

# KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,  
Suwon-si, Gyeonggi-do, 16677, Korea  
TEL: 82-31-285-0894 FAX: 82-505-299-8311  
[www.kctl.co.kr](http://www.kctl.co.kr)

Report No.:  
KR20-SRF0029-B

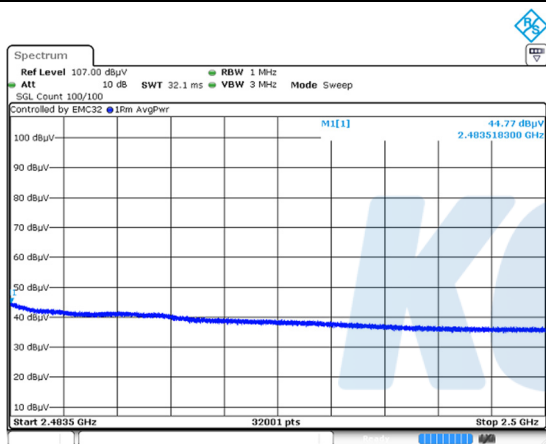
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## Highest Channel (2 462 MHz)

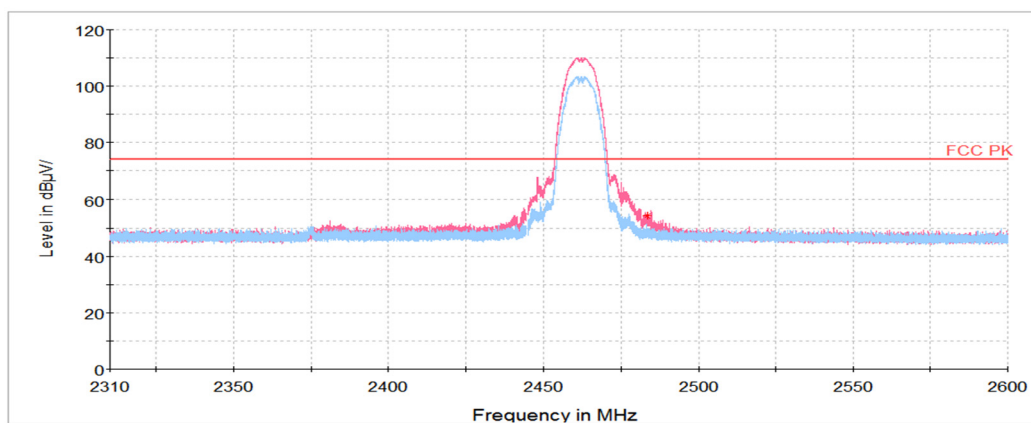
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
<b>Peak data</b>								
2 483.52 <sup>1)</sup>	V	51.17	32.07	-29.21	-	54.03	74.00	19.97
4 000.25 <sup>1)</sup>	V	72.21	33.00	-56.65	-	48.56	74.00	25.44
4 923.72 <sup>1)</sup>	H	66.29	33.97	-54.88	-	45.38	74.00	28.62
7 385.09 <sup>1)</sup>	H	62.01	35.40	-51.14	-	46.27	74.00	27.73
<b>Average Data</b>								
2 483.52 <sup>1)</sup>	V	44.77	32.07	-29.21	0.22	47.85	54.00	6.15

## Average data (1 599.74 MHz)



Blank

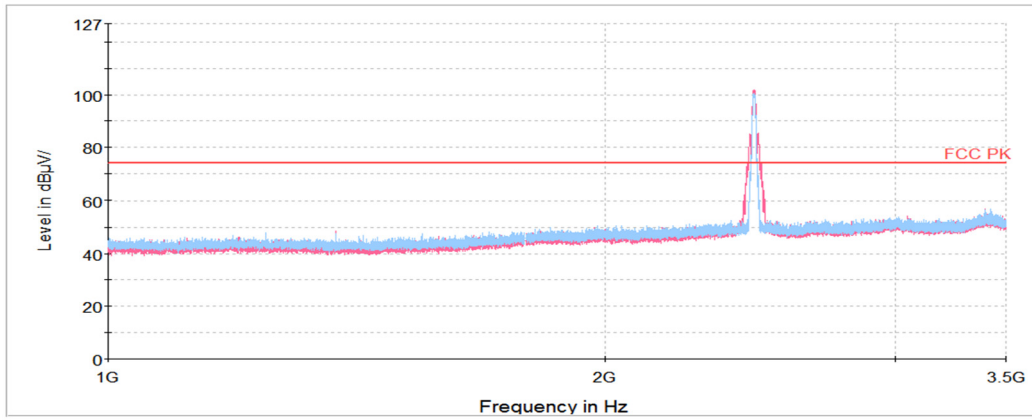
## Horizontal/Vertical for Band-edge



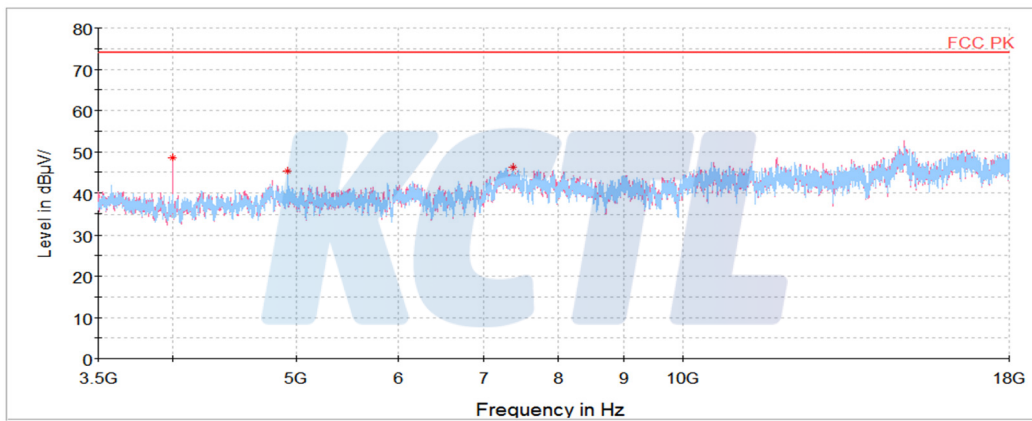
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KCTL-TIR001-003/2

