



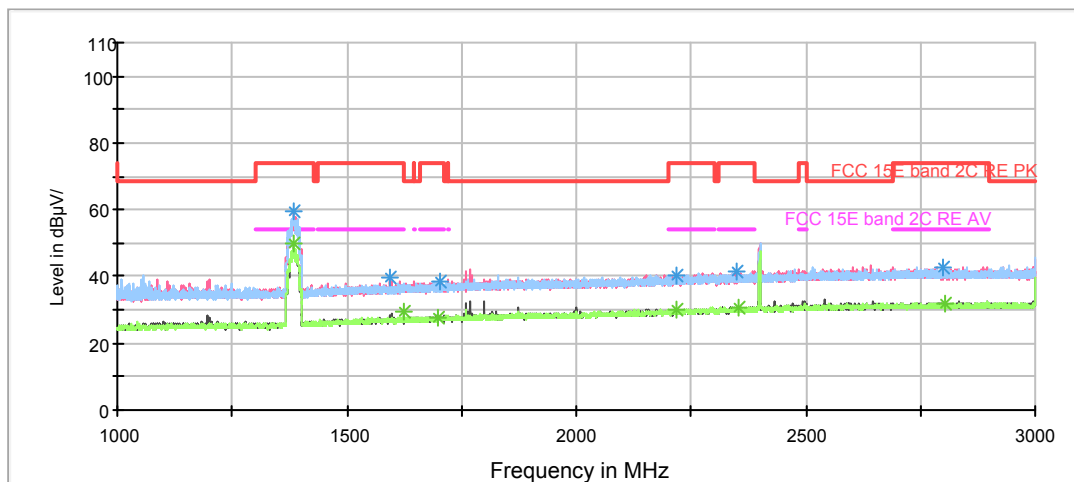
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3746.250000	38.5	100.0	V	184.0	29.8	8.7	15.5	54
4200.000000	42.5	100.0	V	336.0	32.3	10.2	11.5	54
4617.500000	41.3	200.0	V	0.0	30.4	10.9	12.7	54
4811.875000	41.5	200.0	V	0.0	30.1	11.4	12.5	54
7298.125000	44.6	100.0	V	62.0	29.3	15.3	9.4	54
7644.375000	45.3	100.0	V	0.0	29.4	15.9	8.7	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

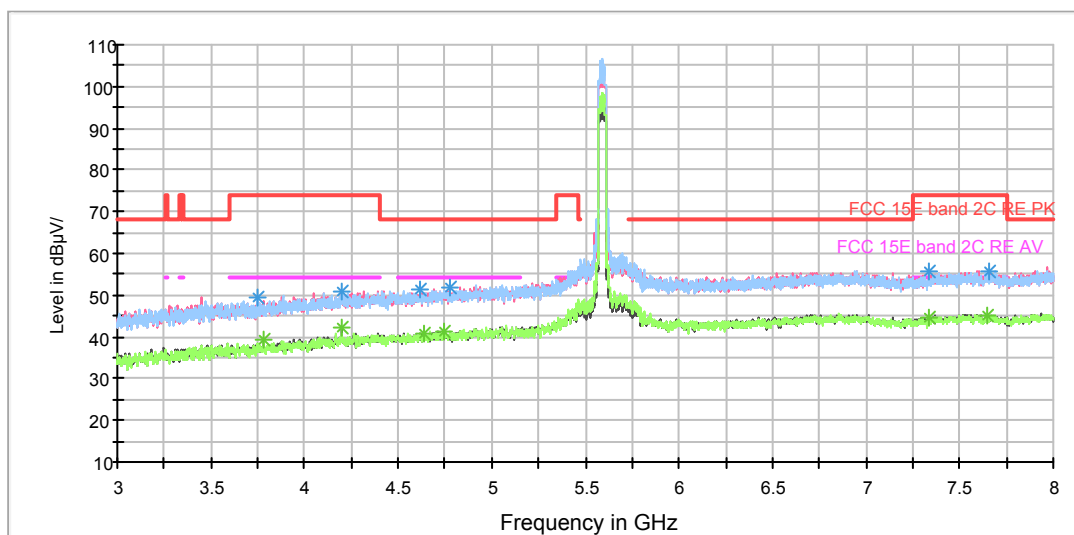
## 802.11n (HT40) CH118

### FCC RE 1G-18GHz PK+AV Class B



### Radiates Emission from 1GHz to 3GHz

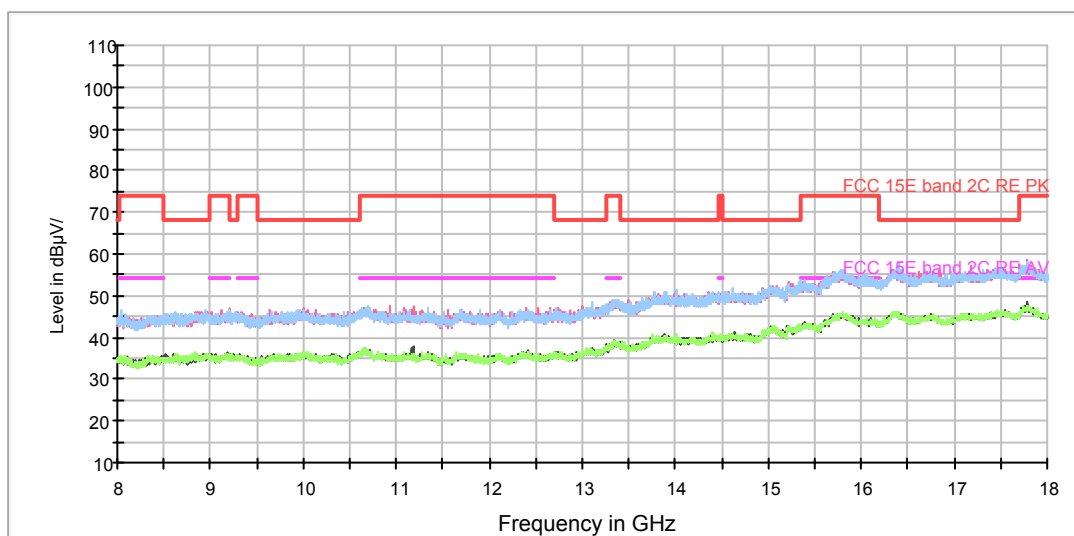
#### RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

### Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz



Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1385.250000	59.6	200.0	V	68.0	69.7	-10.1	14.4	74
4199.375000	51.0	200.0	V	187.0	40.8	10.2	23.0	74
4615.625000	51.1	100.0	H	78.0	40.2	10.9	17.2	68.3
4779.375000	51.9	100.0	H	186.0	40.6	11.3	16.4	68.3
7332.500000	55.5	100.0	H	38.0	40.2	15.3	18.5	74
7656.250000	55.7	200.0	V	264.0	39.7	16.0	18.3	74

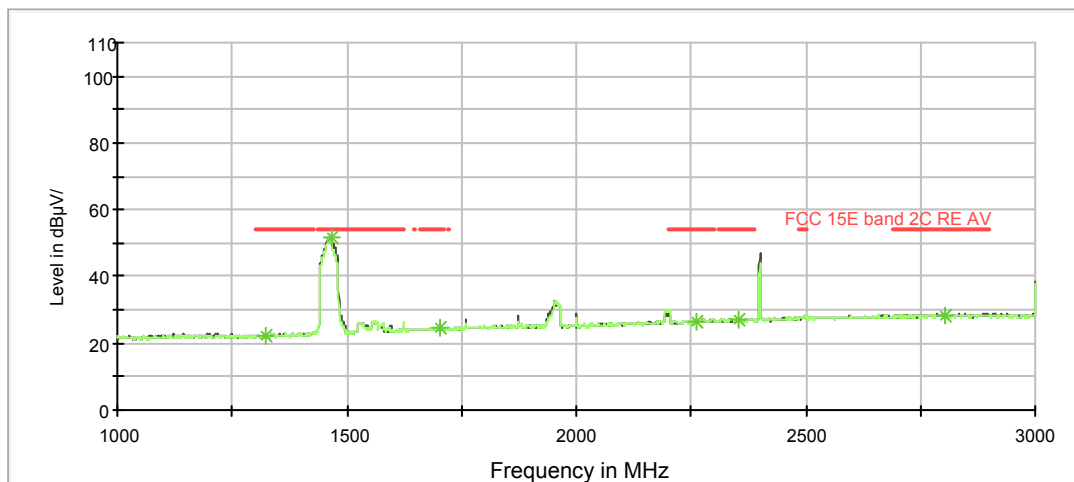
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1385.250000	49.7	200.0	V	68.0	59.8	-10.1	4.3	54
4200.000000	42.3	100.0	V	335.0	32.1	10.2	11.7	54
4636.875000	41.0	200.0	V	0.0	30.0	11.0	13.0	54
4744.375000	41.3	100.0	H	67.0	30.0	11.3	12.7	54
7339.375000	44.5	200.0	V	264.0	29.2	15.3	9.5	54
7644.375000	45.0	100.0	V	0.0	29.1	15.9	9.0	54

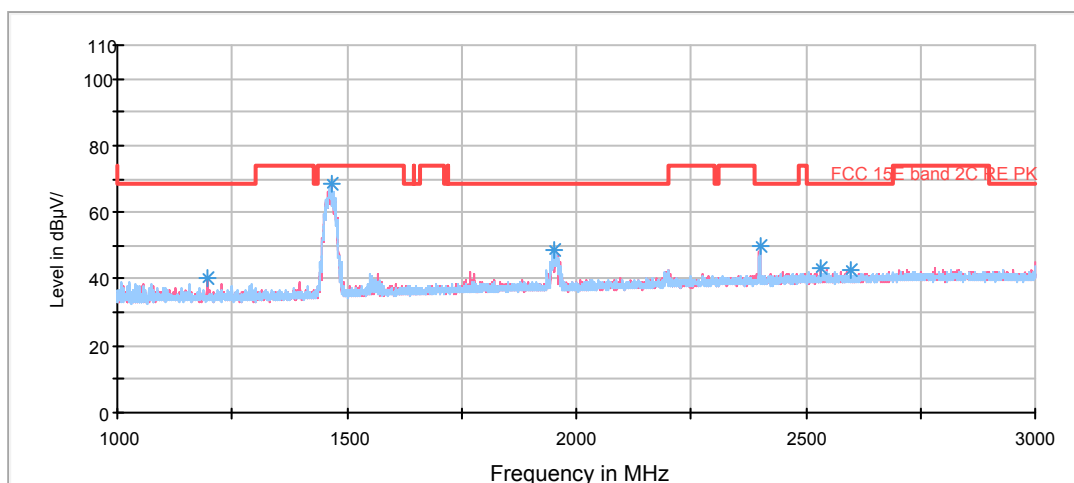
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

## 802.11n (HT40) CH134

### FCC RE 1G-18GHz PK+AV Class B AV

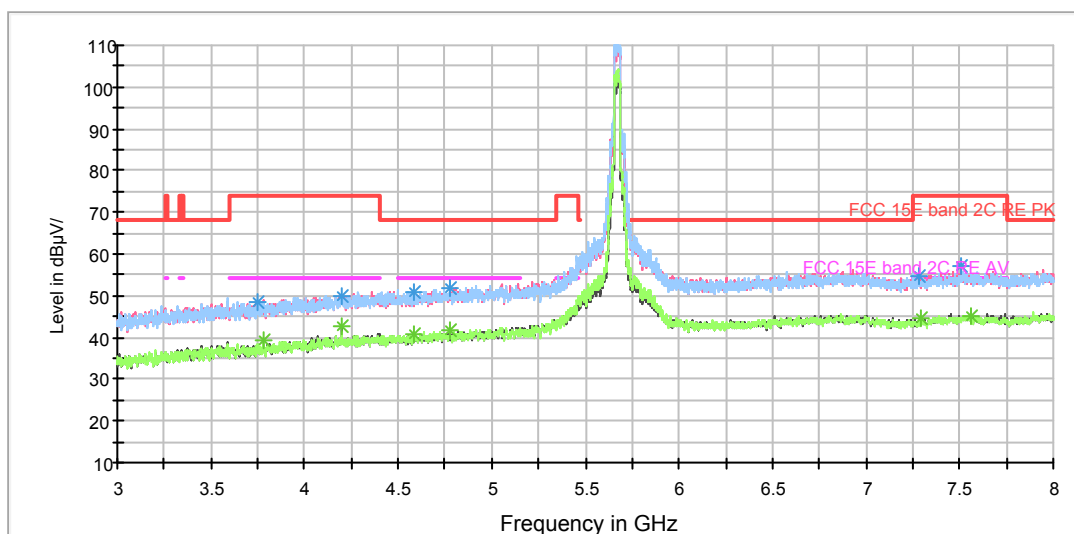


### FCC RE 1G-18GHz PK+AV Class B



Radiates Emission from 1GHz to 3GHz

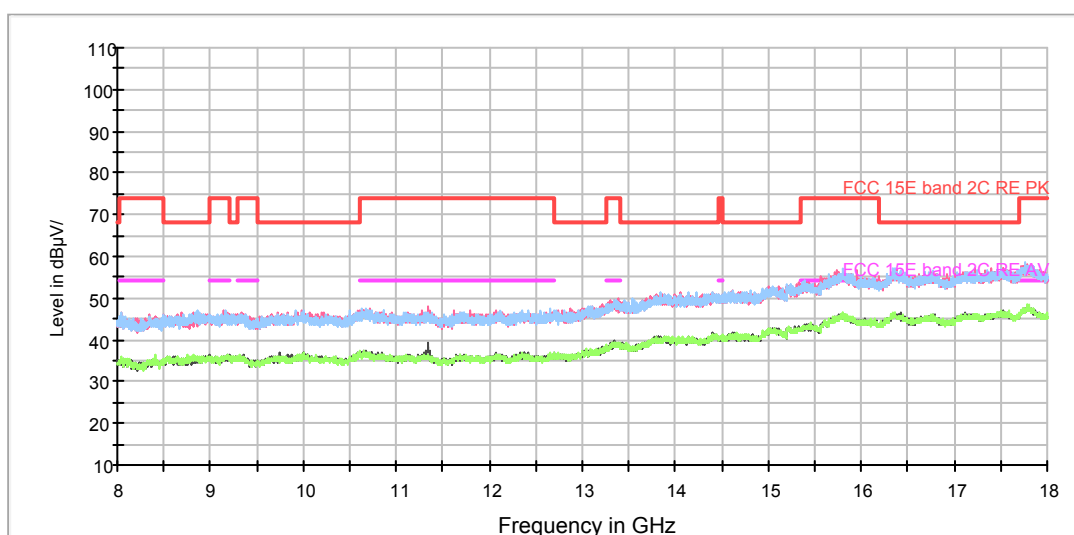
RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz



Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3746.250000	48.7	100.0	V	308.0	40.0	8.7	25.3	74
4200.000000	50.0	100.0	V	340.0	39.8	10.2	24.0	74
4581.875000	50.8	100.0	V	264.0	40.0	10.8	17.5	68.3
4773.750000	51.7	200.0	H	253.0	40.4	11.3	16.6	68.3
7281.250000	54.7	100.0	H	51.0	39.4	15.3	19.3	74
7510.625000	56.9	200.0	V	93.0	41.3	15.6	17.1	74

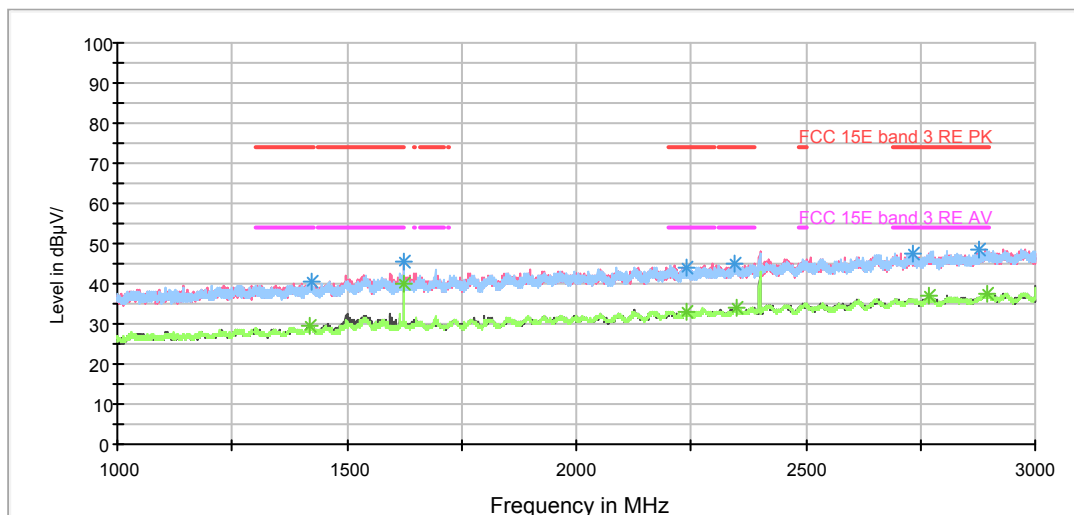
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1466.250000	68.5	200.0	V	77.0	78.2	-9.7	-14.5	54
4200.000000	42.8	100.0	V	340.0	32.6	10.2	11.2	54
4583.750000	40.6	100.0	V	73.0	29.8	10.8	13.4	54
4775.000000	41.7	100.0	H	287.0	30.4	11.3	12.3	54
7298.125000	44.5	100.0	H	0.0	29.2	15.3	9.5	54
7556.250000	45.2	100.0	V	210.0	29.5	15.7	8.8	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

