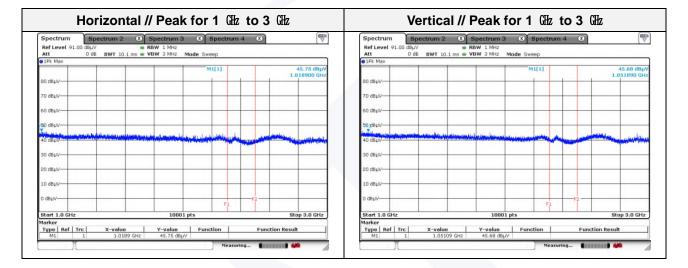


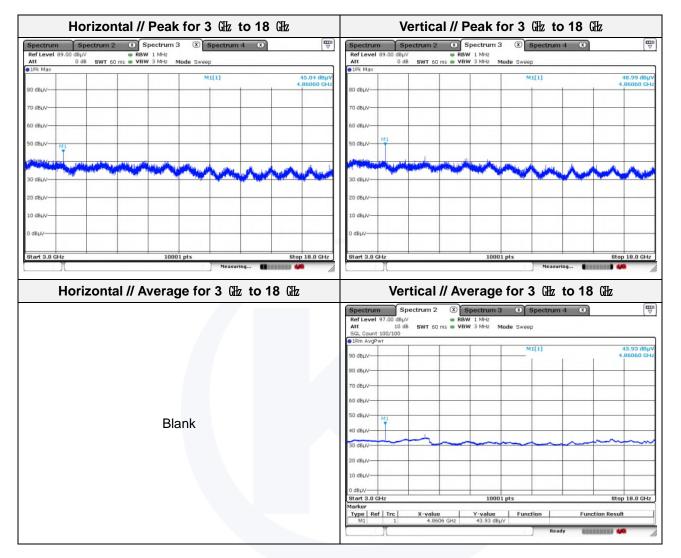
Mode:	802.11b_DC 12 V
Distance of measurement:	3 meter
Channel:	06

Spurious

Frequency (Mb)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBµN/m)	Limit (dBµN/m)	Margin (dB)
1 018.90	45.75	Peak	Н	-9.28	-	36.47	74.00	37.53
1 051.09	45.68	Peak	V	-9.08	-	36.60	74.00	37.40
4 860.60	45.04	Peak	Н	6.73	-	51.77	74.00	22.23
4 860.60	48.99	Peak	V	6.73	-	55.72	74.00	18.28
4 860.60	43.93	Average	V	6.73	0.04	50.70	54.00	3.30







Note.

1. Average test would be performed if the peak result were greater than the average limit.



Mode:	802.11b_DC 12 V
Distance of measurement:	3 meter
Channel:	11

#### Spurious

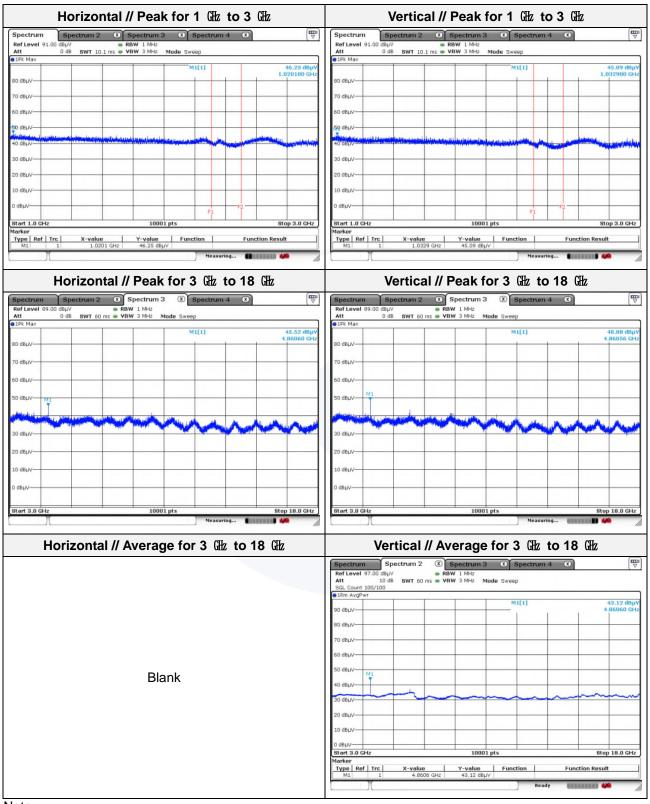
Frequency (版)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB <sub>#</sub> N/m)	Limit (dBµN/m)	Margin (dB)
1 020.10	46.25	Peak	Н	-9.28	-	36.97	74.00	37.03
1 032.90	45.09	Peak	V	-9.19	-	35.90	74.00	38.10
4 860.60	45.52	Peak	Н	6.73	-	52.25	74.00	21.75
4 860.60	48.88	Peak	V	6.73	-	55.61	74.00	18.39
4 860.60	43.12	Average	V	6.73	0.04	49.89	54.00	4.11

#### Band edge

Frequency (畑)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB <sub>#</sub> N/m)	Limit (dBµN/m)	Margin (dB)
2 487.82	45.70	Peak	Н	-0.27	-	45.43	74.00	28.57
2 489.96	45.68	Peak	V	-0.27	-	45.41	74.00	28.59

Rest	Restricted band // Horizontal // Peak						Restricted band // Vertical // Peak								
Spectrum Spect	trum 2 🛞						Spectrun	n Sp	ectrum 2	×					ĺ
	● RE SWT 10.1 ms ● VI	BW 1 MHz BW 3 MHz	Mode Sweep				Ref Level Att				W 1 MHz W 3 MHz	Mode Swee	эр		
90 dBµV			M1[1	1		45.70 dBµV 782380 GHz	● 1Pk Max 90 dBµV					MI	[1]		45.68 dE 2.48995960 (
80 dBµV							80 dBµV	~							
70 dBµV							70 dBµV								
50 dBµV			MI				60 dвµV— 50 dвµV—					MI			
D dBµV		inter Upploty	A CHARLES AND AND AND AND		and a second second second	ingent in stiget. In	40 dBµV			adala belivit a v		and the second	weitiget beitiget	ilin anajaan si	i de la presidenti de la presidenti.
0 dBµV							30 dBµV								
0 dBµV							20 dBµV								
) dBµV		F1		F	2		0 dBµV				F1			F2	
Start 2.462 GHz		1000	1 pts	Measuring	Sto	p 2.51 GHz	Start 2.46	2 GHz			100	01 pts	Measurin		Stop 2.51 G





Note.

1. Average test would be performed if the peak result were greater than the average limit.

KES-QP16-F01(00-23-01-01)



Mode:	802.11b_DC 24 V
Distance of measurement:	3 meter
Channel:	01

#### Spurious -

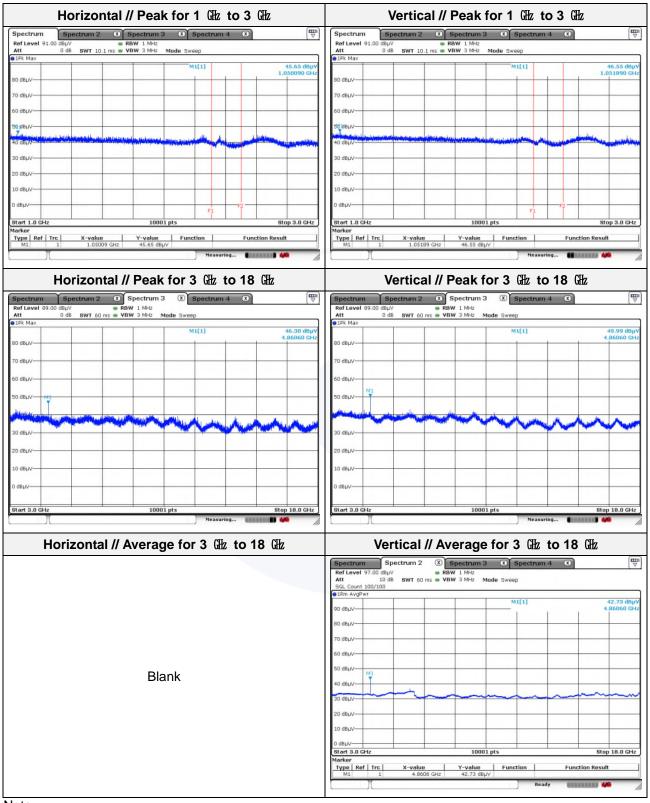
Frequency (Mb)	Level (dBµN)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB#V/m)	Limit (dBµN/m)	Margin (dB)
1 050.09	45.65	Peak	Н	-9.09	-	36.56	74.00	37.44
1 051.89	46.55	Peak	V	-9.07	-	37.48	74.00	36.52
4 860.60	46.30	Peak	Н	6.73	-	53.03	74.00	20.97
4 860.60	49.99	Peak	V	6.73	-	56.72	74.00	17.28
4 860.60	42.73	Average	V	6.73	0.04	49.50	54.00	4.50
- Band			Arri Del	05	DOF		1 : :4	Monsin

#### Band edge \_

2 339.73 44.73 Peak V -0.51 - 44.22 74.00						· · · /	(dB#V/m)	(dB)
	339.73 44.73	73 44.73 Peak	V	-0.51	-	44.22	74.00	29.78
2 349.75 44.56 Peak H -0.48 - 44.08 74.00	349.75 44.50	75 44.56 Peak	н	-0.48	-	44.08	74.00	29.92

Restrict	ted band // Ho	orizontal //	Peak	Restricted band // Vertical // Peak							
Spectrum				Spectrum							
Ref Level 96.00 dBμV           Att         5 dB         swr 10	RBW 1 MHz 1 ms VBW 3 MHz Mode	Sween		Ref Level 96.00 de Att 5	δμV 👄 dB SWT 10.1 ms 👄	RBW 1 MHz	nde Sween				
●1Pk Max		5 6 8 6 6 9		• 1Pk Max	ab 3441 10.1 ms -		oue Sweep				
90 dBµV		M1[1]	44.56 dBµV 2.3497510 GHz	90 dBµV-			M1[1]	44.73 dBµ 2.3397280 GH			
80 dBµV				80 dBµV				- r			
70 dBµV				70 dBµV-							
60 dBµV				60 dBµV-							
50 dBµV	MI MI	Institute and the second station	and a second	50 dBµV	M1		where the state of	Halman Andrewski Hand			
30 dBµV				чо авру 30 dвµV-							
20 dBµV				20 dBµV							
10 dBµV				10 dBµV							
0 dBµVF1			F2	0 dвµv— <sup>F1</sup>				F2			
Start 2.3 GHz	10001 pts		Stop 2.412 GHz	Start 2.3 GHz		10001 p	ts	Stop 2.412 GHz			
Marker           Type         Ref         Trc         X-value           M1         1         2.3497	e <u>Y-value</u> 251 GHz 44.56 dBµV	Function	Function Result	Marker Type Ref Trc M1 1	X-value 2.339728 GHz	Y-value 44.73 dBµV	Function	Function Result			
T T		Measuring					Measuring.				