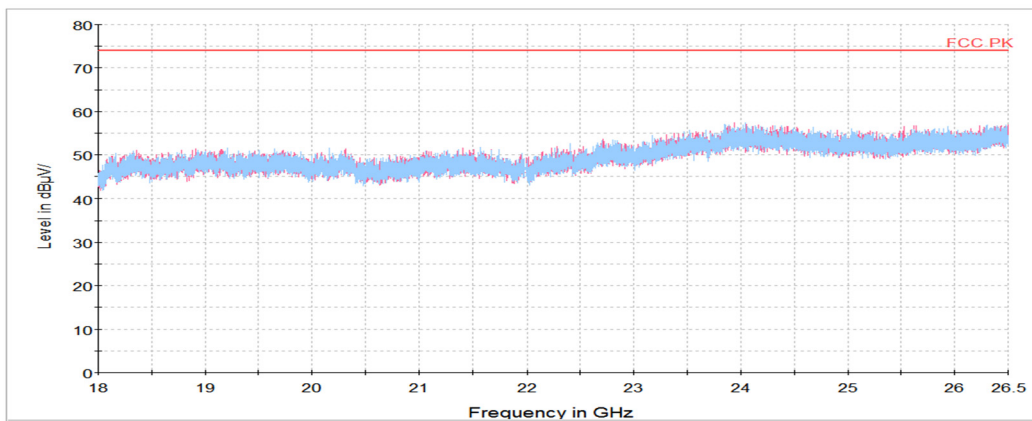
**Horizontal/Vertical for 1 GHz ~ 3.5 GHz**



**Horizontal/Vertical for 3.5 GHz ~ 18 GHz**



**Horizontal/Vertical for 18 GHz ~ 26.5 GHz**



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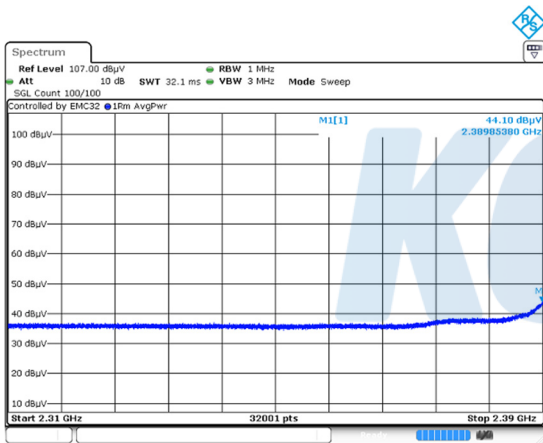


## 802.11b ANT 2

### Lowest Channel (2 412 MHz)

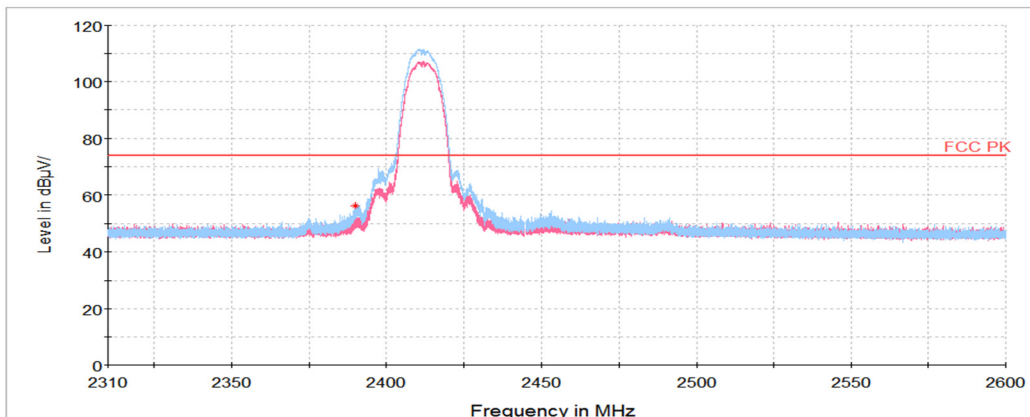
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
2 389.85 <sup>1)</sup>	H	53.38	31.88	-29.04	-	56.22	74.00	17.78
4 000.25 <sup>1)</sup>	V	67.54	33.00	-56.65	-	43.89	74.00	30.11
4 824.03 <sup>1)</sup>	H	67.85	33.93	-52.83	-	48.95	74.00	25.05
7 236.47	H	66.42	35.40	-51.87	-	49.95	74.00	24.05
<b>Average Data</b>								
2 389.85 <sup>1)</sup>	H	44.10	31.88	-29.04	0.22	47.16	54.00	6.84