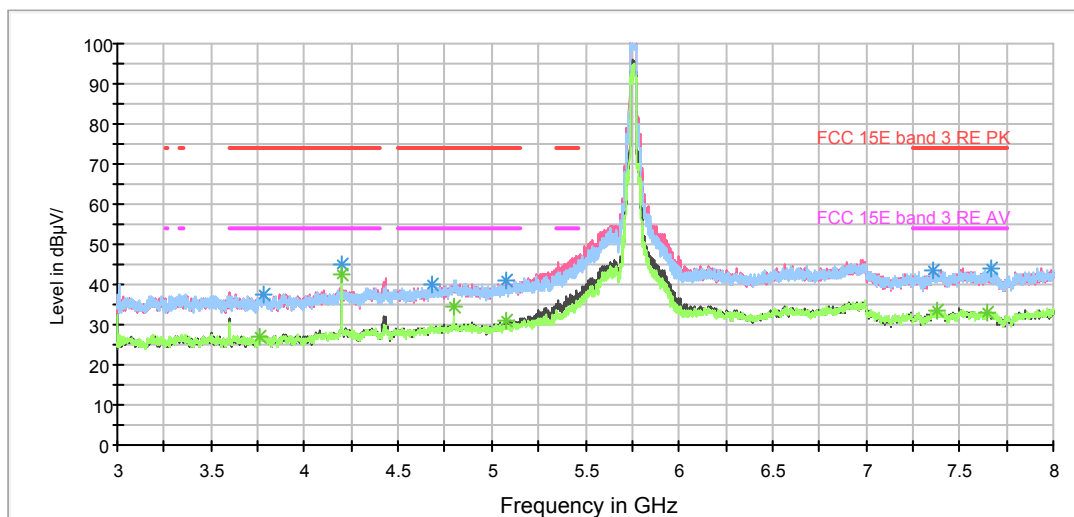
# 802.11n (HT40) CH151

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV

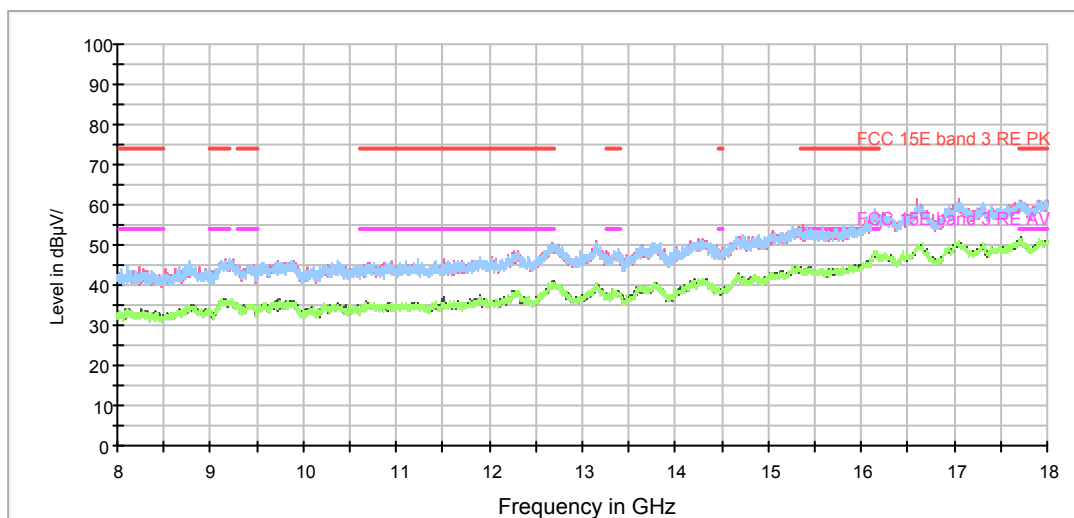


Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

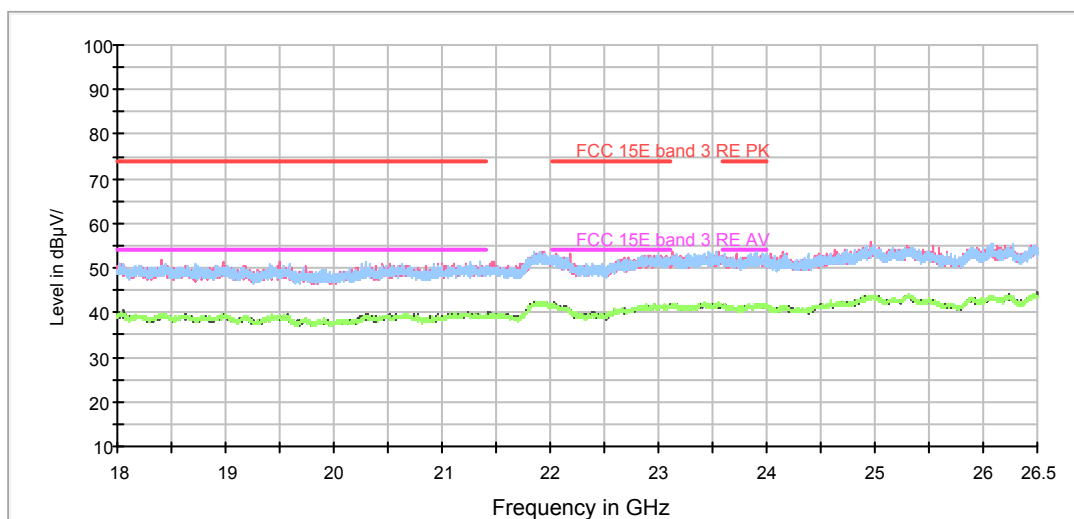


RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

BELL\_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3776.875000	37.6	100.0	V	205.0	39.4	-1.8	36.4	74
4200.000000	45.0	100.0	H	53.0	44.6	0.4	29.0	74
4680.625000	40.2	100.0	V	357.0	39.4	0.8	33.8	74
5074.375000	40.9	100.0	V	300.0	39.3	1.6	33.1	74
7360.625000	43.5	100.0	V	300.0	36.5	7.0	30.5	74
7665.625000	43.8	100.0	H	219.0	37.0	6.8	30.2	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

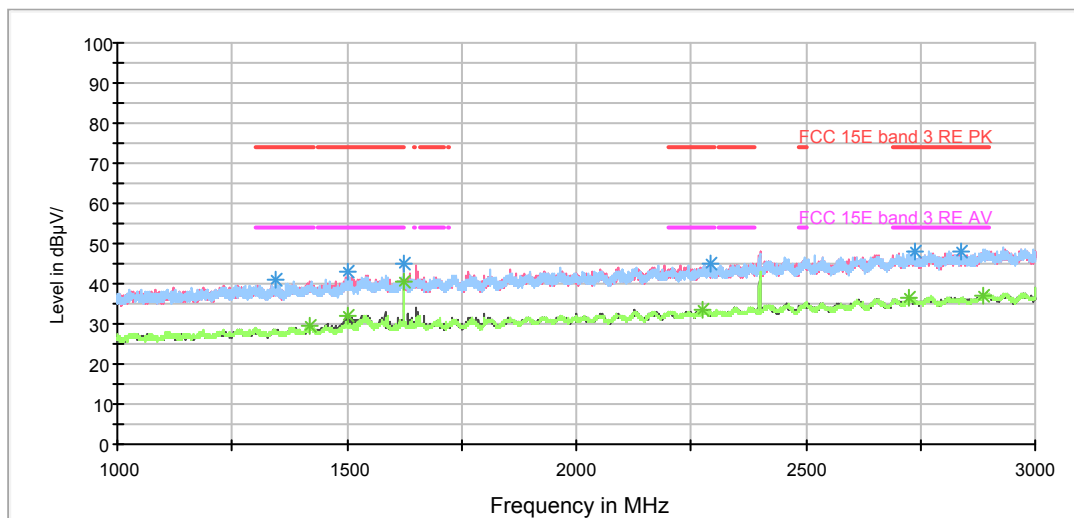


Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3755.625000	27.2	100.0	V	205.0	28.8	-1.6	26.8	54
4200.000000	42.3	100.0	H	53.0	41.9	0.4	11.7	54
4800.000000	34.7	100.0	H	341.0	33.4	1.3	19.3	54
5072.500000	31.0	100.0	V	156.0	29.4	1.6	23.0	54
7375.625000	33.3	100.0	H	34.0	26.2	7.1	20.7	54
7651.250000	33.2	100.0	H	171.0	26.3	6.9	20.8	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

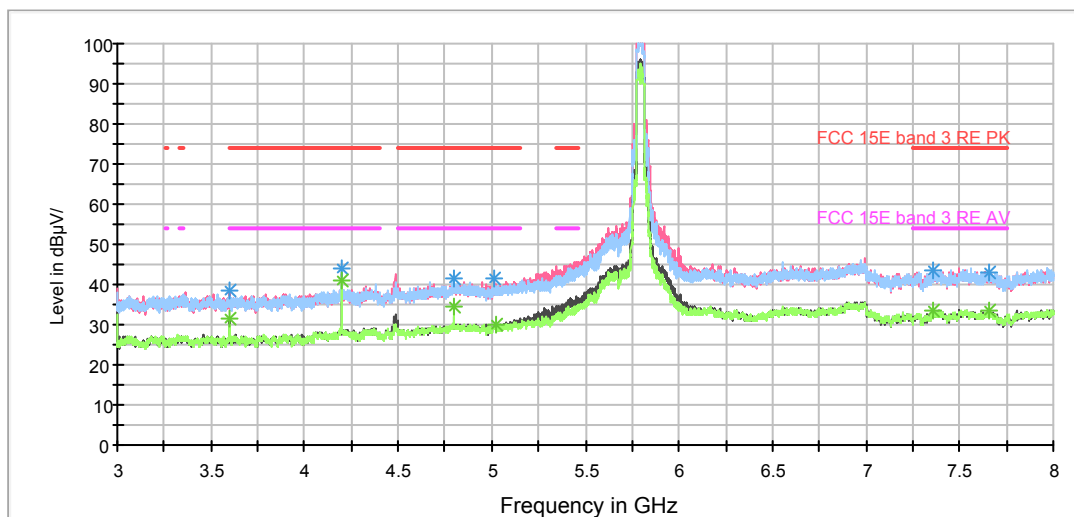
802.11n (HT40) CH159

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

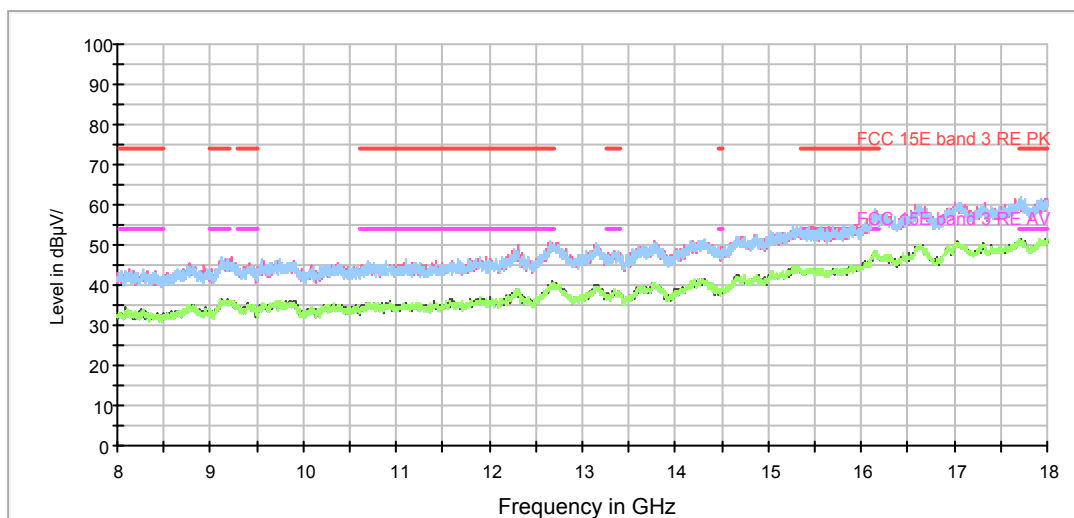
RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

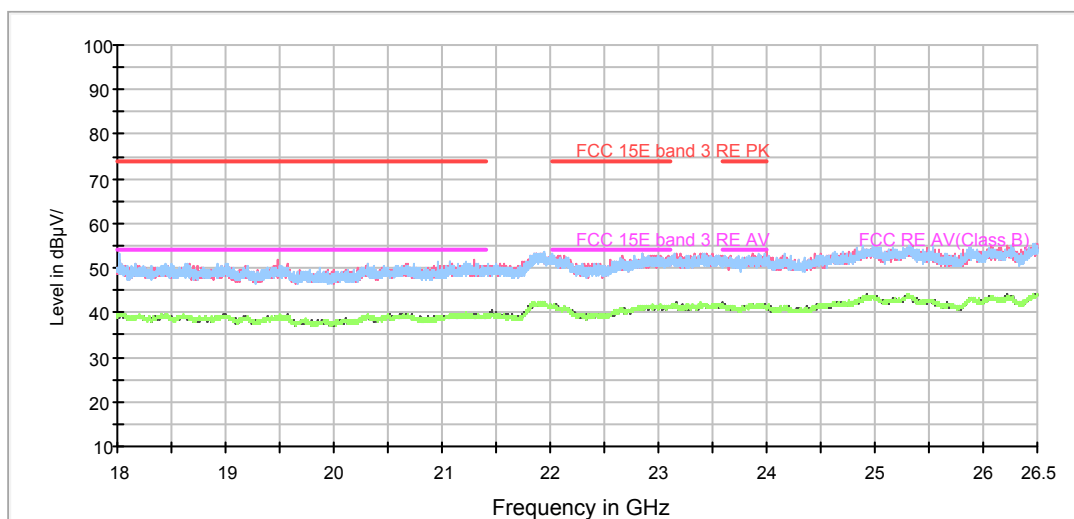
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

BELL\_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3600.000000	38.4	100.0	V	28.0	40.6	-2.2	35.6	74
4200.000000	43.8	100.0	H	51.0	43.4	0.4	30.2	74
4800.000000	41.6	100.0	H	341.0	40.3	1.3	32.4	74
5016.250000	41.3	100.0	V	100.0	39.7	1.6	32.7	74
7353.750000	43.3	100.0	V	326.0	36.3	7.0	30.7	74
7661.250000	43.2	100.0	V	141.0	36.4	6.8	30.8	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

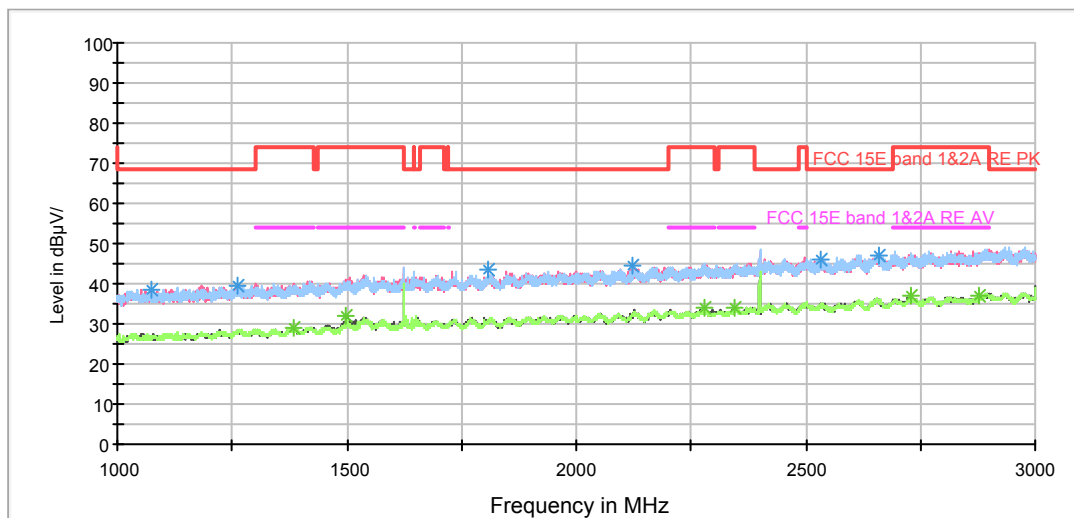


Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3600.000000	31.6	100.0	V	28.0	33.8	-2.2	22.4	54
4200.000000	40.8	100.0	H	51.0	40.4	0.4	13.2	54
4800.000000	34.7	100.0	H	341.0	33.4	1.3	19.3	54
5020.000000	29.9	100.0	V	206.0	28.3	1.6	24.1	54
7361.250000	33.4	100.0	H	0.0	26.4	7.0	20.6	54
7661.250000	33.3	100.0	V	141.0	26.5	6.8	20.7	54

**Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)**

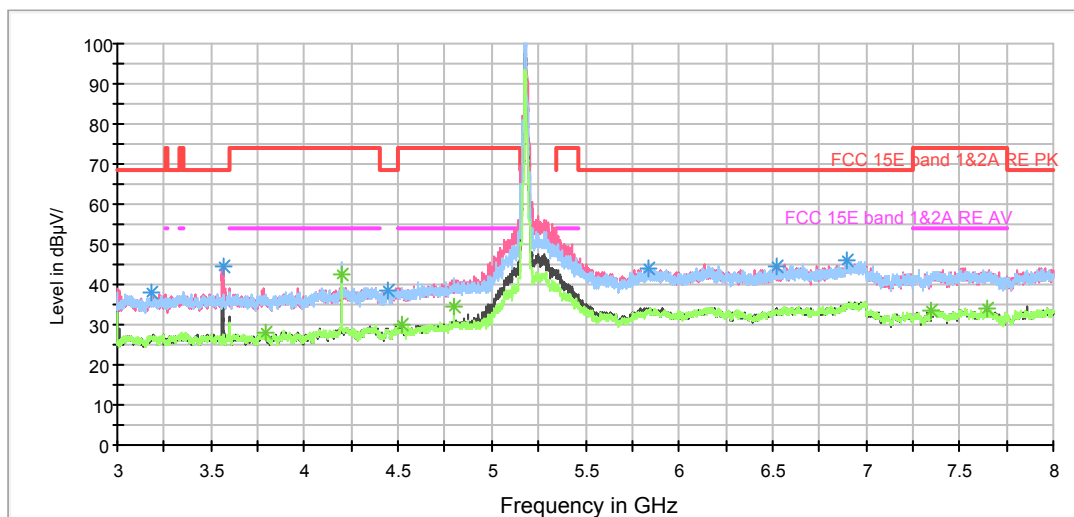
802.11ac (HT20) CH36

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

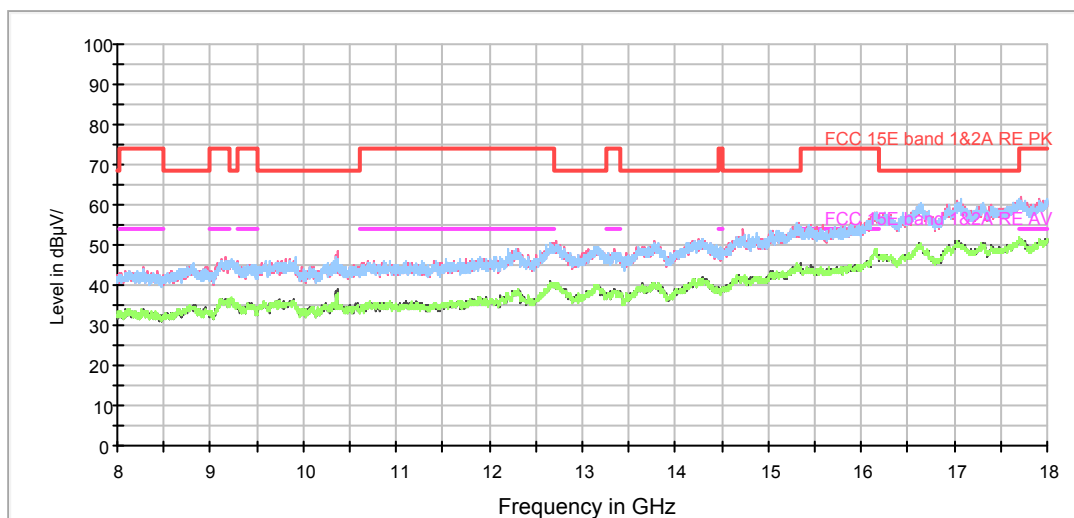
RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