Note.

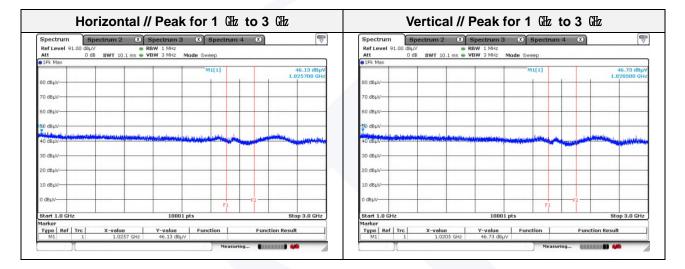
1. Average test would be performed if the peak result were greater than the average limit.



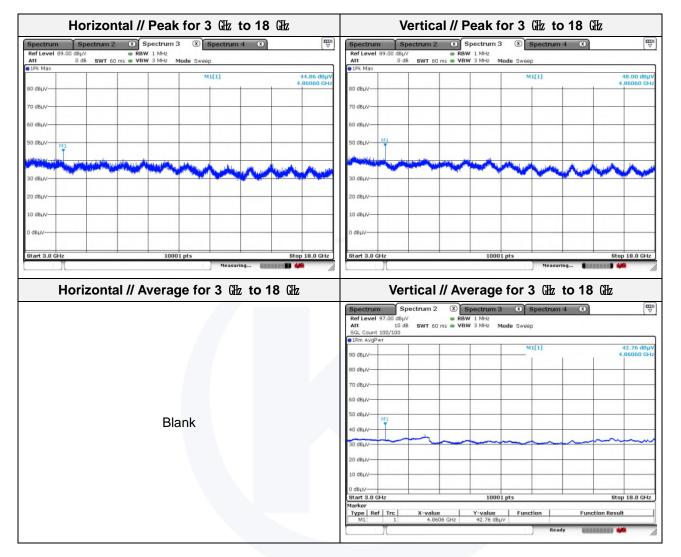
Mode:	802.11b_DC 24 V
Distance of measurement:	3 meter
Channel:	06

Spurious

Frequency (Mb)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBµN/m)	Limit (dBµN/m)	Margin (dB)
1 020.50	46.73	Peak	V	-9.27	-	37.46	74.00	36.54
1 025.70	46.13	Peak	Н	-9.24	-	36.89	74.00	37.11
4 860.60	44.86	Peak	Н	6.73	-	51.59	74.00	22.41
4 860.60	48.00	Peak	V	6.73	-	54.73	74.00	19.27
4 860.60	42.76	Average	V	6.73	0.04	49.53	54.00	4.47







Note.

1. Average test would be performed if the peak result were greater than the average limit.



Mode:	802.11b_DC 24 V
Distance of measurement:	3 meter
Channel:	11

Spurious

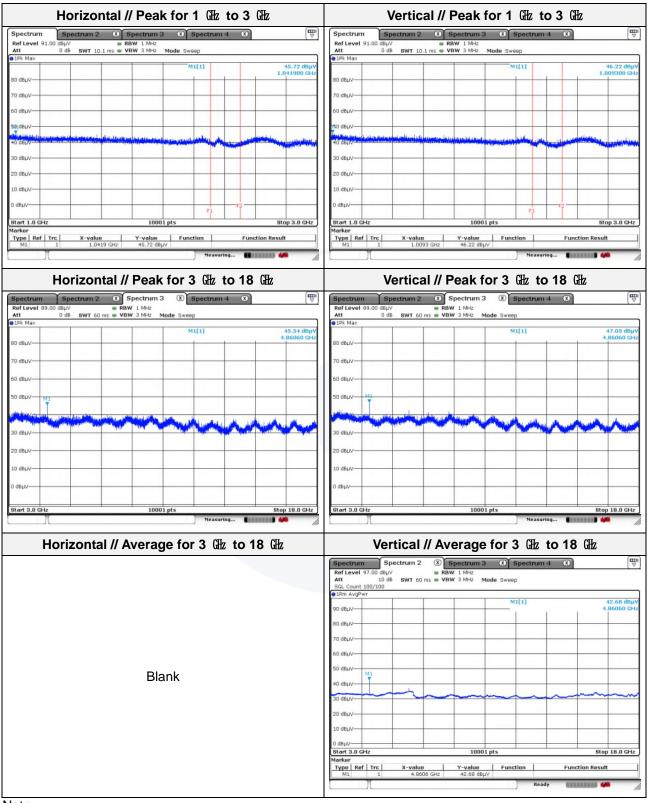
Frequency (雕)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB <sub>#</sub> N/m)	Limit (dBµN/m)	Margin (dB)
1 009.30	46.22	Peak	V	-9.34	-	36.88	74.00	37.12
1 041.90	45.72	Peak	Н	-9.14	-	36.58	74.00	37.42
4 860.60	45.54	Peak	Н	6.73	-	52.27	74.00	21.73
4 860.60	47.05	Peak	V	6.73	-	53.78	74.00	20.22
4 860.60	42.68	Average	V	6.73	0.04	49.45	54.00	4.55

Band edge

Frequency (畑)	Level (dBµN)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB <sub>#</sub> N/m)	Limit (dBµN/m)	Margin (dB)
2 490.30	45.26	Peak	н	-0.27	-	44.99	74.00	29.01
2 494.22	45.74	Peak	V	-0.27	-	45.47	74.00	28.53

Restricted band // Hori	zontal // Peak	Restricted band // Vertical // Peak
Spectrum Spectrum 2 (8)		Spectrum Spectrum 2 (8)
Ref Level 97.00 dBμV         ■ RBW 1 MHz           Att         10 dB         SWT 10.1 ms         ▼VBW 3 MHz         Mode Sw           ● 1Pk Max	/eep	RefLevel         97.00         d8µV         ● RBW         1 MHz           Att         10 d8         SWT         10.1 ms         ● VBW         3 MHz         Mode         Sweep           ■JFK Max         ●         ■
	M1[1] 45.26 dBµV 2.49029560 GHz	M1[1] 45.74 dBuy
80 dBµV		80 dBµV
70 dBµV		70 dBµV
S0 dBµV	11 12 14 Martinda (1911) (1910	50 deµv
40 dBµV		40 dBµV
20 dBµV		20 dBµV
10 dBµV	F2	10 dBµV
0 dBµV F1 Start 2.462 GHz 10001 pts	51 GHz	0 dBµV F1 F1 F2 Stop 2.51 GHz
	Measuring	Image: State 2 - 10001 pts         State 2 - 10001 pts         State 2 - 10001 pts           Image: State 2 - 10001 pts         Measuring         Image: State 2 - 10001 pts





Note.

1. Average test would be performed if the peak result were greater than the average limit.

KES-QP16-F01(00-23-01-01)



Mode:	802.11g_DC 12 V
Distance of measurement:	3 meter
Channel:	01

#### Spurious

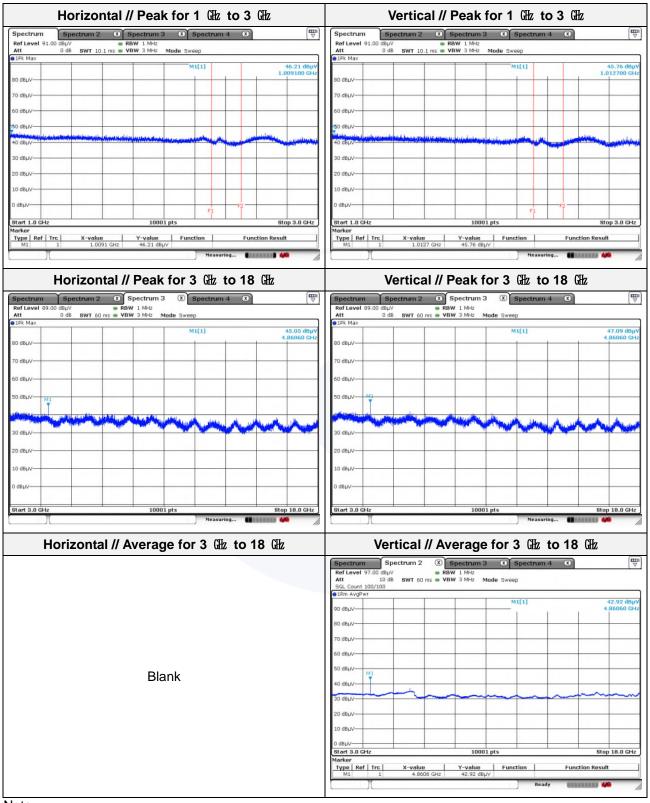
Frequency (Mb)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB#V/m)	Limit (dBµN/m)	Margin (dB)
1 009.10	46.21	Peak	Н	-9.34	-	36.87	74.00	37.13
1 012.70	45.76	Peak	V	-9.32	-	36.44	74.00	37.56
4 860.60	45.05	Peak	Н	6.73	-	51.78	74.00	22.22
4 860.60	47.09	Peak	V	6.73	-	53.82	74.00	20.18
4 860.60	42.92	Average	V	6.73	0.18	49.83	54.00	4.17
- Band e	edge			CE	DCE	Field strength	Limit	Margin

# Band edge

Frequency (Mb)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBµN/m)	Limit (dBµN/m)	Margin (dB)
2 350.78	43.77	Peak	V	-0.47	-	43.30	74.00	30.70
2 372.65	44.63	Peak	Н	-0.40	-	44.23	74.00	29.77

F	Restricted ba	and // Hor	izontal	// Peak			Restric	ted ban	d // Ve	ertica	l // Peal	(
		Spectrum 3 (X) BW 1 MHz BW 3 MHz Mode S	Spectru Ref Leve Att	96.00 0		Spectru     RBW 1M     ms • VBW 3M	Hz	-				
1Pk Max					1Pk Max							
90 dBµV 80 dBµV 70 dBµV 60 dBµV			M1[1]	44.63 2.3726530	<ul> <li>90 dBµV—</li> <li>80 dBµV—</li> <li>70 dBµV—</li> <li>60 dBµV—</li> </ul>							43.77 dBµV 2.3507810 GH2
50 dBµV Чо dBµV		a, danahur dar er er er er er er	M1	Allowing and a second second	50 dBµV-	di sette se	gentle and the second second	teritation providentiale Meditation providentiale			and Maral Marana and	
20 dBµV					20 dBµV—							
0 dBμV— <sup>F1</sup>		10001 pts		F2 Stop 2.412 (	0 dBµV—F			1	.0001 pts		F2	Stop 2.412 GHz
Marker Type Ref Trc M1 1			nction	Function Result	Marker Type R M1	ef Trc	X-value 2.35078:	Y-val L GHz 43.7	<b>ue Fι</b> 7 dBμV	Inction	Functi	on Result
			Measuring	( <b>I</b> REREE) 🦗						Meas	uring <b>Can</b> al	





Note.