### Average data (2 389.85 MHz)



Blank

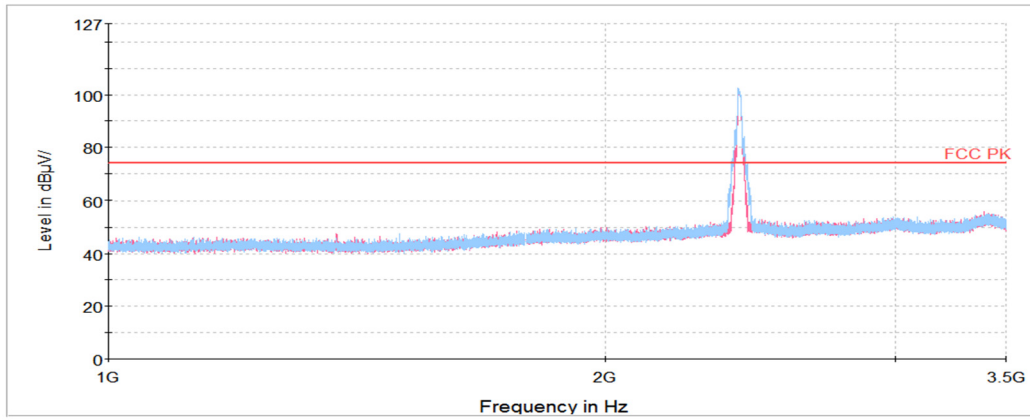
### Horizontal/Vertical for Band-edge



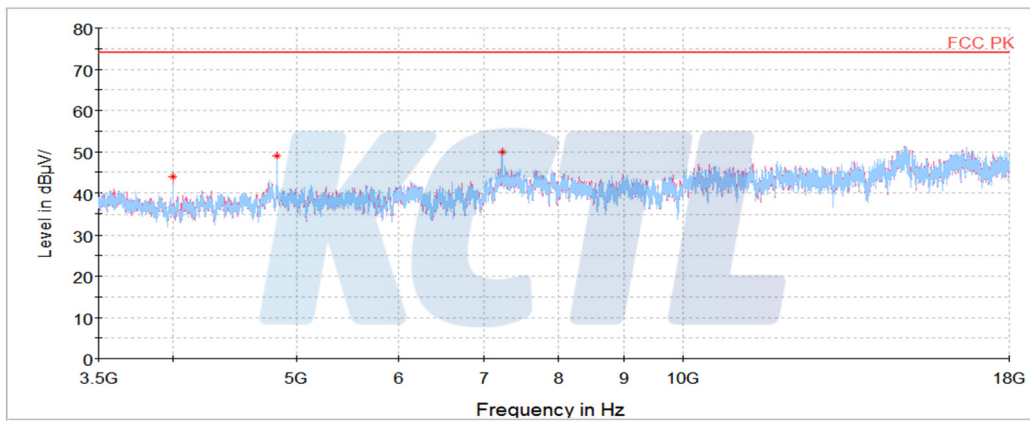
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KCTL-TIR001-003/2

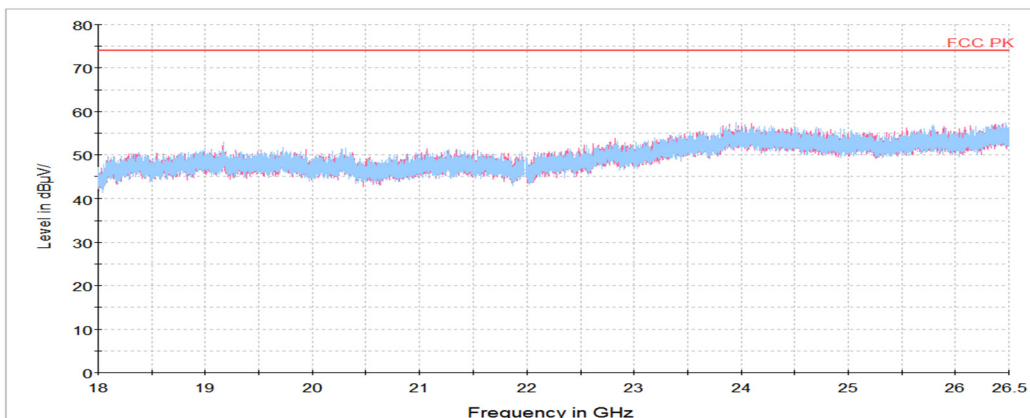
**Horizontal/Vertical for 1 GHz ~ 3.5 GHz**



**Horizontal/Vertical for 3.5 GHz ~ 18 GHz**



**Horizontal/Vertical for 18 GHz ~ 26.5 GHz**



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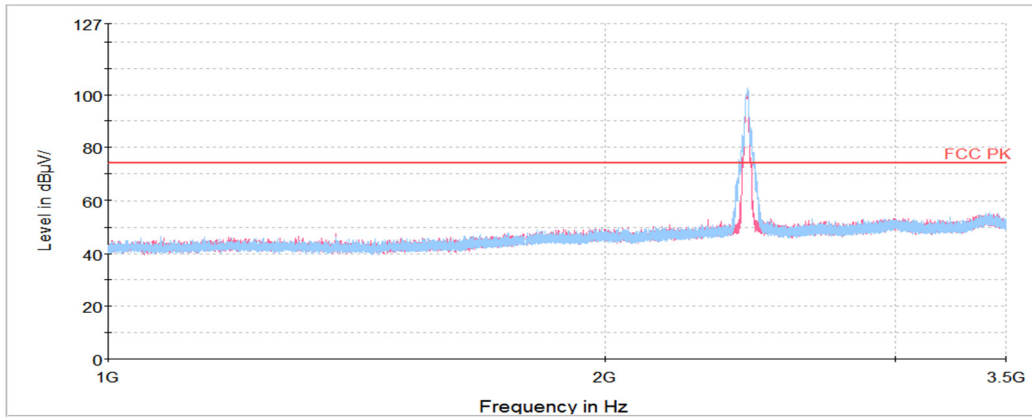
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**Middle Channel (2 437 MHz)**

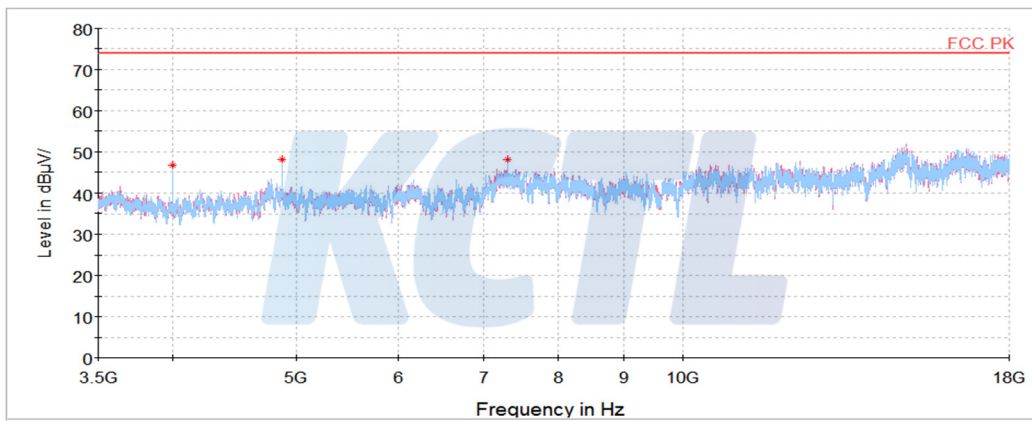
Frequency (MHz)	Pol. (V/H)	Reading (dB( $\mu V$ ))	Ant. Factor (dB)	Amp. + Cable (dB)	DCCF (dB)	Result (dB( $\mu V/m$ ))	Limit (dB( $\mu V/m$ ))	Margin (dB)
<b>Peak data</b>								
3 999.80 <sup>1)</sup>	V	70.20	33.00	-56.65	-	46.55	74.00	27.45
4 873.88 <sup>1)</sup>	H	68.38	33.95	-54.20	-	48.13	74.00	25.87
7 308.52 <sup>1)</sup>	H	64.19	35.40	-51.51	-	48.08	74.00	25.92
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit								



