Overall frequency range is investigated with spectrum analyzer using peak detector. Maximum emission configuration is determined by manipulating the EUT, peripherals, interconnecting cables. Then, emission measurements are performed with test receiver in above setting to each current-carrying conductor of the mains port. Sufficient time for EUT, peripherals and test equipment is provided in order for them to warm up to their normal operating condition. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits.

- Test configuration



9.2 Calculation method

Emission level = Reading + (LISN. factor + Cable system loss)

Margin = Limit – Emission level

9.3 Limit

Frequency [MHz]	Limit	
	QP [dBuV]	AV [dBuV]
0.15-0.5	66-56*	56-46*
0.5-5	56	46
5-30	60	50

*: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.



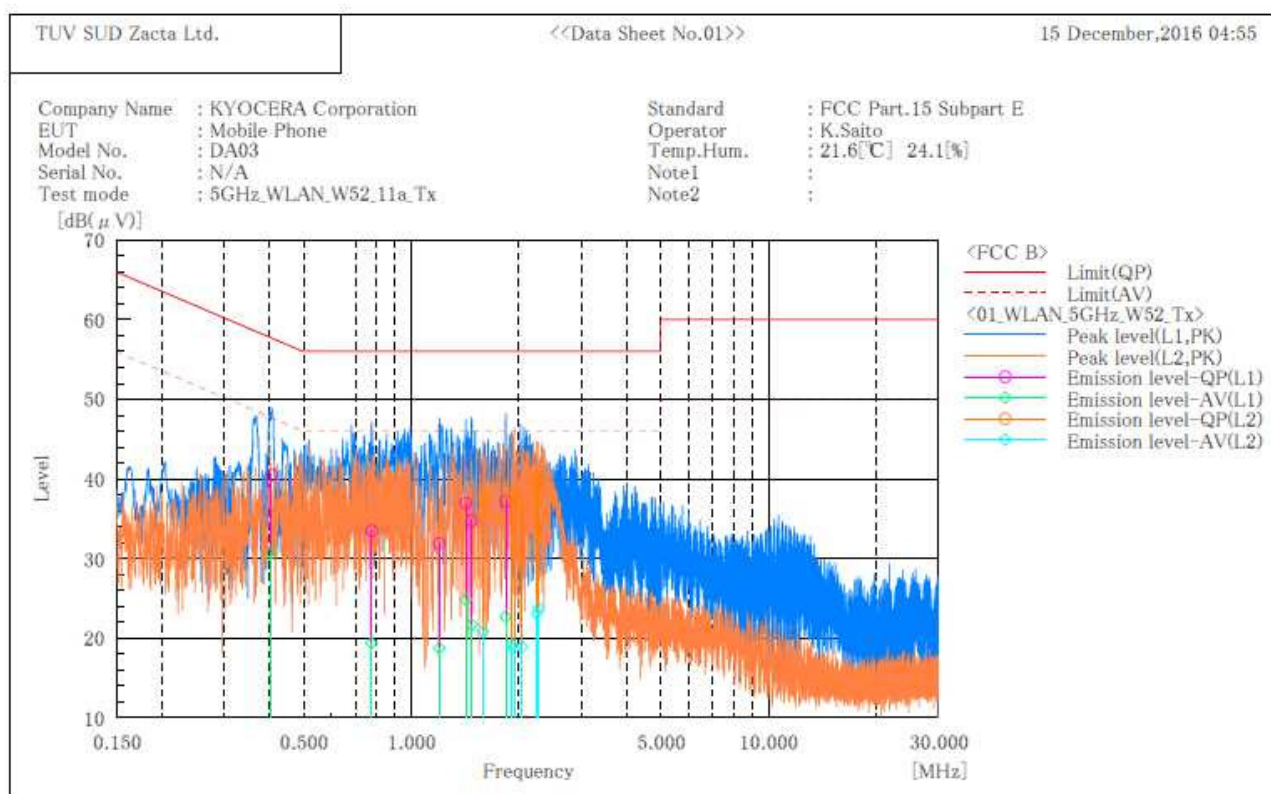
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Date : December 15, 2016
 Temperature : 21.6 [°C]
 Humidity : 24.1 [%]
 Test place : 3m Semi-anechoic chamber

Test engineer : Kazunori Saito

9.4 Test data

***** CONDUCTED EMISSION at MAINS PORT *****
 [3m Semi-anechoic chamber]



Final Result

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]	Remark
1	0.407	30.2	20.4	10.3	40.5	30.7	57.7	47.7	17.2	17.0	
2	0.776	23.2	9.1	10.3	33.5	19.4	56.0	46.0	22.5	26.6	
3	1.201	21.5	8.4	10.4	31.9	18.8	56.0	46.0	24.1	27.2	
4	1.423	26.6	14.5	10.4	37.0	24.9	56.0	46.0	19.0	21.1	
5	1.480	24.4	11.3	10.4	34.8	21.7	56.0	46.0	21.2	24.3	
6	1.842	26.8	12.3	10.4	37.2	22.7	56.0	46.0	18.8	23.3	

