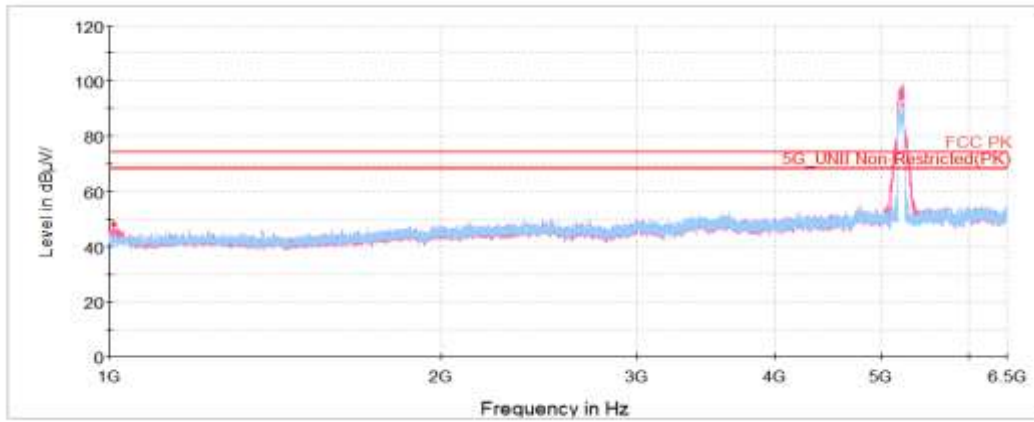
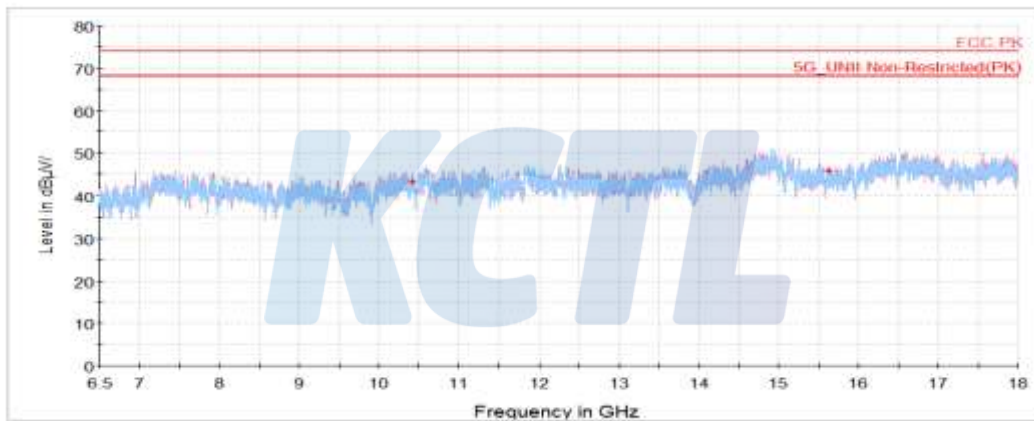
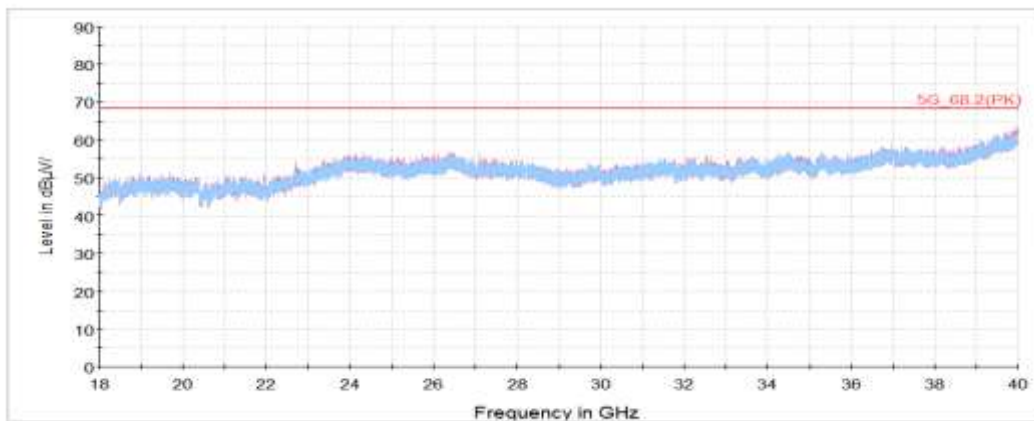


Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

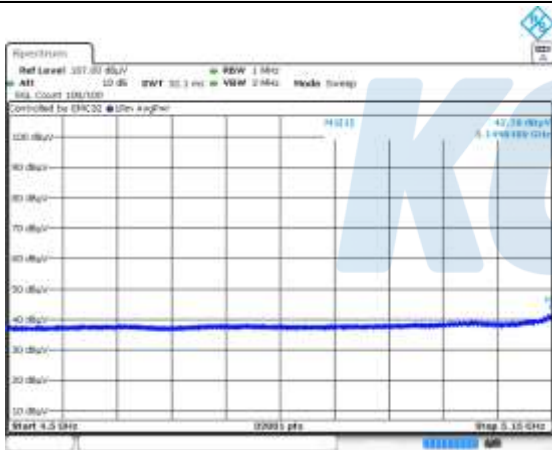
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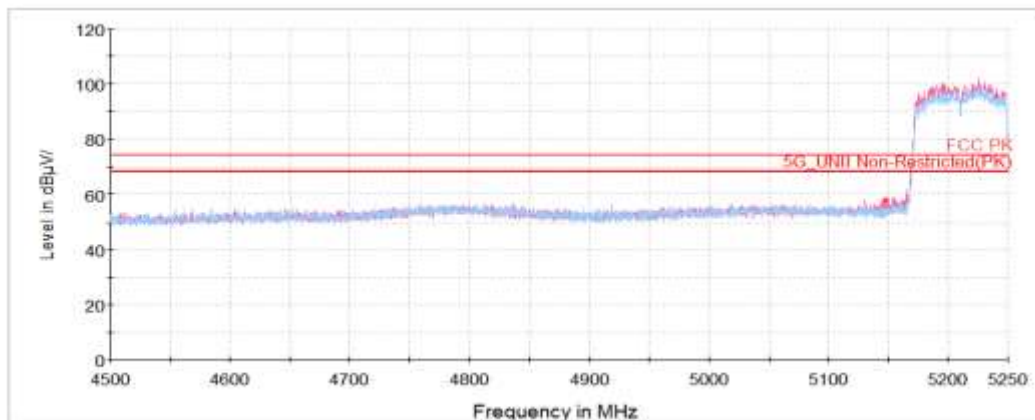
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**802.11ac VHT80 UNII 1 4TX MIMO****Middle Channel (5 210 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
3 473.00	H	68.16	32.59	-46.79	-	53.96	68.20	14.24
5 149.85 ¹⁾	V	50.60	34.24	-27.12	-	57.72	74.00	16.28
6 946.70	V	73.33	35.40	-52.80	-	55.93	68.20	12.27
10 421.86	V	60.01	37.32	-50.01	-	47.32	68.20	20.88
15 629.20 ¹⁾	H	54.68	40.03	-48.62	-	46.09	74.00	27.91
Average Data								
5 149.85 ¹⁾	V	42.78	34.24	-27.12	0.27	50.17	54.00	3.83

Average data (5 149.85 MHz)

Blank

Horizontal/Vertical for Band-edge

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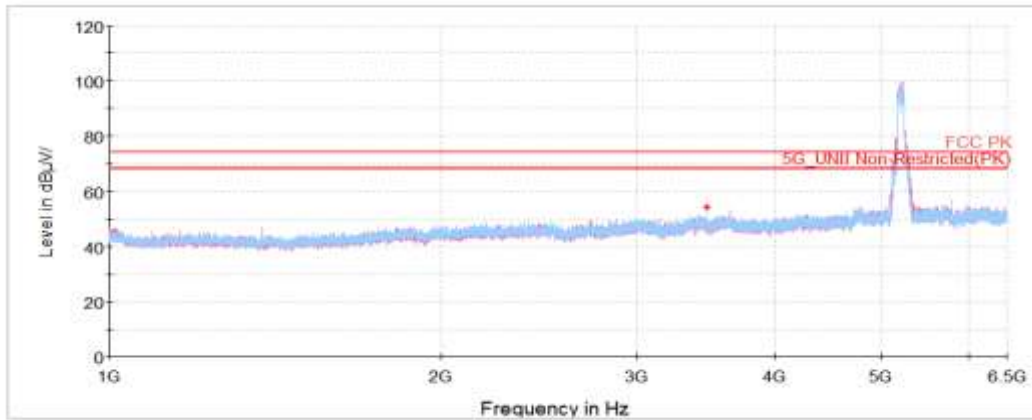
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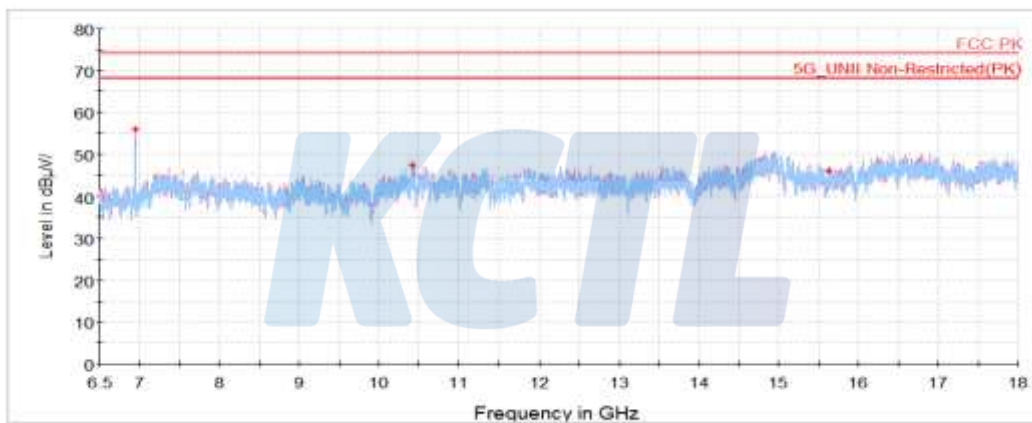
Page (528) of (1046)



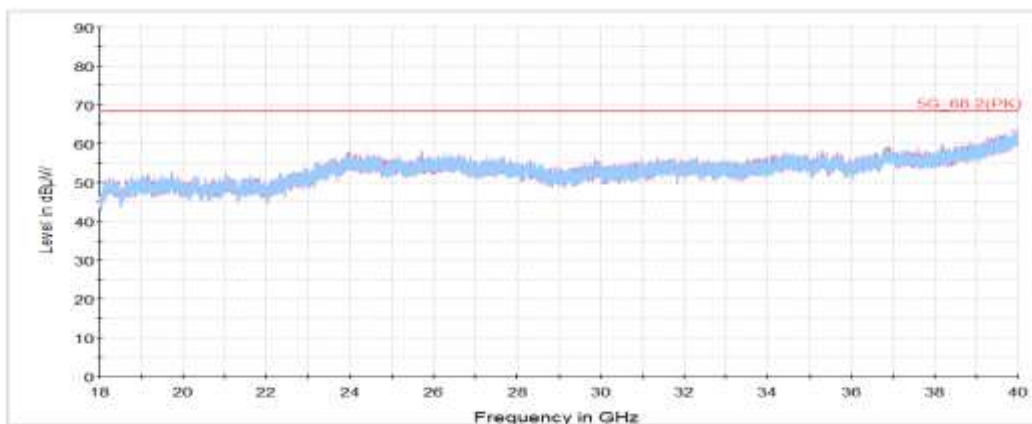
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz

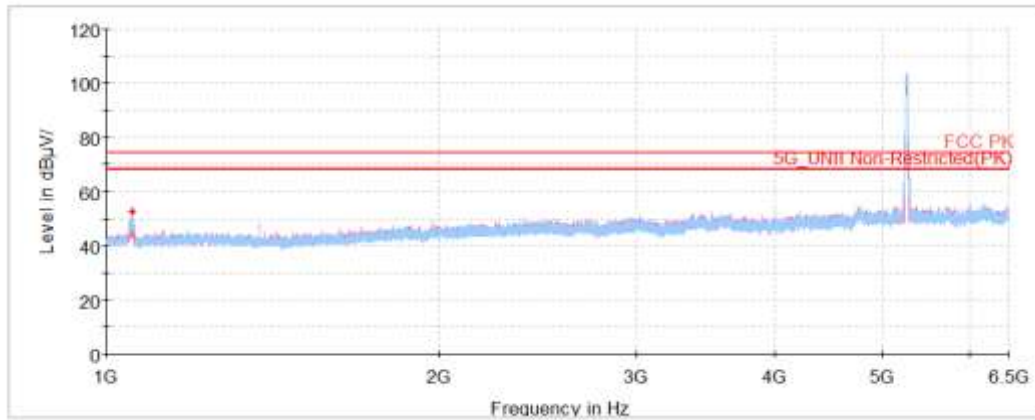
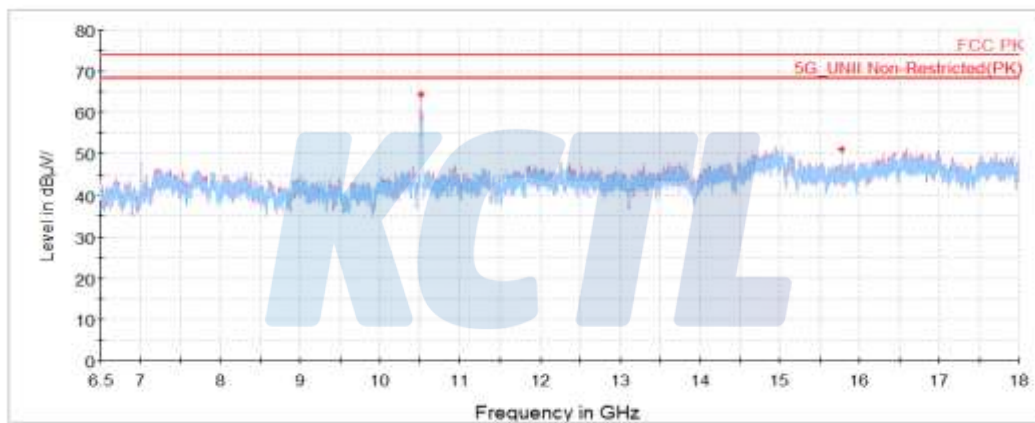
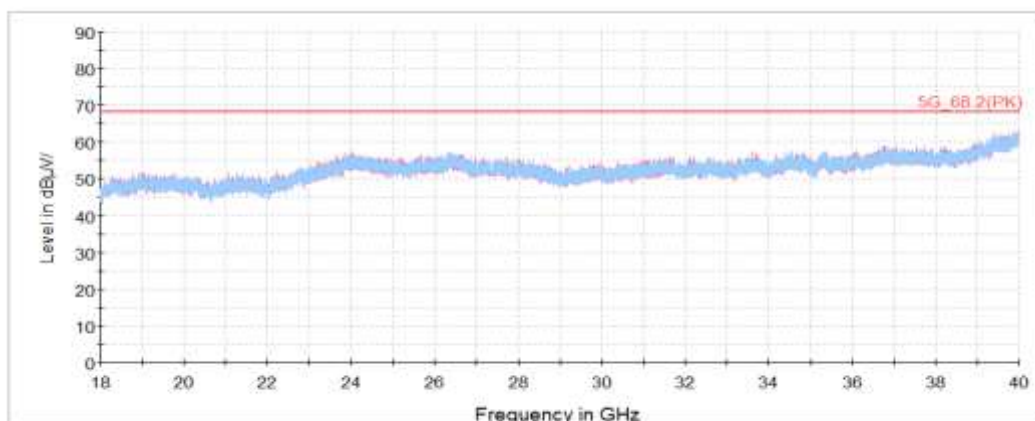


802.11a UNII 2A ANT 0

Lowest Channel (5 260 MHz)

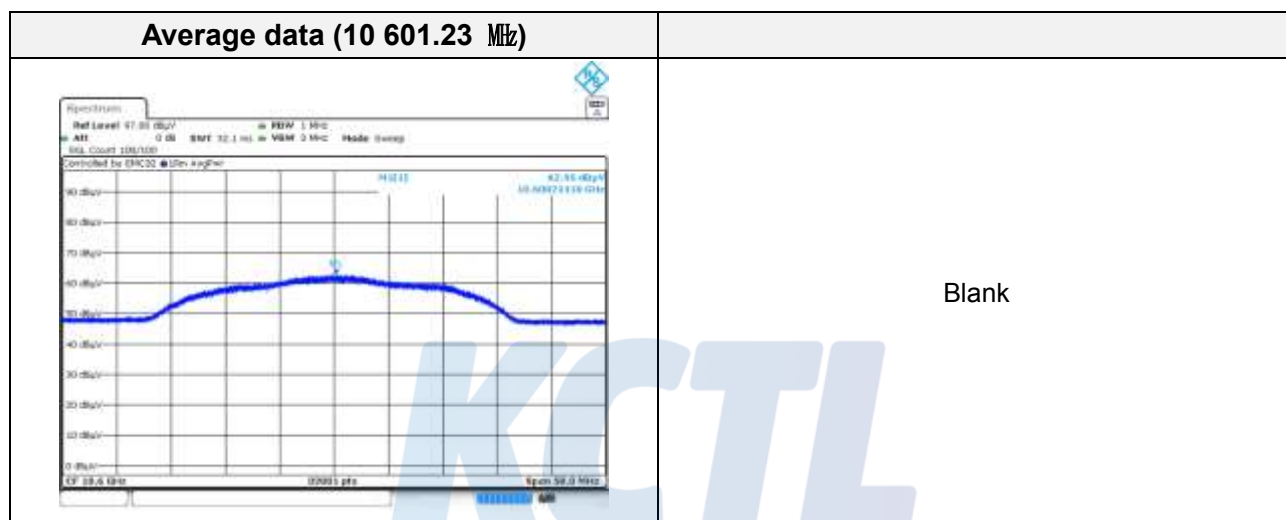
Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB($\mu V/m$))	(dB($\mu V/m$))	(dB)
Peak data								
10 517.81	V	76.71	37.41	-49.69	-	64.43	68.20	3.77
15 781.58 ¹⁾	H	59.53	40.06	-48.70	-	50.89	74.00	23.11
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

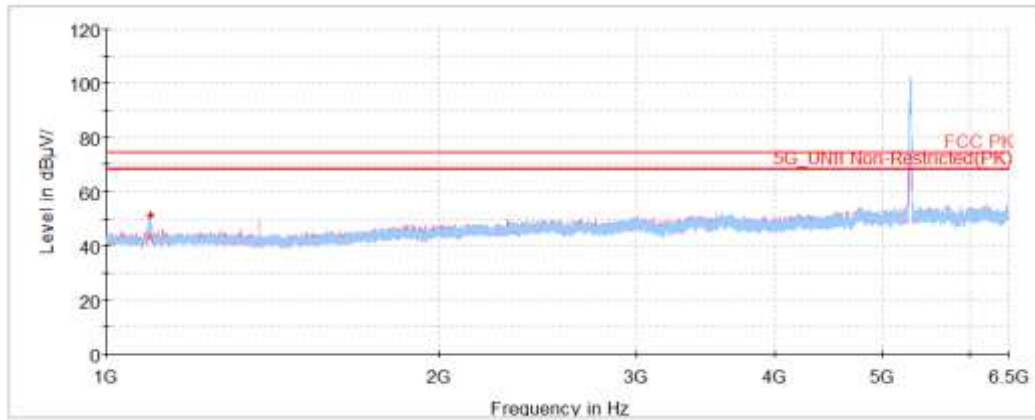
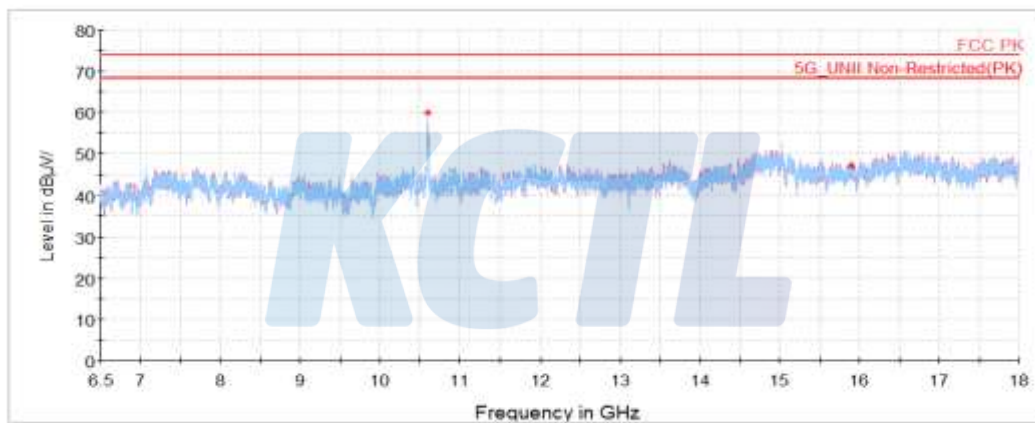
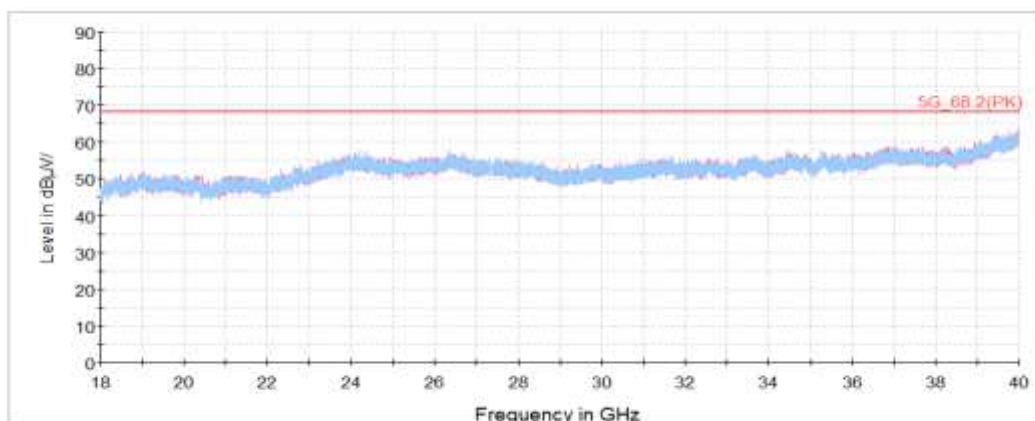
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Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

Middle Channel (5 300 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
10 601.23 ¹⁾	H	72.33	37.46	-49.88	-	59.91	74.00	14.09
15 900.53 ¹⁾	H	55.77	40.08	-48.76	-	47.09	74.00	26.91
Average Data								
10 601.23 ¹⁾	H	62.95	37.46	-49.88	0.22	50.75	54.00	3.25



Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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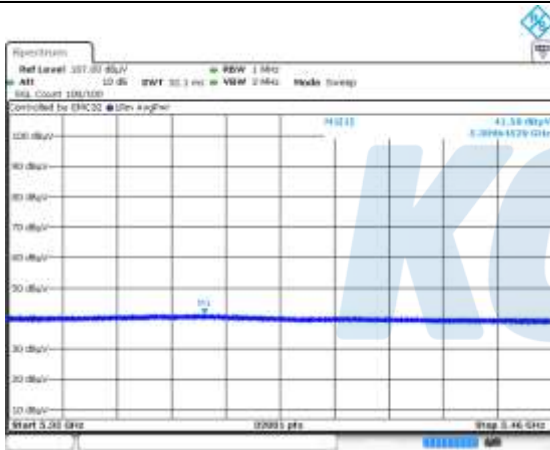
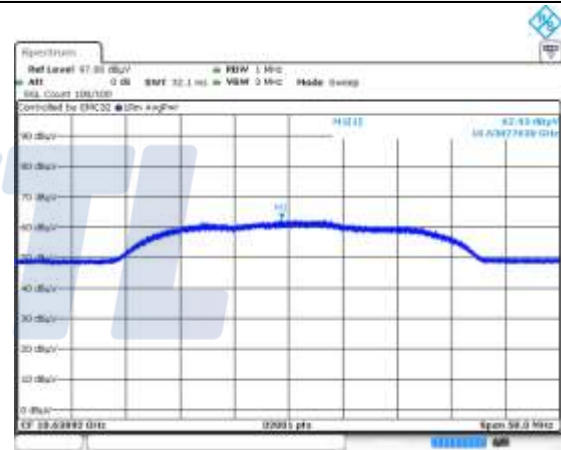
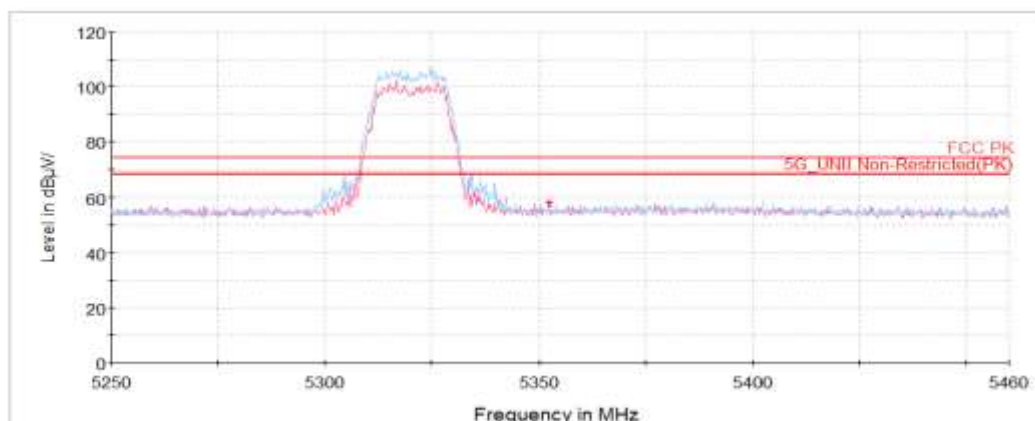
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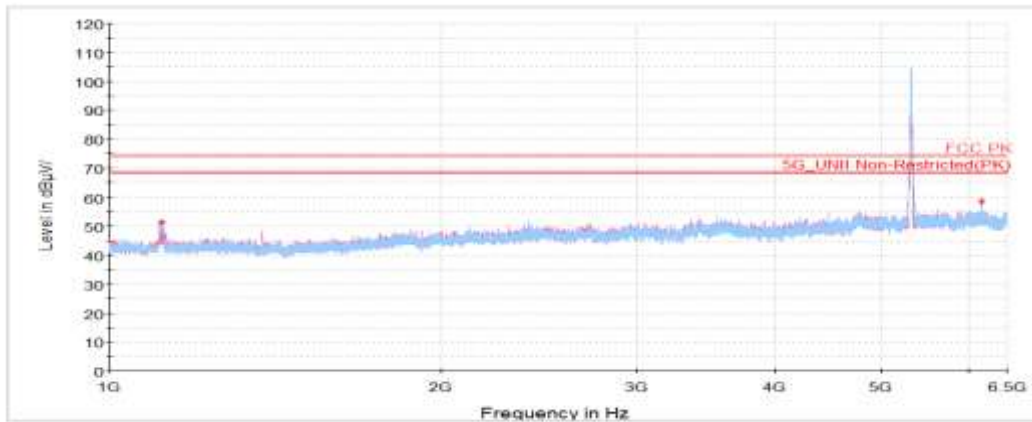
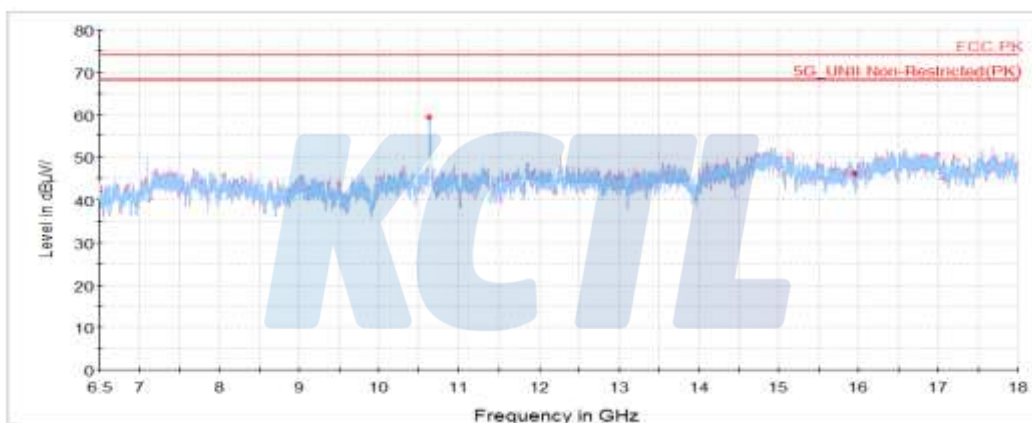
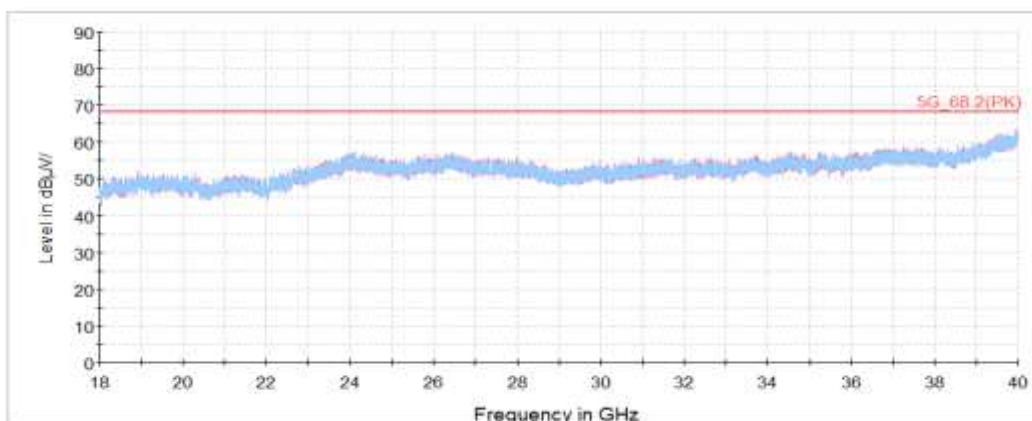
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**Highest Channel (5 320 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
6 161.41	H	67.88	35.40	-44.84	-	58.44	74.00	15.56
5 389.65 ¹⁾	H	49.82	34.62	-26.74	-	57.70	74.00	16.30
10 638.28 ¹⁾	V	71.83	37.48	-49.96	-	59.35	74.00	14.65
15 956.23 ¹⁾	V	54.72	40.09	-48.79	-	46.02	74.00	27.98
Average Data								
5 389.65 ¹⁾	H	41.58	34.62	-26.74	0.22	49.68	54.00	4.32
10 638.28 ¹⁾	V	62.93	37.48	-49.96	0.22	50.67	54.00	3.33

Average data (5 389.65 MHz)**Average data (10 638.28 MHz)****Horizontal/Vertical for Band-edge**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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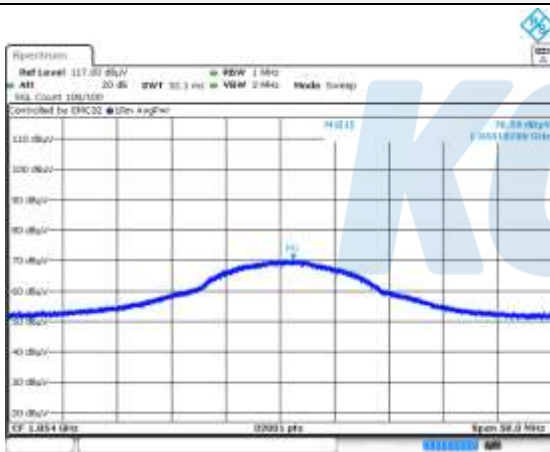
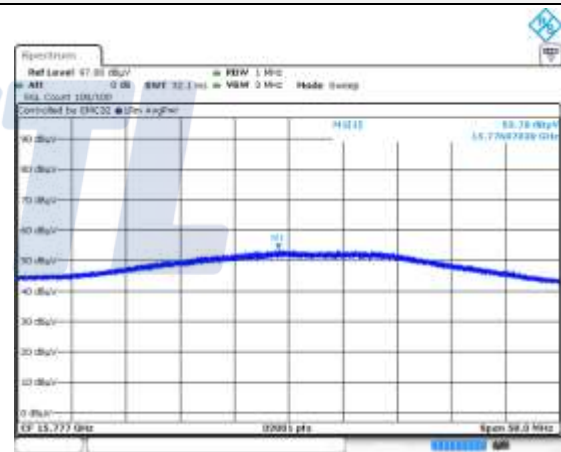
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**802.11a UNII 2A ANT 1****Lowest Channel (5 260 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 055.18 ¹⁾	H	77.62	27.82	-50.61	-	54.83	74.00	19.17
7 013.19	H	67.69	35.40	-52.62	-	50.47	68.20	17.73
10 529.31	V	61.66	37.42	-49.72	-	49.36	68.20	18.84
15 776.07 ¹⁾	V	67.49	40.06	-48.69	-	58.86	74.00	15.14
Average Data								
1 055.18 ¹⁾	H	70.59	27.82	-50.61	0.22	48.02	54.00	5.98
15 776.07 ¹⁾	H	53.78	40.06	-48.69	0.22	45.37	54.00	8.63

Average data (1 055.18 MHz)**Average data (15 776.07 MHz)**

KCTL Inc.

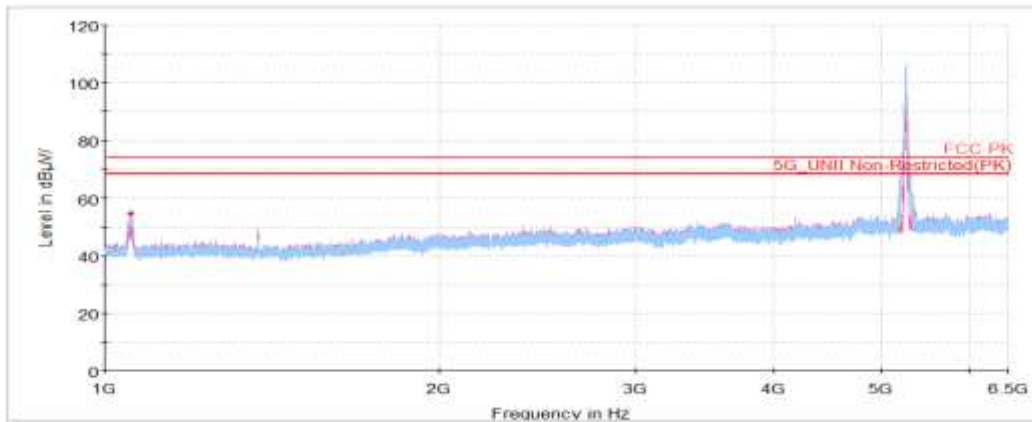
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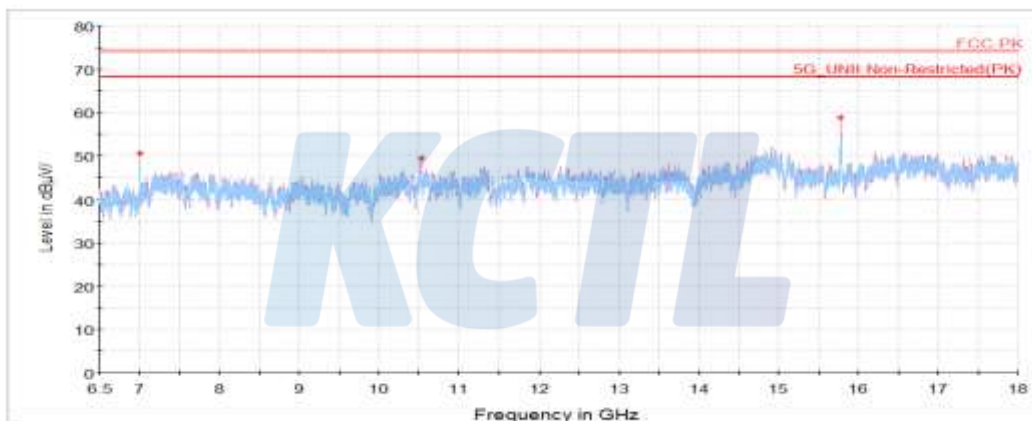
Page (536) of (1046)

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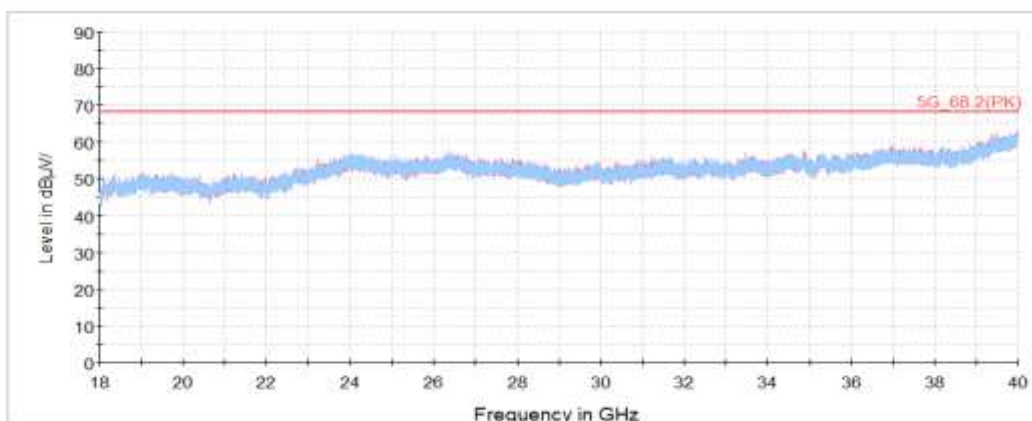
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



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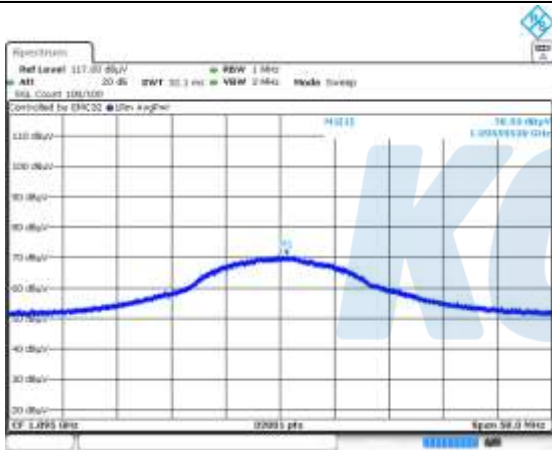
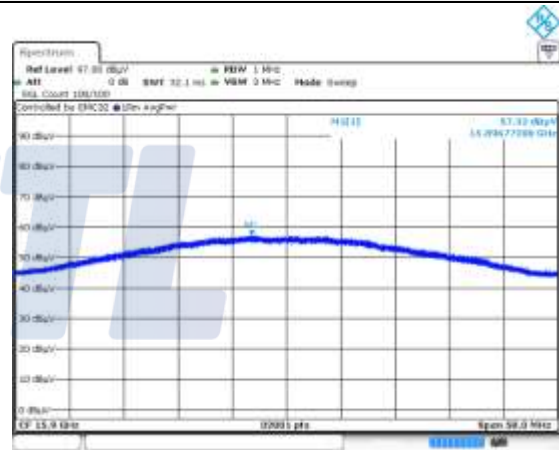
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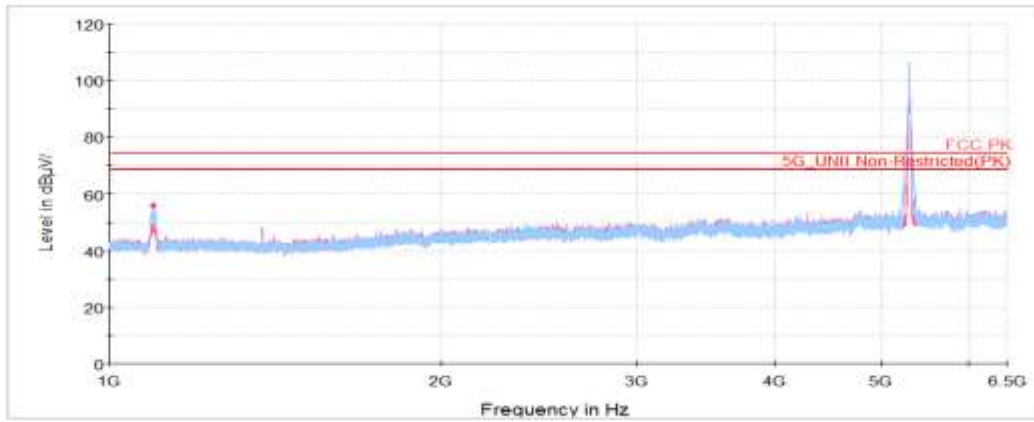
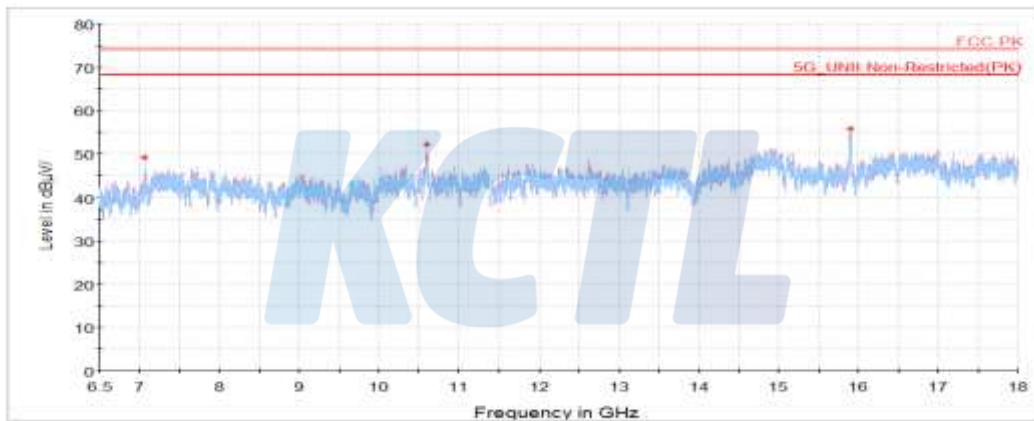
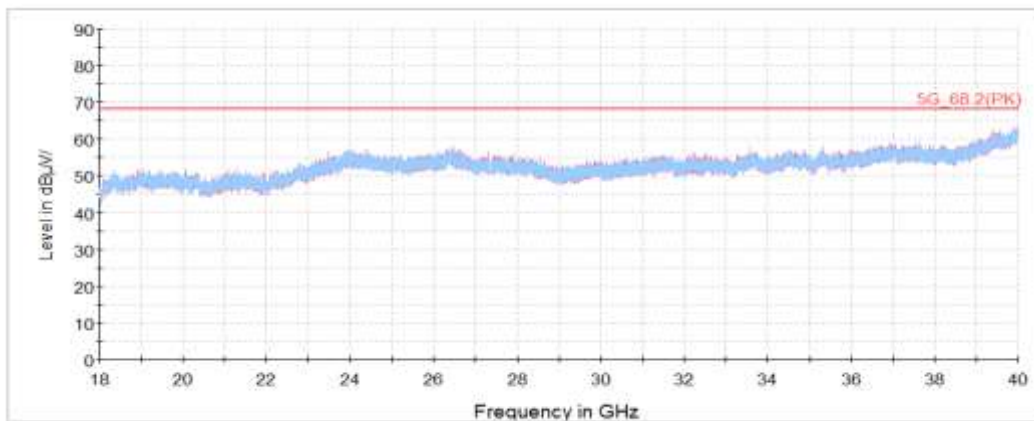
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**Middle Channel (5 300 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 095.60 ¹⁾	H	78.74	27.84	-50.62	-	55.96	74.00	18.04
7 066.73	H	66.00	35.40	-52.37	-	49.03	68.20	19.17
10 600.20 ¹⁾	V	64.61	37.46	-49.87	-	52.20	74.00	21.80
15 896.77 ¹⁾	V	64.35	40.08	-48.76	-	55.67	74.00	18.33
Average Data								
1 095.60 ¹⁾	H	70.93	27.84	-50.62	0.22	48.37	54.00	5.63
15 896.77 ¹⁾	V	57.32	40.08	-48.76	0.22	48.86	54.00	5.14

Average data (1 095.60 MHz)**Average data (15 896.77 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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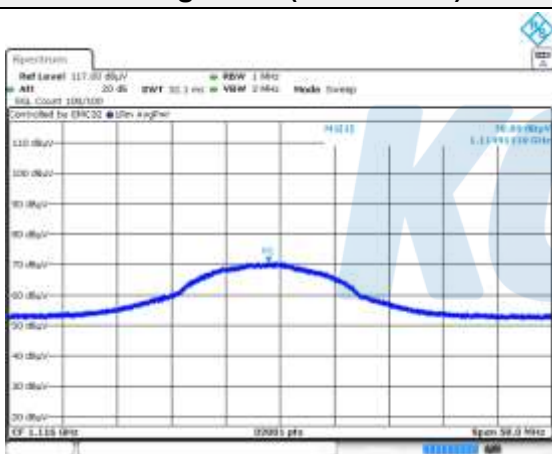
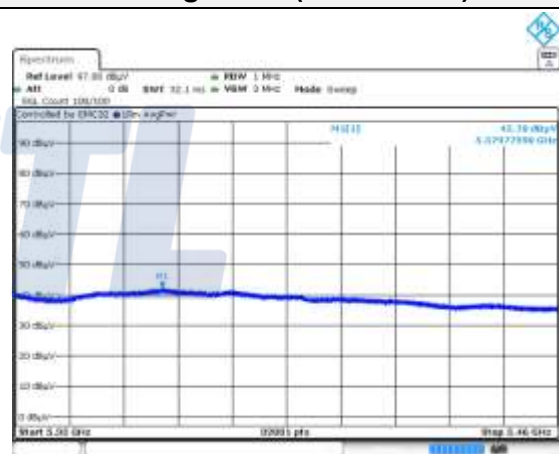
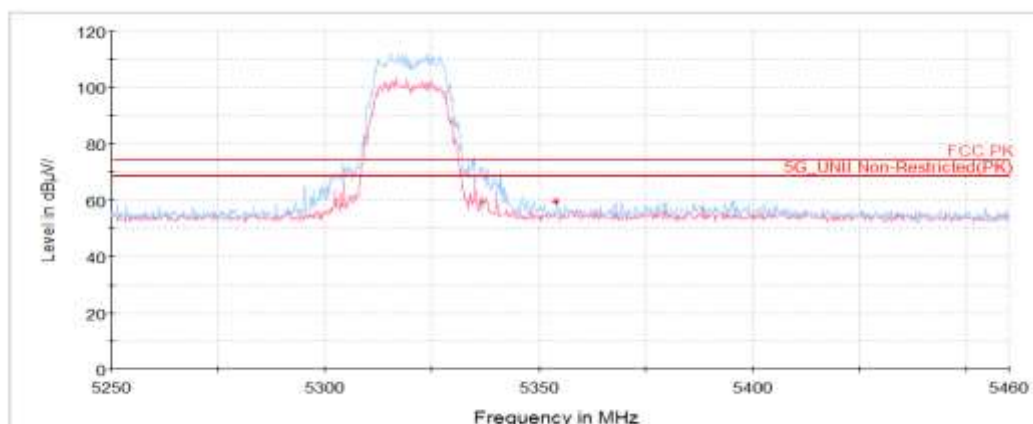
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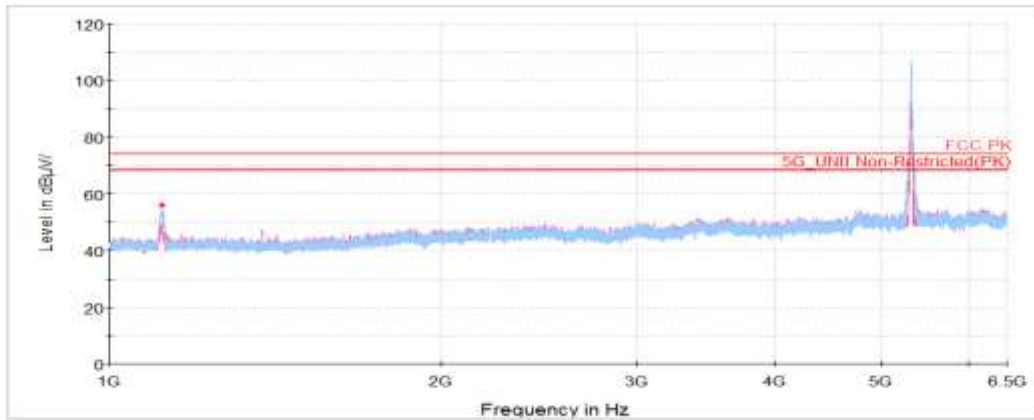
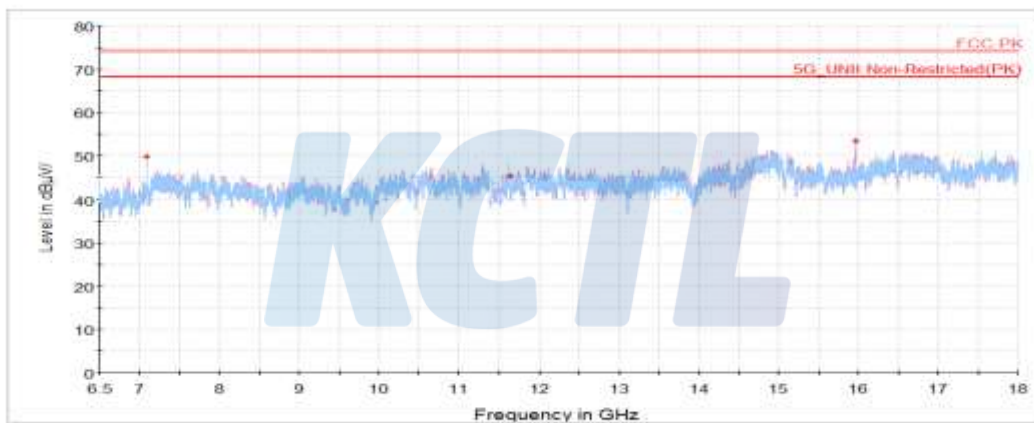
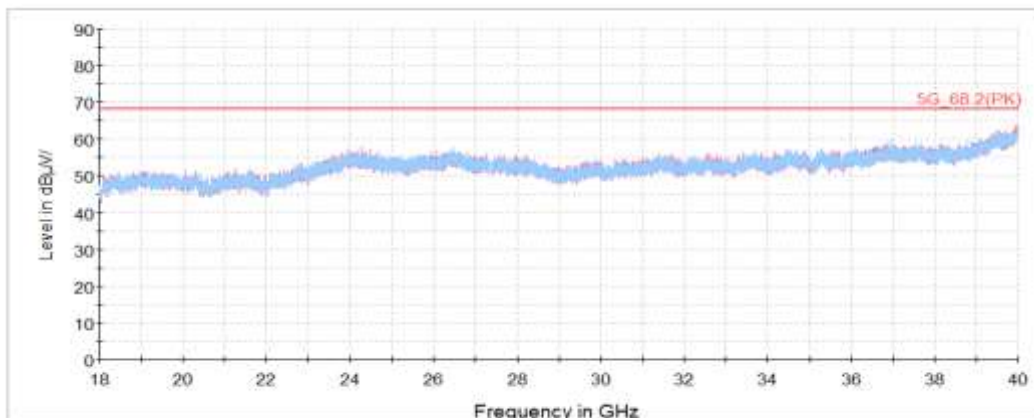
**Highest Channel (5 320 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 114.91 ¹⁾	H	78.87	27.85	-50.50	-	56.22	74.00	17.78
5 379.78 ¹⁾	H	51.41	34.61	-26.77	-	59.25	74.00	14.75
7 093.33	H	66.59	35.40	-52.25	-	49.74	68.20	18.46
11 637.27 ¹⁾	V	57.35	38.16	-50.14	-	45.37	74.00	28.63
15 956.09 ¹⁾	V	62.08	40.09	-48.79	-	53.38	74.00	20.62
Average Data								
1 114.91 ¹⁾	H	70.89	27.85	-50.50	0.22	48.46	54.00	5.54
5 379.78 ¹⁾	H	42.70	34.61	-26.77	0.22	50.76	54.00	3.24

Average data (1 114.91 MHz)**Average data (5 379.78 MHz)****Horizontal/Vertical for Band-edge**

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Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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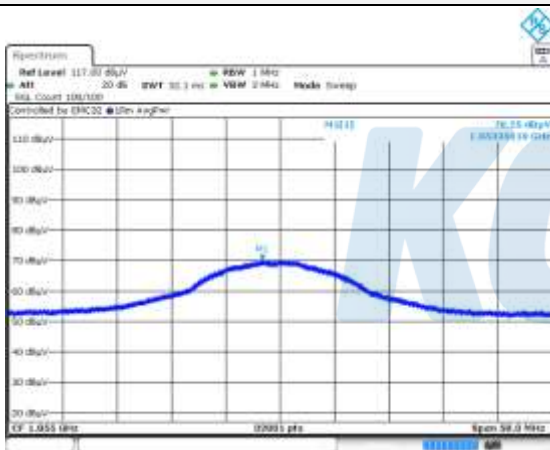
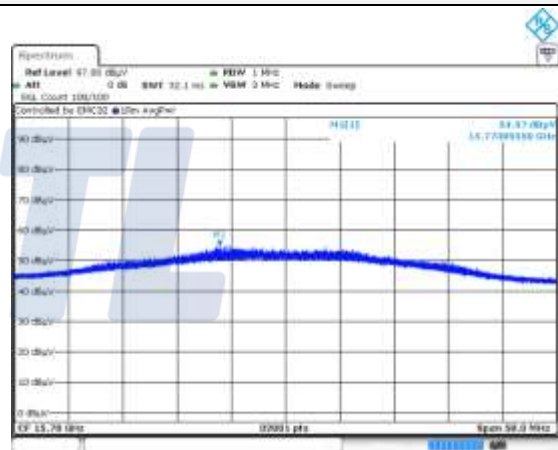
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**802.11a UNII 2A ANT 2****Lowest Channel (5 260 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 053.35 ¹⁾	V	77.69	27.82	-50.61	-	54.90	74.00	19.10
10 524.28	V	64.88	37.41	-49.71	-	52.58	68.20	15.62
15 773.90 ¹⁾	H	68.76	40.05	-48.69	-	60.12	74.00	13.88
Average Data								
1 053.35 ¹⁾	V	70.25	27.82	-50.61	0.22	47.68	54.00	6.32
15 773.90 ¹⁾	V	54.97	40.05	-48.69	0.22	46.55	54.00	7.45

Average data (1 053.35 MHz)**Average data (15 573.90 MHz)**

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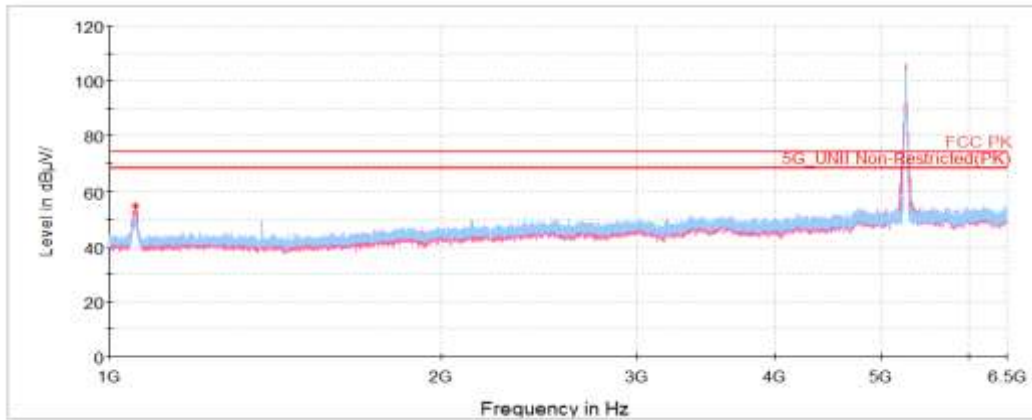
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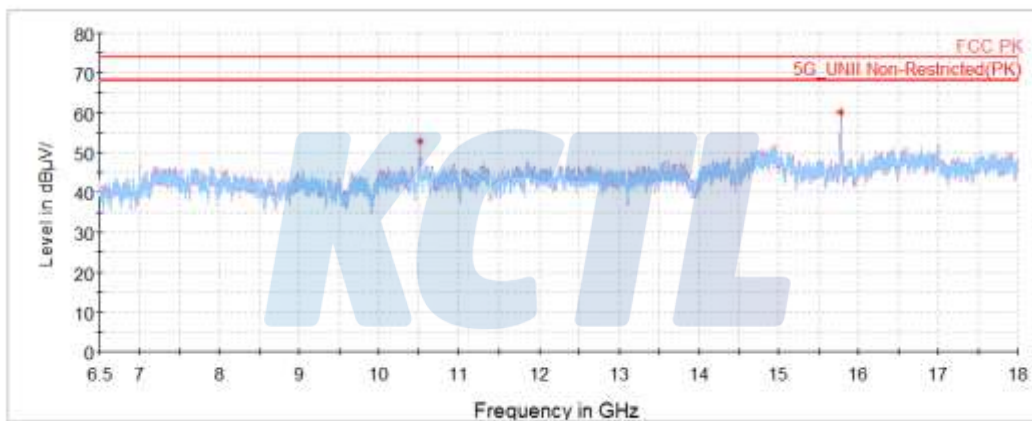
Page (542) of (1046)

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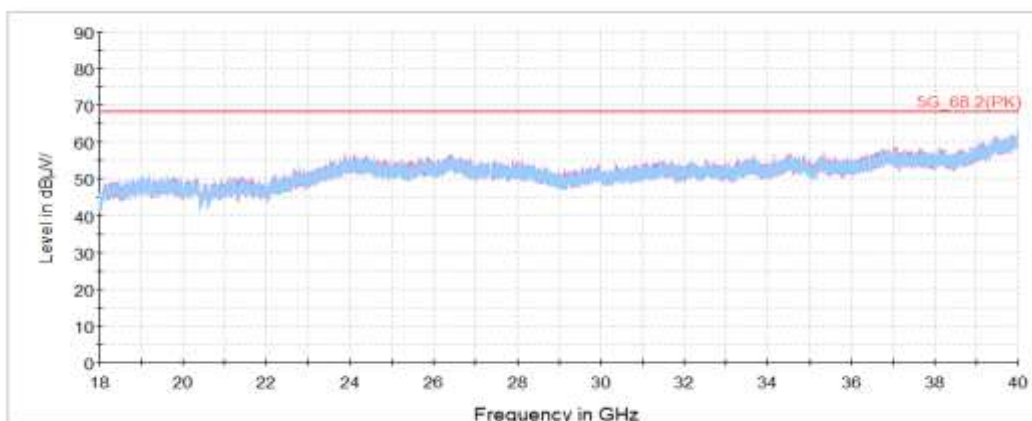
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



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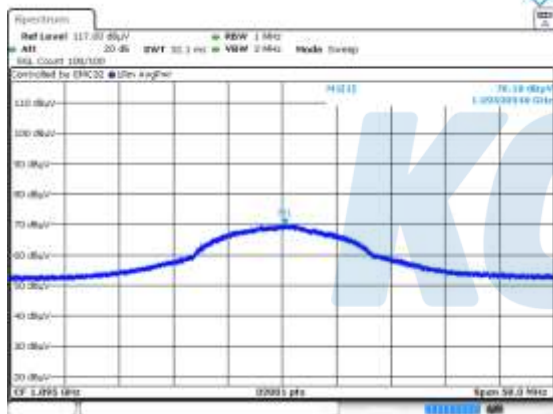
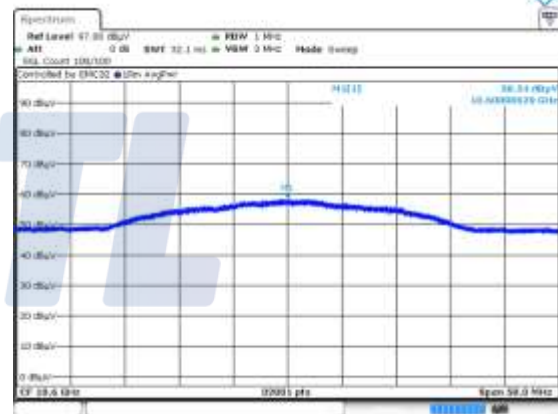
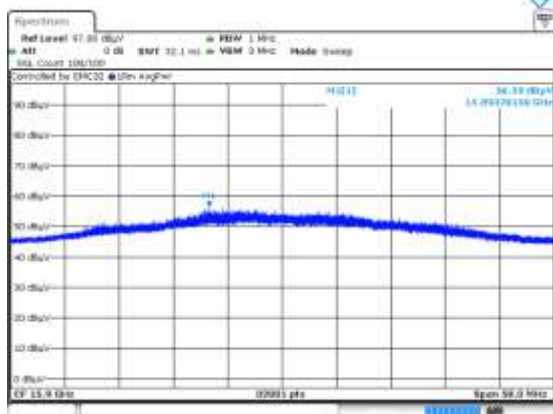
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**Middle Channel (5 300 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
1 095.31 ¹⁾	V	77.34	27.84	-50.62	-	54.56	74.00	19.44
10 600.01 ¹⁾	V	67.25	37.46	-49.87	-	54.84	74.00	19.16
15 893.28 ¹⁾	V	72.90	40.08	-48.76	-	64.22	74.00	9.78
Average Data								
1 095.31 ¹⁾	V	70.18	27.84	-50.62	0.22	47.62	54.00	6.38
10 600.01 ¹⁾	V	58.54	37.46	-49.87	0.22	46.35	54.00	7.65
15 893.28 ¹⁾	V	56.59	40.08	-48.76	0.22	48.13	54.00	5.87

Average data (1 095.31 MHz)**Average data (10 600.01 MHz)****Average data (15 893.28 MHz)**

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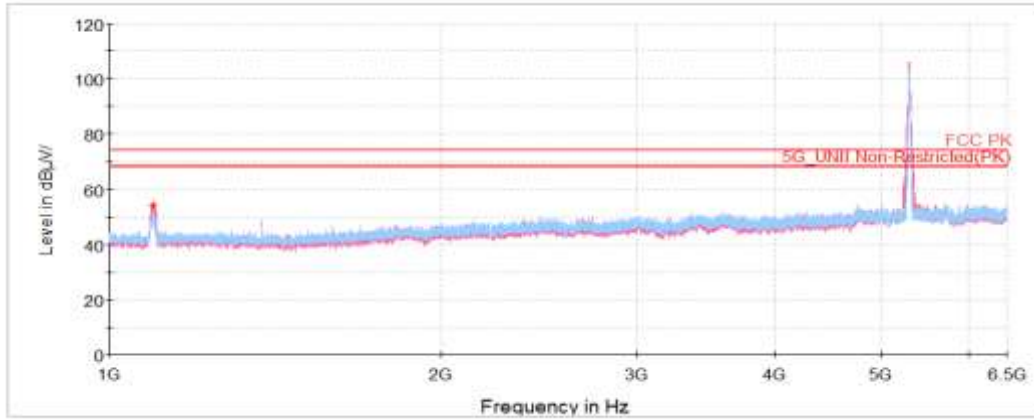
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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KR20-SRF0030-D

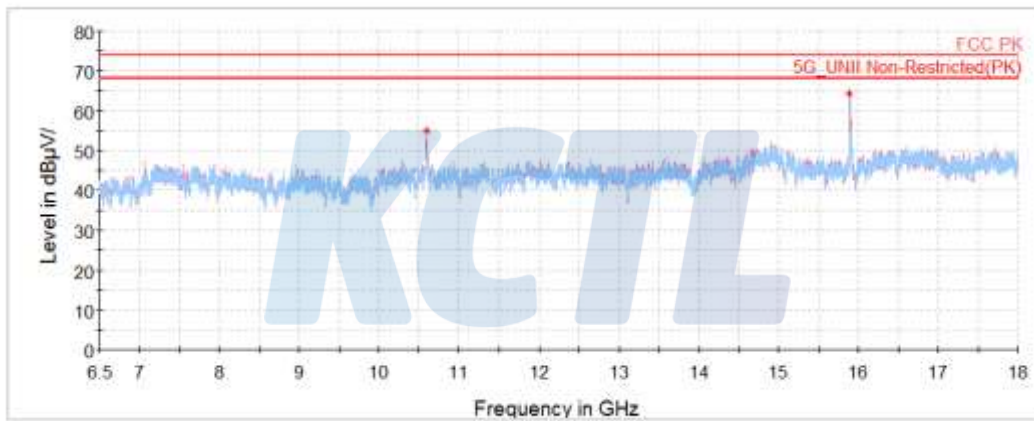
Page (544) of (1046)



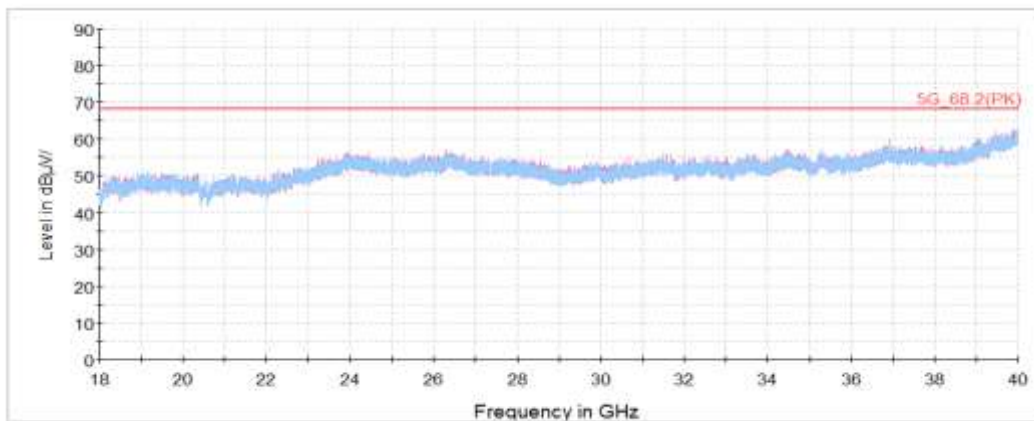
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



Highest Channel (5 320 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB($\mu V/m$))	(dB($\mu V/m$))	(dB)
Peak data								
1 115.45 ¹⁾	V	78.28	27.85	-50.49	-	55.64	74.00	18.36
5 350.03 ¹⁾	V	51.51	34.56	-26.84	-	59.23	74.00	14.77
10 641.77 ¹⁾	V	64.70	37.49	-49.96	-	52.23	74.00	21.77
15 953.40 ¹⁾	V	72.42	40.09	-48.79	-	63.72	74.00	10.28
Average Data								
1 115.45 ¹⁾	V	70.59	27.85	-50.49	0.22	48.17	54.00	5.83
5 350.03 ¹⁾	V	42.23	34.56	-26.84	0.22	50.17	54.00	3.83
15 953.40 ¹⁾	V	48.56	40.09	-48.79	0.22	40.08	54.00	13.92



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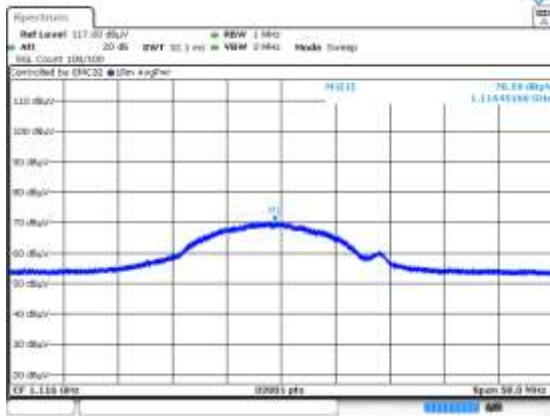
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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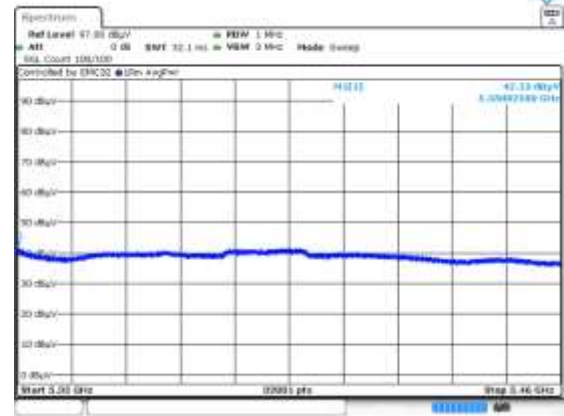
Page (546) of (1046)



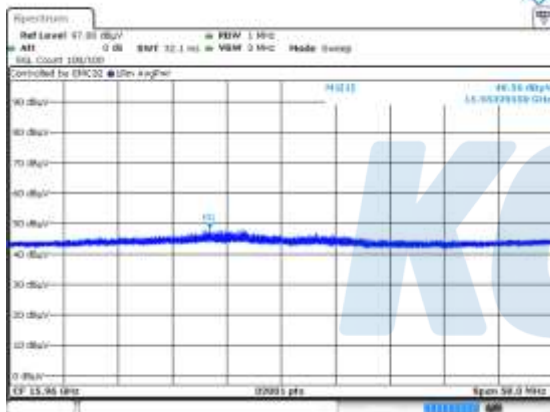
Average data (1 115.45 MHz)



Average data (5 350.03 MHz)

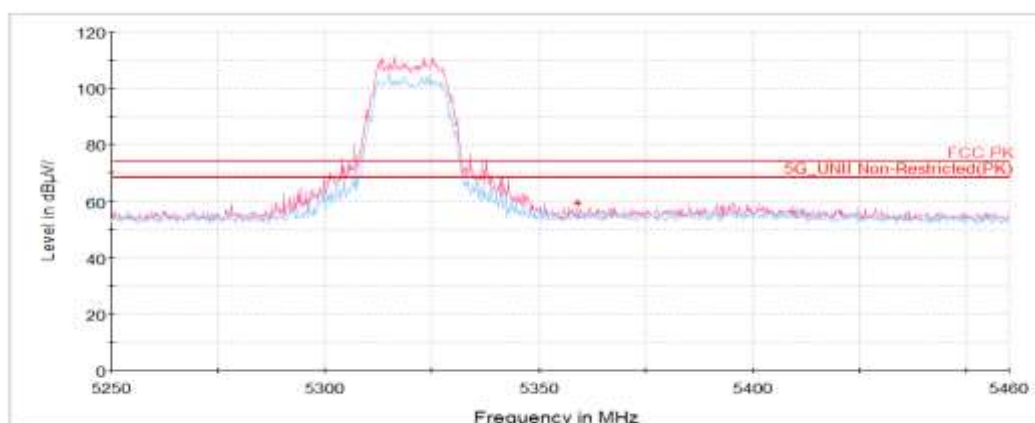


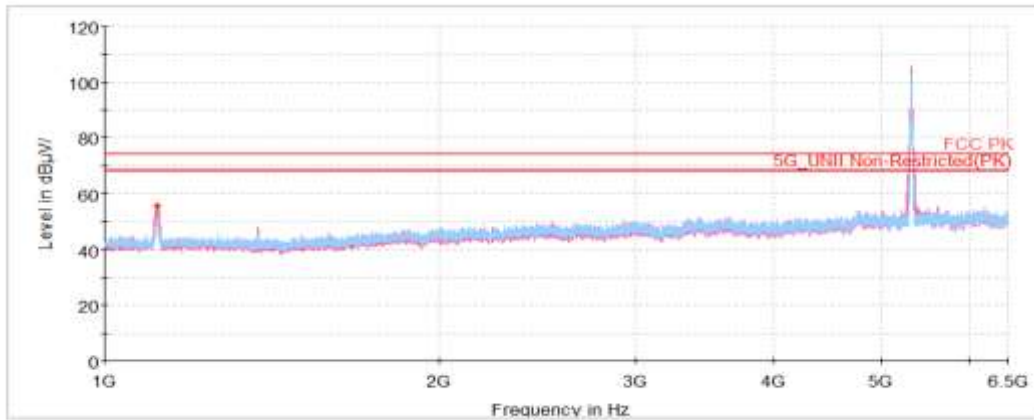
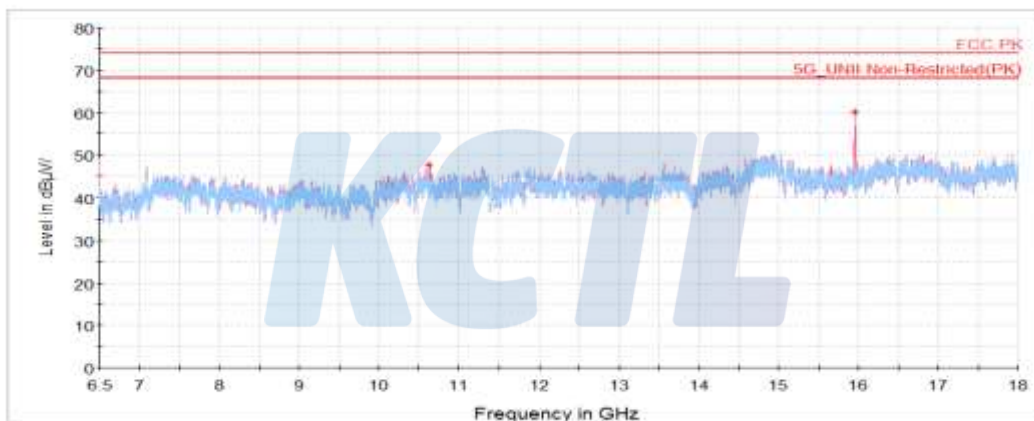
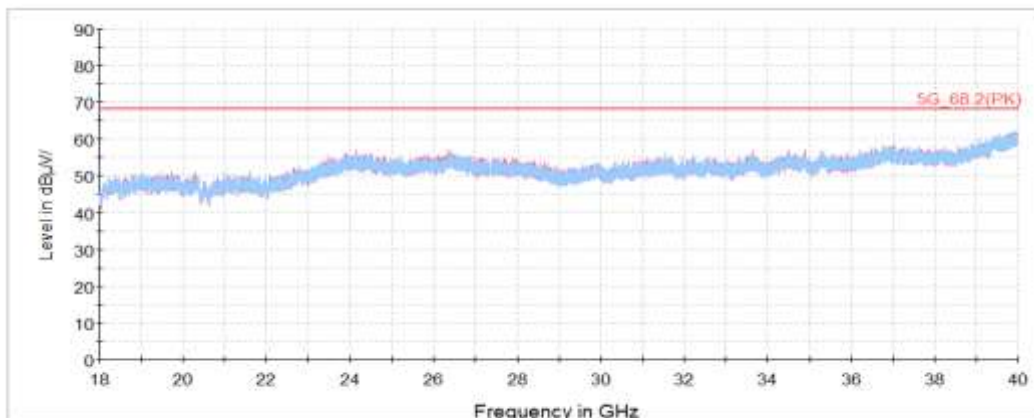
Average data (15 953.401 MHz)



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Horizontal/Vertical for Band-edge



Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

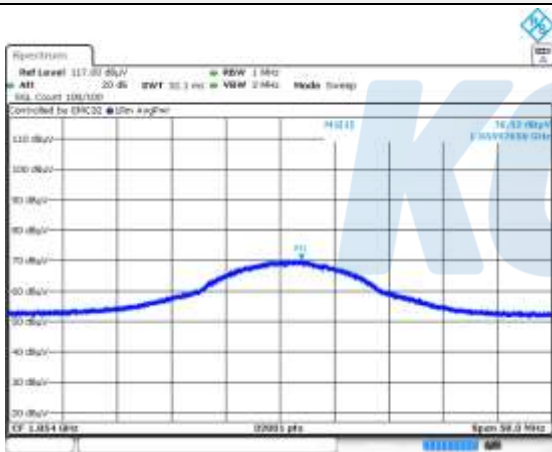
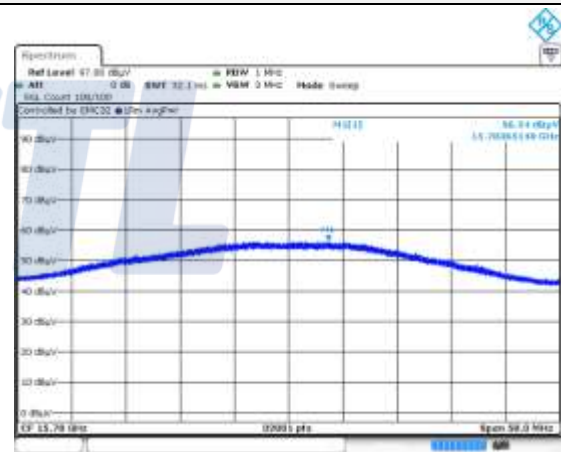
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
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KR20-SRF0030-D

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**802.11a UNII 2A ANT 3****Lowest Channel (5 260 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 055.98 ¹⁾	V	78.22	27.82	-50.61	-	55.43	74.00	18.57
7 013.19	V	67.54	35.40	-52.62	-	50.32	68.20	17.88
10 519.97	V	61.19	37.41	-49.70	-	48.90	68.20	19.30
15 783.65 ¹⁾	V	65.94	40.06	-48.70	-	57.30	74.00	16.70
Average Data								
1 055.98 ¹⁾	V	70.52	27.82	-50.61	0.22	47.95	54.00	6.05
15 783.65 ¹⁾	V	56.54	40.06	-48.70	0.22	48.12	54.00	5.88

Average data (1 055.98 MHz)**Average data (15 783.65 MHz)**

KCTL Inc.