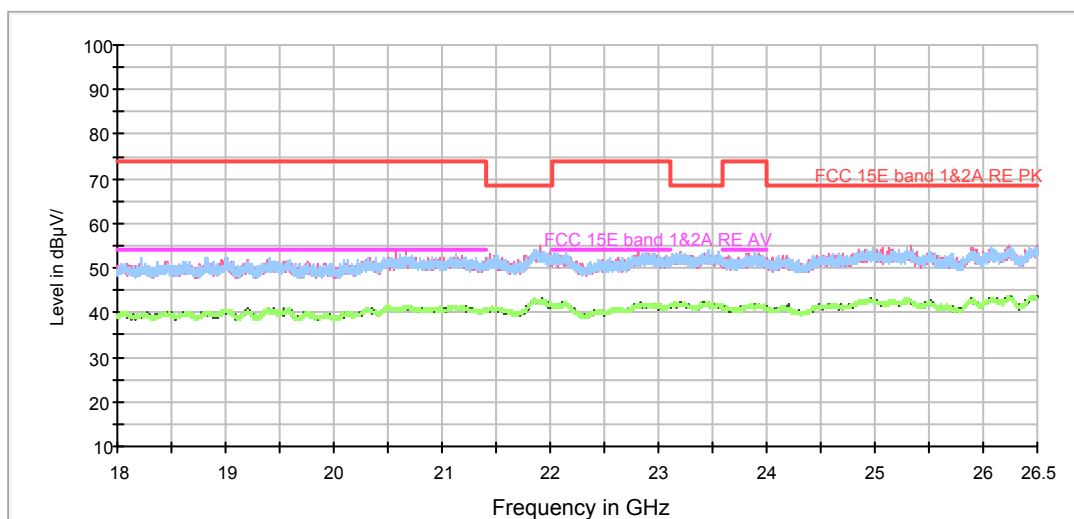
Radiates Emission from 3GHz to 8GHz

## RE 3-18GHz PK+AV



## Radiates Emission from 8GHz to 18GHz

## BELL\_RE 18-26.5GHz PK+AV



## Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3183.750000	37.9	100.0	H	110.0	40.8	-2.9	30.4	68.3
3565.625000	44.6	100.0	V	181.0	46.7	-2.1	23.7	68.3
4445.625000	38.7	100.0	V	0.0	38.5	0.2	29.6	68.3
5834.375000	44.2	100.0	V	206.0	39.7	4.5	24.1	68.3
6520.000000	44.4	100.0	V	340.0	38.9	5.5	23.9	68.3
6893.750000	45.8	100.0	V	332.0	39.6	6.2	22.5	68.3

**Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)**



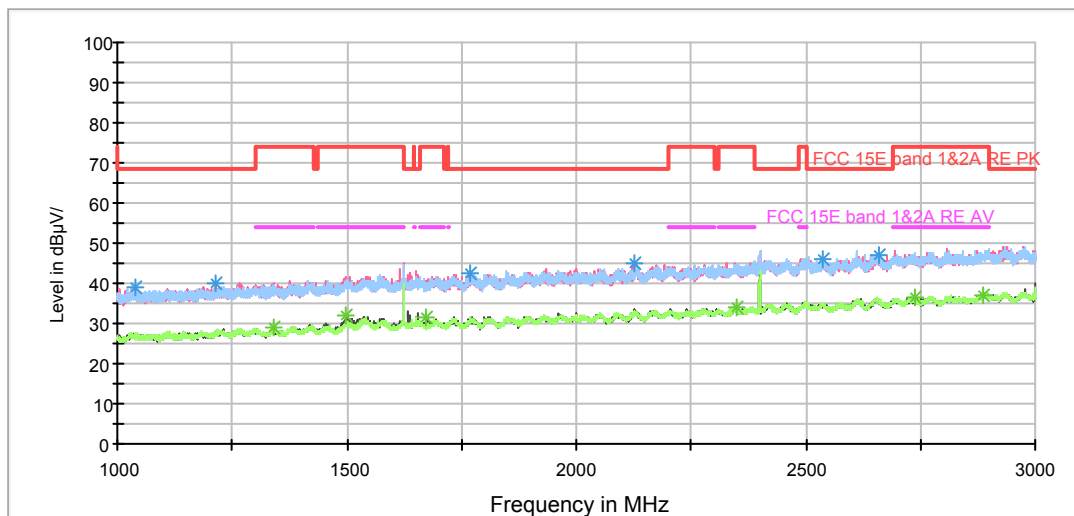
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3788.750000	27.8	100.0	H	70.0	29.5	-1.7	26.2	54
4200.000000	42.4	100.0	H	54.0	42.0	0.4	11.6	54
4520.000000	29.8	100.0	V	293.0	29.3	0.5	24.2	54
4800.000000	34.3	100.0	H	0.0	33.0	1.3	19.7	54
7347.500000	33.6	100.0	V	0.0	26.6	7.0	20.4	54
7650.625000	33.8	100.0	V	254.0	26.9	6.9	20.2	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)



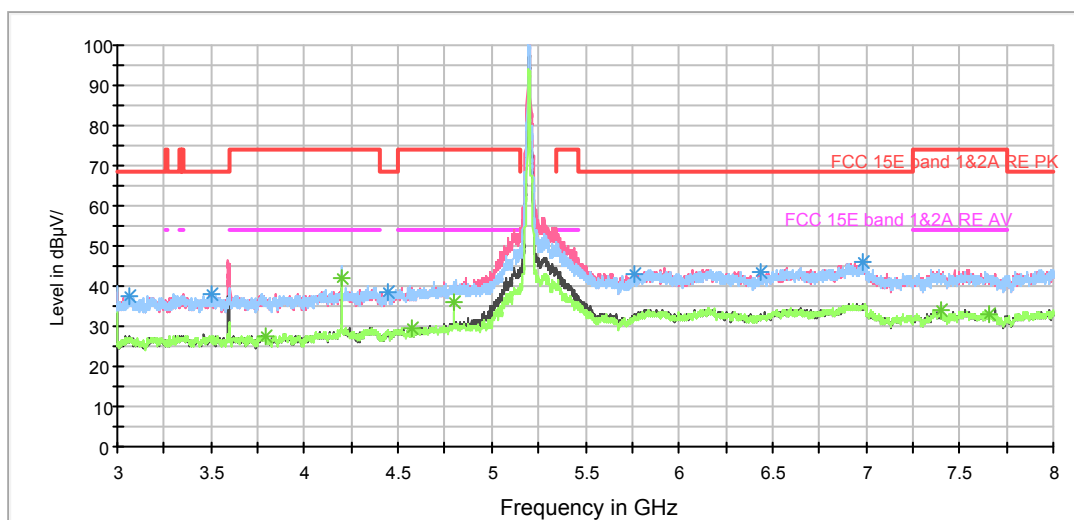
# 802.11ac (HT20) CH40

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

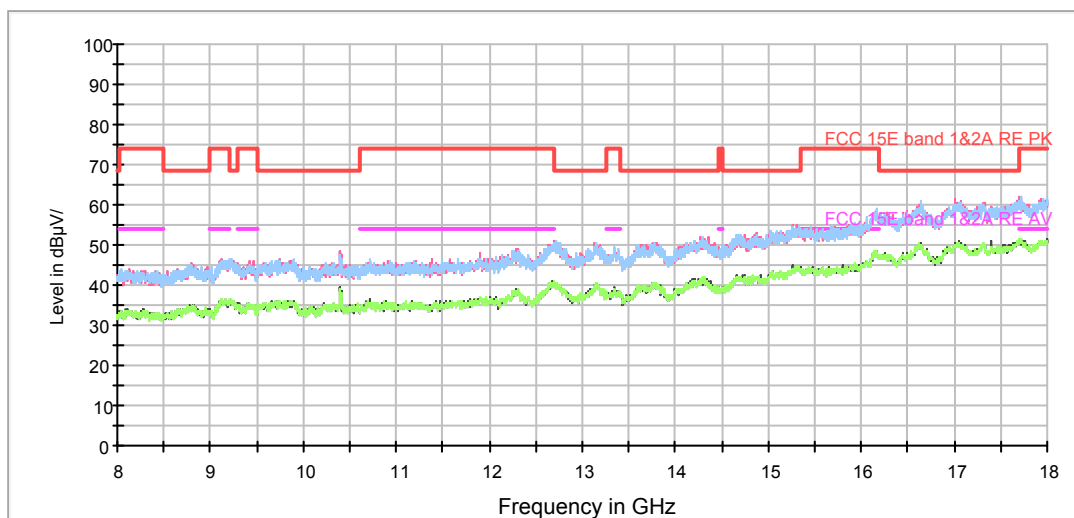
RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

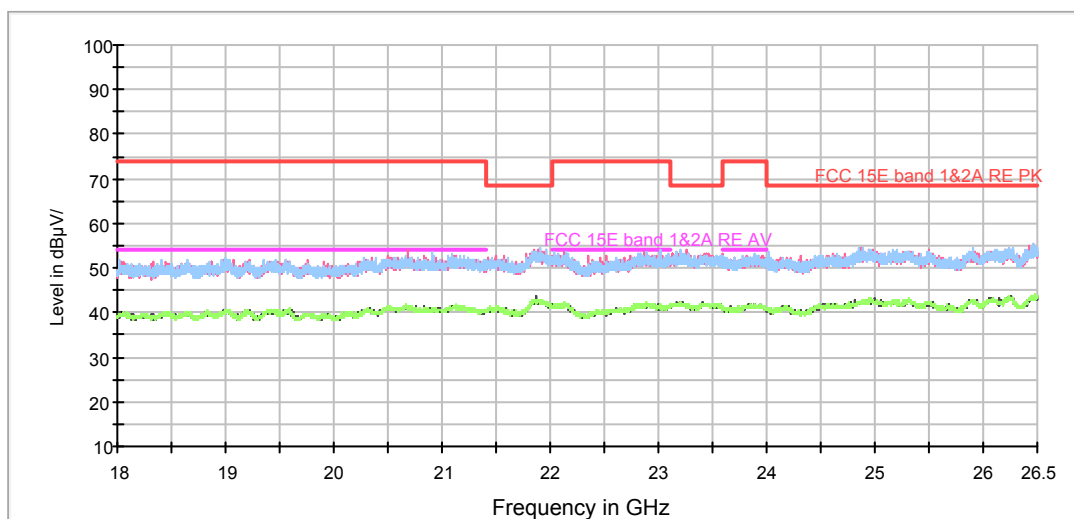
Radiates Emission from 3GHz to 8GHz

## RE 3-18GHz PK+AV



## Radiates Emission from 8GHz to 18GHz

## BELL\_RE 18-26.5GHz PK+AV



## Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3068.750000	37.3	100.0	V	243.0	40.4	-3.1	31.0	68.3
3508.125000	38.1	100.0	H	0.0	40.1	-2.0	30.2	68.3
4447.500000	38.5	100.0	V	0.0	38.3	0.2	29.8	68.3
5760.625000	43.1	100.0	V	55.0	39.6	3.5	25.2	68.3
6433.125000	43.4	100.0	V	0.0	38.5	4.9	24.9	68.3
6980.000000	45.9	100.0	V	1.0	39.5	6.4	22.4	68.3

**Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)**

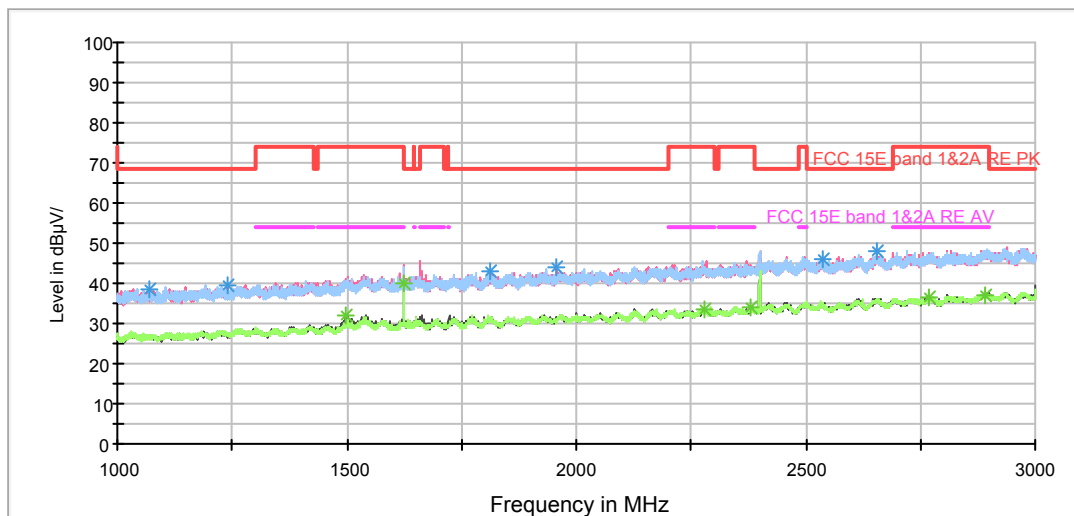


Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3792.500000	27.7	100.0	H	56.0	29.4	-1.7	26.3	54
4200.000000	42.2	100.0	H	48.0	41.8	0.4	11.8	54
4570.625000	29.3	100.0	H	8.0	28.4	0.9	24.7	54
4800.000000	35.9	100.0	H	342.0	34.6	1.3	18.1	54
7396.250000	33.9	100.0	V	338.0	27.1	6.8	20.1	54
7655.625000	33.2	100.0	V	282.0	26.3	6.9	20.8	54

**Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)**

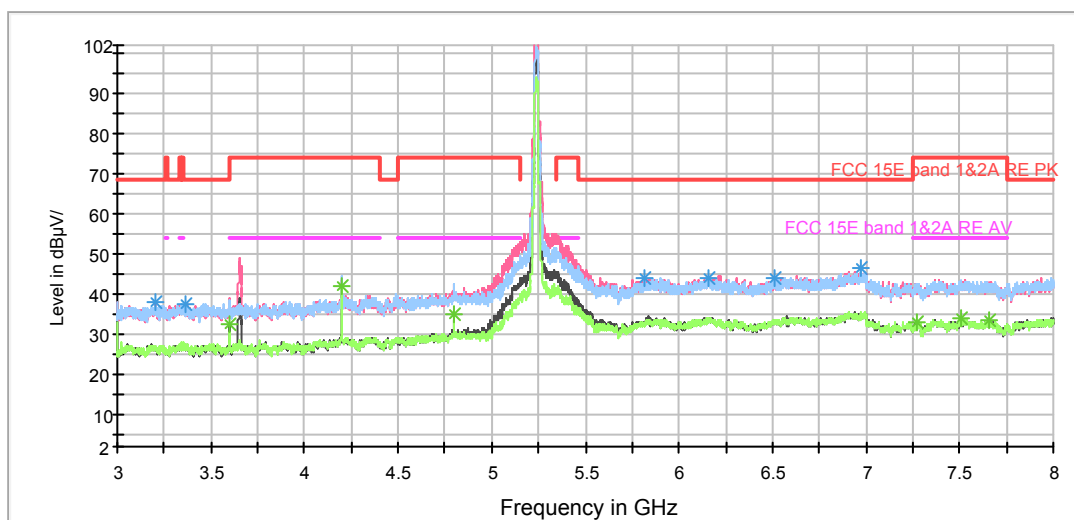
## 802.11ac (HT20) CH48

RE 1G-3GHz PK+AV



### Radiates Emission from 1GHz to 3GHz

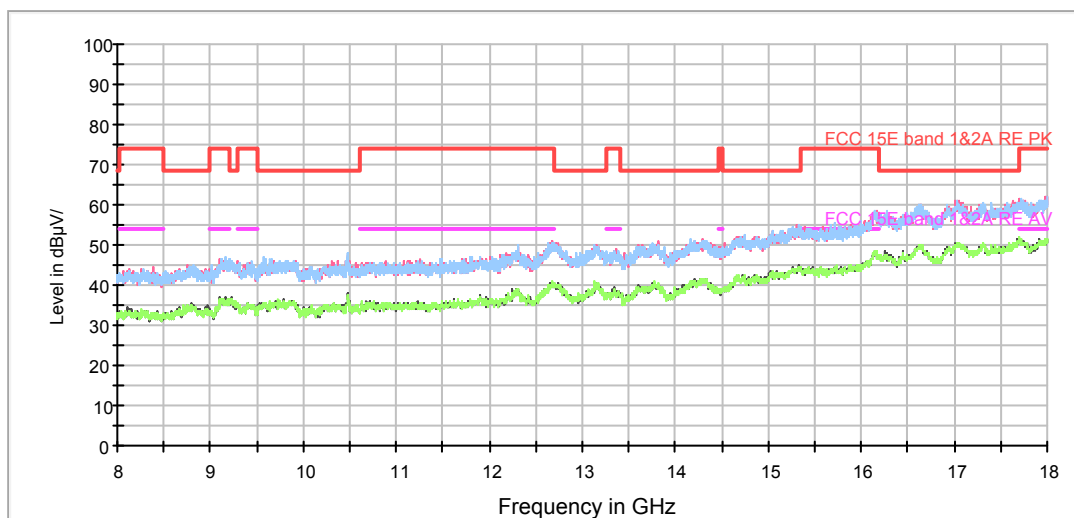
RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

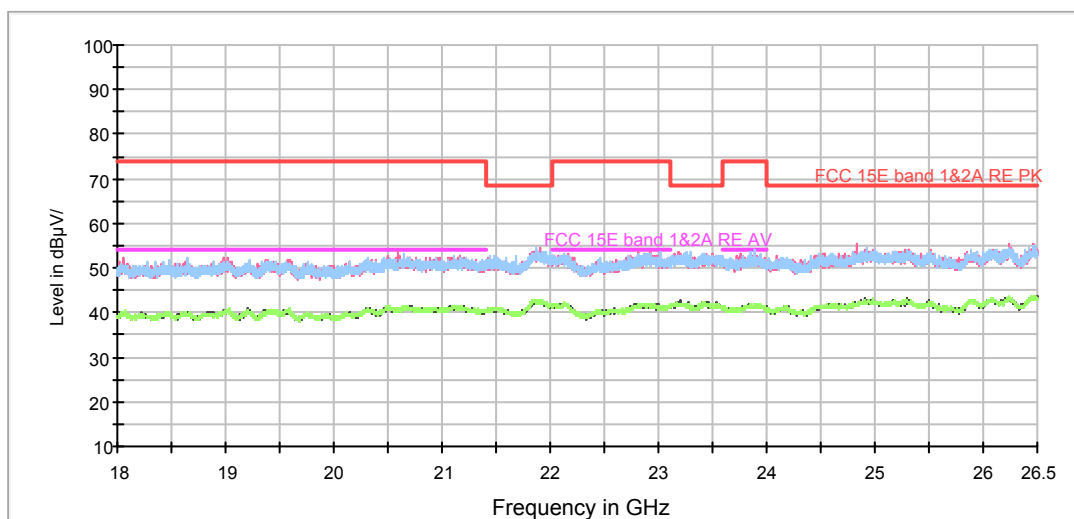
### Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