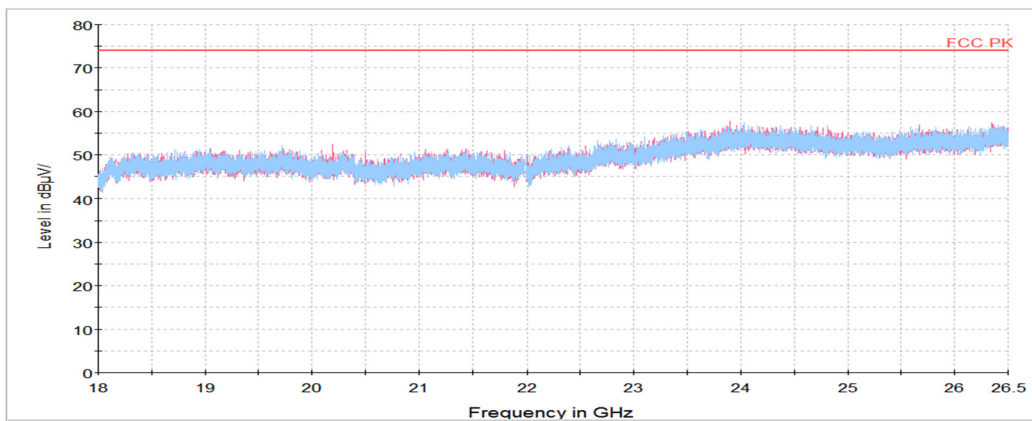
**Horizontal/Vertical for 1 GHz ~ 3.5 GHz**



**Horizontal/Vertical for 3.5 GHz ~ 18 GHz**



**Horizontal/Vertical for 18 GHz ~ 26.5 GHz**



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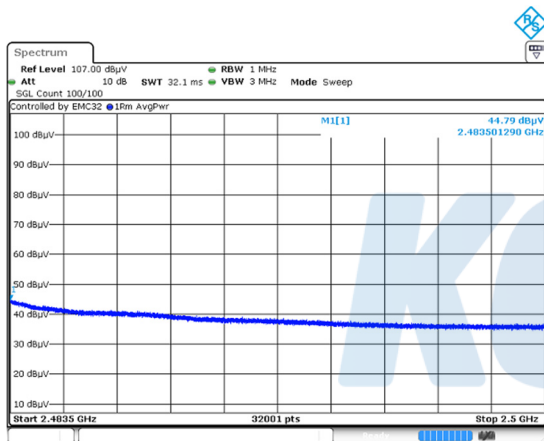
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## Highest Channel (2 462 MHz)

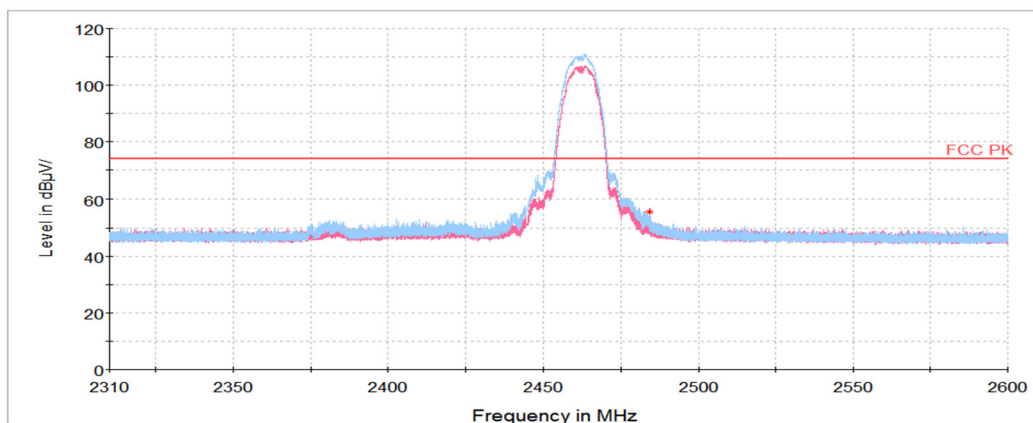
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
<b>Peak data</b>								
2 483.50 <sup>1)</sup>	H	52.56	32.07	-29.21	-	55.42	74.00	18.58
4 000.25 <sup>1)</sup>	V	72.39	33.00	-56.65	-	48.74	74.00	25.26
4 923.72 <sup>1)</sup>	H	68.16	33.97	-54.88	-	47.25	74.00	26.75
7 385.09 <sup>1)</sup>	H	64.42	35.40	-51.14	-	48.68	74.00	25.32
<b>Average Data</b>								
2 483.50 <sup>1)</sup>	H	44.79	32.07	-29.21	0.22	47.87	54.00	6.13

## Average data (2 487.54 MHz)



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## Horizontal/Vertical for Band-edge