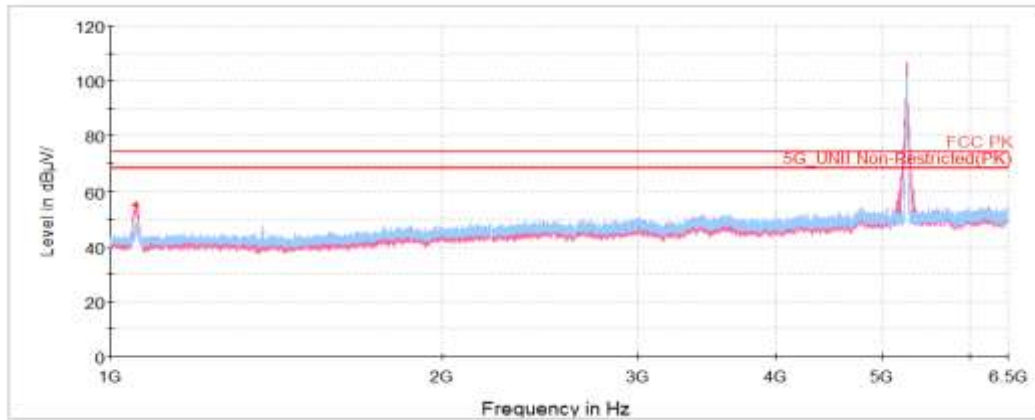
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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KR20-SRF0030-D

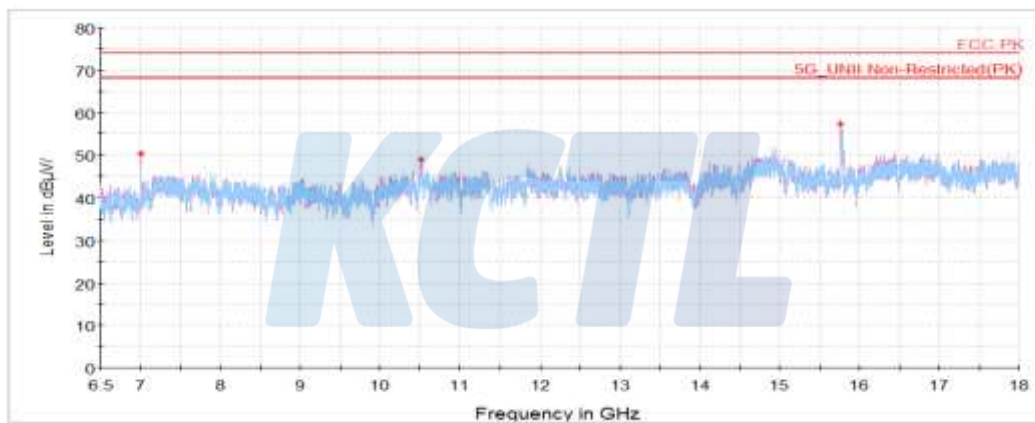
Page (549) of (1046)



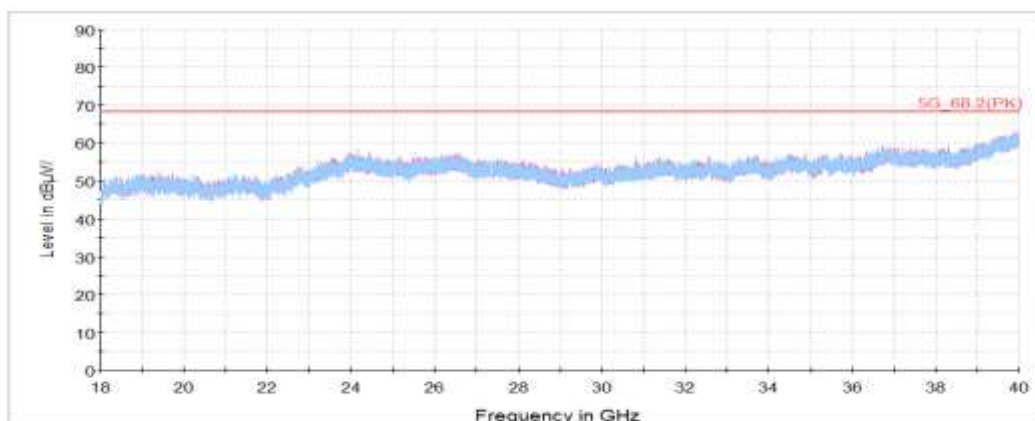
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



KCTL Inc.

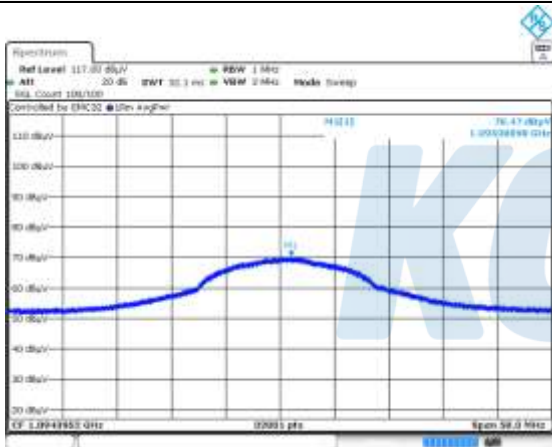
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
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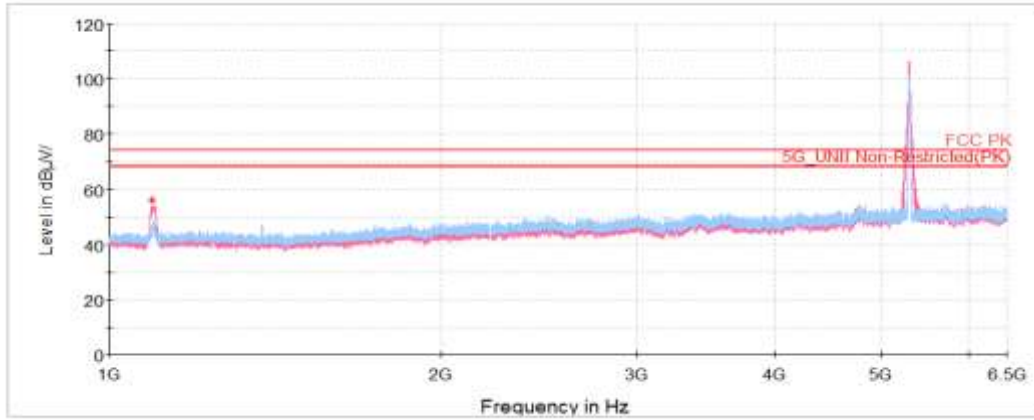
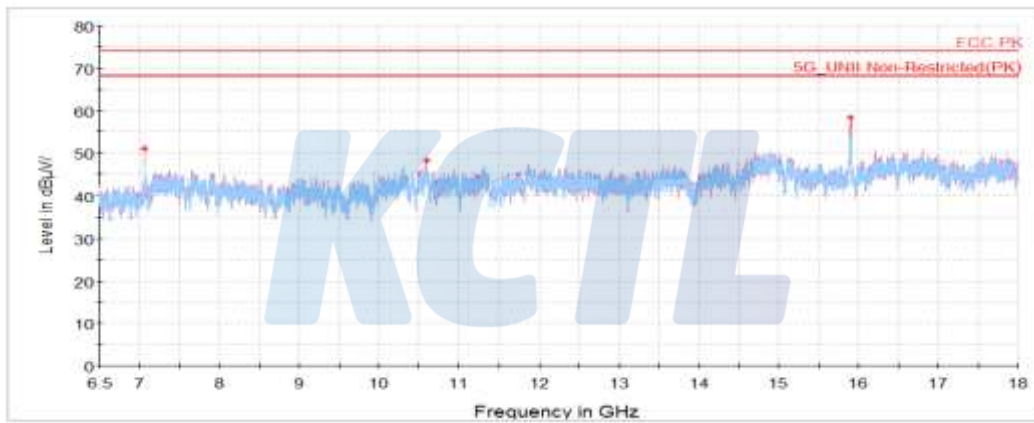
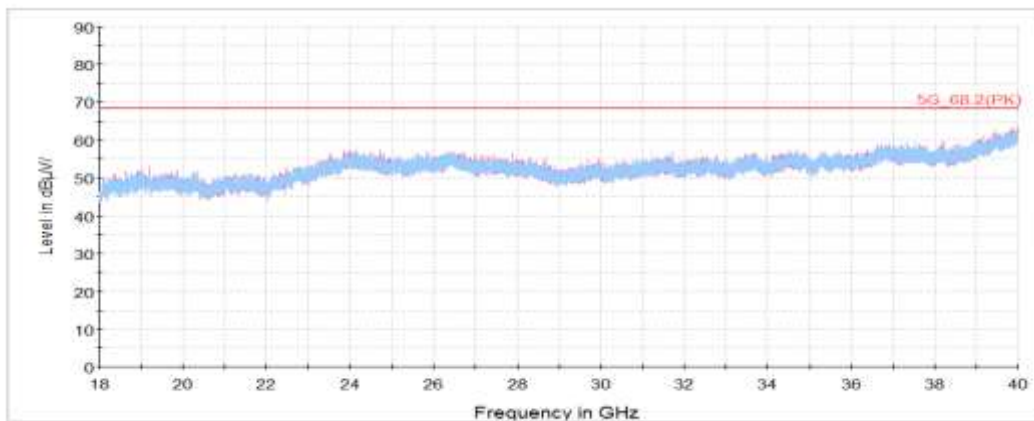
Report No.:
KR20-SRF0030-D

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**Middle Channel (5 300 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 095.39 ¹⁾	V	78.85	27.84	-50.62	-	56.07	74.00	17.93
7 066.73	V	67.97	35.40	-52.37	-	51.00	68.20	17.20
10 601.19 ¹⁾	V	60.63	37.46	-49.88	-	48.21	74.00	25.79
15 901.92 ¹⁾	V	66.91	40.08	-48.76	-	58.23	74.00	15.77
Average Data								
1 095.39 ¹⁾	V	70.47	27.84	-50.62	0.22	47.91	54.00	6.09
15 901.92 ¹⁾	V	57.95	40.08	-48.76	0.22	49.49	54.00	4.51

Average data (1 095.39 MHz)**Average data (15 901.92 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

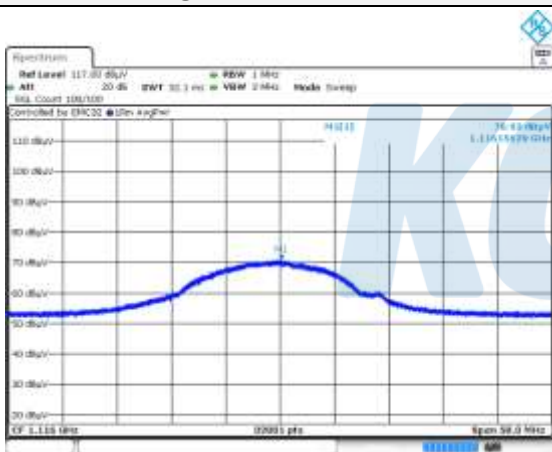
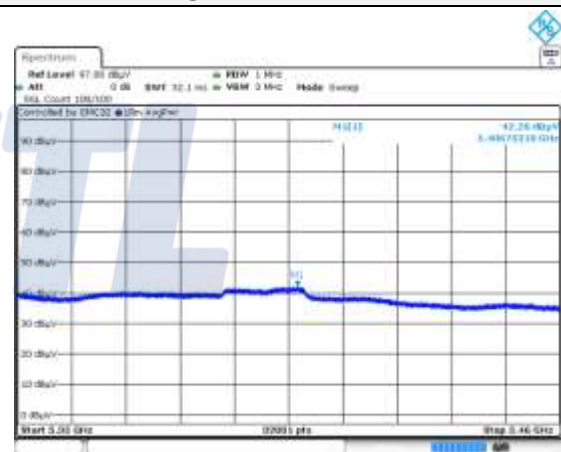
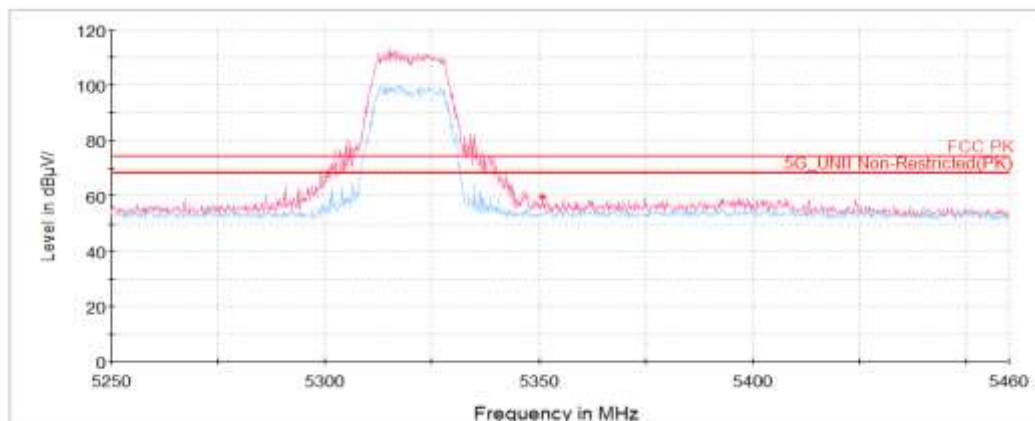
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
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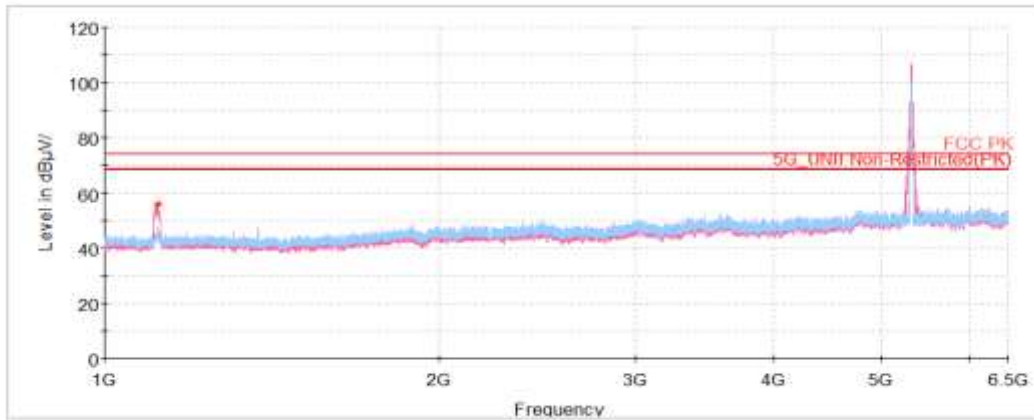
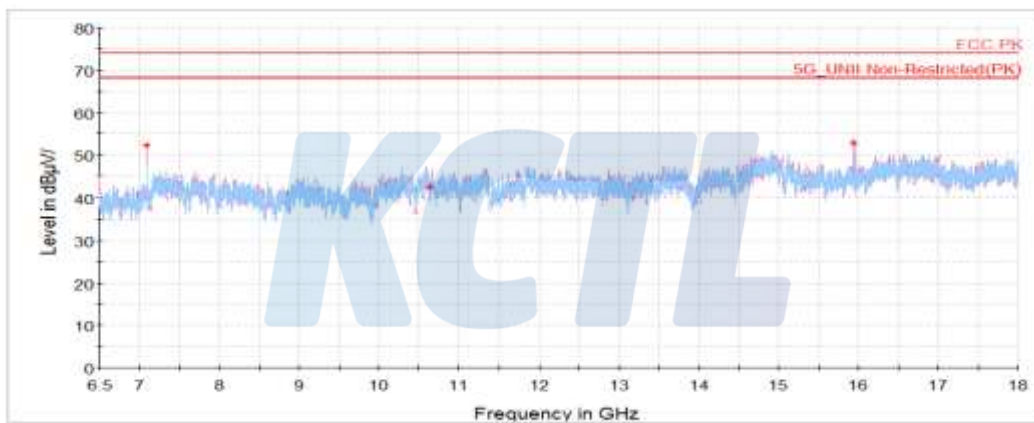
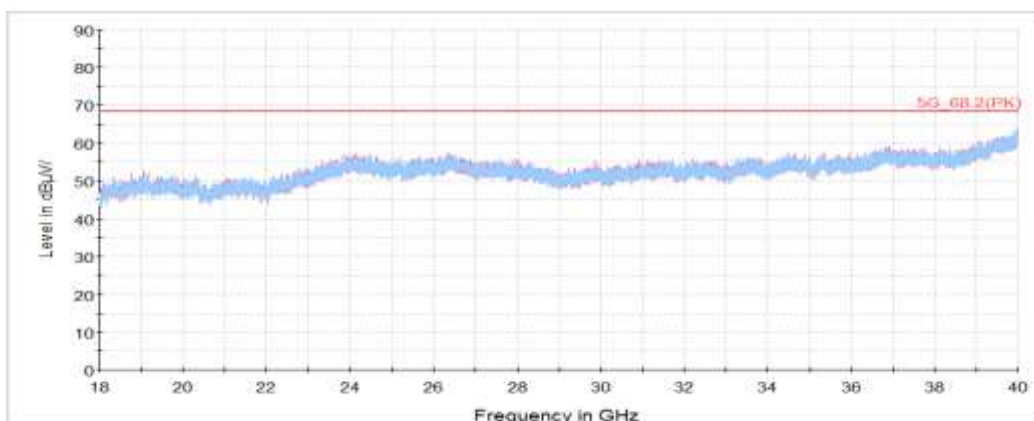
Report No.:
KR20-SRF0030-D

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**Highest Channel (5 320 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 116.16 ¹⁾	V	78.86	27.85	-50.49	-	56.22	74.00	17.78
5 406.75 ¹⁾	V	51.37	34.65	-26.79	-	59.23	74.00	14.77
7 093.33	V	69.21	35.40	-52.25	-	52.36	68.20	15.84
10 645.39 ¹⁾	V	54.98	37.49	-49.97	-	42.50	74.00	31.50
15 954.88 ¹⁾	V	61.61	40.09	-48.79	-	52.91	74.00	21.09
Average Data								
1 116.16 ¹⁾	V	70.93	27.85	-50.49	0.22	48.51	54.00	5.49
5 406.75 ¹⁾	V	42.26	34.65	-26.79	0.22	50.34	54.00	3.66

Average data (1 116.16 MHz)**Average data (5 406.75 MHz)****Horizontal/Vertical for Band-edge**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

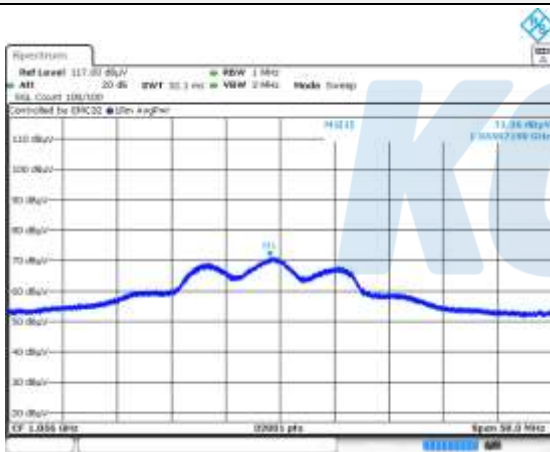
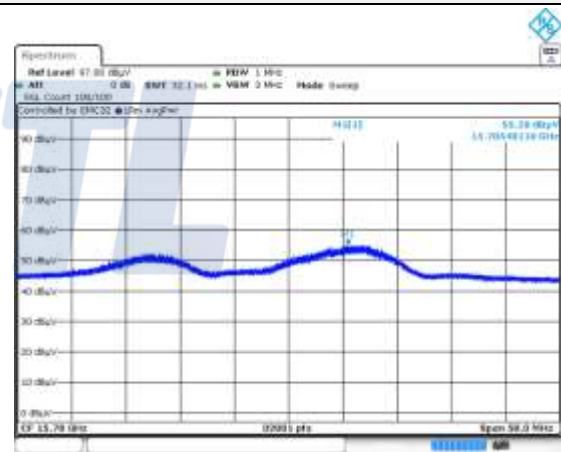
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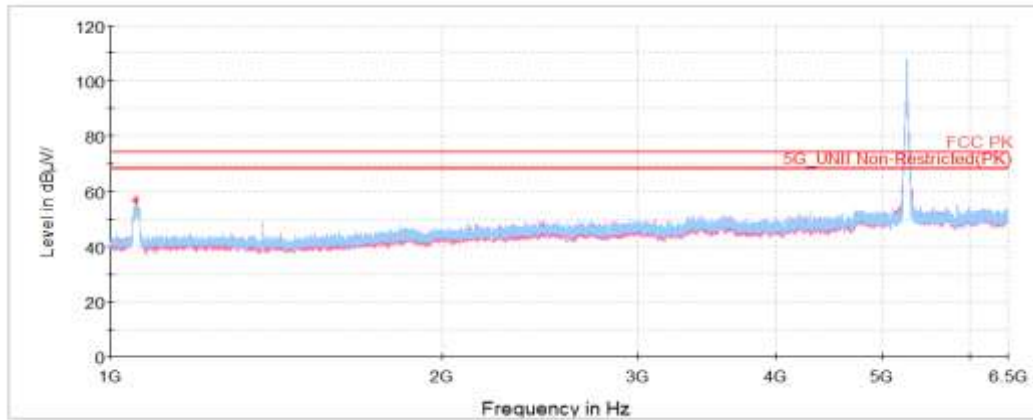
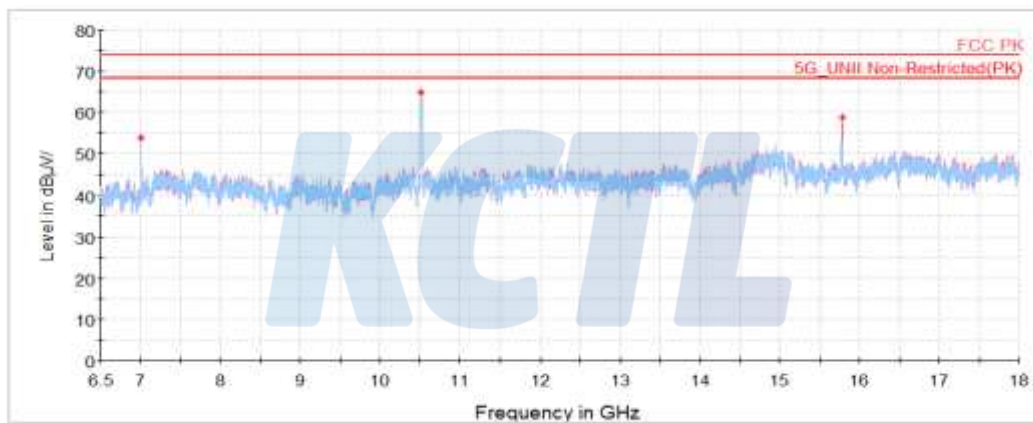
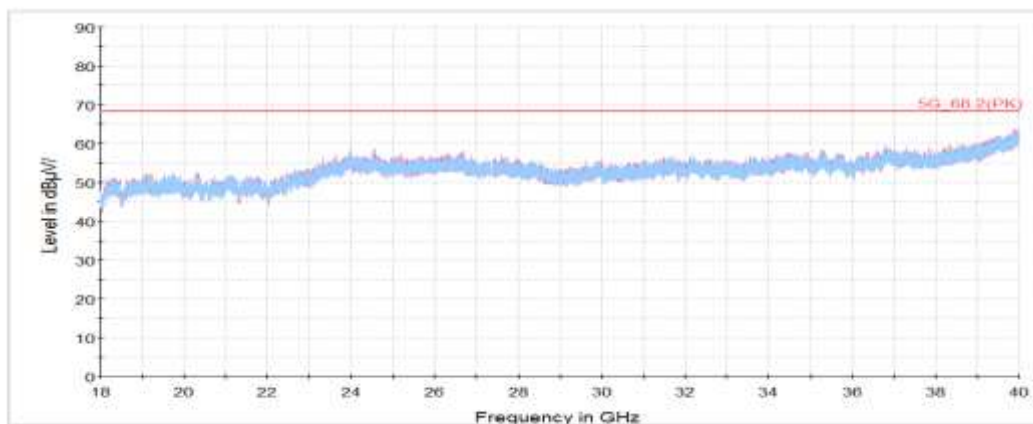
Report No.:
KR20-SRF0030-D

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**802.11a UNII 2A 4TX MIMO****Lowest Channel (5 260 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 055.07 ¹⁾	H	79.69	27.82	-50.61	-	56.90	74.00	17.10
7 013.55	H	71.03	35.40	-52.62	-	53.81	68.20	14.39
10 521.77	V	76.99	37.41	-49.70	-	64.70	68.20	3.50
15 785.48 ¹⁾	V	67.44	40.06	-48.70	-	58.80	74.00	15.20
Average Data								
1 055.07 ¹⁾	V	71.36	27.82	-50.61	0.22	48.79	54.00	5.21
15 785.48 ¹⁾	V	55.28	40.06	-48.70	0.22	46.86	54.00	7.14

Average data (1 055.07 MHz)**Average data (15 785.48 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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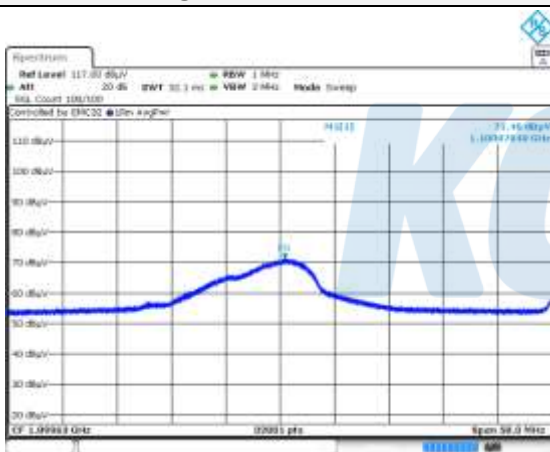
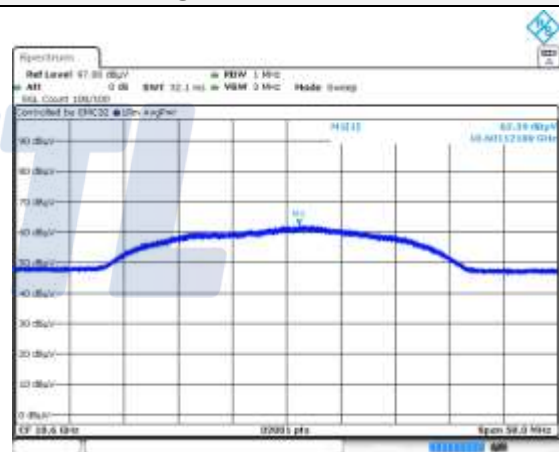
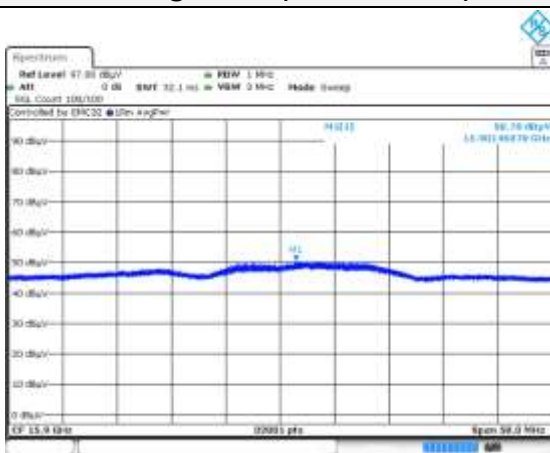
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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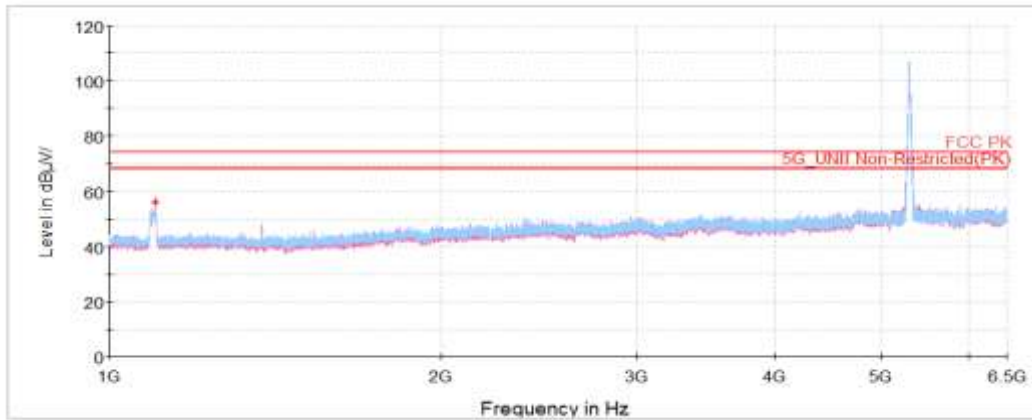
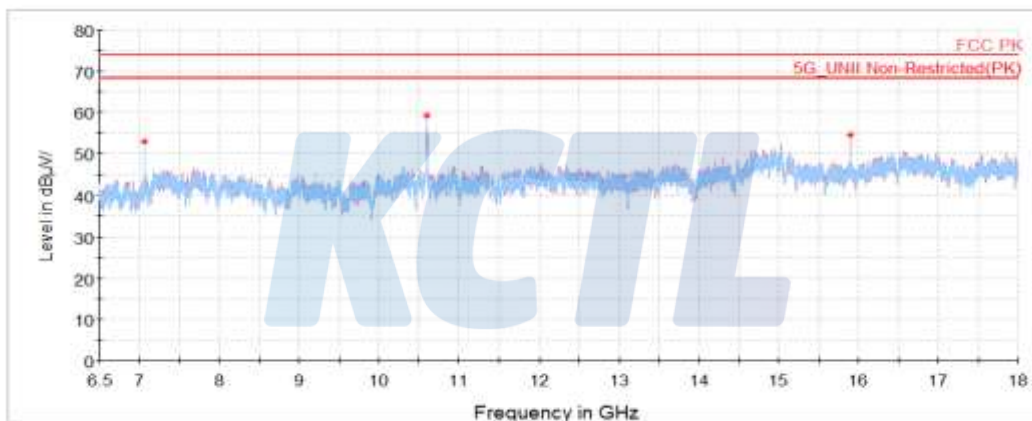
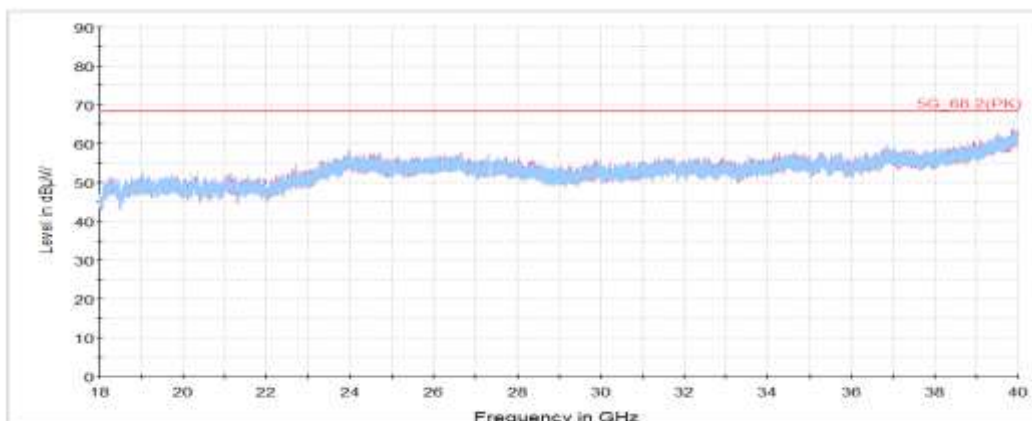
Page (556) of (1046)

**Middle Channel (5 300 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 100.08 ¹⁾	V	78.87	27.84	-50.62	-	56.09	74.00	17.91
7 066.73	H	69.76	35.40	-52.37	-	52.79	68.20	15.41
10 601.12 ¹⁾	H	71.55	37.46	-49.88	-	59.13	74.00	14.87
15 901.47 ¹⁾	V	63.15	40.08	-48.76	-	54.47	74.00	19.53
Average Data								
1 100.08 ¹⁾	V	71.46	27.84	-50.62	0.22	48.90	54.00	5.10
10 601.12 ¹⁾	H	62.39	37.46	-49.88	0.22	50.19	54.00	3.81
15 901.47 ¹⁾	V	50.70	40.08	-48.76	0.22	42.24	54.00	11.76

Average data (1 100.08 MHz)**Average data (10 601.12 MHz)****Average data (15 901.47 MHz)**

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Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

Highest Channel (5 320 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 120.33 ¹⁾	V	78.83	27.85	-50.45	-	56.23	74.00	17.77
5 403.92 ¹⁾	V	50.90	34.65	-26.76	-	58.79	74.00	15.21
7 092.97	V	65.94	35.40	-52.25	-	49.09	68.20	19.11
10 641.91 ¹⁾	V	74.57	37.49	-49.97	-	62.09	74.00	11.91
15 960.55 ¹⁾	V	52.25	40.09	-48.79	-	43.55	74.00	30.45
Average Data								
1 120.33 ¹⁾	V	72.98	27.85	-50.45	0.22	50.60	54.00	3.40
5 403.92 ¹⁾	V	42.83	34.65	-26.76	0.22	50.94	54.00	3.06
10 641.91 ¹⁾	H	62.70	37.49	-49.97	0.22	50.44	54.00	3.56



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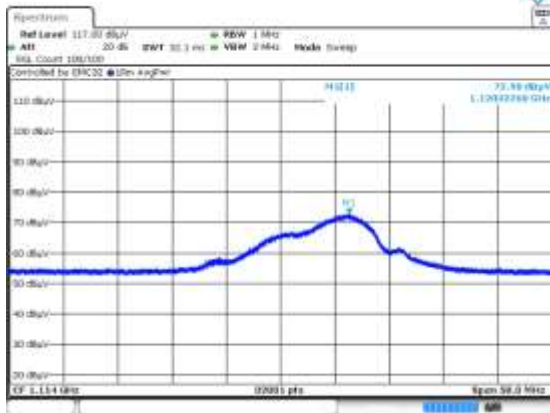
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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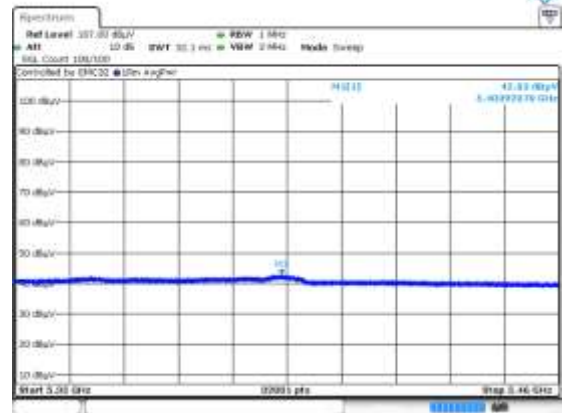
Page (559) of (1046)

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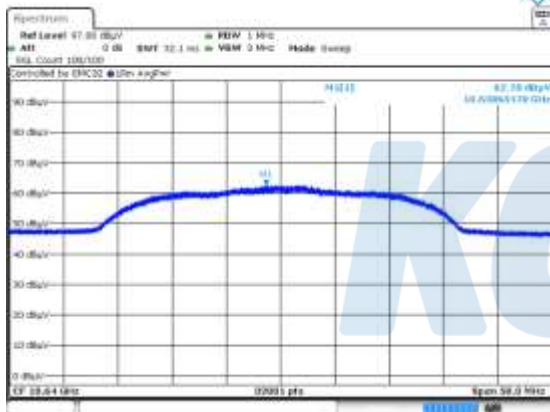
Average data (1 120.33 MHz)



Average data (5 403.92 MHz)

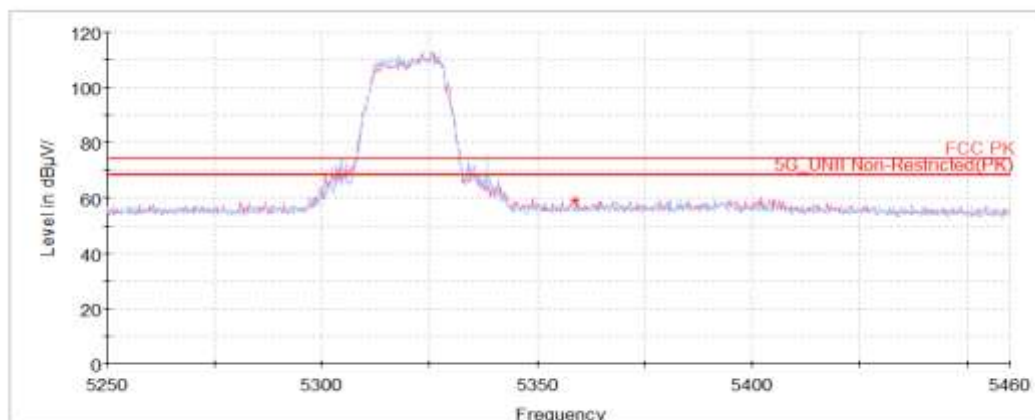


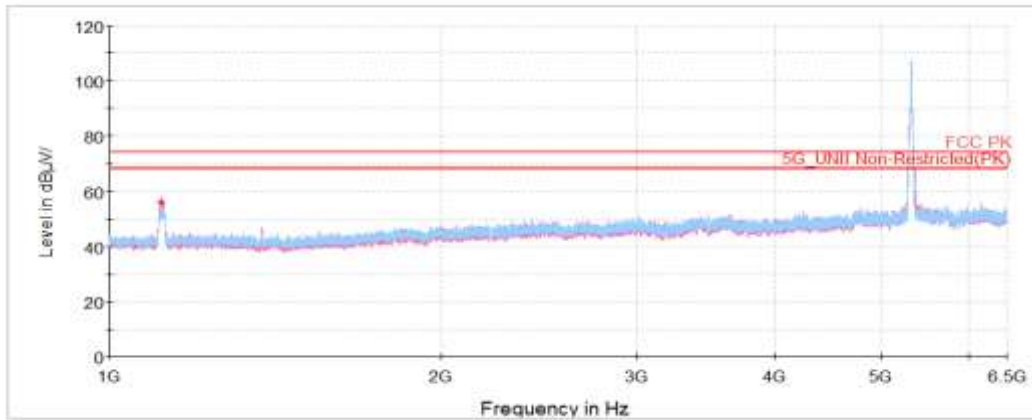
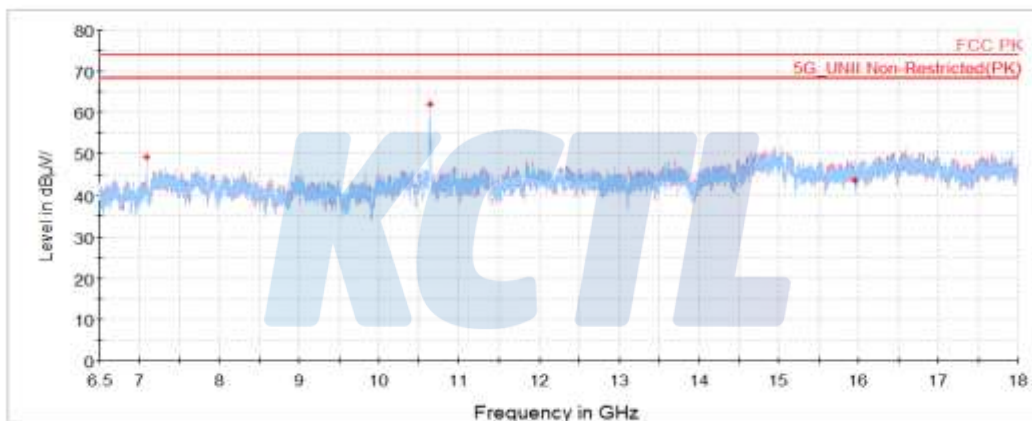
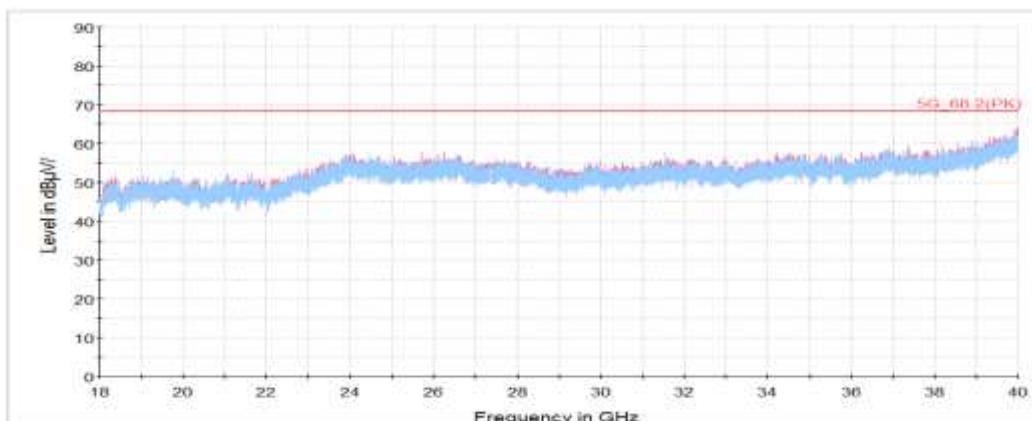
Average data (10 641.91 MHz)



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Horizontal/Vertical for Band-edge



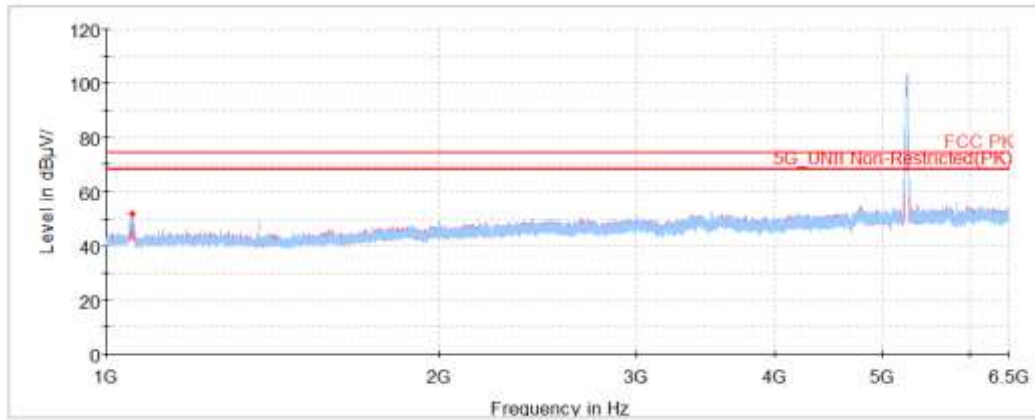
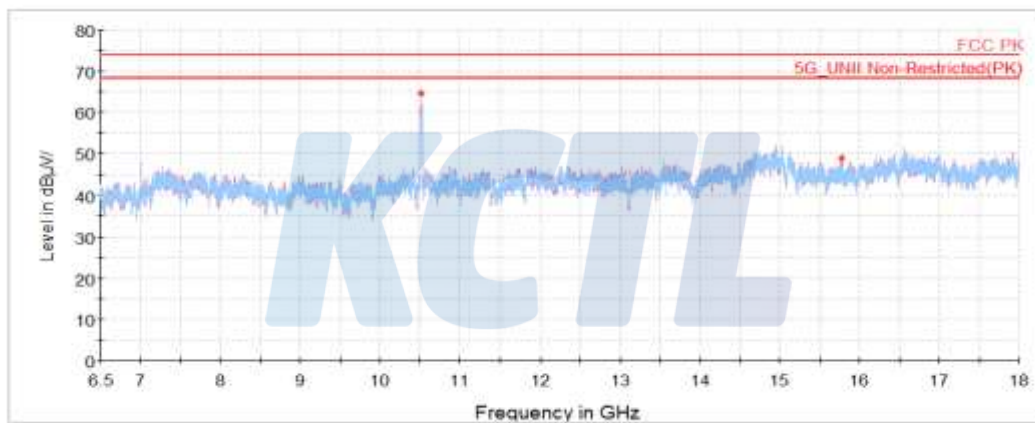
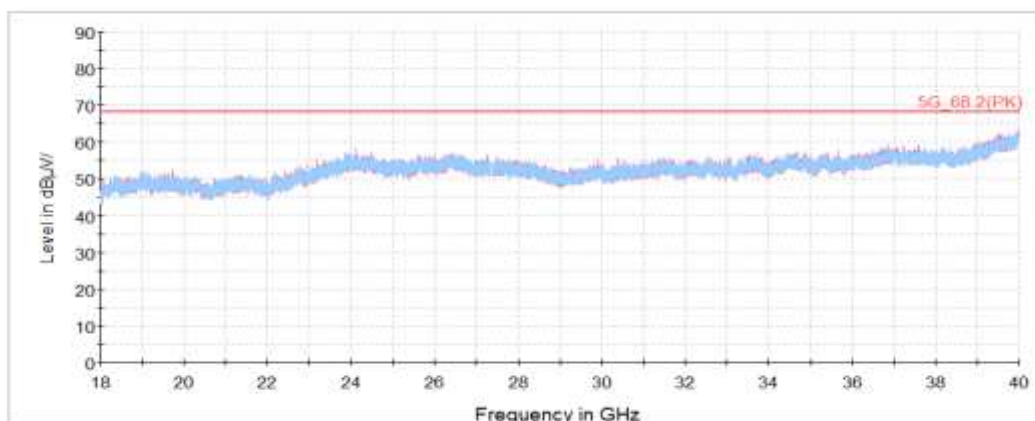
Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

802.11n HT20 UNII 2A ANT 0

Lowest Channel (5 260 MHz)

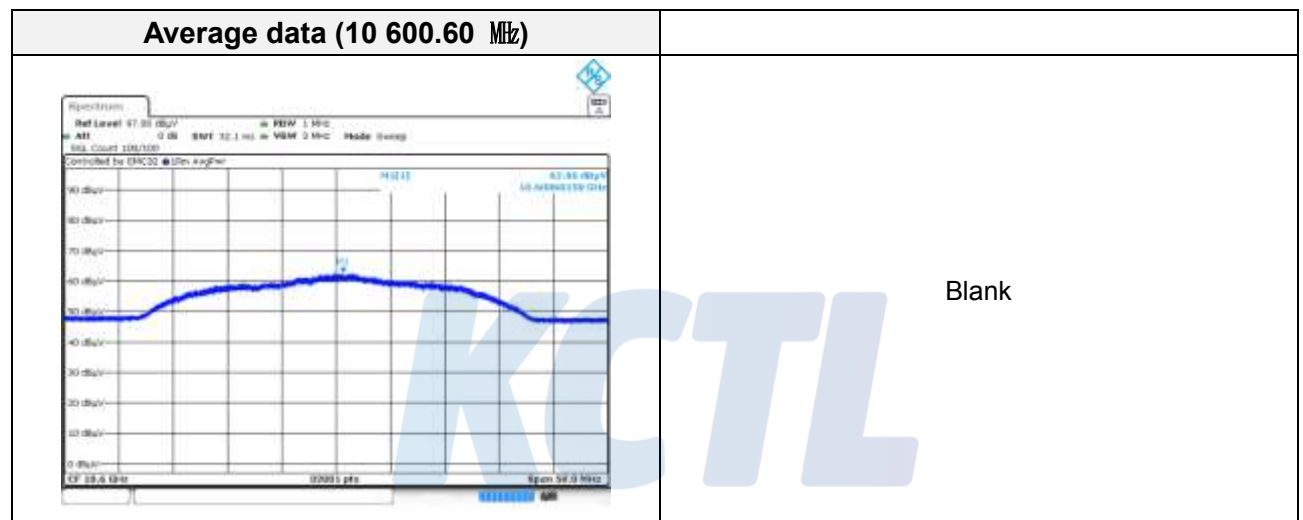
Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB($\mu V/m$))	(dB($\mu V/m$))	(dB)
Peak data								
10 519.61	H	76.90	37.41	-49.70	-	64.61	68.20	3.59
15 780.14 ¹⁾	V	57.55	40.06	-48.70	-	48.91	74.00	25.09
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

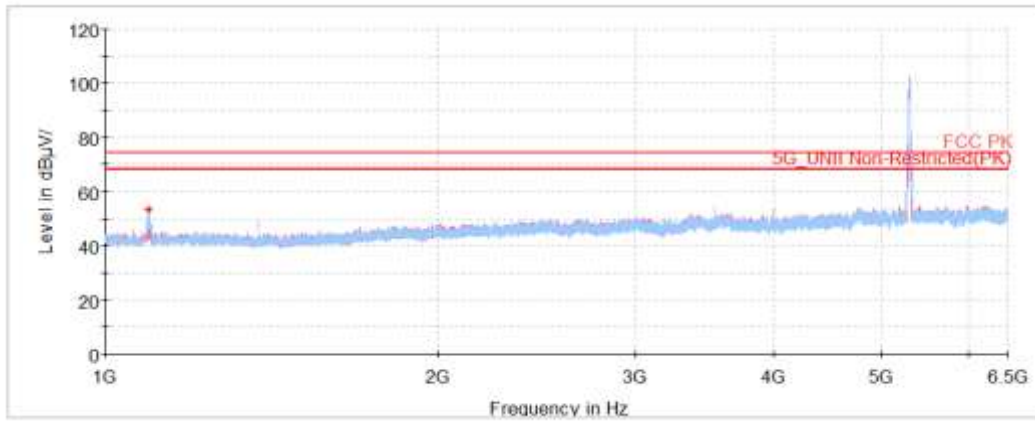
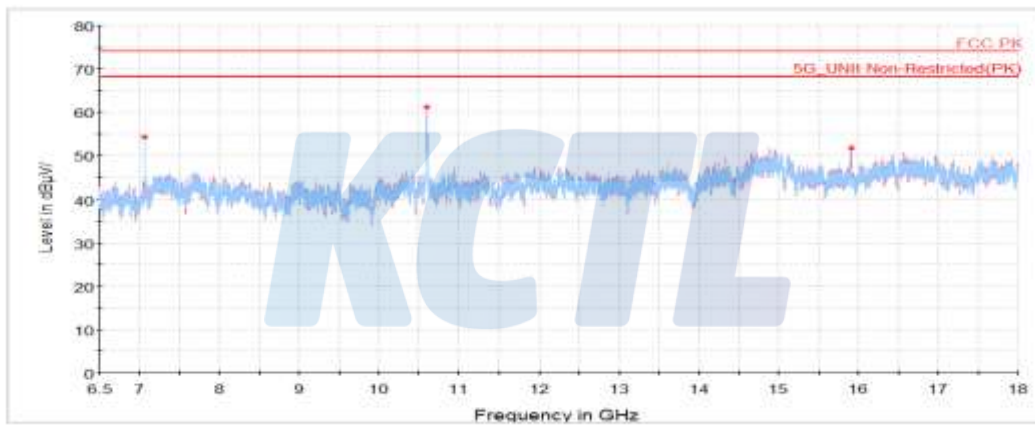
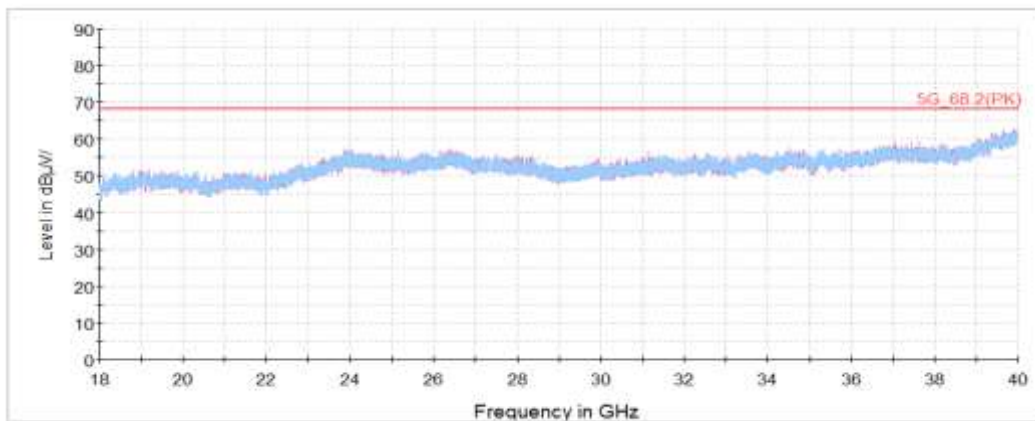
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Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

Middle Channel (5 300 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
7 066.73	H	71.15	35.40	-52.37	-	54.18	68.20	14.02
10 600.60 ¹⁾	V	73.56	37.46	-49.87	-	61.15	74.00	12.85
15 898.22 ¹⁾	V	60.39	40.08	-48.76	-	51.71	74.00	22.29
Average Data								
10 600.60 ¹⁾	V	62.86	37.46	-49.87	0.22	50.67	54.00	3.33



Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

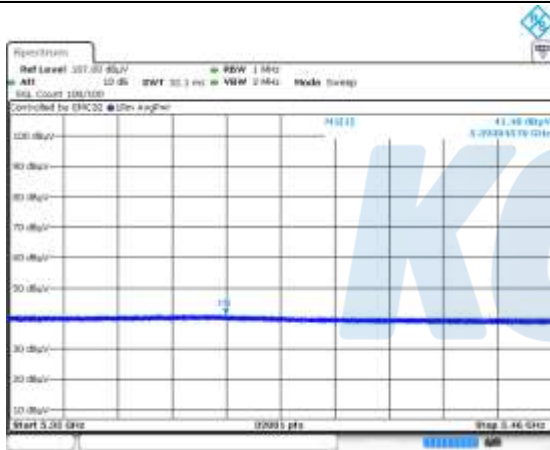
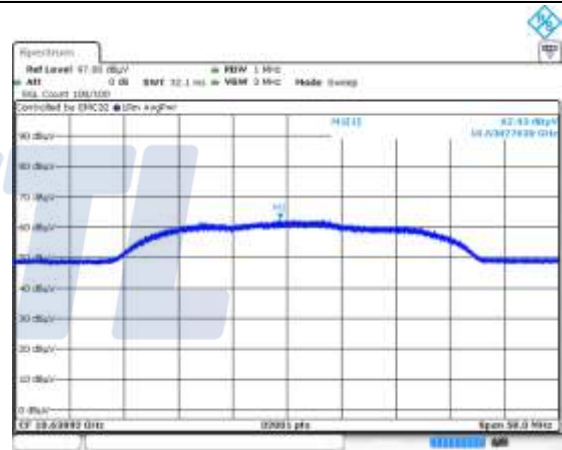
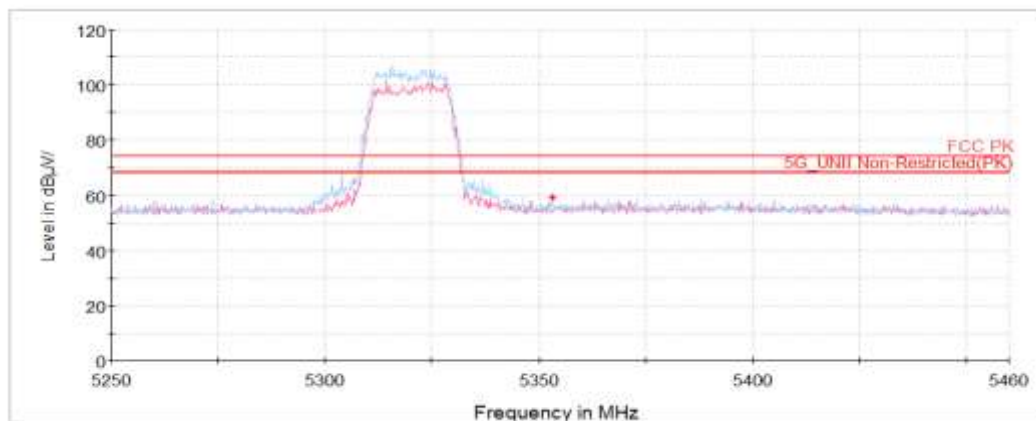
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**Highest Channel (5 320 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 393.85 ¹⁾	H	50.93	34.63	-26.73	-	58.83	74.00	15.17
7 092.97	H	66.49	35.40	-52.25	-	49.64	68.20	18.56
10 638.28 ¹⁾	H	71.80	37.48	-49.96	-	59.32	74.00	14.68
15 958.75 ¹⁾	V	54.03	40.09	-48.79	-	45.33	74.00	28.67
Average Data								
5 393.85 ¹⁾	H	41.48	34.63	-26.73	0.22	49.60	54.00	4.40
10 638.28 ¹⁾	H	62.93	37.48	-49.96	0.22	50.67	54.00	3.33

Average data (5 393.85 MHz)**Average data (10 638.28 MHz)****Horizontal/Vertical for Band-edge**

KCTL Inc.