BELL\_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3200.000000	38.1	100.0	V	331.0	40.9	-2.8	30.2	68.3
3360.000000	37.5	100.0	H	139.0	39.8	-2.3	30.8	68.3
5818.750000	44.1	100.0	H	114.0	39.6	4.5	24.2	68.3
6153.125000	44.1	100.0	H	52.0	38.5	5.6	24.2	68.3
6513.750000	44.0	100.0	V	292.0	38.6	5.4	24.3	68.3
6975.625000	46.5	100.0	H	114.0	40.2	6.3	21.8	68.3

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

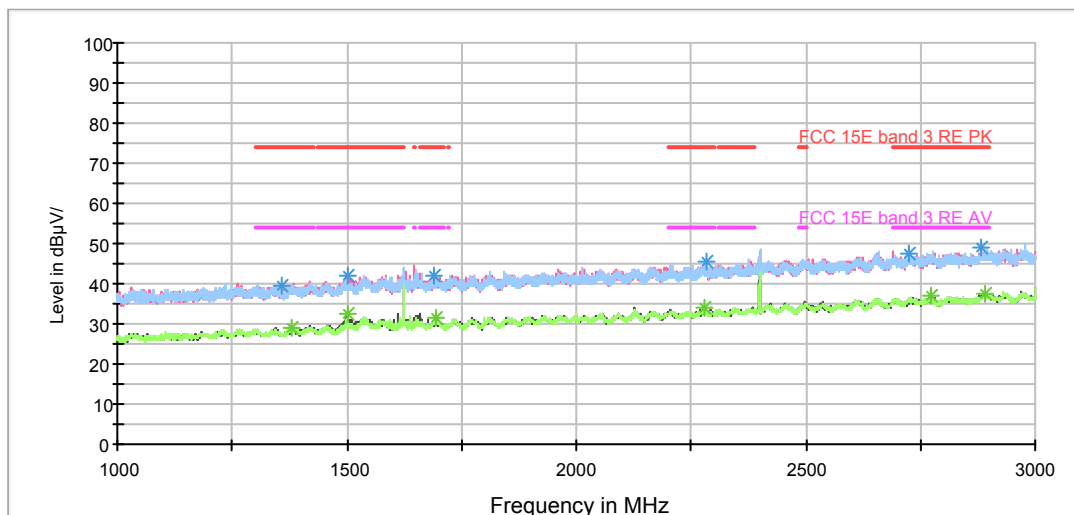


Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3600.000000	32.6	100.0	V	0.0	34.8	-2.2	21.4	54
4200.000000	41.9	100.0	H	52.0	41.5	0.4	12.1	54
4800.000000	35.0	100.0	H	210.0	33.7	1.3	19.0	54
7271.875000	33.0	100.0	V	137.0	26.0	7.0	21.0	54
7504.375000	33.8	100.0	V	308.0	26.9	6.9	20.2	54
7661.250000	33.4	100.0	V	355.0	26.6	6.8	20.6	54

**Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)**

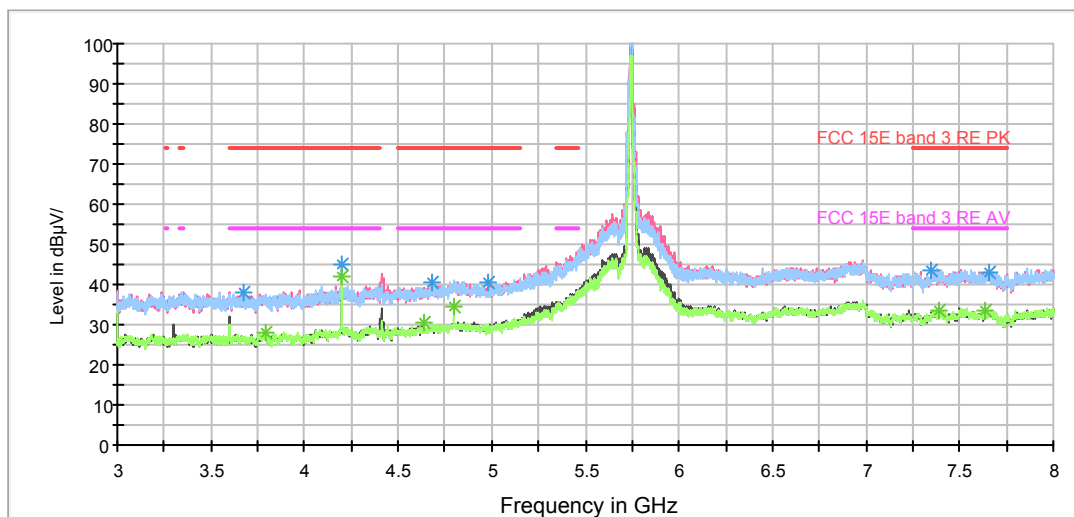
802.11ac (HT20) CH149

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

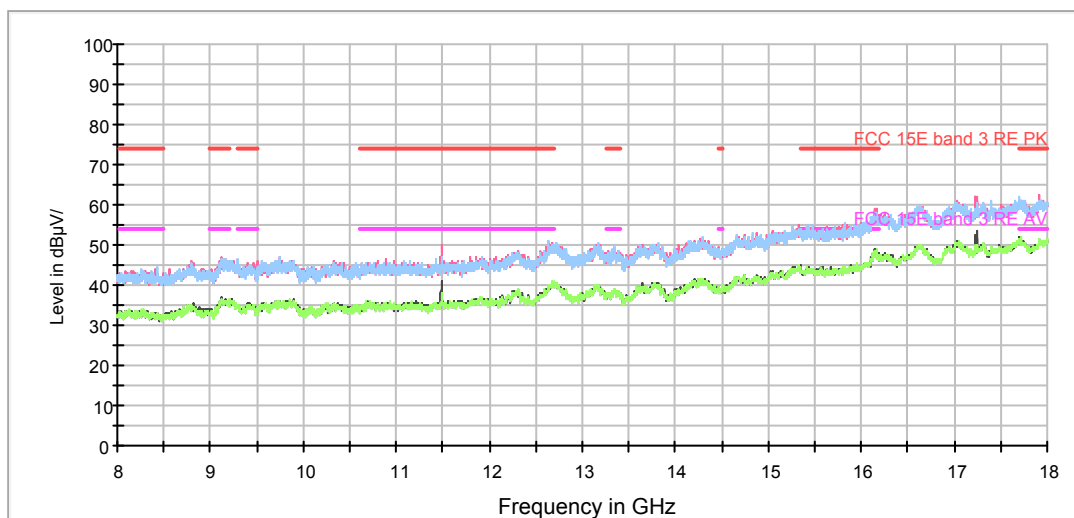
RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

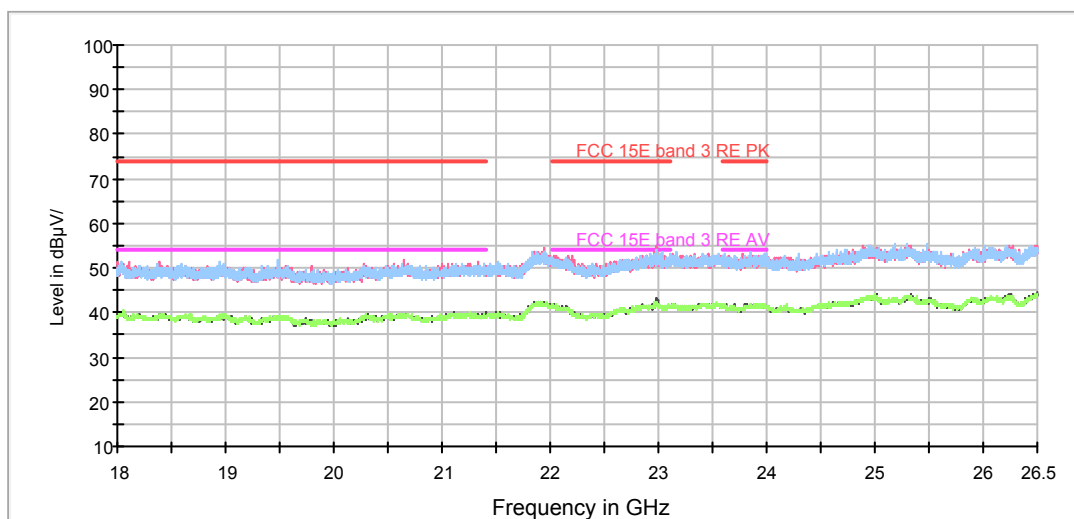
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

BELL\_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3671.875000	38.1	100.0	H	65.0	39.9	-1.8	35.9	74
4200.000000	44.8	100.0	H	50.0	44.4	0.4	29.2	74
4681.875000	40.4	100.0	H	0.0	39.6	0.8	33.6	74
4985.000000	40.3	100.0	H	81.0	38.6	1.7	33.7	74
7348.750000	43.3	100.0	V	317.0	36.3	7.0	30.7	74
7662.500000	43.0	100.0	H	89.0	36.2	6.8	31.0	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)



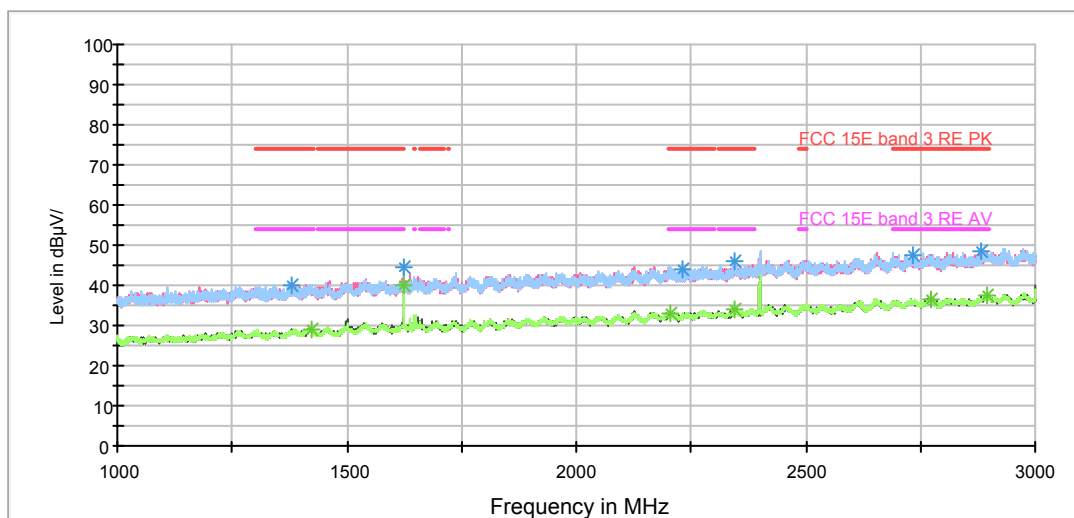


Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3787.500000	27.9	100.0	V	228.0	29.7	-1.8	26.1	54
4200.000000	41.9	100.0	H	50.0	41.5	0.4	12.1	54
4640.000000	30.5	100.0	H	305.0	29.5	1.0	23.5	54
4800.000000	34.7	100.0	H	0.0	33.4	1.3	19.3	54
7387.500000	33.7	100.0	V	180.0	26.7	7.0	20.3	54
7638.750000	33.7	100.0	H	26.0	26.8	6.9	20.3	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

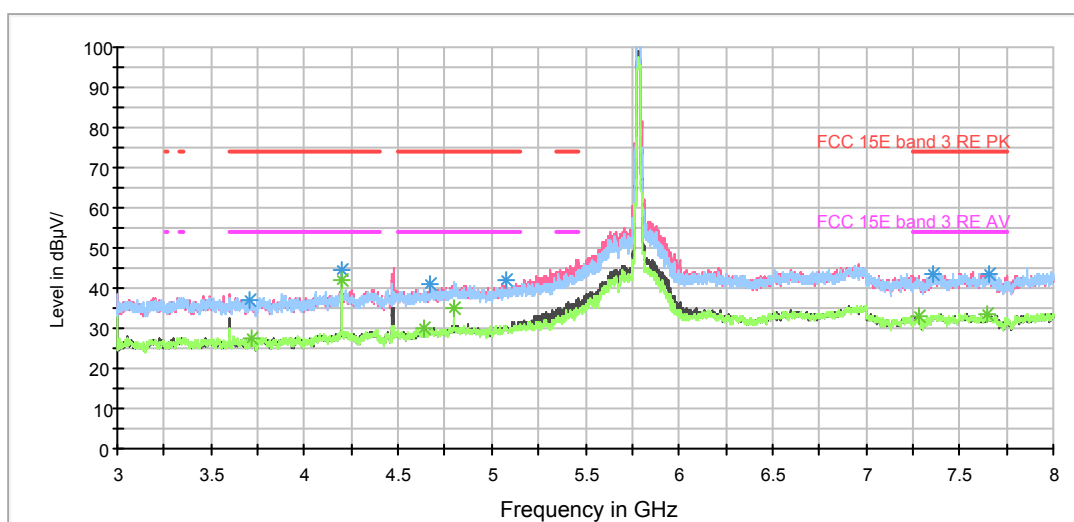
## 802.11ac (HT20) CH157

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

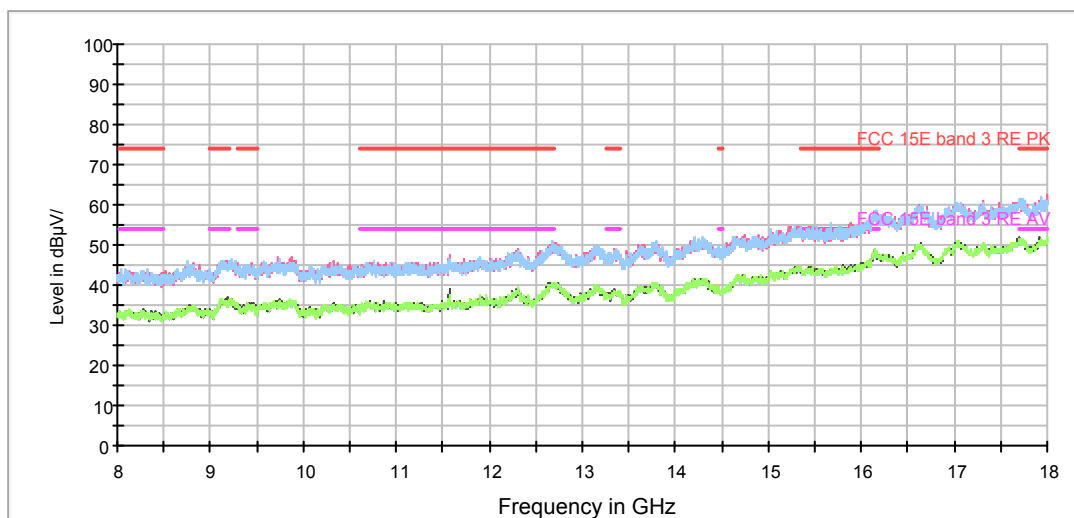
RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

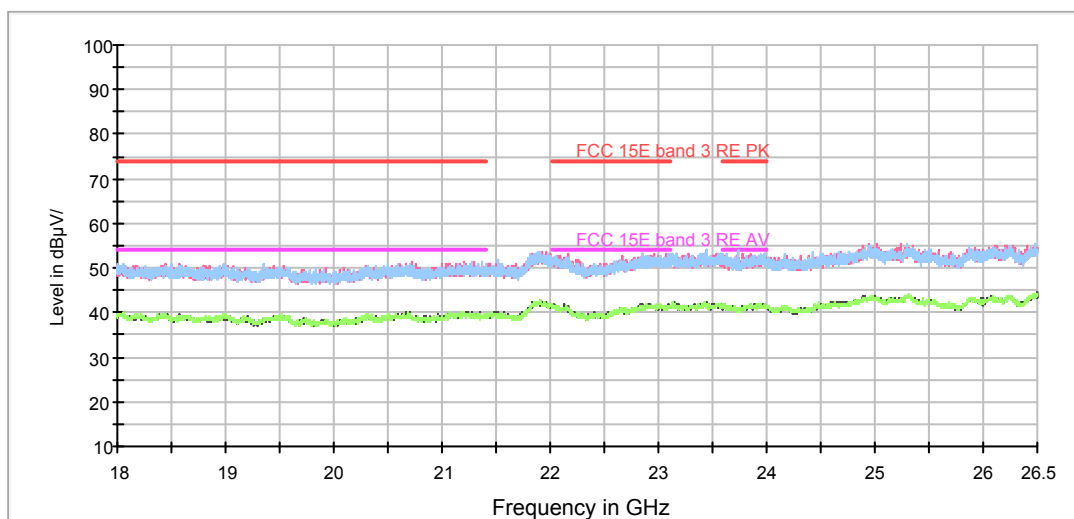
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

BELL\_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3707.500000	37.2	100.0	H	162.0	38.8	-1.6	36.8	74
4200.000000	44.6	100.0	H	52.0	44.2	0.4	29.4	74
4670.000000	40.8	100.0	V	265.0	40.0	0.8	33.2	74
5073.125000	42.0	100.0	V	327.0	40.4	1.6	32.0	74
7352.500000	43.5	100.0	V	129.0	36.5	7.0	30.5	74
7652.500000	43.5	100.0	V	249.0	36.6	6.9	30.5	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

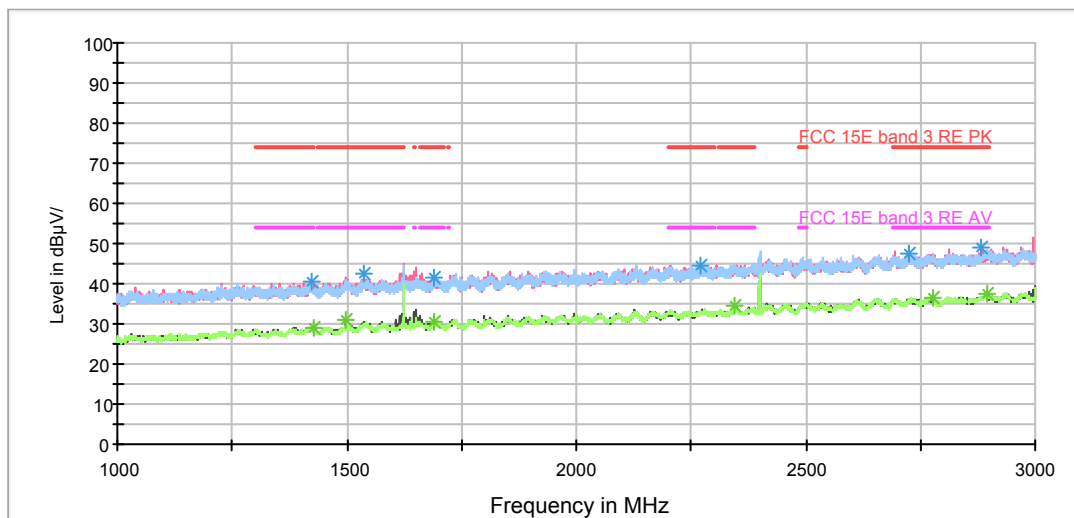


Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3714.375000	27.4	100.0	V	336.0	29.0	-1.6	26.6	54
4200.000000	42.1	100.0	H	52.0	41.7	0.4	11.9	54
4639.375000	29.9	100.0	V	217.0	28.9	1.0	24.1	54
4800.000000	35.1	100.0	H	0.0	33.8	1.3	18.9	54
7285.000000	33.2	100.0	H	98.0	26.2	7.0	20.8	54
7650.000000	33.4	100.0	V	233.0	26.5	6.9	20.6	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