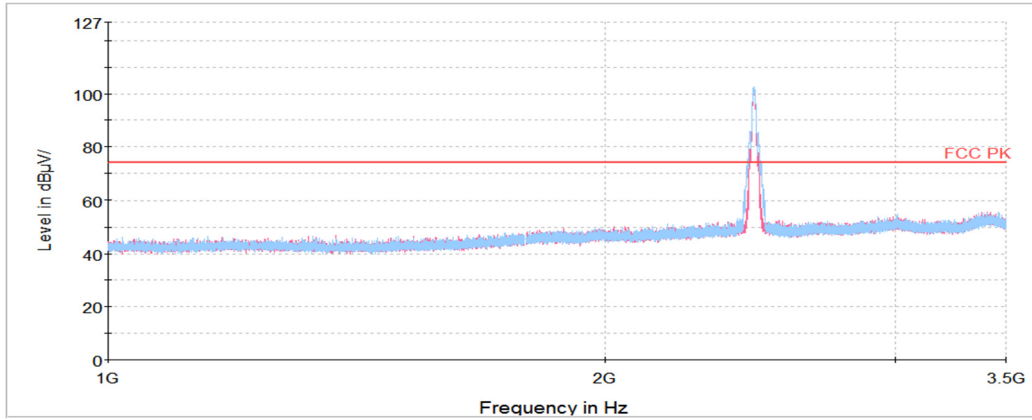


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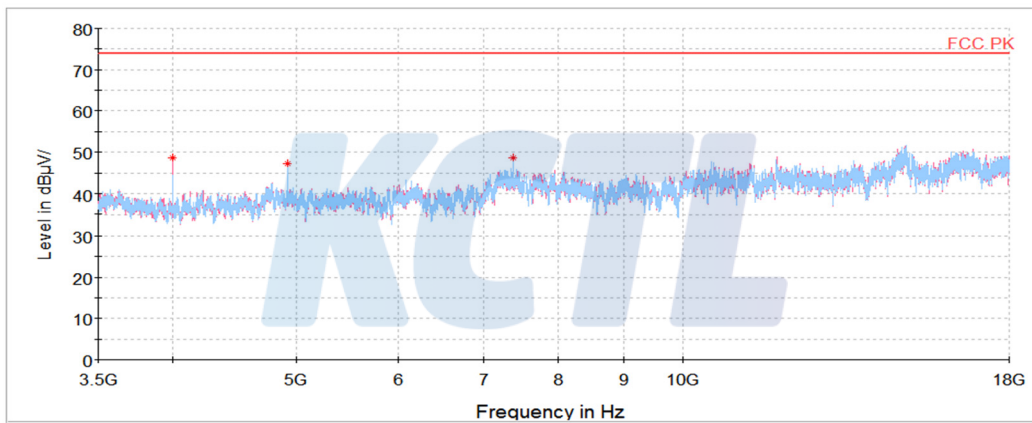
KCTL-TIR001-003/2



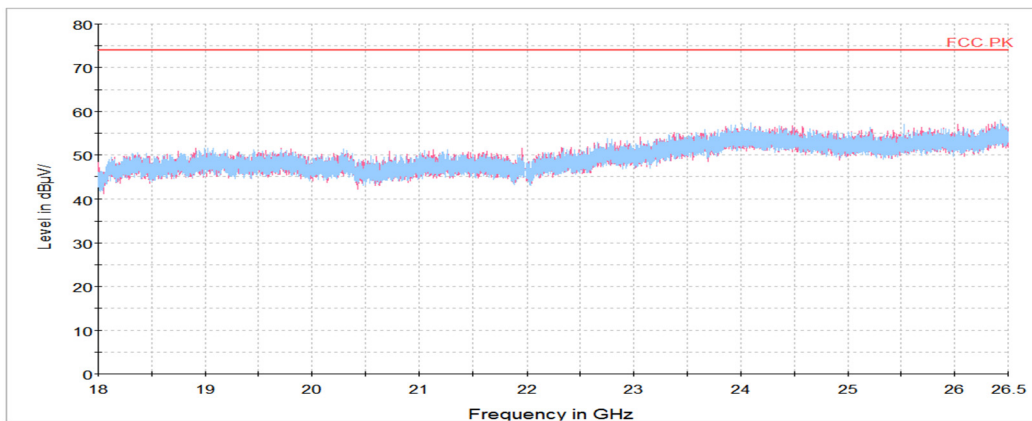
**Horizontal/Vertical for 1 GHz ~ 3.5 GHz**



**Horizontal/Vertical for 3.5 GHz ~ 18 GHz**



**Horizontal/Vertical for 18 GHz ~ 26.5 GHz**





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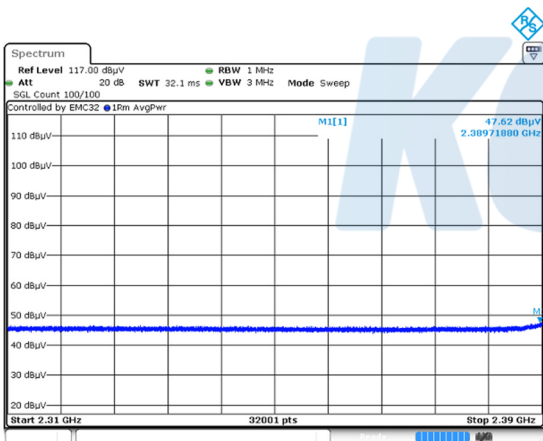


## 802.11b 3TX MIMO

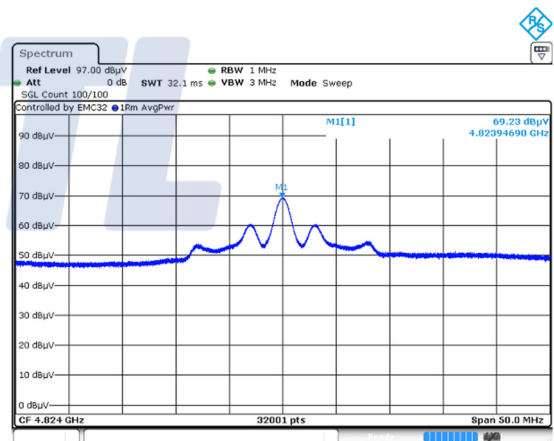
### Lowest Channel (2 412 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
<b>Peak data</b>								
2 389.72 <sup>1)</sup>	V	55.73	31.88	-29.04	-	58.57	74.00	15.43
3 999.80 <sup>1)</sup>	H	71.82	33.00	-56.65	-	48.17	74.00	25.83
4 823.95 <sup>1)</sup>	H	70.65	33.93	-52.83	-	51.75	74.00	22.25
7 236.92	H	61.44	35.40	-51.87	-	44.97	74.00	29.03
<b>Average Data</b>								
2 389.72 <sup>1)</sup>	V	47.62	31.88	-29.04	0.22	50.68	54.00	3.32
4 823.95 <sup>1)</sup>	H	69.23	33.93	-52.83	0.22	50.55	54.00	3.45