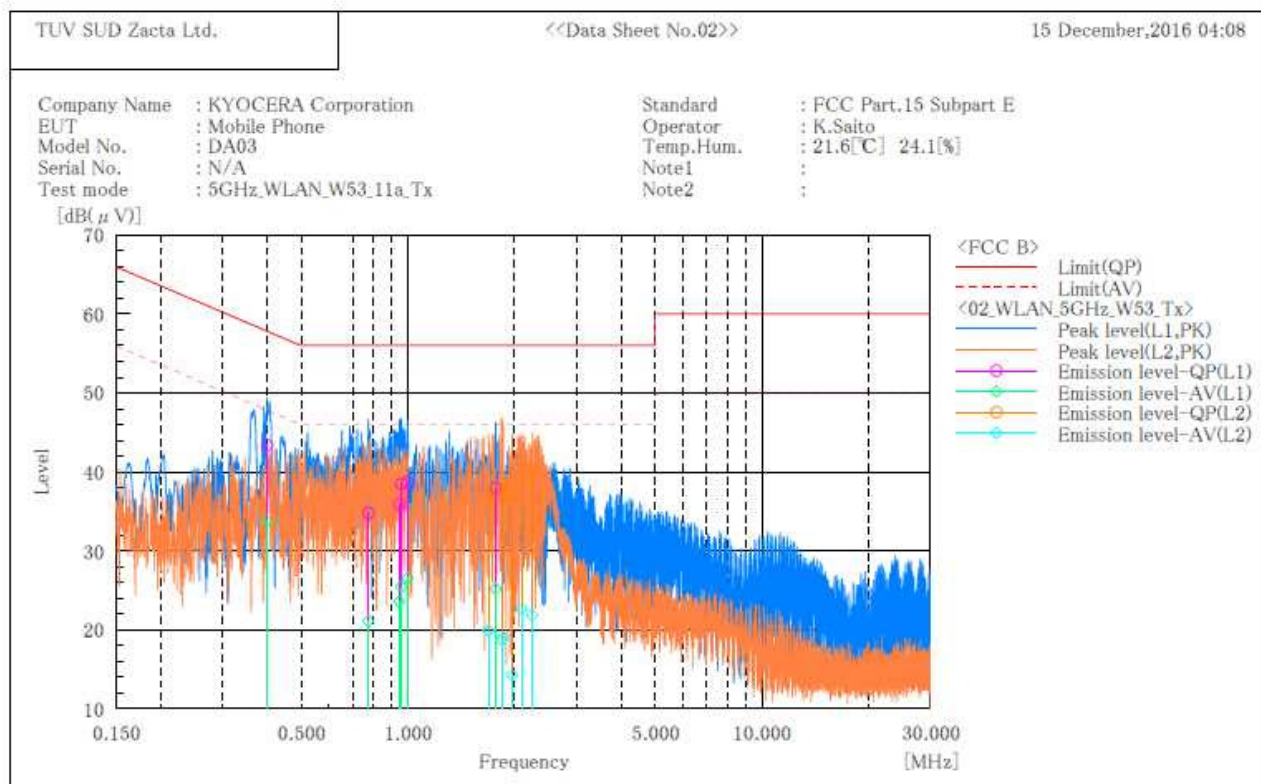
--- L2 Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]	Remark
1	1.588	27.5	10.4	10.4	37.9	20.8	56.0	46.0	18.1	25.2	
2	1.919	27.4	8.8	10.4	37.8	19.2	56.0	46.0	18.2	26.8	
3	1.944	27.5	8.4	10.4	37.9	18.8	56.0	46.0	18.1	27.2	
4	2.045	26.6	8.5	10.4	37.0	18.9	56.0	46.0	19.0	27.1	
5	2.251	29.3	12.7	10.4	39.7	23.1	56.0	46.0	16.3	22.9	
6	2.276	29.5	13.4	10.4	39.9	23.8	56.0	46.0	16.1	22.2	



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***** CONDUCTED EMISSION at MAINS PORT *****
 [3m Semi-anechoic chamber]