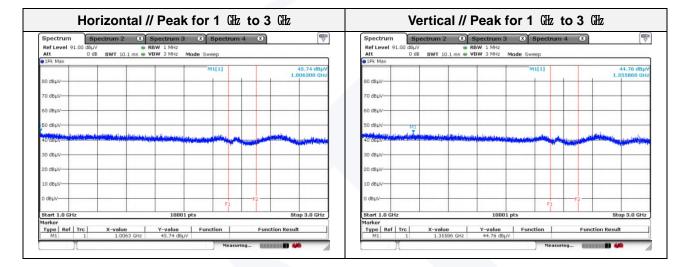
1. Average test would be performed if the peak result were greater than the average limit.



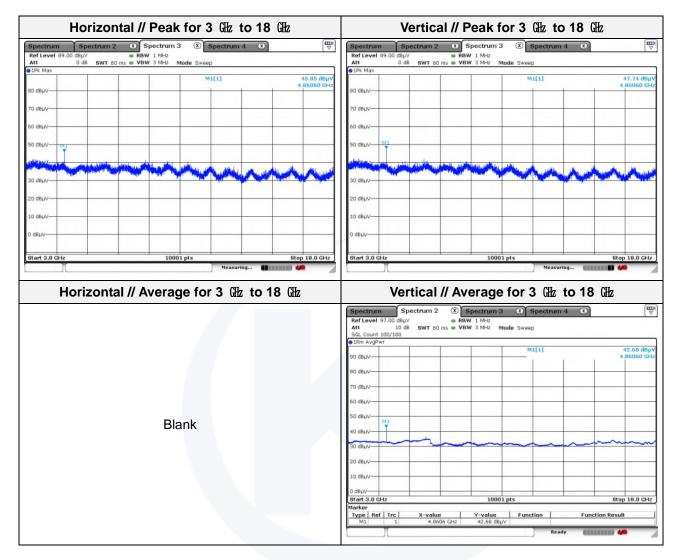
Mode:	802.11g_DC 12 V
Distance of measurement:	3 meter
Channel:	06

Spurious

Frequency (Mb)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBµN/m)	Limit (dBµN/m)	Margin (dB)
1 006.30	45.74	Peak	Н	-9.36	-	36.38	74.00	37.62
1 355.86	44.76	Peak	V	-7.17	-	37.59	74.00	36.41
4 860.60	45.85	Peak	Н	6.73	-	52.58	74.00	21.42
4 860.60	47.74	Peak	V	6.73	-	54.47	74.00	19.53
4 860.60	42.68	Average	V	6.73	0.18	49.59	54.00	4.41







Note.

1. Average test would be performed if the peak result were greater than the average limit.



Mode:	802.11g_DC 12 V
Distance of measurement:	3 meter
Channel:	11

#### Spurious

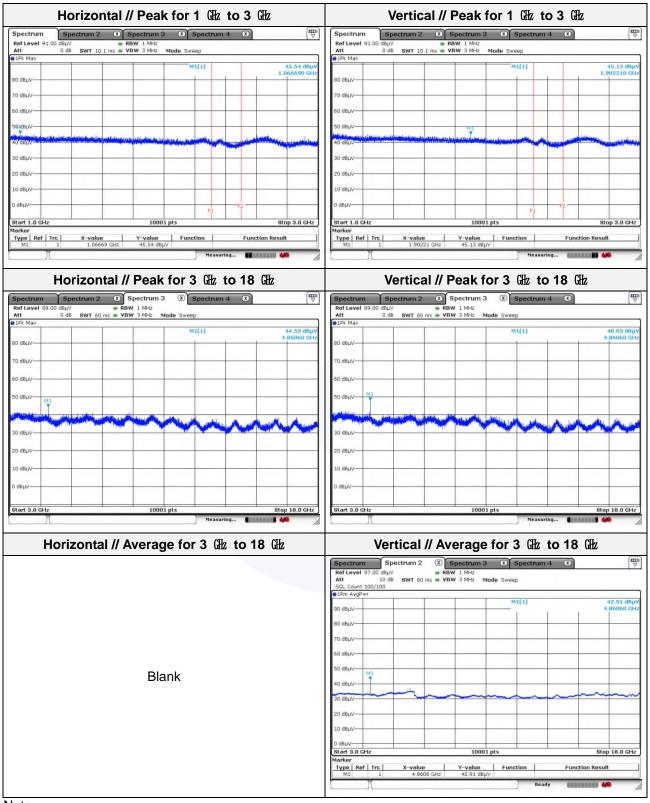
Frequency (版)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBµV/m)	Limit (dBµN/m)	Margin (dB)
1 066.69	45.54	Peak	Н	-8.98	-	36.56	74.00	37.44
1 902.21	45.13	Peak	V	-2.33	-	42.80	74.00	31.20
4 860.60	44.53	Peak	Н	6.73	-	51.26	74.00	22.74
4 860.60	48.03	Peak	V	6.73	-	54.76	74.00	19.24
4 860.60	42.91	Average	V	6.73	0.18	49.59	54.00	4.41

#### Band edge

- Band edge												
Frequency (Mb)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB <sub>/</sub> N/m)	Limit (dBµN/m)	Margin (dB)				
2 488.44	45.65	Peak	V	-0.27	-	45.38	74.00	28.62				
2 497.11	45.95	Peak	н	-0.27	-	45.68	74.00	28.32				
						•	•					

Restr	icted ba	and /	/ Hori	zonta	l // Pe	eak		Restricted band // Vertical // Peak									
Spectrum Spectru	m 2 🗷 S	pectrum	3 🗴					Spectrun	Spe	ectrum 2	× s	pectrum	3 X				
	● RB T 10.1 ms ● VB	W 1 MHz W 3 MHz	Mode Swe	ер				Att	97.00 dBμV 10 dB	SWT 10	● RB .1 ms ● VB	W 1 MHz W 3 MHz	Mode S	weep			
●1Pk Max								1Pk Max									
90 dBµV	M1[1] 45.95 d 2.49710610						45.95 dBµV 10610 GHz	90 dBµV					-	M1[1]	1		15.65 dBµV 44300 GHz
80 dBuV								80 dBµV—									
70 dBuV								70 dBuV-									
								60 dBµV									
60 dBµV																	
50 dBµV	A DIMENSIONAL STATE	alian and	and the state of the state of the		MI A Martin		and the definition of the	50 dBµV			Manual Incom		MI	universited at the	and an energy	- Standarderstan	
40 dBμV								40 dBµV									
30 dBµV								30 dBµV—									
20 dBµV								20 dBµV—					-	-			
10 dBµV								10 dBµV					-				
0 dBuV		F1			F2			0 dBµV				F1			F2		
Start 2.462 GHz		100	01 pts			Stor	2.51 GHz	Start 2.46	2 GHz			100	01 pts			Stop	2.51 GHz
Y		100	or pes	Measuri					Y					Measu	ring 🚺		





Note.

1. Average test would be performed if the peak result were greater than the average limit.

KES-QP16-F01(00-23-01-01)



Mode:	802.11g_DC 24 V
Distance of measurement:	3 meter
Channel:	01

#### Spurious -

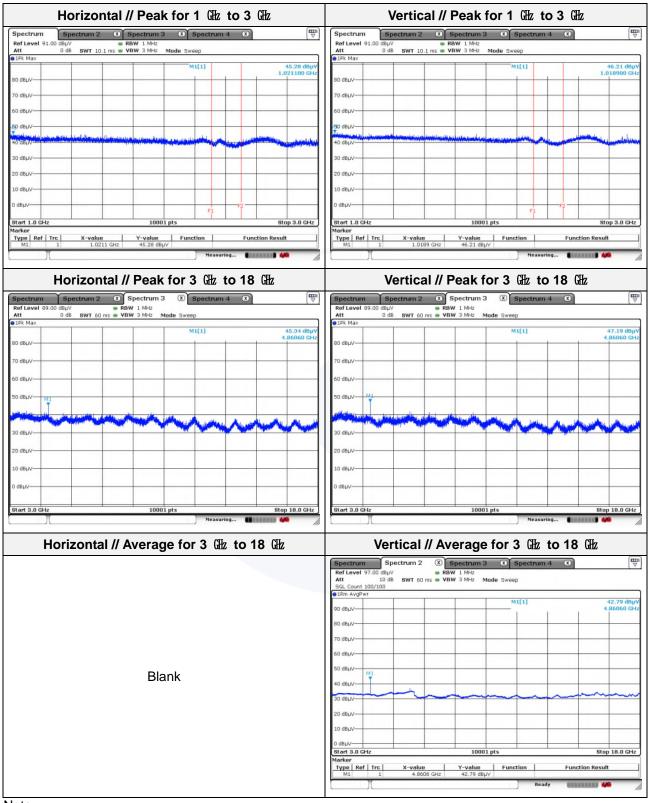
Frequency (Mb)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB#V/m)	Limit (dBµN/m)	Margin (dB)
1 018.90	46.21	Peak	V	-9.28	-	36.93	74.00	37.07
1 021.10	45.28	Peak	Н	-9.27	-	36.01	74.00	37.99
4 860.60	45.34	Peak	Н	6.73	-	52.07	74.00	21.93
4 860.60	47.19	Peak	V	6.73	-	53.92	74.00	20.08
4 860.60	42.79	Average	V	6.73	0.18	49.70	54.00	4.30
- Band	edge			CE	DCE	Field strongth	Limit	Margin