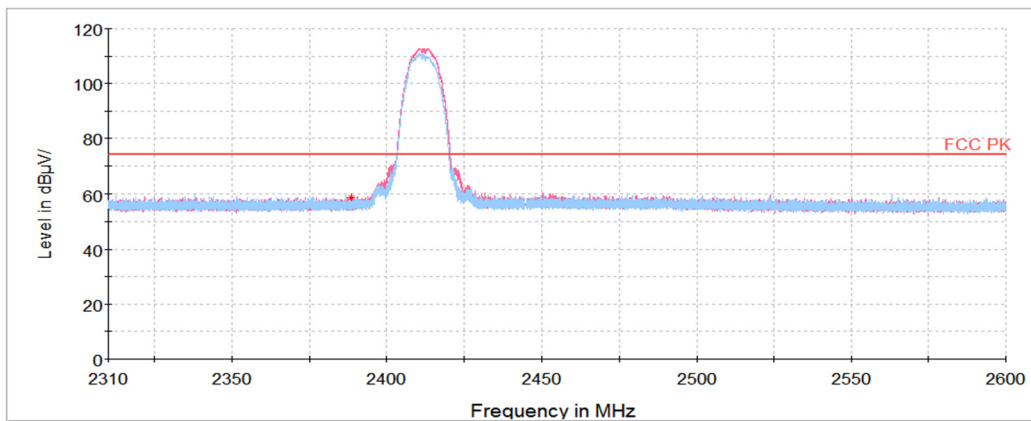
Average data (2 389.72 MHz)



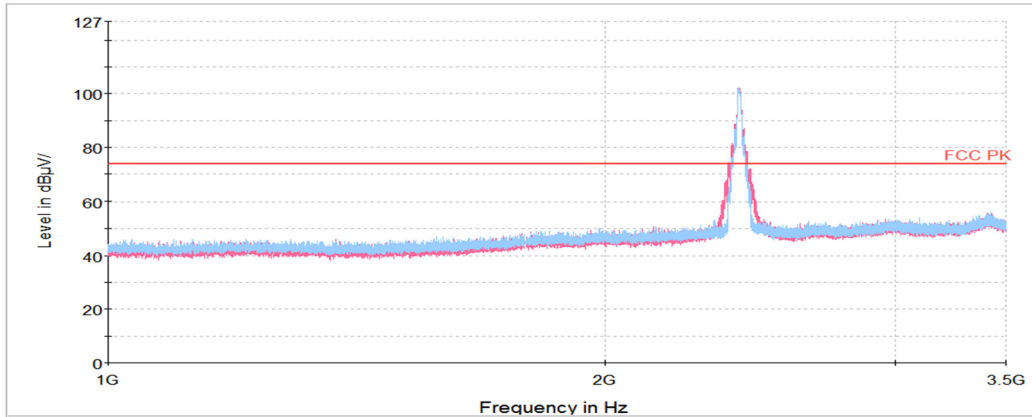
Average data (4 823.95 MHz)



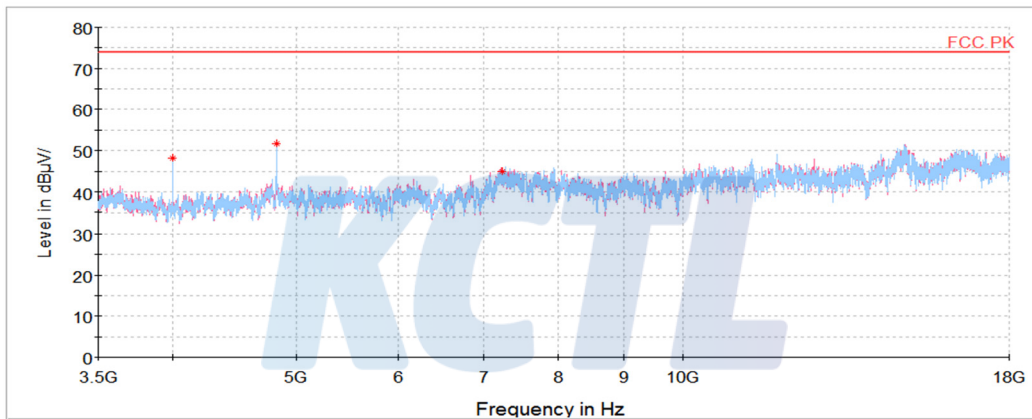
### Horizontal/Vertical for Band-edge



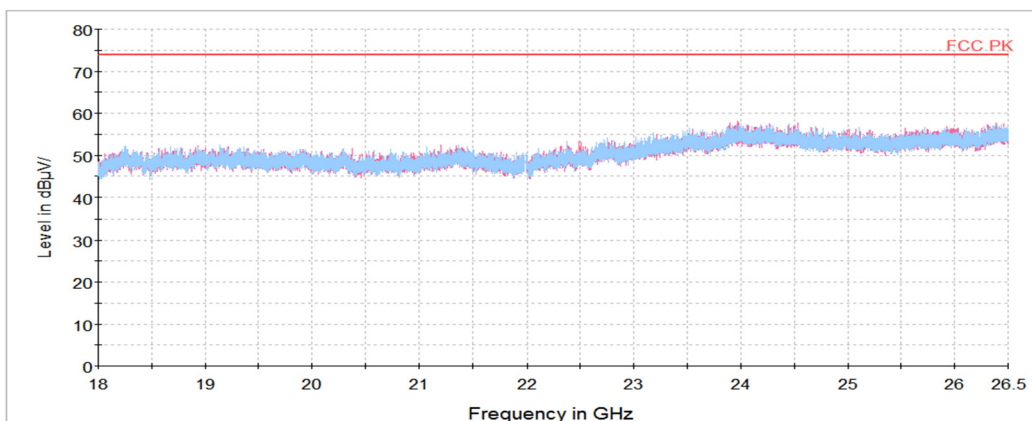
### Horizontal/Vertical for 1 GHz ~ 3.5 GHz