Final Result

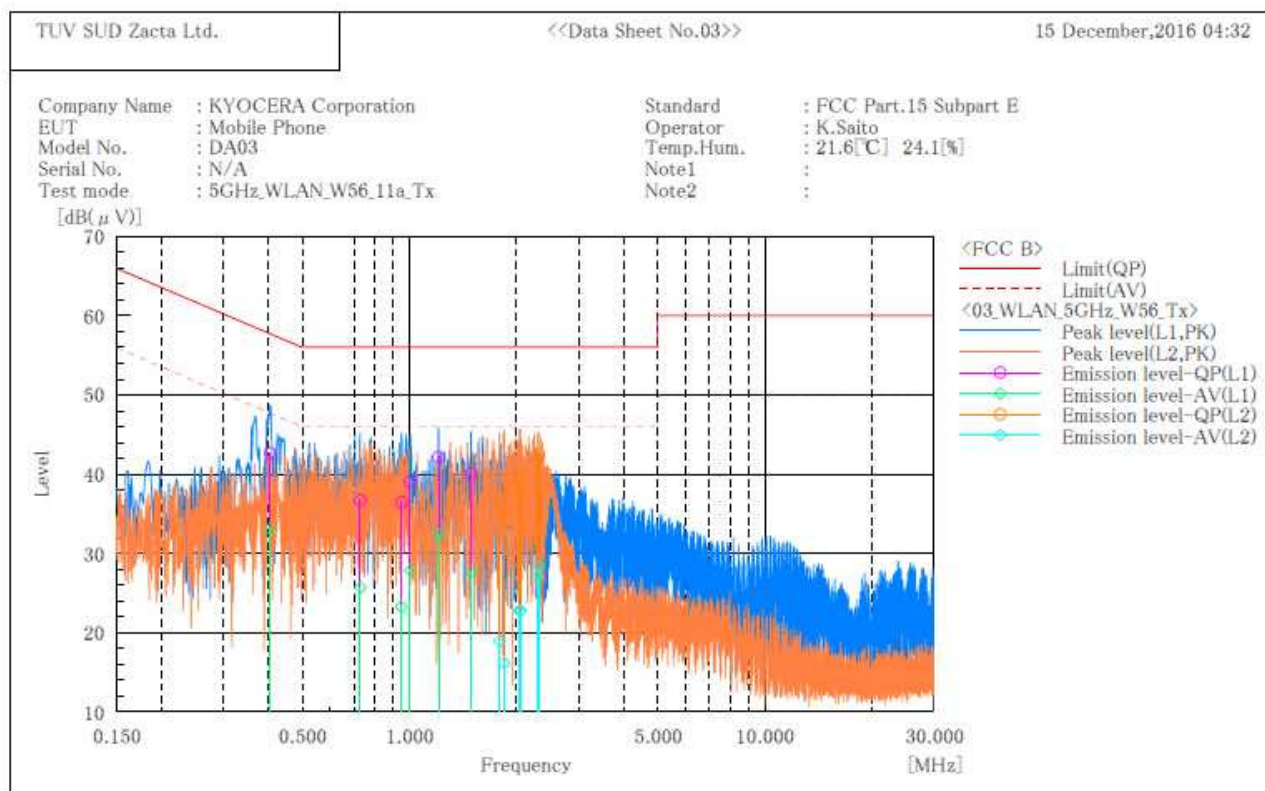
--- L1 Phase ---											
No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.401	33.1	23.5	10.3	43.4	33.8	57.8	47.8	14.4	14.0	
2	0.775	24.5	10.8	10.3	34.8	21.1	56.0	46.0	21.2	24.9	
3	0.947	25.5	13.2	10.4	35.9	23.6	56.0	46.0	20.1	22.4	
4	0.961	28.1	15.1	10.4	38.5	25.5	56.0	46.0	17.5	20.5	
5	0.999	28.3	16.2	10.4	38.7	26.6	56.0	46.0	17.3	19.4	
6	1.773	27.6	14.8	10.4	38.0	25.2	56.0	46.0	18.0	20.8	

--- L2 Phase ---											
No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	1.691	27.1	9.5	10.4	37.5	19.9	56.0	46.0	18.5	26.1	
2	1.841	28.0	8.3	10.4	38.4	18.7	56.0	46.0	17.6	27.3	
3	1.861	26.6	8.6	10.4	37.0	19.0	56.0	46.0	19.0	27.0	
4	1.974	26.9	3.9	10.4	37.3	14.3	56.0	46.0	18.7	31.7	
5	2.095	29.0	12.3	10.4	39.4	22.7	56.0	46.0	16.6	23.3	
6	2.245	29.8	11.5	10.4	40.2	21.9	56.0	46.0	15.8	24.1	



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***** CONDUCTED EMISSION at MAINS PORT *****
 [3m Semi-anechoic chamber]



Final Result

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]	Remark
1	0.406	32.4	22.8	10.3	42.7	33.1	57.7	47.7	15.0	14.6	
2	0.728	26.4	15.4	10.3	36.7	25.7	56.0	46.0	19.3	20.3	
3	0.951	26.1	12.9	10.4	36.5	23.3	56.0	46.0	19.5	22.7	
4	1.006	28.7	17.5	10.4	39.1	27.9	56.0	46.0	16.9	18.1	
5	1.209	31.8	22.0	10.4	42.2	32.4	56.0	46.0	13.8	13.6	
6	1.492	29.7	17.3	10.4	40.1	27.7	56.0	46.0	15.9	18.3	

--- L2 Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]	Remark
1	1.796	25.7	8.5	10.4	36.1	18.9	56.0	46.0	19.9	27.1	
2	1.852	28.2	5.8	10.4	38.6	16.2	56.0	46.0	17.4	29.8	
3	2.042	28.2	12.3	10.4	38.6	22.7	56.0	46.0	17.4	23.3	
4	2.064	29.2	12.4	10.4	39.6	22.8	56.0	46.0	16.4	23.2	
5	2.294	31.5	16.6	10.4	41.9	27.0	56.0	46.0	14.1	19.0	
6	2.319	32.2	18.0	10.4	42.6	28.4	56.0	46.0	13.4	17.6	

10. Duty Cycle

10.1 Measurement procedure

[KDB 789033 Zero-Span Spectrum Analyzer Method]

The duty cycle is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to;

- RBW=8MHz, VBW=8MHz, Span=0Hz, Sweep=Auto, Detector=Peak, Trace mode=Single

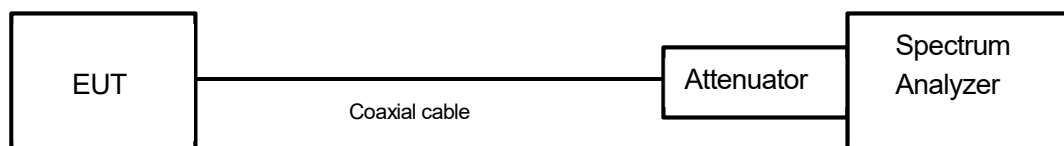
The EUT was set to operate with following conditions.