#### Band edge \_

Frequency (脈)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB#V/m)	Limit (dBµN/m)	Margin (dB)
2 348.64	44.56	Peak	н	-0.48	-	44.08	74.00	29.92
2 368.87	44.02	Peak	V	-0.41	-	43.61	74.00	30.39

R	estricted b	and // H	lorizonta	al // Peak		Restrict	ed band //	/ Vertical	// Peak
Ref Level 96.00 d		Spectrum 3 RBW 1 MHz	x ada Swaan		Ref Level 96.00 c		Spectrum 3     BW 1 MHz     SBW 3 MHz	X Andra Supara	
1Pk Max	5 GD 3WI 10.1 MS	<b>1011</b> 5 10112 10	oue sweep		PlPk Max	5 GD 3WI 10.11		noue sweep	
90 dBµV			M1[1]	44.56 dB 2.3486420.61				M1[1]	44.02 dBj 2.3688680 G
70 dBµV					— 70 dBµ∨				
50 dBµV	s	M1 Literation	and the second		- 50 dBµV	a dat minimum the sea in sea	a na militara di pana di seconda d	Mi	
30 dBµV					<ul> <li>30 d8µ∨</li> <li>20 d8µ∨</li> </ul>				
10 dBµV				F2	— 10 dBµV-				F2
Start 2.3 GHz		10001	ots	Stop 2.412 GH	z Start 2.3 GHz		10001	pts	Stop 2.412 GH
Marker Type Ref Trc M1 1	X-value 2.348642 GHz	Y-value 44.56 dBµV	Function	Function Result	Marker Type Ref Trc M1 1	X-value 2.368868	Y-value GHz 44.02 dBµV	Function	Function Result
			Measu	ring 📲 COTTATO 🚧				Measu	uring 🚺 🖬 🗰 🚧





Note.

1. Average test would be performed if the peak result were greater than the average limit.

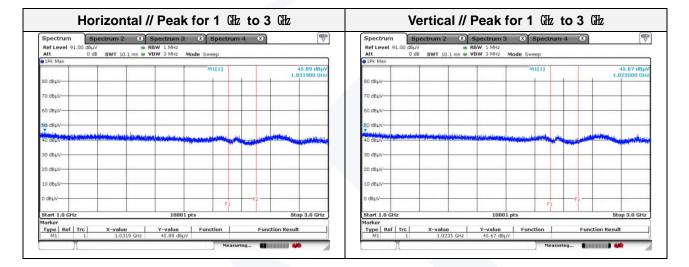
KES-QP16-F01(00-23-01-01)



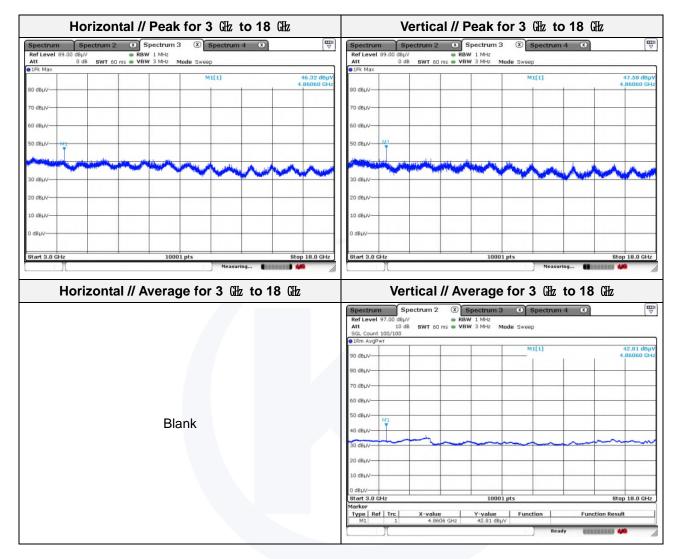
Mode:	802.11g_DC 24 V
Distance of measurement:	3 meter
Channel:	06

Spurious

Frequency (Mb)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBµN/m)	Limit (dBµN/m)	Margin (dB)
1 023.50	45.67	Peak	V	-9.25	-	36.42	74.00	37.58
1 031.90	45.89	Peak	Н	-9.20	-	36.69	74.00	37.31
4 860.60	46.32	Peak	Н	6.73	-	53.05	74.00	20.95
4 860.60	47.58	Peak	V	6.73	-	54.31	74.00	19.69
4 860.60	42.81	Average	V	6.73	0.18	49.72	54.00	4.28







Note.

1. Average test would be performed if the peak result were greater than the average limit.



Mode:	802.11g_DC 24 V
Distance of measurement:	3 meter
Channel:	11

#### Spurious

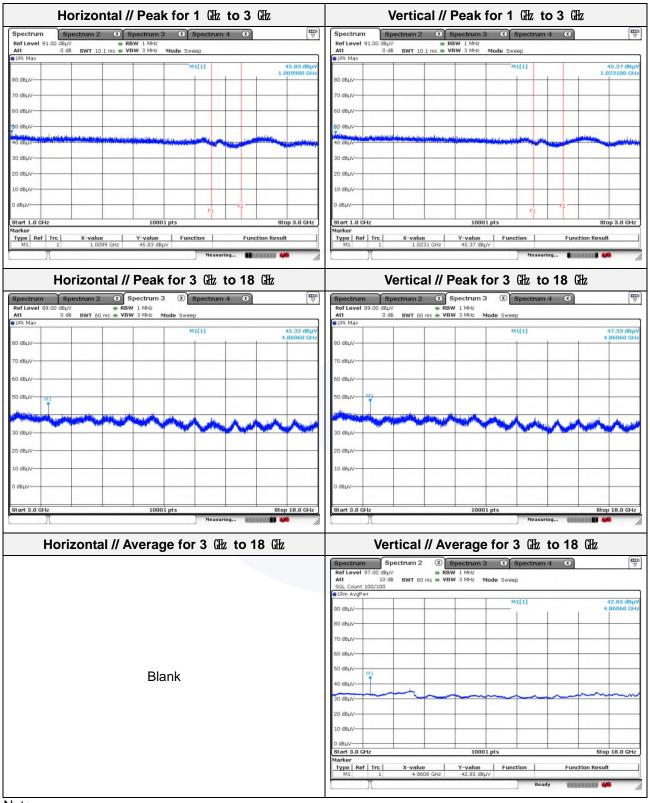
Frequency (Mb)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB <sub>4</sub> N/m)	Limit (dBµN/m)	Margin (dB)
1 009.90	45.83	Peak	Н	-9.34	-	36.49	74.00	37.51
1 023.10	45.37	Peak	V	-9.26	-	36.11	74.00	37.89
4 860.60	45.32	Peak	Н	6.73	-	52.05	74.00	21.95
4 860.60	47.33	Peak	V	6.73	-	54.06	74.00	19.94
4 860.60	42.85	Average	V	6.73	0.18	49.76	54.00	4.24

#### Band edge

Frequency (畑)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB <sub>#</sub> N/m)	Limit (dBµN/m)	Margin (dB)
2 487.14	46.05	Peak	н	-0.27	-	45.78	74.00	28.22
2 491.04	45.66	Peak	V	-0.27	-	45.39	74.00	28.61

Restr	icted ba	nd //	Horizo	ntal // Pe	eak		Restricted band // Vertical // Peak								
Spectrum Spectru	ım 2 🛞 Sp	ectrum 3	×				Spectrur	n Sp	ectrum 2	(X) 5	Spectrun	13 🗴			
	● RBV /T 10.1 ms ● VBV	NI 1 MHz NI 3 MHz	Mode Sweep			)	Att	97.00 dBµV 10 dB	SWT 10		BWI1 MH: BWI3 MH:	2 Mode Swee	0		,
● 1Pk Max 90 dBµV			M1[1]			46.05 dBµV 14230 GHz	● 1Pk Max 90 d8µV					M1[	1]		45.66 dBµ\ 2.49104430 GH: 
80 d8µV-							80 dBµV—	$\overline{}$							
70 dBµV-							70 dBµV—								
60 dBµV 50 dBµV			M1				60 dBµV—		1			LTM.			
40 dBµV	and a strategy in a strategy i	handhid a biyin	Martin Milator Jame	nationites dates and a destination of the	19 9. Ali 19 Ali	and is the second	40 dBµV—			and the second	in a still and	i la faithe ann sinter in		ensela, est al deser	iteen distance in a state of a space.
30 dBµV							30 dBµV—								
20 dBµV							20 dBµV							_	
10 dBµV		F1		F2			10 авру				F1			F2	
Start 2.462 GHz	1	1000	1 pts		Stop	2.51 GHz	Start 2.46	2 GHz		1	10	001 pts		U	Stop 2.51 GHz
The second secon				Measuring 🔳	unnun 🗰			T					Measuring.		





Note.