**Horizontal/Vertical for 3.5 GHz ~ 18 GHz**



**Horizontal/Vertical for 18 GHz ~ 26.5 GHz**



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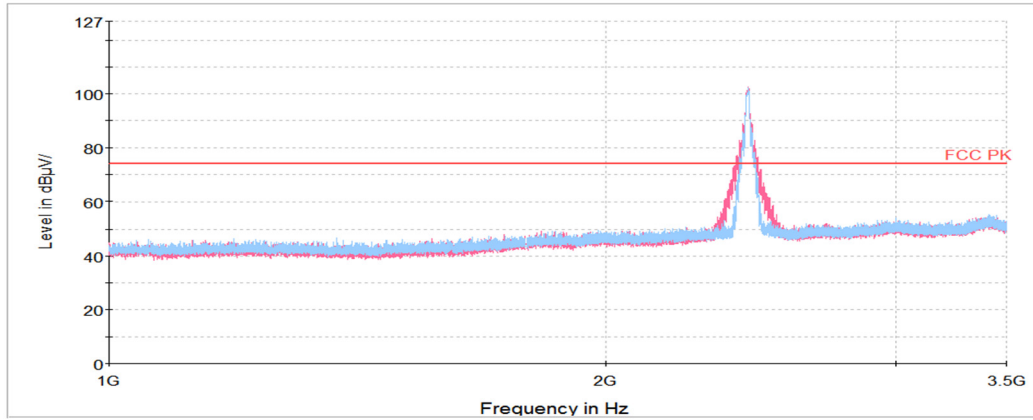
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**Middle Channel (2 437 MHz)**

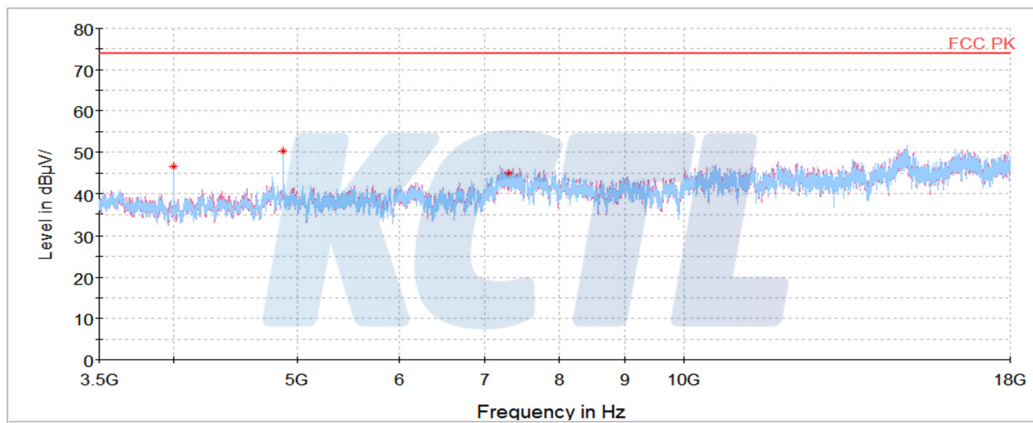
Frequency (MHz)	Pol. (V/H)	Reading (dB( $\mu$ V))	Ant. Factor (dB)	Amp. + Cable (dB)	DCCF (dB)	Result (dB( $\mu$ V/m))	Limit (dB( $\mu$ V/m))	Margin (dB)
<b>Peak data</b>								
3 999.80 <sup>1)</sup>	H	70.18	33.00	-56.65	-	46.53	74.00	27.47
4 873.42 <sup>1)</sup>	H	70.63	33.95	-54.19	-	50.39	74.00	23.61
7 310.33 <sup>1)</sup>	V	61.06	35.40	-51.50	-	44.96	74.00	29.04
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit								



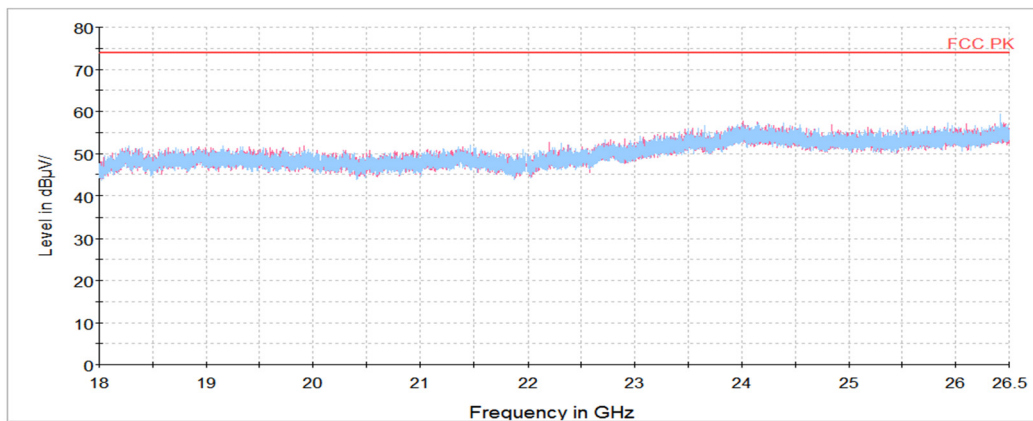
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**Horizontal/Vertical for 18 GHz ~ 26.5 GHz**