- 5.2GHz Band, 5.3GHz Band, 5.6GHz Band

The test mode of EUT is as follows.

- Tx mode

- Test configuration



10.2 Limit

None

10.3 Measurement result

Date : October 6, 2016
 Temperature : 23.8 [°C]
 Humidity : 57.0 [%]
 Test place : Shielded room No.4

Tested by : Kazunori Saito

Mode	Channel	Frequency (MHz)	Duty Cycle				DCF (dB) 10log(1/x)	DCF (dB) 20log(1/x)
			On Time(ms)	On+Off Time(ms)	X	1/T		
802.11a	36	5180	1.362	1.370	0.994	734.2	0.025	0.051
	40	5200						
	58	5240						
	52	5260	1.364	1.372	0.994	733.1	0.025	0.051
	56	5280						
	64	5320						
	100	5500	1.364	1.372	0.994	733.1	0.025	0.051
	116	5580						
140	5700							

Note: X = On time / (On + Off time)

Mode	Channel	Frequency (MHz)	Duty Cycle				DCF (dB) 10log(1/x)	DCF (dB) 20log(1/x)
			On Time(ms)	On+Off Time(ms)	X	1/T		
802.11n (20MHz)	36	5180	1.276	1.284	0.994	783.7	0.027	0.054
	40	5200						
	58	5240						
	52	5260	1.274	1.284	0.992	784.9	0.034	0.068
	56	5280						
	64	5320						
	100	5500	1.274	1.284	0.992	784.9	0.034	0.068
	116	5580						
140	5700							

Note: X = On time / (On + Off time)



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Mode	Channel	Frequency (MHz)	Duty Cycle				DCF (dB) 10log(1/x)	DCF (dB) 20log(1/x)
			On Time(ms)	On+Off Time(ms)	X	1/T		
802.11n (40MHz)	38	5190	0.635	0.645	0.984	1574.8	0.068	0.136
	46	5230						
	54	5270	0.636	0.645	0.986	1572.3	0.061	0.122
	62	5310						
	102	5510	0.634	0.646	0.981	1577.3	0.081	0.163
	110	5550						
	134	5670						

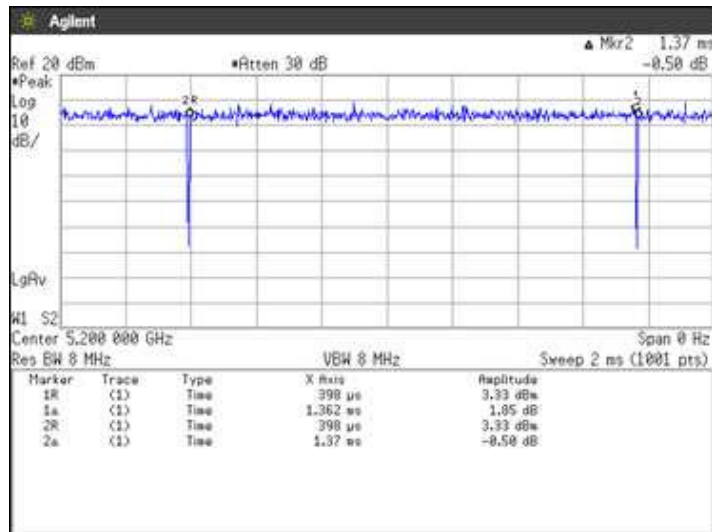
Note: X = On time / (On + Off time)

Mode	Channel	Frequency (MHz)	Duty Cycle				DCF (dB) 10log(1/x)	DCF (dB) 20log(1/x)
			On Time(ms)	On+Off Time(ms)	X	1/T		
802.11ac (80MHz)	42	5210	0.247	0.258	0.957	4056.8	0.190	0.379
	58	5290	0.247	0.258	0.957	4056.8	0.190	0.379
	106	5530	0.247	0.258	0.957	4048.6	0.189	0.378
	122	5610	0.247	0.258	0.957	4056.8	0.190	0.379

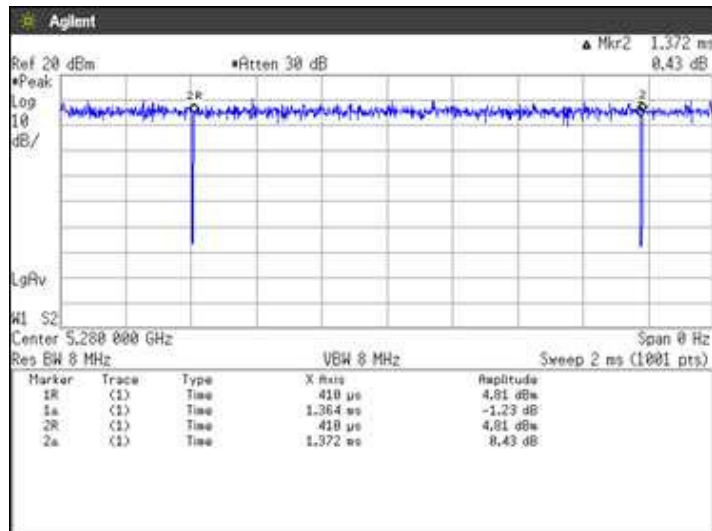
Note: X = On time / (On + Off time)