1. Average test would be performed if the peak result were greater than the average limit.

KES-QP16-F01(00-23-01-01)



Mode:
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#### 802.11n\_HT20\_DC 12 V

Distance of measurement:	3 meter
Channel:	01

#### Spurious

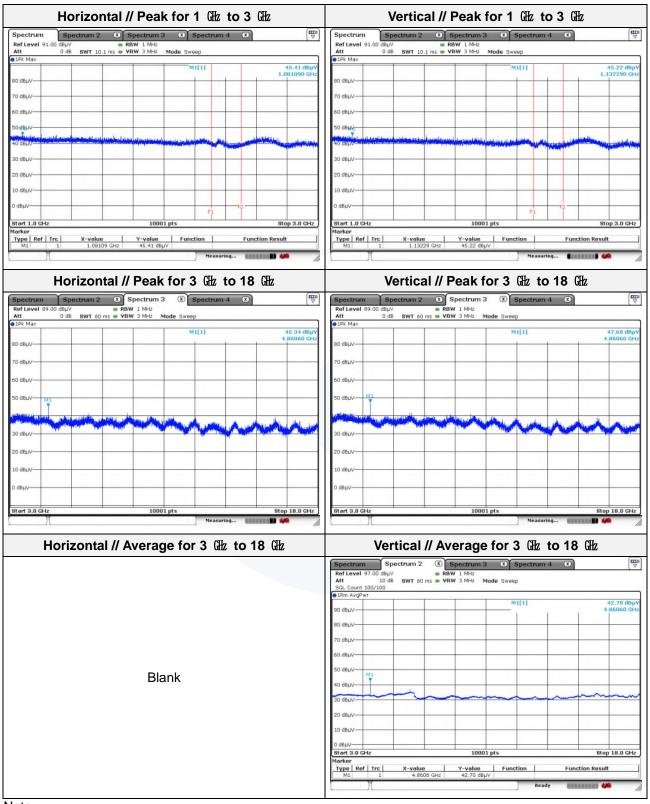
Frequency (Mb)	Level (dBµN)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB#V/m)	Limit (dBµN/m)	Margin (dB)			
1 081.09	45.41	Peak	Н	-8.89	-	36.52	74.00	37.48			
1 132.29	45.22	Peak	V	-8.57	-	36.65	74.00	37.35			
4 860.60	45.34	Peak	Н	6.73	-	52.07	74.00	21.93			
4 860.60	47.68	Peak	V	6.73	-	54.41	74.00	19.59			
4 860.60	42.70	Average	V	6.73	0.32	49.75	54.00	4.25			
- Band edge											

# Band edge

2 326.19         44.38         Peak         V         -0.55         -         43.83         74.00         30.17           2 366.01         44.54         Peak         H         -0.42         -         44.12         74.00         29.88	Frequency (脈)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB#V/m)	Limit (dBµN/m)	Margin (dB)
2 366.01 44.54 Peak H -0.42 - 44.12 74.00 29.88	2 326.19	44.38	Peak	V	-0.55	-	43.83	74.00	30.17
	2 366.01	44.54	Peak	Н	-0.42	-	44.12	74.00	29.88

	Restrict	ed band // I	Horizonta	// Peak		Restricted band // Vertical // Peak									
Spectrum Ref Level 96.00		Spectrum 3     RBW 1 MHz 1 ms • VBW 3 MHz	8			Spectrum Ref Level Att	1 <b>Spe</b> 96.00 dBμV 5 dB	ectrum 2	RBW	ectrum 3	8				
1Pk Max	Sub SWI 10.	1 ms - VBW 3 MH2 N	lode Sweep			Att 1Pk Max	5 GB	SW1 10.	1 ms 🖶 VBV	V 3 MHZ IV	lode Sweep				
90 dBµV 80 dBµV 70 dBµV 60 dBµV 50 dBµV 30 dBµV 30 dBµV 20 dBµV			MI[1]	2.	44.54 dBµV 3660120 GHz	90 dBµV		MI			MI[1]			14.38 dBµ\ 61890 GH:	
10 dBµV 0 dBµV—F1 Start 2.3 GHz	48μν- <sup>F</sup> 1						Hz			10001	nts	F	2 Stop 2	2.412 GHz	
Marker Type   Ref   Tr	c X-value 1 2.36601	Y-value	Function	Function Res		Start 2.3 G Marker Type Ret M1		X-value 2.32618		<b>Y-value</b> 44.38 dBµV	Function	Func	tion Result		
			Measurin	g <b>C</b> RONKOWN <b>)</b>	<b>4/4</b>		)[				Mea	suring 💵			





Note.

1. Average test would be performed if the peak result were greater than the average limit.

KES-QP16-F01(00-23-01-01)



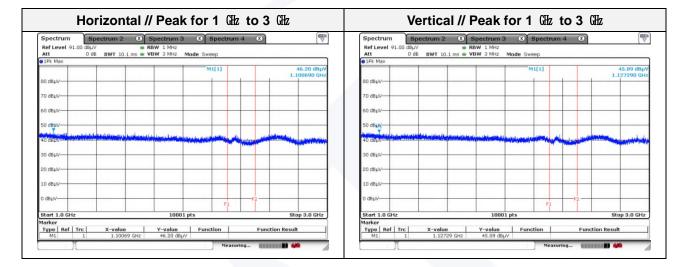
Mode:
-------

## 802.11n\_HT20\_DC 12 V

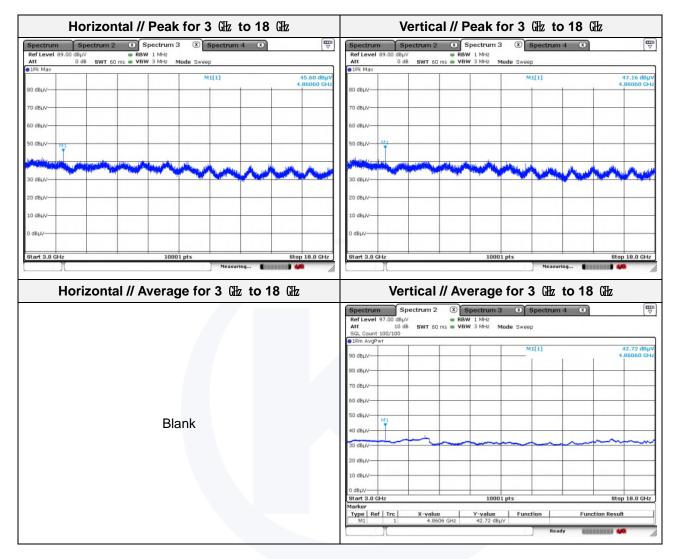
Distance of measurement:	3 meter
Channel:	06

Spurious

Frequency (Mb)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBµN/m)	Limit (dBµN/m)	Margin (dB)
1 100.69	46.20	Peak	Н	-8.77	-	37.43	74.00	36.57
1 127.29	45.09	Peak	V	-8.60	-	36.49	74.00	37.51
4 860.60	45.60	Peak	Н	6.73	-	52.33	74.00	21.67
4 860.60	47.16	Peak	V	6.73	-	53.89	74.00	20.11
4 860.60	42.72	Average	V	6.73	0.32	49.77	54.00	4.23







Note.

1. Average test would be performed if the peak result were greater than the average limit.



Mode:	802.11n_HT20_DC 12 V
Distance of measurement:	3 meter
Channel:	11

Spurious

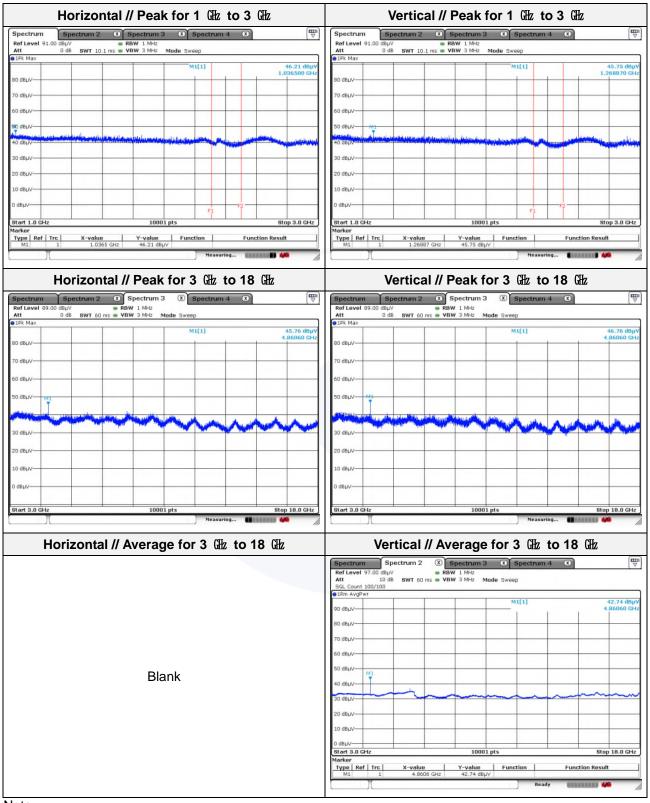
Frequency (脈)	Level (dBµN)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB <sub>#</sub> N/m)	Limit (dBµN/m)	Margin (dB)
1 036.50	46.21	Peak	Н	-9.17	-	37.04	74.00	36.96
1 268.87	45.75	Peak	V	-7.71	- 38.04		74.00	35.96
4 860.60	45.76	Peak	Н	6.73	-	52.49	74.00	21.51
4 860.60	46.76	Peak	V	6.73	-	53.49	74.00	20.51
4 860.60	42.74	Average	V	6.73	0.32	49.79	54.00	4.21
- Band			Arri Del	05	DOF		1 : :4	Manain

#### Band edge

Frequency (畑)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB <sub>#</sub> N/m)	Limit (dBµN/m)	Margin (dB)
2 484.75	45.57	Peak	н	-0.27	-	45.30	74.00	28.70
2 493.23	45.75	Peak	V	-0.27	-	45.48	74.00	28.52
							•	

90 dBµV	F	Restrict	ed bar	nd //	Hori	zonta	I // P	eak			Restricted band // Vertical // Peak									
Att       10 db       SWT 10.1 ms       VBW 3 MHz       Mode Sweep         B1Fk Max       Image: Sweet 10.1 ms       Image: Sweet 10.1	Spectrum	Spectrum 2	🗴 Spe	ctrum 3	×					Spectrum	Spe	ctrum 2	× s	pectrum	3 X	)				
90 dBµV	Att :				Mode Swe	ер				Att		SWT 10.				iweep				
70 dBµV-       1<					M	1[1]	1			90 dBµV						M1[1]	1		45.75 dBµV 322810 GHz	
60 dBµV	80 dBµV									80 dBuy									<u> </u>	
So deµv     M1     So deµv     <	70 dBµV									70 dBµV										
	50 dBµV									60 dBµ∨										
40 deµv	50 dBµV		Harribandan (L)	MI	ar an an an fail bit.	casel being the state		and an encode set. And	an ann an Allendara a			N.	the state of the sector	-		MI	A	- Jan Lander		
20 dBμV 10 dBμV F1 F1 F2 0 dBμV F1 F1 F2 0 dBμV																				
10 dBµV																				
0 dBµV F1 F2 F1 F2 F1 F2 F1																				
				F1			F	2						F1			F2			
8tart 2.462 GHz 10001 pts Stop 2.51 GHz Start 2.462 GHz 10001 pts Stop 2.51 GHz	Start 2.462 GHz			1000	1 pts			Stop	2.51 GHz	Start 2.462	GHz			100	101 pts			Stor	2.51 GHz	





Note.