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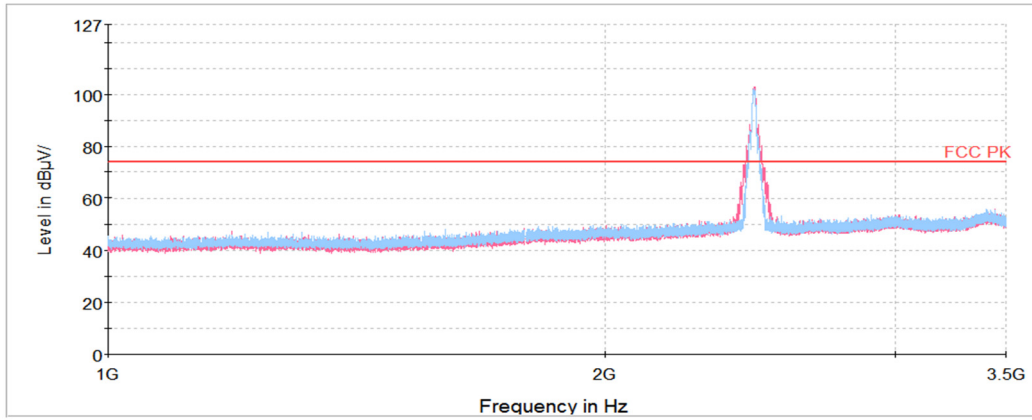
**Highest Channel (2 462 MHz)**

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
2 484.74 <sup>1)</sup>	V	56.28	32.07	-29.22	-	59.13	74.00	14.87
3 999.80 <sup>1)</sup>	V	70.82	33.00	-56.65	-	47.17	74.00	26.83
4 924.17 <sup>1)</sup>	H	68.05	33.97	-54.88	-	47.14	74.00	26.86
7 386.00 <sup>1)</sup>	H	60.19	35.40	-51.13	-	44.46	74.00	29.54
<b>Average Data</b>								
2 484.74 <sup>1)</sup>	V	47.76	32.07	-29.22	0.22	50.83	54.00	3.17

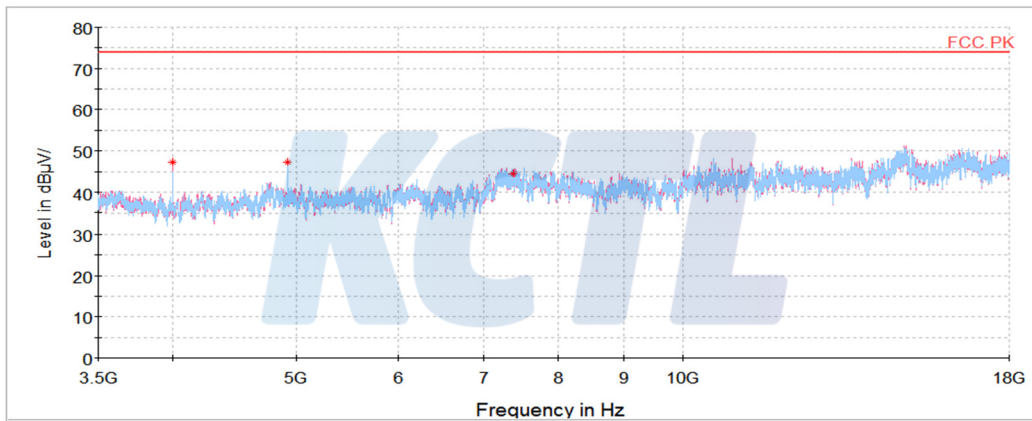
**Average data (2 484.74 MHz)**

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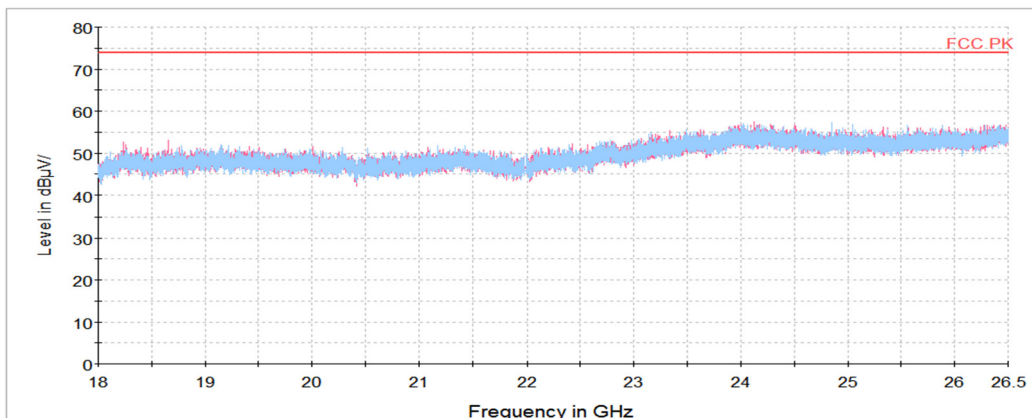
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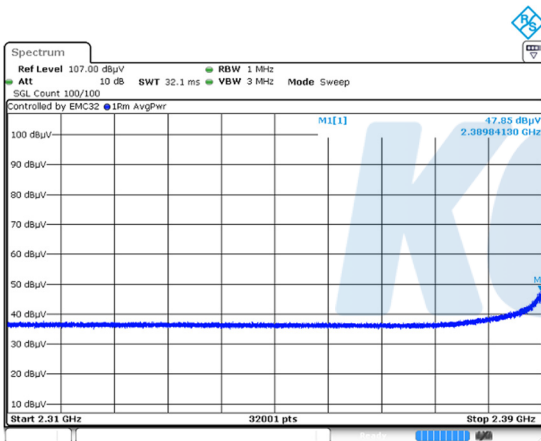


## 802.11g ANT 0

### Lowest Channel (2 412 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
2 375.07 <sup>1)</sup>	V	62.26	31.85	-29.12	-	64.99	74.00	9.01
4 000.25 <sup>1)</sup>	H	68.60	33.00	-56.65	-	44.95	74.00	29.05
4 824.94 <sup>1)</sup>	H	62.27	33.93	-52.85	-	43.35	74.00	30.65
7 239.64	H	61.90	35.40	-51.85	-	45.45	74.00	28.55
<b>Average Data</b>								
2 375.07 <sup>1)</sup>	V	47.85	31.85	-29.12	0.23	50.81	54.00	3.19

### Average data (2 375.07 MHz)



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### Horizontal/Vertical for Band-edge