10.4 Trace data
[IEEE802.11a]

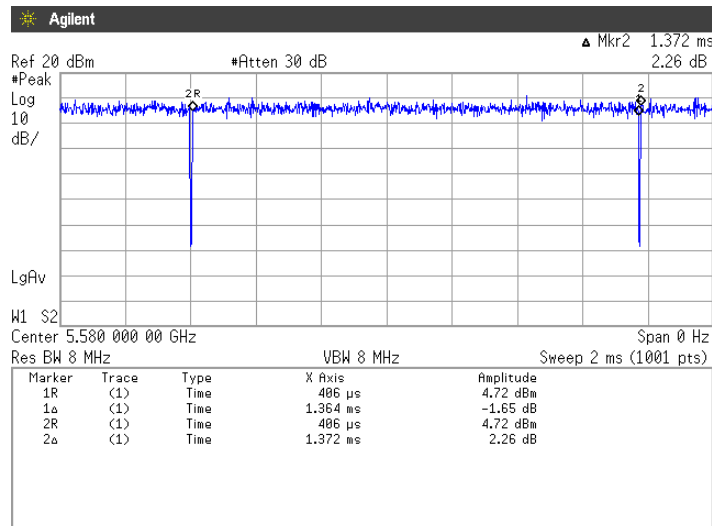
Channel: 40



Channel: 56



Channel: 116

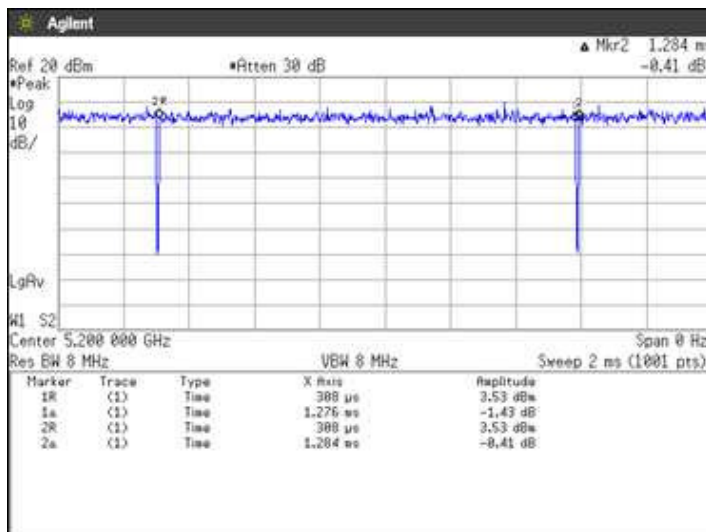




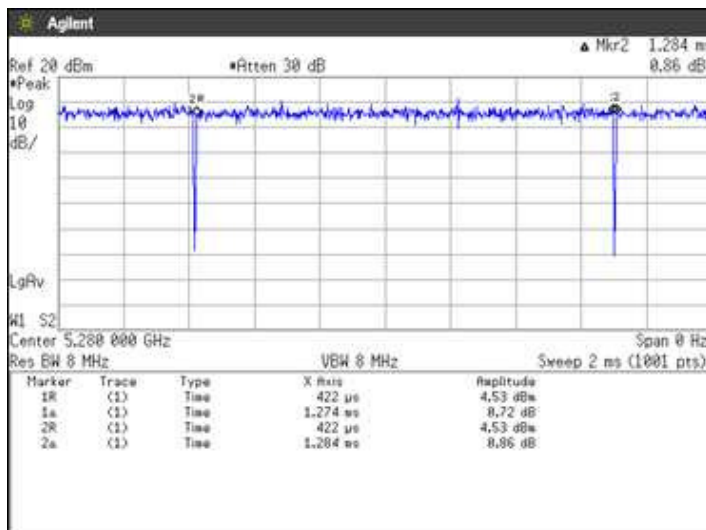
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[IEEE802.11n (HT20)]