1. Average test would be performed if the peak result were greater than the average limit.

KES-QP16-F01(00-23-01-01)



Mode:	802.11n_HT20_DC 24 V					
Distance of measurement:	3 meter					
Channel:	01					

#### Spurious -

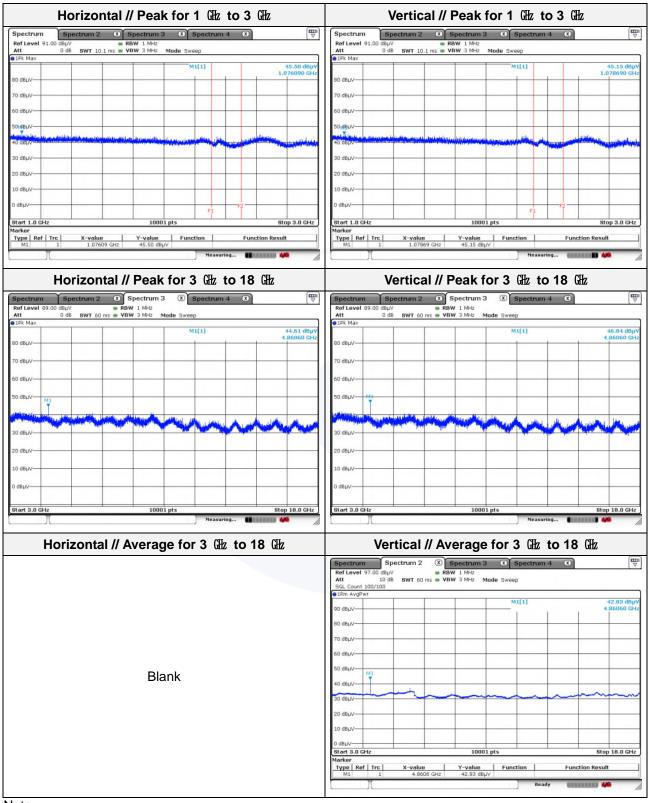
Frequency (Mb)	Level (dBµN)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB <i>µ</i> V/m)	Limit (dBµV/m)	Margin (dB)
1 076.09	45.50	Peak	Н	-8.92	-	36.58	74.00	37.42
1 078.69	45.15	Peak	V	-8.91	-	36.24	74.00	37.76
4 860.60	44.61	Peak	Н	6.73	-	51.34	74.00	22.66
4 860.60	46.84	Peak	V	6.73	-	53.57	74.00	20.43
4 860.60	42.83	Average	V	6.73	0.32	49.88	54.00	4.12
- Band			Arri Del	05	DOF		1 : :4	Monoin

#### Band edge \_

	Frequency (畑)	Level (dBµN)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB#V/m)	Limit (dBµN/m)	Margin (dB)
2 327 68 44 97 Peak H -0 55 - 44 42 74 00 294	2 326.54	44.40	Peak	V	-0.55	-	43.85	74.00	30.15
	2 327.68	44.97	Peak	Н	-0.55	-	44.42	74.00	29.58

Restricted band // Horizontal // Peak						Restricted band // Vertical // Peak								
						Spectrum Ref Level	and the second second	ectrum 2	Spe		×			
		ms . VBW 3 MHz	Mode Sweep			Att		SWT 10.	1 ms SVBW		Mode Sweep			
●1Pk Max						1Pk Max								
90 dBµV			M1[1]	2.	44.97 dBµV 3276780 GHz	90 dBµV					M1[1]			44.40 dBµ 265360 GH
80 dBµV					$- \int $	80 dBµV								
70 dBµV					1	70 dBµV								
60 dBµV					1	60 dBµV								1
50 dBµV	M1	و الماليد مع من و المعمالية.	A survey and the second survey a low	alasta and a second second second second		50 dBµV		M1	و و و و و و و و و و و	Internet and	and plantated in sec.	and mercele and		
чо авру 30 dвµV						140 ОВДV								
20 dBµV						20 dBµV								
10 dBµV						10 dBµV								
0 dBµV— <sup>F1</sup>				F2		0 dBµV—F1							F2	
Start 2.3 GHz	1	100	01 pts	Sto	p 2.412 GHz	Start 2.3 G	Hz			10001	L pts		Stop	2.412 GHz
Marker         Yuge         Function         Function Result           M1         1         2.327678 GHz         44,97 dBµV         Function         Function Result					Marker Type Ref M1	Trc 1	X-value 2.32653		<b>'-value</b> 44.40 dBµ	Function	F	unction Resu	t	
1			Measurin	1g (1010000)	440		1				4	feasuring	CORDER N	6





Note.

1. Average test would be performed if the peak result were greater than the average limit.

KES-QP16-F01(00-23-01-01)

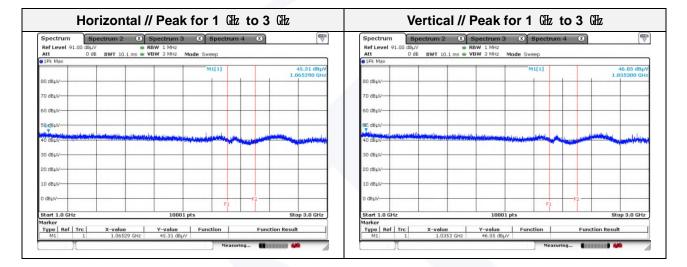


#### 802.11n\_HT20\_DC 24 V

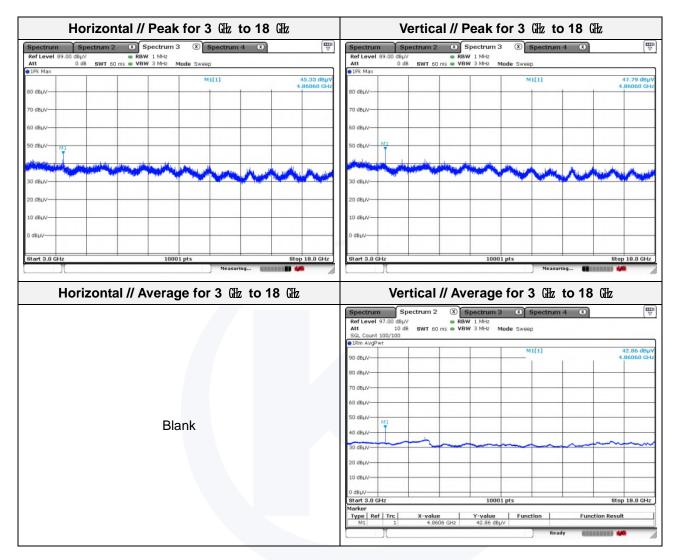
Distance of measurement:	3 meter
Channel:	06

Spurious

Frequency (Mb)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBµN/m)	Limit (dBµN/m)	Margin (dB)
1 035.30	46.05	Peak	V	-9.18	-	36.87	74.00	37.13
1 065.29	45.31	Peak	Н	-8.99	-	36.32	74.00	37.68
4 860.60	45.33	Peak	Н	6.73	-	52.06	74.00	21.94
4 860.60	47.79	Peak	V	6.73	-	54.52	74.00	19.48
4 860.60	42.86	Average	V	6.73	0.32	49.91	54.00	4.09







Note.

1. Average test would be performed if the peak result were greater than the average limit.



Mode:	802.11n_HT20_DC 24 V
Distance of measurement:	3 meter
Channel:	11

Spurious

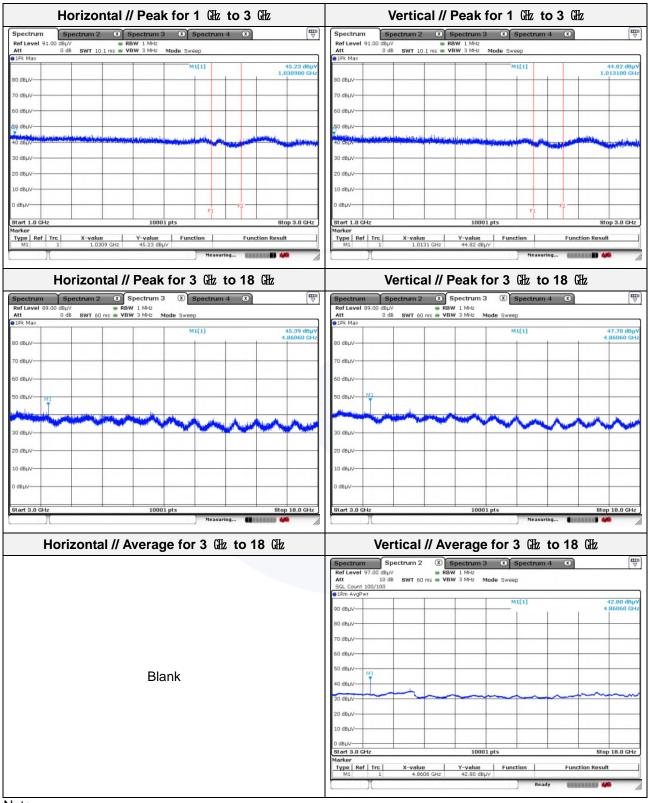
Frequency (Mb)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB <sub>#</sub> N/m)	Limit (dBµN/m)	Margin (dB)
1 013.10	44.82	Peak	V	-9.32	-	35.50	74.00	38.50
1 030.90	45.23	Peak	Н	-9.21	-	36.02	74.00	37.98
4 860.60	45.39	Peak	Н	6.73	-	52.12	74.00	21.88
4 860.60	47.70	Peak	V	6.73	-	54.43	74.00	19.57
4 860.60	42.80	Average	V	6.73	0.32	49.85	54.00	4.15
- Band	edge		Ant Dol	CE	DCE	Field strongth	Limit	Morgin