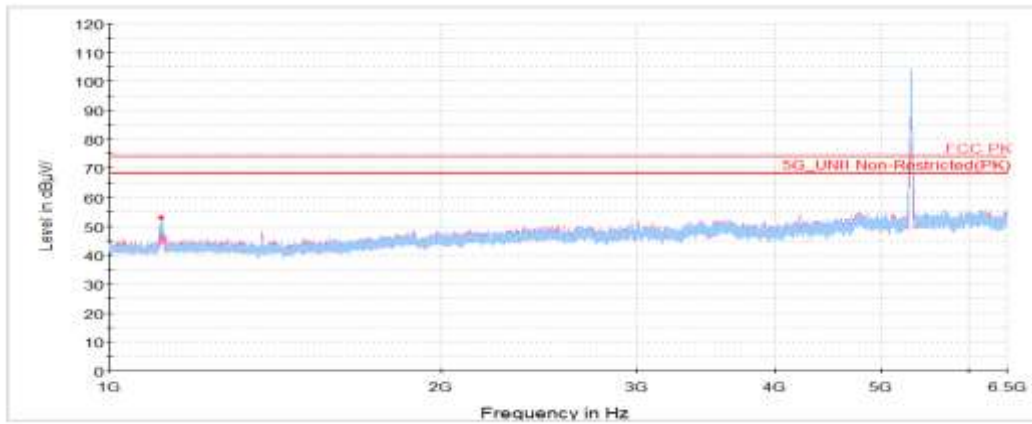
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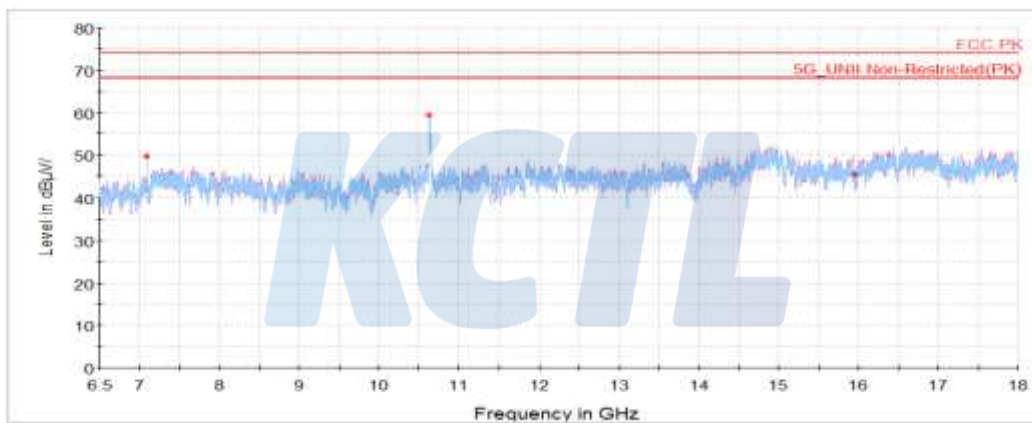
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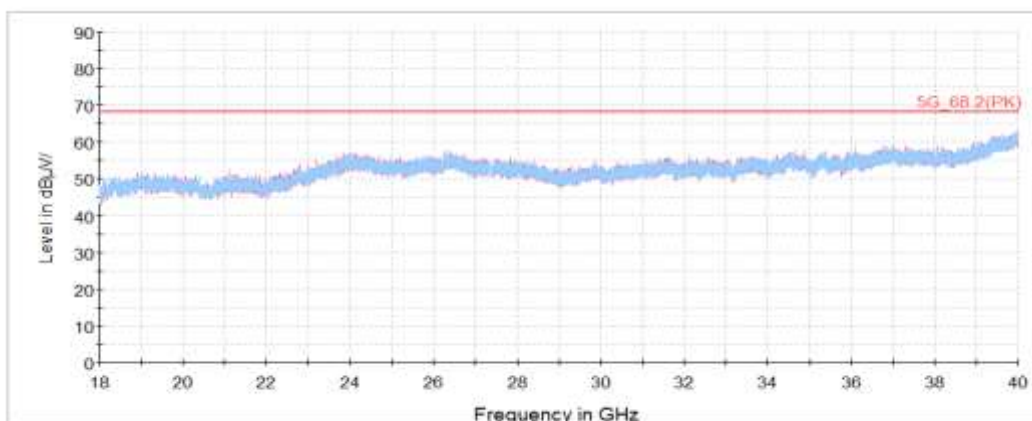
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



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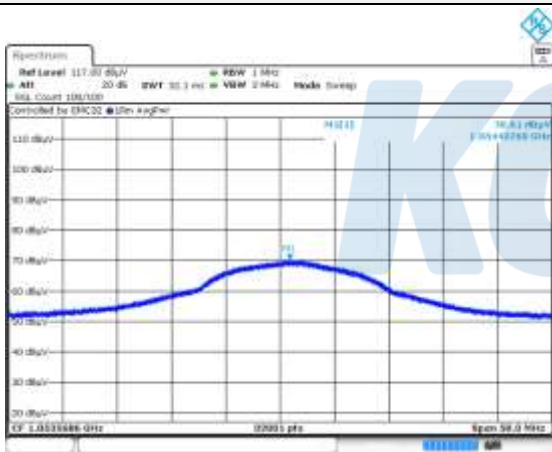
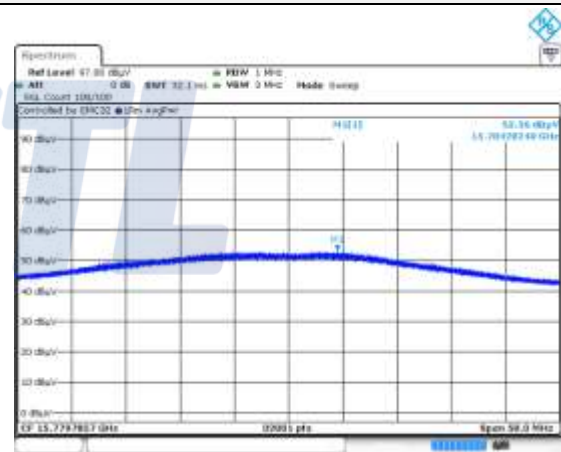
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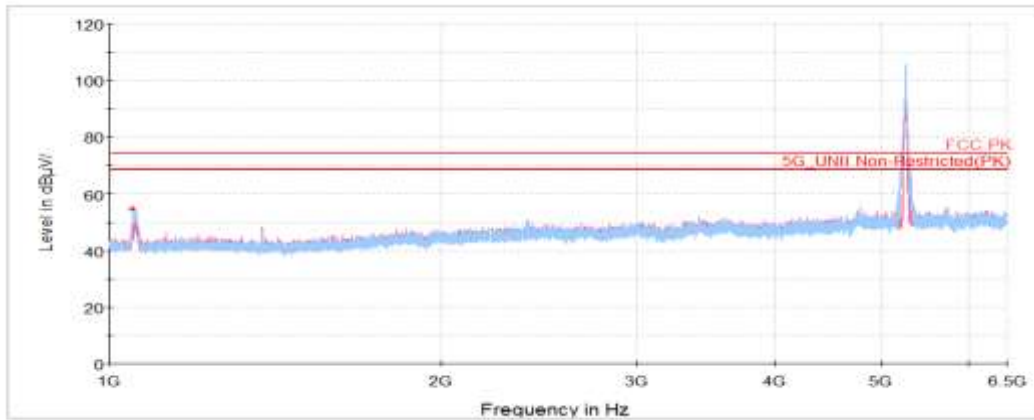
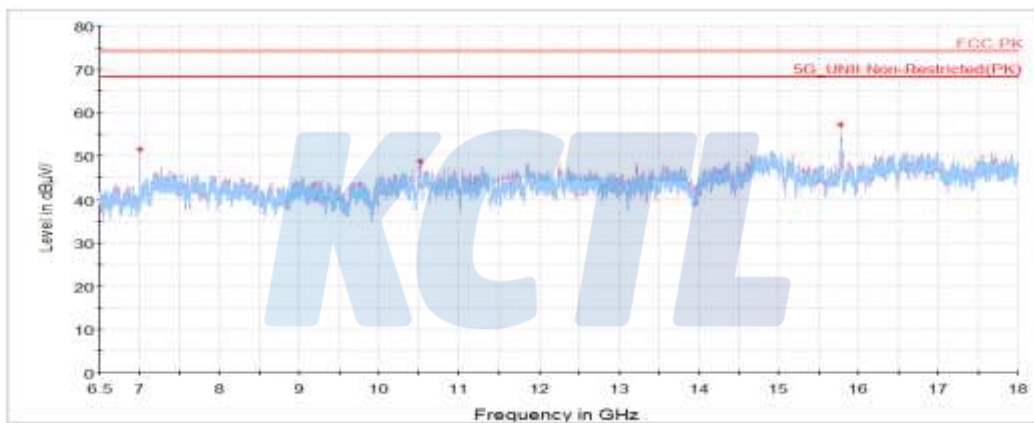
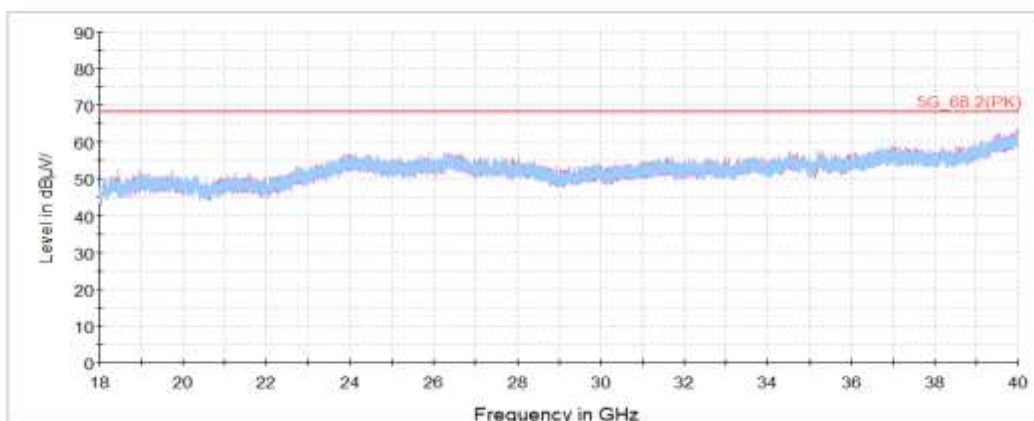
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**802.11n HT20 UNII 2A ANT 1****Lowest Channel (5 260 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 054.43 ¹⁾	H	77.58	27.82	-50.61	-	54.79	74.00	19.21
7 013.55	H	68.69	35.40	-52.62	-	51.47	68.20	16.73
10 517.81	V	60.98	37.41	-49.69	-	48.70	68.20	19.50
15 784.28 ¹⁾	V	65.89	40.06	-48.70	-	57.25	74.00	16.75
Average Data								
1 054.43 ¹⁾	H	70.61	27.82	-50.61	0.22	48.04	54.00	5.96
15 784.28 ¹⁾	H	53.36	40.06	-48.70	0.22	44.94	54.00	9.06

Average data (1 054.43 MHz)**Average data (15 784.28 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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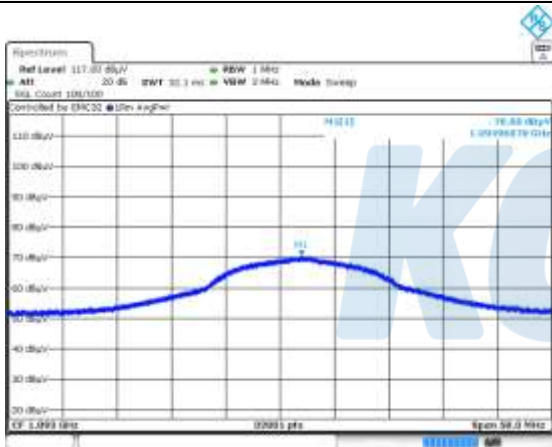
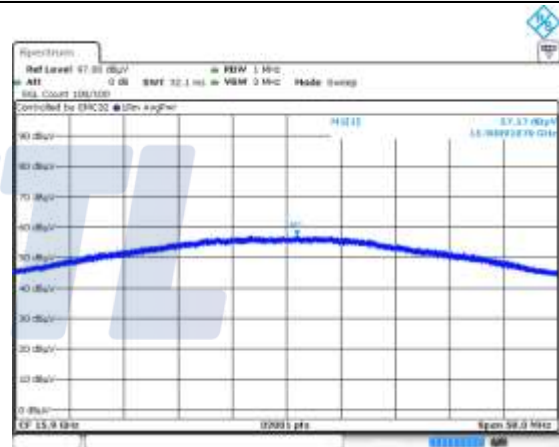
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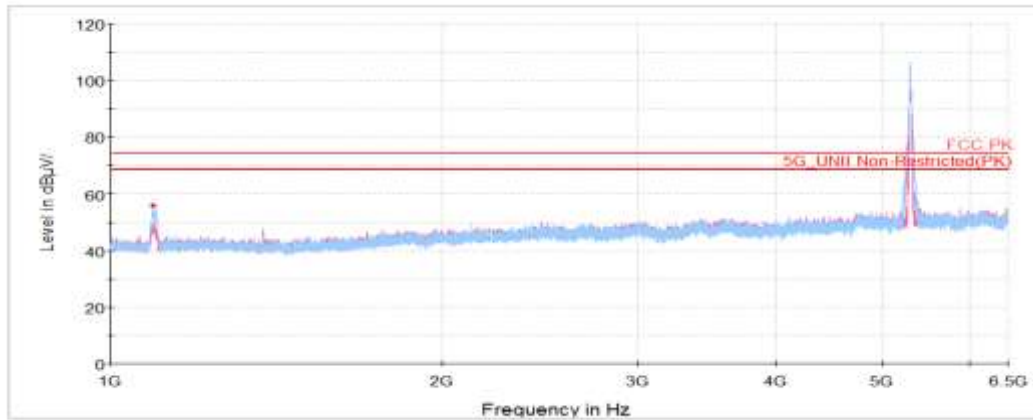
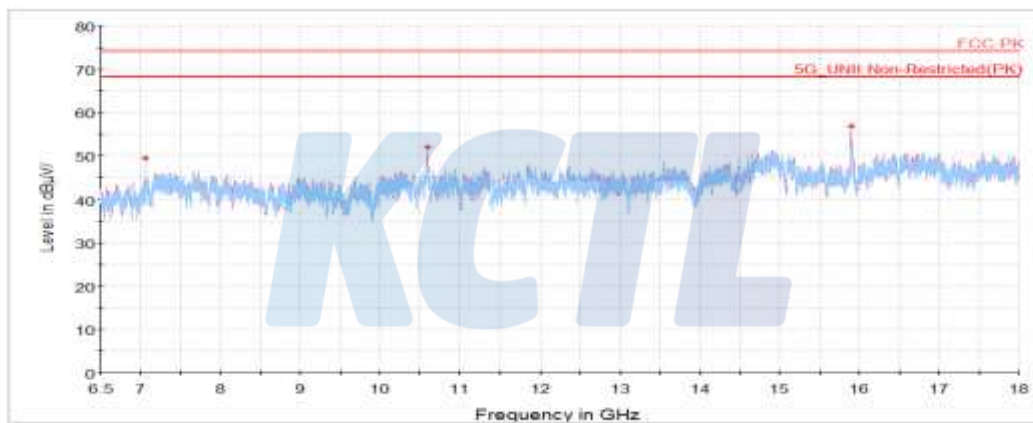
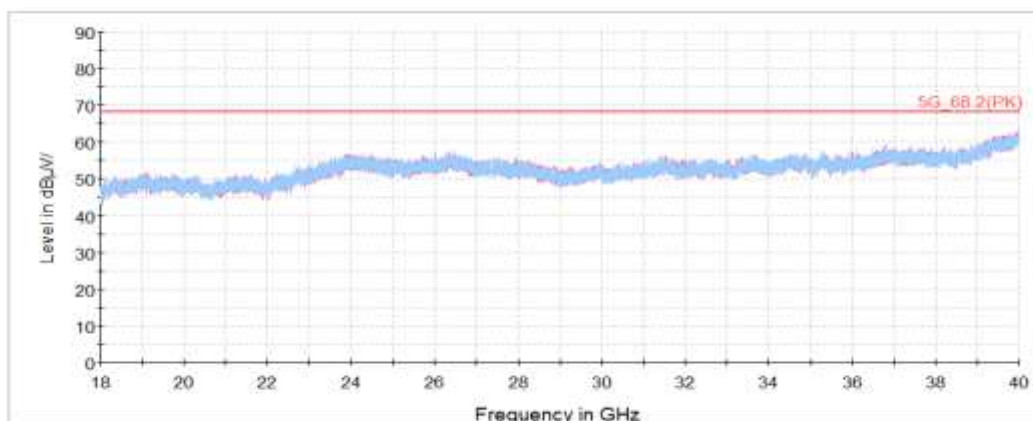
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**Middle Channel (5 300 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 094.97 ¹⁾	H	78.73	27.84	-50.62	-	55.95	74.00	18.05
7 066.38	H	66.36	35.40	-52.37	-	49.39	68.20	18.81
10 602.74 ¹⁾	V	64.31	37.46	-49.88	-	51.89	74.00	22.11
15 900.92 ¹⁾	V	65.46	40.08	-48.76	-	56.78	74.00	17.22
Average Data								
1 094.97 ¹⁾	H	70.80	27.84	-50.62	0.22	48.24	54.00	5.76
15 900.92 ¹⁾	V	57.17	40.08	-48.76	0.22	48.71	54.00	5.29

Average data (1 094.97 MHz)**Average data (15 900.92 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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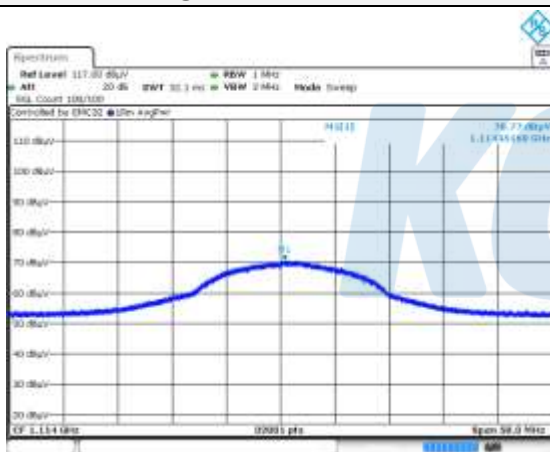
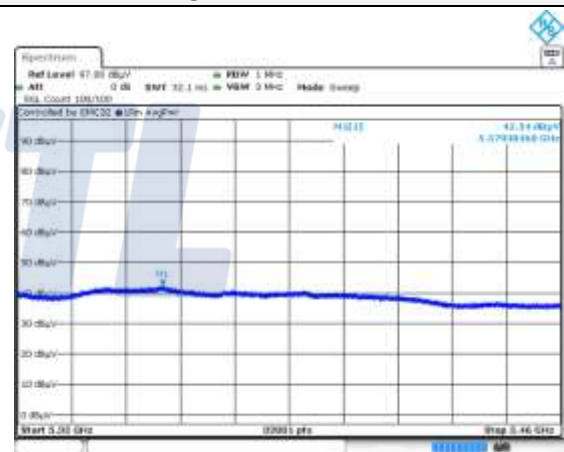
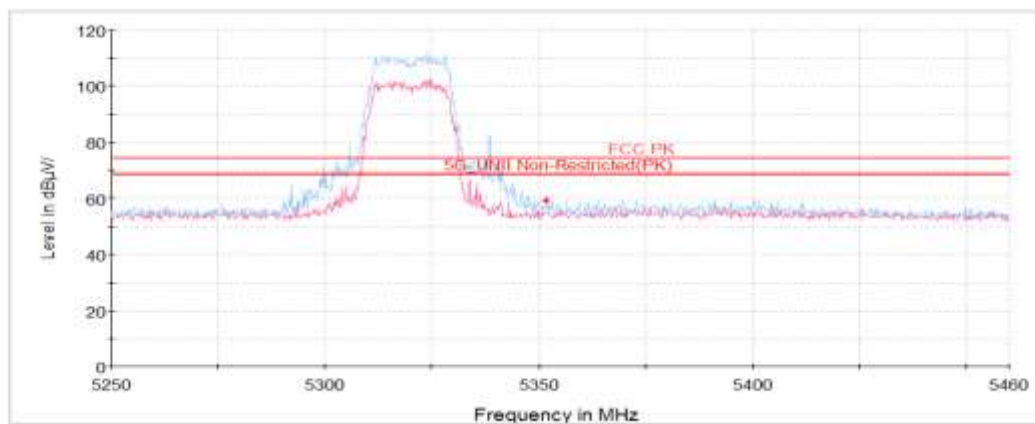
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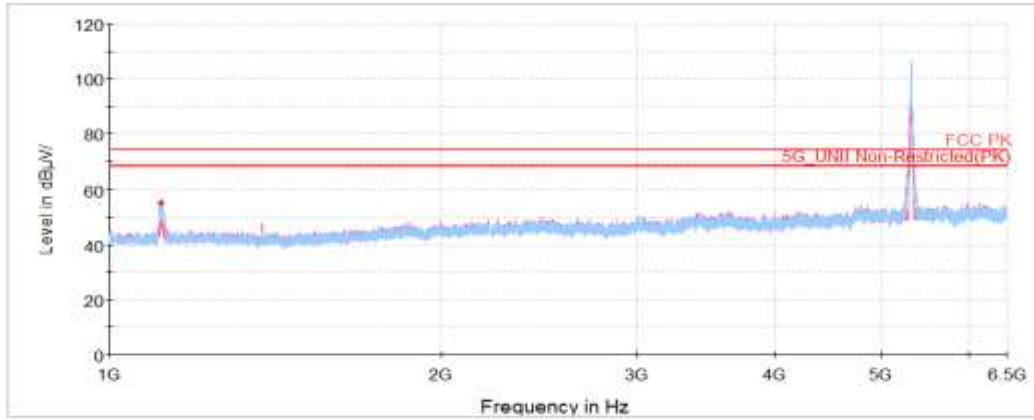
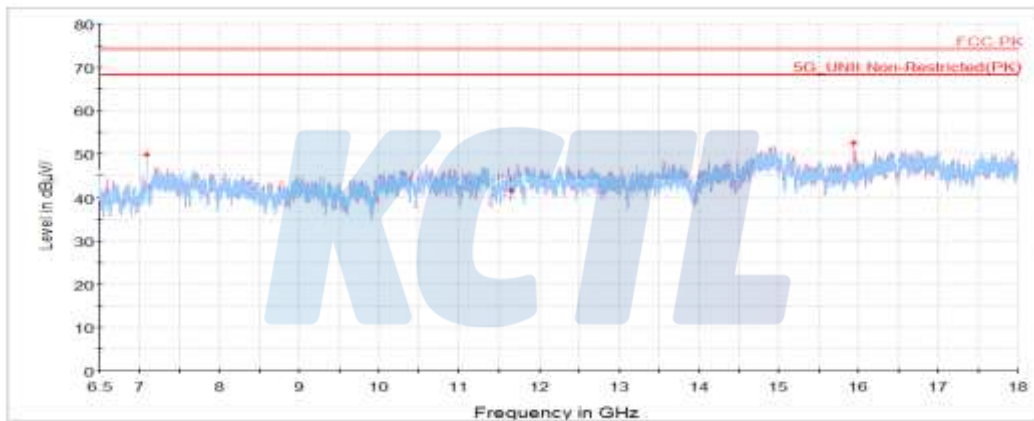
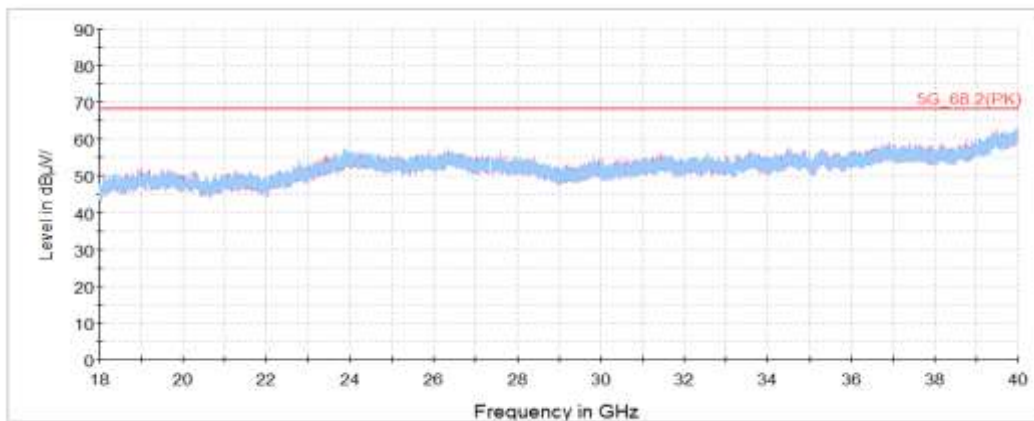
**Highest Channel (5 320 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 114.35 ¹⁾	H	77.80	27.85	-50.50	-	55.15	74.00	18.85
5 379.38 ¹⁾	H	51.20	34.61	-26.77	-	59.04	74.00	14.96
7 093.33	H	66.65	35.40	-52.25	-	49.80	68.20	18.40
11 639.42 ¹⁾	H	53.46	38.17	-50.14	-	41.49	74.00	32.51
15 952.72 ¹⁾	V	61.18	40.09	-48.79	-	52.48	74.00	21.52
Average Data								
1 114.35 ¹⁾	H	70.77	27.85	-50.50	0.22	48.34	54.00	5.66
5 379.38 ¹⁾	H	42.54	34.61	-26.77	0.22	50.60	54.00	3.40

Average data (1 114.35 MHz)**Average data (5 379.38 MHz)****Horizontal/Vertical for Band-edge**

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Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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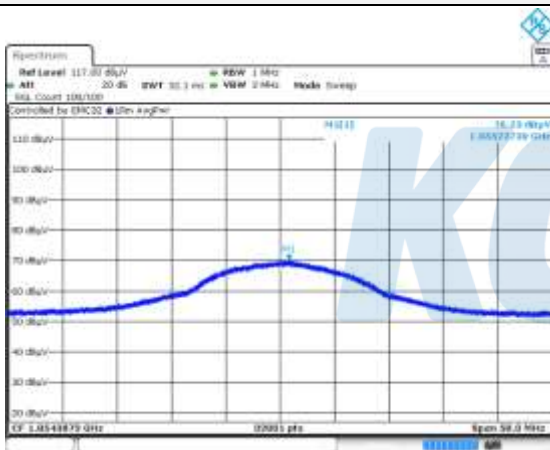
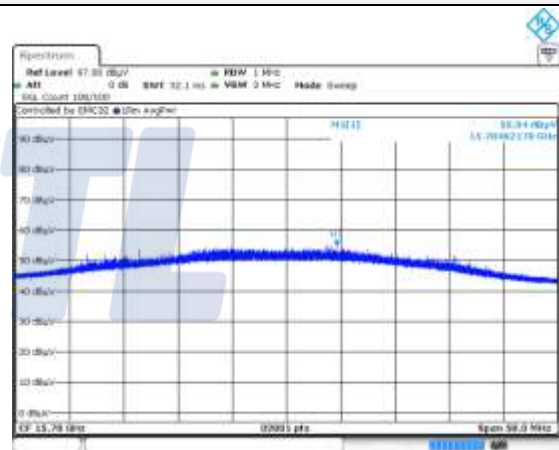
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**802.11n HT20 UNII 2A ANT 2****Lowest Channel (5 260 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 055.24 ¹⁾	V	77.37	27.82	-50.61	-	54.58	74.00	19.42
10 519.25	V	64.07	37.41	-49.69	-	51.79	68.20	16.41
15 784.62 ¹⁾	V	69.34	40.06	-48.70	-	60.70	74.00	13.30
Average Data								
1 055.24 ¹⁾	V	70.23	27.82	-50.61	0.22	47.66	54.00	6.34
15 784.62 ¹⁾	V	55.04	40.06	-48.70	0.22	46.62	54.00	7.38

Average data (1 055.24 MHz)**Average data (15 784.62 MHz)**

KCTL Inc.

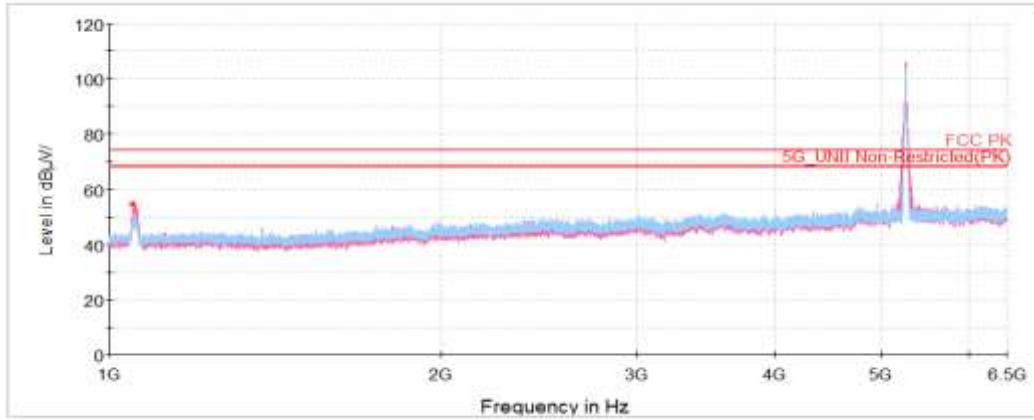
65, Sinwon-ro, Yeongtong-gu,
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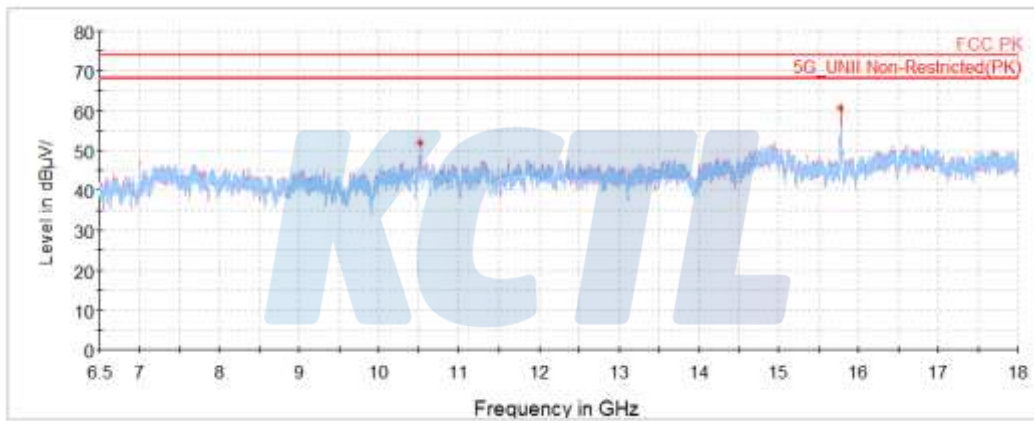
Page (574) of (1046)



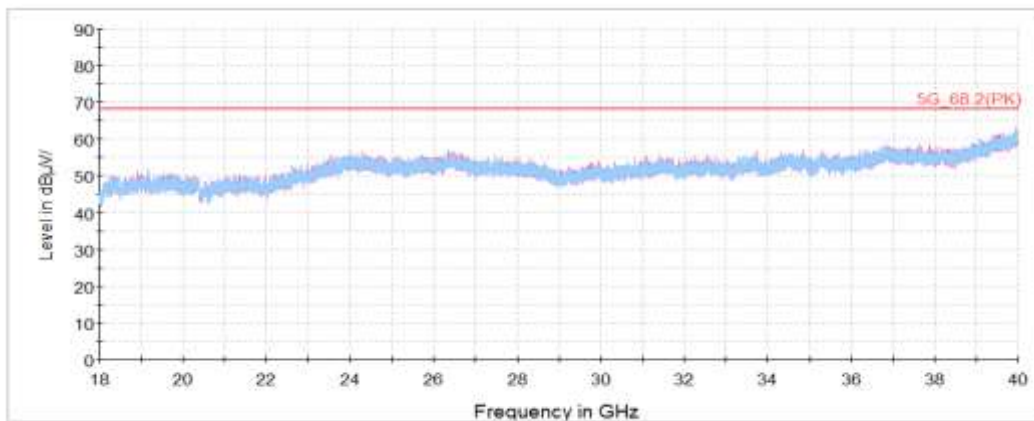
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



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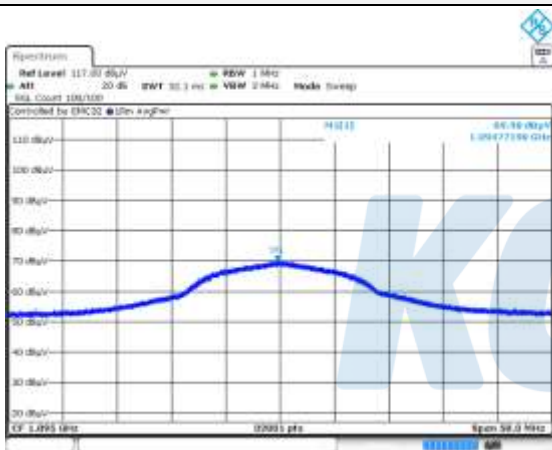
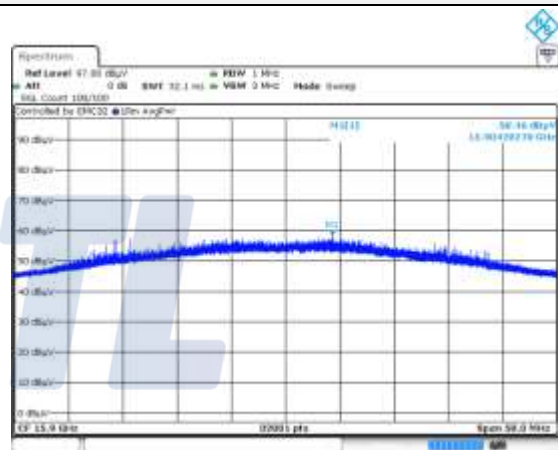
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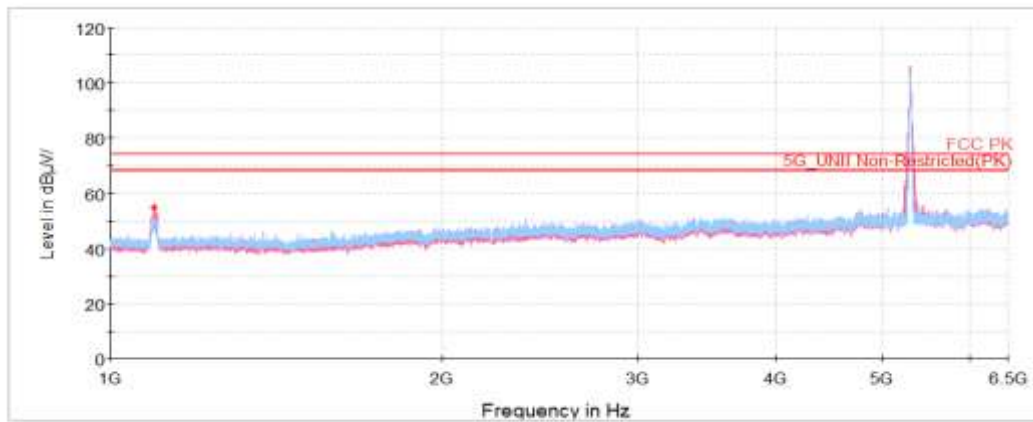
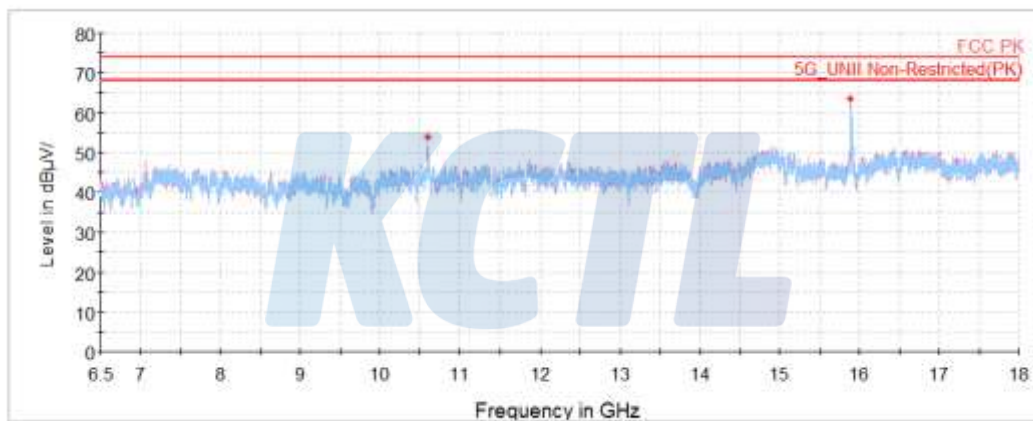
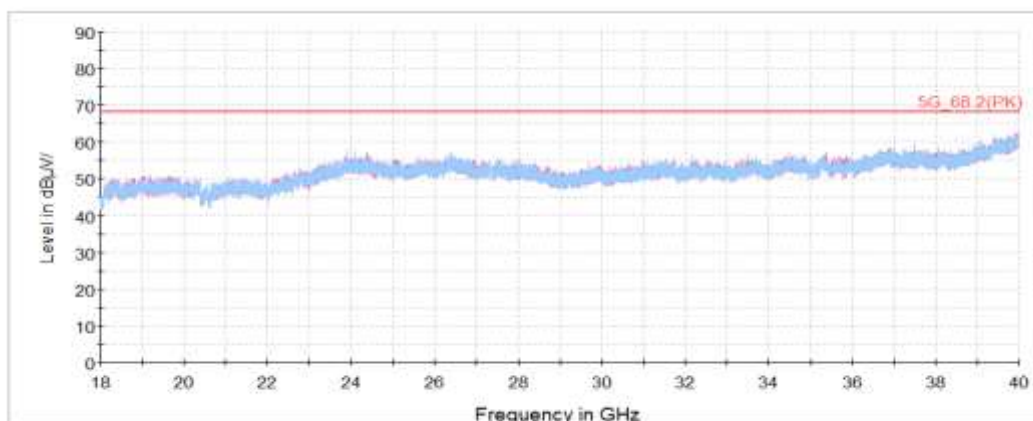
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**Middle Channel (5 300 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 094.77 ¹⁾	V	77.73	27.84	-50.62	-	54.95	74.00	19.05
10 600.03 ¹⁾	V	66.07	37.46	-49.87	-	53.66	74.00	20.34
15 903.47 ¹⁾	V	72.00	40.08	-48.76	-	63.32	74.00	10.68
Average Data								
1 094.77 ¹⁾	V	69.98	27.84	-50.62	0.22	47.42	54.00	6.58
15 903.47 ¹⁾	V	58.46	40.08	-48.76	0.22	50.00	54.00	4.00

Average data (1 094.77 MHz)**Average data (15 903.47 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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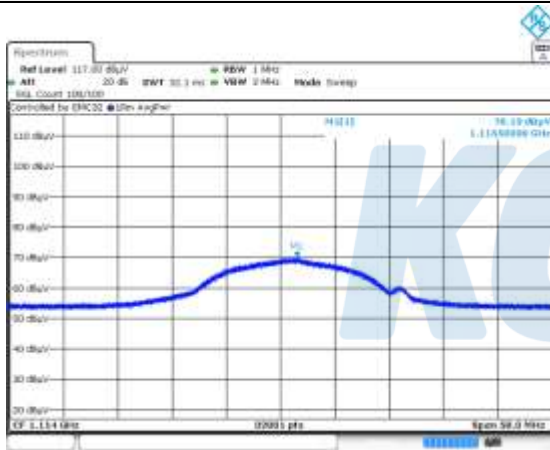
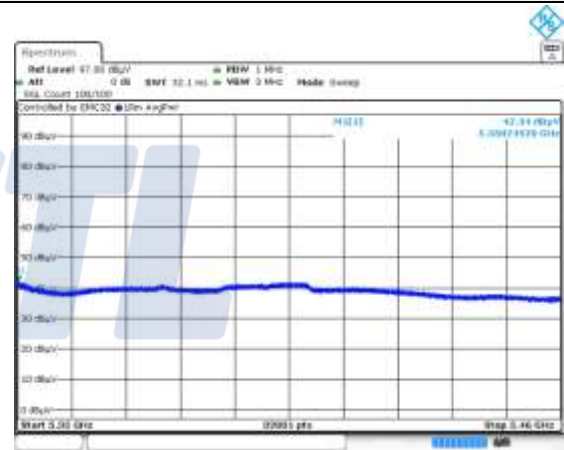
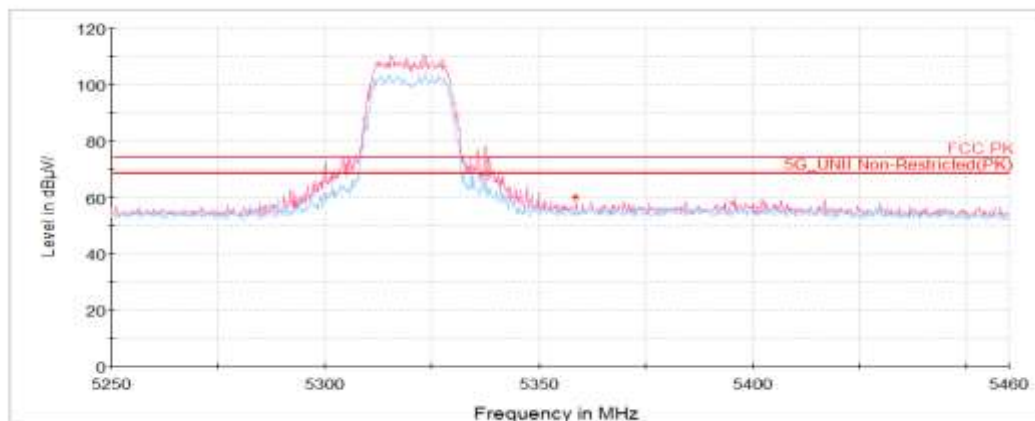
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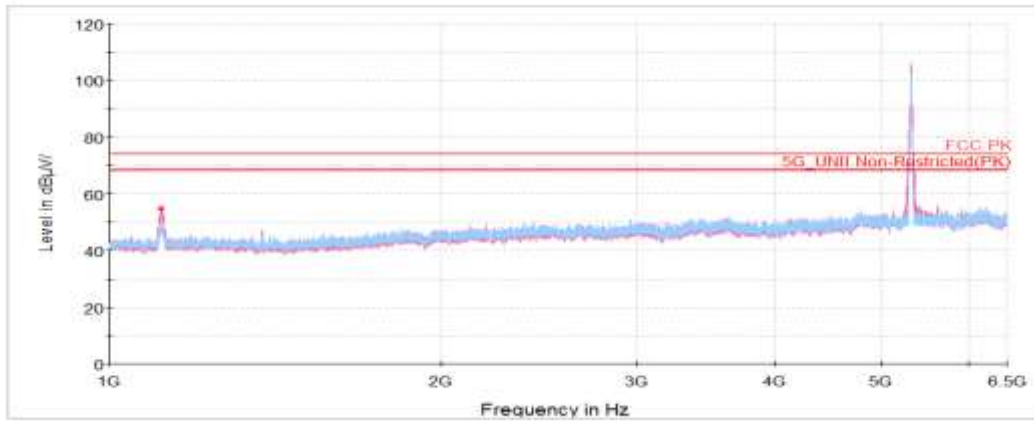
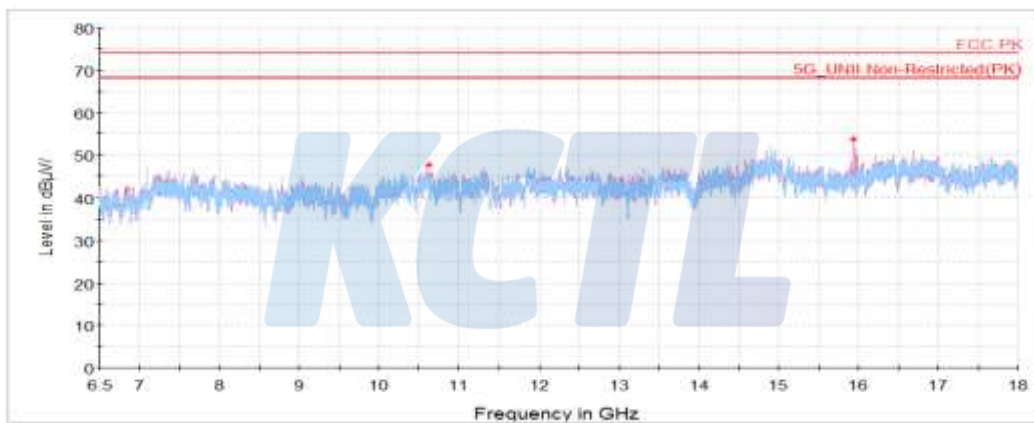
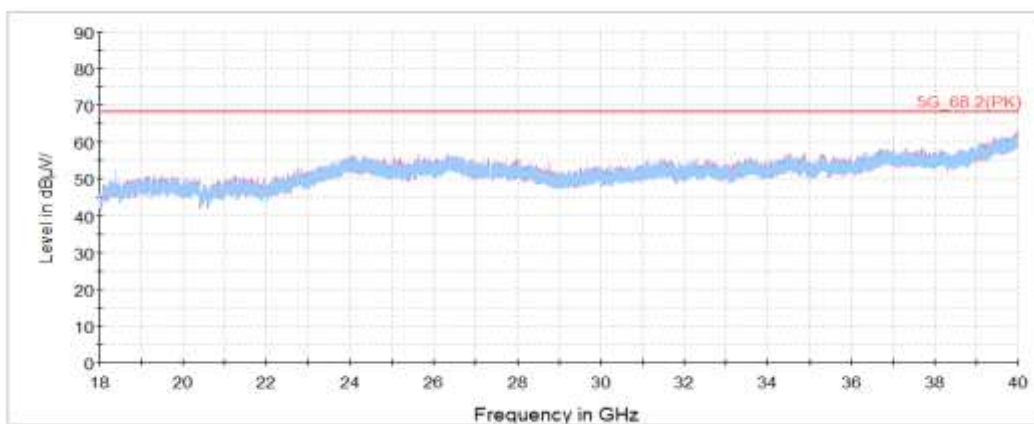
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**Highest Channel (5 320 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 115.50 ¹⁾	V	77.65	27.85	-50.49	-	55.01	74.00	18.99
5 350.25 ¹⁾	V	51.51	34.56	-26.84	-	59.23	74.00	14.77
10 626.70 ¹⁾	V	60.16	37.48	-49.93	-	47.71	74.00	26.29
15 944.24 ¹⁾	V	62.31	40.09	-48.79	-	53.61	74.00	20.39
Average Data								
1 115.50 ¹⁾	V	70.19	27.85	-50.49	0.22	47.77	54.00	6.23
5 350.25 ¹⁾	V	42.34	34.56	-26.84	0.22	50.28	54.00	3.72

Average data (1 115.50 MHz)**Average data (5 350.25 MHz)****Horizontal/Vertical for Band-edge**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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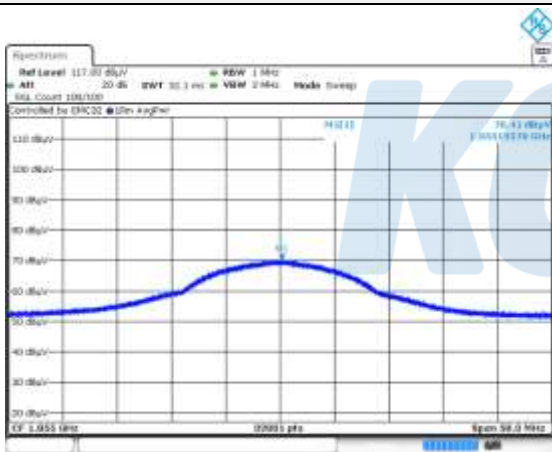
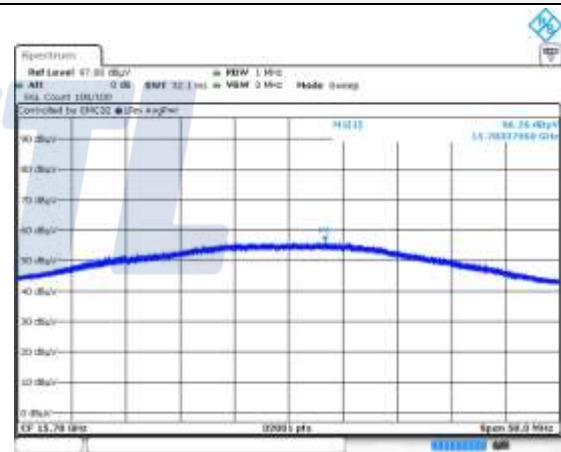
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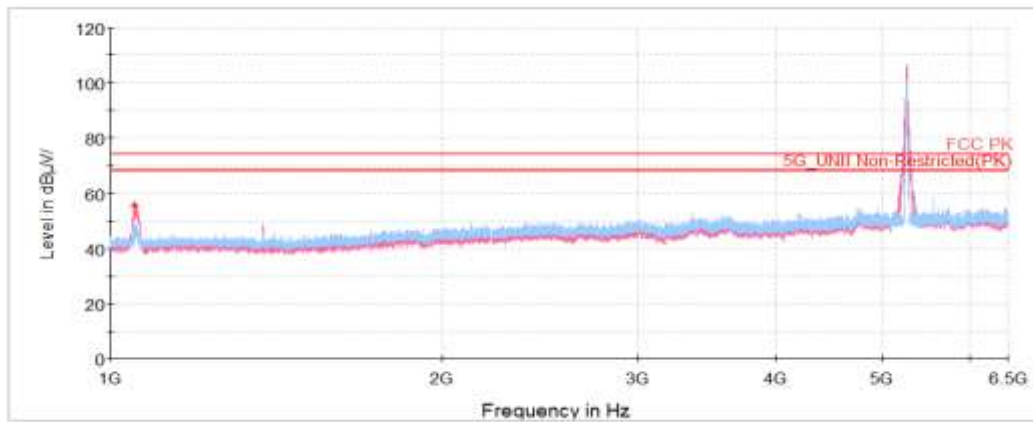
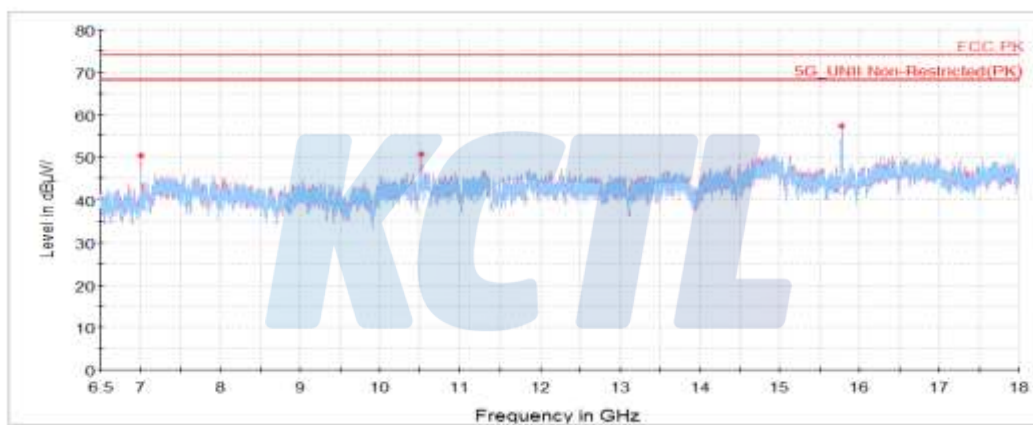
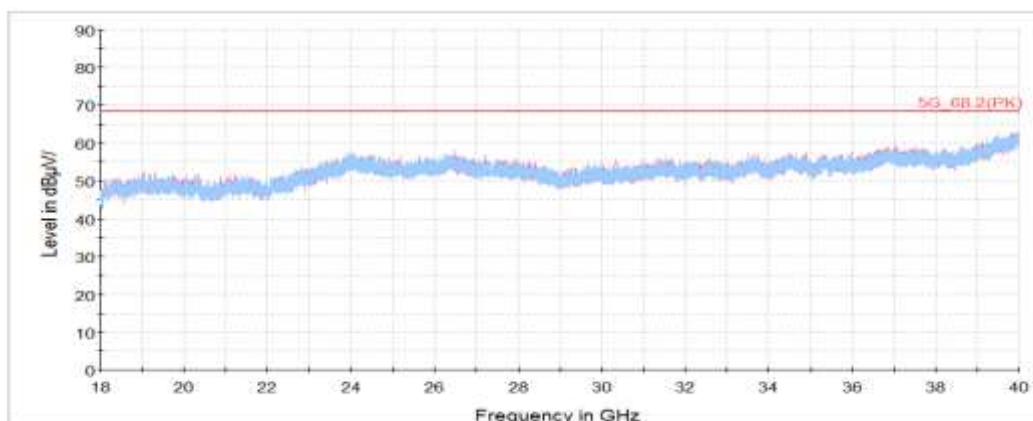
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**802.11n HT20 UNII 2A ANT 3****Lowest Channel (5 260 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 055.19 ¹⁾	V	78.54	27.82	-50.61	-	55.75	74.00	18.25
7 013.19	V	67.41	35.40	-52.62	-	50.19	68.20	18.01
10 519.25	V	62.90	37.41	-49.69	-	50.62	68.20	17.58
15 783.38 ¹⁾	V	65.94	40.06	-48.70	-	57.30	74.00	16.70
Average Data								
1 055.19 ¹⁾	V	70.41	27.82	-50.61	0.22	47.84	54.00	6.16
15 783.38 ¹⁾	V	56.26	40.06	-48.70	0.22	47.84	54.00	6.16

Average data (1 055.19 MHz)**Average data (15 783.38 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

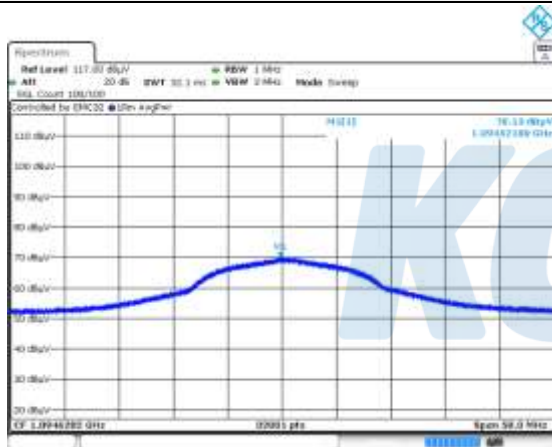
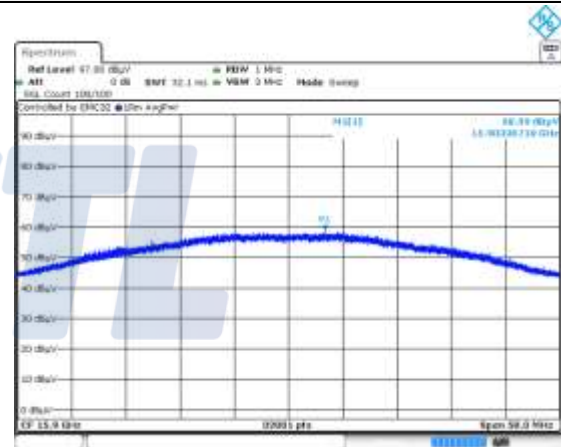
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

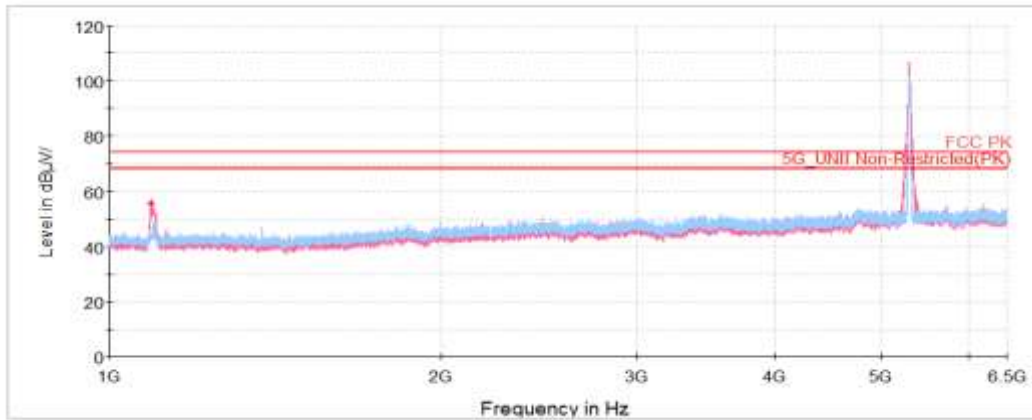
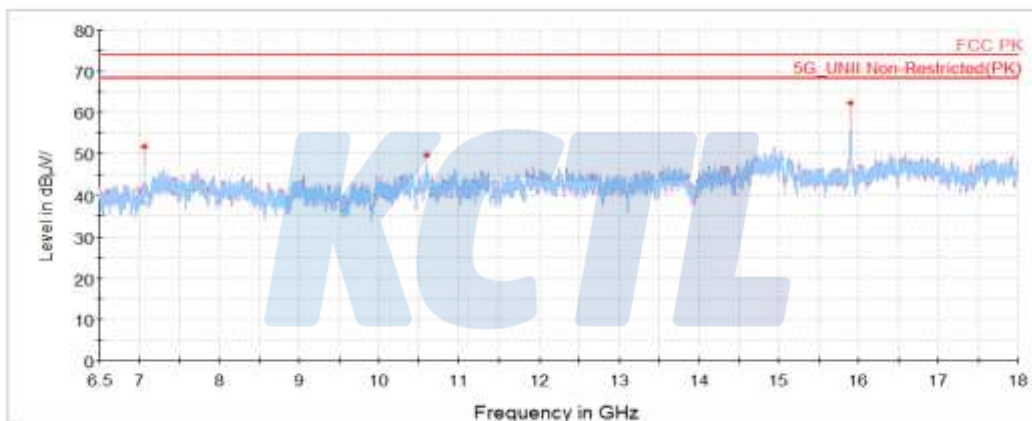
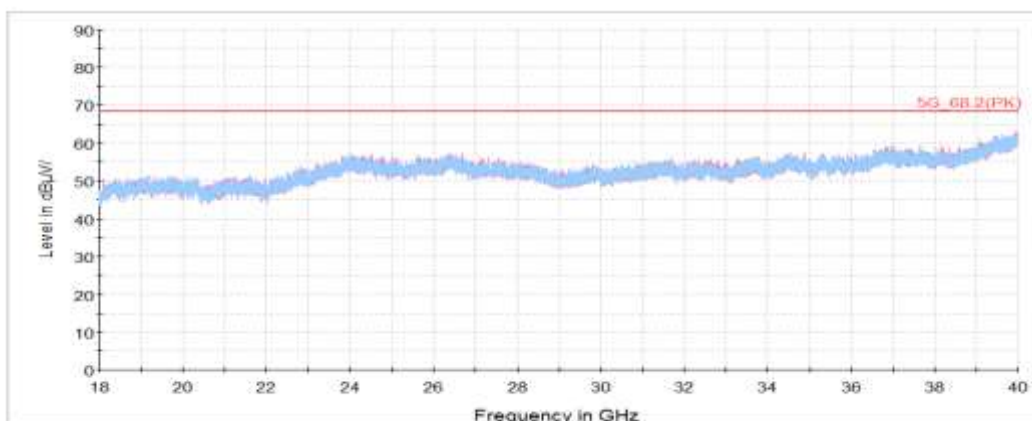
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KR20-SRF0030-D

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**Middle Channel (5 300 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 094.52 ¹⁾	V	78.61	27.84	-50.62	-	55.83	74.00	18.17
7 066.73	V	68.66	35.40	-52.37	-	51.69	68.20	16.51
10 602.98	H	62.13	37.46	-49.88	-	49.71	74.00	24.29
15 903.37 ¹⁾	V	70.97	40.08	-48.76	-	62.29	74.00	11.71
Average Data								
1 094.52 ¹⁾	V	70.13	27.84	-50.62	0.22	47.57	54.00	6.43
15 903.37 ¹⁾	V	58.99	40.08	-48.76	0.22	50.53	54.00	3.47

Average data (1 094.52 MHz)**Average data (15 903.37 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

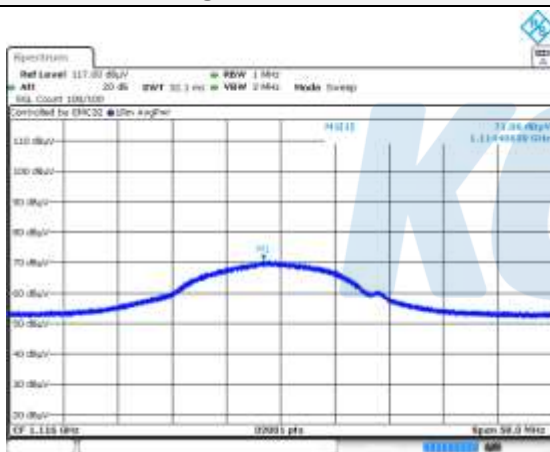
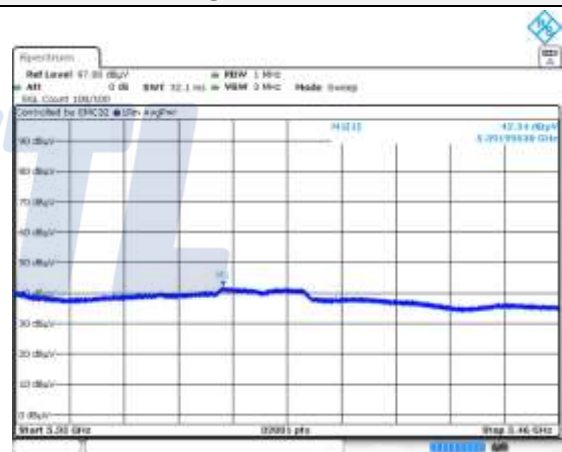
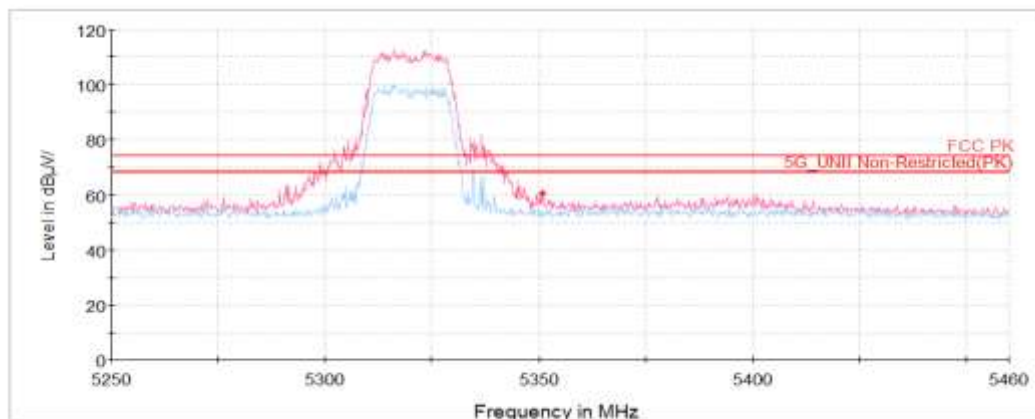
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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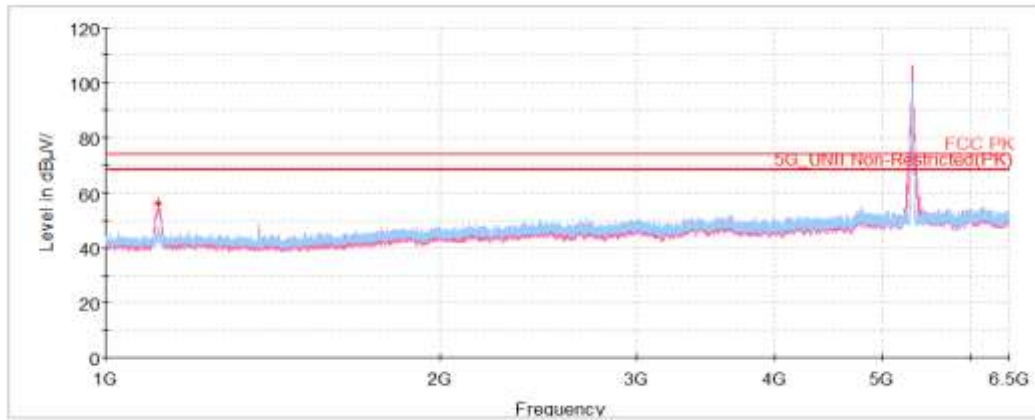
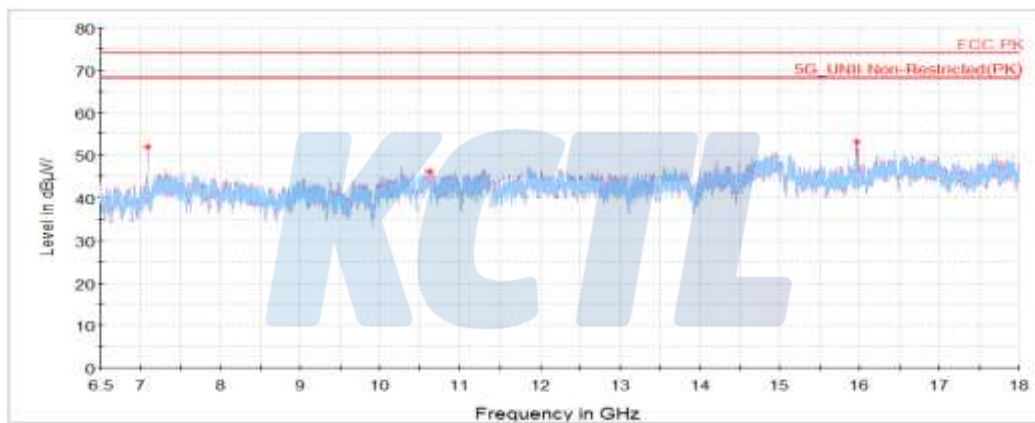
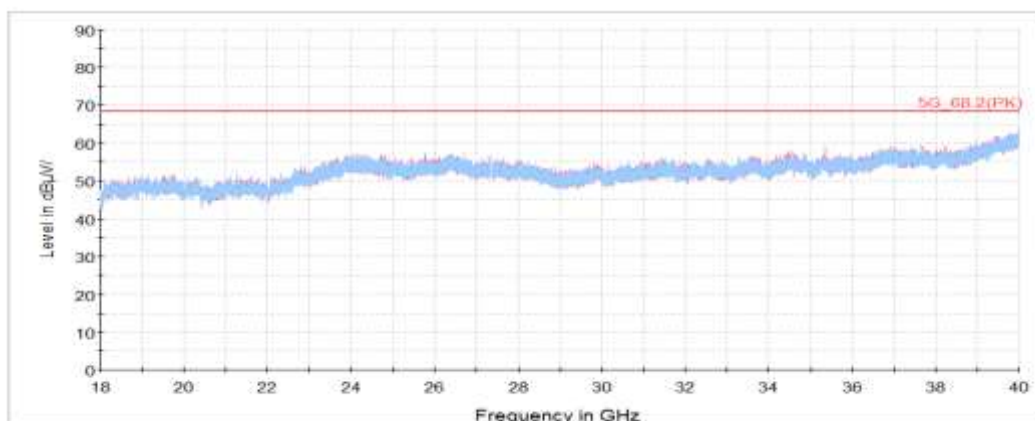
Report No.:
KR20-SRF0030-D

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**Highest Channel (5 320 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 114.41 ¹⁾	V	78.88	27.85	-50.50	-	56.23	74.00	17.77
5 392.00 ¹⁾	V	52.51	34.63	-26.74	-	60.40	74.00	13.60
7 093.33	V	68.76	35.40	-52.25	-	51.91	68.20	16.29
10 633.17 ¹⁾	V	58.45	37.48	-49.95	-	45.98	74.00	28.02
15 956.07 ¹⁾	V	61.80	40.09	-48.79	-	53.10	74.00	20.90
Average Data								
1 114.41 ¹⁾	V	71.06	27.85	-50.50	0.22	48.63	54.00	5.37
5 392.00 ¹⁾	V	42.34	34.63	-26.74	0.22	50.45	54.00	3.55

Average data (1 114.41)**Average data (5 392.00)****Horizontal/Vertical for Band-edge**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