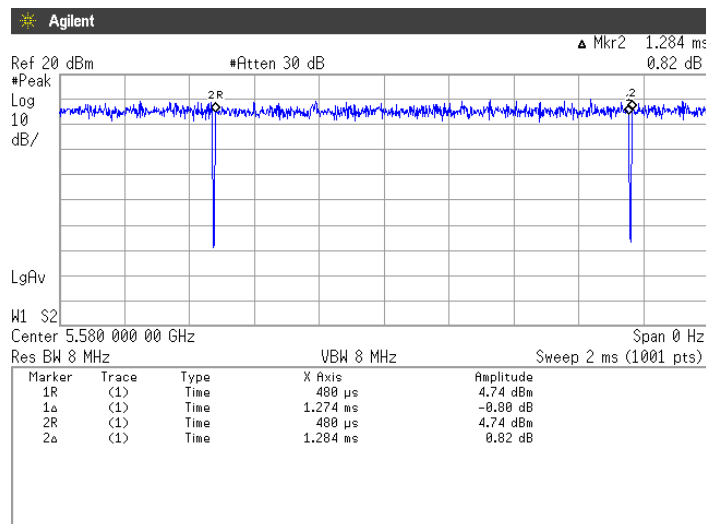
Channel: 40



Channel: 56



Channel: 116

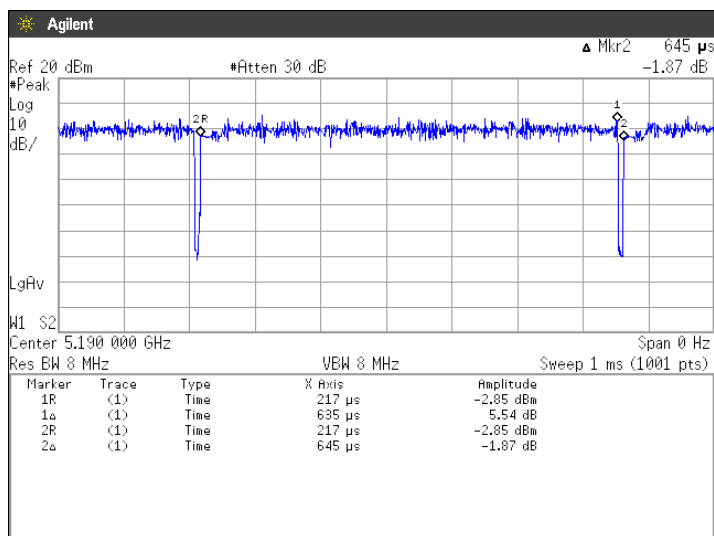




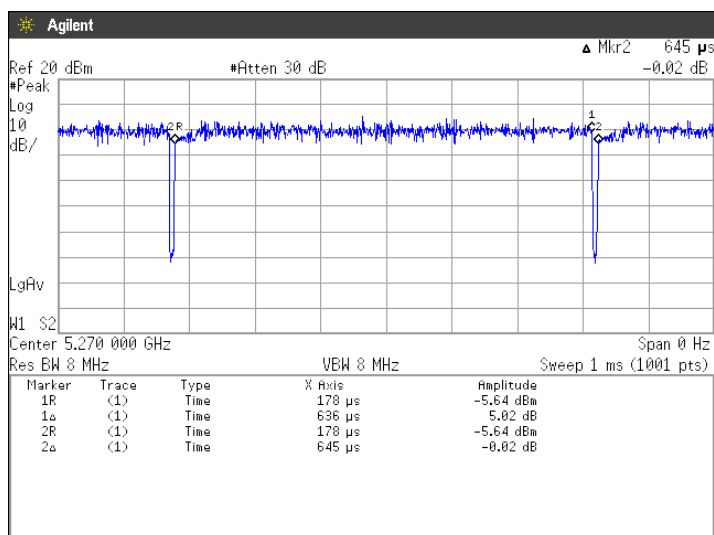
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[IEEE802.11n (HT40)]