#### Band edge

Frequency (畑)	Level (dBµV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB <sub>#</sub> N/m)	Limit (dBµN/m)	Margin (dB)
2 491.66	45.81	Peak	V	-0.27	-	45.54	74.00	28.46
2 494.76	45.42	Peak	Н	-0.27	-	45.15	74.00	28.85

Restricted band // Horizontal // Peak							Restricted band // Vertical // Peak						
Spectrum Spectr	um 2 🛞 🕄	Spectrum 3	3 X)				Spectrum	Spectrum 2	(X) Spectr	um 3 🛛 🔇	3		
Ref Level         97.00 dBµ∨           Att         10 dB         S           1Pk Max         S         S	● R WT 10.1 ms ● V	BW 1 MHz BW 3 MHz	Mode Sweep			_	Ref Level 97.0 Att		RBW 11 1 ms = VBW 31		Sweep		
90 dBµV-			M1[1]	1	45.42 2.49475910	dBµV ) GHz					M1[1]	1 1	45.81 dBµV 2.49165860 GHz
80 dBµV						_	80-d8/4/						
70 dBµV						_	70 dBµV						
60 dBµV							60 dBµV						
40 dBµV	Nutries had and		a constraint a statistical	Mi	a dan san da kit makata ka	Neterlas	40 dBµV				in our discontinue	<b>Miketeristic</b> teri	
30 dBµV						_	30 dBµV				_		
20 dBµV						_	20 dBµV						
10 dBµV		E1		F	2	_	10 dBµV		F			F2	
0 dBµV Start 2.462 GHz			1 pts		Stop 2.51	GHz	0 dBµV Start 2.462 GH	łz		10001 pts			Stop 2.51 GHz
T T				leasuring							Measu	ing 🚺	





Note.

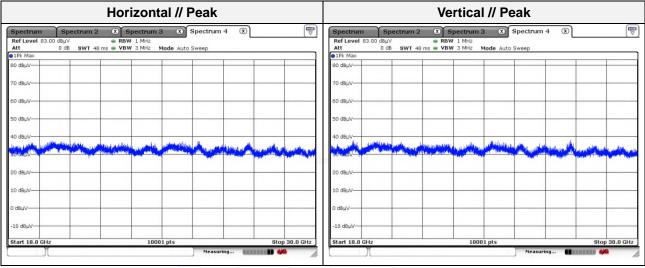
1. Average test would be performed if the peak result were greater than the average limit.



Test results (18 GHz to 30	G∄z) – Worst case
Mode:	LE 1 Mbps_DC 12 V
Distance of measurement:	3 meter

Channel:

00 (Worst case)



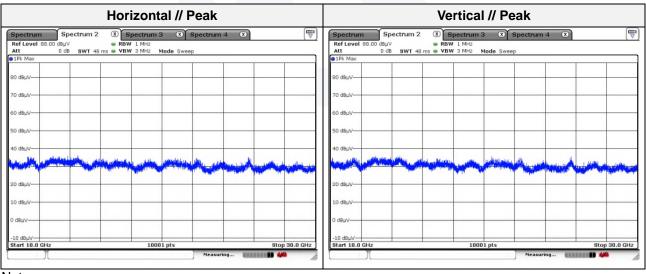
Note.

1. No spurious emission were detected above 18  $\,\mathrm{GHz}$ .

 Mode:
 LE 1 Mbps\_DC 24 V

 Distance of measurement:
 3 meter

 Channel:
 00 (Worst case)



Note.

1. No spurious emission were detected above 18  $\,{\rm Ghz}$ 



802.11g (Worst case)\_DC 12 V

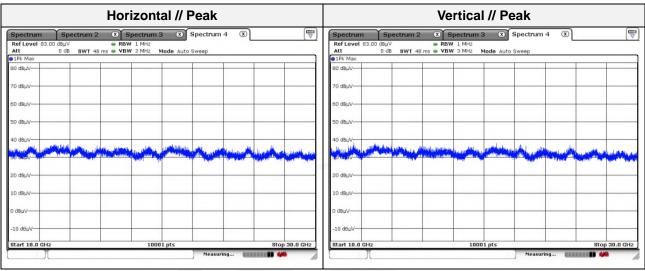
Distance of measurement:

3 meter

Channel:

Mode:

06 (Worst case)



Note.

1. No spurious emission were detected above 18 GHz.

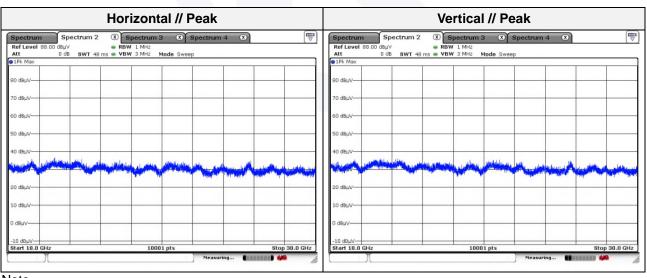
Mode:

Channel:

802.11g (Worst case)\_DC 12 V

Distance of measurement:

3 meter 06 (Worst case)



Note.

1. No spurious emission were detected above 18  $\,{\rm Ghz}$ 

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# 3.6. Conducted spurious emissions & band edge

Test setup

EUT		Attopuetor	Spectrum
	Attenuator	Allenualoi	analyzer

#### Test procedure Band edge

ANSI C63.10-2013 - Section 11.11

- 1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
- 2. Span was set large enough so as to capture all out of band emissions near the band edge
- 3. Set the RBW = 100 kHz
- 4. Set the VBW =  $[3 \times \text{RBW}]$ .
- 5. Detector = Peak
- 6. Sweep time = auto
- 7. Trace mode = max hold
- 8. Allow trace to fully stabilize.

#### Out of band emissions

ANSI C63.10-2013 - Section 11.11

- 1. Start frequency was set to 30 Mz and stop frequency was set to 25 Gz for 2.4 Gz frequencies and 40 Gz for 5 Gz frequencies
- 2. Set the RBW = 100 kHz
- 3. Set the VBW =  $[3 \times RBW]$ .
- 4. Detector = Peak
- 5. Sweep time = auto
- 6. Trace mode = max hold
- 7. Allow trace to fully stabilize.

#### FCC Limit

According to 15.247(d), in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval , as permitted under paragraph(b)(3) of this section , the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in section 15.209(a) is not required. In addition, radiated emission which in the restricted band, as define in section 15.205(a), must also comply the radiated emission limits specified in section 15.205(c))

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#### IC Limit

According to RSS-247 5.5, In any 100 kt bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kt bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

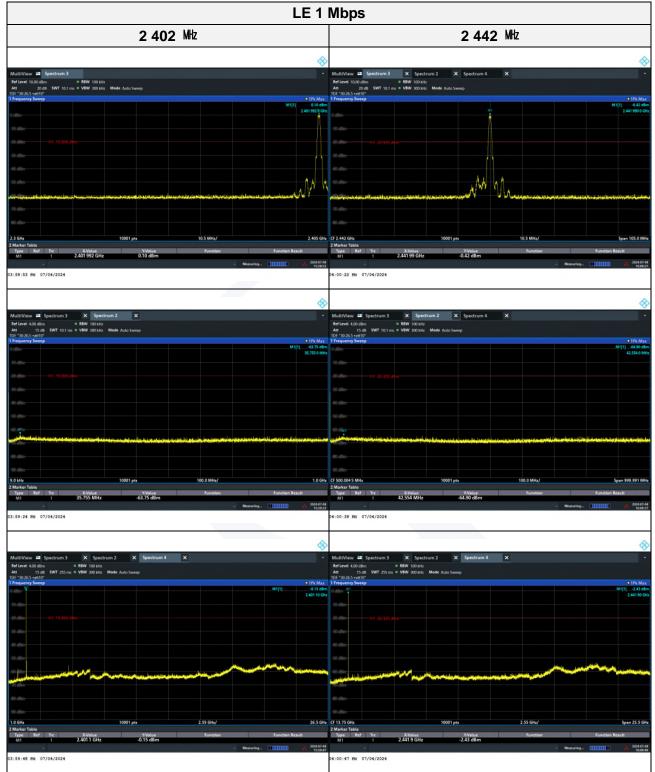


KES-QP16-F01(00-23-01-01)



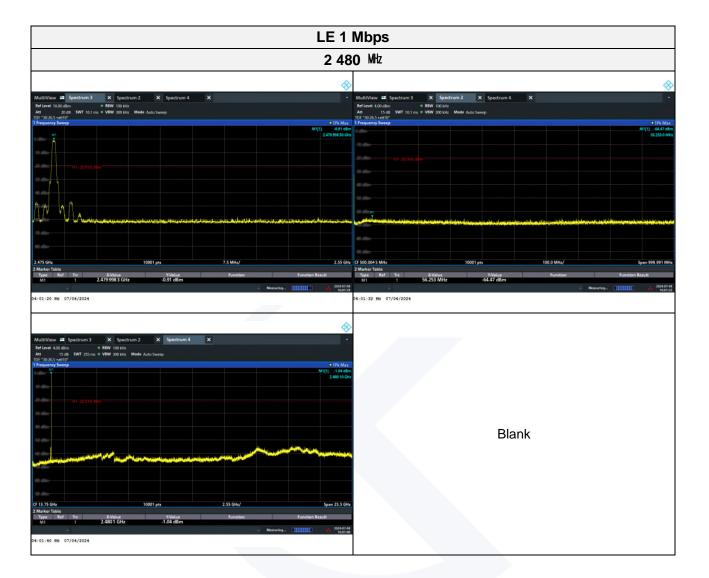
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#### Test results