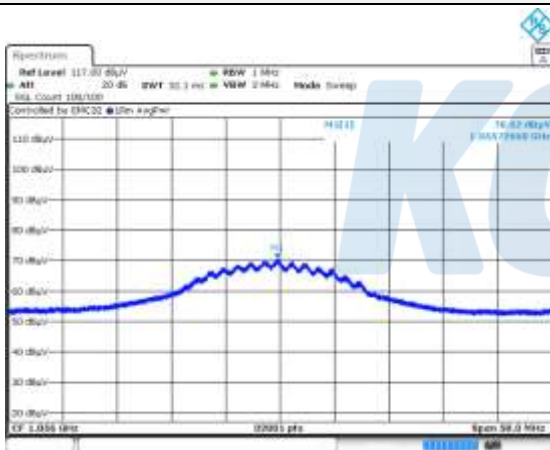
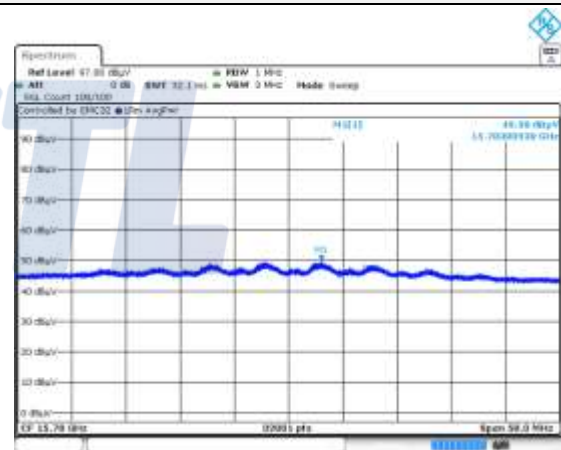
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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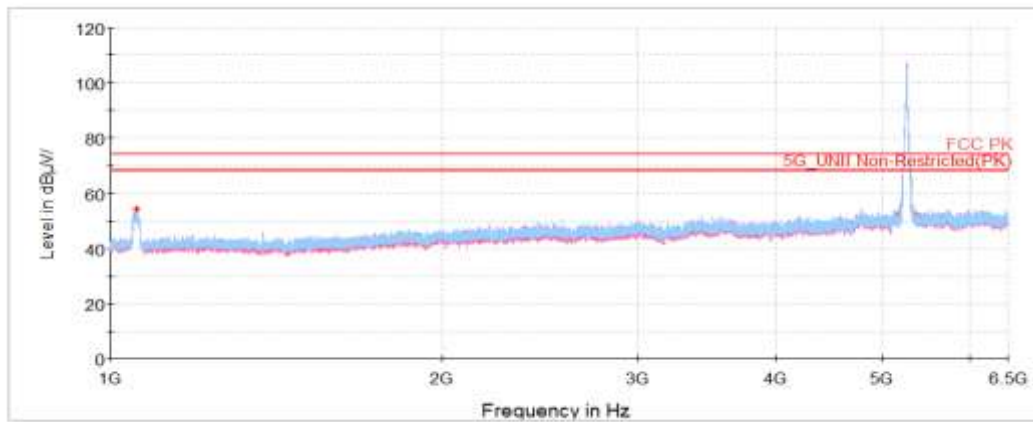
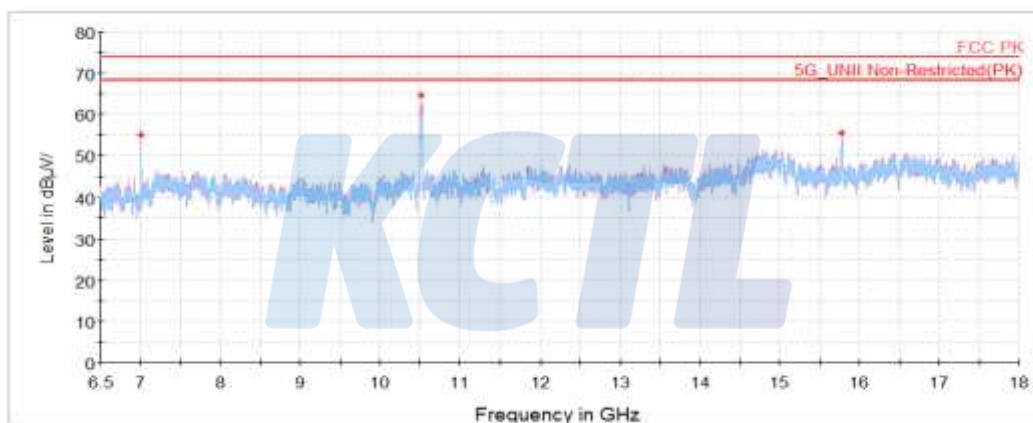
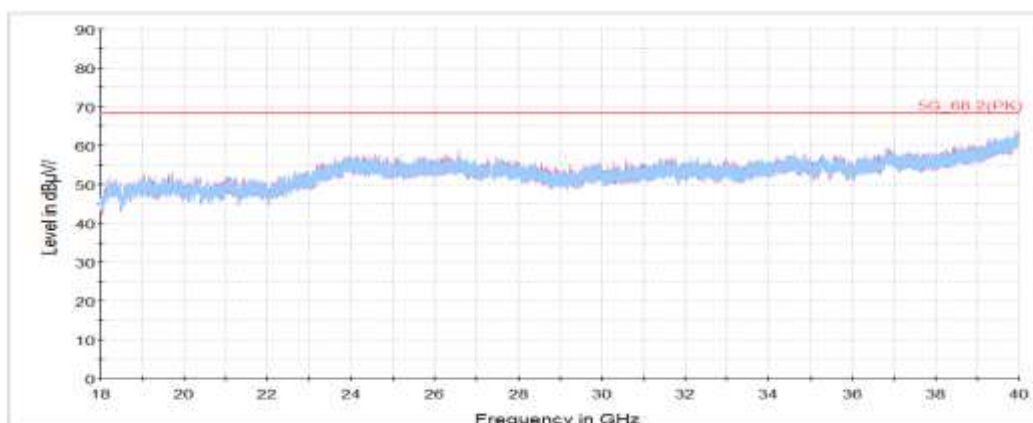
Report No.:
KR20-SRF0030-D

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**802.11n HT20 UNII 2A 4TX MIMO****Lowest Channel (5 260 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 055.73 ¹⁾	V	77.01	27.82	-50.61	-	54.22	74.00	19.78
7 013.55	H	72.26	35.40	-52.62	-	55.04	68.20	13.16
10 521.41	V	76.87	37.41	-49.70	-	64.58	68.20	3.62
15 783.01 ¹⁾	V	64.11	40.06	-48.70	-	55.47	74.00	18.53
Average Data								
1 055.73 ¹⁾	V	70.62	27.82	-50.61	0.22	48.05	54.00	5.95
15 783.01 ¹⁾	V	49.98	40.06	-48.70	0.22	41.56	54.00	12.44

Average data (1 055.73 MHz)**Average data (15 783.01 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

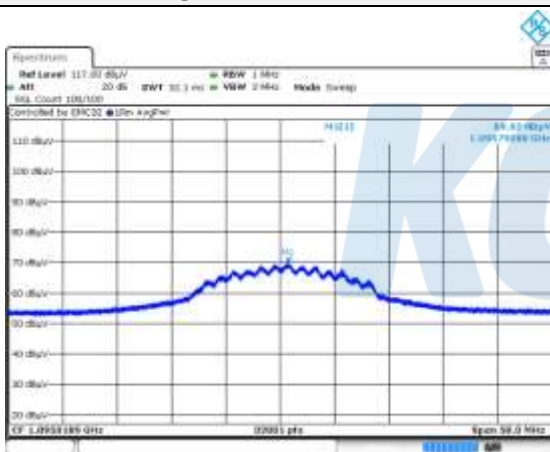
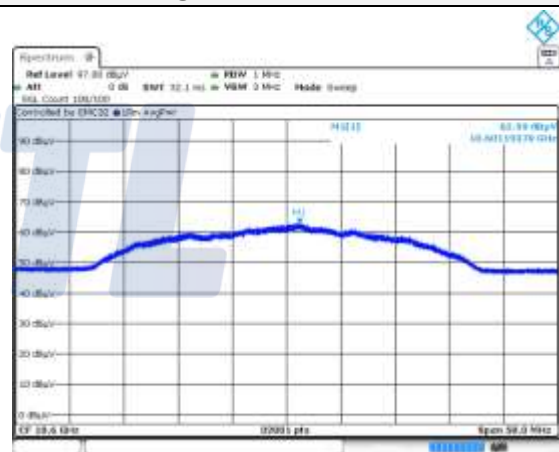
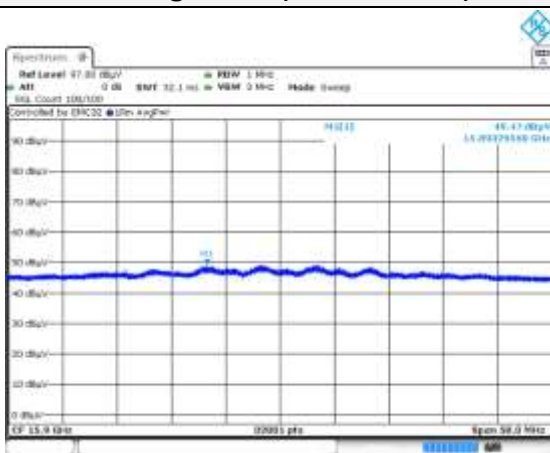
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
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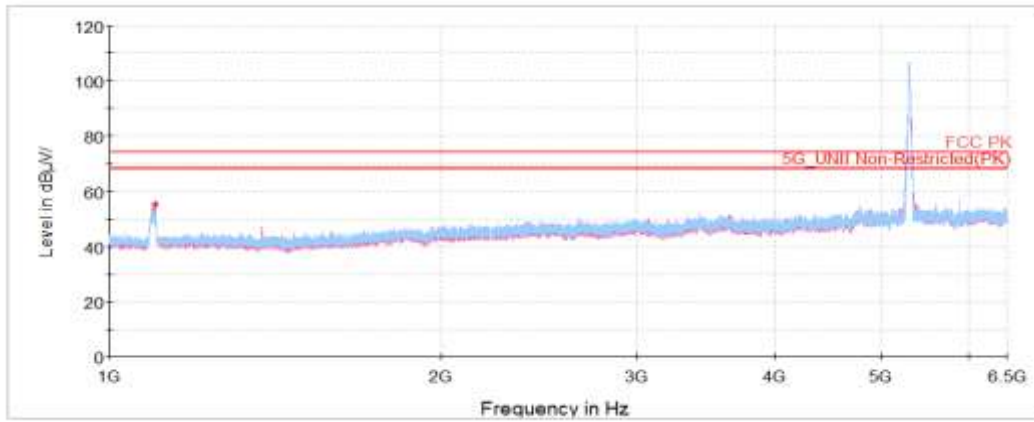
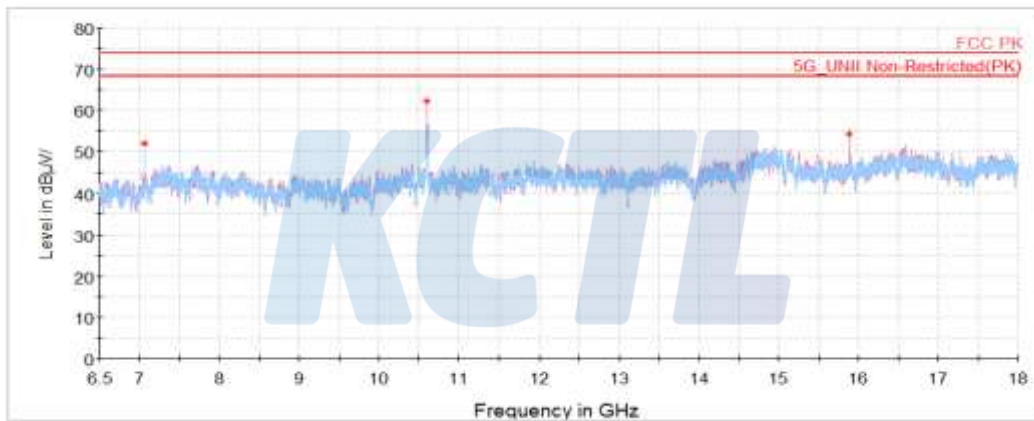
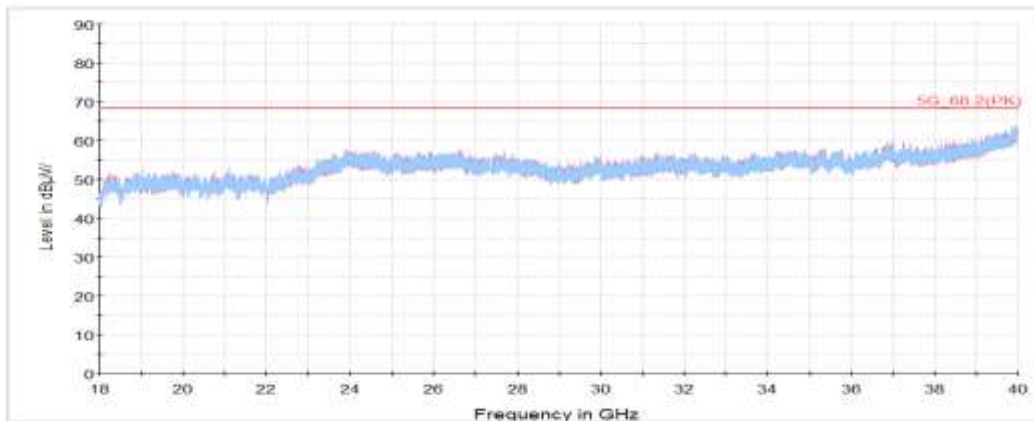
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**Middle Channel (5 300 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 095.79 ¹⁾	V	78.33	27.84	-50.62	-	55.55	74.00	18.45
7 066.73	H	68.93	35.40	-52.37	-	51.96	68.20	16.24
10 601.19 ¹⁾	V	74.73	37.46	-49.88	-	62.31	74.00	11.69
15 893.30 ¹⁾	V	62.84	40.08	-48.76	-	54.16	74.00	19.84
Average Data								
1 095.79 ¹⁾	V	69.82	27.84	-50.62	0.22	47.26	54.00	6.74
10 601.19 ¹⁾	V	62.99	37.46	-49.88	0.22	50.79	54.00	3.21
15 893.30 ¹⁾	V	49.47	40.08	-48.76	0.22	41.01	54.00	12.99

Average data (1 095.79 MHz)**Average data (10 601.19 MHz)****Average data (15 893.30 MHz)**

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Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

Highest Channel (5 320 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 115.70 ¹⁾	V	79.07	27.85	-50.49	-	56.43	74.00	17.57
5 389.83 ¹⁾	H	50.02	34.62	-26.74	-	57.90	74.00	16.10
7 093.33	H	70.39	35.40	-52.25	-	53.54	68.20	14.66
10 639.94 ¹⁾	H	69.50	37.48	-49.96	-	57.02	74.00	16.98
15 957.67 ¹⁾	V	57.53	40.09	-48.79	-	48.83	74.00	25.17
Average Data								
1 115.70 ¹⁾	V	70.91	27.85	-50.49	0.22	48.49	54.00	5.51
5 389.83 ¹⁾	H	41.43	34.62	-26.74	0.22	49.53	54.00	4.47
10 639.94 ¹⁾	H	62.44	37.48	-49.96	0.22	50.18	54.00	3.82



KCTL Inc.

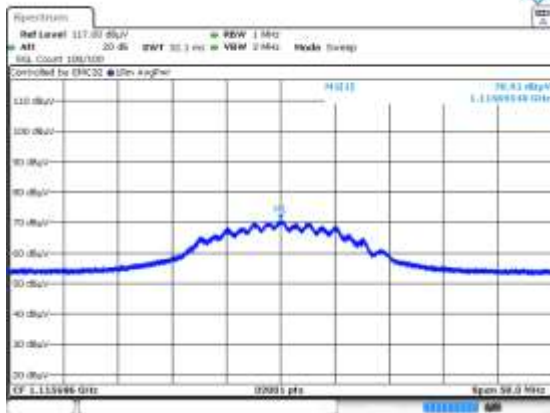
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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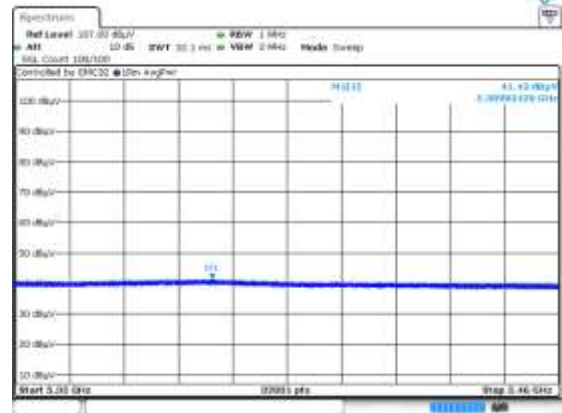
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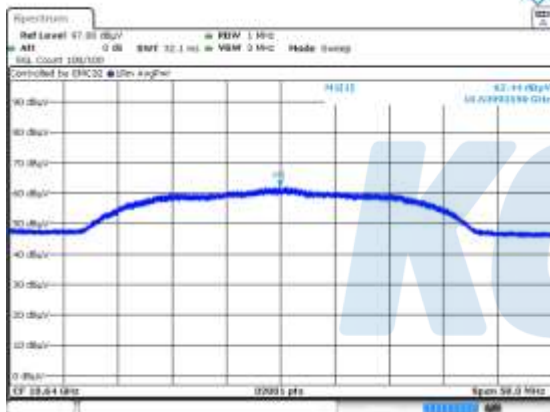
Average data (1 115.70 MHz)



Average data (5 389.83 MHz)

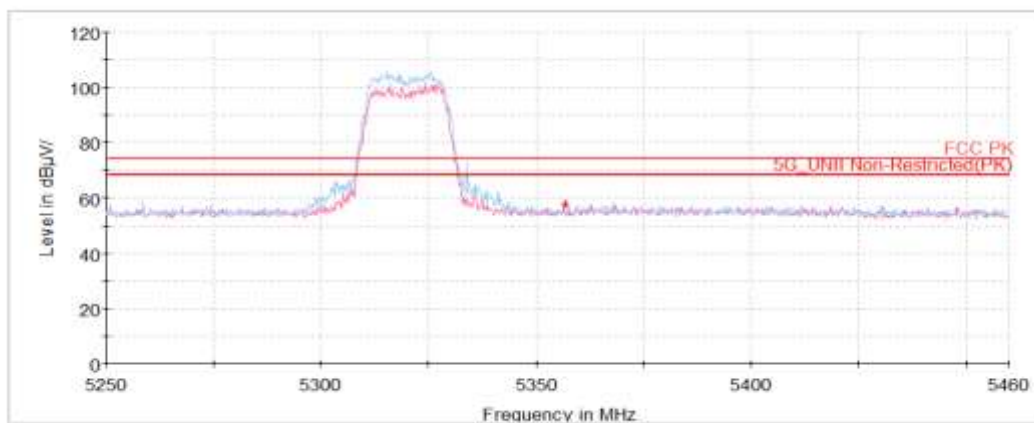


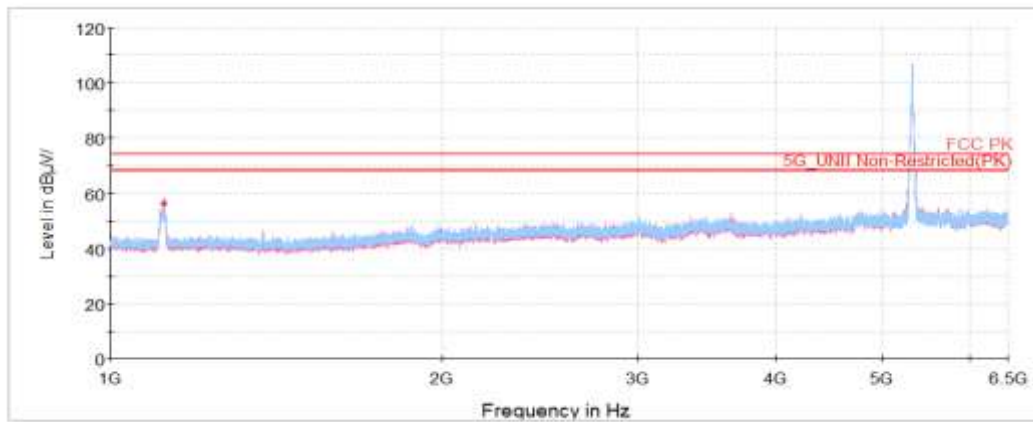
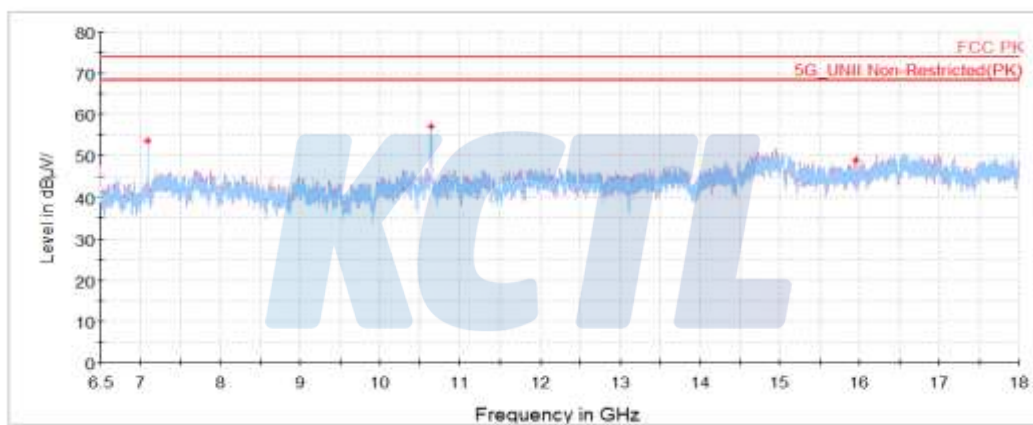
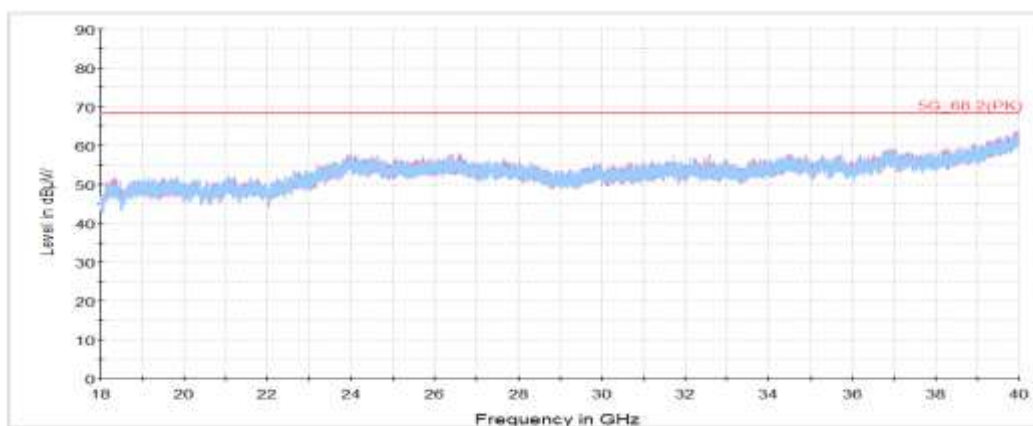
Average data (10 639.94 MHz)



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Horizontal/Vertical for Band-edge



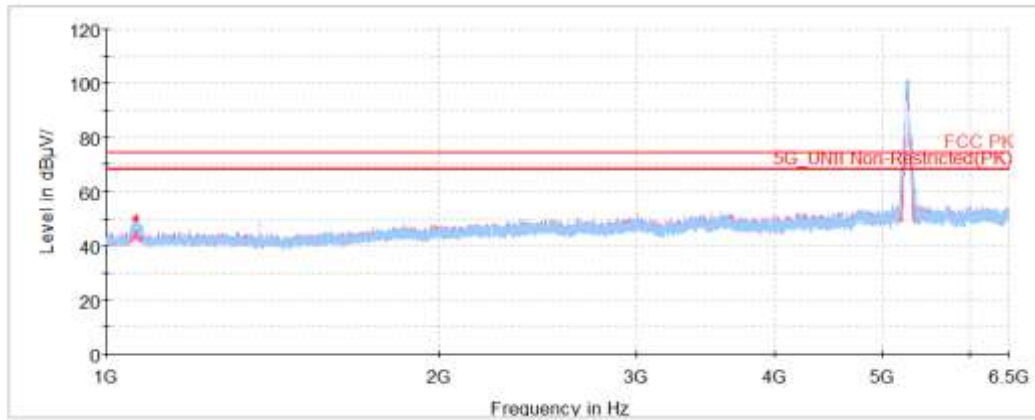
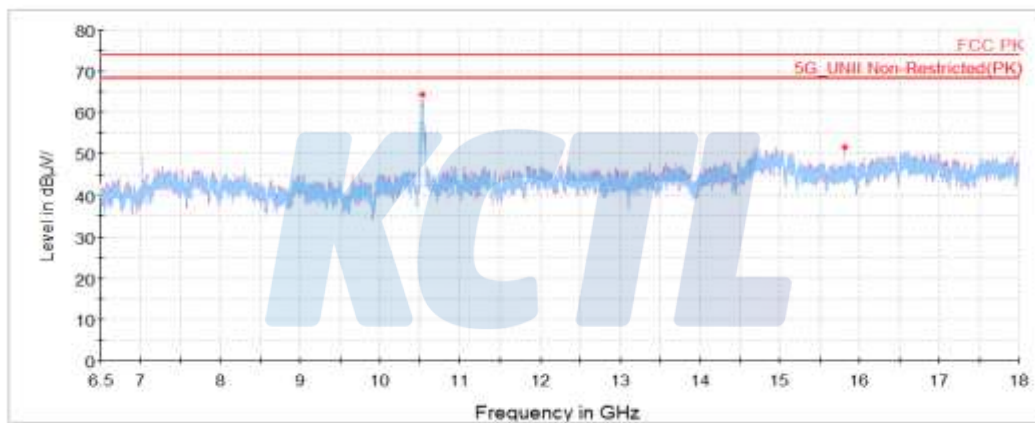
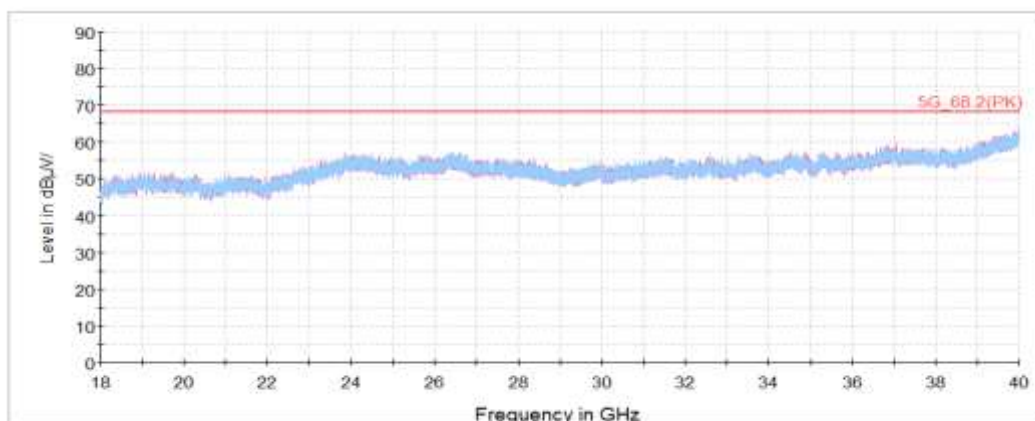
Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

802.11n HT40 UNII 2A ANT 0

Lowest Channel (5 270 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB($\mu V/m$))	(dB($\mu V/m$))	(dB)
Peak data								
10 538.66	V	76.61	37.42	-49.74	-	64.29	68.20	3.91
15 820.23 ¹⁾	V	60.23	40.06	-48.72	-	51.57	74.00	22.43
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

KCTL

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

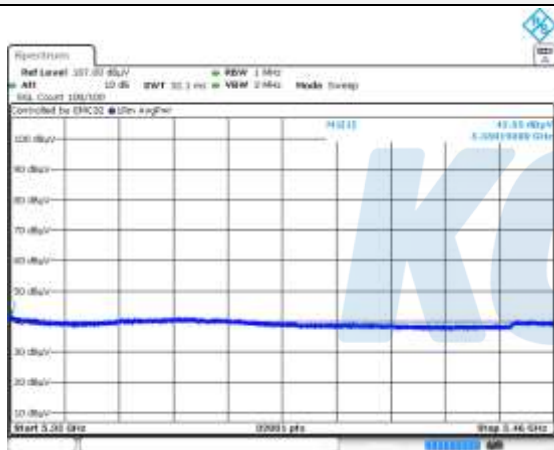
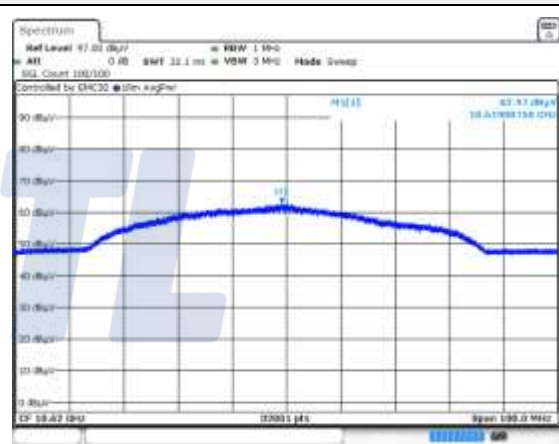
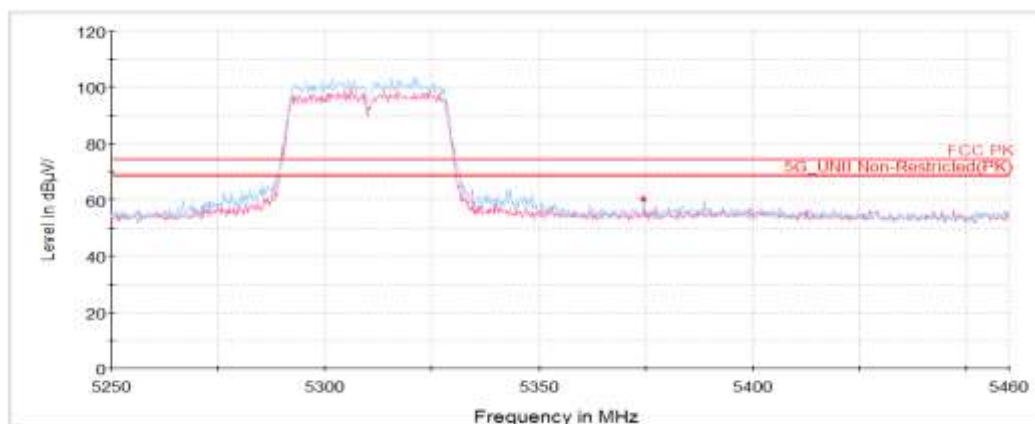
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
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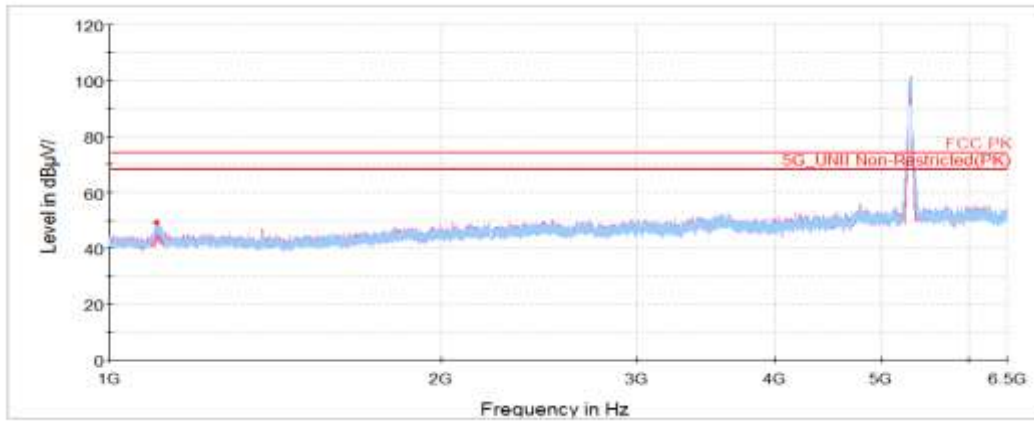
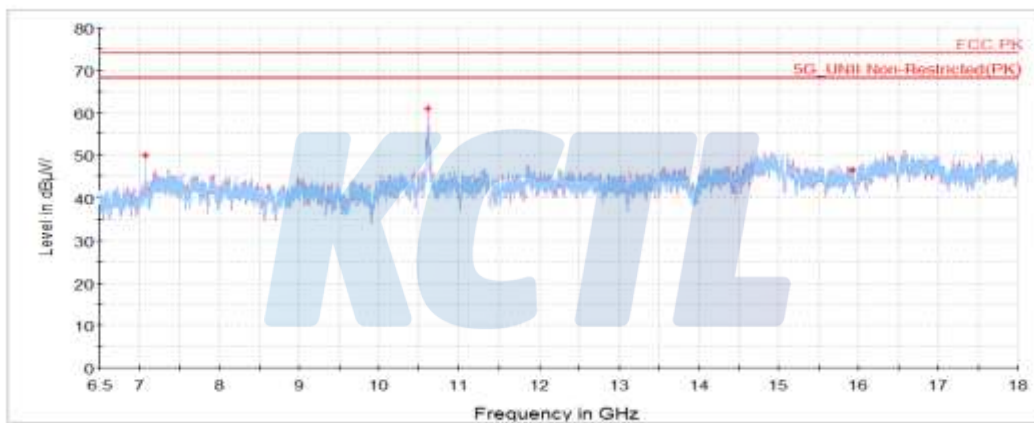
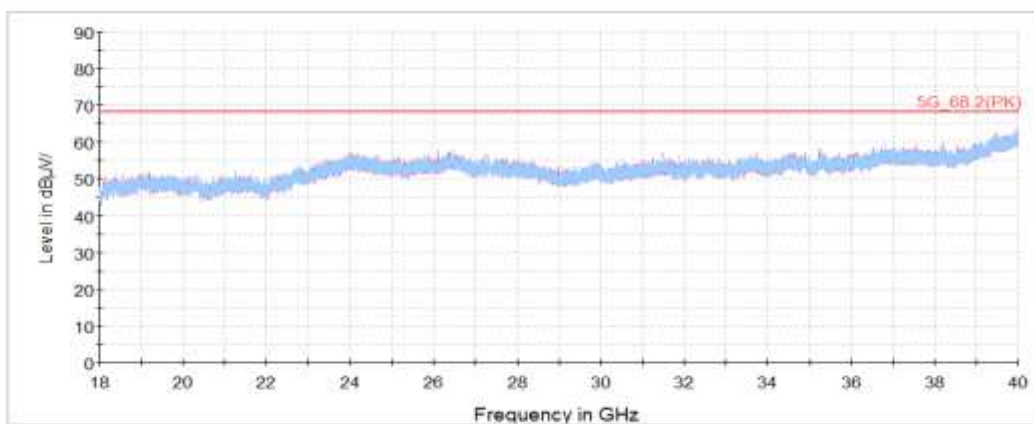
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**Highest Channel (5 310 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 350.19 ¹⁾	H	52.36	34.56	-26.84	-	60.08	74.00	13.92
7 080.03	H	66.83	35.40	-52.31	-	49.92	68.20	18.28
10 619.09 ¹⁾	V	73.29	37.47	-49.91	-	60.85	74.00	13.15
15 930.36 ¹⁾	V	55.07	40.09	-48.78	-	46.38	74.00	27.62
Average Data								
5 350.19 ¹⁾	H	42.05	34.56	-26.84	0.44	50.21	54.00	3.79
10 619.09 ¹⁾	V	62.97	37.47	-49.91	0.44	50.97	54.00	3.03

Average data (5 350.19 MHz)**Average data (10 619.09 MHz)****Horizontal/Vertical for Band-edge**

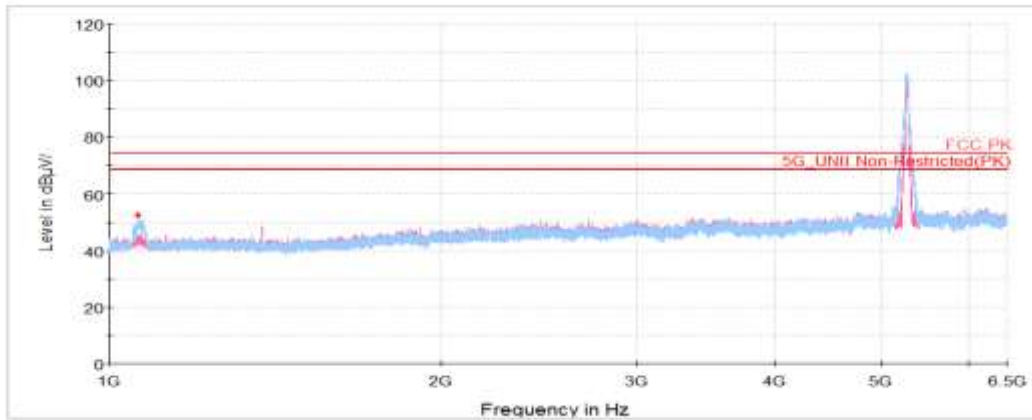
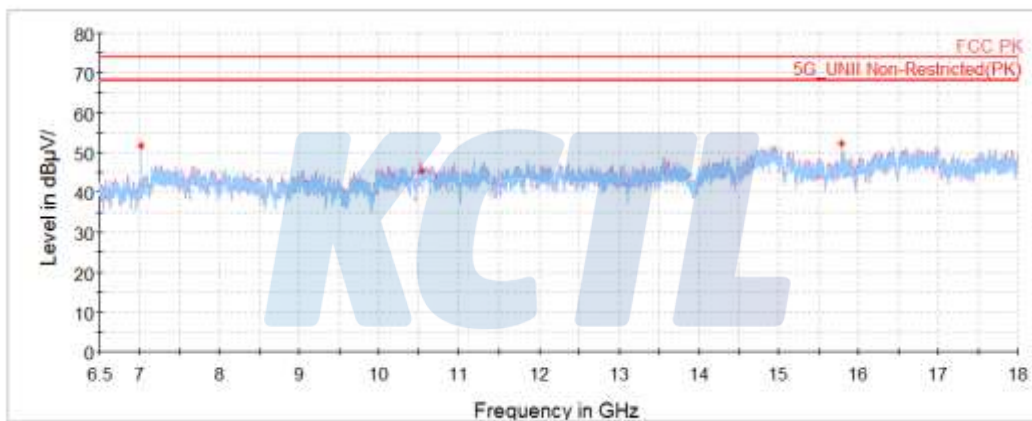
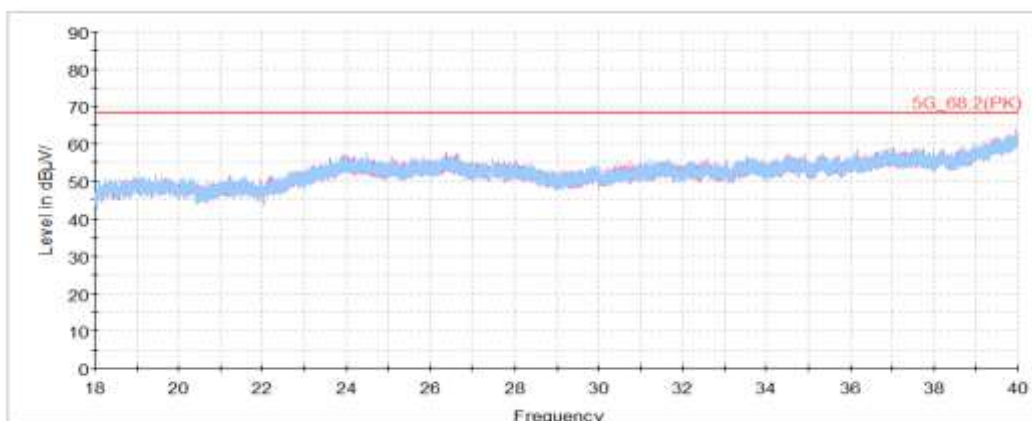
Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

802.11n HT40 UNII 2A ANT 1

Lowest Channel (5 270 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 064.48 ¹⁾	H	75.25	27.83	-50.61	-	52.47	74.00	21.53
7 026.48	H	68.86	35.40	-52.56	-	51.70	68.20	16.50
10 540.45	H	57.54	37.42	-49.74	-	45.22	68.20	22.98
15 795.99 ¹⁾	V	60.78	40.06	-48.71	-	52.13	74.00	21.87
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

KCTL

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

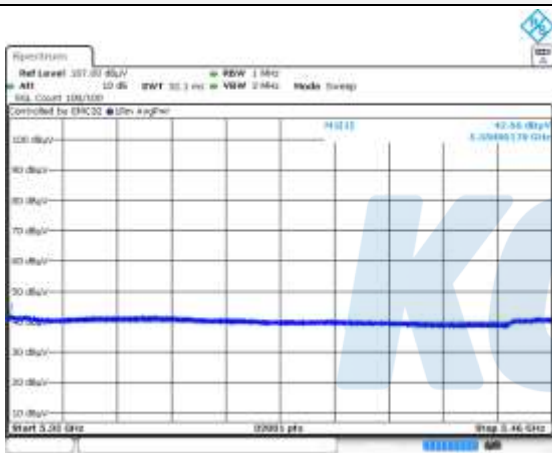
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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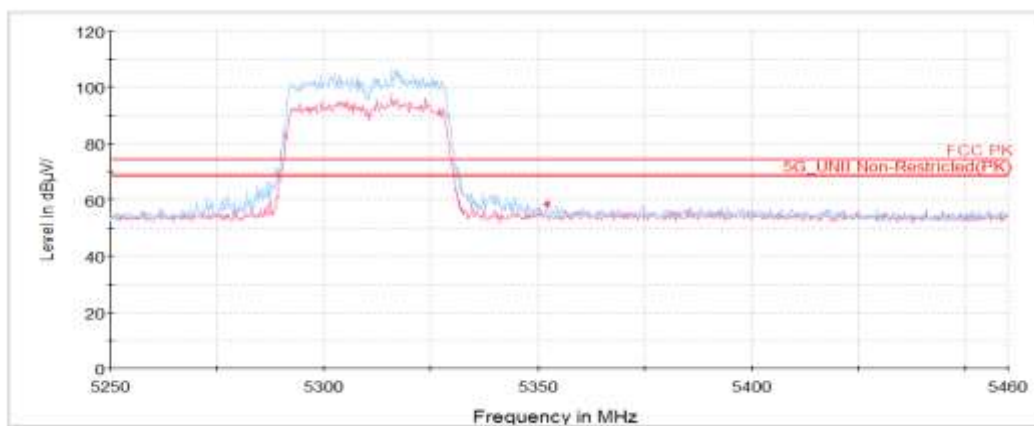
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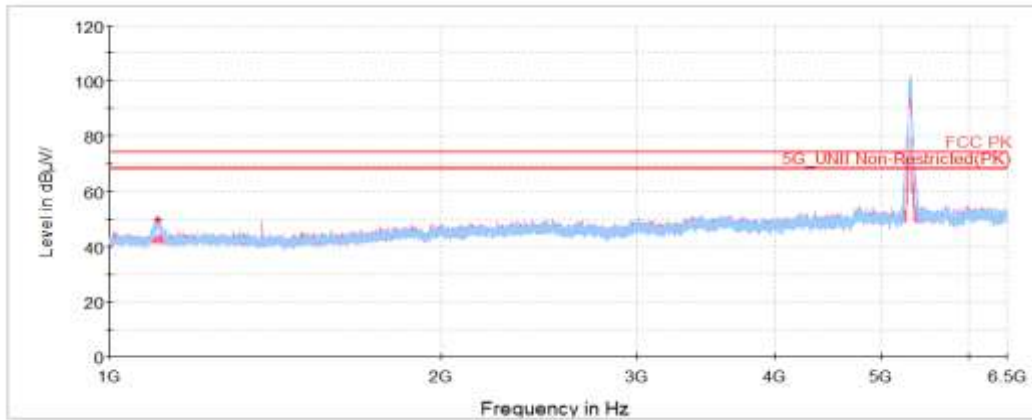
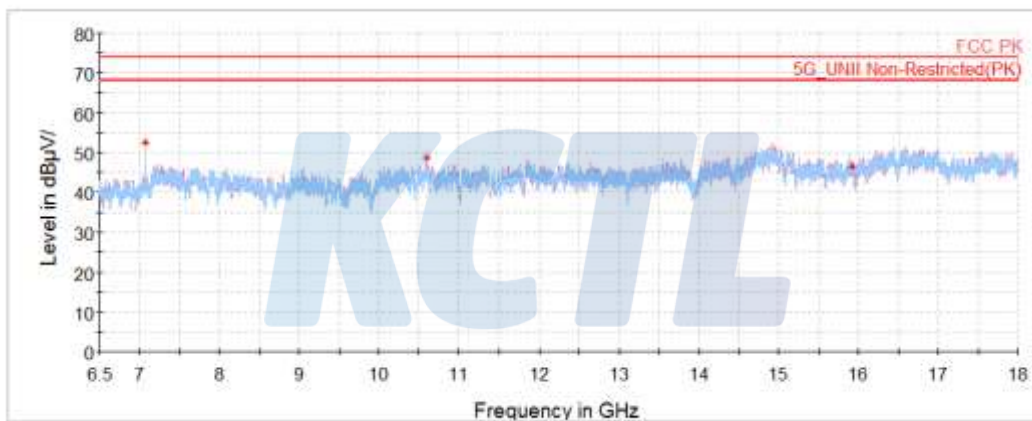
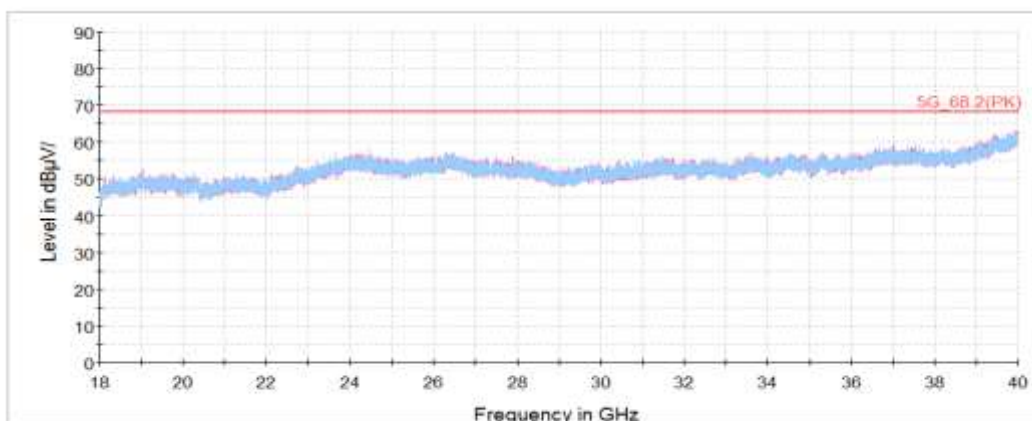
**Highest Channel (5 310 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 350.00 ¹⁾	H	50.78	34.56	-26.84	-	58.50	74.00	15.50
7 080.03	H	69.31	35.40	-52.31	-	52.40	68.20	15.80
10 601.19 ¹⁾	H	60.84	37.46	-49.88	-	48.42	74.00	25.58
15 931.08 ¹⁾	V	55.04	40.09	-48.78	-	46.35	74.00	27.65
Average Data								
5 350.00 ¹⁾	H	42.66	34.56	-26.84	0.44	50.82	54.00	3.18

Average data (5 350.00 MHz)

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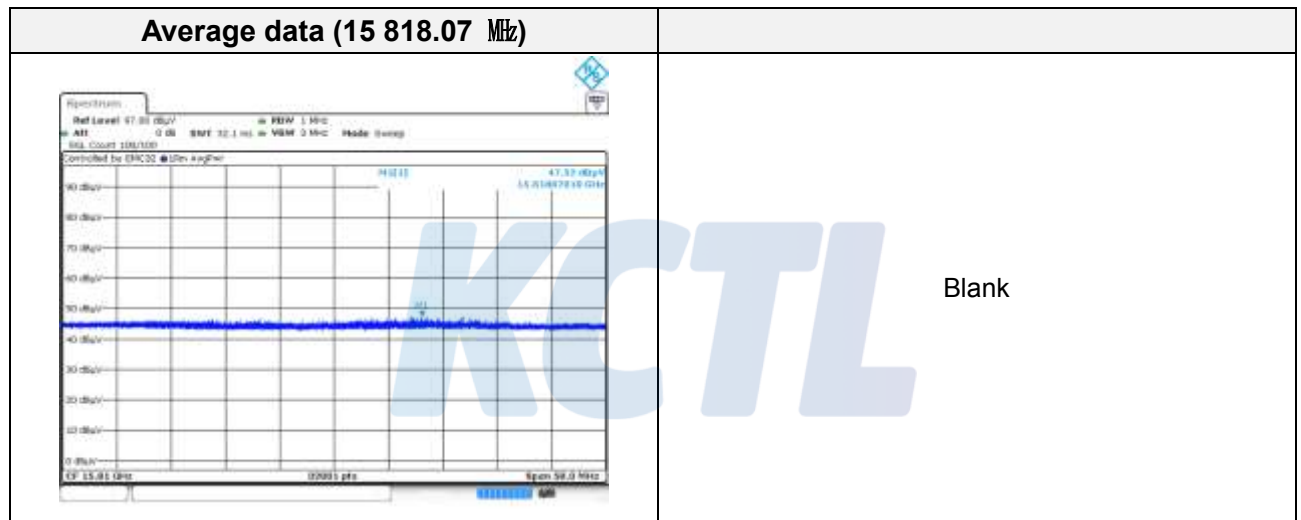
Horizontal/Vertical for Band-edge

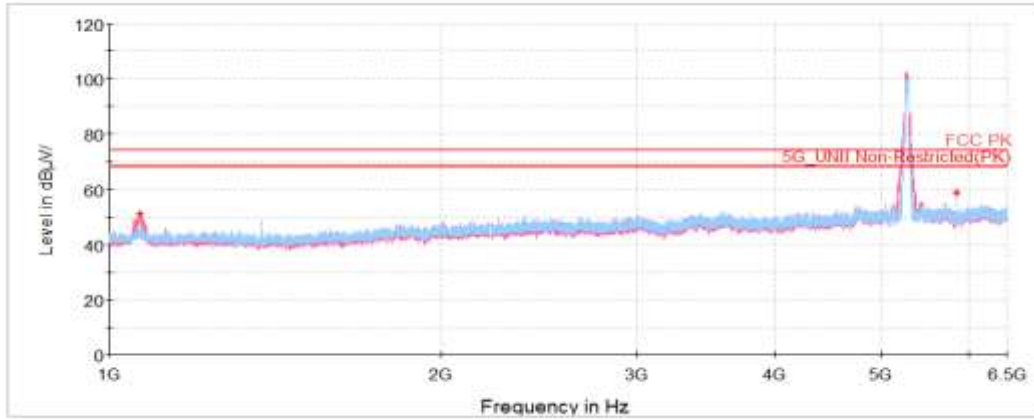
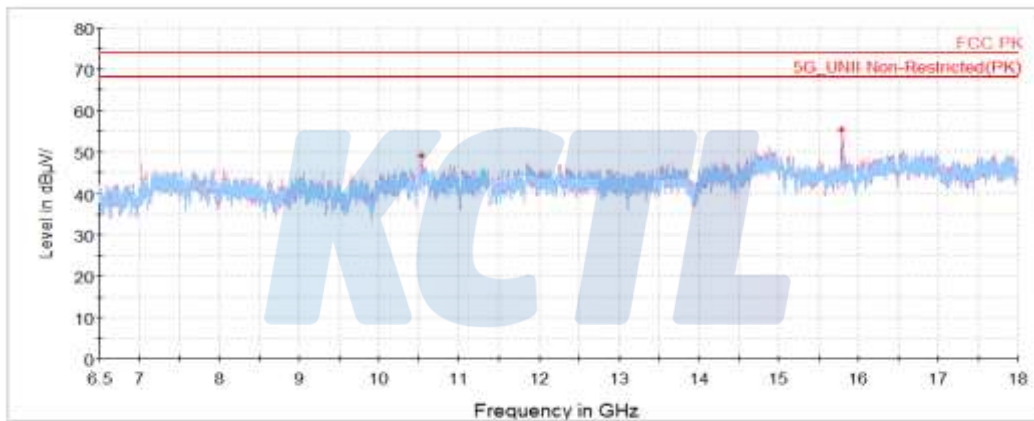
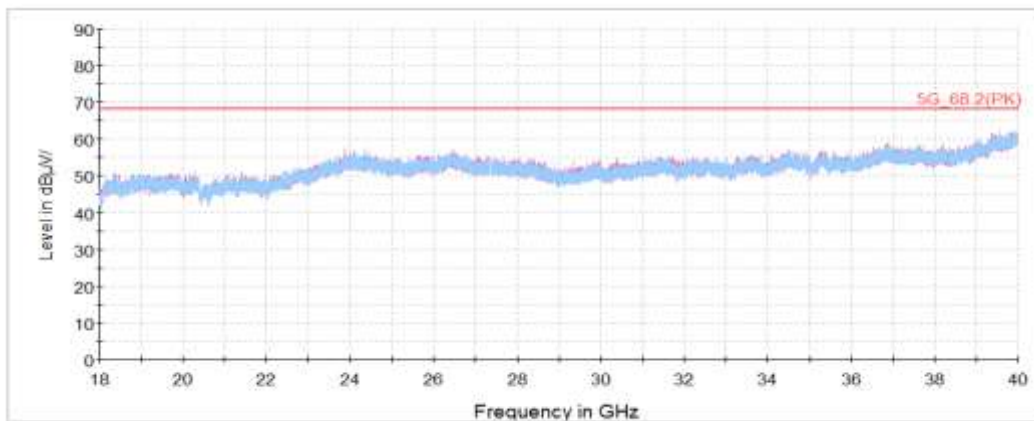
Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

802.11n HT40 UNII 2A ANT 2

Lowest Channel (5 270 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB($\mu V/m$))	(dB($\mu V/m$))	(dB)
Peak data								
5 855.64	V	68.27	35.23	-44.90	-	58.60	68.20	9.60
10 537.94	V	61.35	37.42	-49.74	-	49.03	68.20	19.17
15 818.07 ¹⁾	V	63.95	40.06	-48.72	-	55.29	74.00	18.71
Average Data								
15 818.07 ¹⁾	V	47.52	40.06	-48.72	0.44	39.30	54.00	14.70



Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

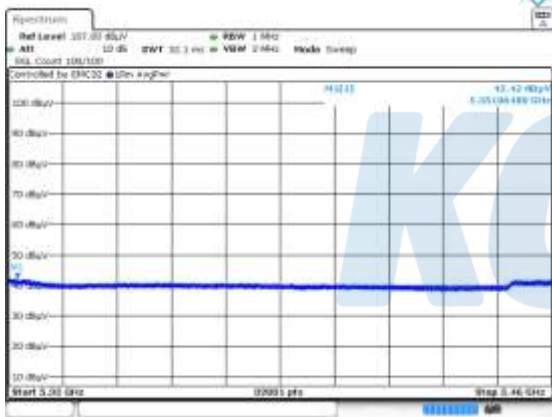
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR20-SRF0030-D

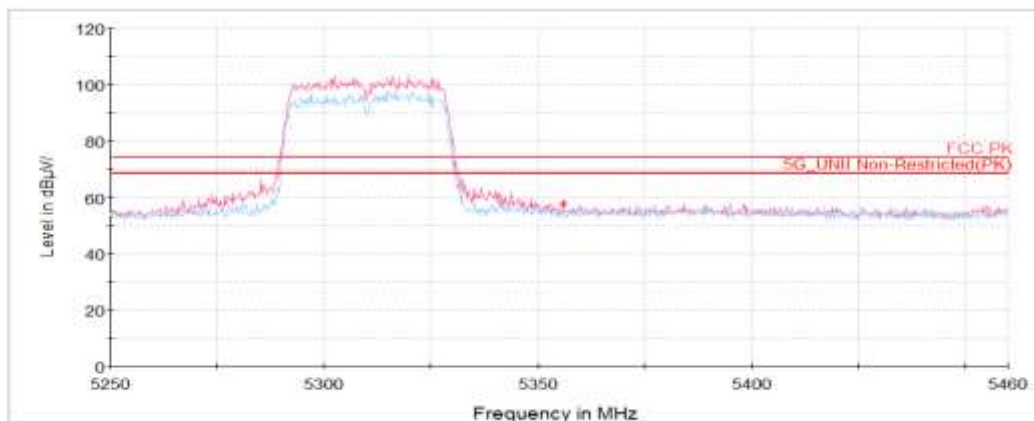
Page (602) of (1046)

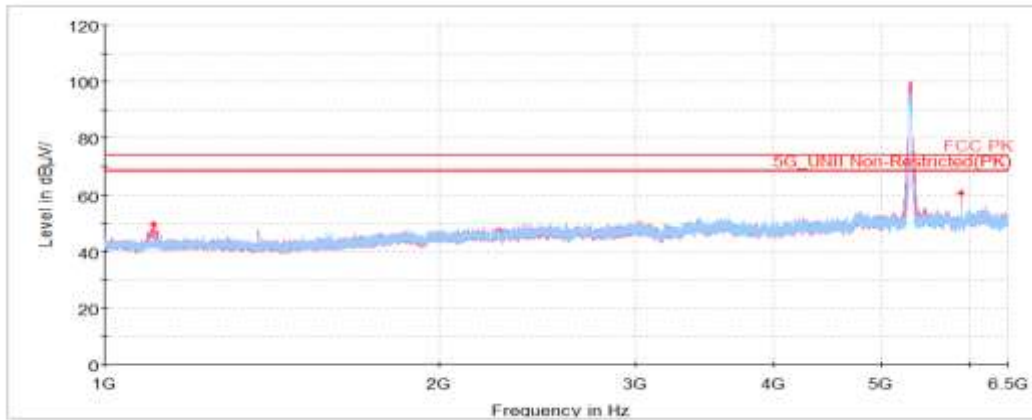
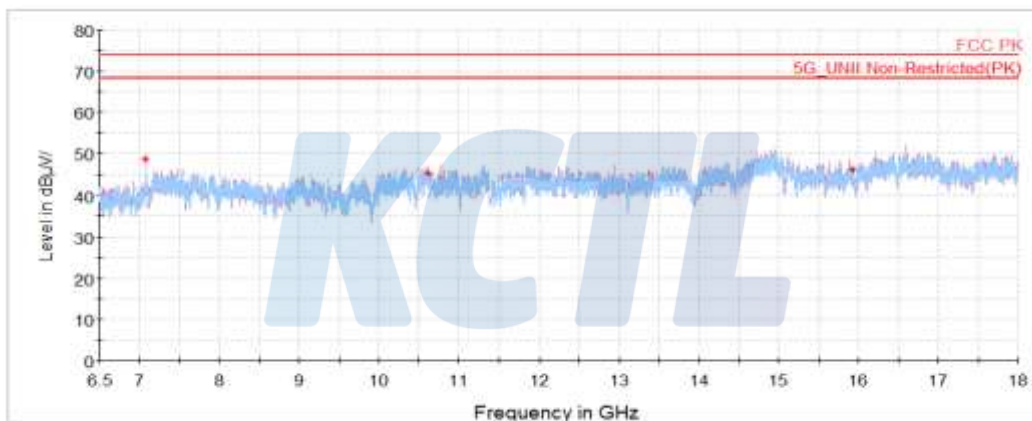
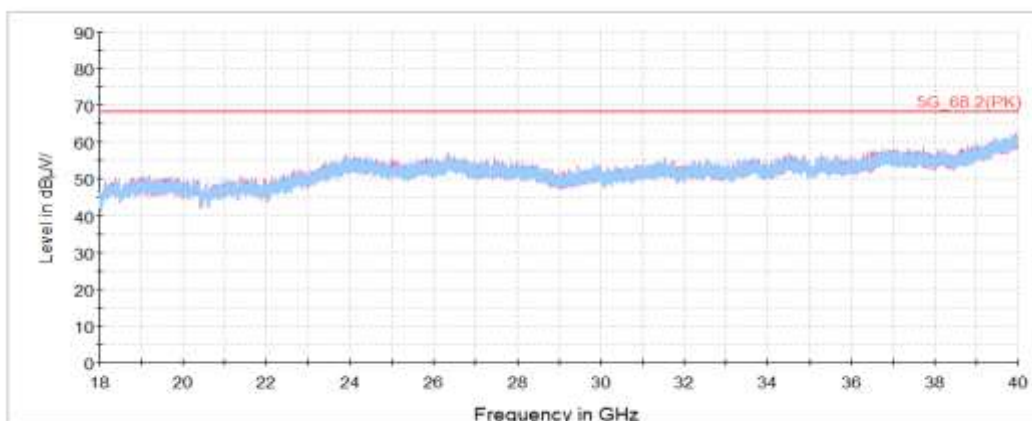
**Highest Channel (5 310 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 351.86 ¹⁾	V	49.85	34.56	-26.84	-	57.57	74.00	16.43
5 899.98	V	69.85	35.28	-44.49	-	60.64	68.20	7.56
7 080.03	V	65.55	35.40	-52.31	-	48.64	68.20	19.56
10 620.23 ¹⁾	V	57.71	37.47	-49.92	-	45.26	74.00	28.74
15 931.80 ¹⁾	V	54.76	40.09	-48.78	-	46.07	74.00	27.93
Average Data								
5 351.86 ¹⁾	V	42.42	34.56	-26.84	0.44	50.58	54.00	3.42

Average data (5 351.86 MHz)

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Horizontal/Vertical for Band-edge

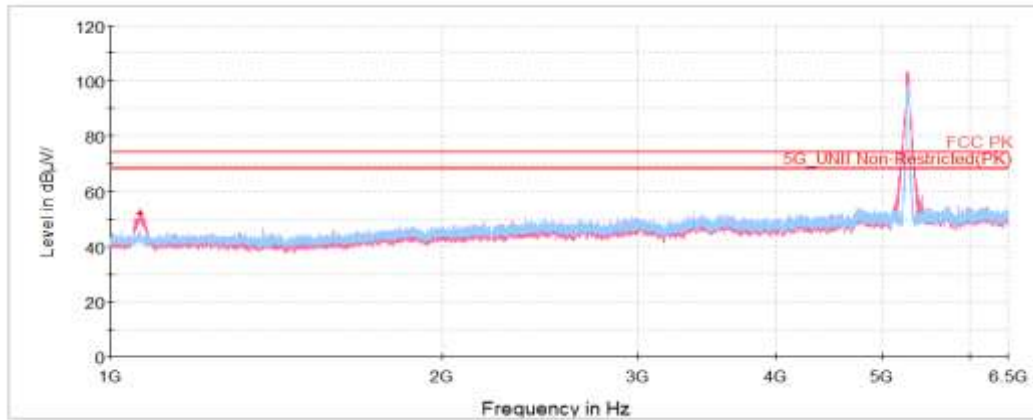
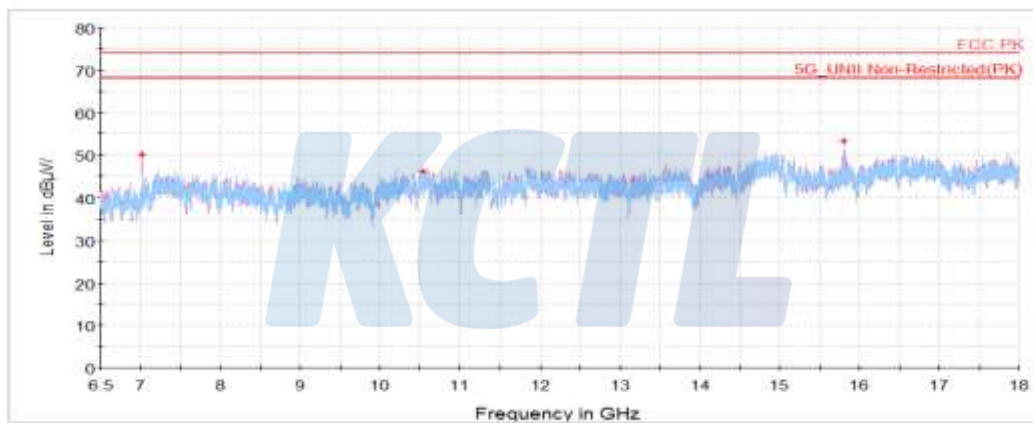
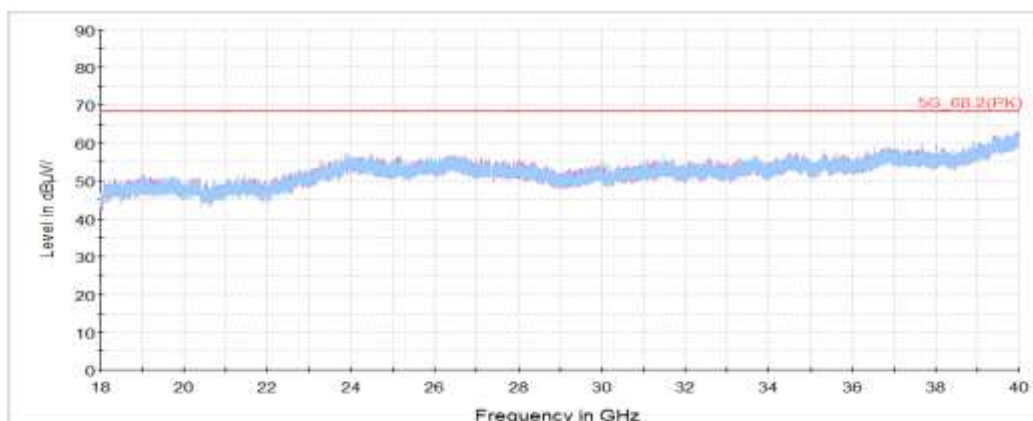
Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

802.11n HT40 UNII 2A ANT 3

Lowest Channel (5 270 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB($\mu V/m$))	(dB($\mu V/m$))	(dB)
Peak data								
7 026.84	V	67.19	35.40	-52.56	-	50.03	68.20	18.17
10 537.22	V	58.42	37.42	-49.73	-	46.11	68.20	22.09
15 822.00 ¹⁾	H	61.88	40.06	-48.72	-	53.22	74.00	20.78
Average Data								
No spurious emissions were detected within 20 dB of the limit.								



Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

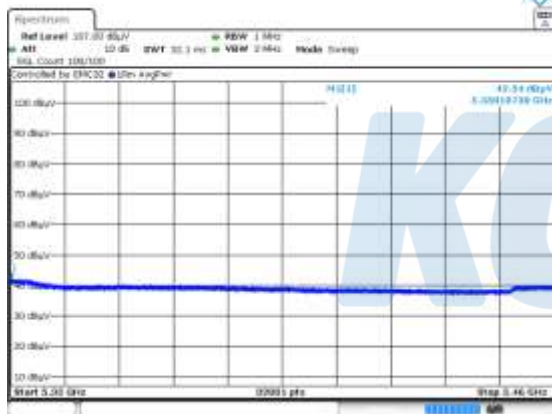
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR20-SRF0030-D

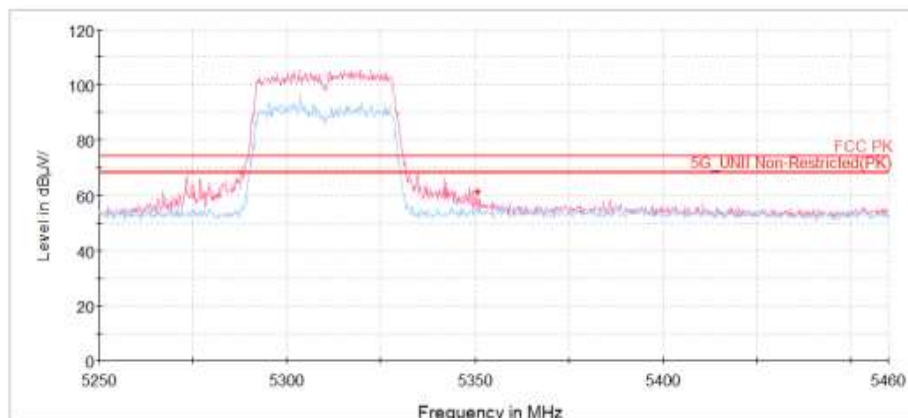
Page (606) of (1046)

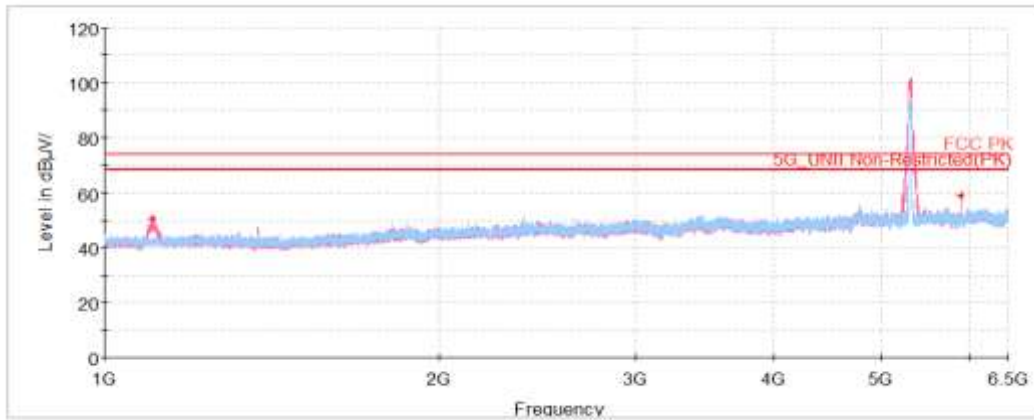
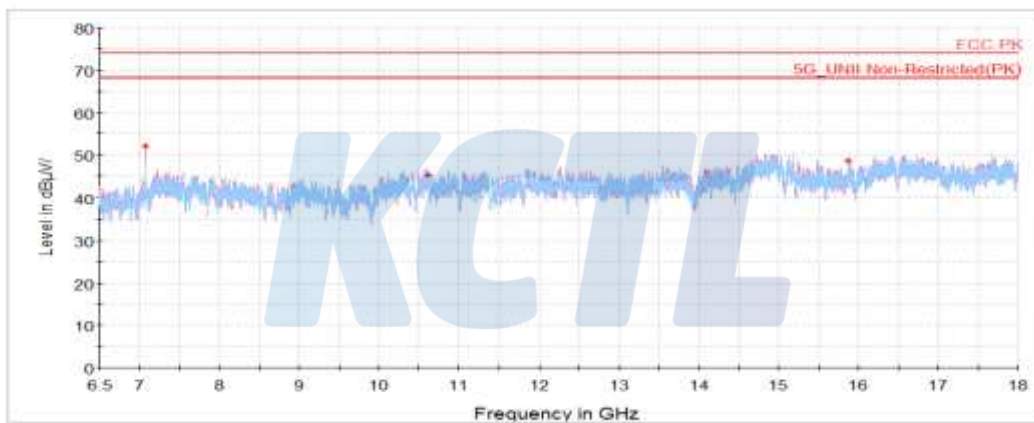
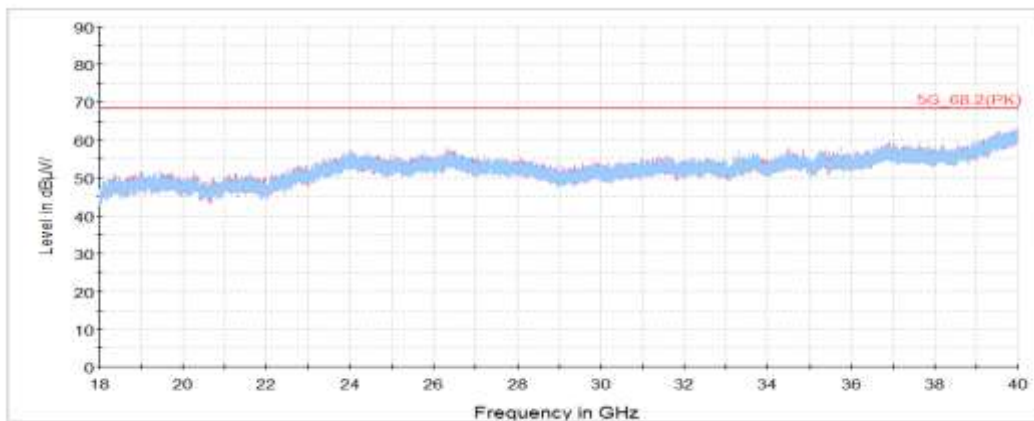
**Highest Channel (5 310 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 350.19 ¹⁾	V	53.47	34.56	-26.84	-	61.19	74.00	12.81
5 899.98	V	67.81	35.28	-44.49	-	58.60	68.20	9.60
7 079.67	V	69.02	35.40	-52.31	-	52.11	68.20	16.09
10 619.16 ¹⁾	H	57.71	37.47	-49.92	-	45.26	74.00	28.74
15 879.69 ¹⁾	H	57.26	40.08	-48.75	-	48.59	74.00	25.41
Average Data								
5 350.19 ¹⁾	V	42.54	34.56	-26.84	0.44	50.70	54.00	3.30

Average data (5 350.19 MHz)

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Horizontal/Vertical for Band-edge

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

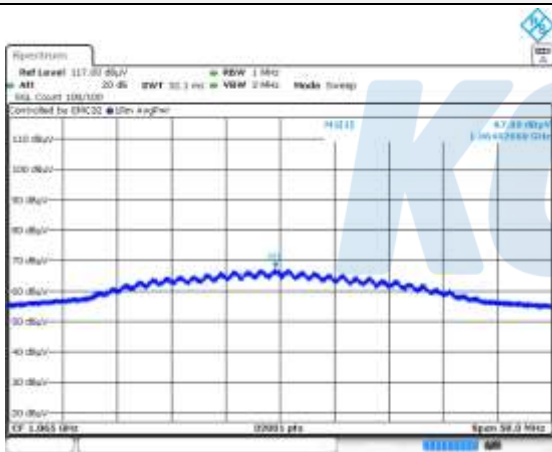
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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Report No.:
KR20-SRF0030-D

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**802.11n HT40 UNII 2A 4TX MIMO****Lowest Channel (5 270 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 064.53 ¹⁾	H	77.31	27.83	-50.61	-	54.53	74.00	19.47
7 026.84	H	71.15	35.40	-52.56	-	53.99	68.20	14.21
10 537.94	H	74.38	37.42	-49.74	-	62.06	68.20	6.14
15 816.51 ¹⁾	V	67.87	40.06	-48.72	-	59.21	74.00	14.79
Average Data								
1 064.53 ¹⁾	H	67.80	27.83	-50.61	0.44	45.46	54.00	8.54
15 816.51 ¹⁾	V	51.73	40.06	-48.72	0.44	43.51	54.00	10.49

Average data (1 064.53 MHz)**Average data (15 818.87 MHz)**

KCTL Inc.

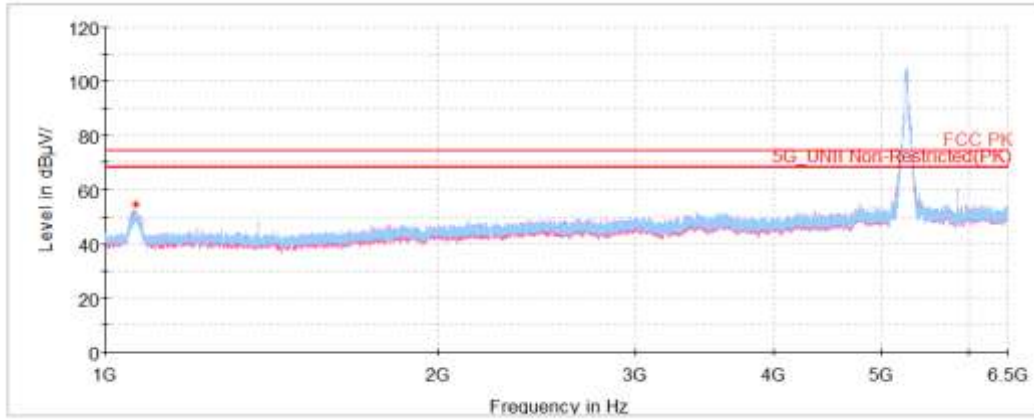
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR20-SRF0030-D

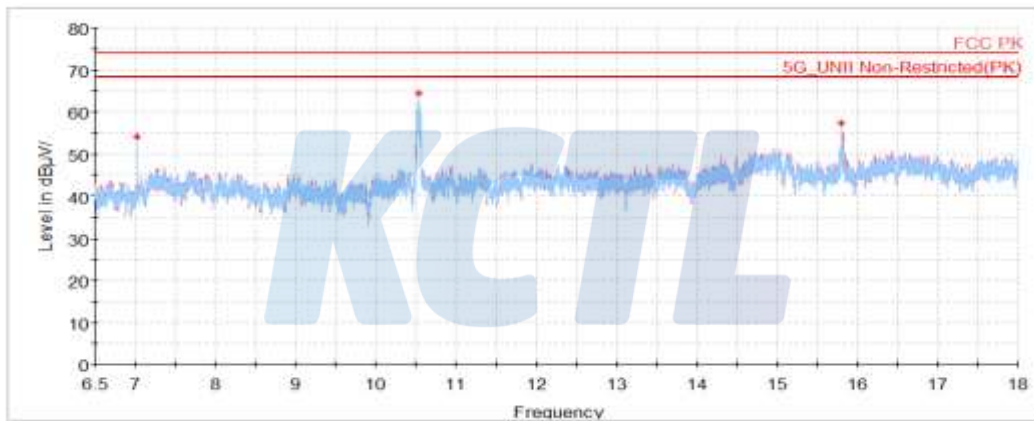
Page (609) of (1046)



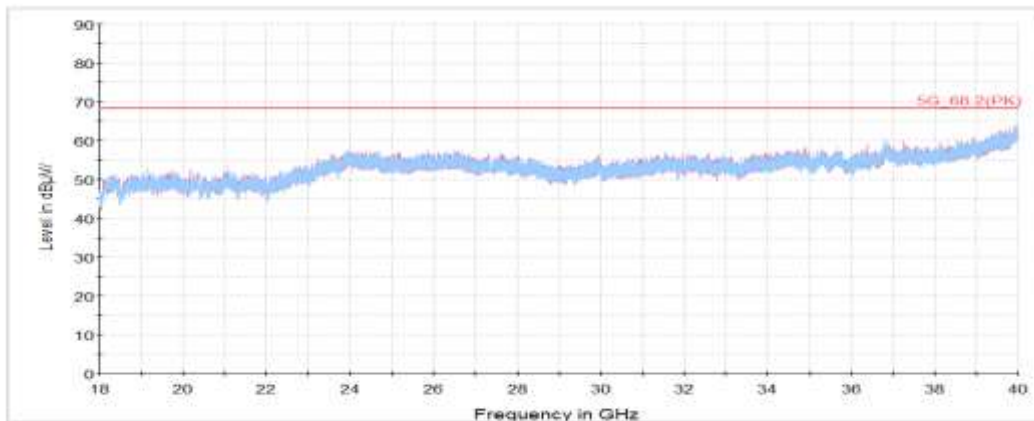
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



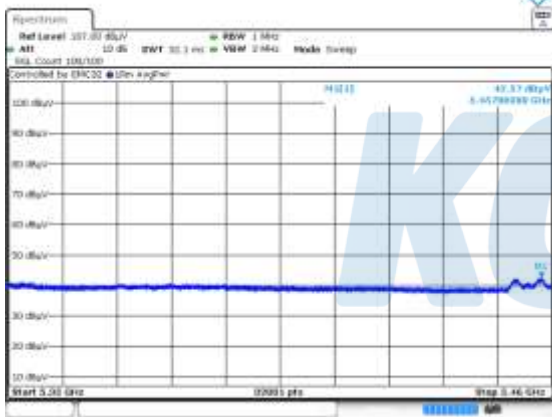
Horizontal/Vertical for 18 GHz ~ 40 GHz



Highest Channel (5 310 MHz)

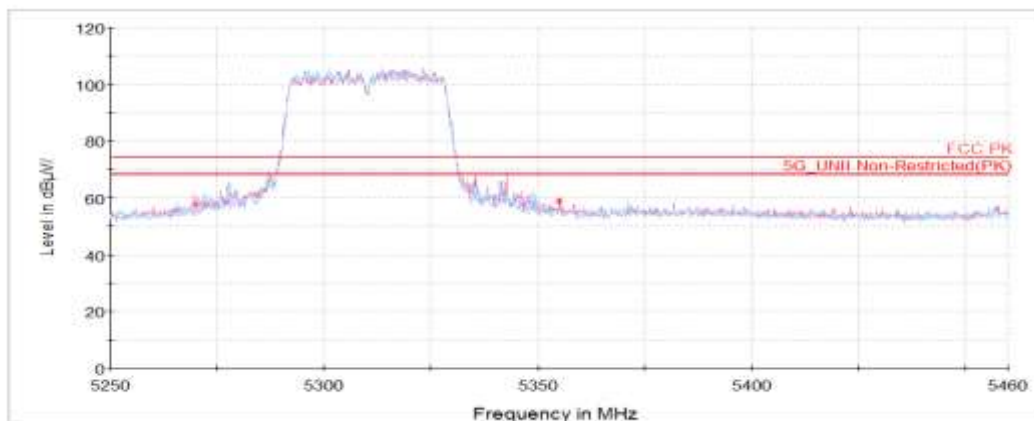
Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 457.88 ¹⁾	V	51.31	34.73	-27.33	-	58.71	74.00	15.29
5 900.16	V	69.24	35.28	-44.49	-	60.03	68.20	8.17
7 079.67	H	70.85	35.40	-52.31	-	53.94	68.20	14.26
10 618.80 ¹⁾	V	62.10	37.47	-49.91	-	49.66	74.00	24.34
15 928.56 ¹⁾	H	55.33	40.09	-48.78	-	46.64	74.00	27.36
Average Data								
5 457.88 ¹⁾	V	42.57	34.73	-27.33	0.44	50.41	54.00	3.59

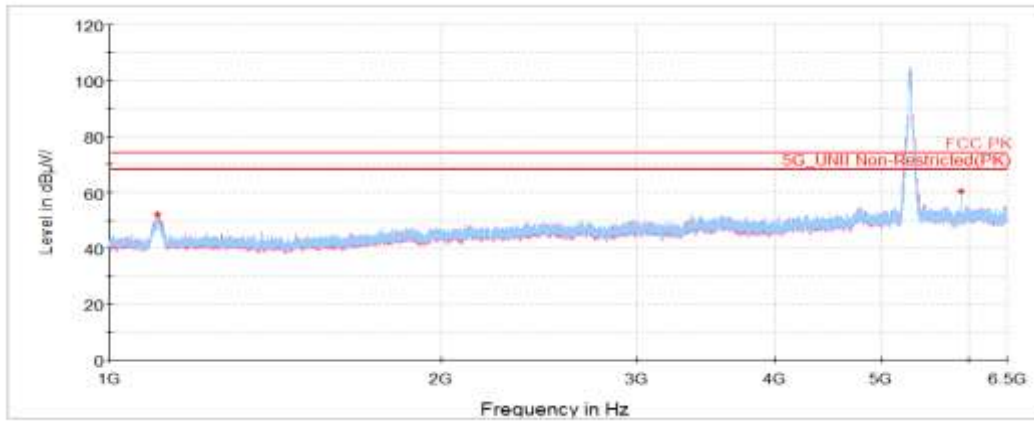
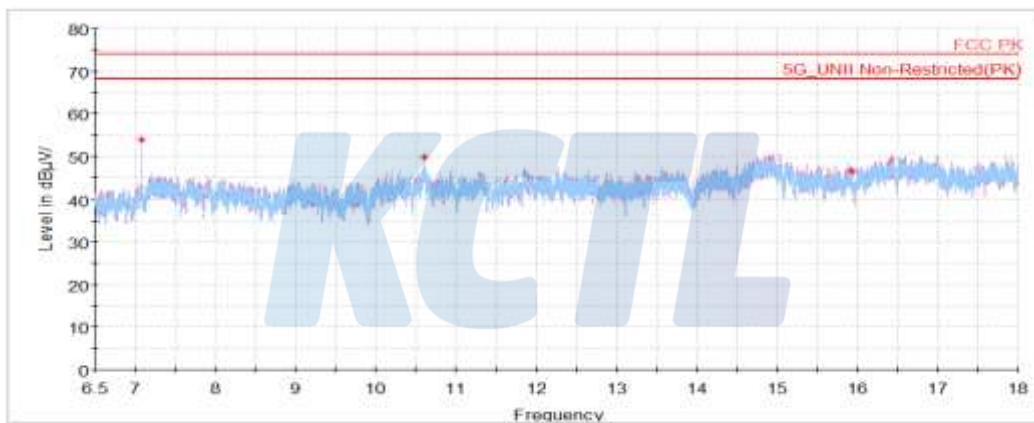
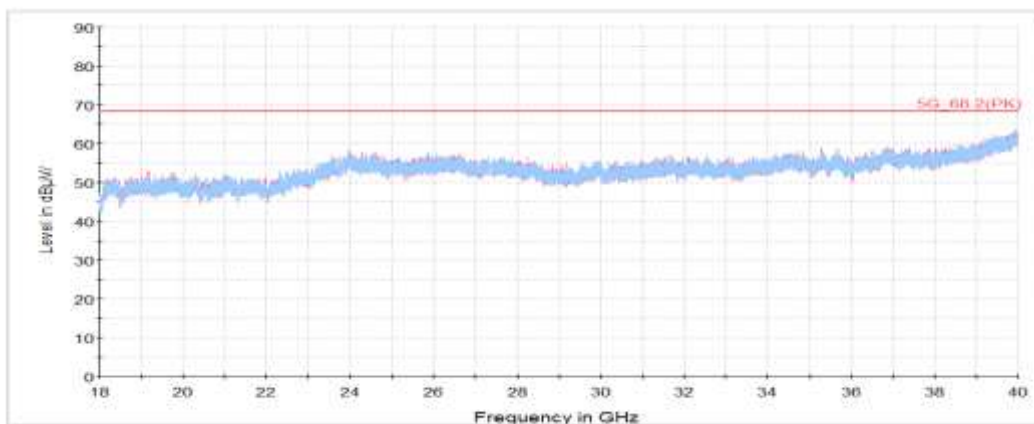
Average data (5 457.88 MHz)



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Horizontal/Vertical for Band-edge



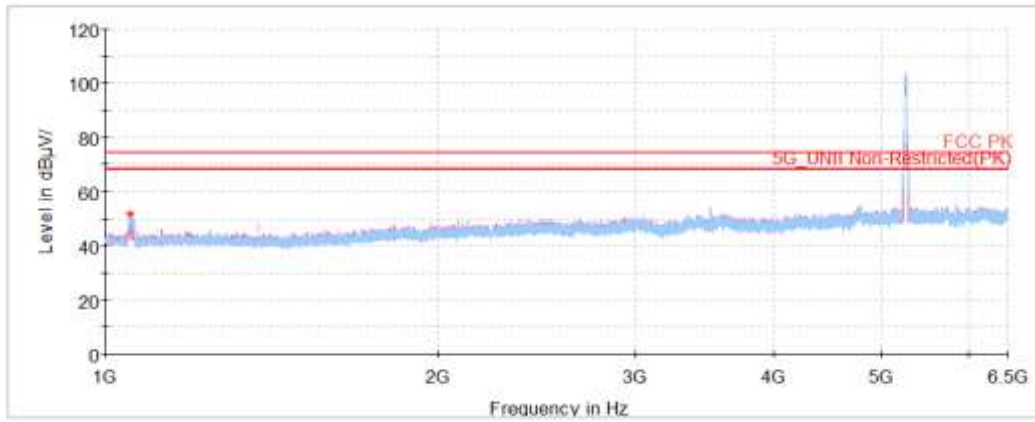
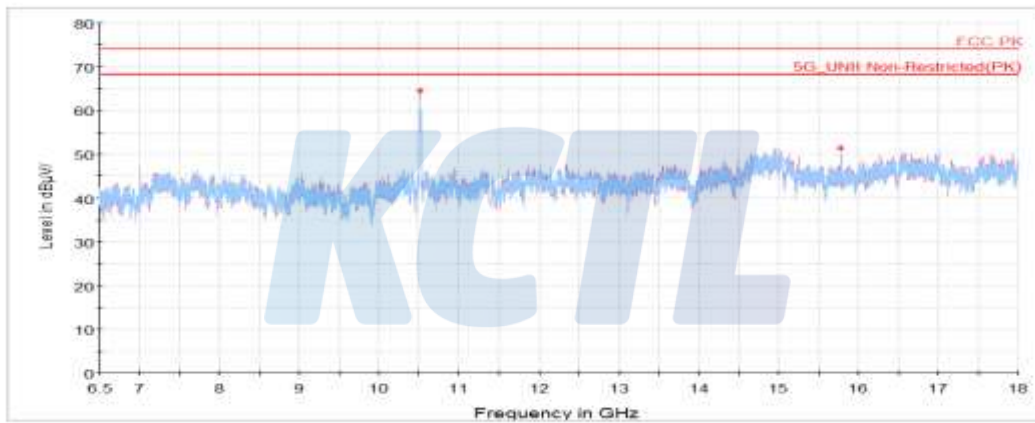
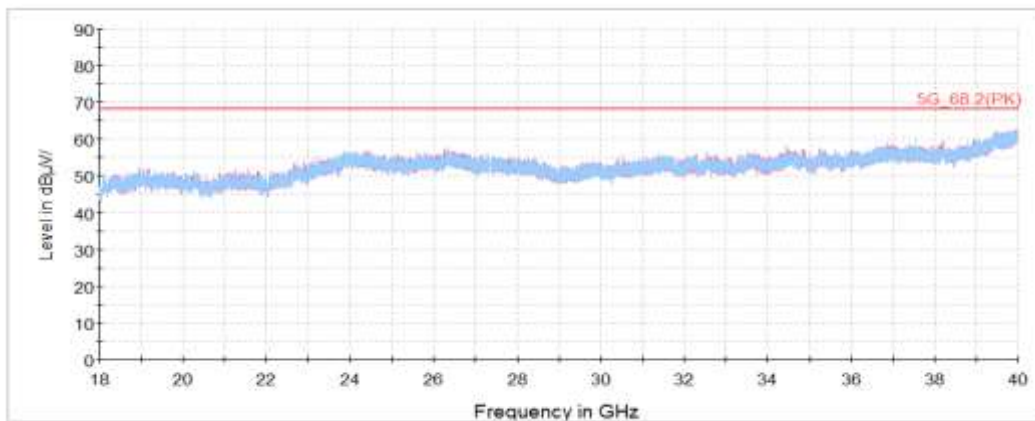
Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

802.11ac VHT20 UNII 2A ANT 0

Lowest Channel (5 260 MHz)

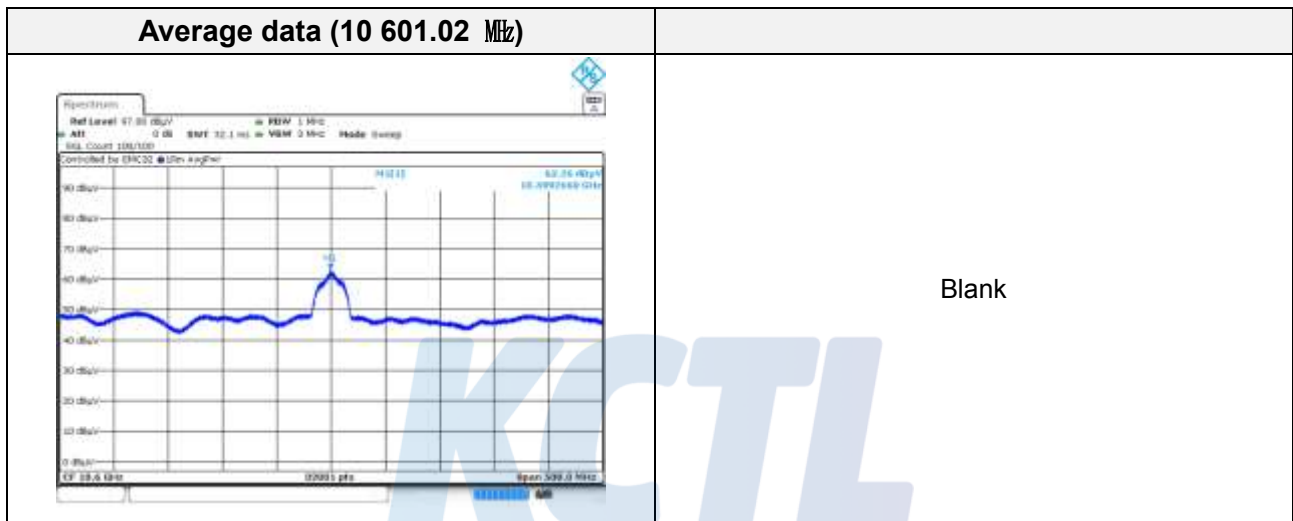
Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB($\mu V/m$))	(dB($\mu V/m$))	(dB)
Peak data								
10 519.97	V	76.79	37.41	-49.70	-	64.50	68.20	3.70
15 783.14 ¹⁾	H	59.91	40.06	-48.70	-	51.27	74.00	22.73
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

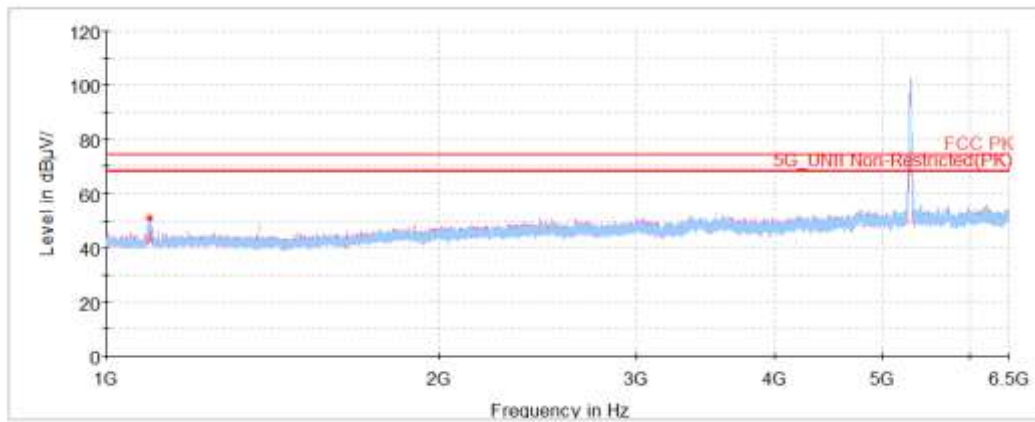
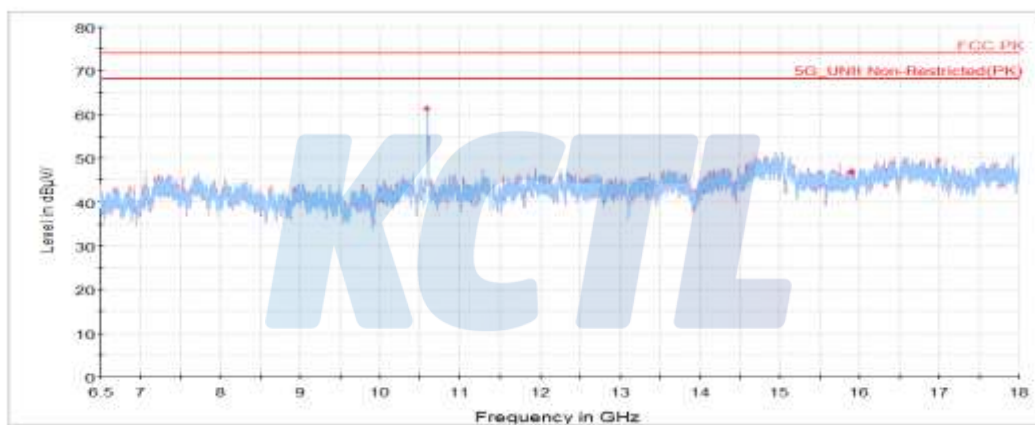
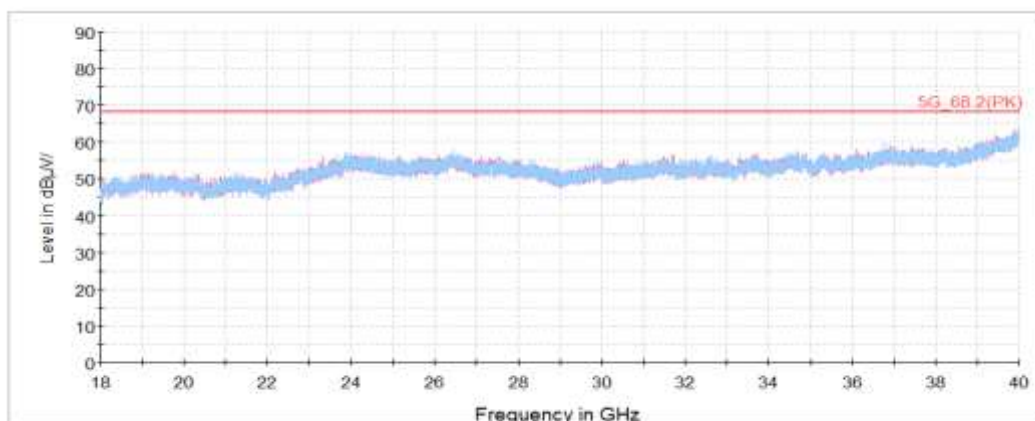
KCTL

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

Middle Channel (5 300 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
10 601.02 ¹⁾	H	73.78	37.46	-49.88	-	61.36	74.00	12.64
15 901.97 ¹⁾	H	55.37	40.08	-48.76	-	46.69	74.00	27.31
Average Data								
10 601.02 ¹⁾	H	63.26	37.46	-49.88	-	50.84	54.00	3.16



Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

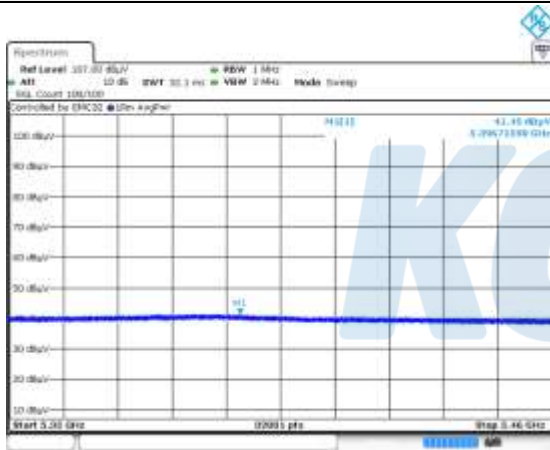
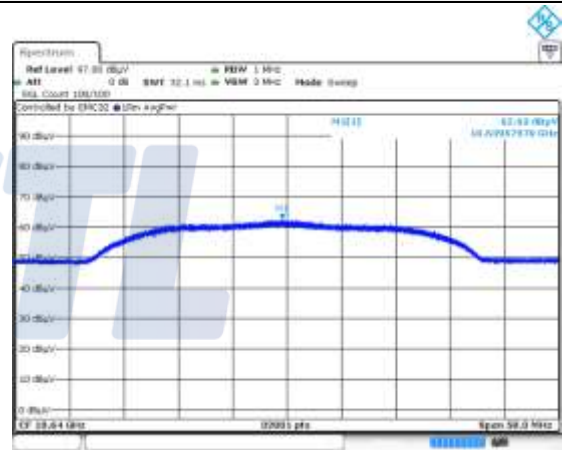
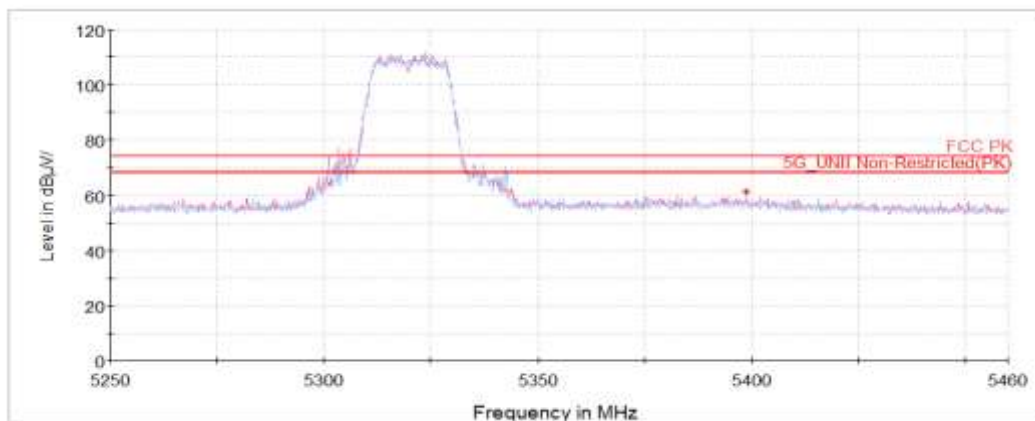
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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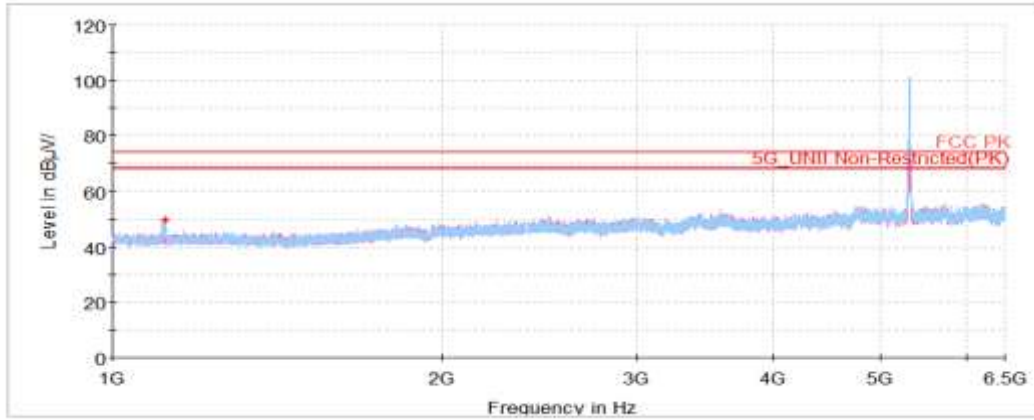
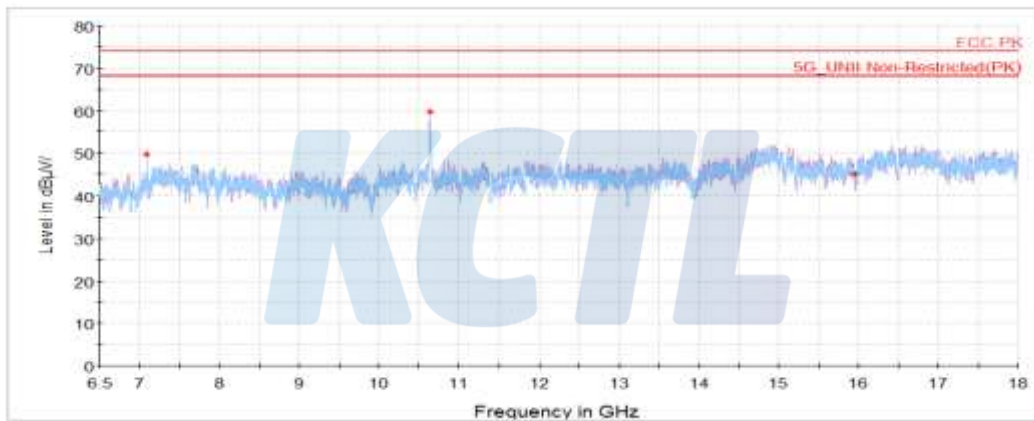
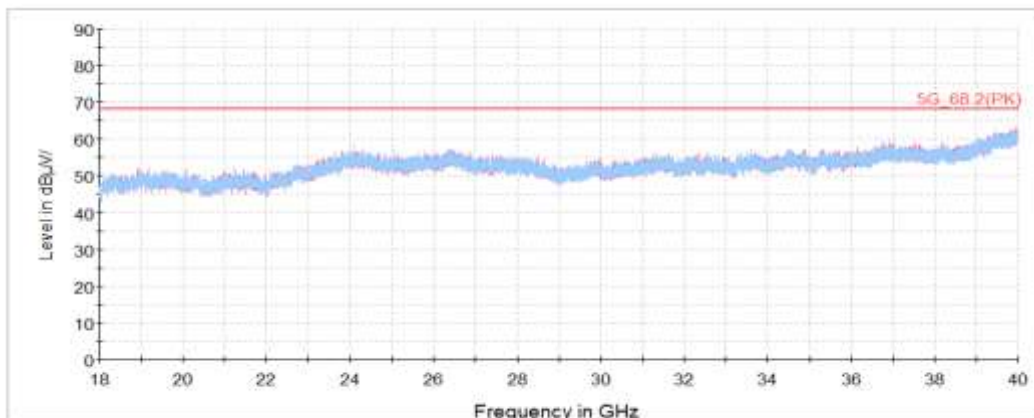
Report No.:
KR20-SRF0030-D

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**Highest Channel (5 320 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 396.72 ¹⁾	H	49.76	34.63	-26.72	-	57.67	74.00	16.33
7 093.33	H	66.56	35.40	-52.25	-	49.71	68.20	18.49
10 639.58 ¹⁾	H	72.09	37.48	-49.96	-	59.61	74.00	14.39
15 960.19 ¹⁾	H	53.68	40.09	-48.79	-	44.98	74.00	29.02
Average Data								
5 396.72 ¹⁾	H	41.45	34.63	-26.72	-	49.36	54.00	4.64
10 639.58 ¹⁾	H	62.63	37.48	-49.96	-	50.15	54.00	3.85

Average data (5 396.72 MHz)**Average data (10 639.58 MHz)****Horizontal/Vertical for Band-edge**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

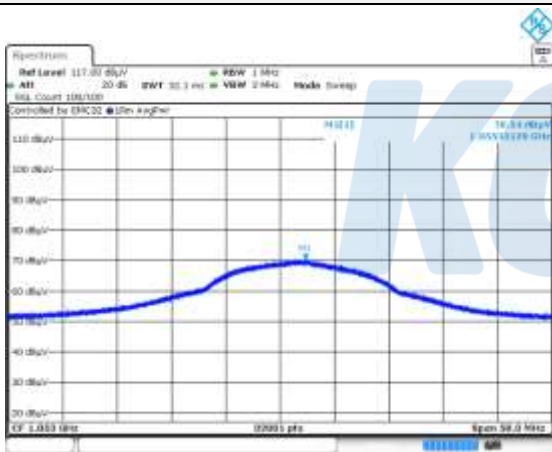
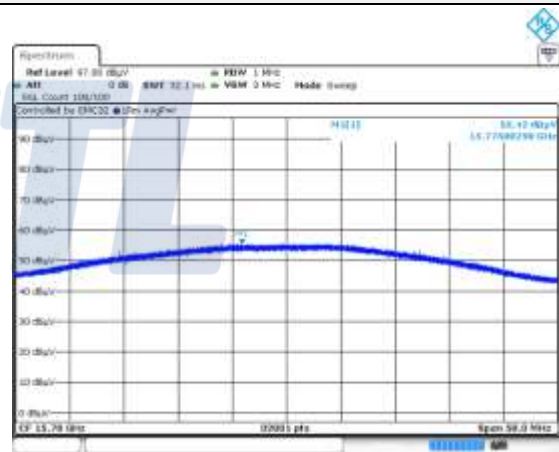
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

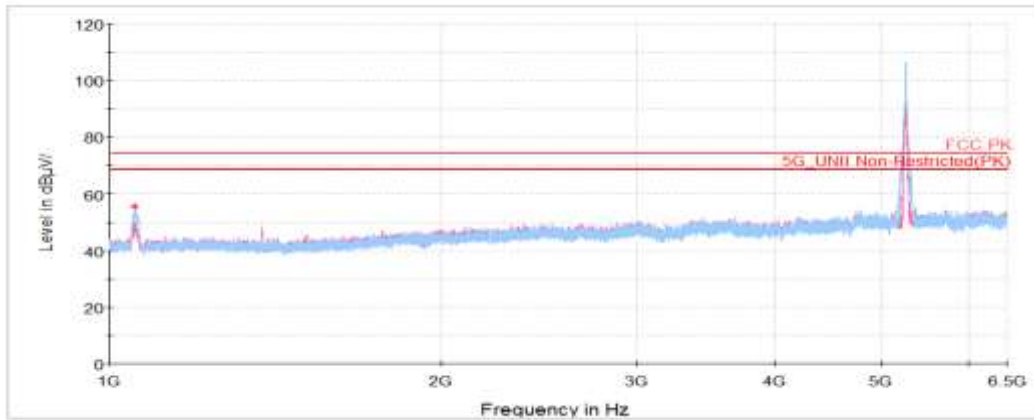
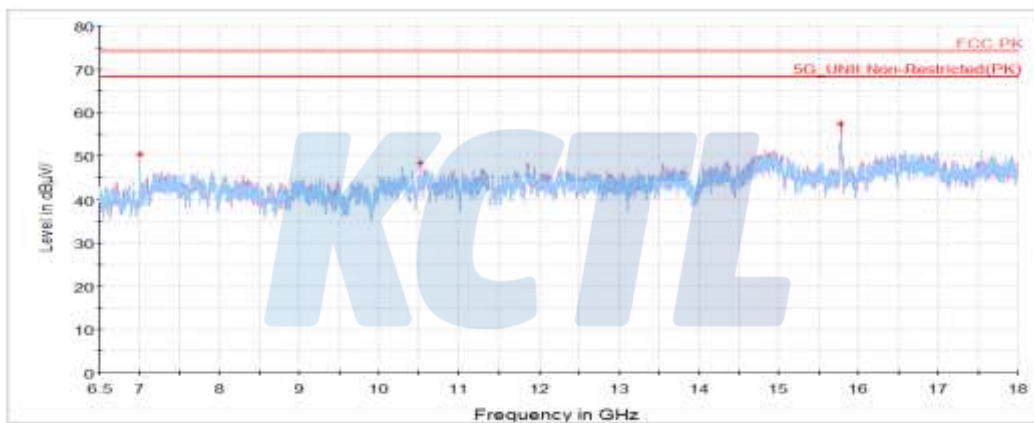
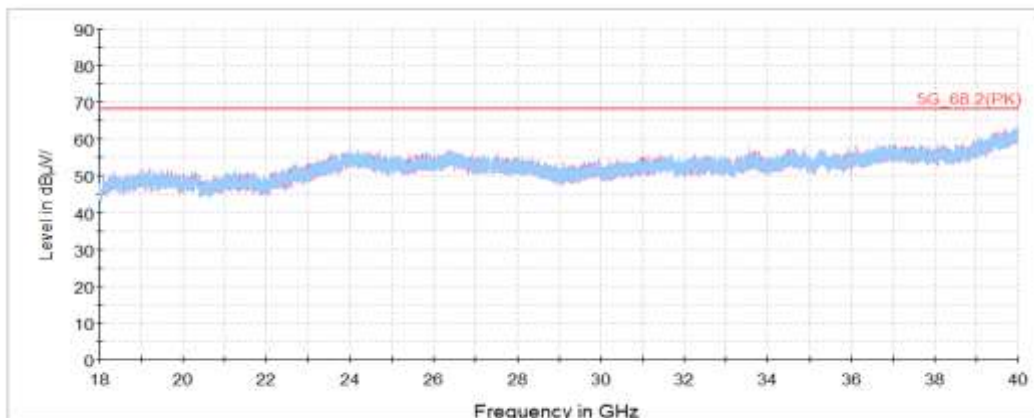
Report No.:
KR20-SRF0030-D

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**802.11ac VHT20 UNII 2A ANT 1****Lowest Channel (5 260 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 055.33 ¹⁾	H	78.32	27.82	-50.61	-	55.53	74.00	18.47
7 013.55	H	67.58	35.40	-52.62	-	50.36	68.20	17.84
10 519.97	V	60.56	37.41	-49.70	-	48.27	68.20	19.93
15 775.88 ¹⁾	V	65.97	40.06	-48.69	-	57.34	74.00	16.66
Average Data								
1 055.33 ¹⁾	H	70.54	27.82	-50.61	-	47.75	54.00	6.25
15 775.88 ¹⁾	V	55.42	40.06	-48.69	-	46.79	54.00	7.21

Average data (1 055.33 MHz)**Average data (15 775.88 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

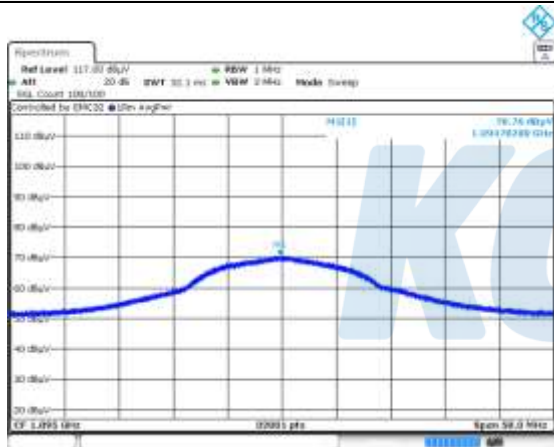
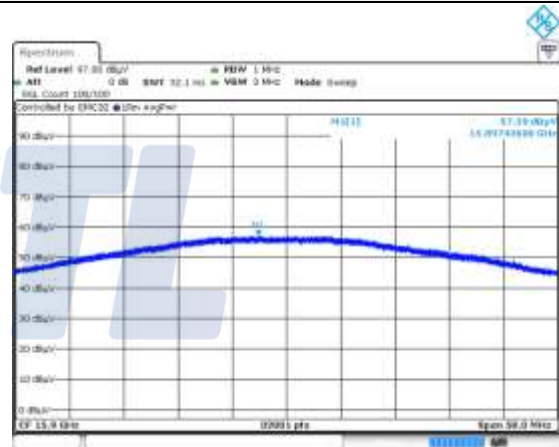
65, Sinwon-ro, Yeongtong-gu,
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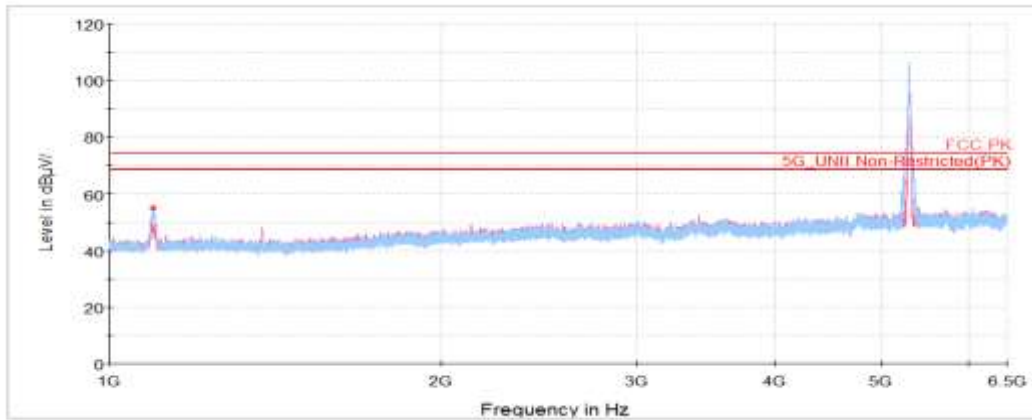
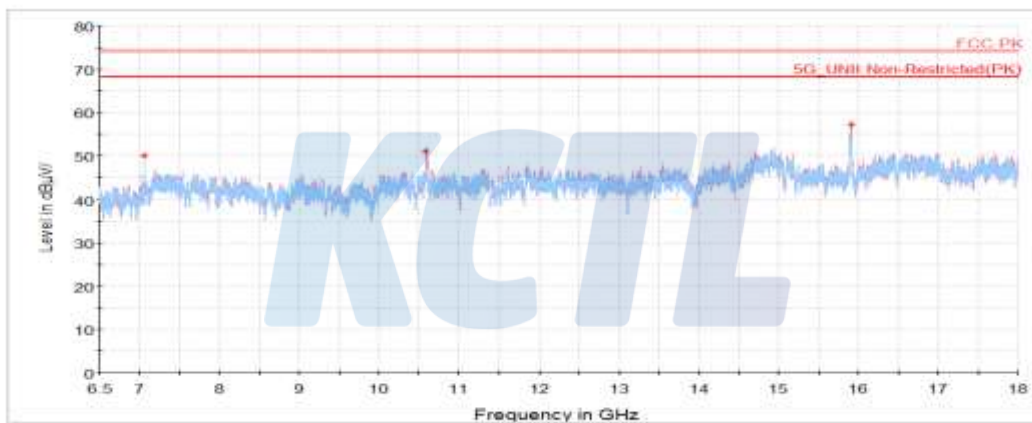
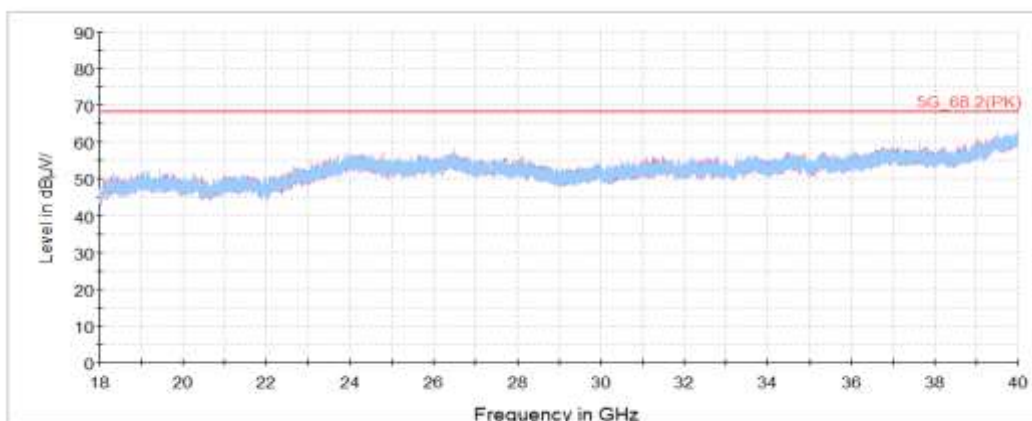
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**Middle Channel (5 300 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 094.78 ¹⁾	H	77.80	27.84	-50.62	-	55.02	74.00	18.98
7 066.73	H	66.90	35.40	-52.37	-	49.93	68.20	18.27
10 594.72	V	63.46	37.46	-49.86	-	51.06	68.20	17.14
15 897.44 ¹⁾	V	65.89	40.08	-48.76	-	57.21	74.00	16.79
Average Data								
1 094.78 ¹⁾	H	70.76	27.84	-50.62	-	47.98	54.00	6.02
15 897.44 ¹⁾	V	57.29	40.08	-48.76	-	48.61	54.00	5.39

Average data (1 094.78 MHz)**Average data (15 897.44 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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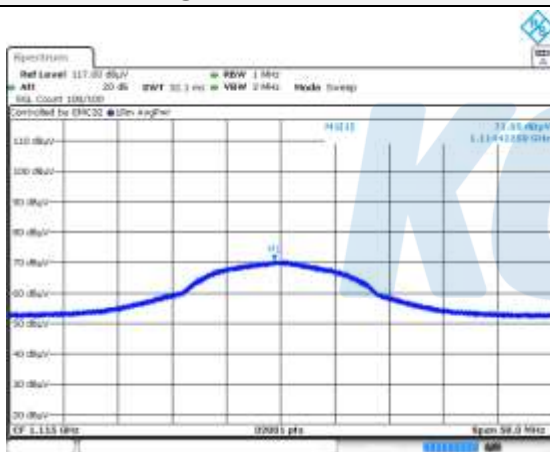
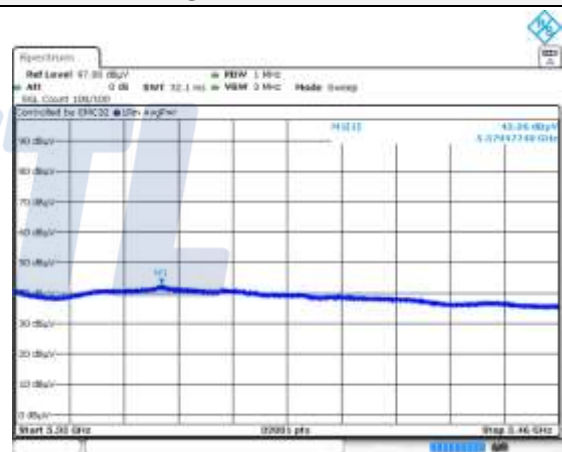
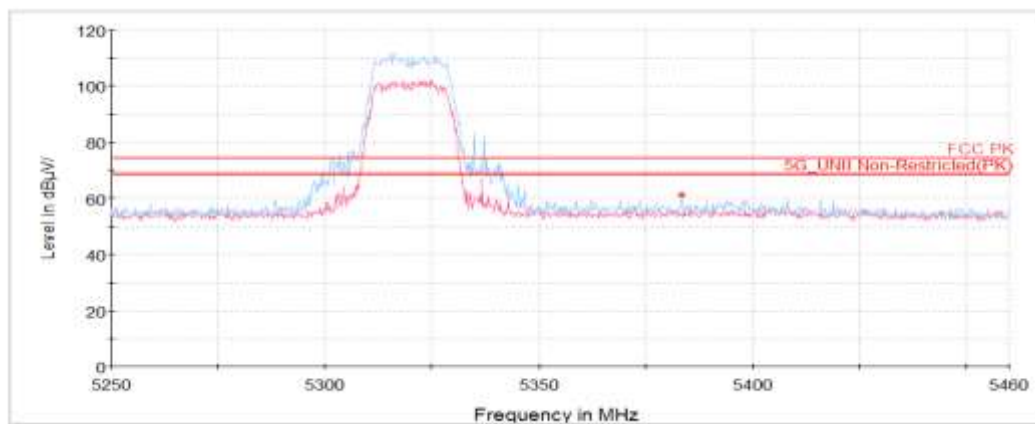
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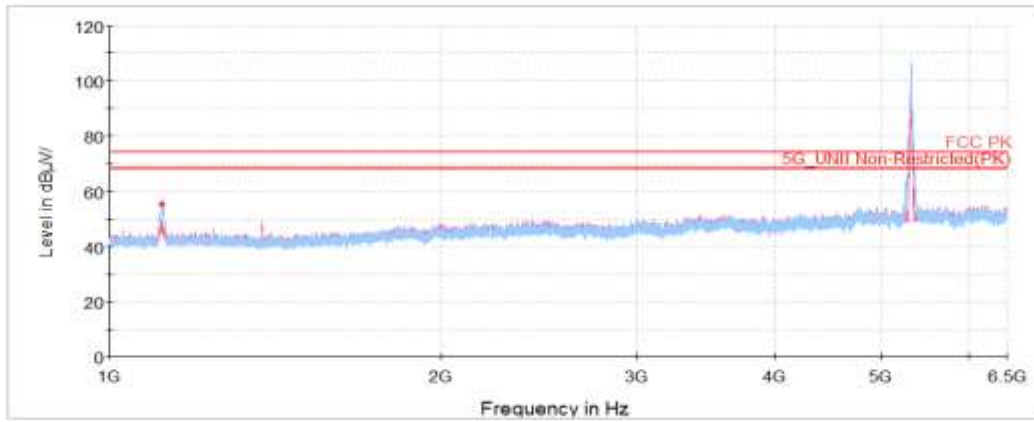
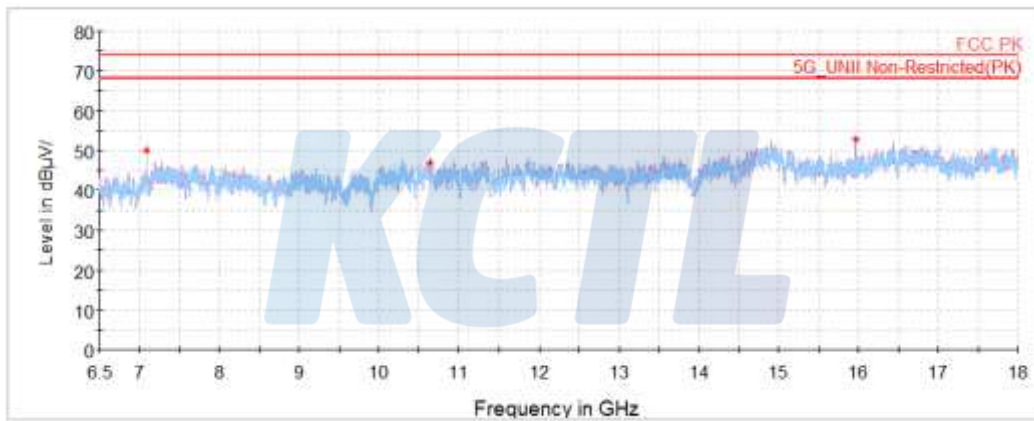
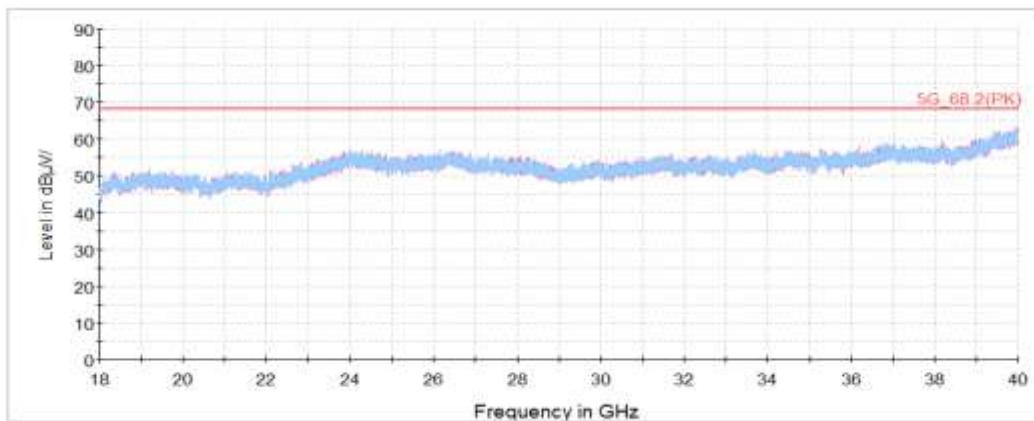
**Highest Channel (5 320 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 114.41 ¹⁾	H	78.15	27.85	-50.50	-	55.50	74.00	18.50
5 379.48 ¹⁾	H	52.97	34.61	-26.77	-	60.81	74.00	13.19
7 093.33	H	66.83	35.40	-52.25	-	49.98	68.20	18.22
10 640.72 ¹⁾	V	59.49	37.48	-49.96	-	47.01	74.00	26.99
15 955.80 ¹⁾	V	61.41	40.09	-48.79	-	52.71	74.00	21.29
Average Data								
1 114.41 ¹⁾	H	71.05	27.85	-50.50	-	48.40	54.00	5.60
5 379.48 ¹⁾	H	43.06	34.61	-26.77	-	50.90	54.00	3.10

Average data (1 114.41 MHz)**Average data (5 379.48 MHz)****Horizontal/Vertical for Band-edge**

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Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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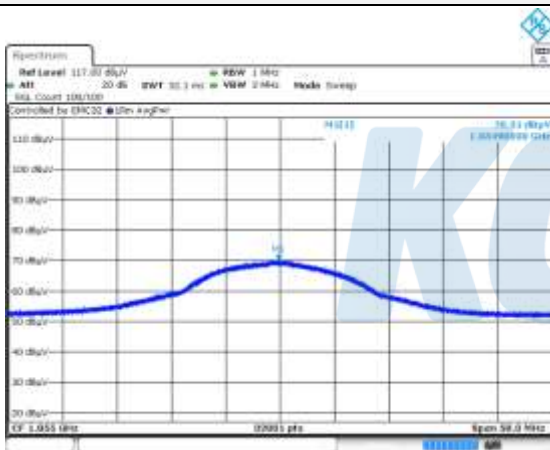
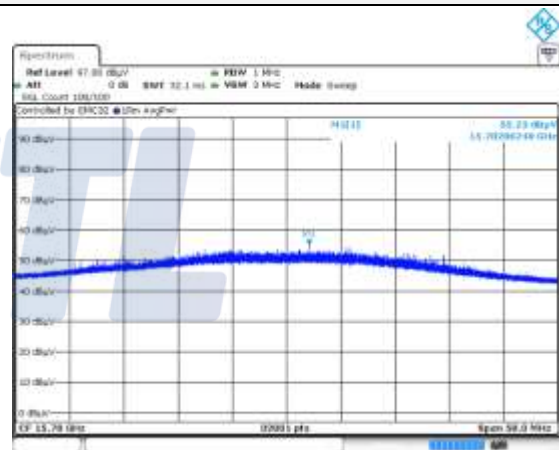
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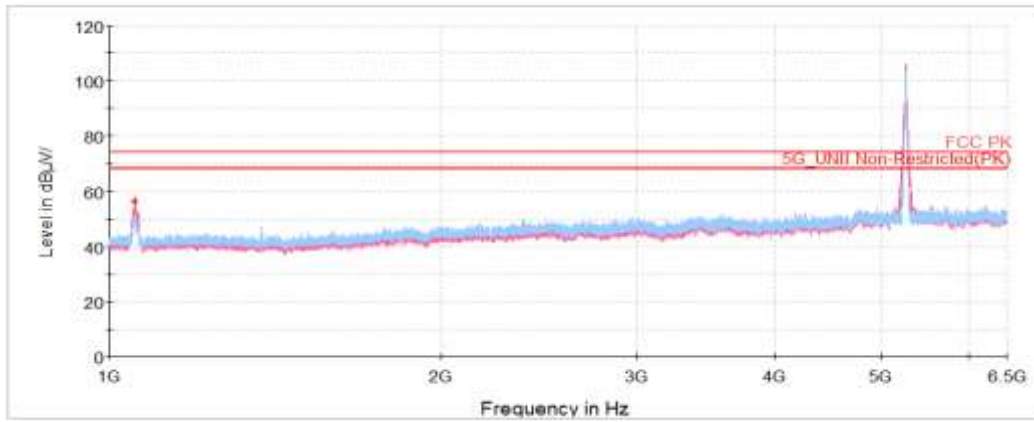
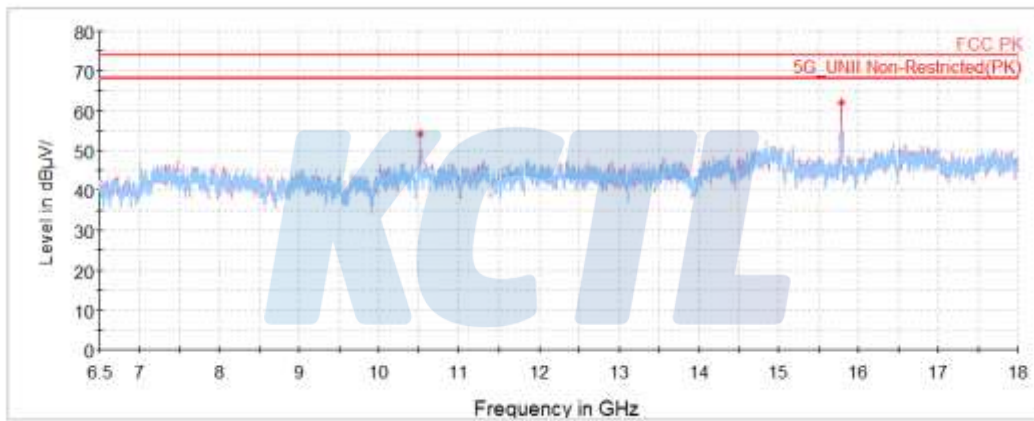
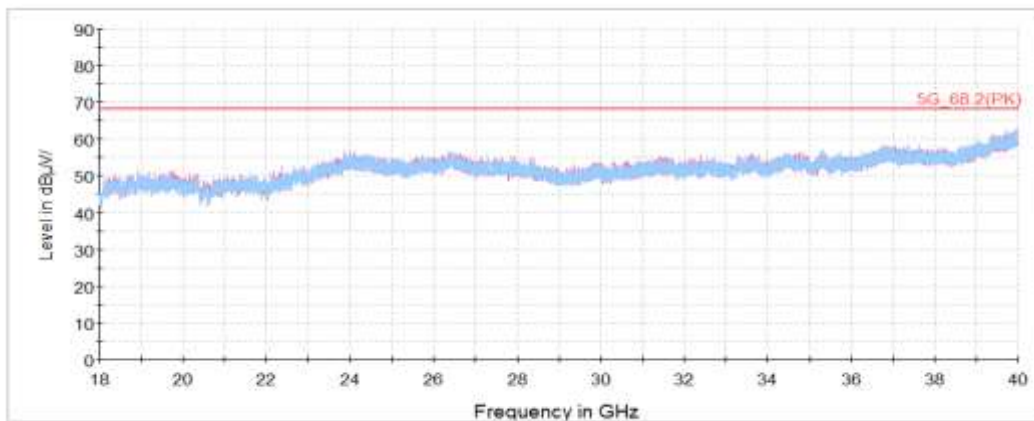
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**802.11ac VHT20 UNII 2A ANT 2****Lowest Channel (5 260 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 054.90 ¹⁾	V	79.20	27.82	-50.61	-	56.41	74.00	17.59
10 517.09	V	66.47	37.41	-49.69	-	54.19	68.20	14.01
15 782.06 ¹⁾	V	70.62	40.06	-48.7	-	61.98	74.00	12.02
Average Data								
1 054.90 ¹⁾	V	70.31	27.82	-50.61	-	47.75	54.00	6.48
15 782.06 ¹⁾	V	55.23	40.06	-48.7	-	46.59	54.00	7.41