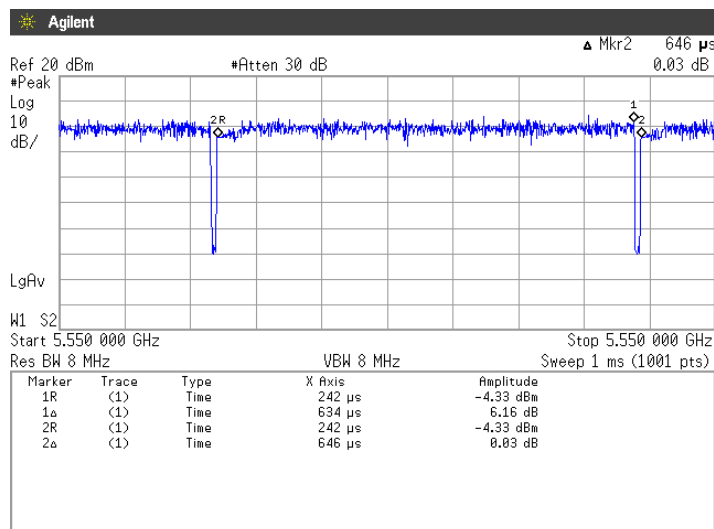
Channel: 38



Channel: 54



Channel: 110

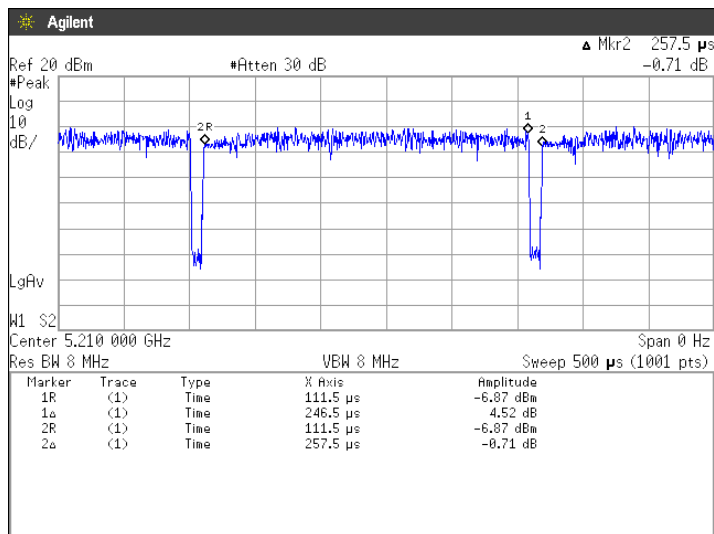




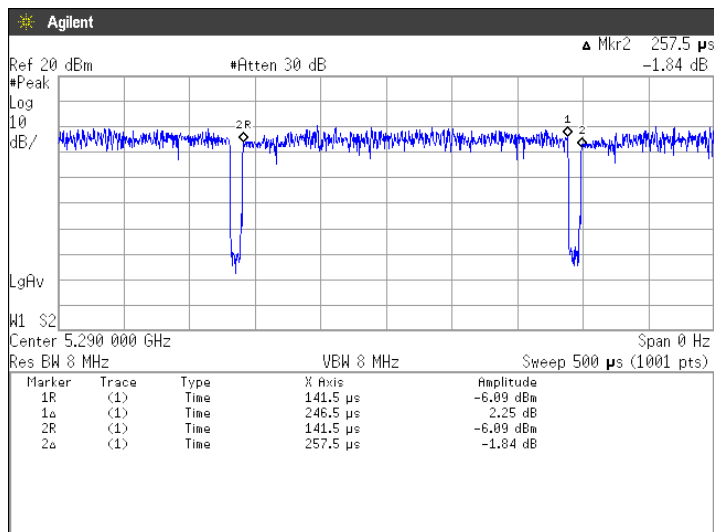
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[IEEE802.11ac (HT80)]

Channel: 42



Channel: 58

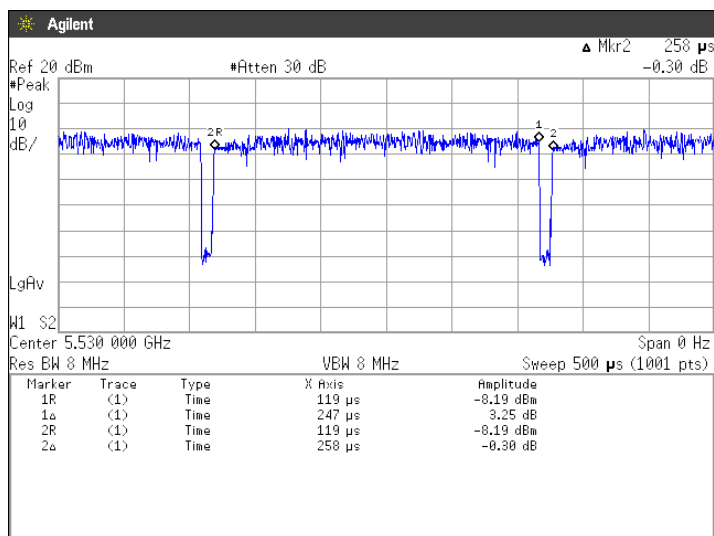




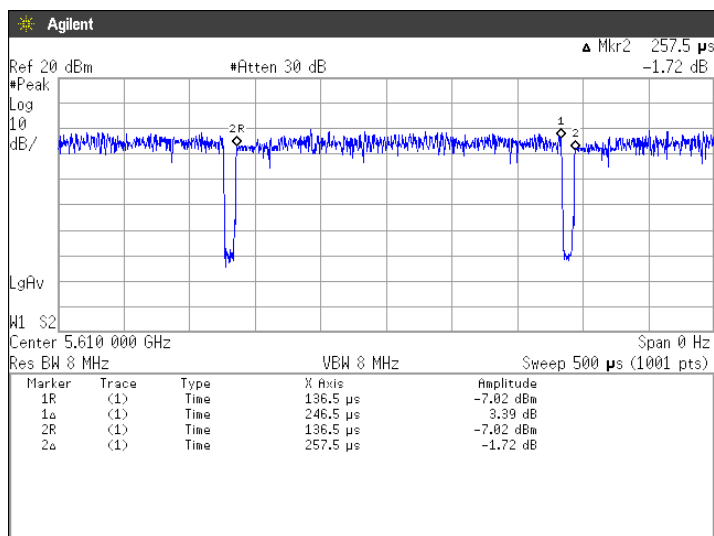
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[IEEE802.11ac (HT80)]

Channel: 106



Channel: 122





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11. Antenna requirement

According to FCC 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.

The antenna is a special antenna mounted inside of the EUT. Therefore, the EUT complies with the antenna requirement of FCC section 15.203.

12. Uncertainty of measurement

Expanded uncertainties stated are calculated with a coverage Factor $k=2$.

Please note that these results are not taken into account when determining compliance or non-compliance with test result.