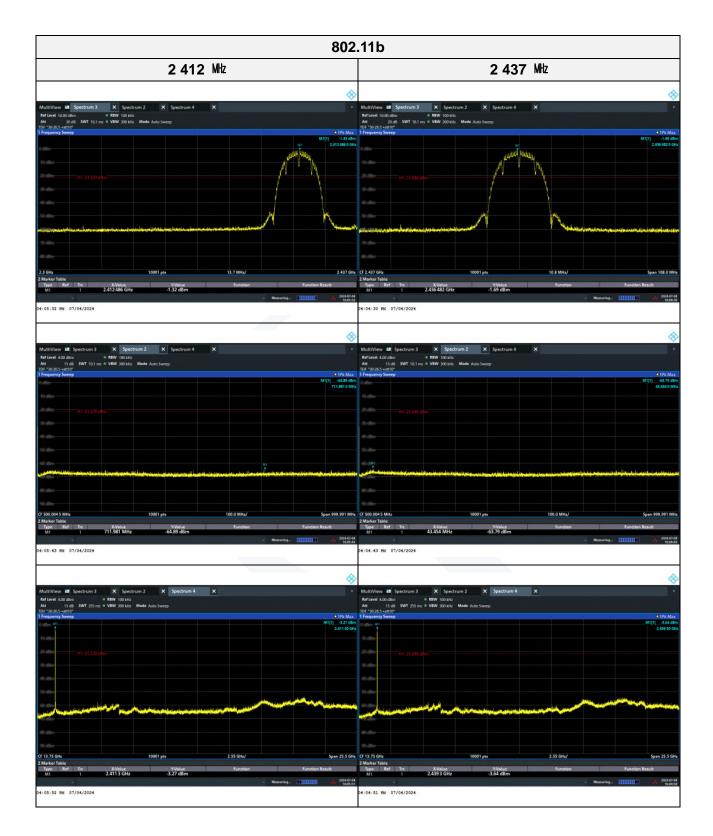
KES-QP16-F01(00-23-01-01)





KES-QP16-F01(00-23-01-01)

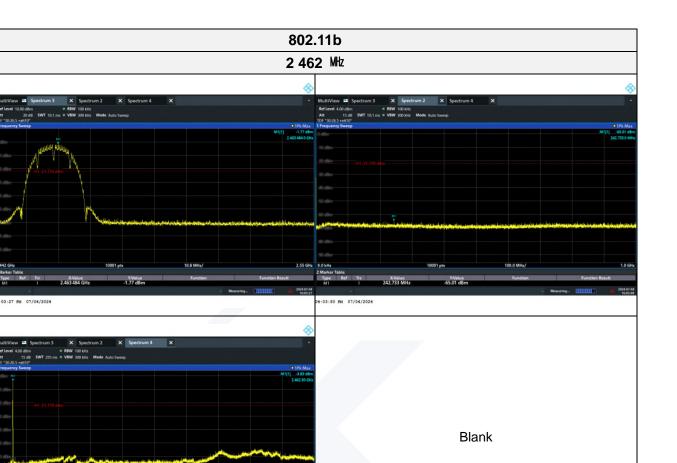




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KES Co., Ltd.





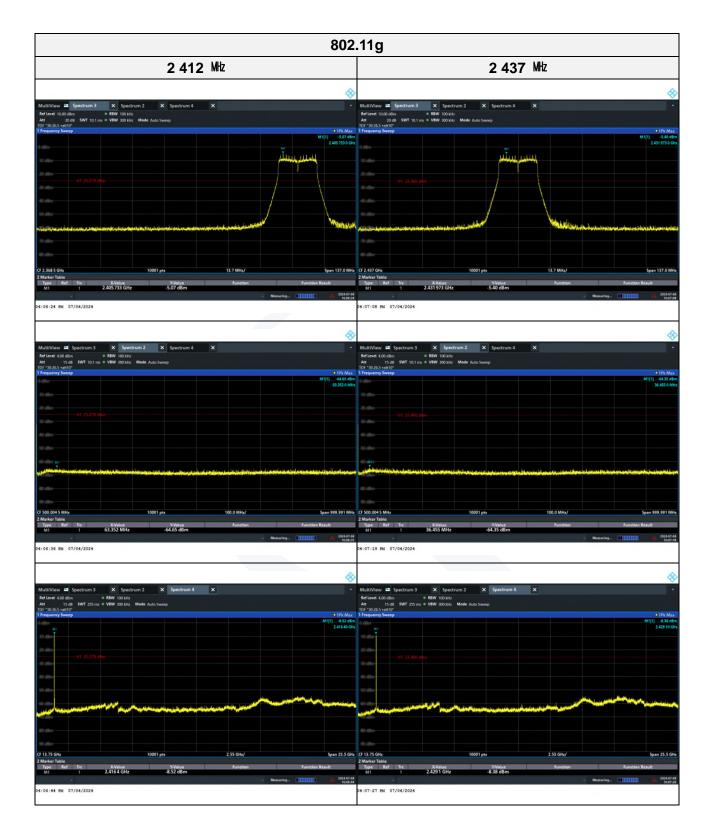
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KES-QP16-F01(00-23-01-01)

X-Volue 2.462 3 (G)

3:58 PM 07/04/2024





KES-QP16-F01(00-23-01-01)

KES Co., Ltd.



2.456.982 GH

07:59 PM 07/04/2024

08:16 PM 07/04/2024

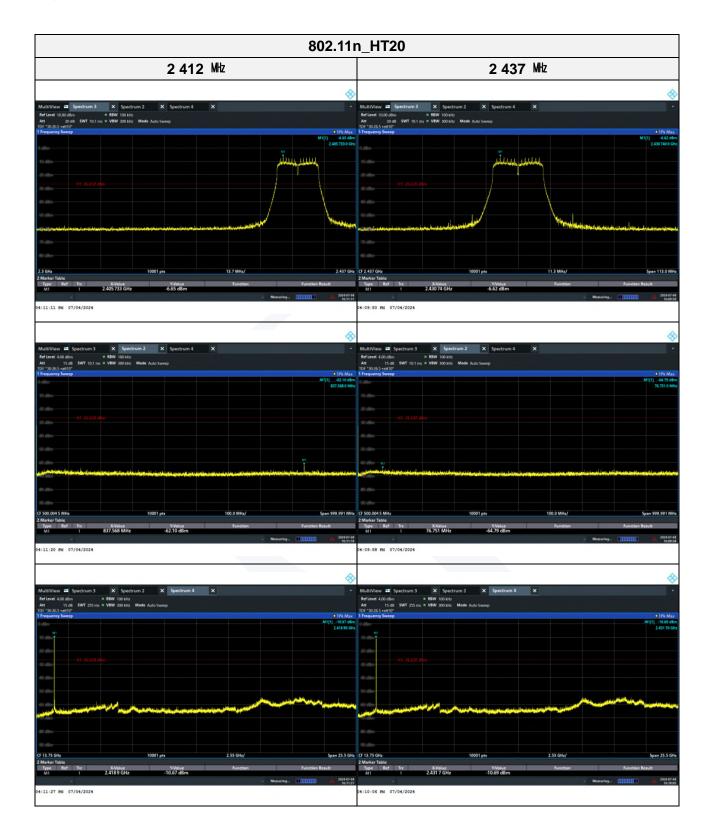


# Blank X-Value 2.4600-C

KES-QP16-F01(00-23-01-01)

#### KES Co., Ltd.

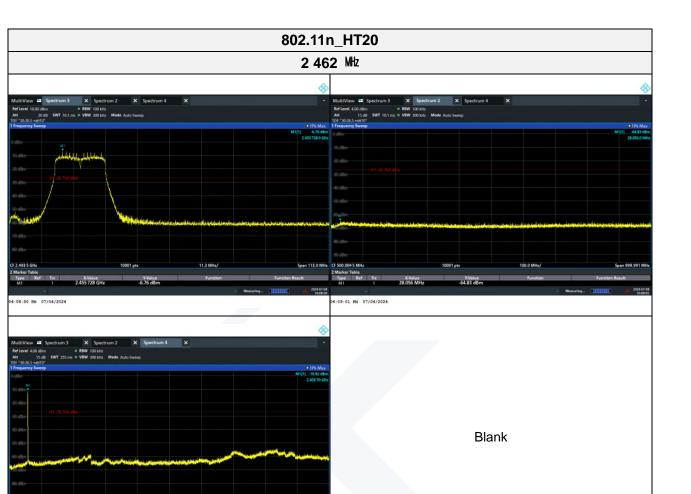




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KES Co., Ltd.





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# KES-QP16-F01(00-23-01-01)

X-Value 2 4597 cli

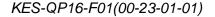
9:09 PM 07/04/2024

#### KES Co., Ltd.



#### 3.7. Antenna Requirement

According to 15.207(a), An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded.





Equipment	Manufacturer	Model	Serial No.	Calibration interval	Calibration due.
Spectrum analyzer	R&S	FSV40	101725	1 year	2025.06.12
Spectrum analyzer	R&S	FSV3044	101272	1 year	2025.03.12
SIGNAL GENERATOR	KEYSIGHT	N5182B	MY59100115	1 year	2025.04.15
SIGNAL GENERATOR	Anritsu	68369B	002118	1 year	2025.04.15
Power Meter	Anritsu	ML2495A	2010001	1 year	2025.04.15
Pulse Power Sensor	Anritsu	MA2411B	1911111	1 year	2025.04.15
Attenuator	Mini-Circuits	BW-S10-2W263+	3	1 year	2025.01.15
BAND REJECT FILTER	MICRO-TRONICS	BRM50702	G272	1 year	2025.01.12
ACTIVE LOOP ANTENNA	SCHWARZBECK	FMZB 1513	1513-257	2 years	2025.11.16
TRILOG-BROADBAND ANTENNA	Schwarzbeck	VULB 9163	714	2 years	2026.04.19
Attenuator	HUBER+SHHNER	6806.17.A	NONE	1 year	2025.02.13
Horn Antenna	A.H.	SAS-571	414	1 year	2025.01.16
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA 9170550	1 year	2025.01.16
Amplifier	SONOMA INSTRUMENT	310N	401123	1 year	2025.02.13
PREAMPLIFIER	HP	8449B	3008A00538	1 year	2025.04.30
BROADBAND AMPLIFIER	SCHWARZBECK	BBV9721	PS9721-003	1 year	2025.01.15
DC POWER SUPPLY	SORENSEN	DCS40-75E	1408A02745	1 year	2025.01.12
EMI Test Receiver	R&S	ESU26	100552	1 year	2025.02.13

# Appendix A. Measurement equipment

\* Statement of Traceability: KES Co., Ltd. attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

#### **Peripheral devices**

Device	Manufacturer	Model No.	Serial No.	
Notebook computer	LG Electronics Inc.,	LGS53	306QCZP560949	
Test Jig Board	N/A	N/A	N/A	

The end of test report.

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