Average data (1 054.90 MHz)**Average data (15 782.06 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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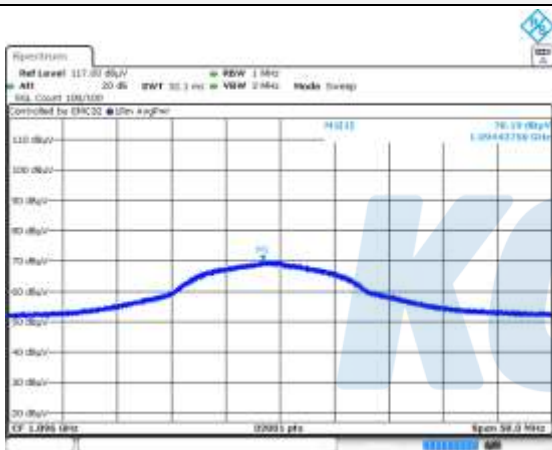
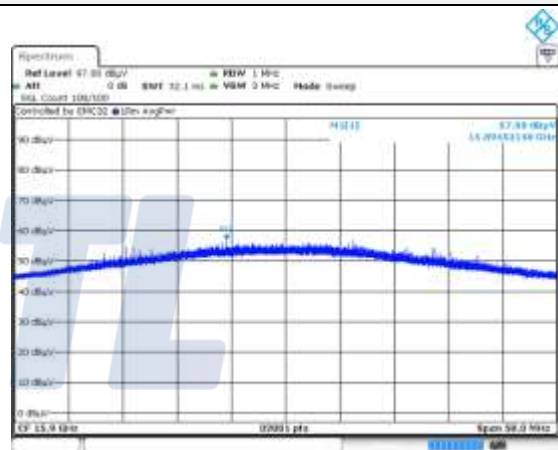
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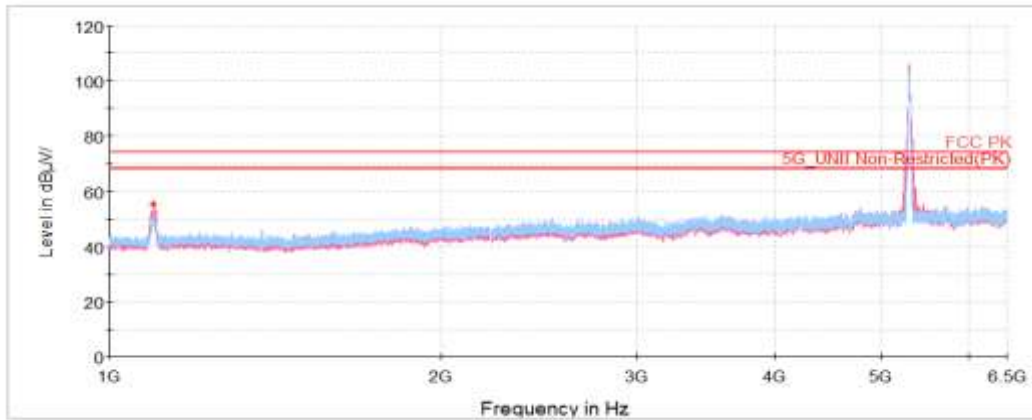
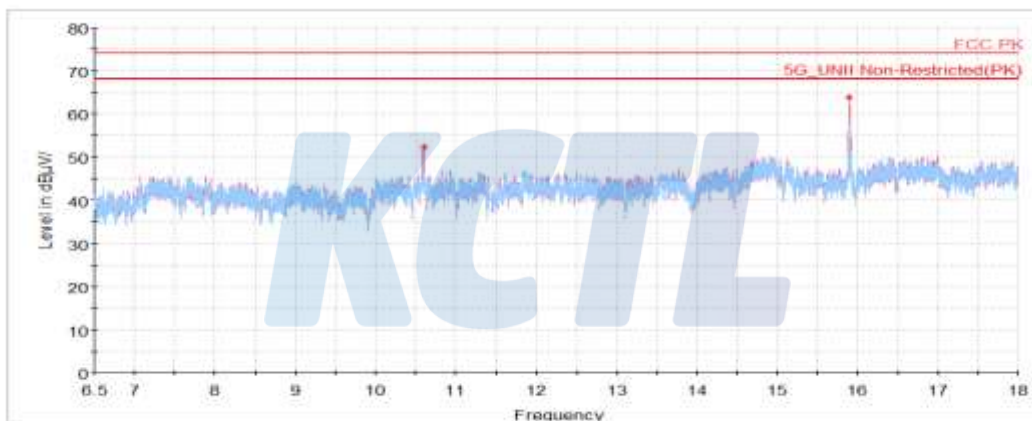
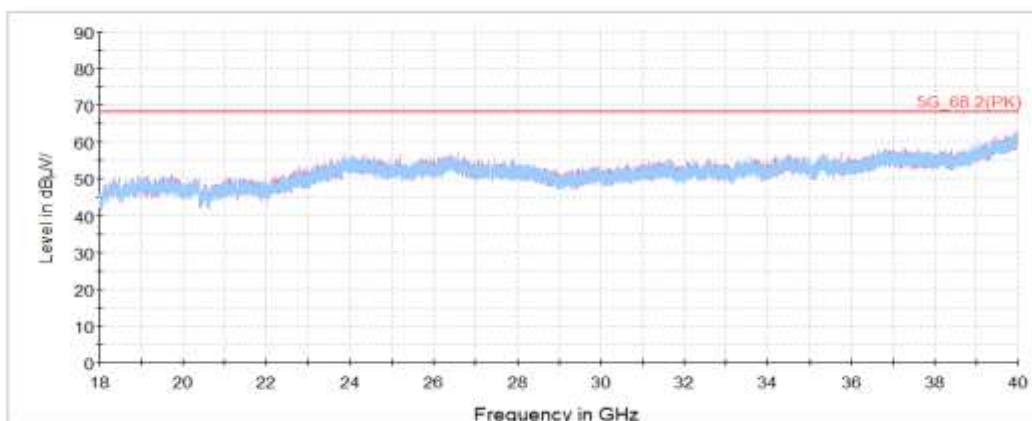
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**Middle Channel (5 300 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 094.44 ¹⁾	V	78.08	27.84	-50.62	-	55.30	74.00	18.70
10 601.21 ¹⁾	V	64.65	37.46	-49.88	-	52.23	74.00	21.77
15 894.53 ¹⁾	V	72.40	40.08	-48.76	-	63.72	74.00	10.28
Average Data								
1 094.44 ¹⁾	V	70.19	27.84	-50.62	-	47.41	54.00	6.59
15 894.53 ¹⁾	V	57.08	40.08	-48.76	-	48.40	54.00	5.60

Average data (1 094.44 MHz)**Average data (15 894.53 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

Highest Channel (5 320 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB($\mu V/m$))	(dB($\mu V/m$))	(dB)
Peak data								
1 114.79 ¹⁾	V	78.70	27.85	-50.50	-	56.05	74.00	17.95
5 350.11 ¹⁾	V	52.46	34.56	-26.84	-	60.18	74.00	13.82
10 648.27 ¹⁾	V	62.22	37.49	-49.98	-	49.73	74.00	24.27
15 956.08 ¹⁾	V	63.06	40.09	-48.79	-	54.36	74.00	19.64
Average Data								
1 114.79 ¹⁾	V	70.14	27.85	-50.50	-	47.49	54.00	6.51
5 350.11 ¹⁾	V	42.61	34.56	-26.84	-	50.33	54.00	3.67
15 956.08 ¹⁾	V	49.86	40.09	-48.79	-	41.16	54.00	12.84

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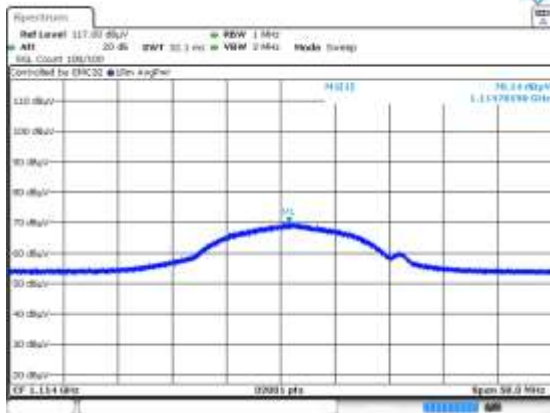
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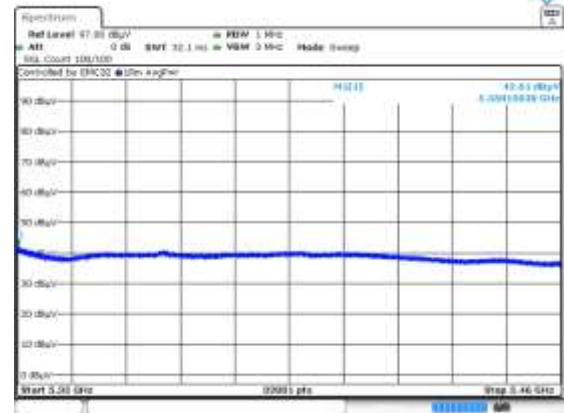
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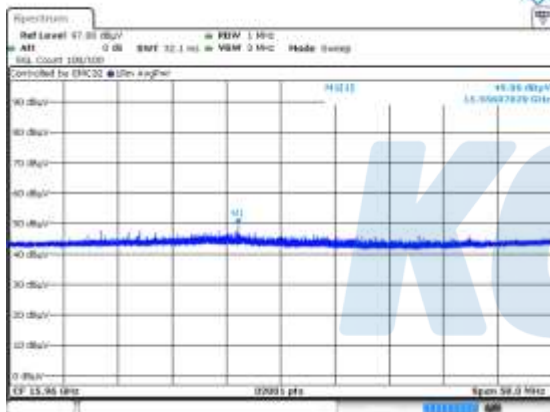
Average data (1 114.79 MHz)



Average data (5 350.11 MHz)

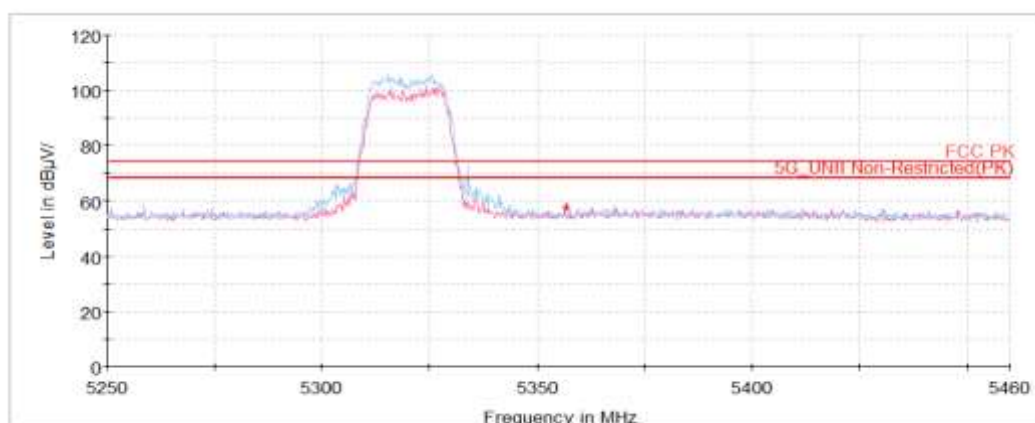


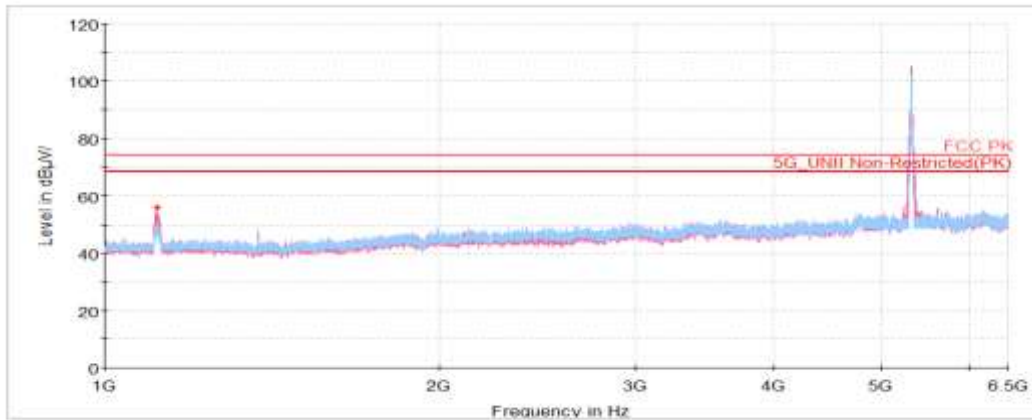
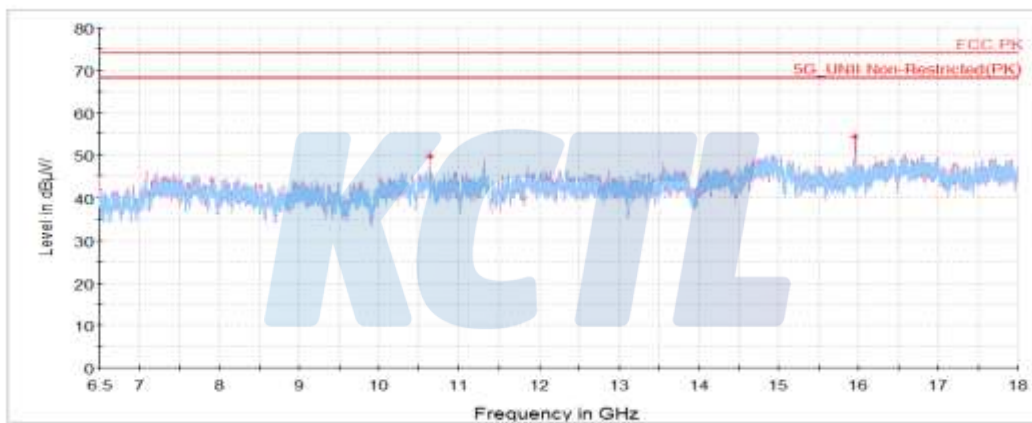
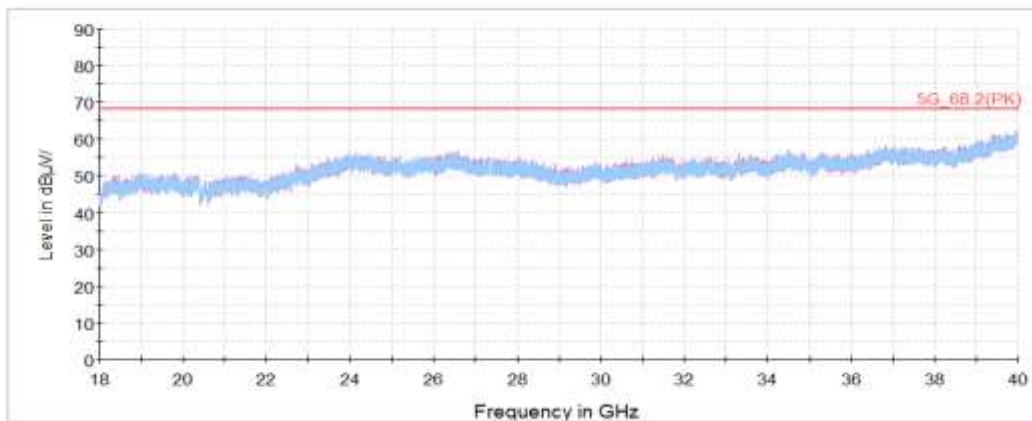
Average data (15 956.08 MHz)



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Horizontal/Vertical for Band-edge



Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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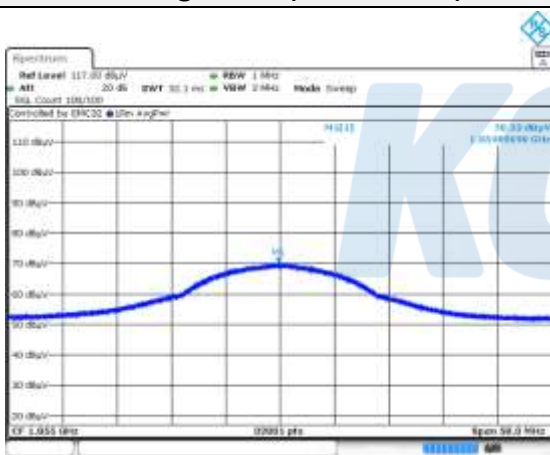
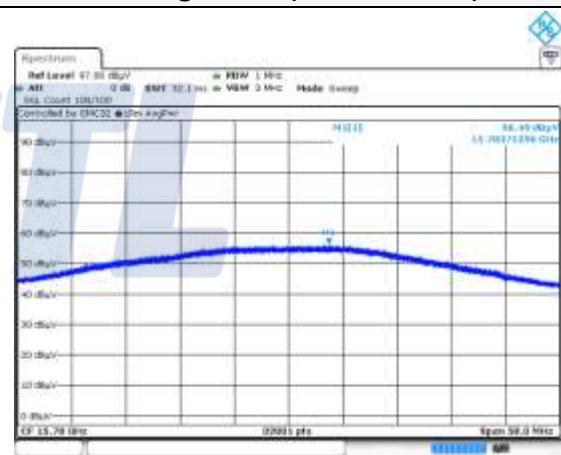
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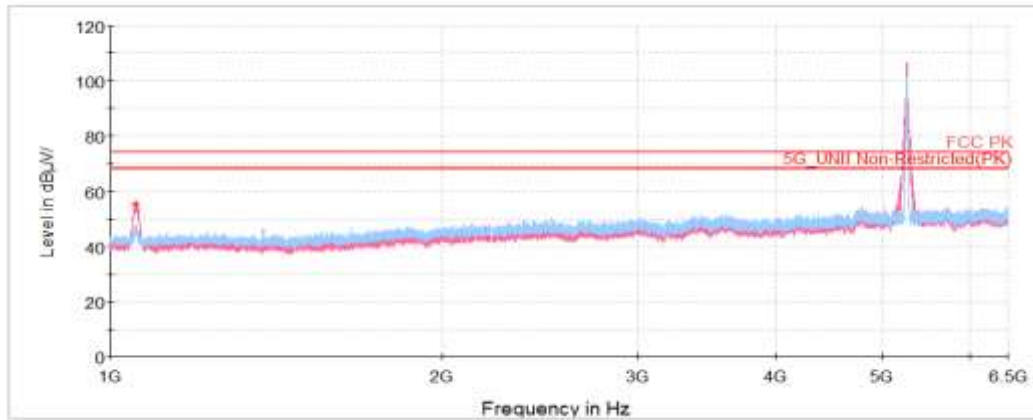
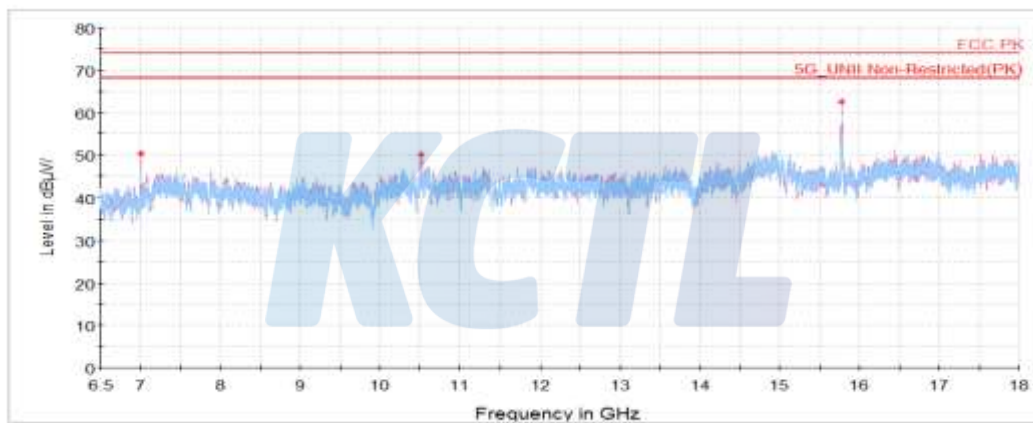
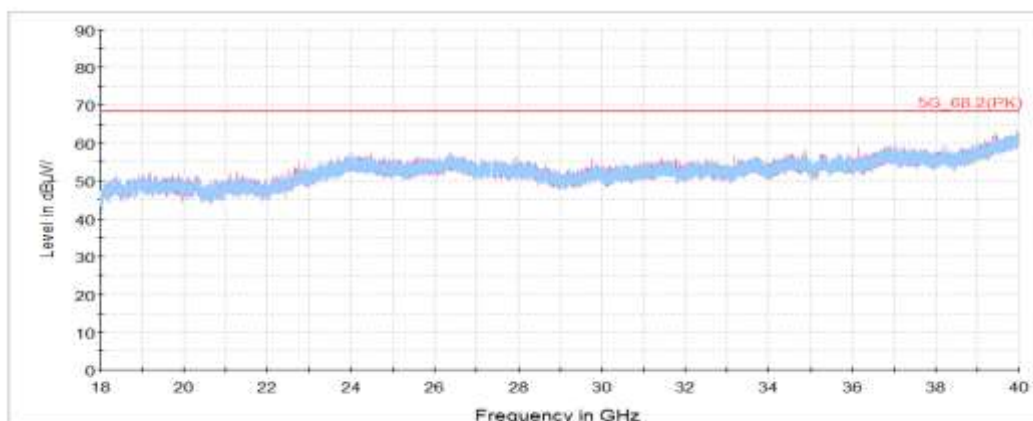
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**802.11ac VHT20 UNII 2A ANT 3****Lowest Channel (5 260 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 054.90 ¹⁾	V	78.22	27.82	-50.61	-	55.43	74.00	18.57
7 013.19	V	67.44	35.40	-52.62	-	50.22	68.20	17.98
10 517.81	V	62.34	37.41	-49.69	-	50.06	68.20	18.14
15 783.71 ¹⁾	V	71.12	40.06	-48.70	-	62.48	74.00	11.52
Average Data								
1 054.90 ¹⁾	V	70.33	27.82	-50.61	-	47.54	54.00	6.46
15 783.71 ¹⁾	V	56.49	40.06	-48.70	-	47.85	54.00	6.15

Average data (1 054.90 MHz)**Average data (15 783.71 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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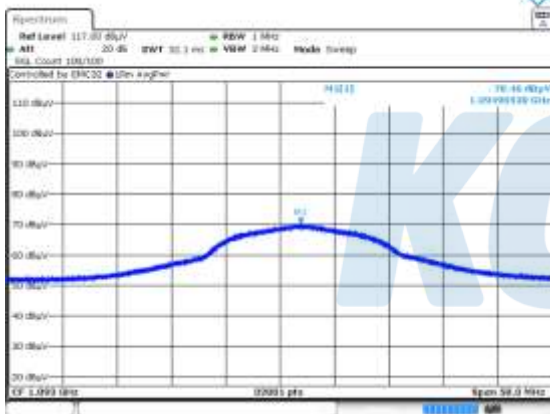
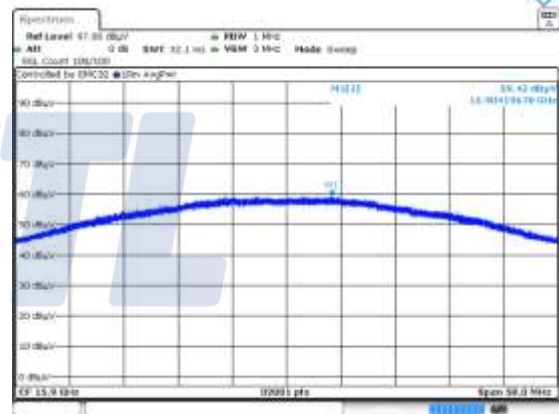
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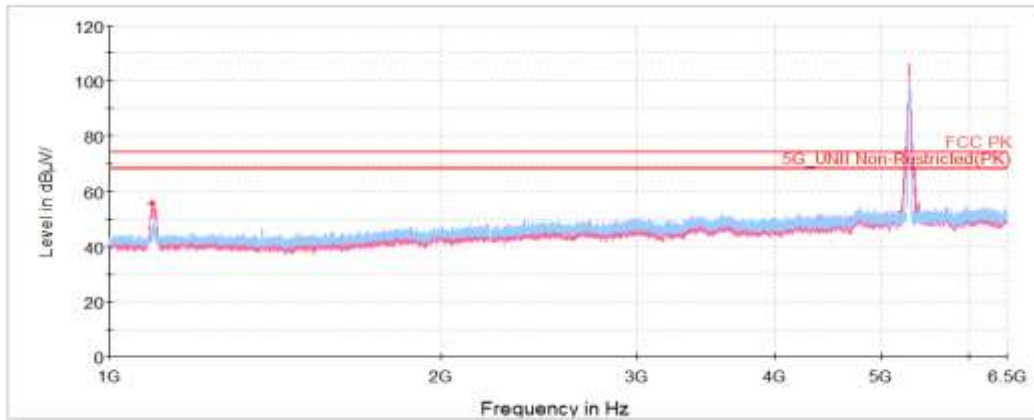
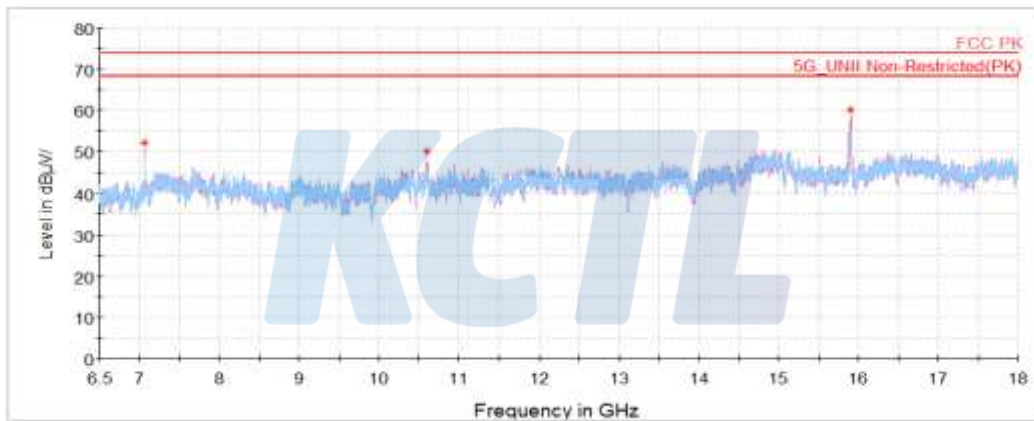
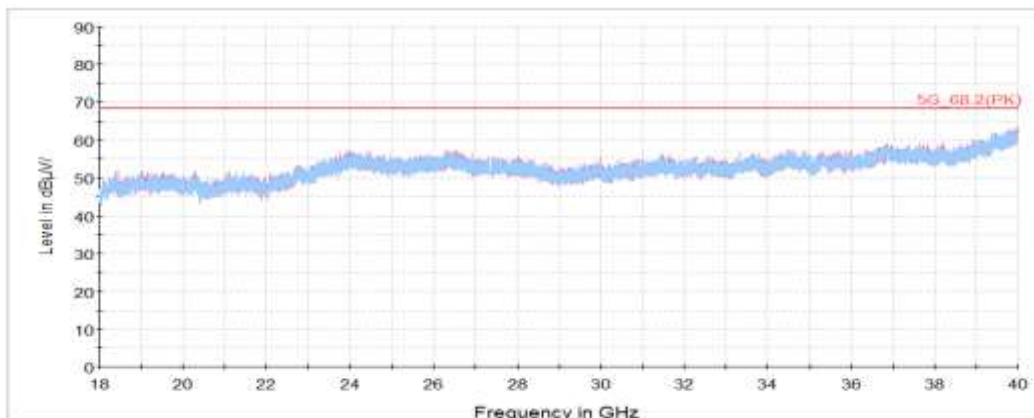
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**Middle Channel (5 300 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 094.91 ¹⁾	V	78.63	27.84	-50.62	-	55.85	74.00	18.15
7 066.73	V	69.08	35.40	-52.37	-	52.11	68.20	16.09
10 605.14 ¹⁾	V	62.40	37.46	-49.88	-	49.98	74.00	24.02
15 904.20 ¹⁾	V	68.90	40.08	-48.76	-	60.22	74.00	13.78
Average Data								
1 094.91 ¹⁾	V	70.46	27.84	-50.62	-	47.68	54.00	6.32
15 904.20 ¹⁾	V	59.42	40.08	-48.76	-	50.74	54.00	3.26

Average data (1 094.91 MHz)**Average data (15 904.20 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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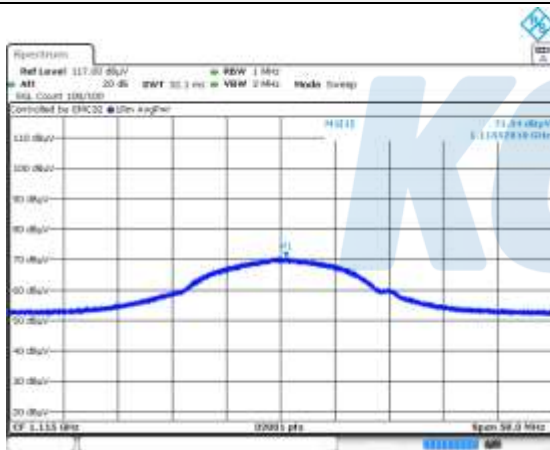
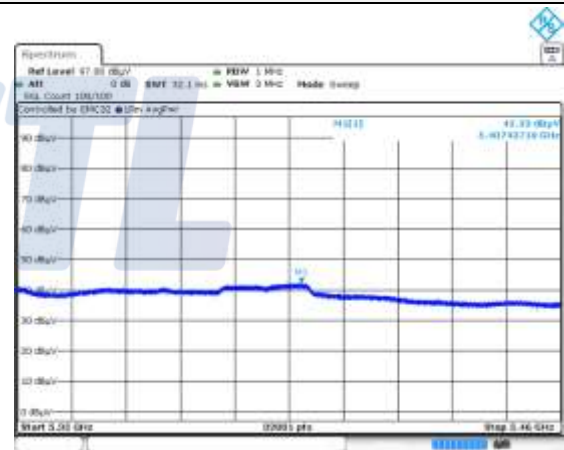
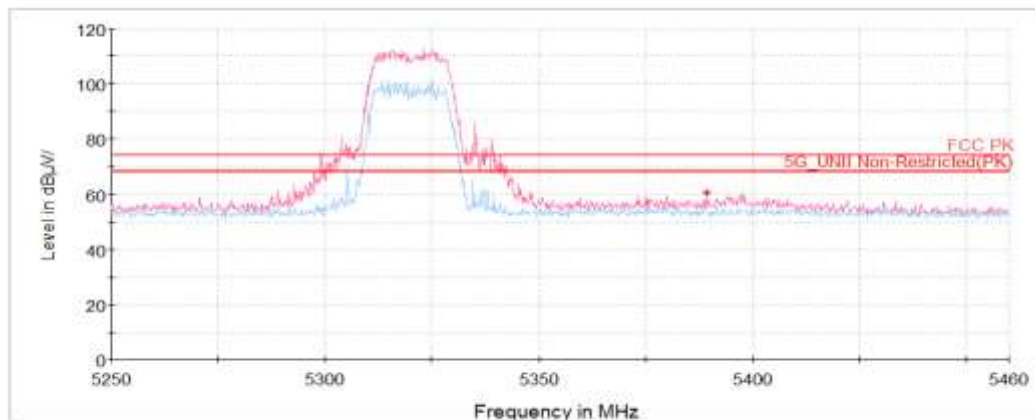
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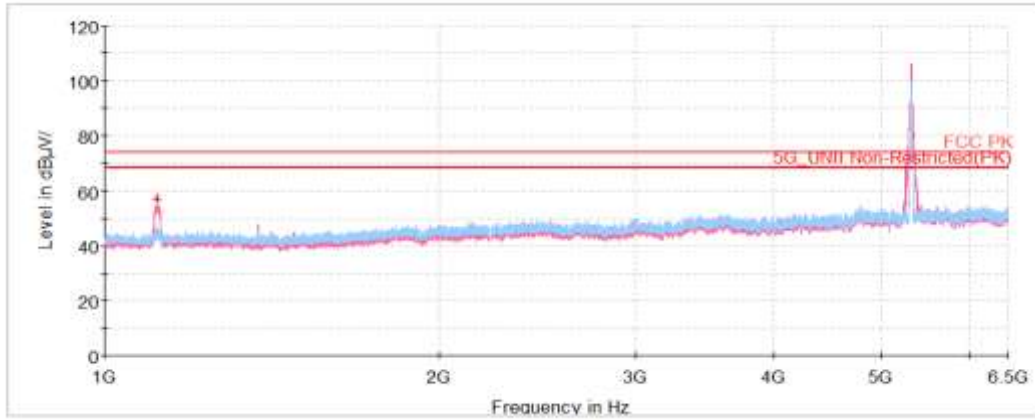
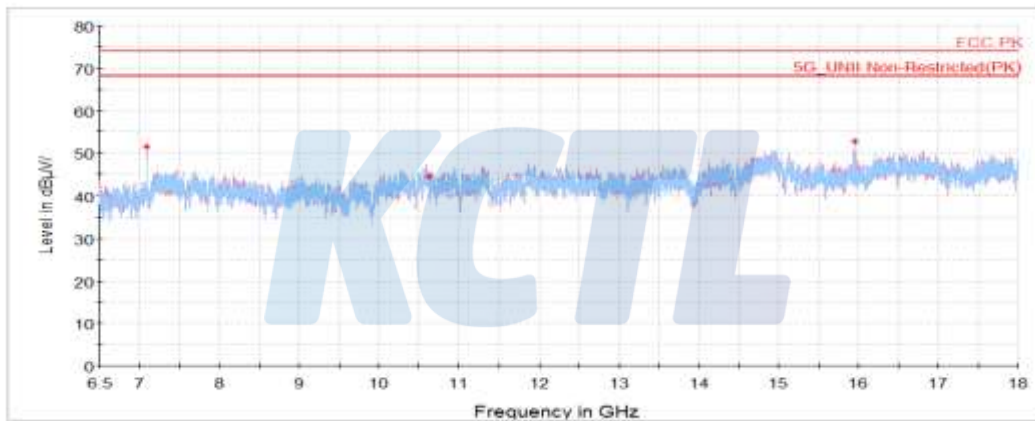
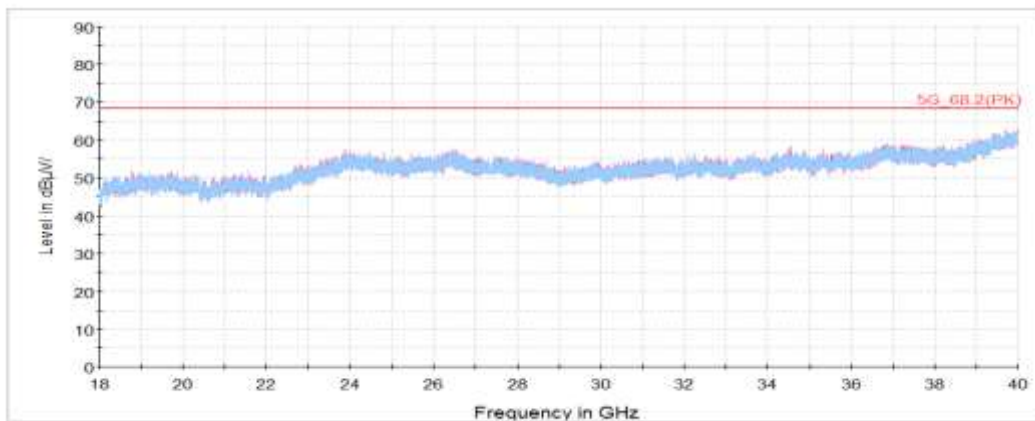
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**Highest Channel (5 320 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
1 115.53 ¹⁾	V	79.89	27.85	-50.49	-	57.25	74.00	16.75
5 407.44 ¹⁾	V	52.48	34.65	-26.80	-	60.33	74.00	13.67
7 092.97	V	68.22	35.40	-52.25	-	51.37	68.20	16.83
10 635.69 ¹⁾	V	56.99	37.48	-49.95	-	44.52	74.00	29.48
15 954.32 ¹⁾	V	61.37	40.09	-48.79	-	52.67	74.00	21.33
Average Data								
1 115.53 ¹⁾	V	71.04	27.85	-50.49	-	48.40	54.00	5.60
5 407.44 ¹⁾	V	42.33	34.65	-26.80	-	50.18	54.00	3.82

Average data (1 115.53 MHz)**Average data (5 407.44 MHz)****Horizontal/Vertical for Band-edge**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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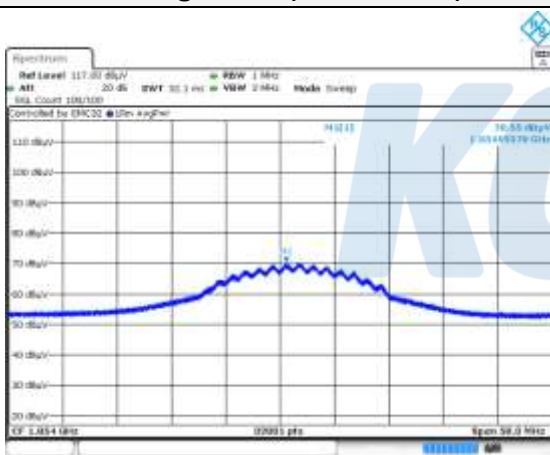
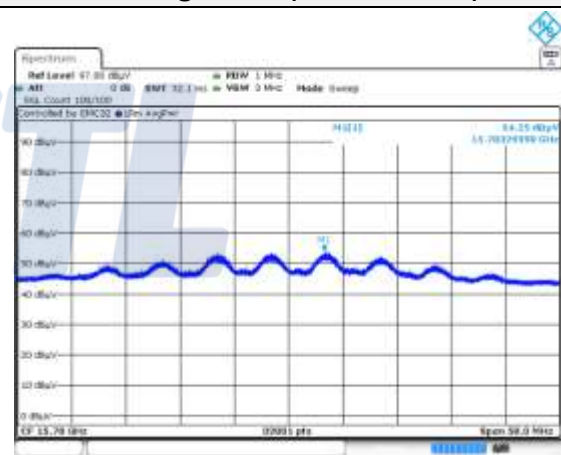
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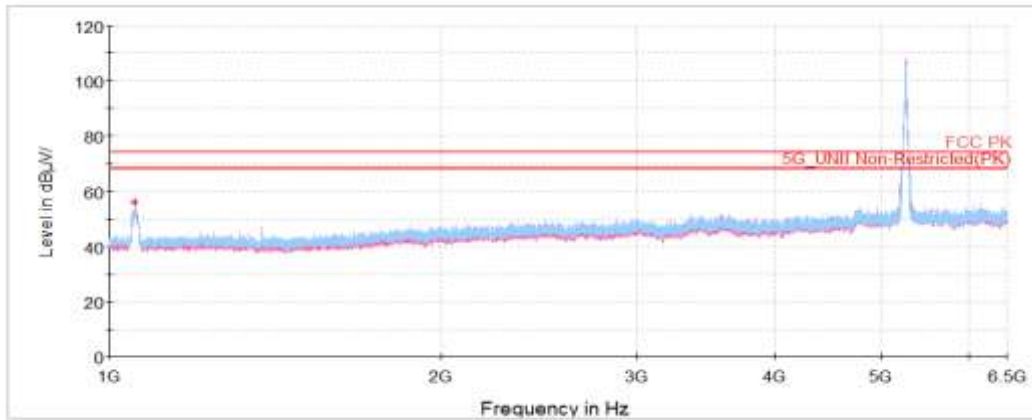
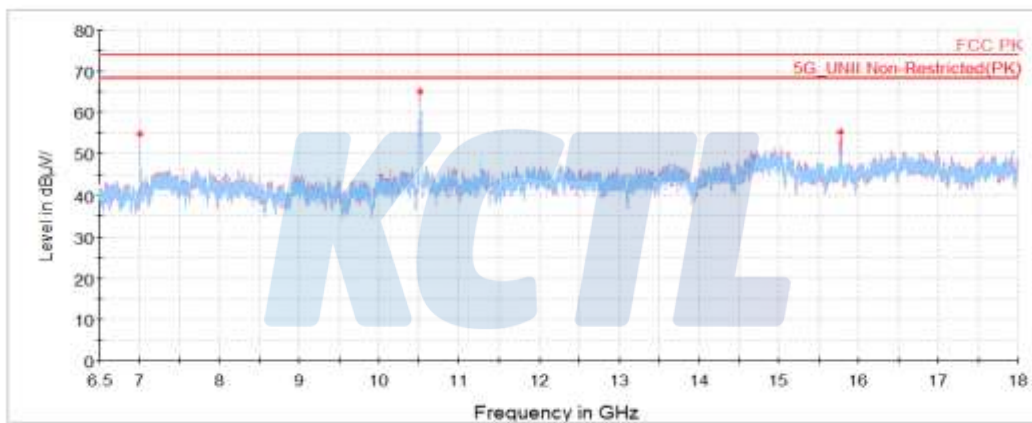
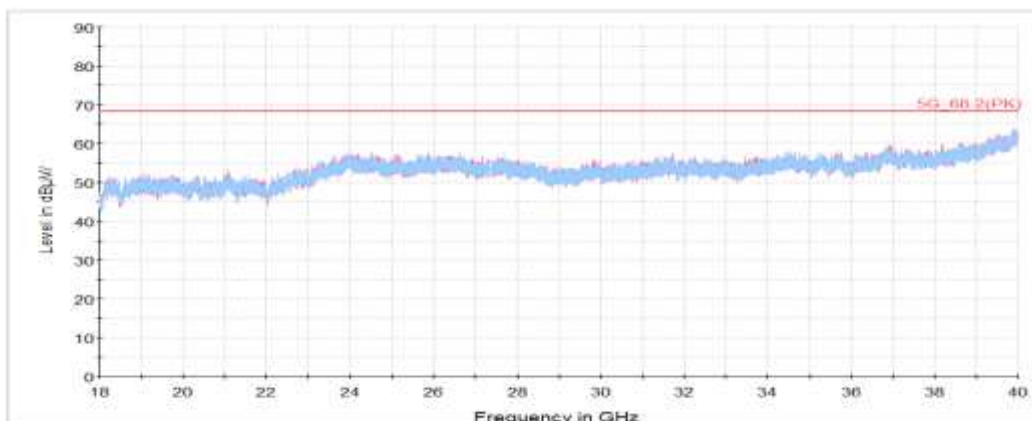
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**802.11ac VHT20 UNII 2A 4TX MINO****Lowest Channel (5 260 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 054.59 ¹⁾	V	79.01	27.82	-50.61	-	56.22	74.00	17.78
7 013.55	H	71.88	35.40	-52.62	-	54.66	68.20	13.54
10 521.05	V	77.27	37.41	-49.70	-	64.98	68.20	3.22
15 783.30 ¹⁾	V	63.88	40.06	-48.70	-	55.24	74.00	18.76
Average Data								
1 054.59 ¹⁾	V	70.55	27.82	-50.61	-	47.76	54.00	6.24
15 783.30 ¹⁾	V	54.25	40.06	-48.70	-	45.61	54.00	8.39

Average data (1 054.59 MHz)**Average data (15 783.30 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

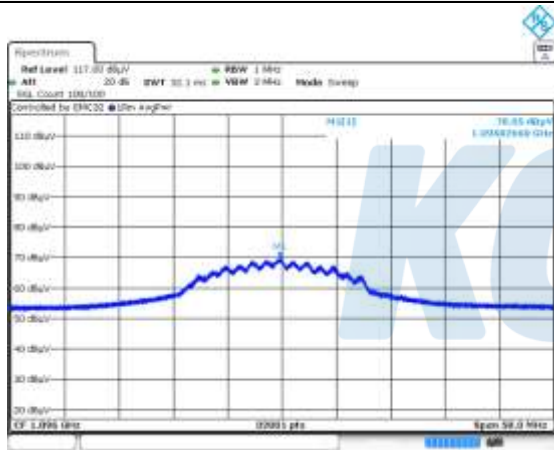
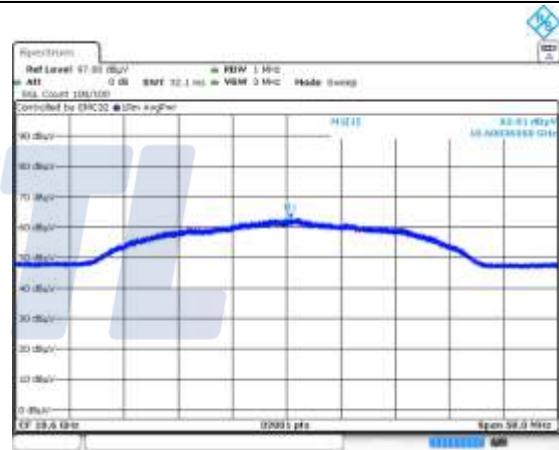
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Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

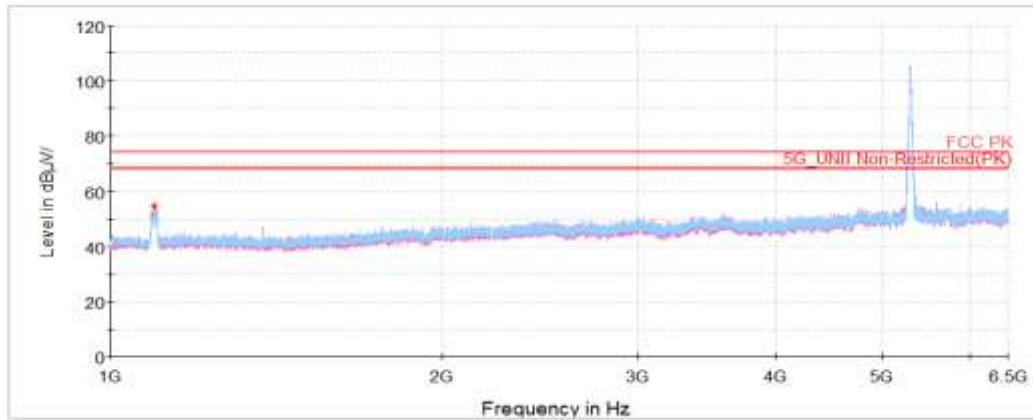
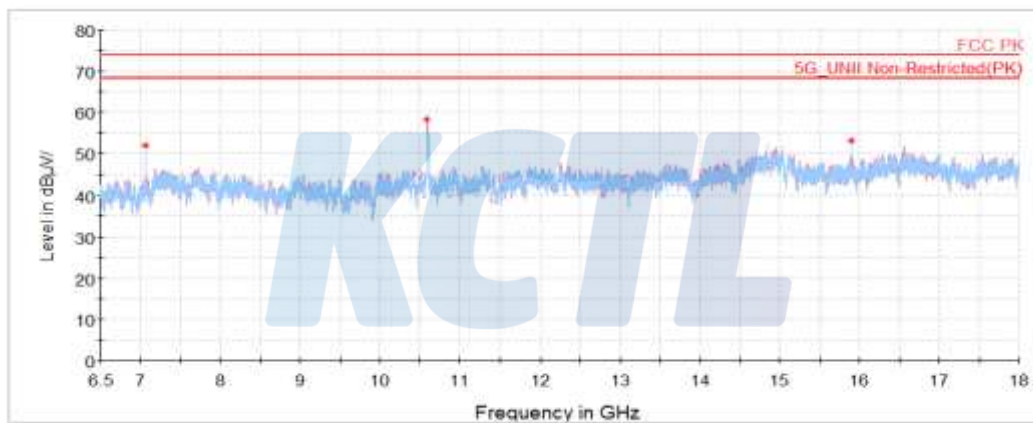
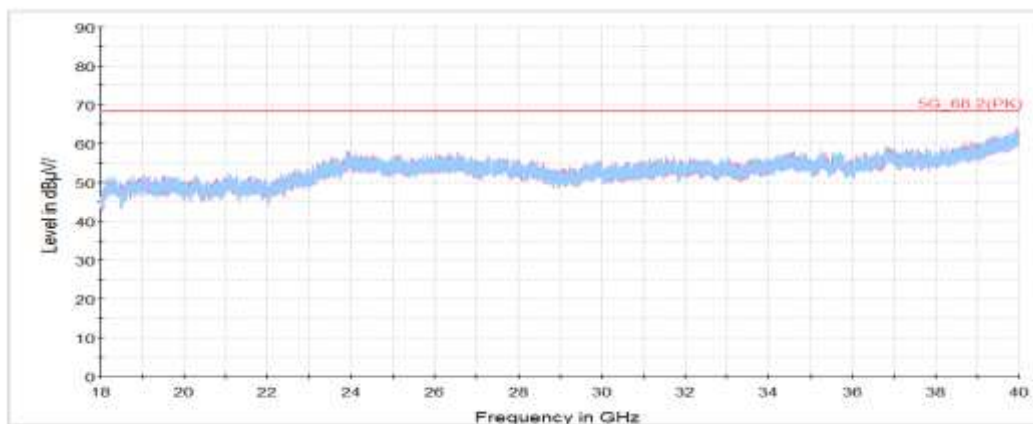
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**Middle Channel (5 300 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 095.83 ¹⁾	H	77.60	27.84	-50.62	-	54.82	74.00	19.18
7 066.73	V	68.88	35.40	-52.37	-	51.91	68.20	16.29
10 600.37 ¹⁾	V	70.59	37.46	-49.87	-	58.18	74.00	15.82
15 898.03 ¹⁾	H	61.78	40.08	-48.76	-	53.10	74.00	20.90
Average Data								
1 095.83 ¹⁾	V	70.05	27.84	-50.62	-	47.27	54.00	6.73
10 600.37 ¹⁾	V	63.01	37.46	-49.87	-	50.60	54.00	3.40

Average data (1 095.83 MHz)**Average data (10 600.37 MHz)**

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

Highest Channel (5 320 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 115.66 ¹⁾	H	77.46	27.85	-50.49	-	54.82	74.00	19.18
5 394.50 ¹⁾	H	53.27	34.63	-26.73	-	61.17	74.00	12.83
7 093.33	H	69.22	35.40	-52.25	-	52.37	68.20	15.83
10 640.00 ¹⁾	V	71.18	37.48	-49.96	-	58.70	74.00	15.30
15 959.83 ¹⁾	V	57.59	40.09	-48.79	-	48.89	74.00	25.11
Average Data								
1 115.66 ¹⁾	V	71.37	27.85	-50.49	-	48.73	54.00	5.27
5 394.50 ¹⁾	H	42.78	34.63	-26.73	-	50.68	54.00	3.32
10 640.00 ¹⁾	V	62.69	37.48	-49.96	-	50.21	54.00	3.79



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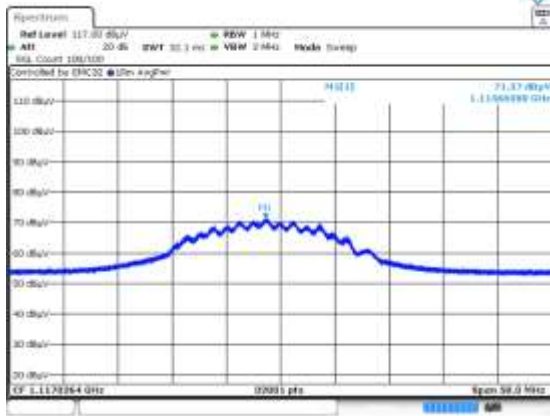
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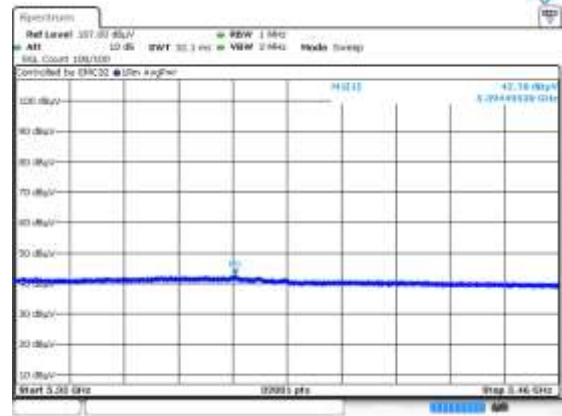
Page (642) of (1046)



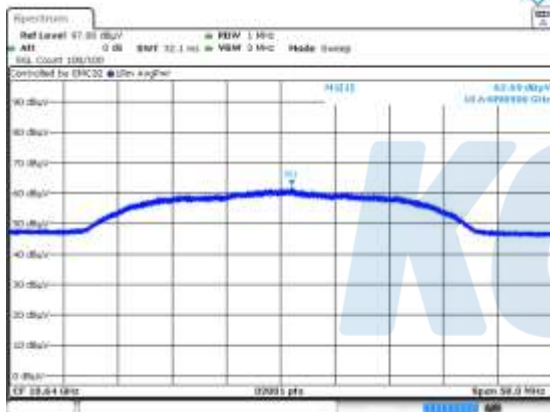
Average data (1 115.66 MHz)



Average data (5 394.50 MHz)

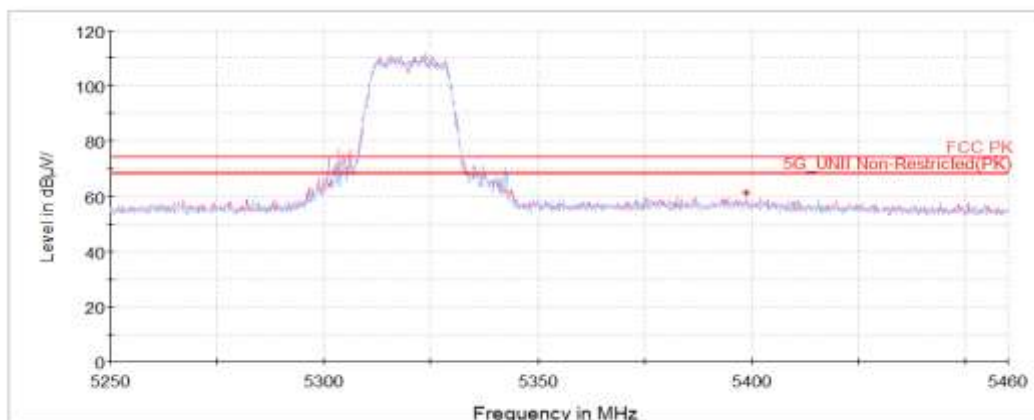


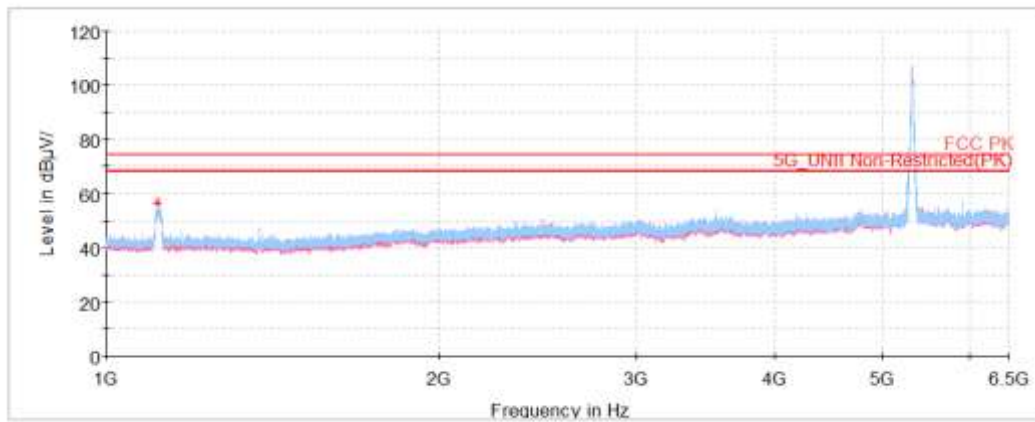
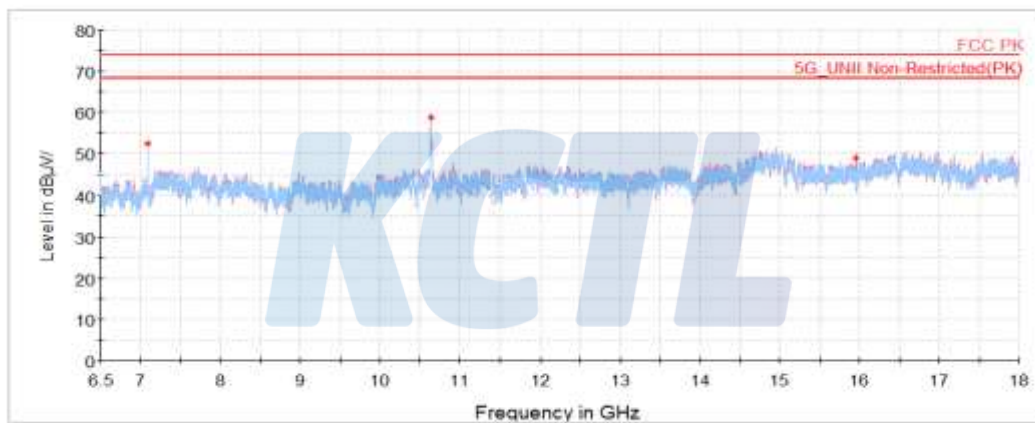
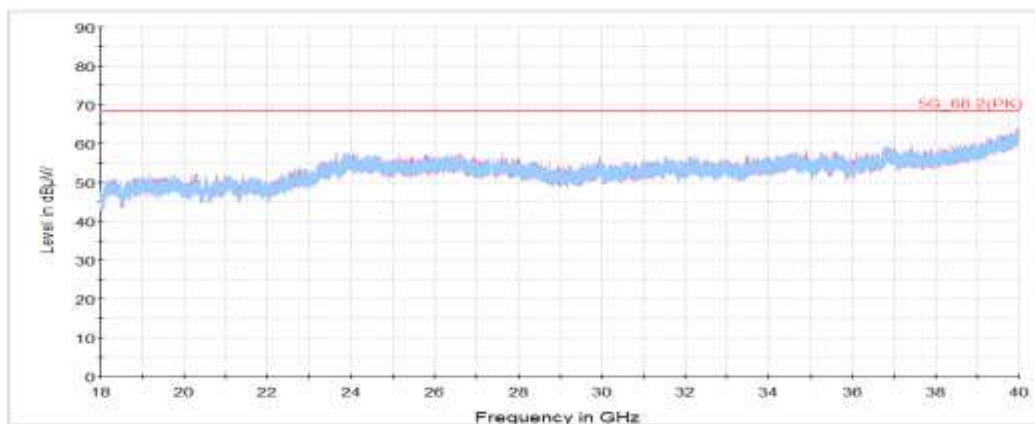
Average data (10 640.00 MHz)



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Horizontal/Vertical for Band-edge



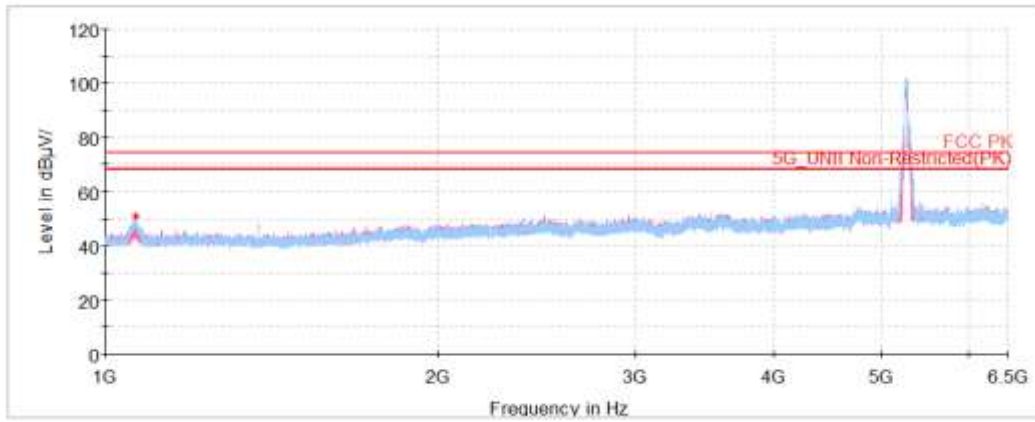
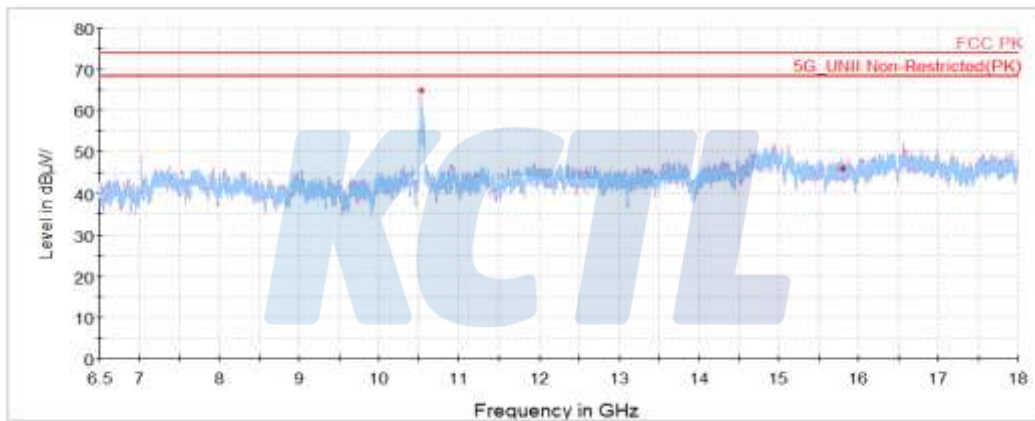
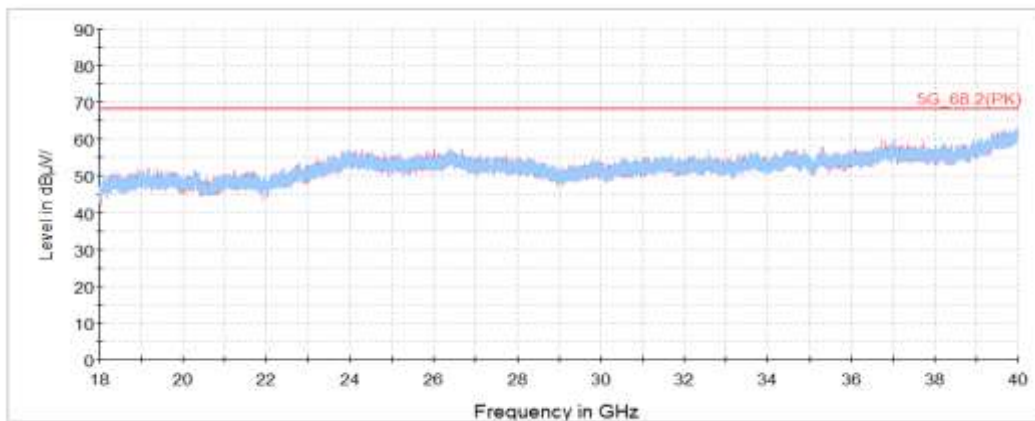
Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

802.11ac VHT40 UNII 2A ANT 0

Lowest Channel (5 270 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB($\mu V/m$))	(dB($\mu V/m$))	(dB)
Peak data								
10 537.22	H	77.01	37.42	-49.73	-	64.70	68.20	3.50
15 810.69 ¹⁾	H	54.39	40.06	-48.71	-	45.74	74.00	28.26
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

KCTL

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

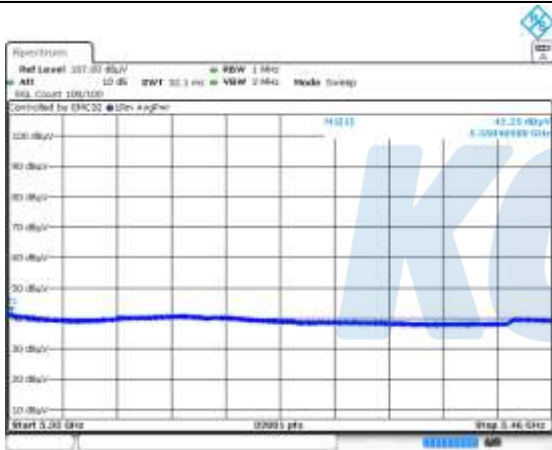
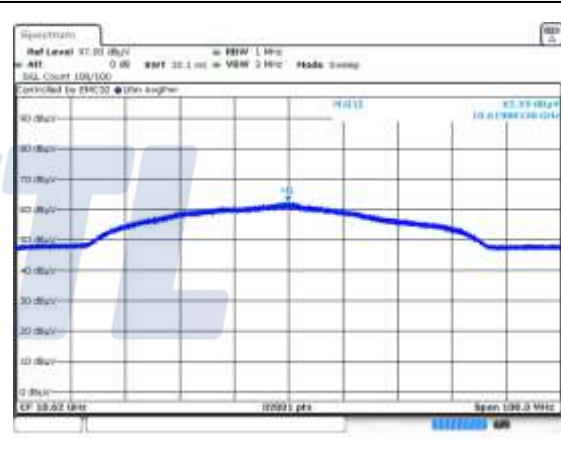
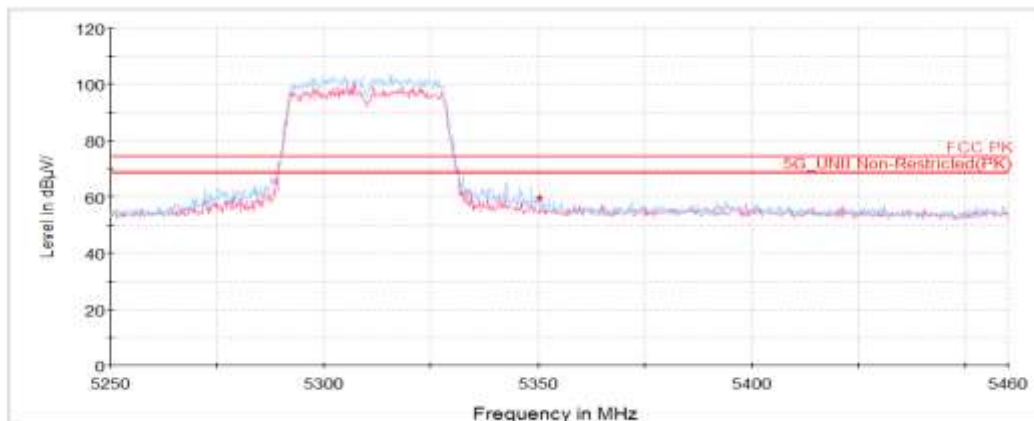
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**Highest Channel (5 310 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 350.49 ¹⁾	H	51.57	34.56	-26.84	-	59.29	74.00	14.71
7 079.67	V	64.30	35.40	-52.31	-	47.39	74.00	26.61
10 619.88 ¹⁾	V	73.44	37.47	-49.92	-	60.99	74.00	13.01
15 924.25 ¹⁾	H	56.26	40.08	-48.77	-	47.57	74.00	26.43
Average Data								
5 350.49 ¹⁾	H	42.25	34.56	-26.84	0.13	50.10	54.00	3.90
10 619.88 ¹⁾	V	62.59	37.47	-49.92	0.13	50.27	54.00	3.73

Average data (5 350.49 MHz)**Average data (10 619.88 MHz)****Horizontal/Vertical for Band-edge**

KCTL Inc.