Test item	Measurement uncertainty
Conducted emission at mains port	$\pm 3.0\text{dB}$
Radiated emission (9kHz – 30MHz)	$\pm 4.4\text{dB}$
Radiated emission (30MHz – 1000MHz)	$\pm 4.5\text{dB}$
Radiated emission (1000MHz – 26GHz)	$\pm 3.9\text{dB}$



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13. Laboratory Information

1. Location

Name: Yonezawa Testing Center
 Address: 5-4149-7, Hachimanpara, Yonezawa-shi, Yamagata, 992-1128 Japan
 Phone: +81-238-28-2881
 Fax: +81-238-28-2888

2. Accreditation and Registration

- 1) NVLAP
LAB CODE: 200306-0
- 2) VLAC
Accreditation No.: VLAC-013
- 3) BSMI
Laboratory Code: SL2-IN-E-6018, SL2-A1-E-6018

4) FCC

Registration number	Expiration date
540072	2017-2-20

5) Industry Canada

Site number	Facility	Expiration date
4224A-4	3m Semi-anechoic chamber	2017-12-03
4224A-5	10m Semi-anechoic chamber No.1	2017-12-03
4224A-6	10m Semi-anechoic chamber No.2	2019-12-14

6) VCCI Council

Registration number	Expiration date
A-0166	2017-07-03

Appendix A. Test equipment

Antenna port conducted test

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. date
Spectrum analyzer	Agilent Technologies	E4440A	US40420937	Jul. 31, 2017	Jul. 15, 2016
Microwave cable	RS	YH-13S5	N/A(S403)	May 31, 2017	May 24, 2016
Attenuator	Weinschel	56-10	J4993	Nov. 30, 2016	Nov. 12, 2015
Attenuator	Weinschel	56-10	J4993	Nov. 30, 2017	Nov. 1, 2016
Low temperature and humidity chamber	Espec	PL1KP	14007261	Jan. 21, 2017	Jan. 22, 2016

Radiated emission

Equipment	Company	Model No.	Serial No.	Cal. Due	Cal. Date
EMI Receiver	ROHDE&SCHWARZ	ESCI	100764	Aug. 31, 2017	Aug. 19, 2016
Preamplifier	ANRITSU	MH648A	M96057	May 31, 2017	May 10, 2016
Loop antenna	ROHDE&SCHWARZ	HFH2-Z2	892246/010	May 31, 2017	May 9, 2016
Attenuator	TDC	TAT-43B-06	N/A(S209)	May 31, 2017	May 10, 2016
Biconical antenna	Schwarzbeck	VHA9103/BBA9106	2155	Jun. 30, 2017	Jun. 2, 2016
Log periodic antenna	Schwarzbeck	UHALP9108A	0560	Jun. 30, 2017	Jun. 2, 2016
Attenuator	TME	CFA-01NPJ-6	N/A(S273)	May 31, 2017	May 25, 2016
Attenuator	TME	CFA-01NPJ-3	N/A(S270)	May 31, 2017	May 25, 2016
Spectrum analyzer	Agilent Technologies	E4440A	US40420937	Jul. 31, 2017	Jul. 15, 2016
EMI Receiver	ROHDE&SCHWARZ	ESCI	100764	Aug. 31, 2017	Aug. 19, 2016
Double ridged guide antenna	EMCO	3115	5205	Mar. 31, 2017	Mar. 3, 2016
Double ridged guide antenna	ETS LINDGREN	3117	00052315	Feb. 28, 2017	Feb. 23, 2016
Attenuator	Agilent Technologies	8491B	MY39268633	Feb. 28, 2017	Feb. 23, 2016
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	BBHA9170189	Jun. 30, 2017	Jun. 16, 2016
Preamplifier	TSJ	MLA-1840-B03-35	1240332	Jun. 30, 2017	Jun. 16, 2016
Notch Filter	Micro-Tronics	BRM50716	006	Jul. 31, 2017	Jul. 20, 2016
Microwave cable	SUHNER	SUCOFELX102/2m	31648	Mar. 31, 2017	Mar. 29, 2016
Microwave cable	SUHNER	SUCOFLEX104/9m	346316/4	May 31, 2017	May 25, 2016
		SUCOFLEX104/1m	322084/4	May 31, 2017	May 25, 2016
		SUCOFLEX104/1.5m	317226/4	May 31, 2017	May 25, 2016
		SUCOFLEX104/7m	41625/6	May 31, 2017	May 25, 2016
PC	DELL	DIMENSION E521	75465BX	N/A	N/A
Software	TOYO Corporation	EP5/RE-AJ	0611193/V5.3.61	N/A	N/A
Absorber	RIKEN	PFP30	N/A	N/A	N/A
3m Semi an-echoic Chamber	TOKIN	N/A	N/A(9002-NSA)	May 31, 2017	May 11, 2016
3m Semi an-echoic Chamber	TOKIN	N/A	N/A(9002-SVSWR)	May 31, 2017	May 12, 2016

Conducted emission at mains port

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. date
EMI Receiver	ROHDE&SCHWARZ	ESCI	100764	Aug. 31, 2017	Aug. 19, 2016
Attenuator	HUBER+SUHNER	6810.01.A	N/A (S411)	Feb. 28, 2017	Feb. 23, 2016
Line impedance stabilization network for EUT	Kyoritsu Electrical Works, Ltd.	KNW-407F	8-2003-1	Mar. 31, 2017	Mar. 28, 2016
Coaxial cable	FUJIKURA	5D-2W/4m	N/A (S330)	Feb. 28, 2017	Feb. 23, 2016
Coaxial cable	FUJIKURA	5D-2W/1m	N/A (S193)	Feb. 28, 2017	Feb. 23, 2016
Coaxial cable	SUHNER	RG214/U/10m	N/A (S194)	Feb. 28, 2017	Feb. 23, 2016
PC	DELL	DIMENSION	75465BX	N/A	N/A

*: The calibrations of the above equipment are traceable to NIST or equivalent standards of the reference organizations.