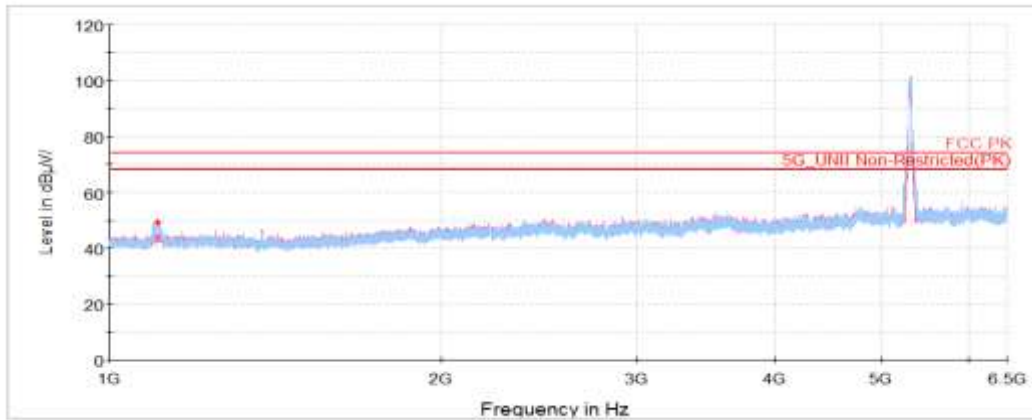
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TEL: 82-31-285-0894 FAX: 82-505-299-8311
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Report No.:
KR20-SRF0030-D

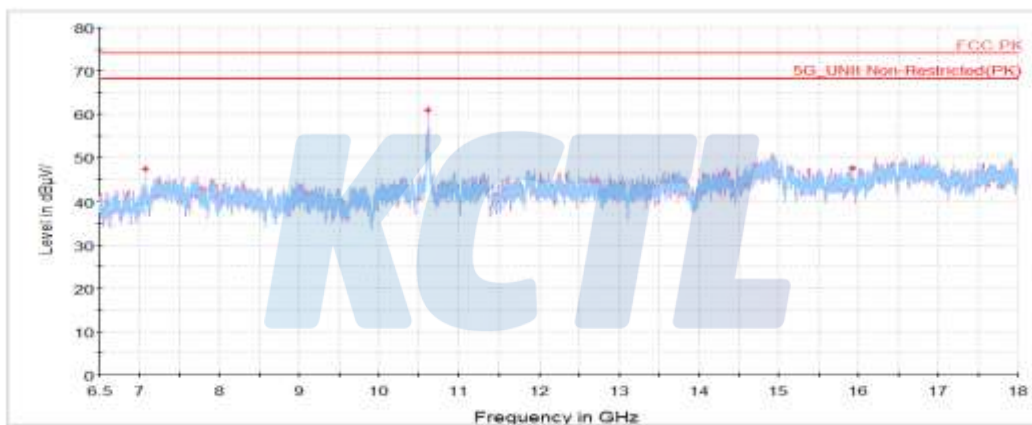
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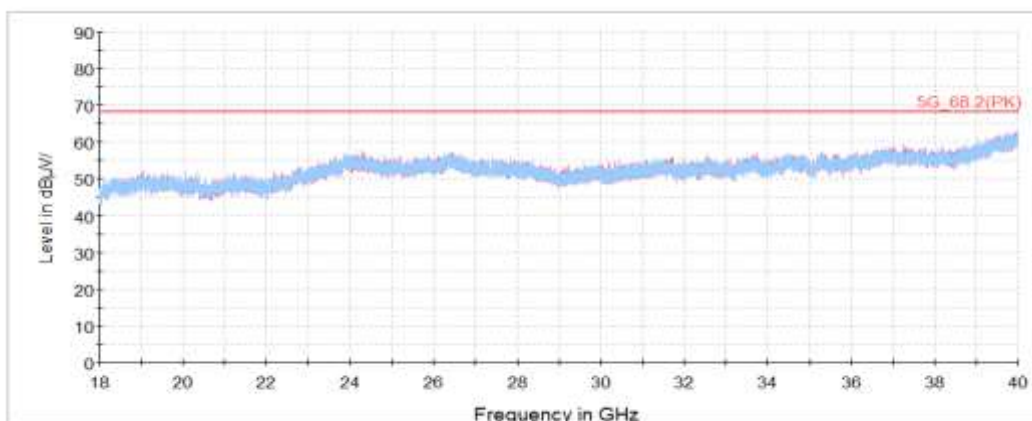
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz

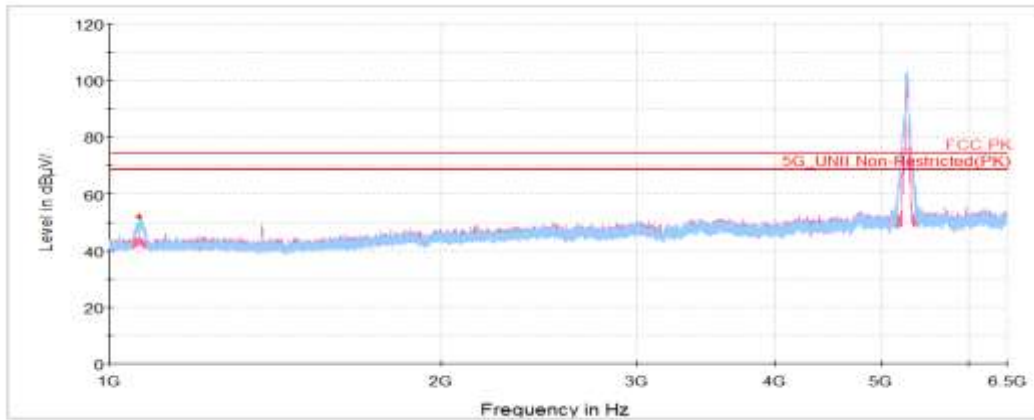
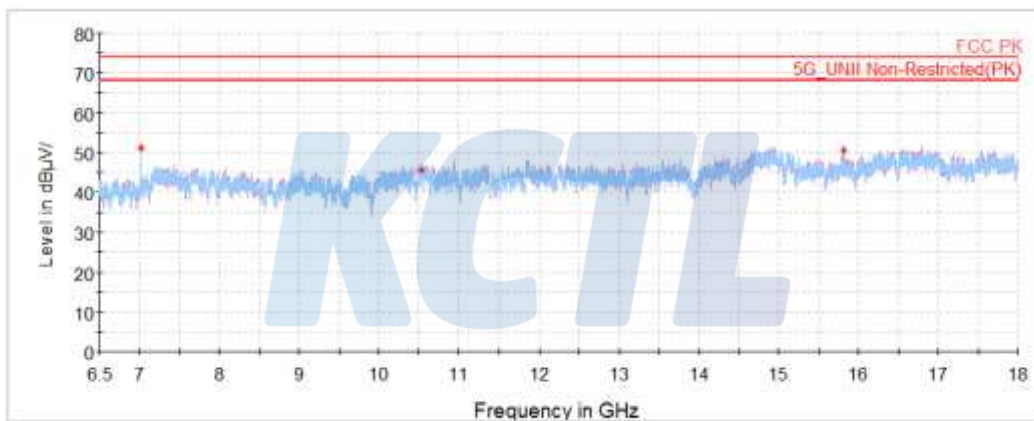
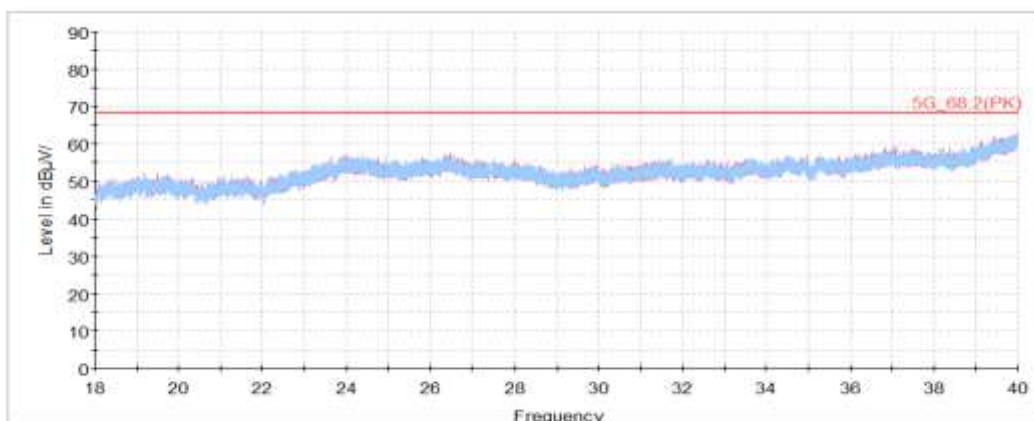


802.11ac VHT40 UNII 2A ANT 1

Lowest Channel (5 270 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB($\mu V/m$))	(dB($\mu V/m$))	(dB)
Peak data								
7 026.48	H	68.08	35.40	-52.56	-	50.92	68.20	17.28
10 540.09	H	57.71	37.42	-49.74	-	45.39	68.20	22.81
15 820.03 ¹⁾	V	59.21	40.06	-48.72	-	50.55	74.00	23.45
Average Data								
No spurious emissions were detected within 20 dB of the limit.								



Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

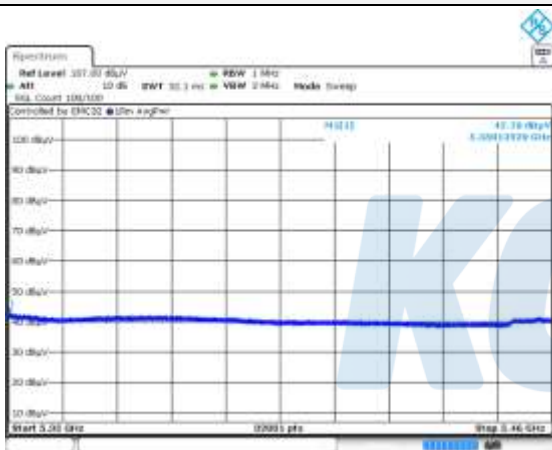
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TEL: 82-31-285-0894 FAX: 82-505-299-8311
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Report No.:
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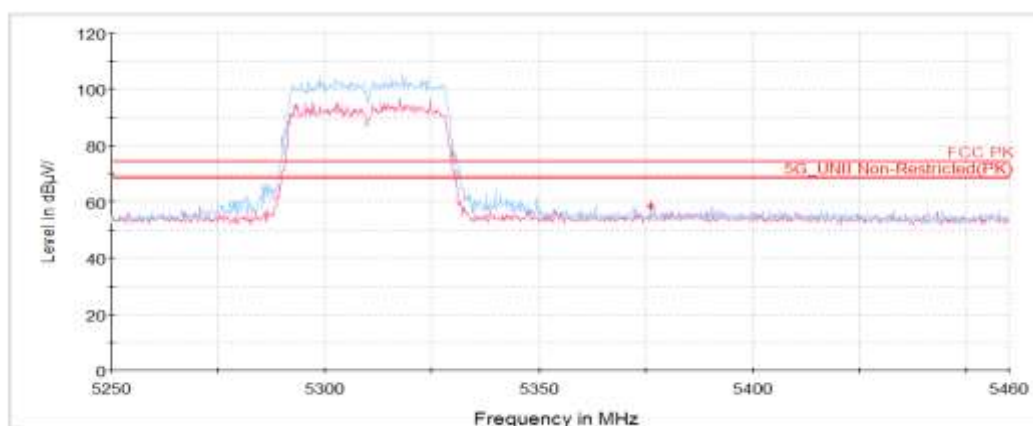
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**Highest Channel (5 310 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 350.14 ¹⁾	H	50.81	34.56	-26.84	-	58.53	74.00	15.47
7 080.03	H	68.35	35.40	-52.31	-	51.44	68.20	16.76
10 618.80 ¹⁾	V	59.52	37.47	-49.91	-	47.08	74.00	26.92
15 930.36 ¹⁾	H	55.98	40.09	-48.78	-	47.29	74.00	26.71
Average Data								
5 350.14 ¹⁾	H	42.70	34.56	-26.84	0.13	50.55	54.00	3.45

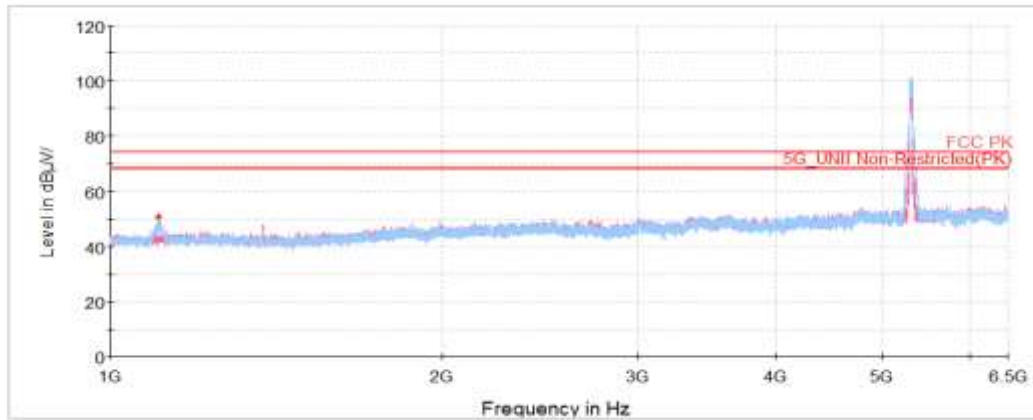
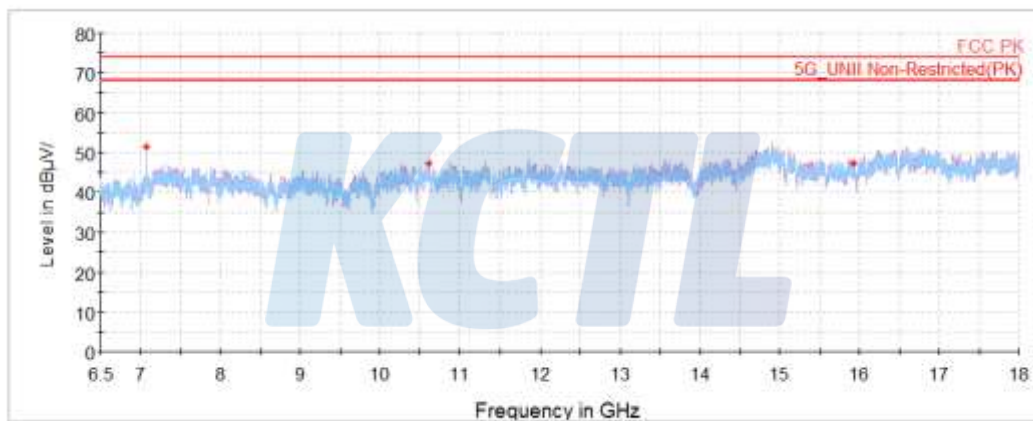
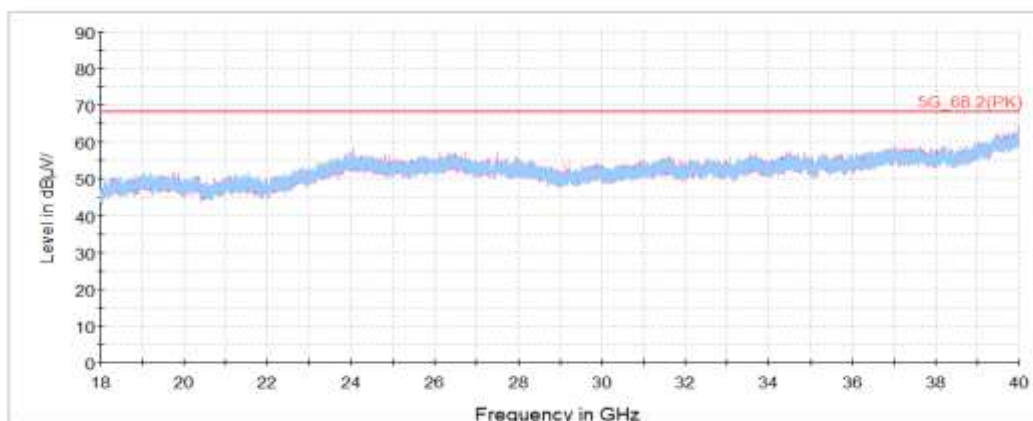
Average data (5 350.14 MHz)

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Horizontal/Vertical for Band-edge

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KCTL-TIR001-003/2

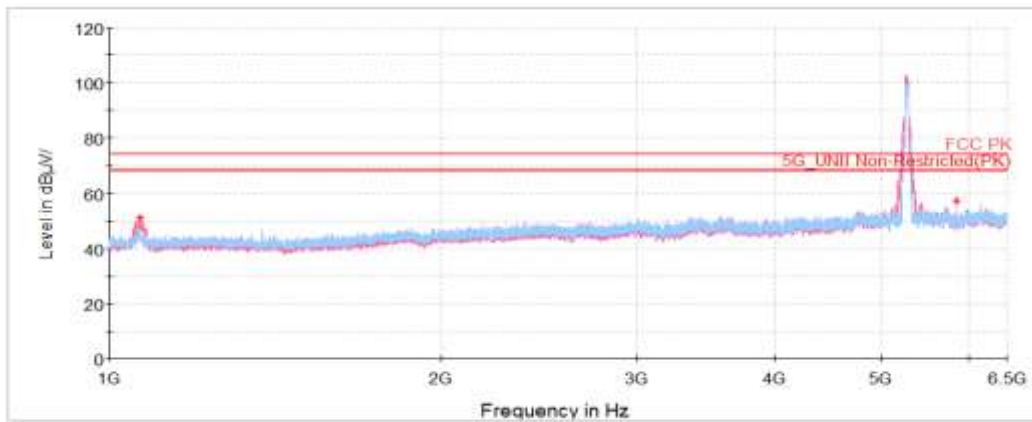
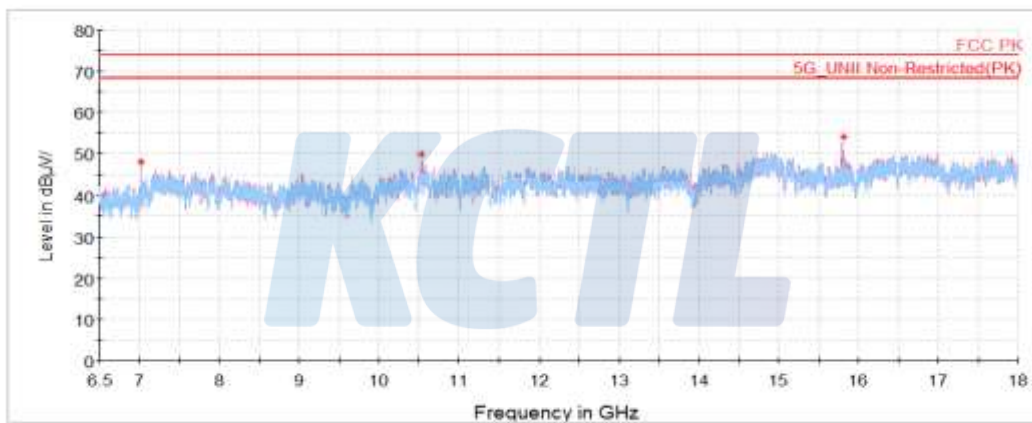
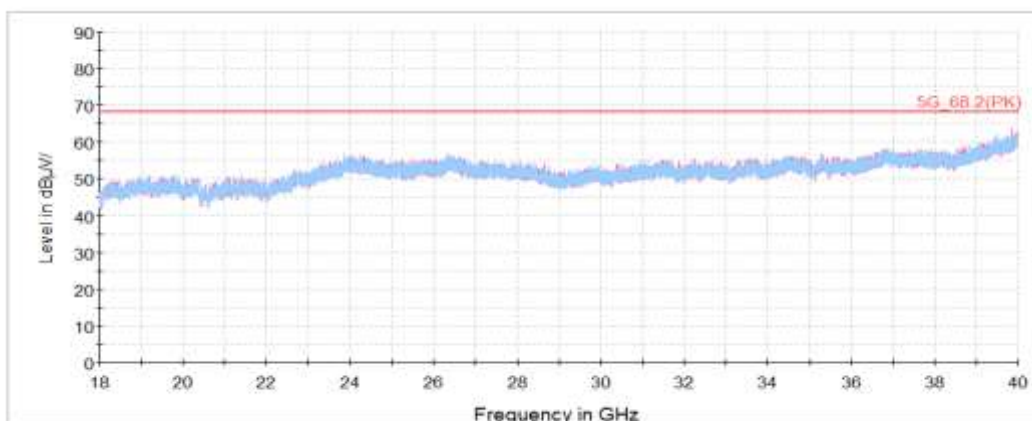
Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

802.11ac VHT40 UNII 2A ANT 2

Lowest Channel (5 270 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB($\mu V/m$))	(dB($\mu V/m$))	(dB)
Peak data								
5 855.81	V	66.79	35.23	-44.90	-	57.12	68.20	11.08
7 026.48	V	65.20	35.40	-52.56	-	48.04	68.20	20.16
10 536.86	V	62.15	37.42	-49.73	-	49.84	68.20	18.36
15 795.18 ¹⁾	V	62.64	40.06	-48.71	-	53.99	74.00	20.01
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

KCTL

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

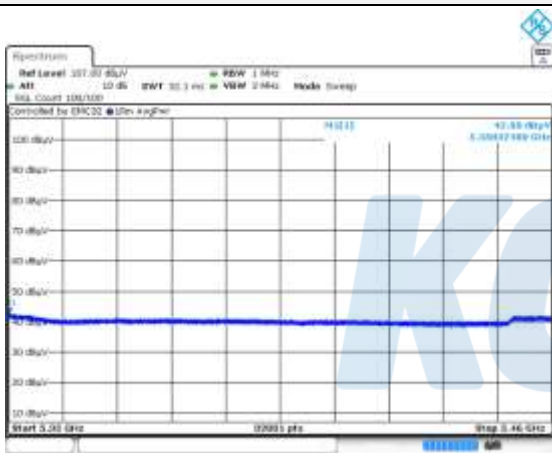
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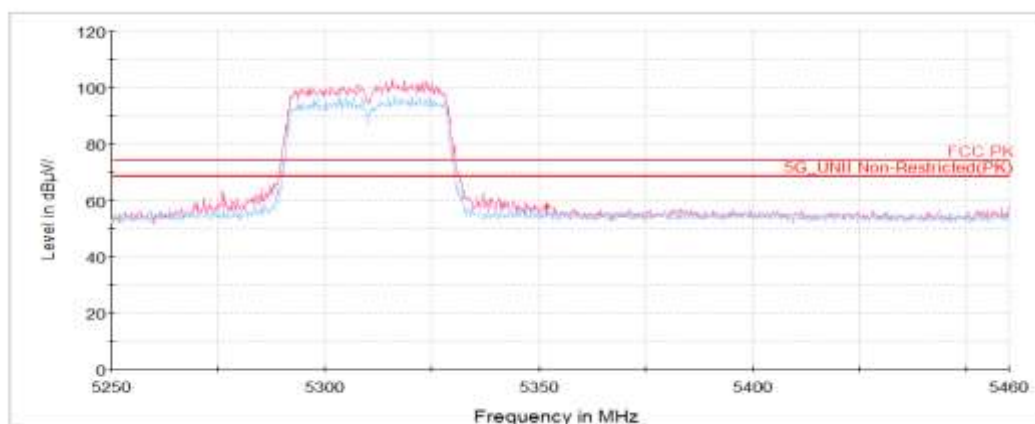
Page (654) of (1046)

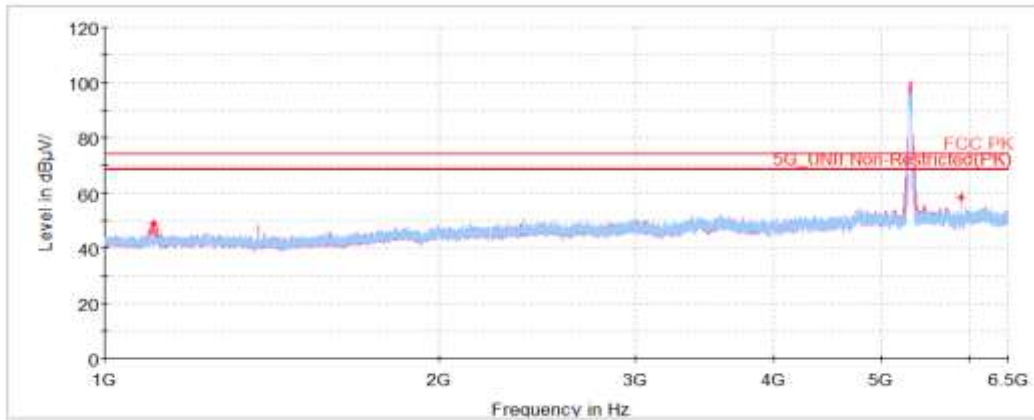
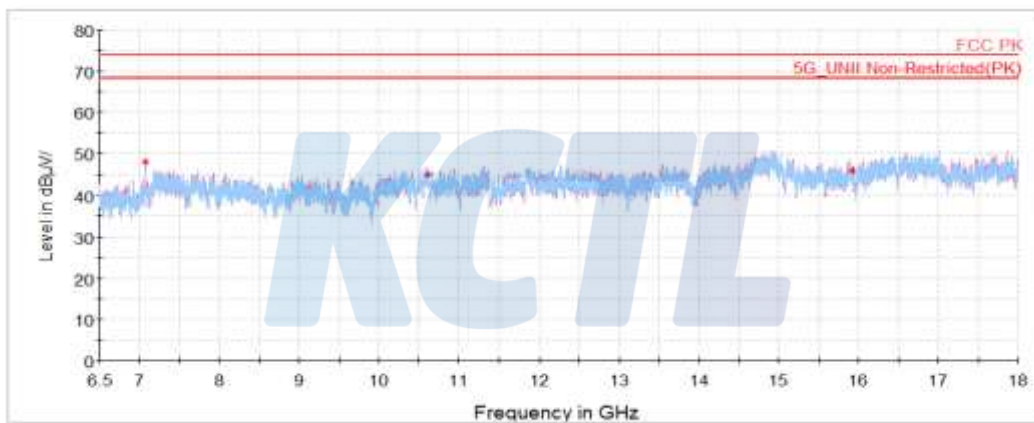
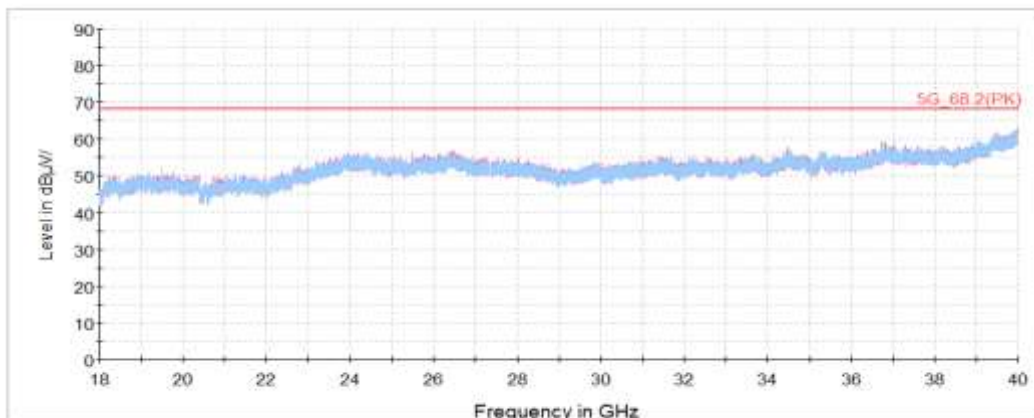
**Highest Channel (5 310 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 350.32 ¹⁾	V	50.05	34.56	-26.84	-	57.77	74.00	16.23
5 899.98	V	67.47	35.28	-44.49	-	58.26	68.20	9.94
10 620.95 ¹⁾	H	57.35	37.47	-49.92	-	44.90	74.00	29.10
15 932.16 ¹⁾	H	54.63	40.09	-48.78	-	45.94	74.00	28.06
Average Data								
5 350.32 ¹⁾	V	42.80	34.56	-26.84	0.13	50.65	54.00	3.35

Average data (5 350.32 MHz)

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Horizontal/Vertical for Band-edge

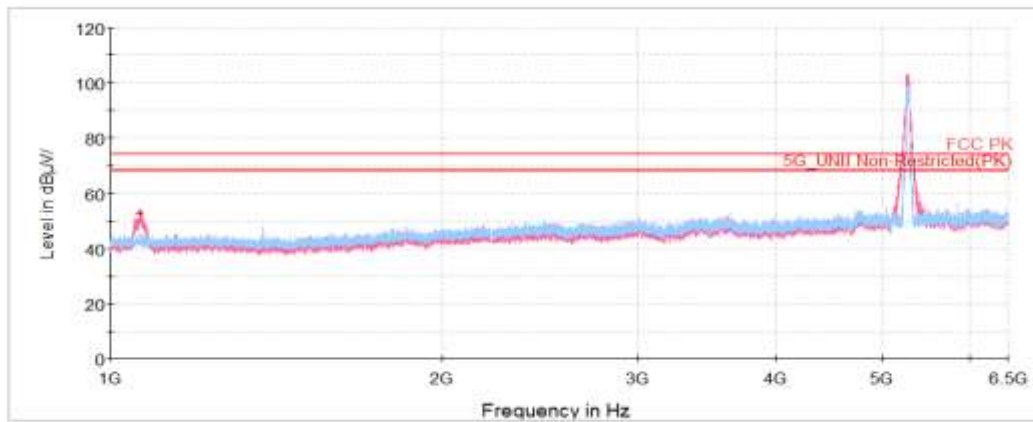
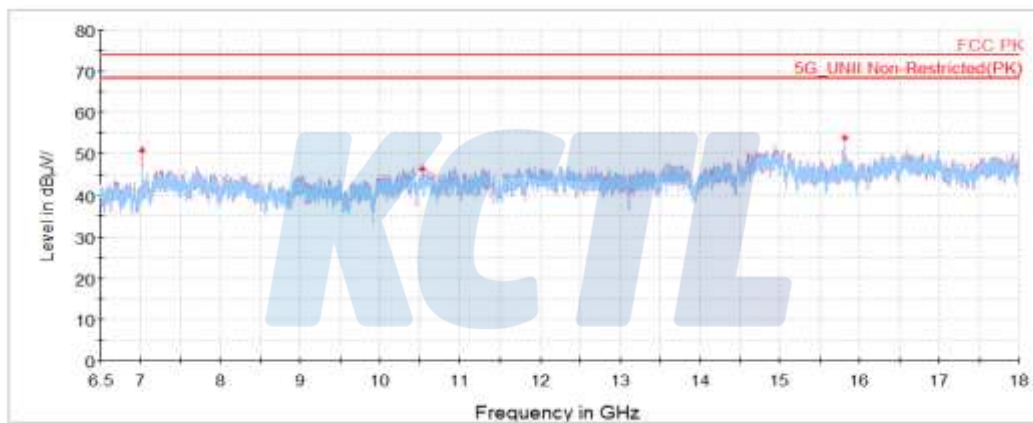
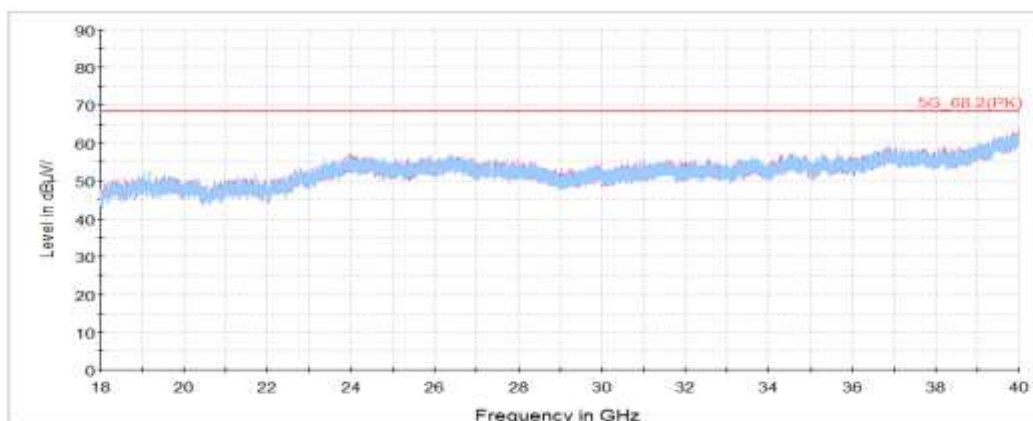
Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

802.11ac VHT40 UNII 2A ANT 3

Lowest Channel (5 270 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
7 026.48	V	67.80	35.40	-52.56	-	50.64	68.20	17.56
10 538.66	V	58.65	37.42	-49.74	-	46.33	68.20	21.87
15 803.64 ¹⁾	H	62.34	40.06	-48.71	-	53.69	74.00	20.31
Average Data								
No spurious emissions were detected within 20 dB of the limit.								



Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

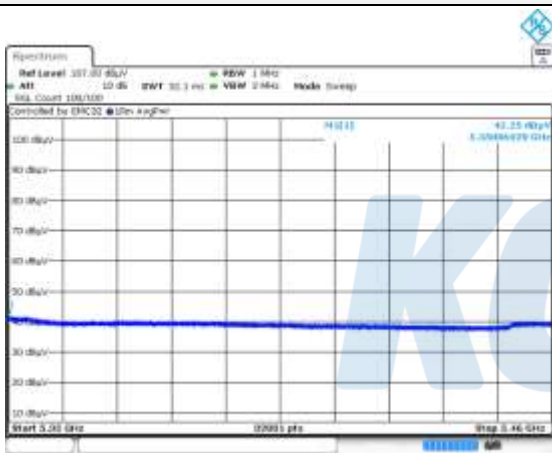
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TEL: 82-31-285-0894 FAX: 82-505-299-8311
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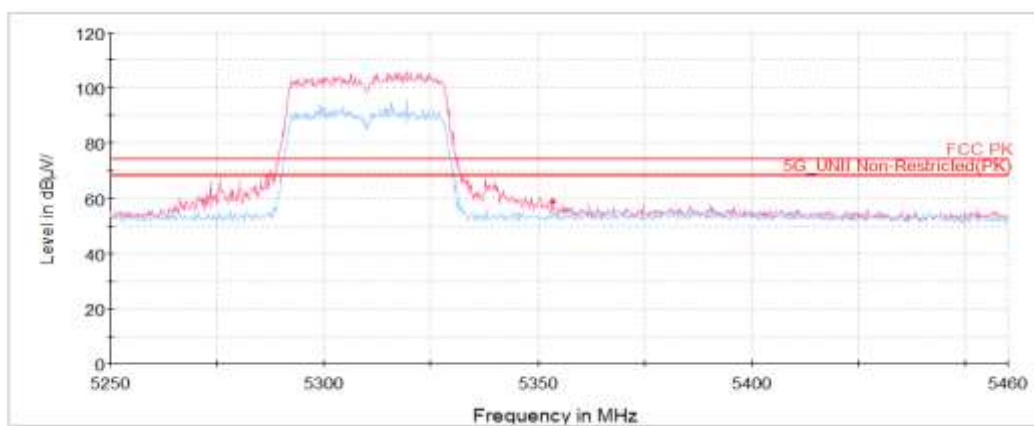
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**Highest Channel (5 310 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 350.06 ¹⁾	V	50.72	34.56	-26.84	-	58.44	74.00	15.56
7 080.03	V	67.85	35.40	-52.31	-	50.94	68.20	17.26
10 626.70 ¹⁾	V	57.50	37.48	-49.93	-	45.05	74.00	28.95
15 915.63 ¹⁾	H	54.98	40.08	-48.77	-	46.29	74.00	27.71
Average Data								
5 350.06 ¹⁾	V	42.25	34.56	-26.84	0.13	50.10	54.00	3.90

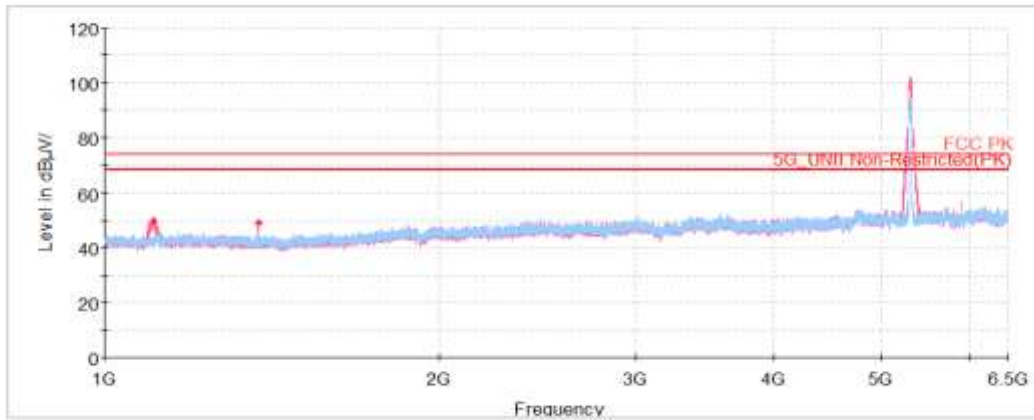
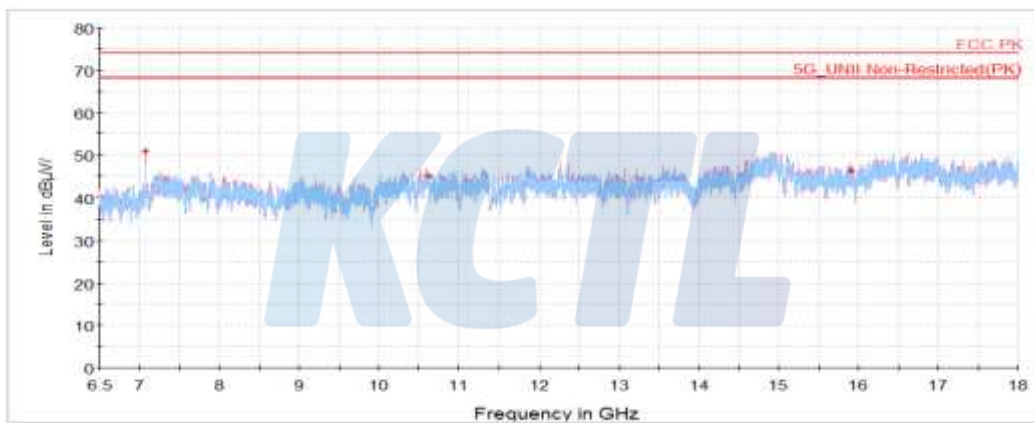
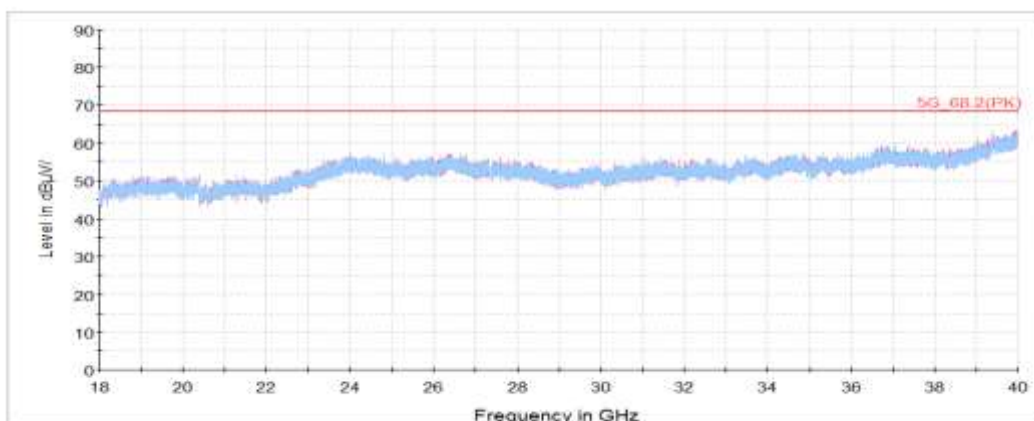
Average data (5 350.06 MHz)

Blank

Horizontal/Vertical for Band-edge

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Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

802.11ac VHT40 UNII 2A 4TX MIMO

Lowest Channel (5 270 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB($\mu V/m$))	(dB($\mu V/m$))	(dB)
Peak data								
7 027.20	H	69.69	35.40	-52.56	-	52.53	68.20	15.67
10 540.45	V	76.85	37.42	-49.74	-	64.53	68.20	3.67
15 818.76 ¹⁾	V	60.03	40.06	-48.72	-	51.37	74.00	22.63
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

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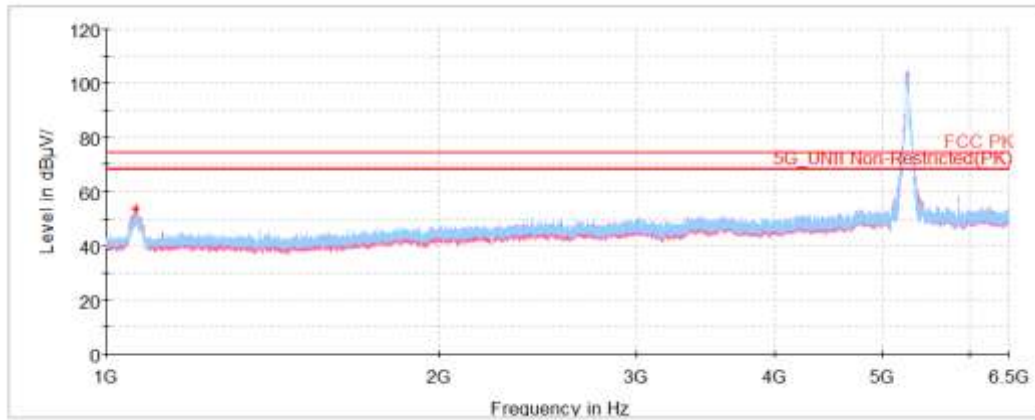
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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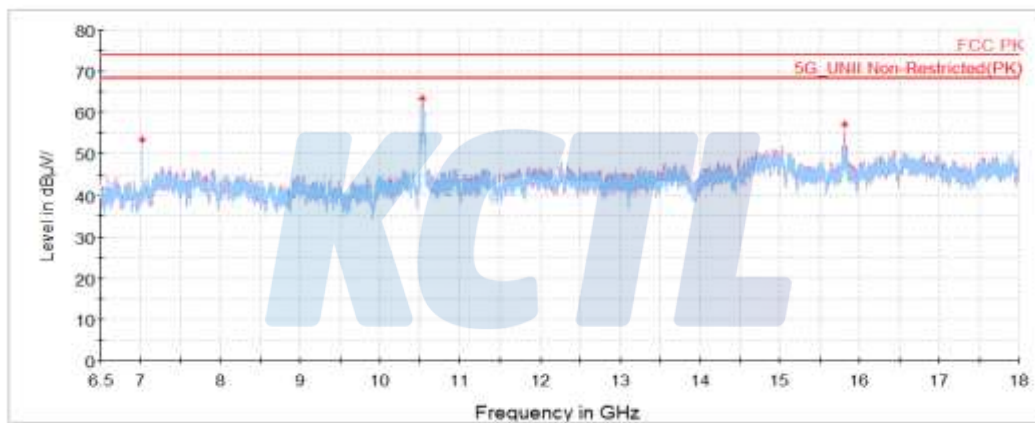
Page (661) of (1046)



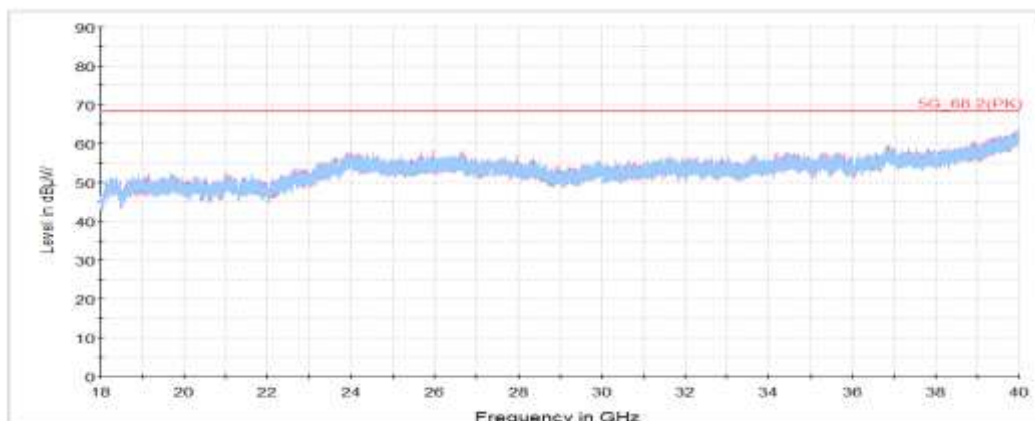
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



KCTL Inc.

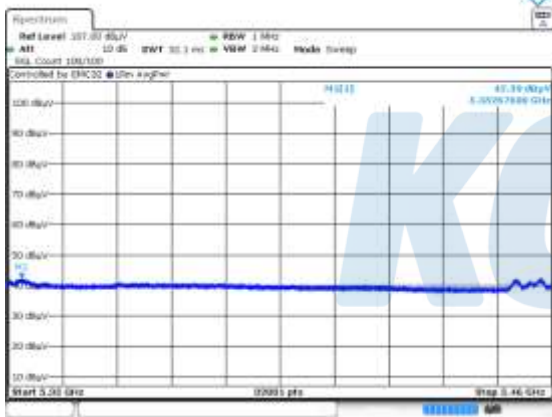
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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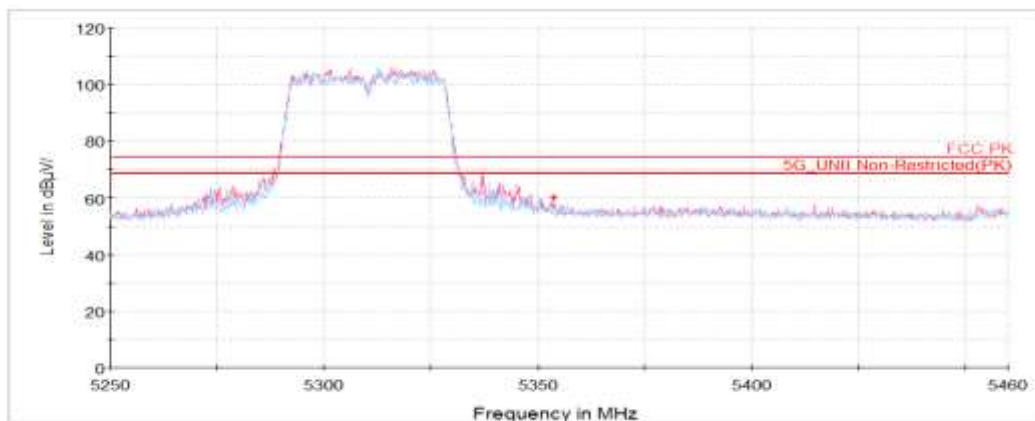
Page (662) of (1046)

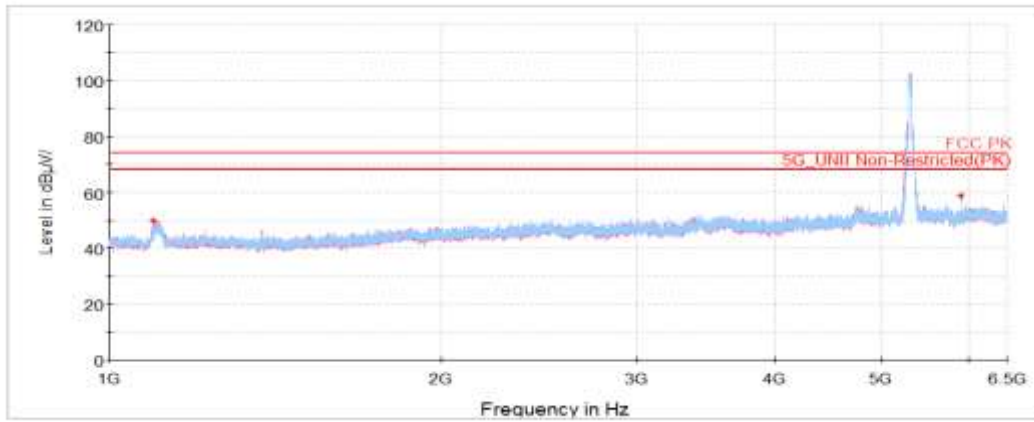
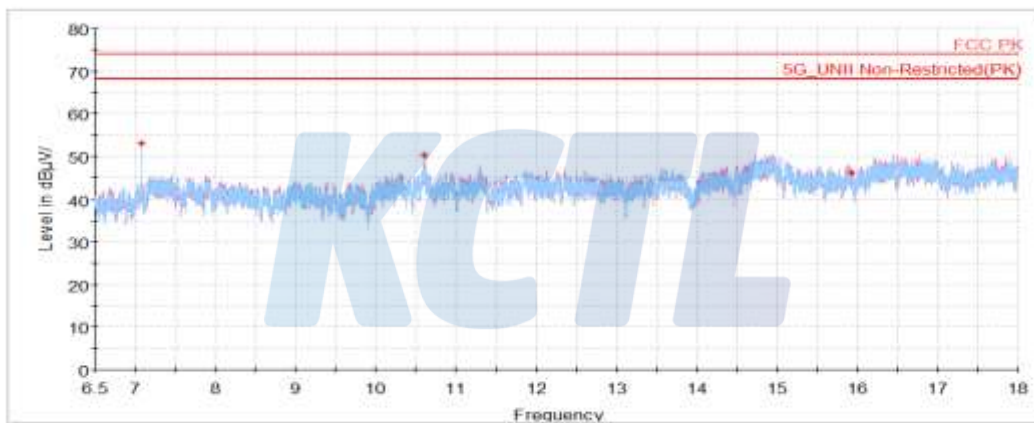
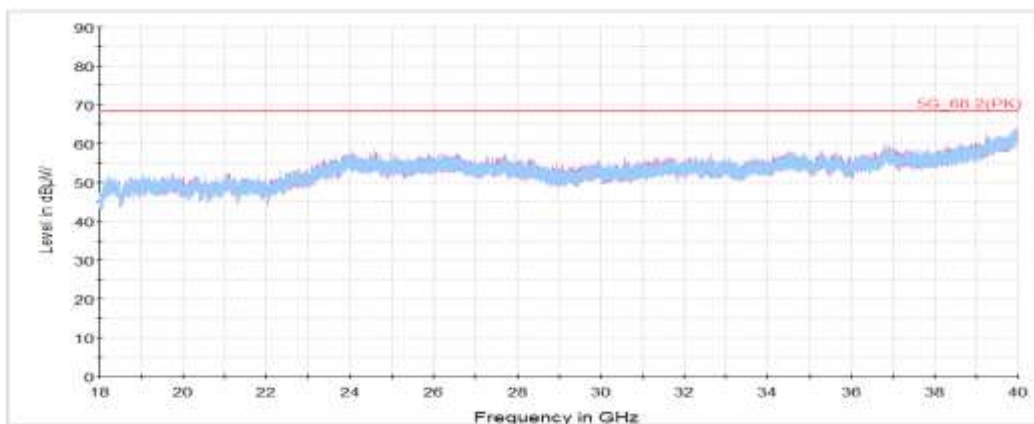
**Highest Channel (5 310 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 352.67 ¹⁾	V	52.01	34.56	-26.84	-	59.73	74.00	14.27
5 900.33	V	67.58	35.28	-44.49	-	58.37	68.20	9.83
7 079.67	H	69.97	35.40	-52.31	-	53.06	68.20	15.14
10 617.00 ¹⁾	V	62.71	37.47	-49.91	-	50.27	74.00	23.73
15 934.31 ¹⁾	H	54.80	40.09	-48.78	-	46.11	74.00	27.89
Average Data								
5 352.67 ¹⁾	V	42.39	34.56	-26.84	0.13	50.24	54.00	3.76

Average data (5 352.67 MHz)

Blank

Horizontal/Vertical for Band-edge

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

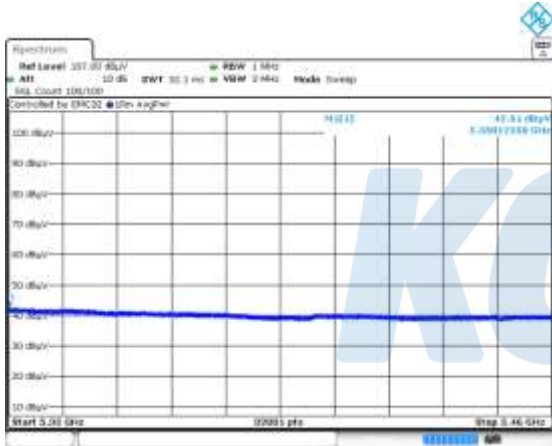
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
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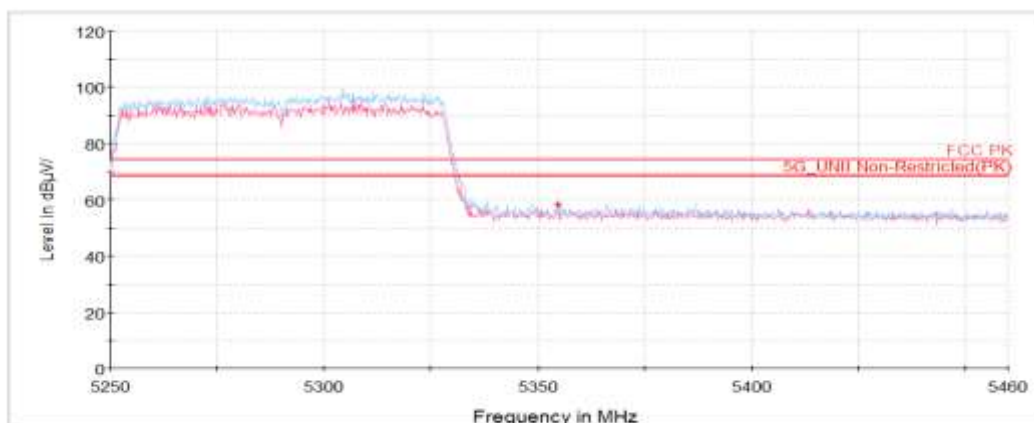
Page (664) of (1046)

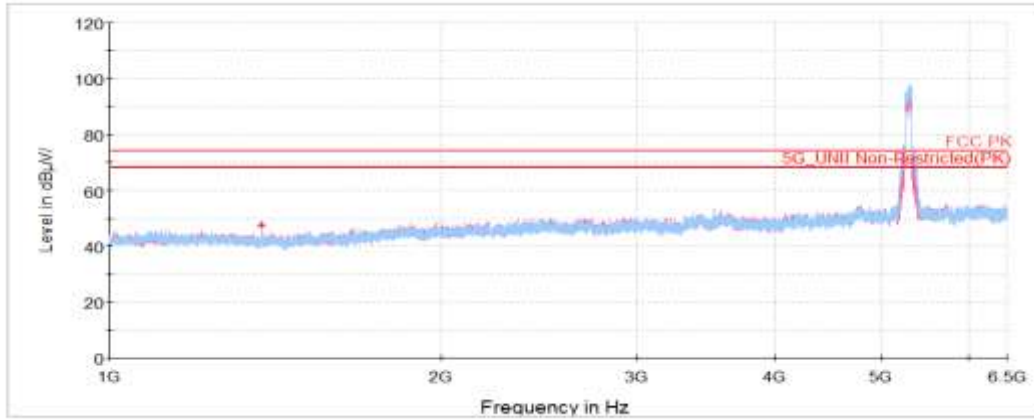
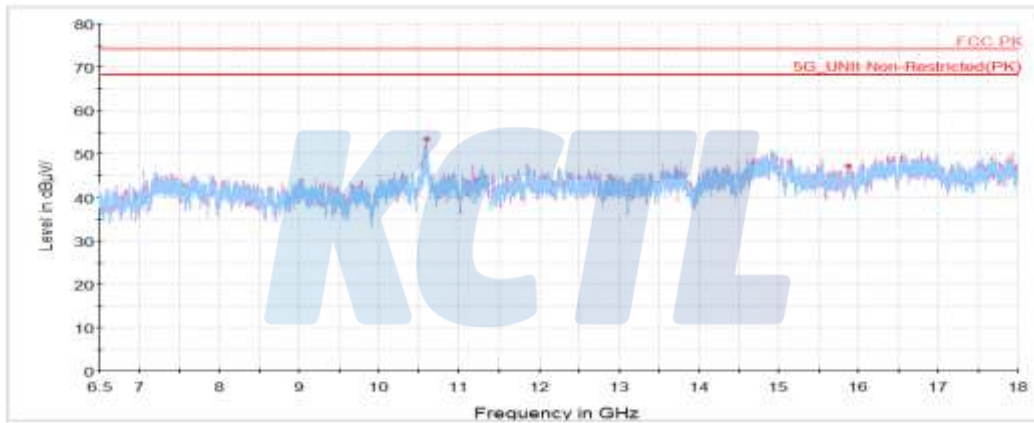
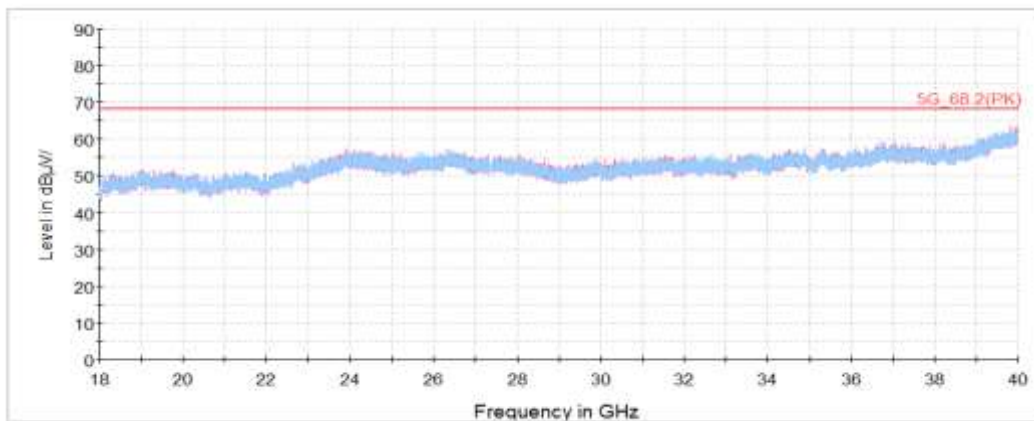
**802.11ac VHT80 UNII 2A ANT 0****Middle Channel (5 290 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 350.13 ¹⁾	H	50.49	34.56	-26.84	-	58.21	74.00	15.79
10 602.88 ¹⁾	H	65.78	37.46	-49.88	-	53.36	74.00	20.64
15 870.34 ¹⁾	H	55.73	40.07	-48.75	-	47.05	74.00	26.95
Average Data								
5 350.13 ¹⁾	H	42.61	34.56	-26.84	0.27	50.60	54.00	3.40

Average data (5 350.13 MHz)

Blank

Horizontal/Vertical for Band-edge

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

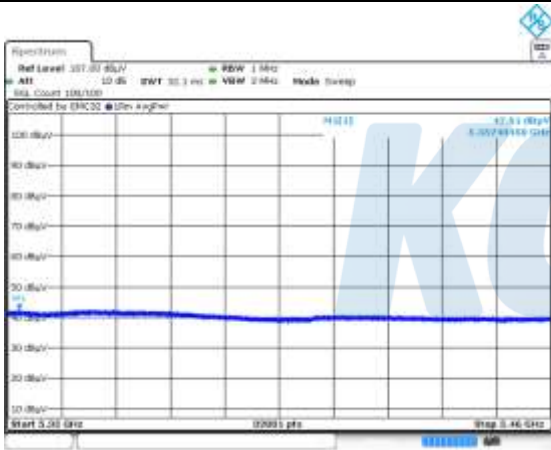
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
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KR20-SRF0030-D

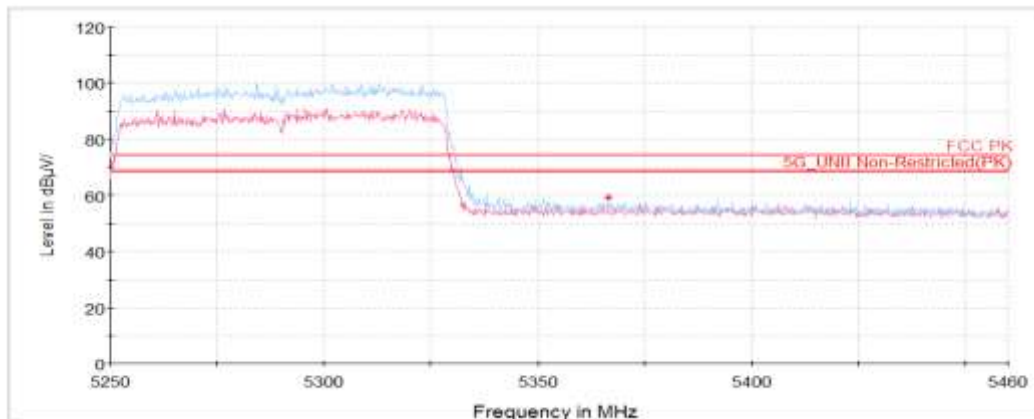
Page (666) of (1046)

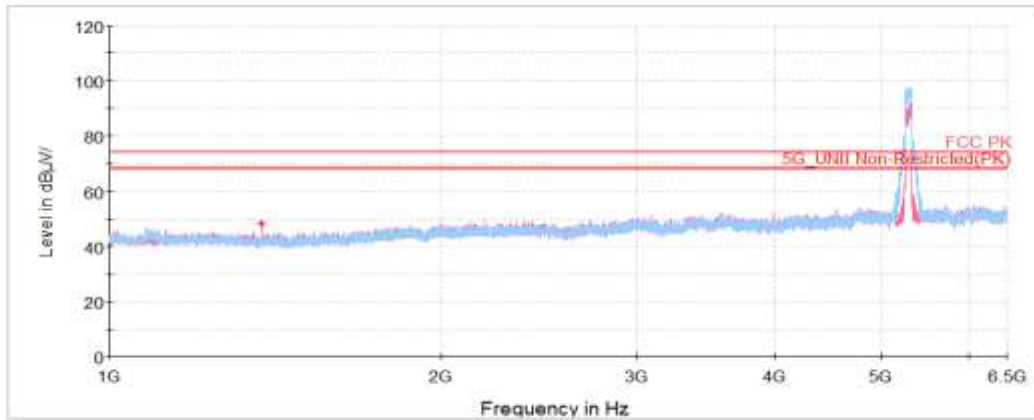
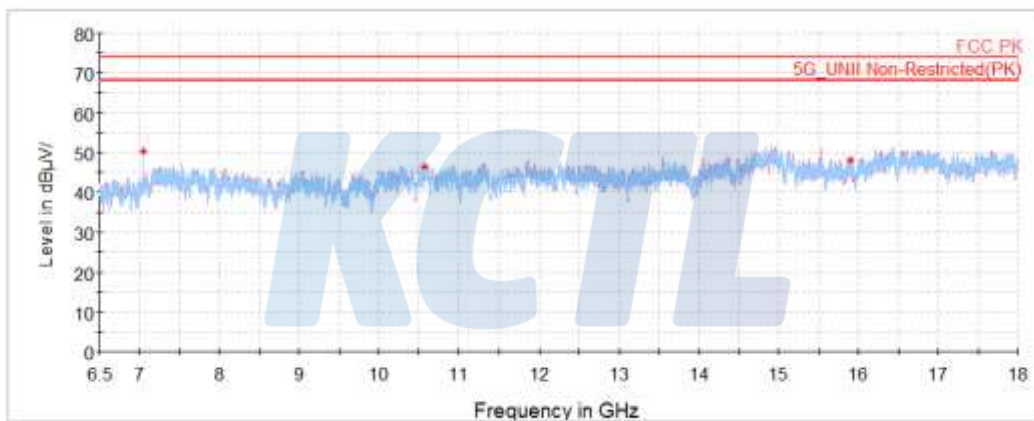
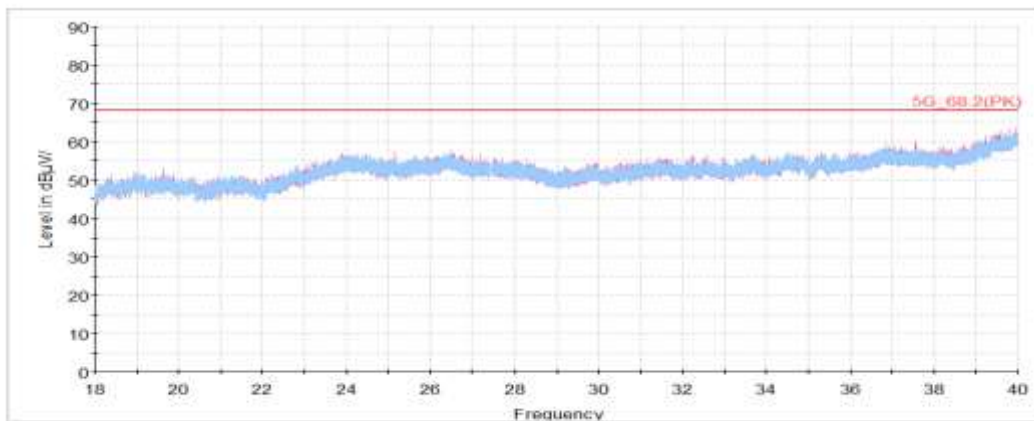
**802.11ac VHT80 UNII 2A ANT 1****Middle Channel (5 290 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 352.40 ¹⁾	H	51.32	34.56	-26.84	-	59.04	74.00	14.96
7 053.08	H	67.23	35.40	-52.44	-	50.19	68.20	18.01
10 581.42	V	58.82	37.45	-49.83	-	46.44	68.20	21.76
15 896.94 ¹⁾	V	56.62	40.08	-48.76	-	47.94	74.00	26.06
Average Data								
5 352.40 ¹⁾	H	42.61	34.56	-26.84	0.27	50.60	54.00	3.40

Average data (5 352.40 MHz)

Blank

Horizontal/Vertical for Band-edge

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

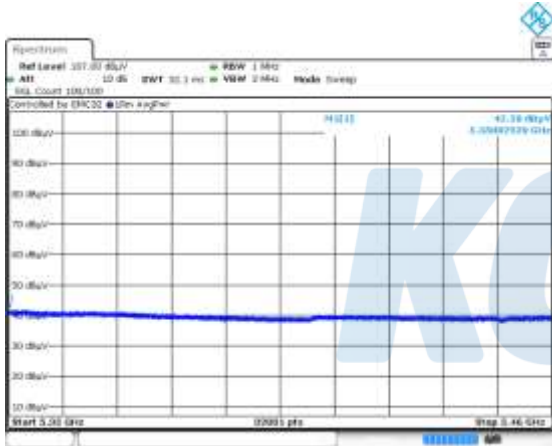
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
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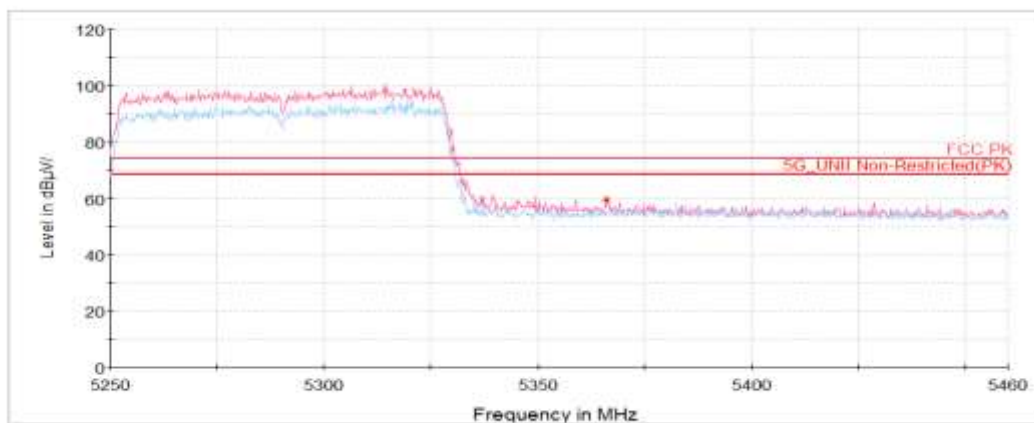
Page (668) of (1046)

**802.11ac VHT80 UNII 2A ANT 2****Middle Channel (5 290 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 350.03 ¹⁾	V	51.92	34.56	-26.84	-	59.64	74.00	14.36
10 579.27	V	57.87	37.45	-49.83	-	45.49	68.20	22.71
15 867.11 ¹⁾	H	55.61	40.07	-48.74	-	46.94	74.00	27.06
Average Data								
5 350.03 ¹⁾	V	42.28	34.56	-26.84	0.27	50.27	54.00	3.73

Average data (5 350.03 MHz)

Blank

Horizontal/Vertical for Band-edge

KCTL Inc.

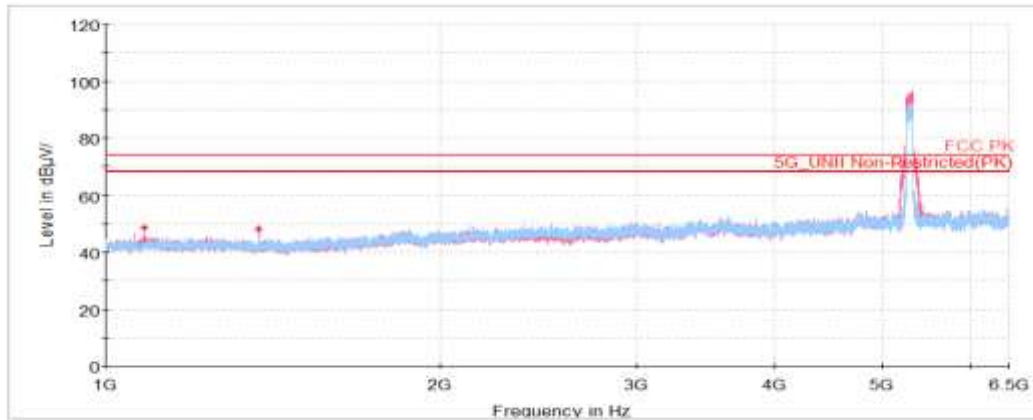
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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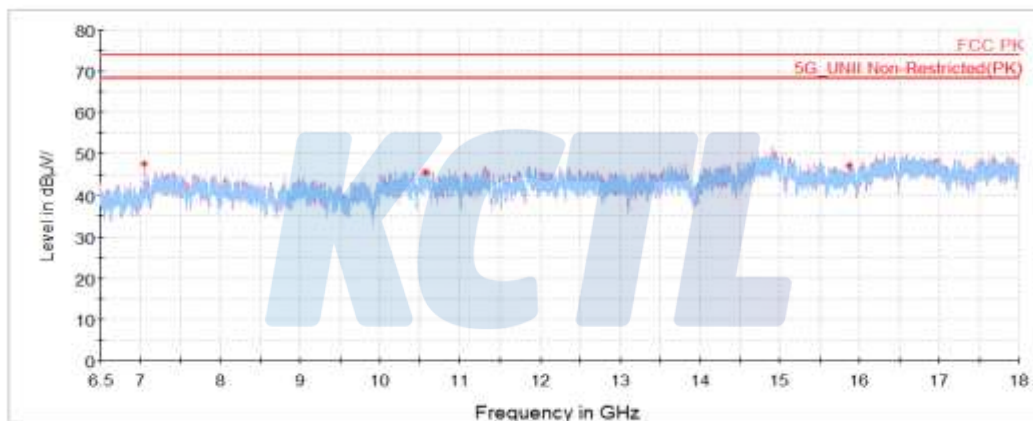
Page (669) of (1046)



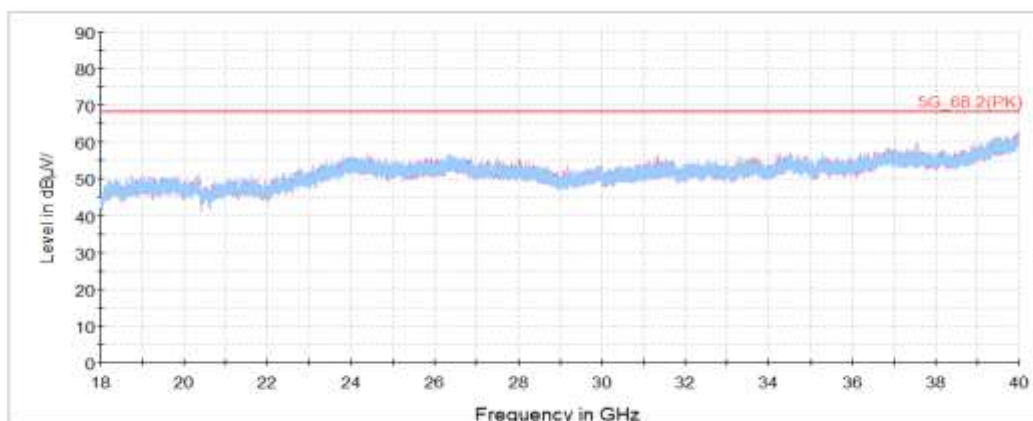
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



KCTL Inc.

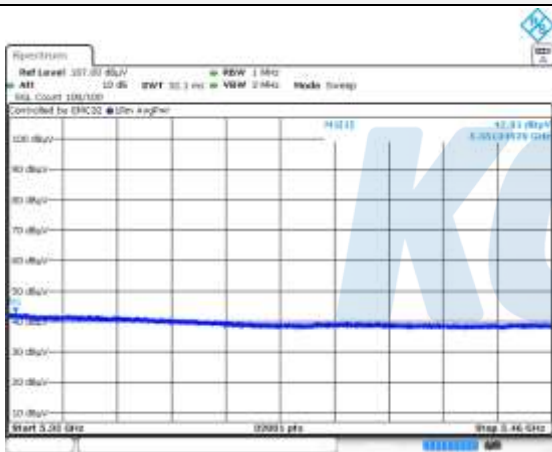
65, Sinwon-ro, Yeongtong-gu,
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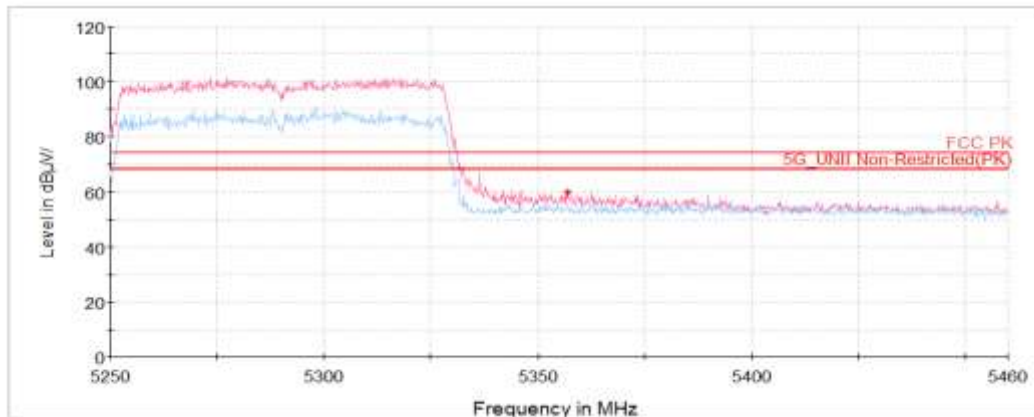
Page (670) of (1046)

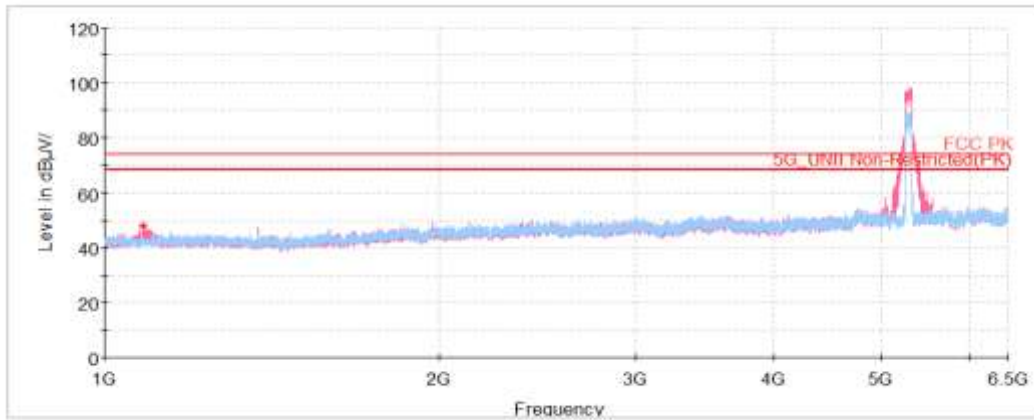
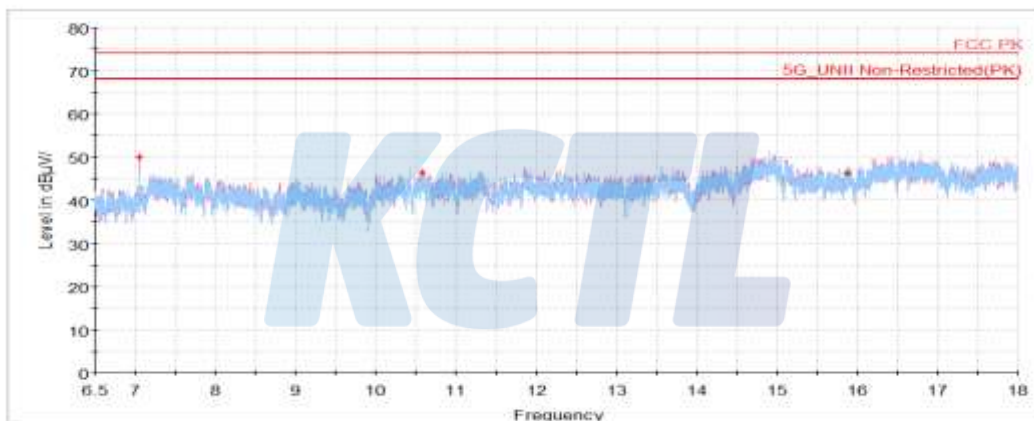
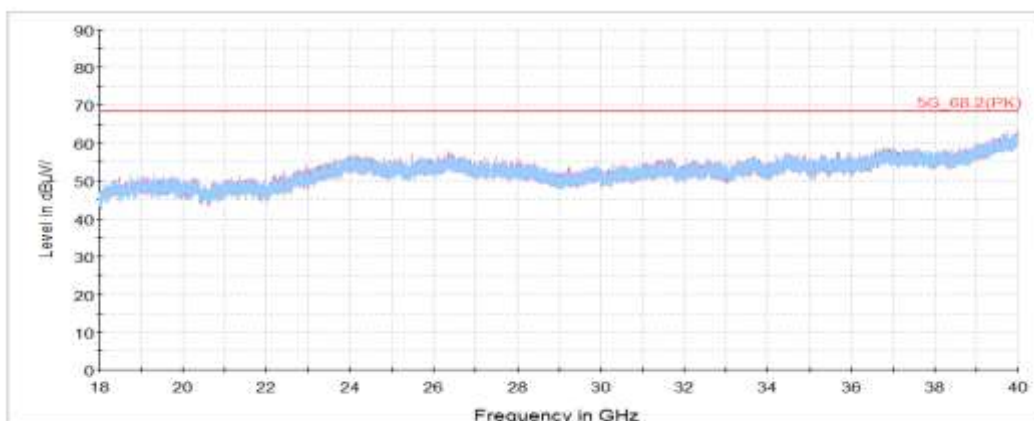
**802.11ac VHT80 UNII 2A ANT 3****Middle Channel (5 290 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 351.35 ¹⁾	V	51.99	34.56	-26.84	-	59.71	74.00	14.29
7 053.08	V	67.03	35.40	-52.44	-	49.99	68.20	18.21
10 578.91	V	58.64	37.45	-49.83	-	46.26	68.20	21.94
15 870.34 ¹⁾	V	54.79	40.07	-48.75	-	46.11	74.00	27.89
Average Data								
5 351.35 ¹⁾	V	42.81	34.56	-26.84	0.27	50.80	54.00	3.20

Average data (5 351.35 MHz)

Blank

Horizontal/Vertical for Band-edge

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

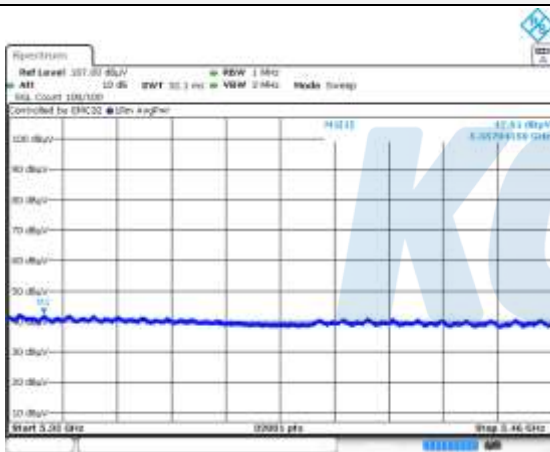
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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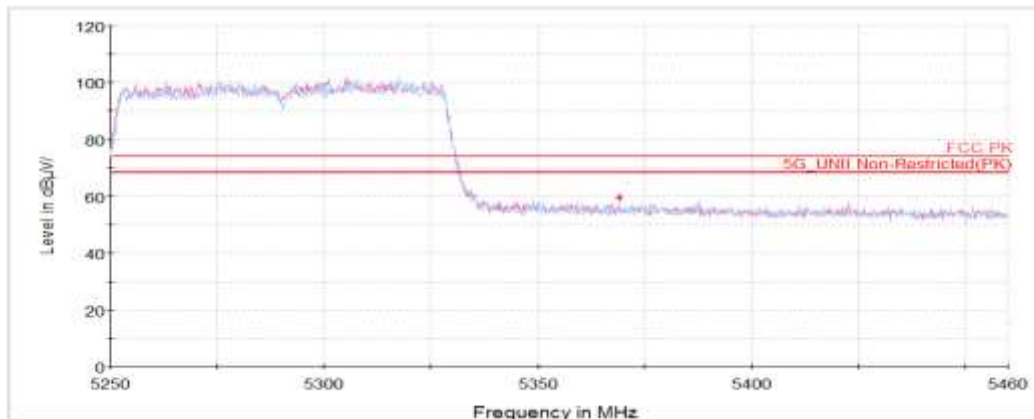
Page (672) of (1046)

**802.11ac VHT80 UNII 2A 4TX MIMO****Middle Channel (5 290 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 357.04 ¹⁾	V	51.74	34.57	-26.83	-	59.48	74.00	14.52
7 053.80	H	71.15	35.40	-52.43	-	50.62	68.20	17.58
10 576.75	V	74.38	37.45	-49.82	-	50.26	68.20	17.94
15 899.09 ¹⁾	H	67.87	40.08	-48.76	-	48.63	74.00	25.37
Average Data								
5 357.04 ¹⁾	V	42.61	34.57	-26.83	0.27	50.62	54.00	3.38

Average data (5 357.04 MHz)

Blank

Horizontal/Vertical for Band-edge

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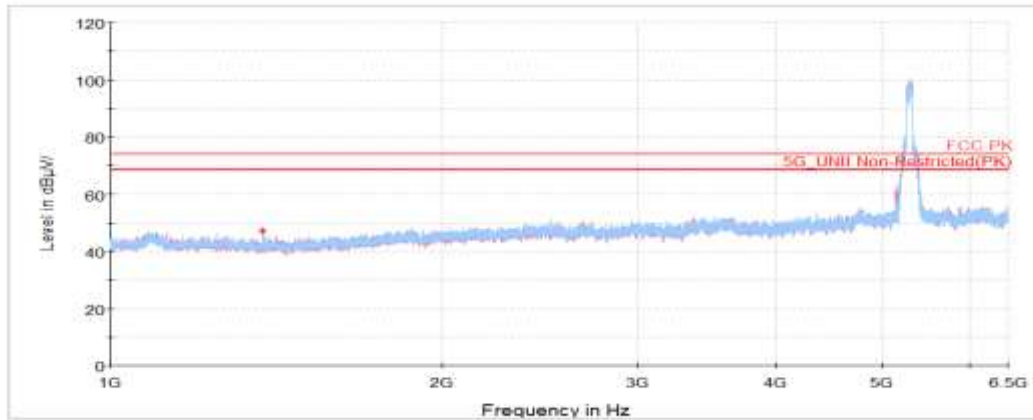
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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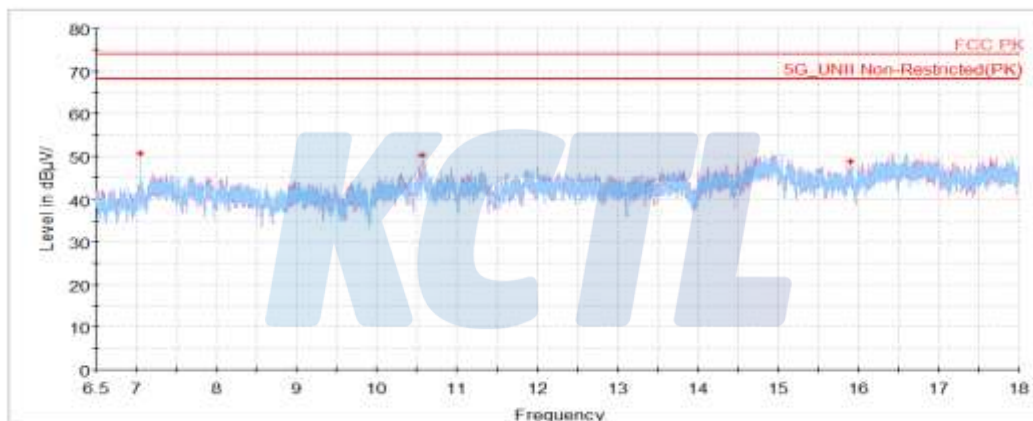
Page (673) of (1046)



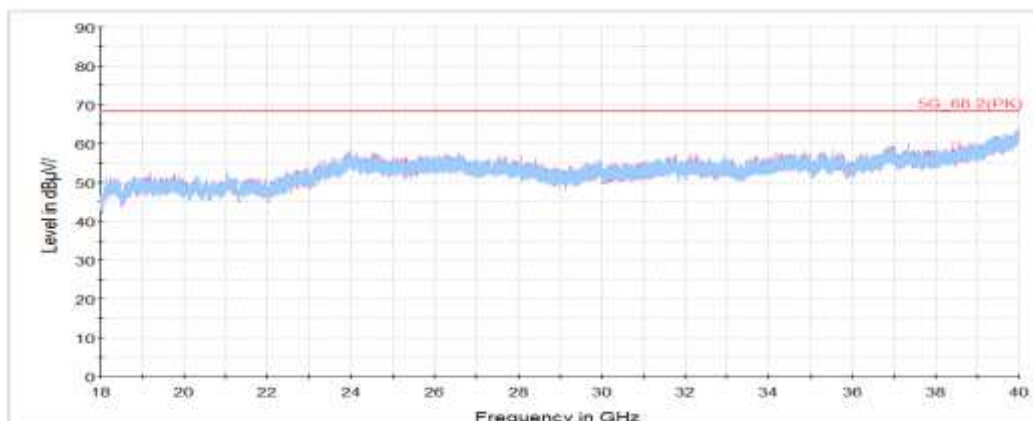
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



KCTL Inc.

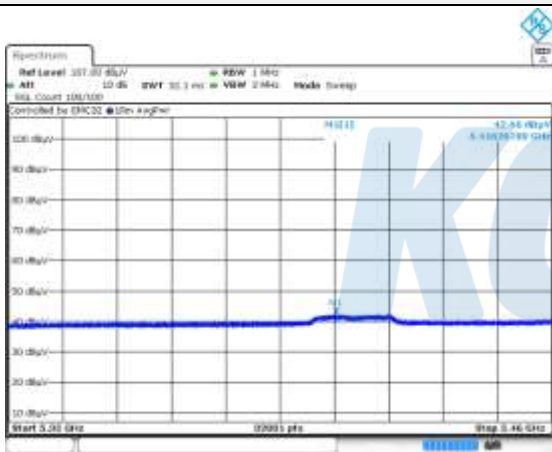
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Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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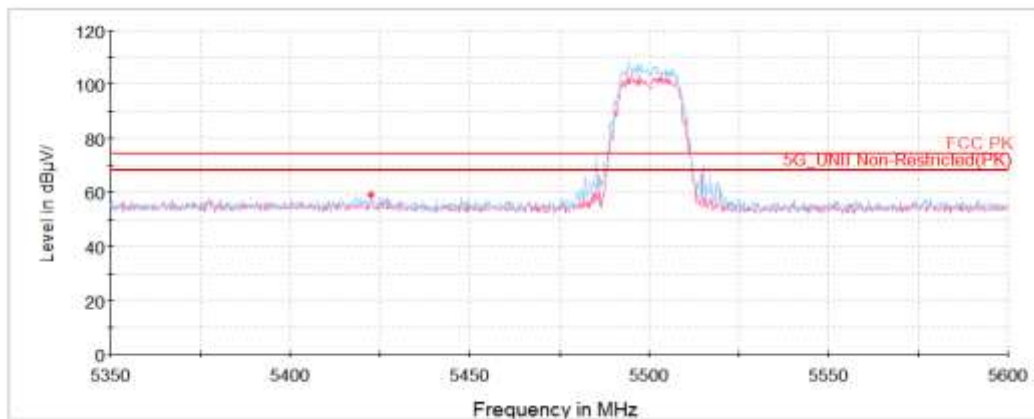
Page (674) of (1046)

**802.11a UNII 2C ANT 0****Lowest Channel (5 500 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 416.27 ¹⁾	H	52.11	34.67	-26.89	-	59.89	74.00	14.11
7 333.03 ¹⁾	H	65.63	35.40	-51.13	-	49.90	74.00	24.10
10 998.45 ¹⁾	H	66.73	37.70	-50.75	-	53.68	74.00	20.32
16 504.28 ¹⁾	V	53.31	41.50	-46.76	-	48.05	68.20	20.15
Average Data								
5 416.27 ¹⁾	H	42.66	34.67	-26.89	0.22	50.66	54.00	3.34

Average data (5 416.27 MHz)

Blank

Horizontal/Vertical for Band-edge

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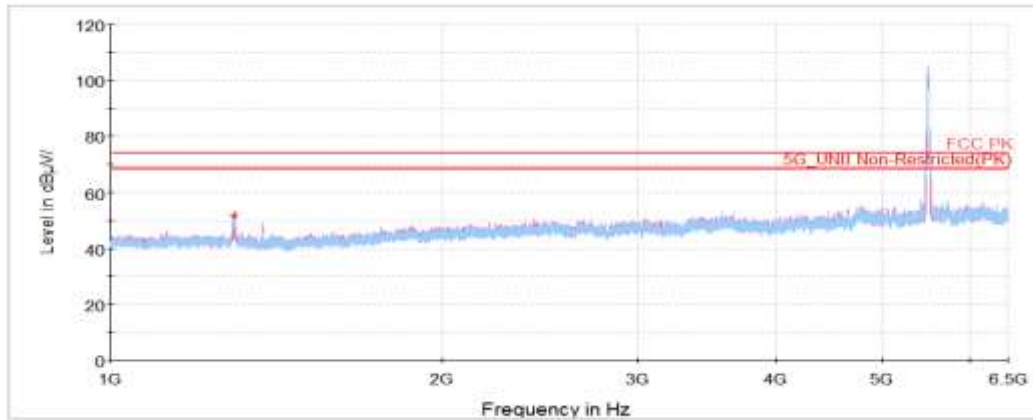
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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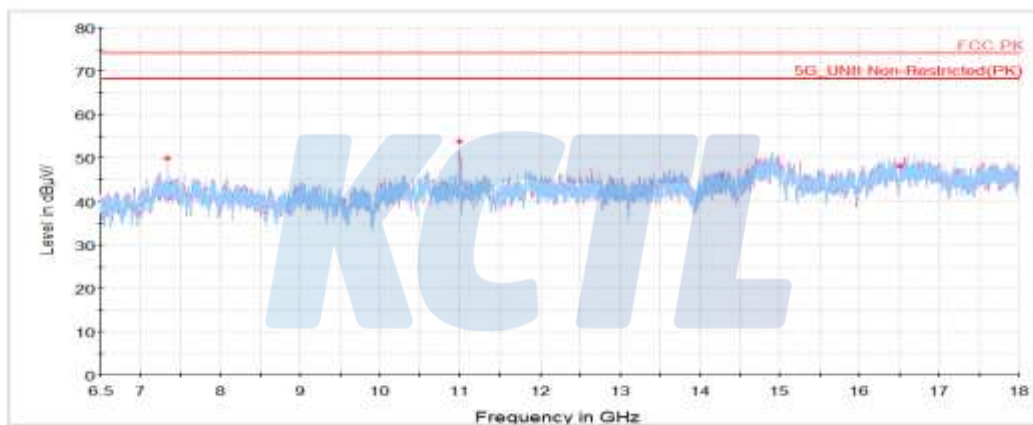
Page (675) of (1046)



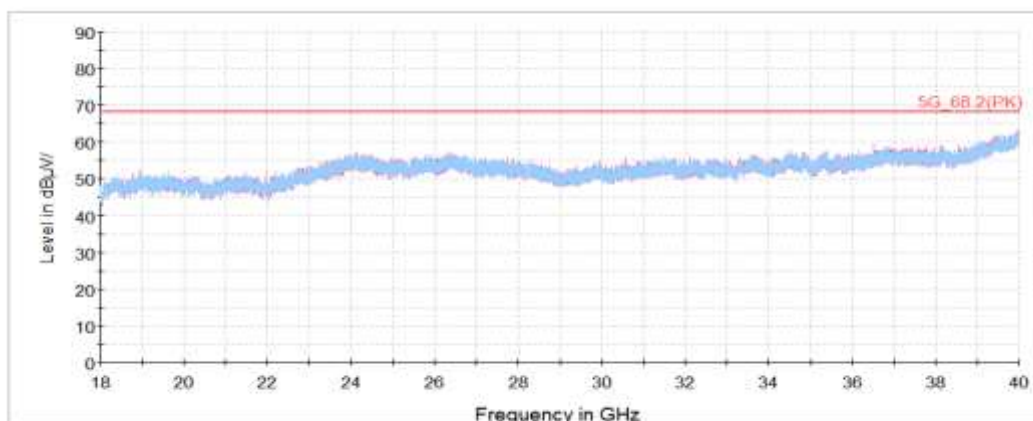
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



KCTL Inc.

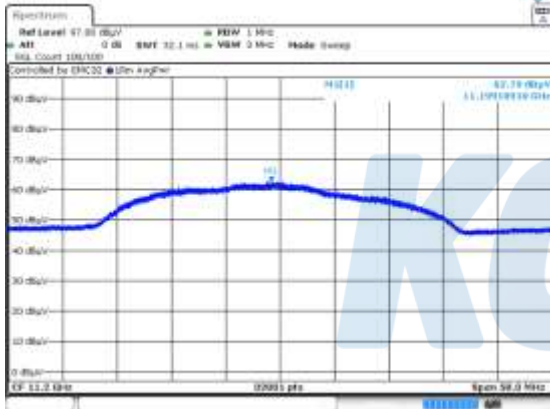
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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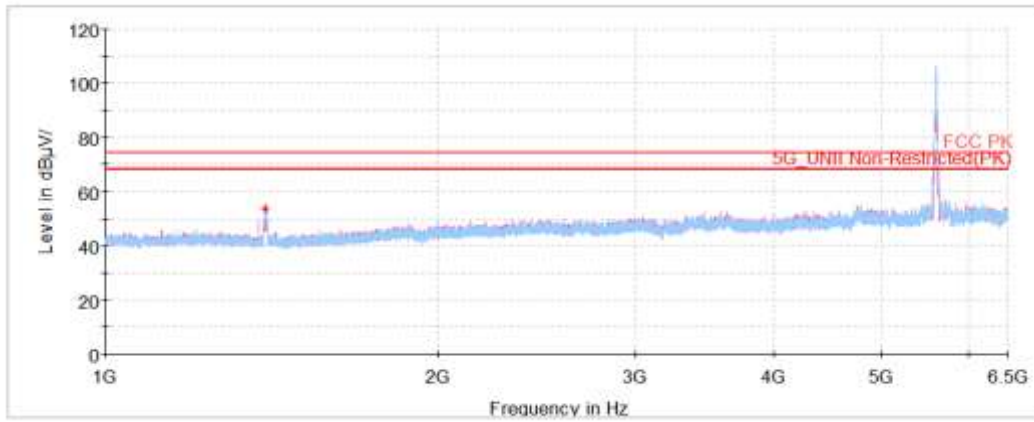
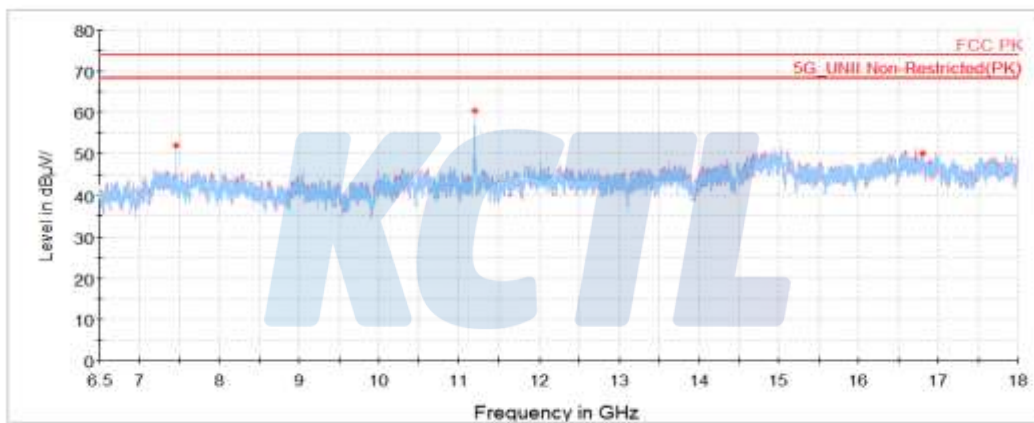
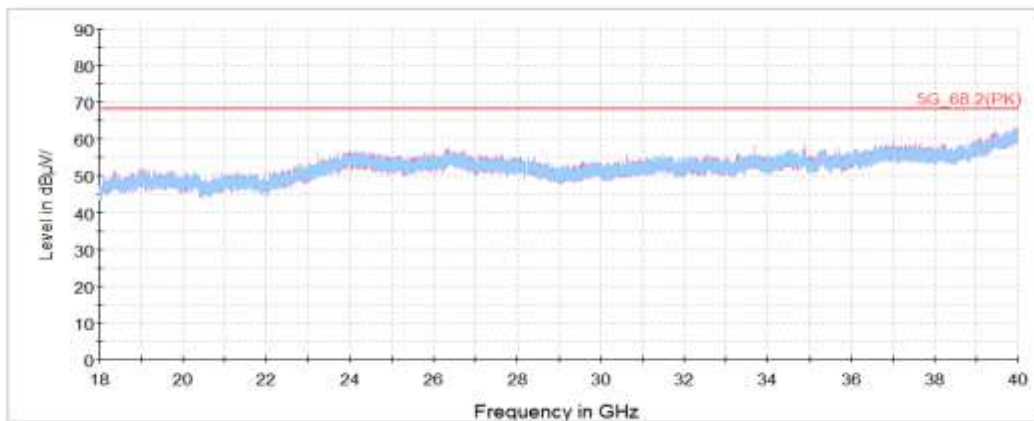
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**Middle Channel (5 600 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 394.85 ¹⁾	H	75.82	27.96	-50.39	-	53.39	74.00	20.61
7 466.72 ¹⁾	H	65.01	35.40	-50.50	-	49.91	74.00	24.09
11 199.19 ¹⁾	H	69.44	37.82	-50.47	-	56.79	74.00	17.21
16 806.52	H	56.11	41.81	-46.85	-	51.07	68.20	17.13
Average Data								
11 199.19 ¹⁾	H	62.79	37.82	-50.47	0.22	50.36	54.00	3.64

Average data (11 199.19 MHz)

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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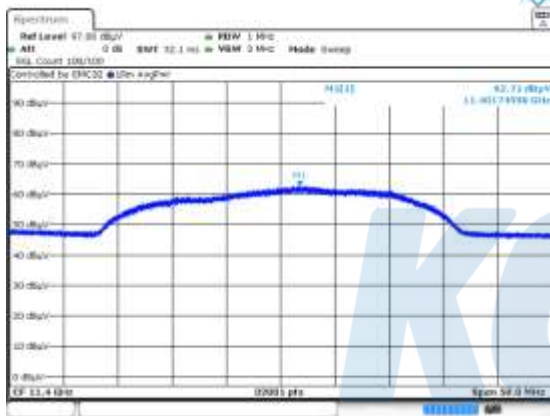
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
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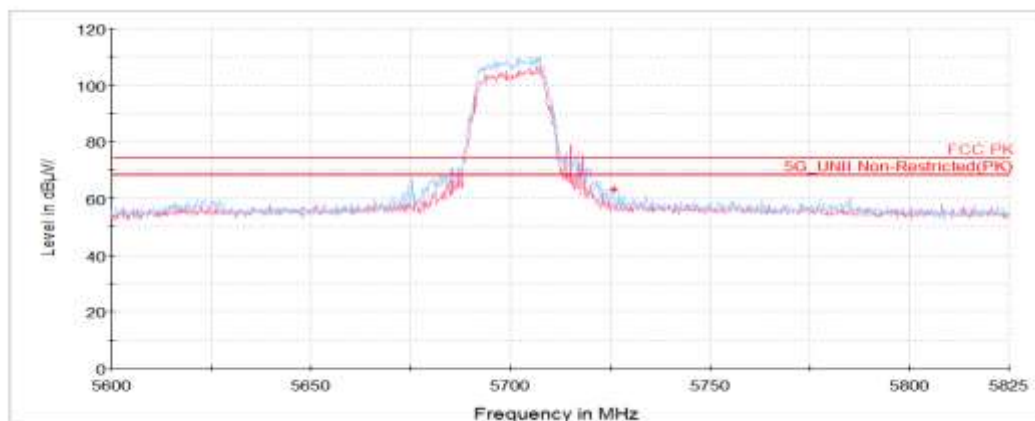
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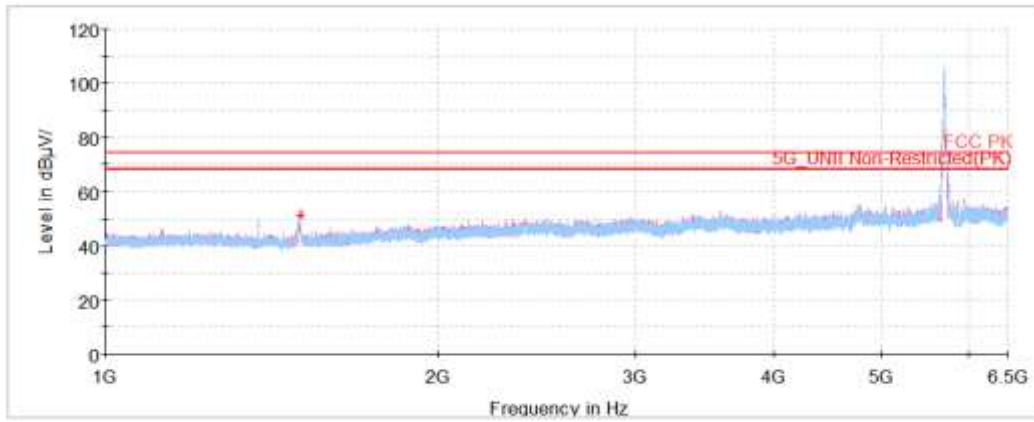
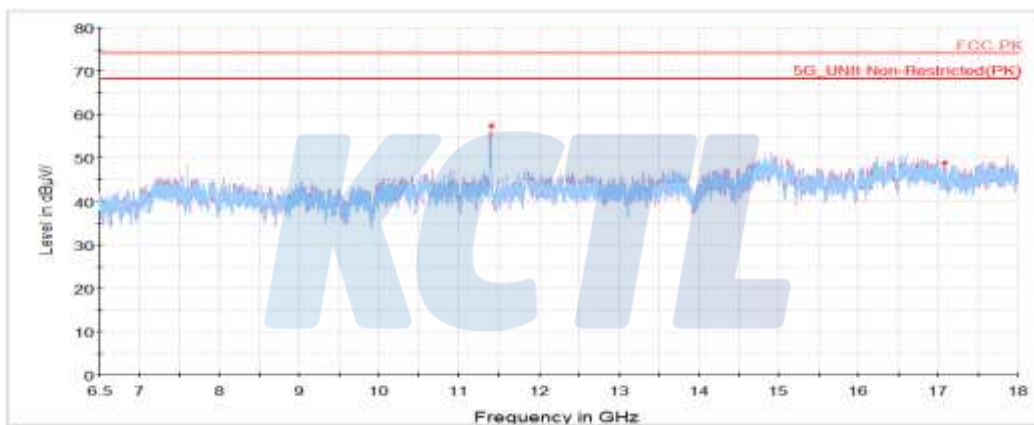
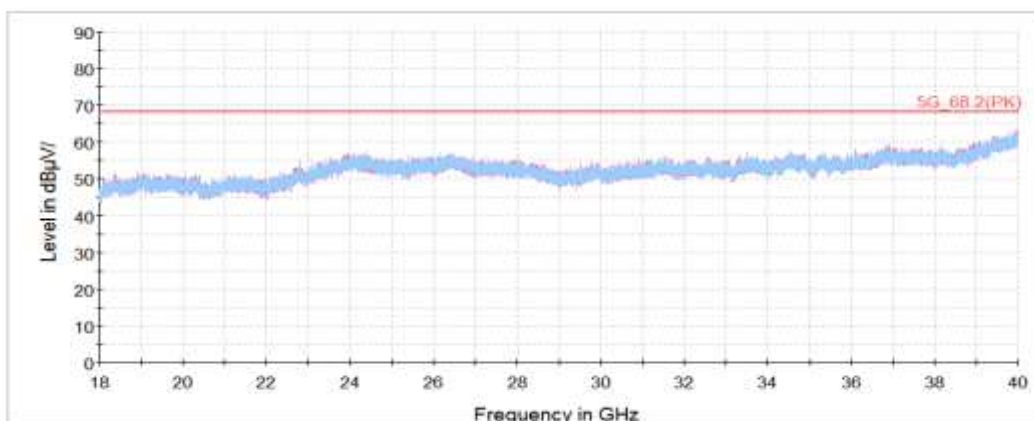
**Highest Channel (5 700 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 725.70	H	53.96	35.07	-25.93	-	63.10	68.20	5.10
11 401.75 ¹⁾	V	69.53	37.94	-50.19	-	57.28	74.00	16.72
17 085.03	H	54.64	41.27	-47.20	-	48.71	68.20	19.49
Average Data								
11 401.75 ¹⁾	V	62.71	37.94	-50.19	0.22	50.68	54.00	3.32

Average data (11 401.75 MHz)

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Horizontal/Vertical for Band-edge

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

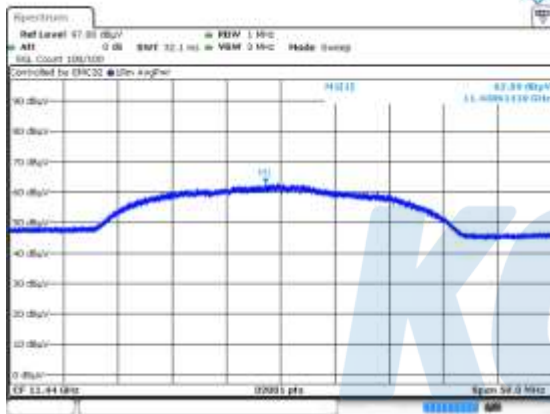
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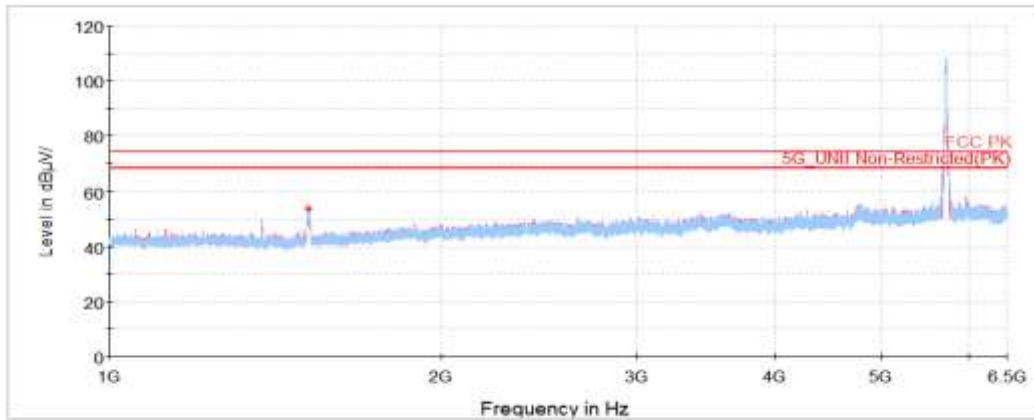
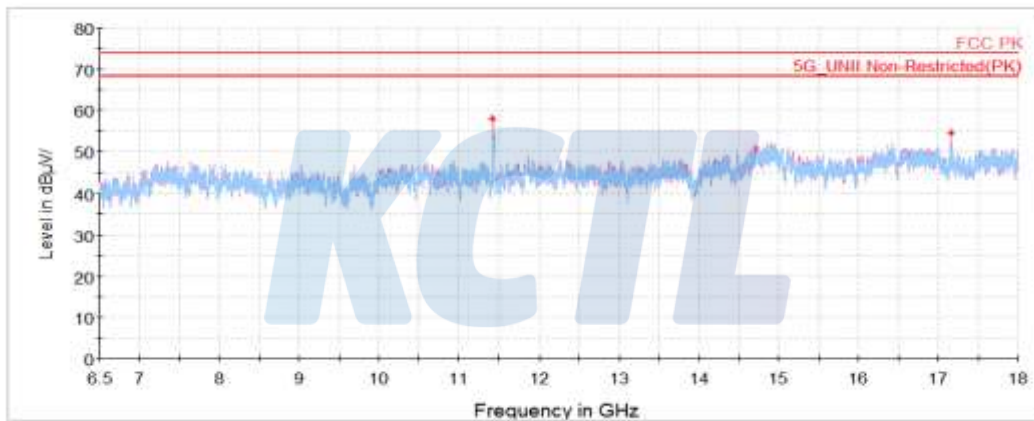
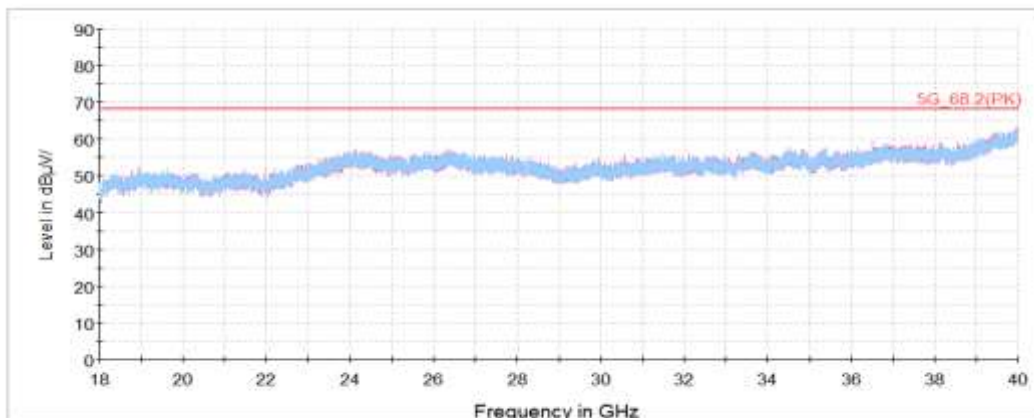
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**Straddle Channel (5 720 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 514.99 ¹⁾	H	75.49	28.09	-50.03	-	53.55	74.00	20.45
11 438.61 ¹⁾	V	70.21	37.96	-50.14	-	58.03	74.00	15.97
17 163.38 ¹⁾	V	60.73	41.23	-47.47	-	54.49	68.20	13.71
Average Data								
11 438.61 ¹⁾	V	62.89	37.96	-50.14	0.22	50.93	54.00	3.07

Average data (11 438.61 MHz)

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Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

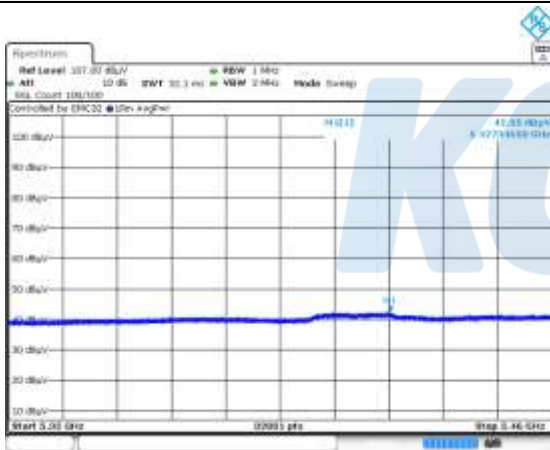
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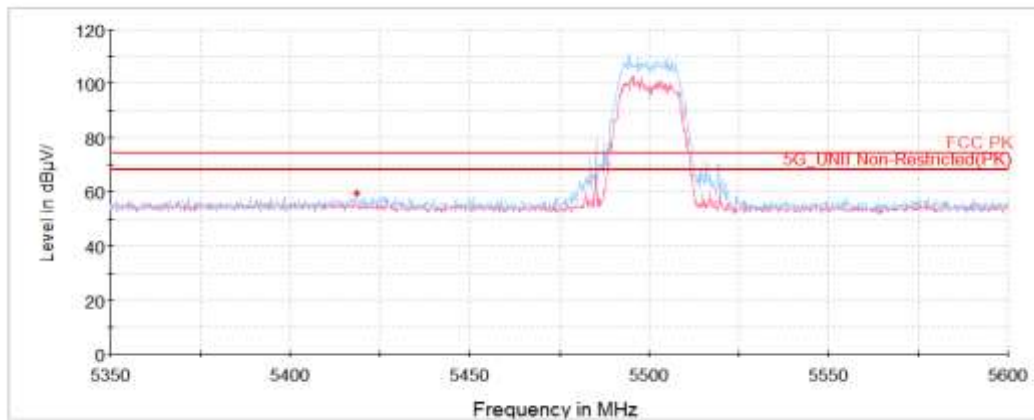
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**802.11a UNII 2C ANT 1****Lowest Channel (5 500 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 295.11	H	77.83	27.92	-50.08	-	55.67	68.20	12.53
5 427.35 ¹⁾	H	51.51	34.68	-27.01	-	59.18	74.00	14.82
7 332.67 ¹⁾	V	66.06	35.40	-51.13		50.33	74.00	23.67
10 999.02 ¹⁾	V	57.37	37.70	-50.75	-	44.32	74.00	29.68
16 501.77	V	57.61	41.50	-46.76	-	52.35	68.20	15.85
Average Data								
5 427.35 ¹⁾	H	42.65	34.68	-27.01	0.22	50.54	54.00	3.46

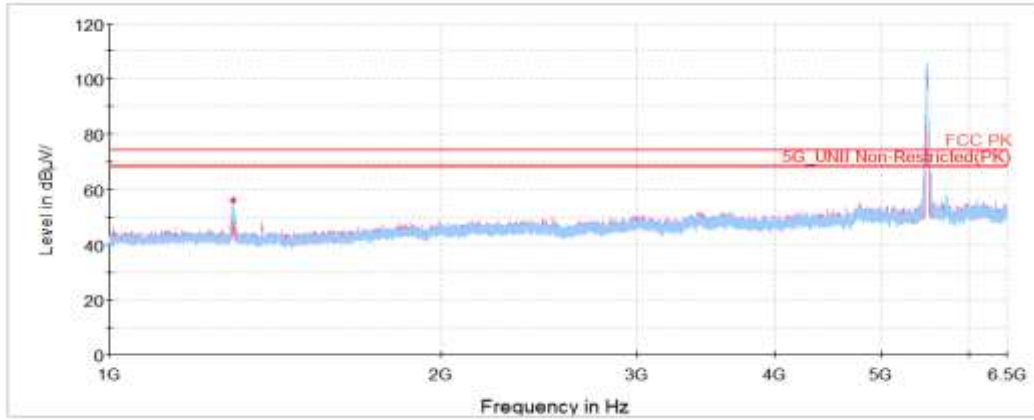
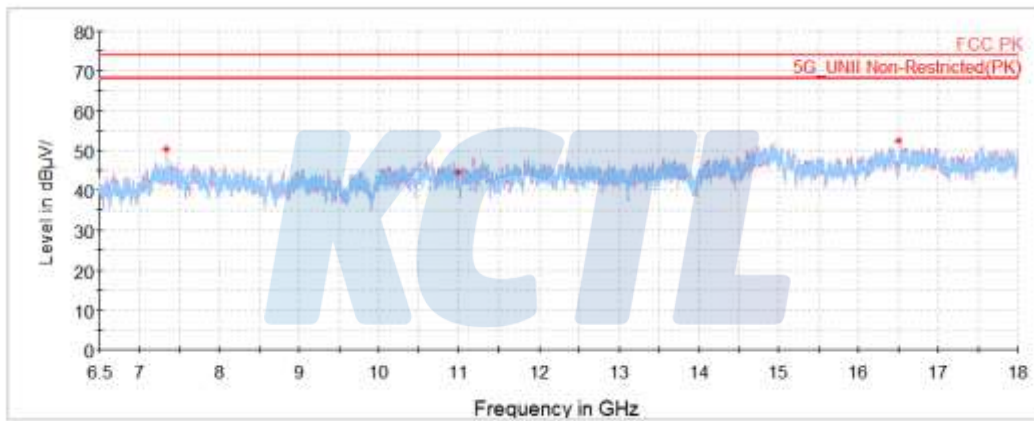
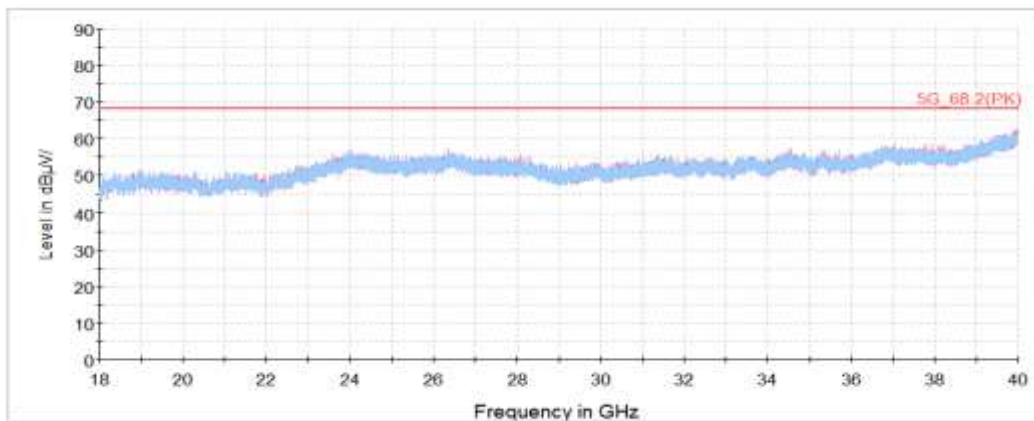
Average data (5 427.35 MHz)

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Horizontal/Vertical for Band-edge

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KCTL-TIR001-003/2

Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

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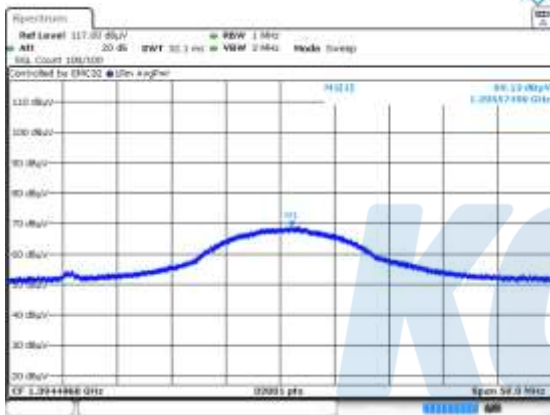
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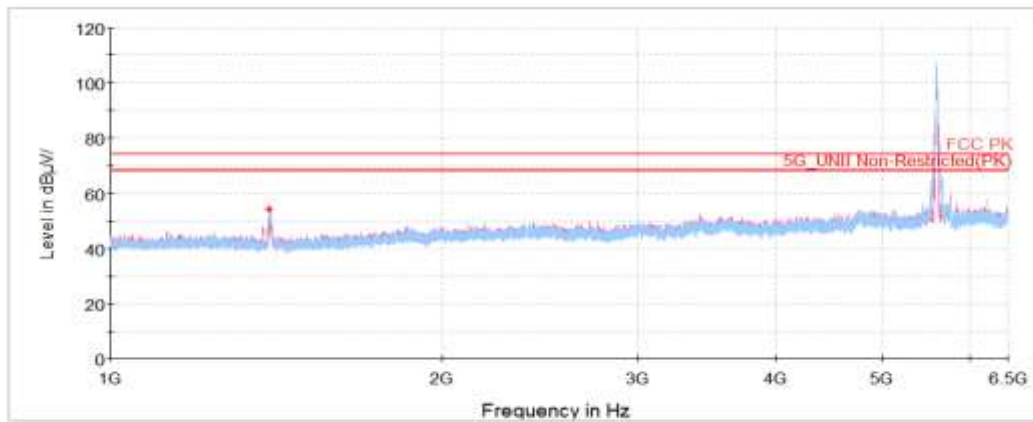
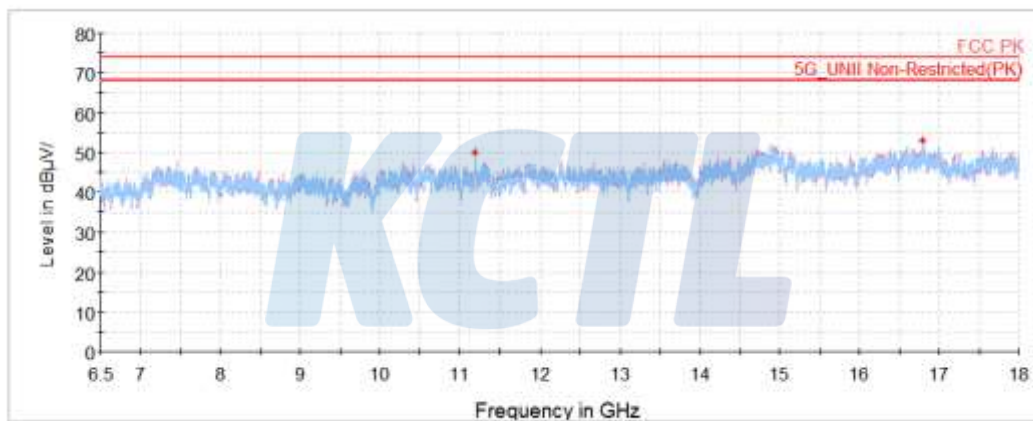
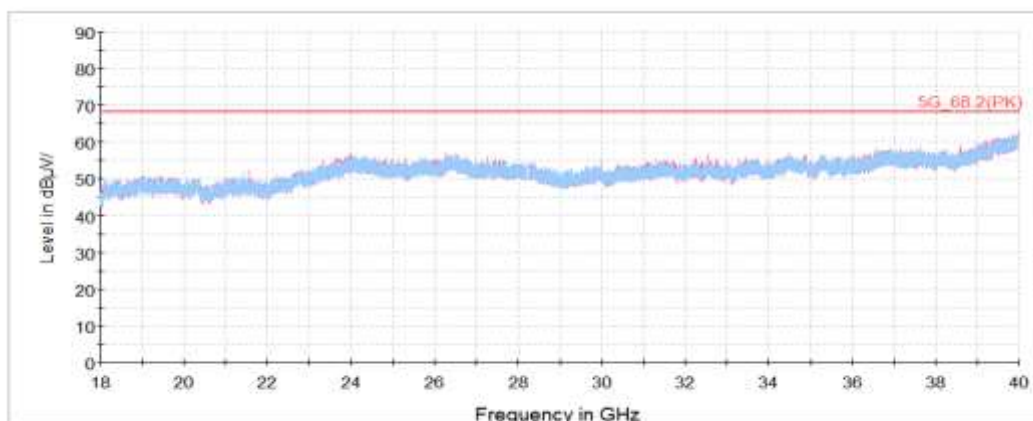
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**Middle Channel (5 600 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 395.57 ¹⁾	H	76.52	27.96	-50.39	-	54.09	74.00	19.91
11 196.31 ¹⁾	V	62.65	37.82	-50.48	-	49.99	74.00	24.01
16 797.89	V	57.95	41.80	-46.85	-	52.90	68.20	15.30
Average Data								
1 395.57 ¹⁾	H	69.13	27.96	-50.39	0.22	46.92	54.00	7.08

Average data (1 395.57 MHz)

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Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

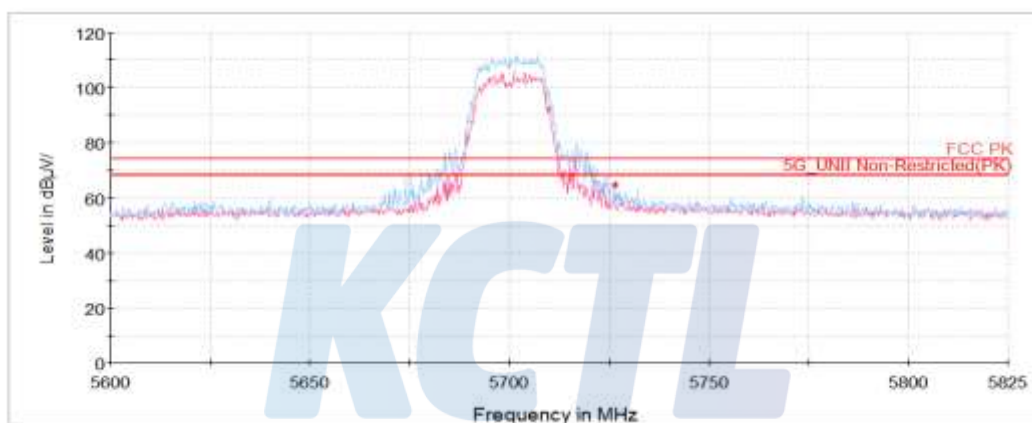
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**Highest Channel (5 700 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 726.39	H	55.49	35.07	-25.94	-	64.62	68.20	3.58
11 401.52 ¹⁾	V	58.37	37.94	-50.19	-	46.12	74.00	27.88
17 096.53	V	53.46	41.26	-47.24	-	47.48	68.20	20.72
Average Data								
No spurious emissions were detected within 20 dB of the limit.								

Horizontal/Vertical for Band-edge

KCTL Inc.

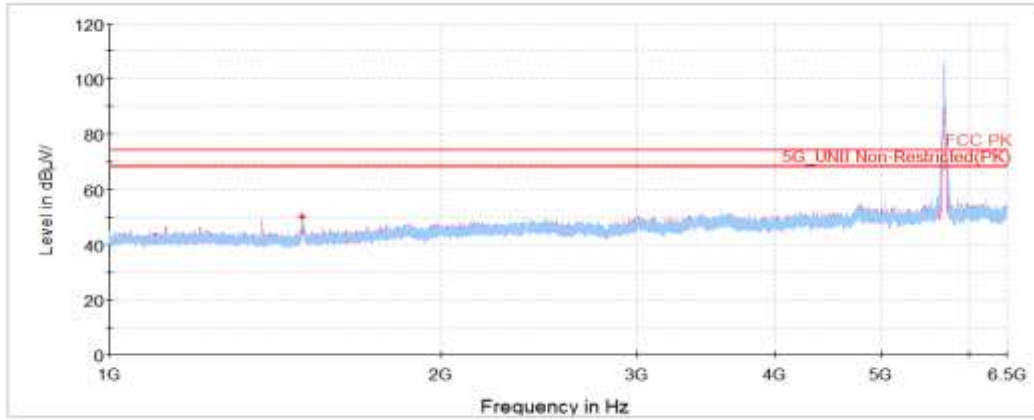
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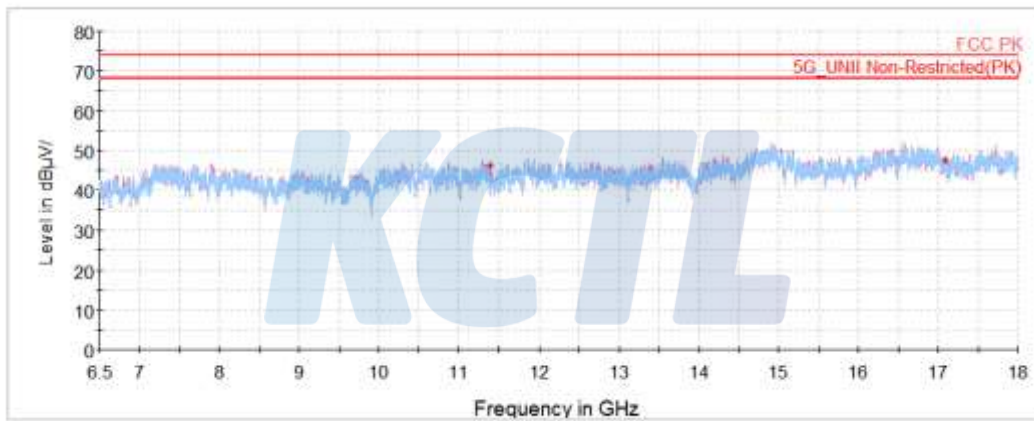
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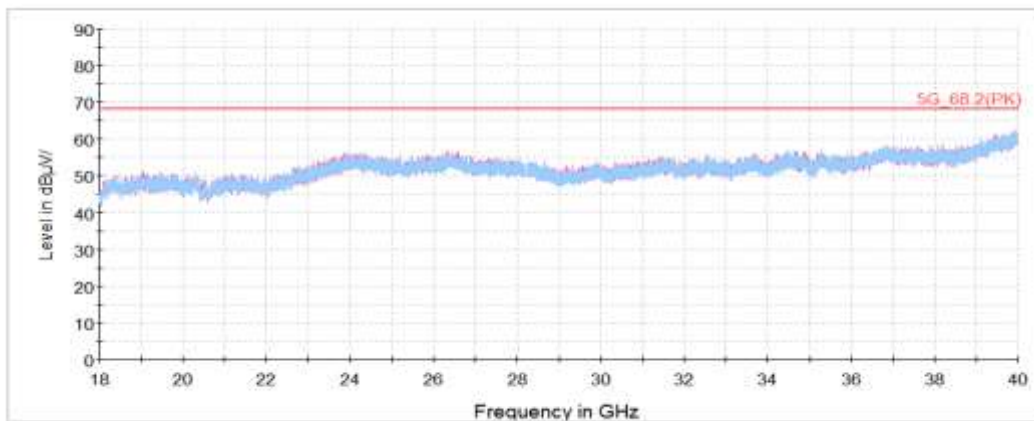
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz

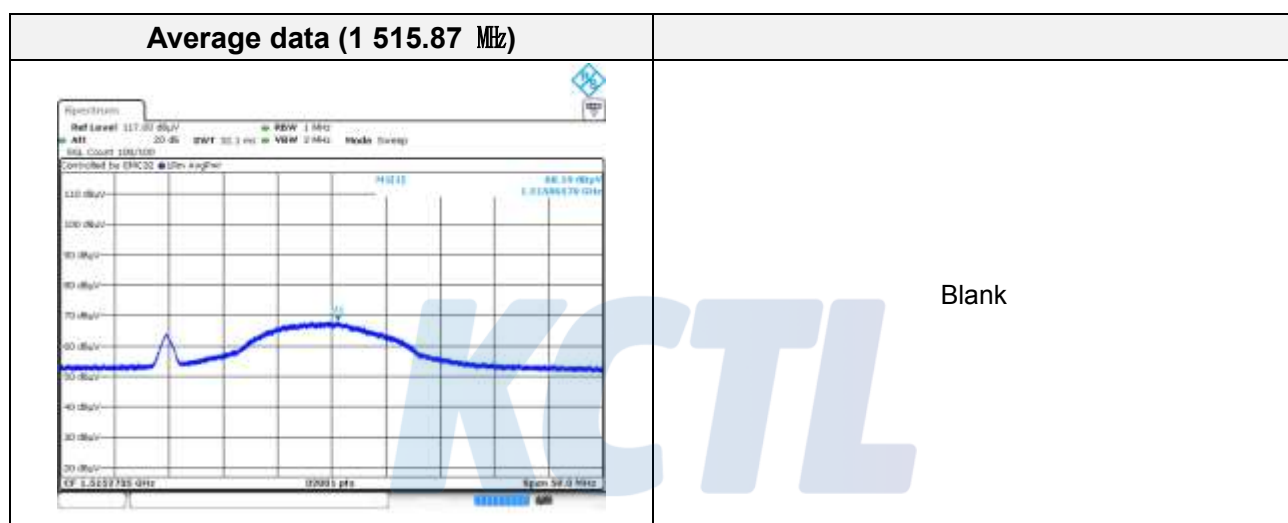


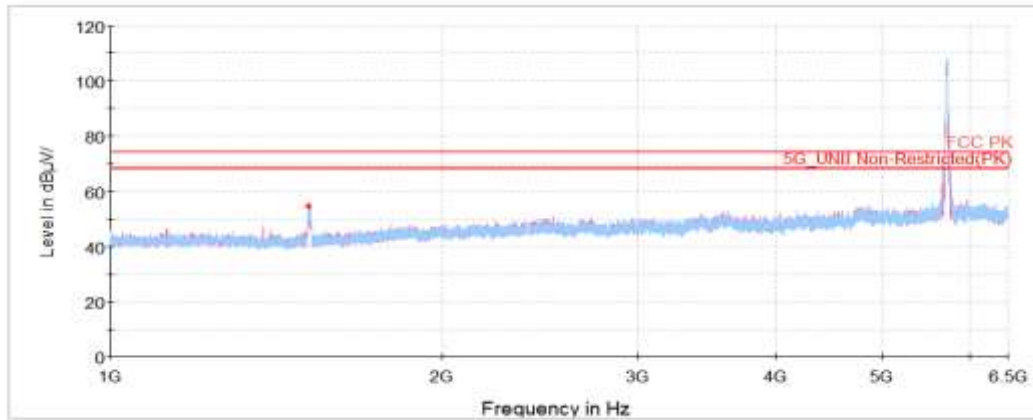
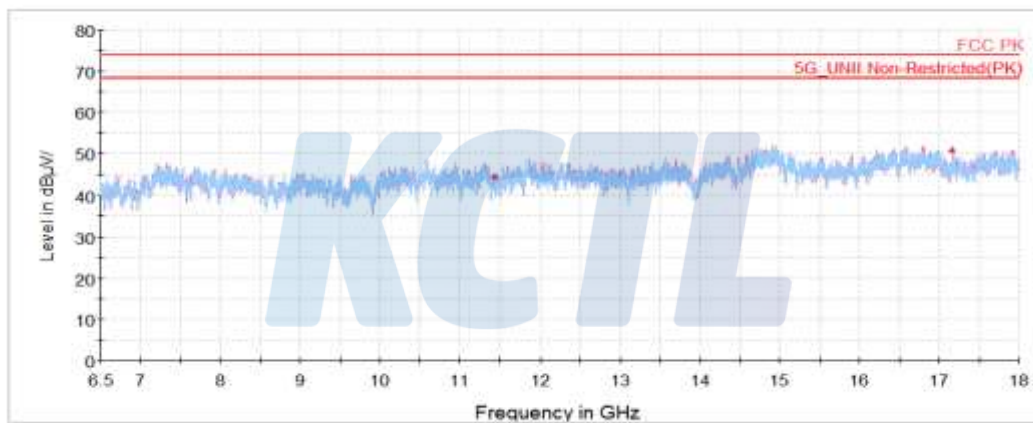
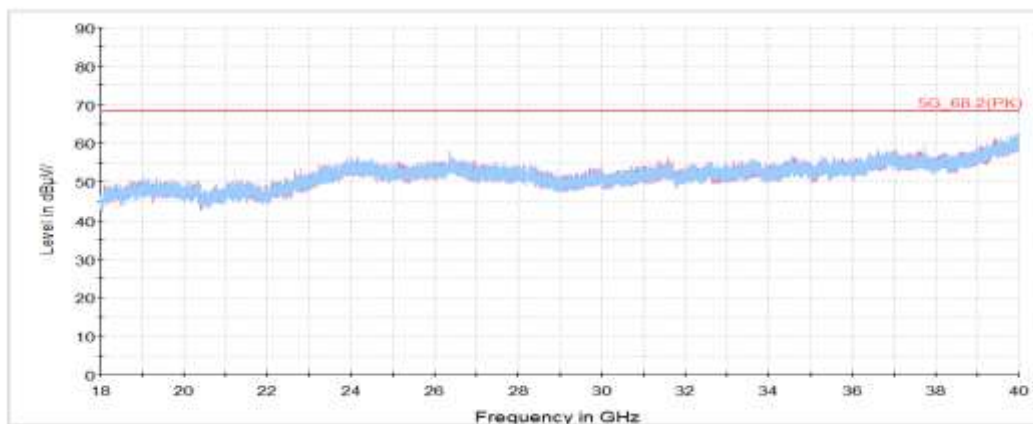
Horizontal/Vertical for 18 GHz ~ 40 GHz



Straddle Channel (5 720 MHz)

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
1 515.87 ¹⁾	H	76.24	28.10	-50.03	-	54.31	74.00	19.69
11 439.97 ¹⁾	V	56.37	37.96	-50.14	-	44.19	74.00	29.81
17 161.94	H	56.99	41.24	-47.47	-	50.76	68.20	17.44
Average Data								
1 515.87 ¹⁾	H	68.19	28.10	-50.03	0.22	46.48	54.00	7.52



Horizontal/Vertical for 1 GHz ~ 6.5 GHz**Horizontal/Vertical for 6.5 GHz ~ 18 GHz****Horizontal/Vertical for 18 GHz ~ 40 GHz**

KCTL Inc.

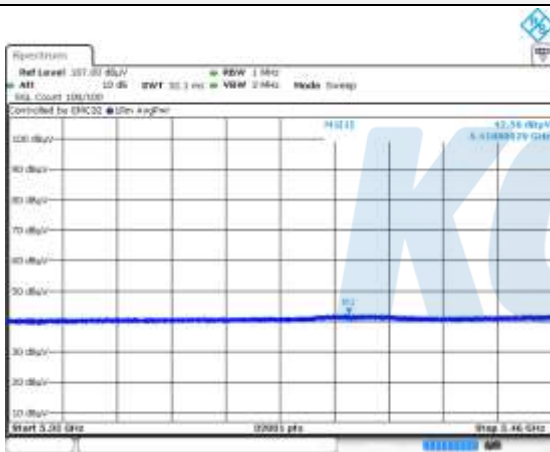
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**802.11a UNII 2C ANT 2****Lowest Channel (5 500 MHz)**

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
1 292.70	V	76.21	27.92	-50.07	-	54.06	68.20	14.14
5 418.88 ¹⁾	V	50.94	34.67	-26.92	-	58.69	74.00	15.31
11 003.33 ¹⁾	V	56.42	37.70	-50.75	-	43.37	74.00	30.63
16 498.89	H	51.25	42.00	-46.77	-	46.48	68.20	21.72
Average Data								
5 418.88 ¹⁾	V	42.56	34.67	-26.92	0.22	50.53	54.00	3.47

Average data (5 418.88 MHz)

Blank

Horizontal/Vertical for Band-edge