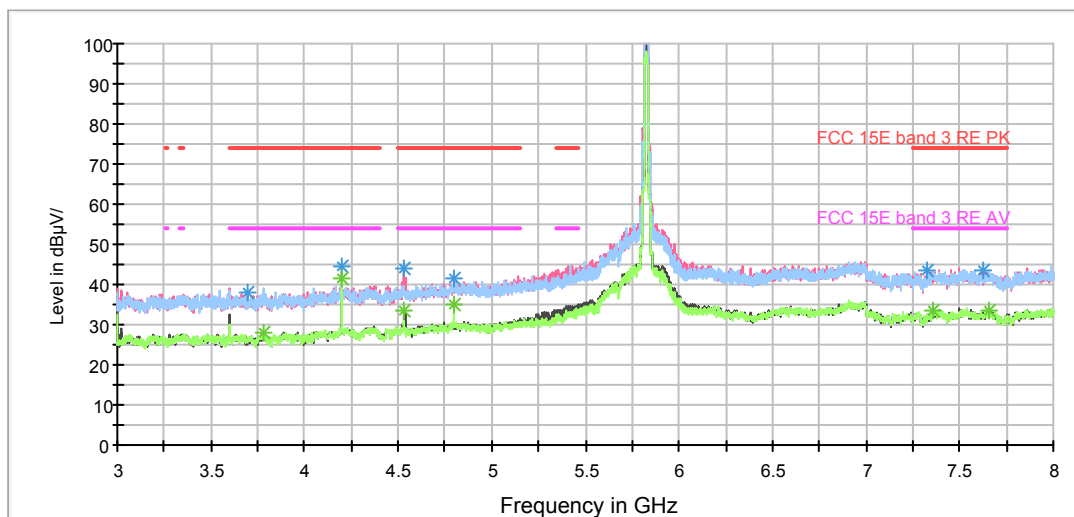
802.11ac (HT20) CH165

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

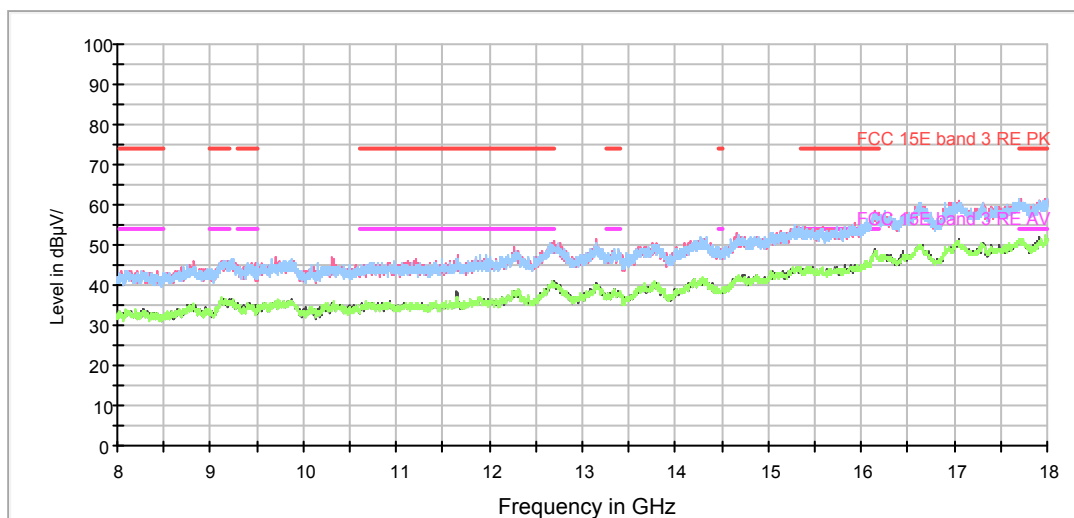
RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

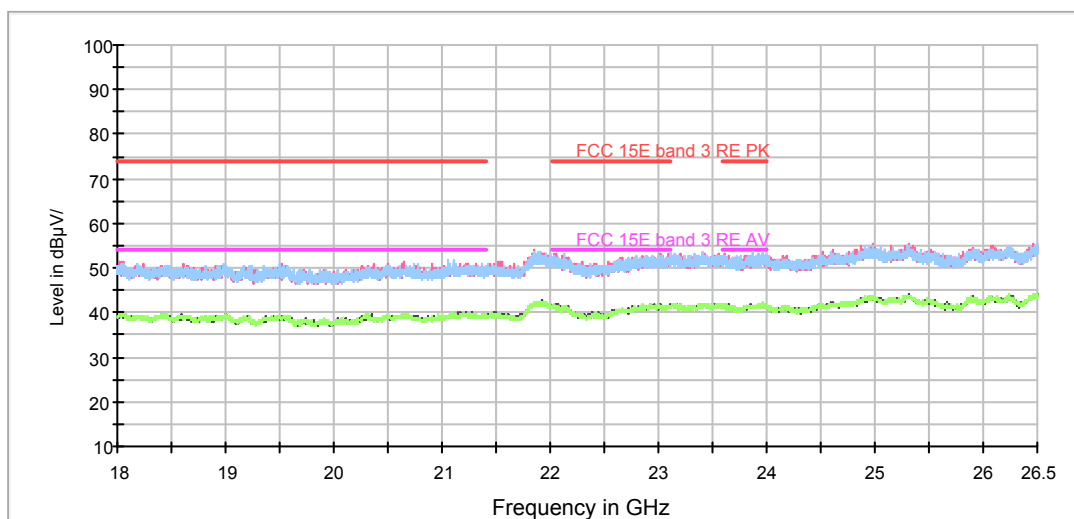
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

BELL\_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3694.375000	37.8	100.0	V	0.0	39.4	-1.6	36.2	74
4200.000000	44.3	100.0	H	50.0	43.9	0.4	29.7	74
4535.000000	44.2	100.0	V	277.0	43.6	0.6	29.8	74
4800.625000	41.5	100.0	H	252.0	40.2	1.3	32.5	74
7328.750000	43.5	100.0	V	336.0	36.5	7.0	30.5	74
7625.625000	43.7	100.0	V	105.0	36.9	6.8	30.3	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

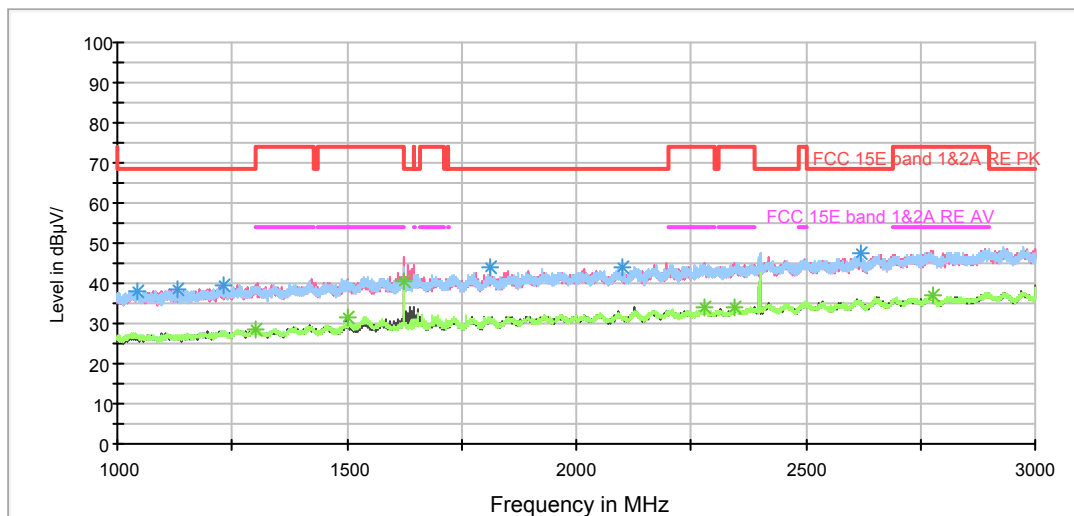


Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3778.125000	27.8	100.0	V	336.0	29.6	-1.8	26.2	54
4200.000000	41.7	100.0	H	50.0	41.3	0.4	12.3	54
4533.750000	33.7	100.0	V	97.0	33.1	0.6	20.3	54
4800.000000	35.1	100.0	H	0.0	33.8	1.3	18.9	54
7356.250000	33.4	100.0	V	352.0	26.4	7.0	20.6	54
7658.125000	33.5	100.0	H	234.0	26.7	6.8	20.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

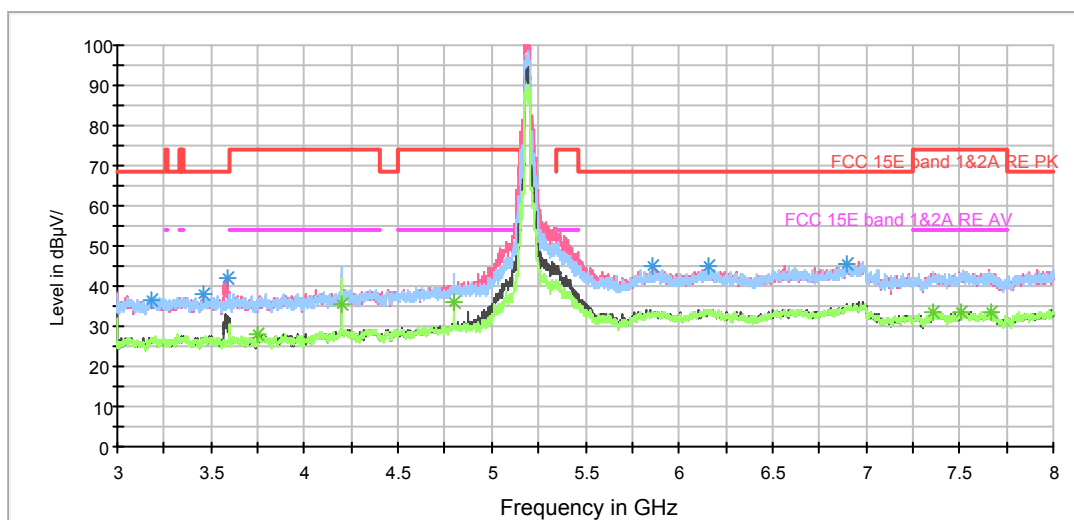
# 802.11ac (HT40) CH38

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV

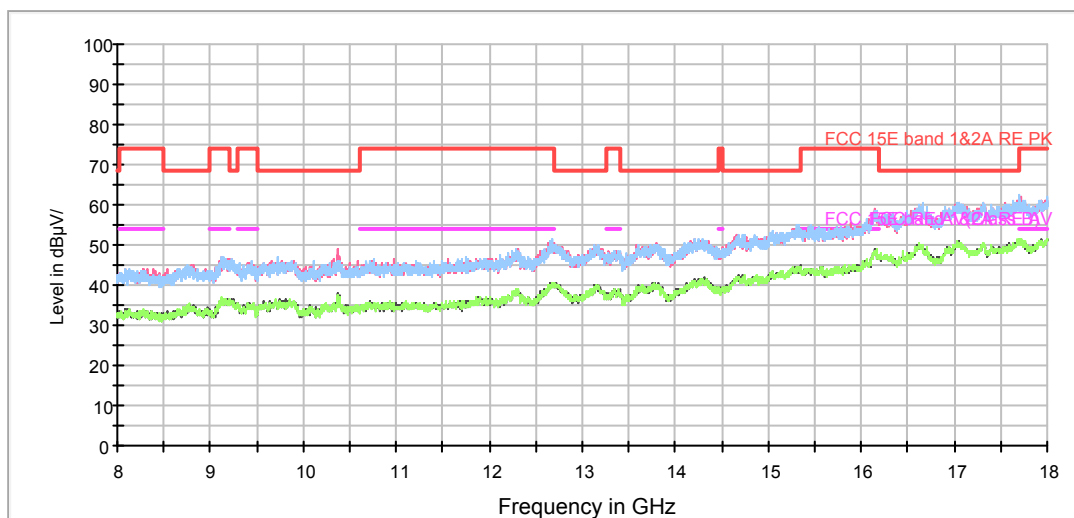


Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

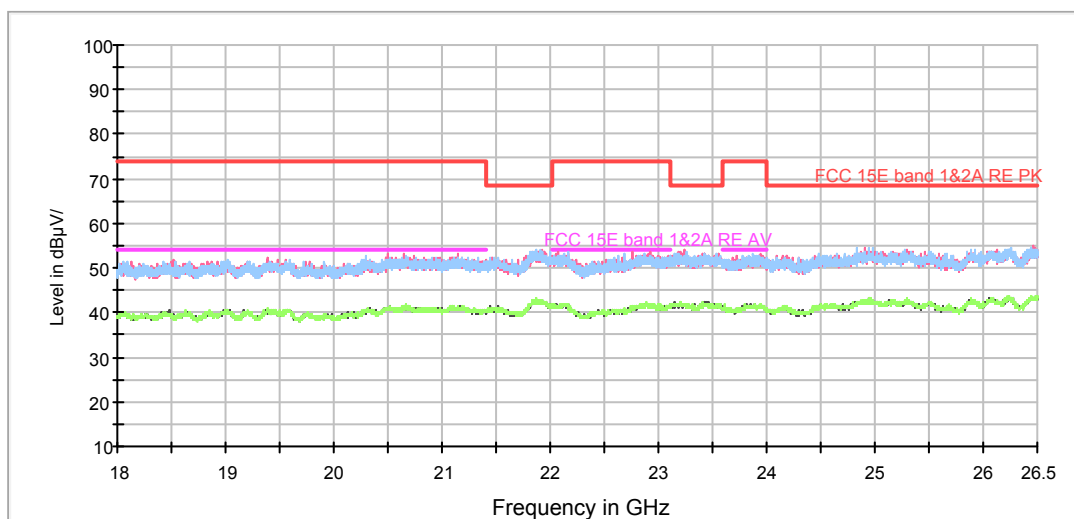


RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

BELL\_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3176.875000	36.3	100.0	H	0.0	39.2	-2.9	32.0	68.3
3463.125000	38.1	100.0	V	0.0	40.3	-2.2	30.2	68.3
3583.750000	41.9	100.0	V	179.0	44.2	-2.3	26.4	68.3
5856.250000	44.8	100.0	H	214.0	40.0	4.8	23.5	68.3
6157.500000	44.8	100.0	V	245.0	39.2	5.6	23.5	68.3
6897.500000	45.6	100.0	V	325.0	39.4	6.2	22.7	68.3

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

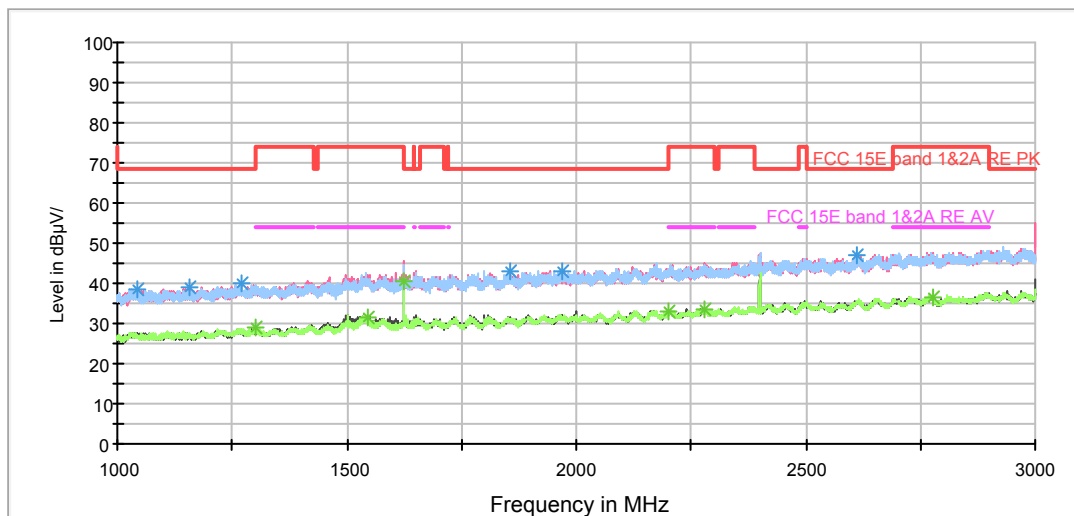


Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3749.375000	27.8	100.0	V	146.0	29.5	-1.7	26.2	54
4200.625000	35.5	100.0	V	65.0	35.1	0.4	18.5	54
4800.000000	35.8	100.0	H	352.0	34.5	1.3	18.2	54
7361.250000	33.7	100.0	V	245.0	26.7	7.0	20.3	54
7505.000000	33.7	100.0	H	156.0	26.8	6.9	20.3	54
7663.125000	33.5	100.0	H	172.0	26.7	6.8	20.5	54

**Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)**

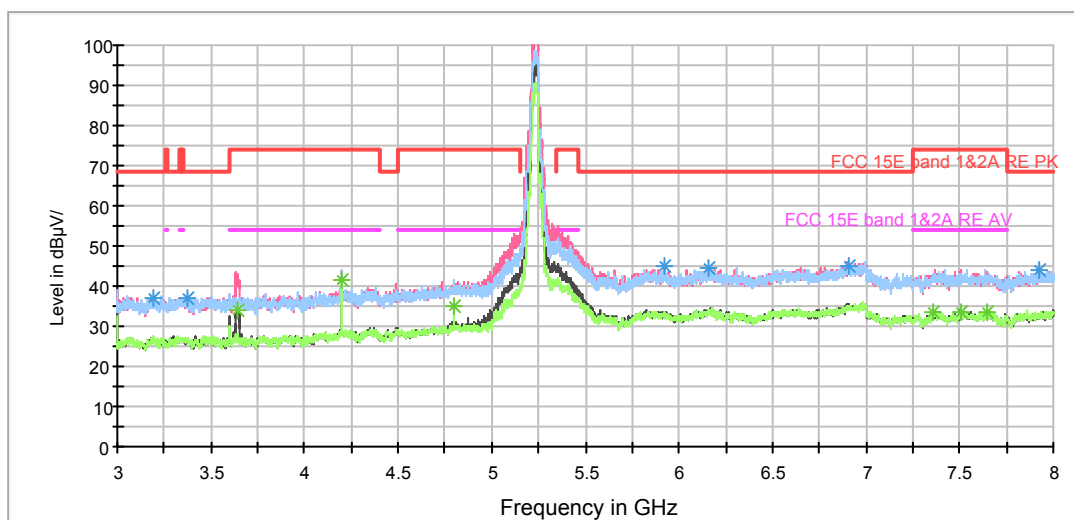
## 802.11ac (HT40) CH46

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV

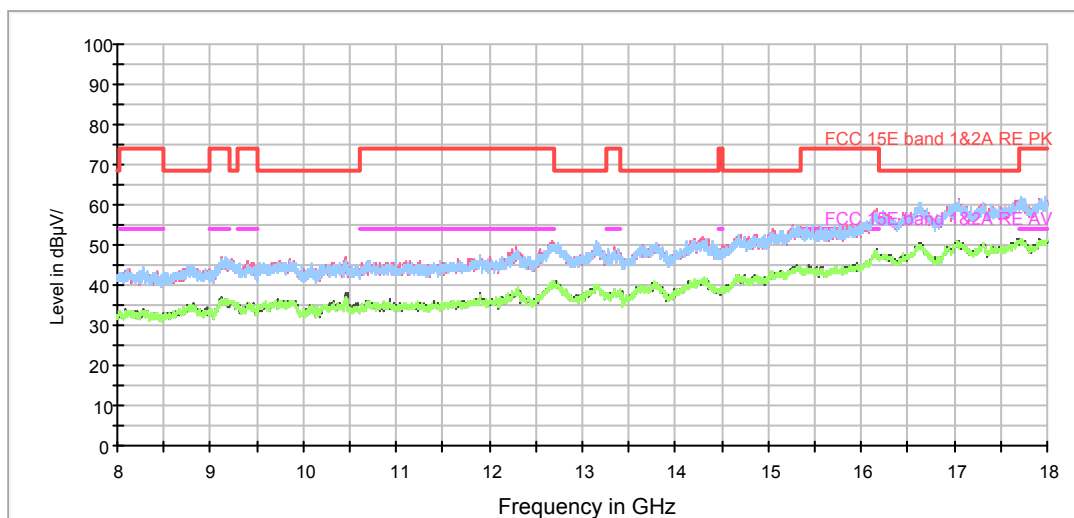


Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

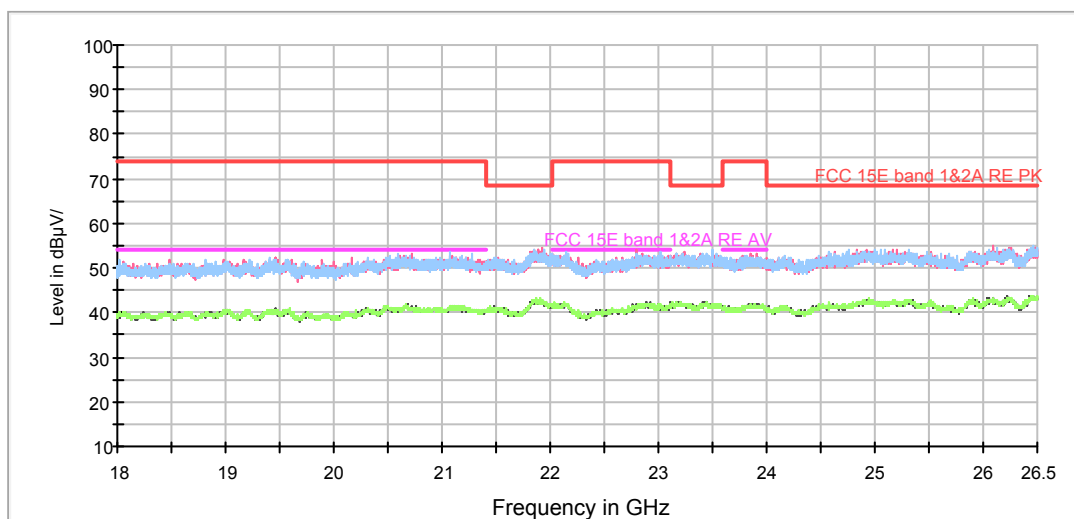


## RE 3-18GHz PK+AV



## Radiates Emission from 8GHz to 18GHz

## BELL\_RE 18-26.5GHz PK+AV



## Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3190.000000	37.1	100.0	V	124.0	40.0	-2.9	31.2	68.3
3373.125000	37.2	100.0	V	124.0	39.7	-2.5	31.1	68.3
5923.125000	44.8	100.0	V	91.0	40.0	4.8	23.5	68.3
6160.625000	44.6	100.0	V	267.0	38.9	5.7	23.7	68.3
6905.000000	45.1	100.0	V	116.0	38.8	6.3	23.2	68.3
7921.875000	44.2	100.0	H	86.0	37.0	7.2	24.1	68.3

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

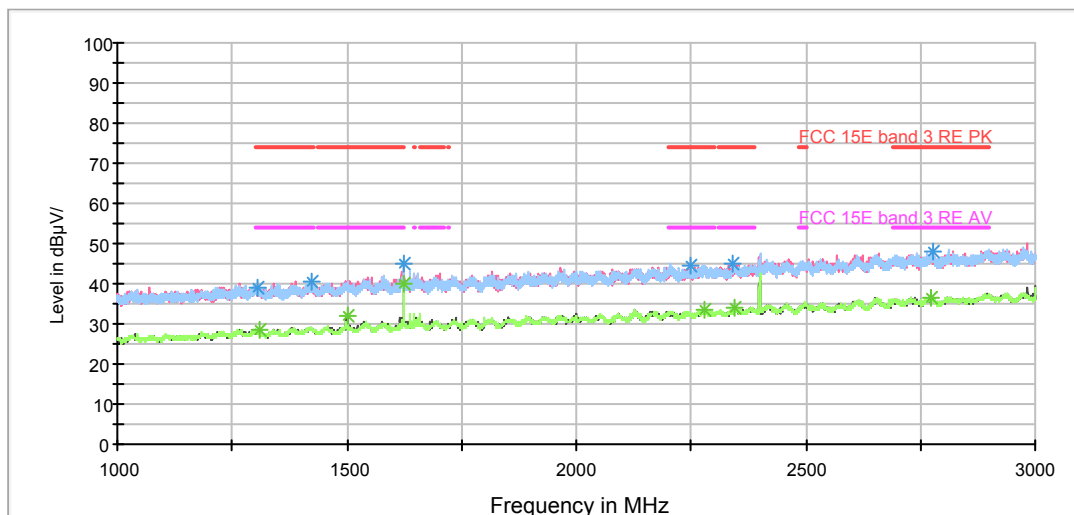


Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3644.375000	34.1	100.0	V	180.0	35.9	-1.8	19.9	54
4200.000000	41.6	100.0	H	54.0	41.2	0.4	12.4	54
4800.000000	35.0	100.0	H	352.0	33.7	1.3	19.0	54
7353.750000	33.3	100.0	V	148.0	26.3	7.0	20.7	54
7502.500000	33.6	100.0	V	124.0	26.7	6.9	20.4	54
7650.625000	33.4	100.0	V	345.0	26.5	6.9	20.6	54

**Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)**

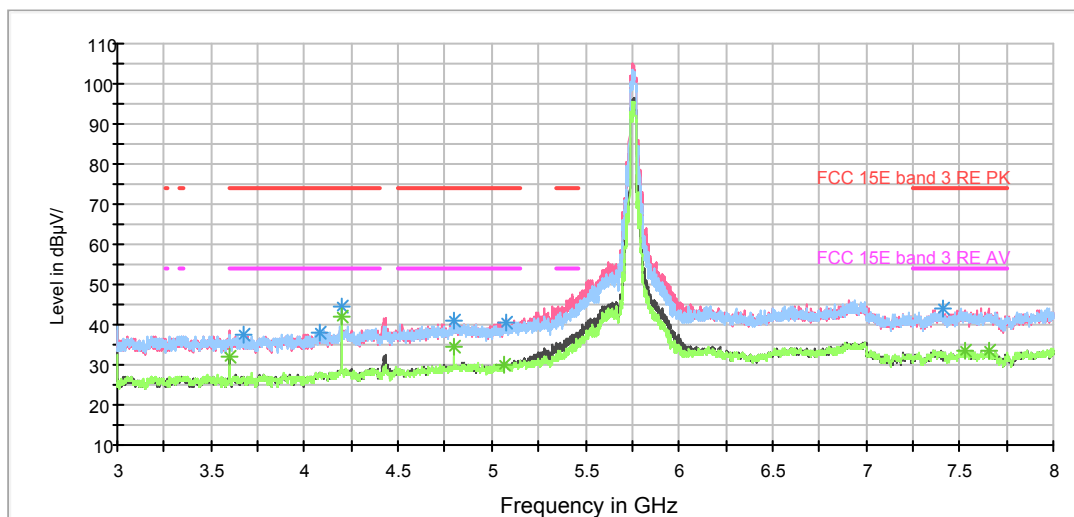
802.11ac (HT40) CH151

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

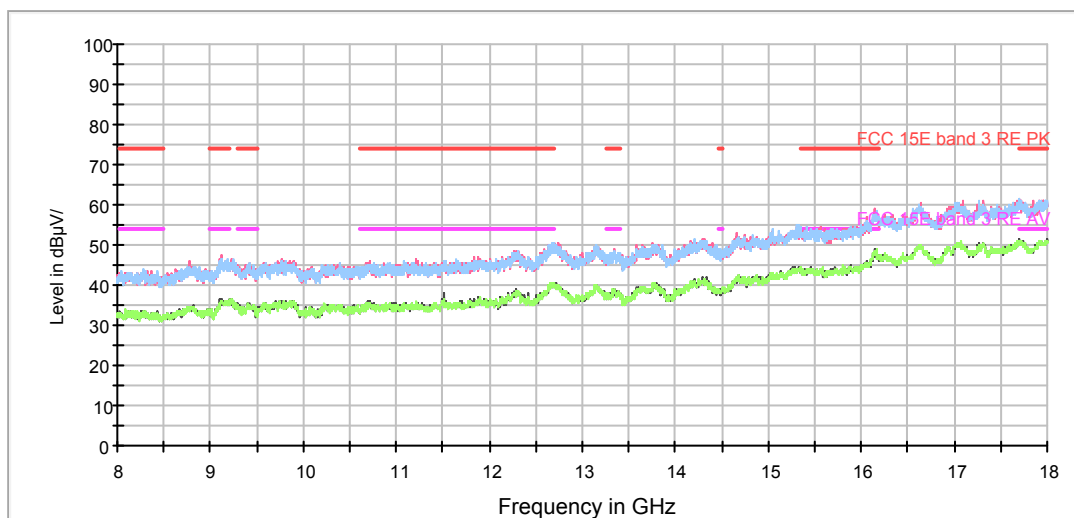
RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

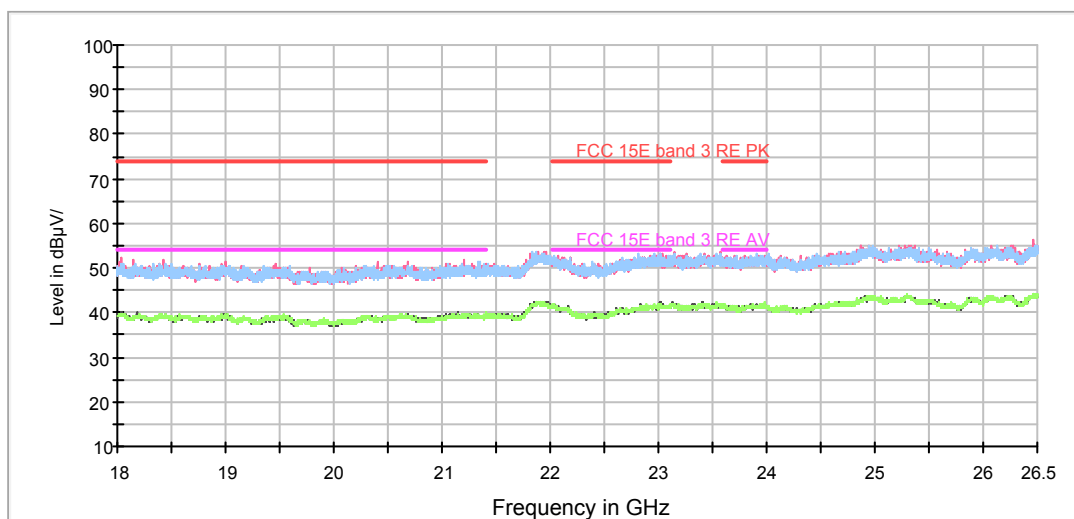
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

BELL\_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3679.375000	37.5	100.0	V	205.0	39.3	-1.8	36.5	74
4082.500000	37.9	100.0	V	264.0	38.8	-0.9	36.1	74
4200.000000	44.4	100.0	H	50.0	44.0	0.4	29.6	74
4800.000000	41.2	100.0	H	0.0	39.9	1.3	32.8	74
5078.750000	40.7	100.0	V	165.0	39.1	1.6	33.3	74
7412.500000	43.9	100.0	H	91.0	37.0	6.9	30.1	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)



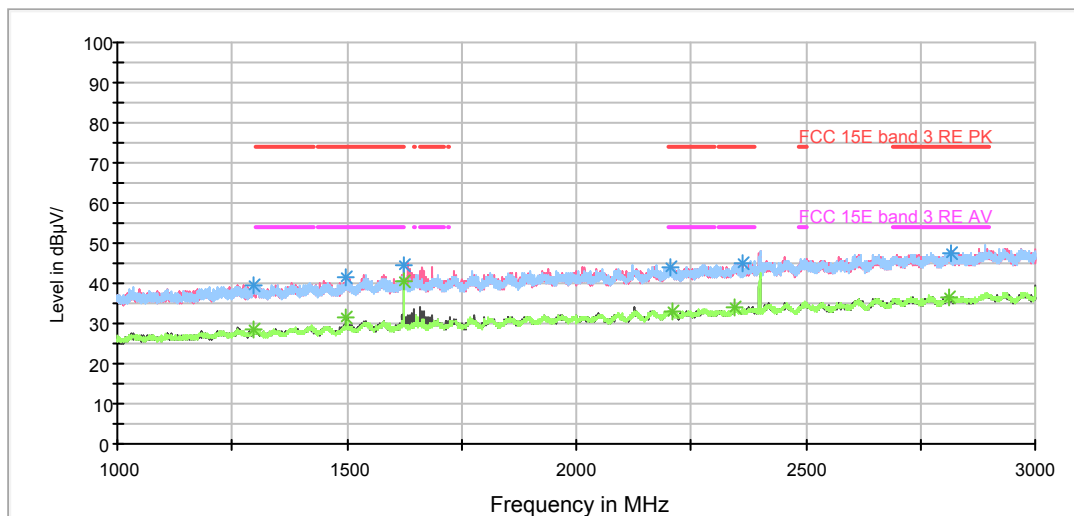
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3600.000000	32.0	100.0	V	0.0	34.2	-2.2	22.0	54
4200.000000	41.9	100.0	H	50.0	41.5	0.4	12.1	54
4800.000000	34.7	100.0	H	0.0	33.4	1.3	19.3	54
5062.500000	30.2	100.0	V	181.0	28.6	1.6	23.8	54
7532.500000	33.3	100.0	H	138.0	26.2	7.1	20.7	54
7654.375000	33.5	100.0	V	139.0	26.6	6.9	20.5	54

**Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)**



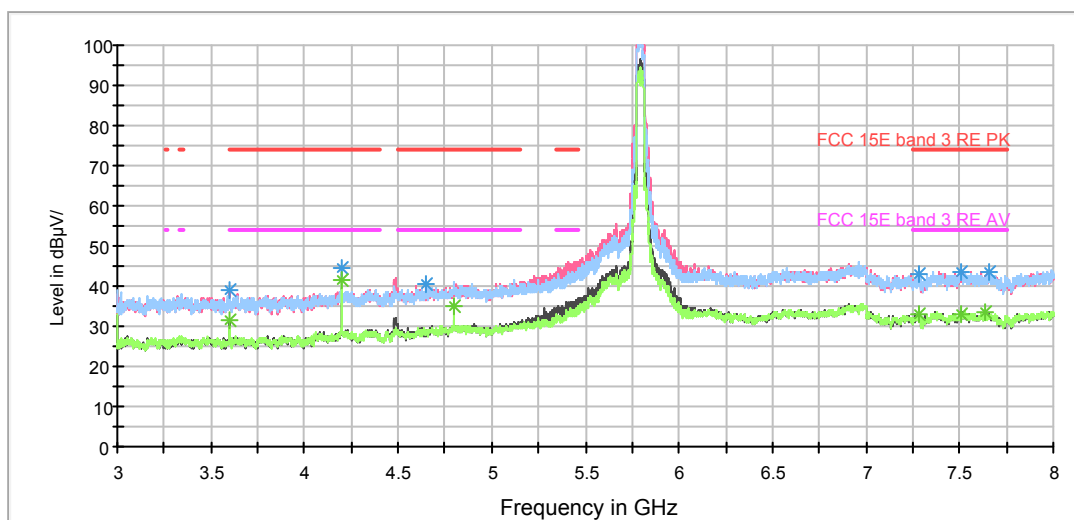
## 802.11ac (HT40) CH159

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV

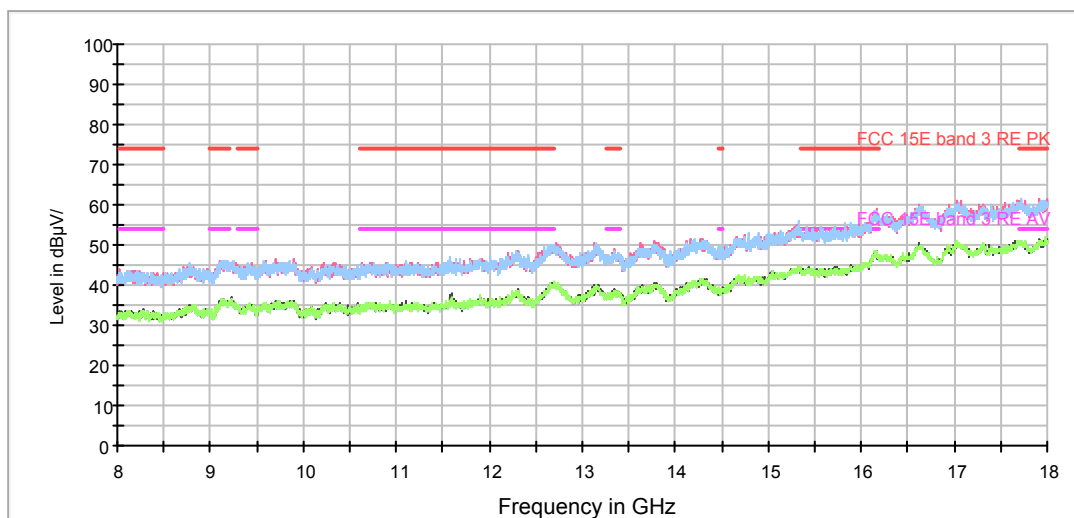


Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

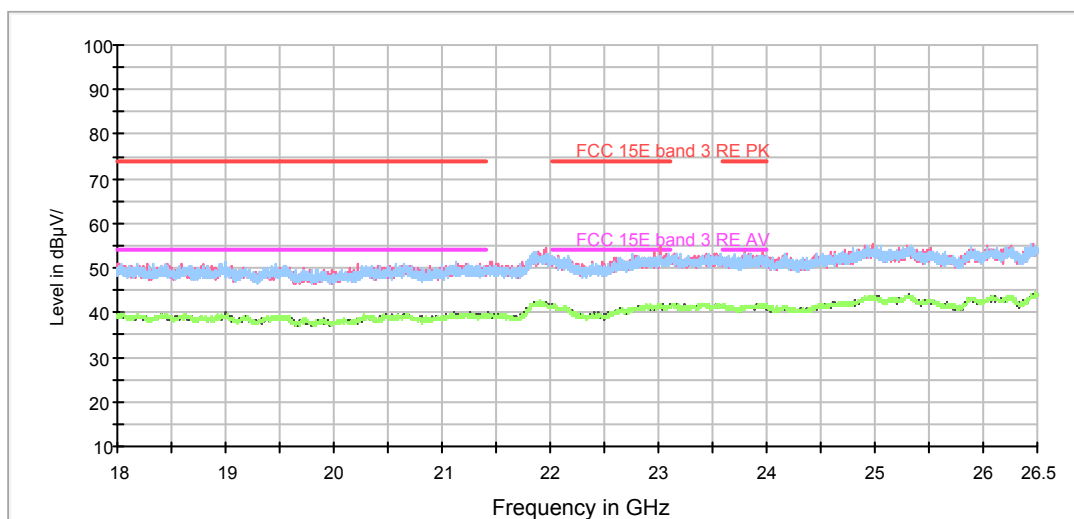


## RE 3-18GHz PK+AV



## Radiates Emission from 8GHz to 18GHz

## BELL\_RE 18-26.5GHz PK+AV



## Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3600.000000	39.1	100.0	V	0.0	41.3	-2.2	34.9	74
4200.000000	44.4	100.0	H	53.0	44.0	0.4	29.6	74
4653.125000	40.7	100.0	V	265.0	39.9	0.8	33.3	74
7279.375000	42.8	100.0	H	125.0	35.8	7.0	31.2	74
7502.500000	43.6	100.0	V	312.0	36.7	6.9	30.4	74
7652.500000	43.7	100.0	V	129.0	36.8	6.9	30.3	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

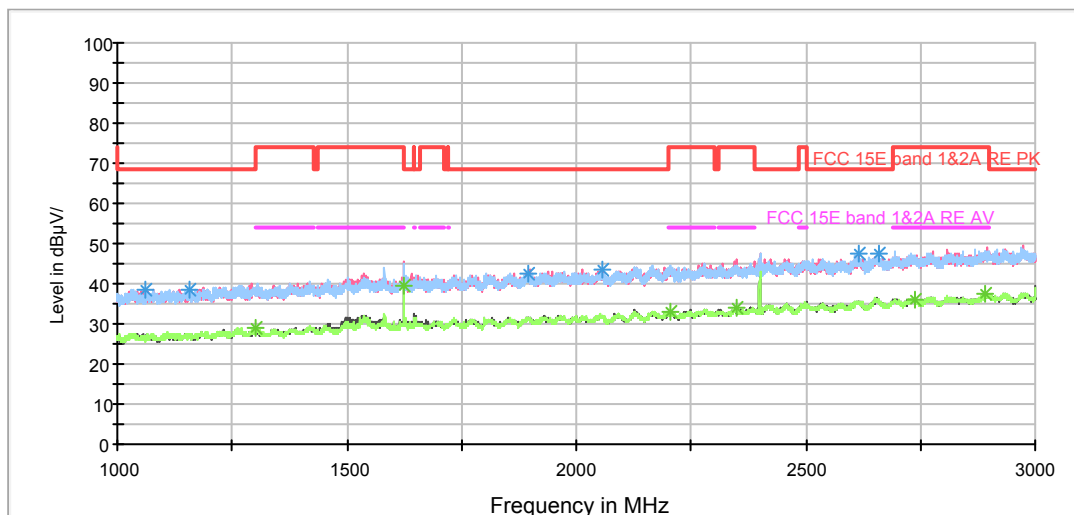


Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3600.000000	31.3	100.0	V	0.0	33.5	-2.2	22.7	54
4200.000000	41.3	100.0	H	53.0	40.9	0.4	12.7	54
4800.000000	34.8	100.0	H	352.0	33.5	1.3	19.2	54
7278.750000	33.0	100.0	V	88.0	26.0	7.0	21.0	54
7507.500000	33.1	100.0	V	304.0	26.2	6.9	20.9	54
7640.000000	33.4	100.0	H	180.0	26.5	6.9	20.6	54

**Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)**

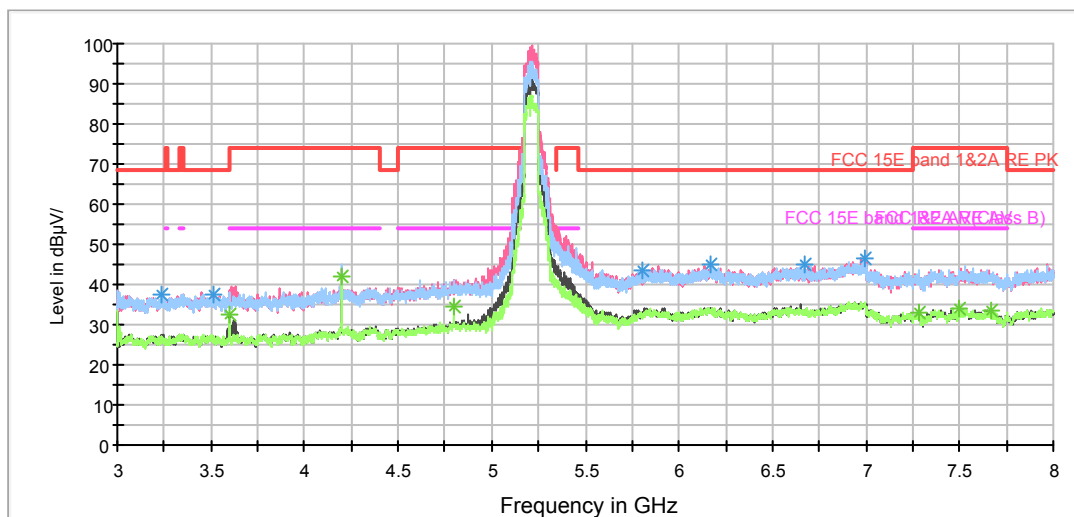
802.11ac (HT80) CH42

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV

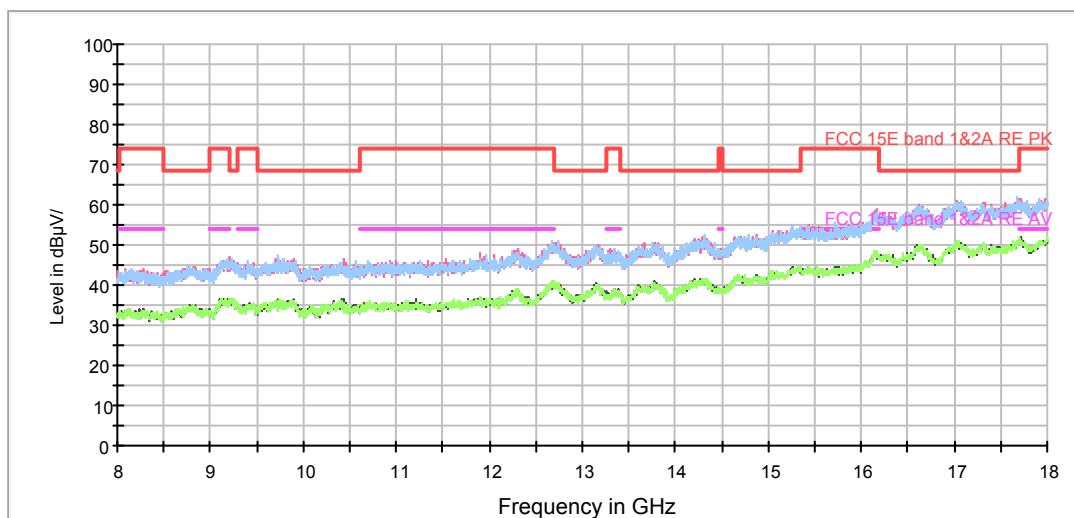


Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

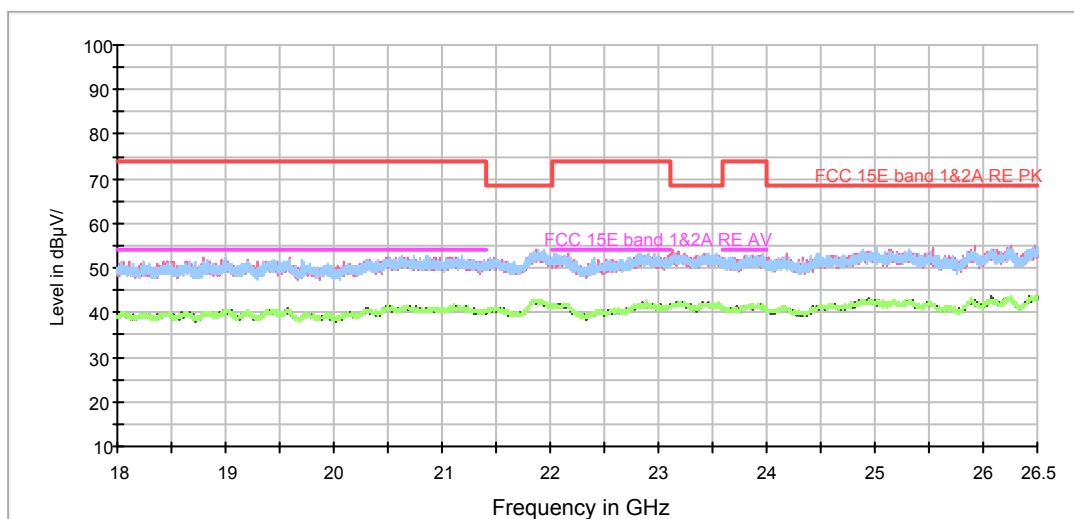


## RE 3-18GHz PK+AV



## Radiates Emission from 8GHz to 18GHz

## BELL\_RE 18-26.5GHz PK+AV



## Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3232.500000	37.3	100.0	V	337.0	39.9	-2.6	31.0	68.3
3511.875000	37.7	100.0	V	337.0	39.7	-2.0	30.6	68.3
5804.375000	43.7	100.0	V	290.0	39.5	4.2	24.6	68.3
6166.875000	45.0	100.0	H	68.0	39.4	5.6	23.3	68.3
6669.375000	44.9	100.0	H	305.0	39.4	5.5	23.4	68.3
6991.250000	46.5	100.0	H	0.0	40.0	6.5	21.8	68.3

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

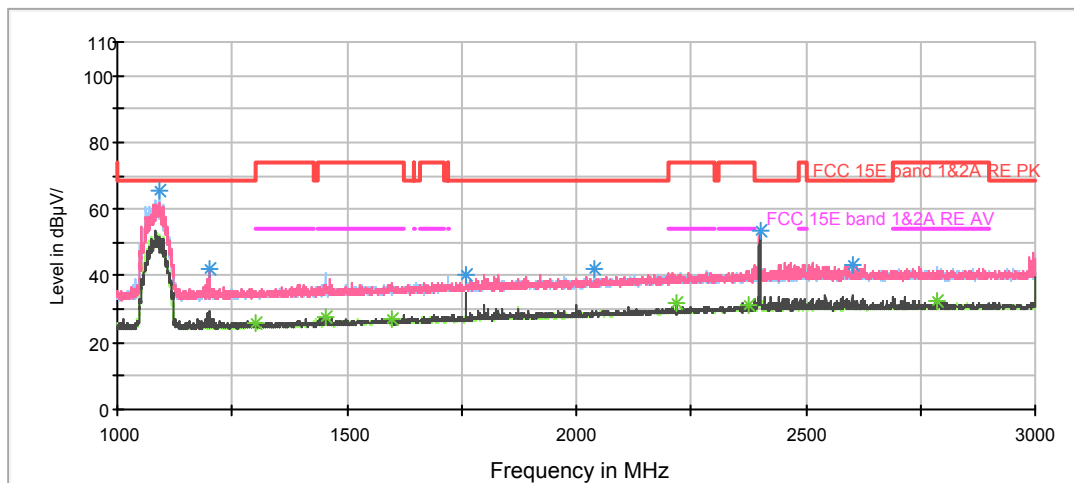


Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3600.000000	32.3	100.0	V	0.0	34.5	-2.2	21.7	54
4200.000000	42.1	100.0	H	53.0	41.7	0.4	11.9	54
4800.000000	34.4	100.0	H	288.0	33.1	1.3	19.6	54
7280.625000	33.0	100.0	V	114.0	26.0	7.0	21.0	54
7496.250000	33.8	100.0	H	180.0	27.0	6.8	20.2	54
7667.500000	33.5	100.0	H	60.0	26.7	6.8	20.5	54

**Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)**

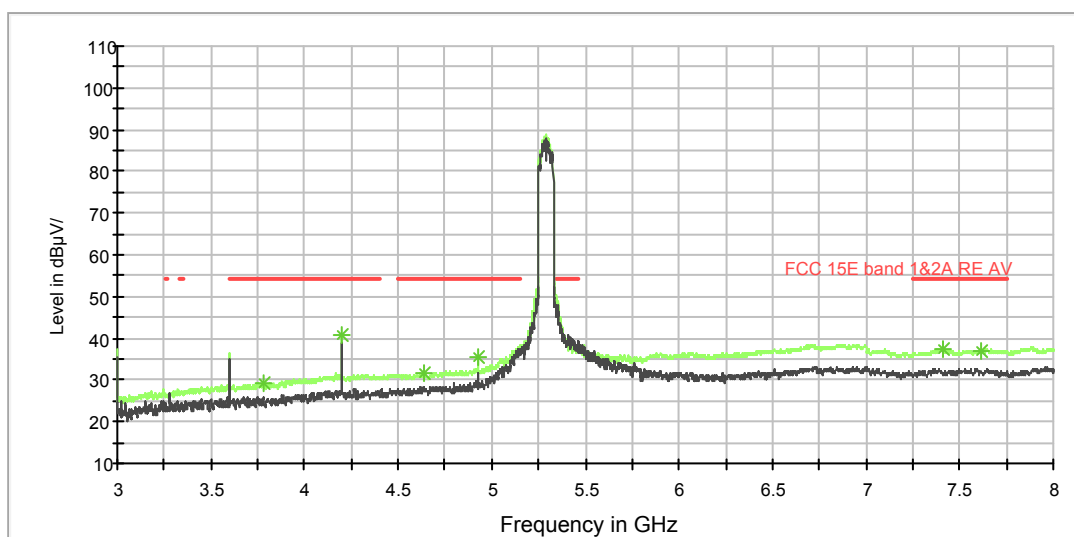
## 802.11ac (HT80) CH58

FCC RE 1G-18GHz PK+AV Class B

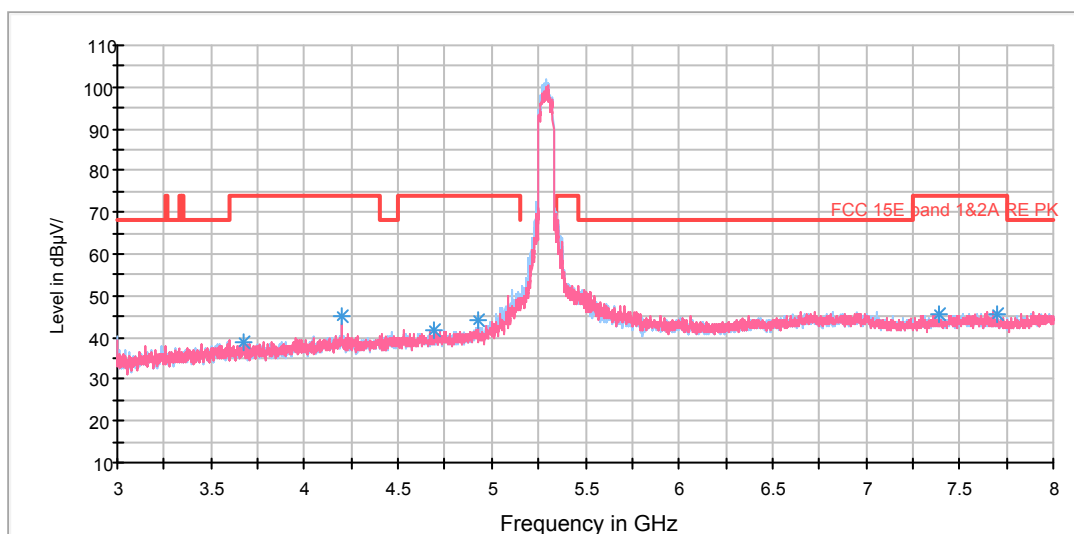


Radiates Emission from 1GHz to 3GHz

RE 3-18GHz AV



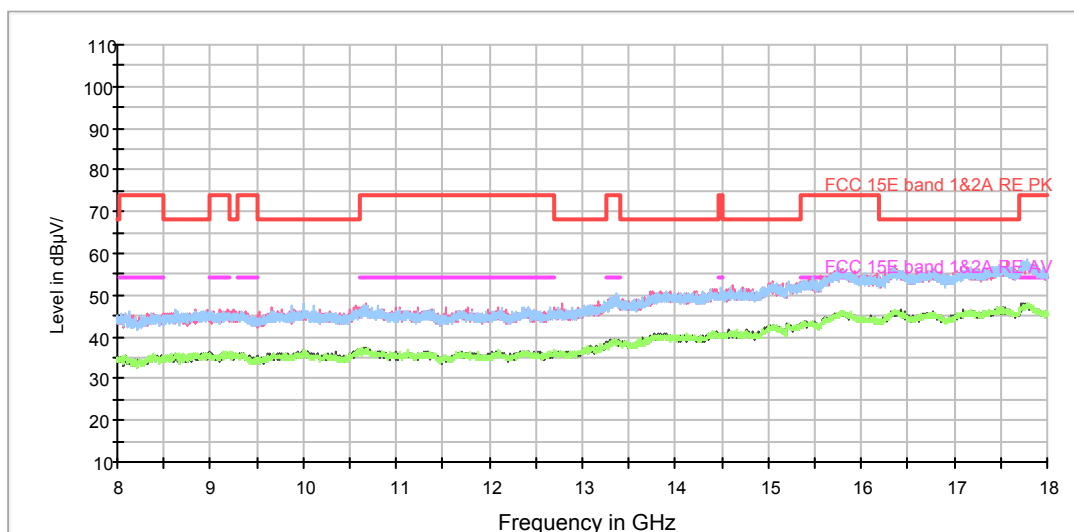
RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz





Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3673.125000	39.0	200.0	V	256.0	40.4	-1.4	35.0	74
4200.000000	45.2	100.0	H	31.0	45.0	0.2	28.8	74
4688.750000	41.7	200.0	V	330.0	40.6	1.1	32.3	74
4923.750000	44.0	100.0	H	250.0	42.5	1.5	30.0	74
7387.500000	45.5	200.0	V	205.0	40.2	5.3	28.5	74
7698.125000	45.8	200.0	V	320.0	39.7	6.1	28.2	74

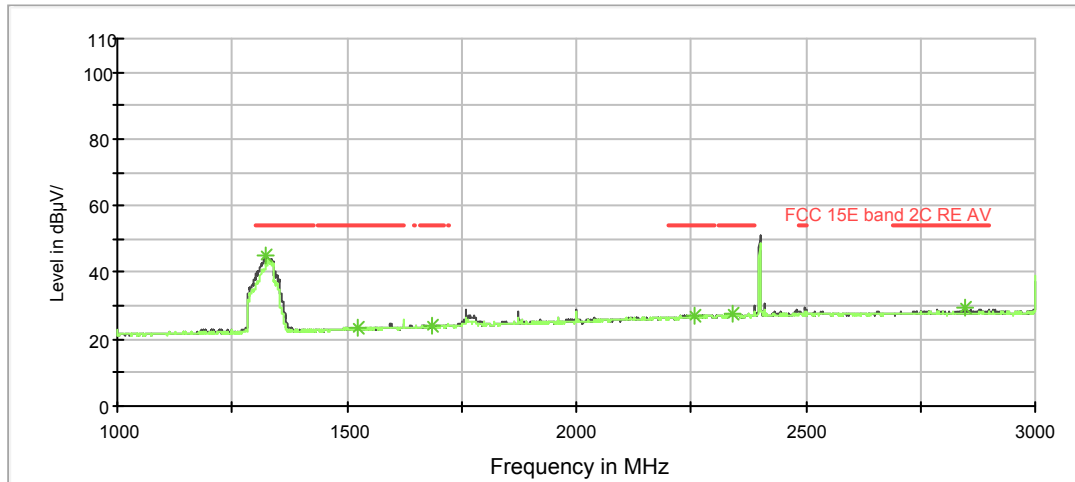
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3781.250000	29.3	100.0	H	0.0	30.5	-1.2	24.7	54
4200.000000	40.6	100.0	H	36.0	40.4	0.2	13.4	54
4636.875000	31.5	100.0	H	304.0	30.5	1.0	22.5	54
4923.750000	35.5	100.0	H	276.0	34.0	1.5	18.5	54
7410.625000	37.4	100.0	H	340.0	32.1	5.3	16.6	54
7616.250000	37.1	200.0	H	0.0	31.2	5.9	16.9	54

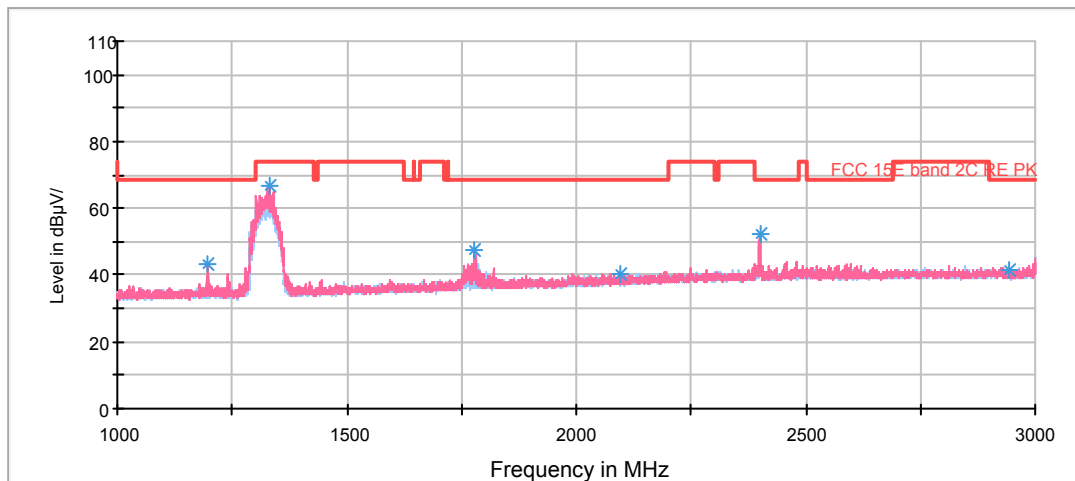
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

## 802.11ac (HT80) CH106

### FCC RE 1G-18GHz PK+AV Class B AV

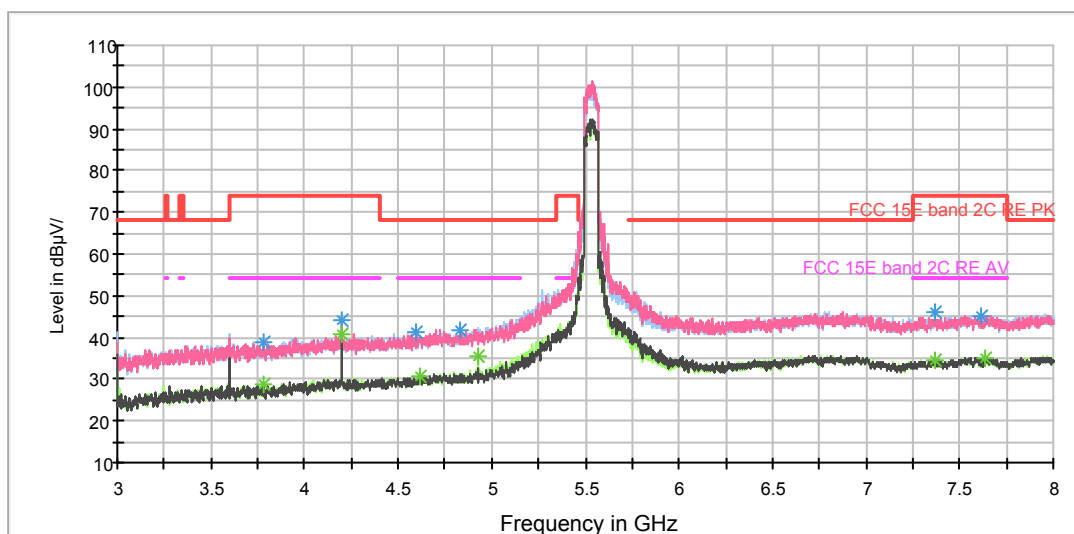


### FCC RE 1G-18GHz PK+AV Class B



Radiates Emission from 1GHz to 3GHz

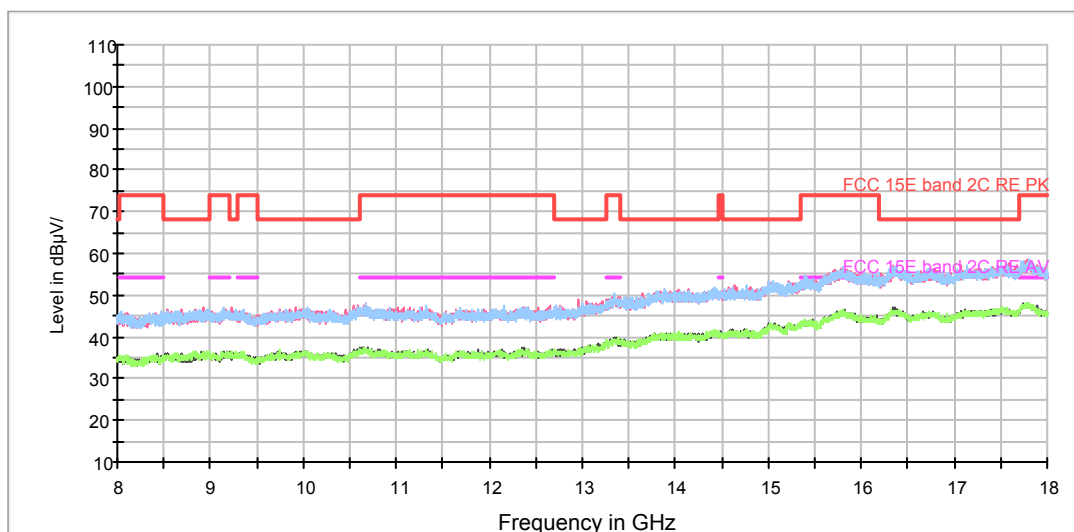
RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz



Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3778.125000	38.7	100.0	V	33.0	39.9	-1.2	35.3	74
4200.000000	44.3	200.0	H	128.0	44.1	0.2	29.7	74
4600.625000	41.1	200.0	V	197.0	40.2	0.9	27.2	68.3
4827.500000	41.6	200.0	V	176.0	40.2	1.4	26.7	68.3
7368.125000	46.1	100.0	V	251.0	40.8	5.3	27.9	74
7612.500000	45.1	200.0	H	0.0	39.2	5.9	28.9	74

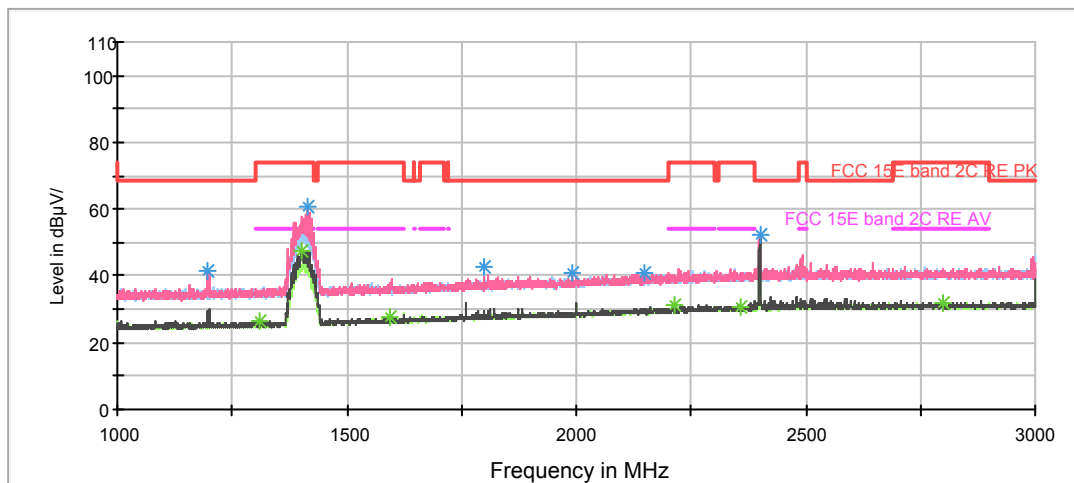
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3778.125000	38.7	100.0	V	33.0	39.9	-1.2	15.3	54
4200.000000	44.3	200.0	H	128.0	44.1	0.2	9.7	54
4600.625000	41.1	200.0	V	197.0	40.2	0.9	12.9	54
4827.500000	41.6	200.0	V	176.0	40.2	1.4	12.4	54
7368.125000	46.1	100.0	V	251.0	40.8	5.3	7.9	54
7612.500000	45.1	200.0	H	0.0	39.2	5.9	8.9	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

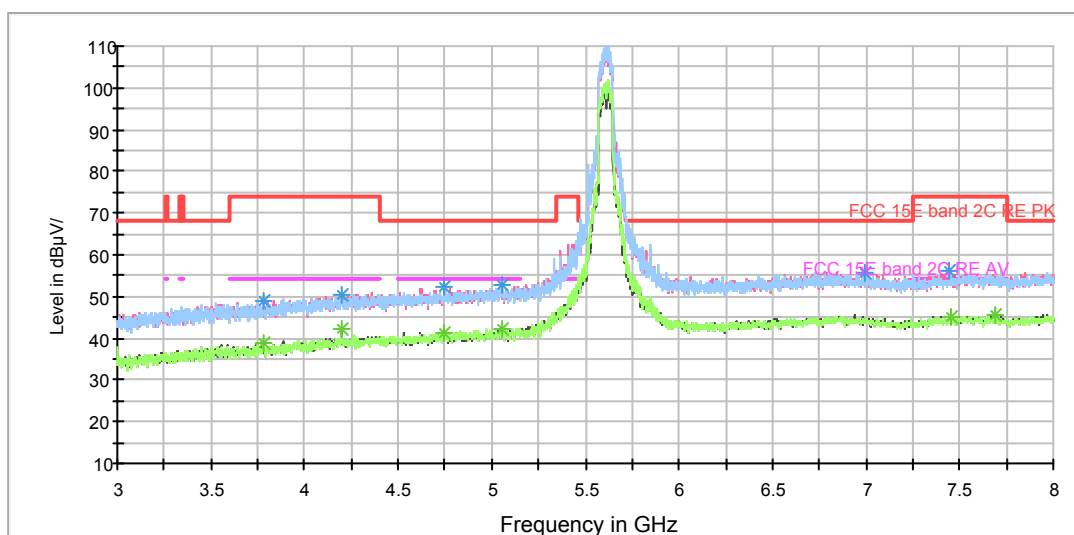
# 802.11ac (HT80) CH122

FCC RE 1G-18GHz PK+AV Class B



Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV

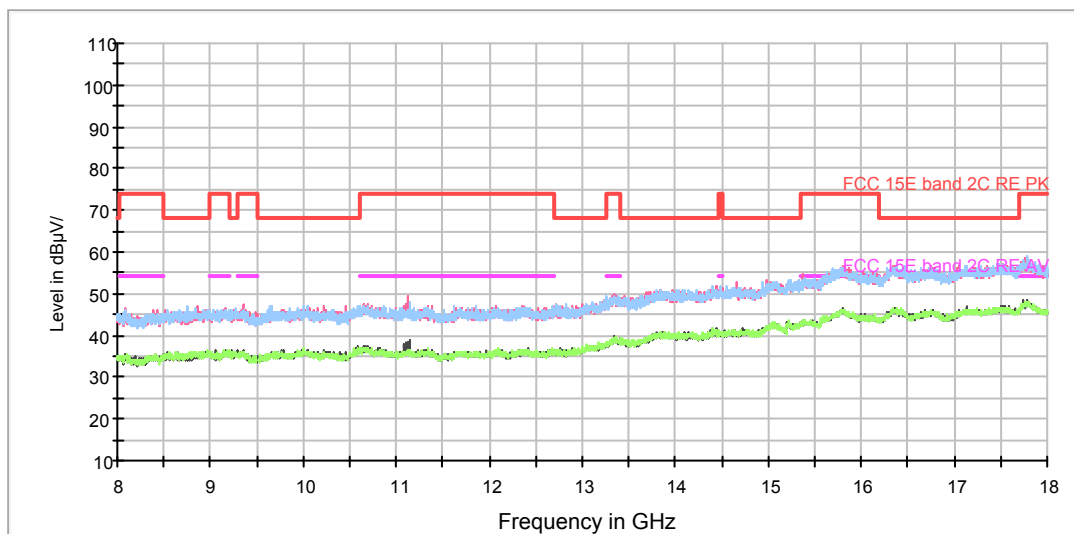


Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



## RE 3-18GHz PK+AV



## Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3780.625000	49.2	100.0	V	0.0	40.4	8.8	24.8	74
4199.375000	50.2	100.0	V	330.0	40.0	10.2	23.8	74
4741.875000	52.1	100.0	H	118.0	40.8	11.3	16.2	68.3
5056.250000	52.7	200.0	H	229.0	41.0	11.7	15.6	68.3
6995.625000	55.9	200.0	H	6.0	40.4	15.5	12.4	68.3
7441.875000	56.0	100.0	H	218.0	40.6	15.4	18.0	74

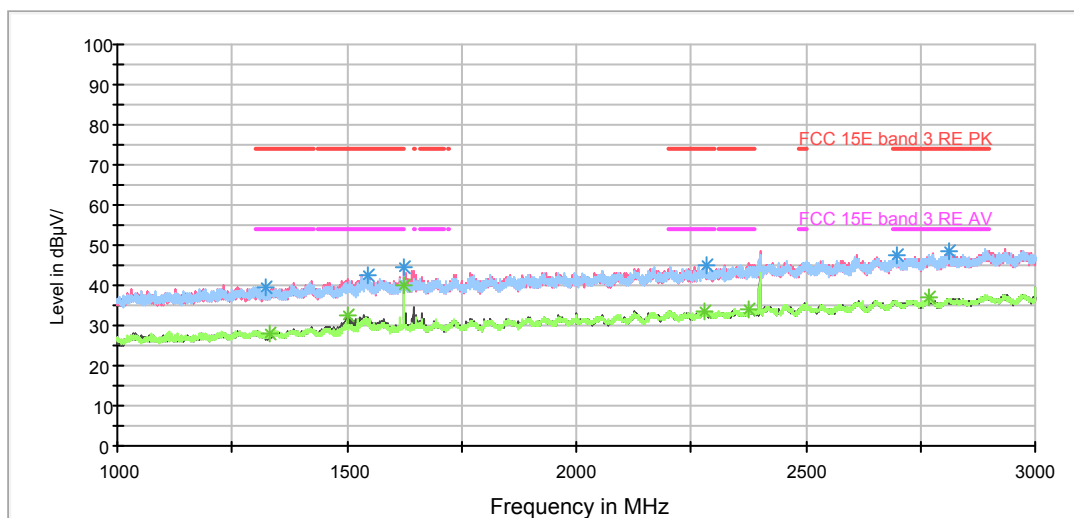
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3779.375000	38.9	100.0	H	183.0	30.1	8.8	15.1	54
4200.000000	42.3	100.0	V	319.0	32.1	10.2	11.7	54
4745.000000	41.4	200.0	H	0.0	30.1	11.3	12.6	54
5051.250000	42.4	100.0	V	71.0	30.7	11.7	11.6	54
7455.625000	44.9	100.0	V	135.0	29.4	15.5	9.1	54
7694.375000	45.5	100.0	H	161.0	29.4	16.1	8.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

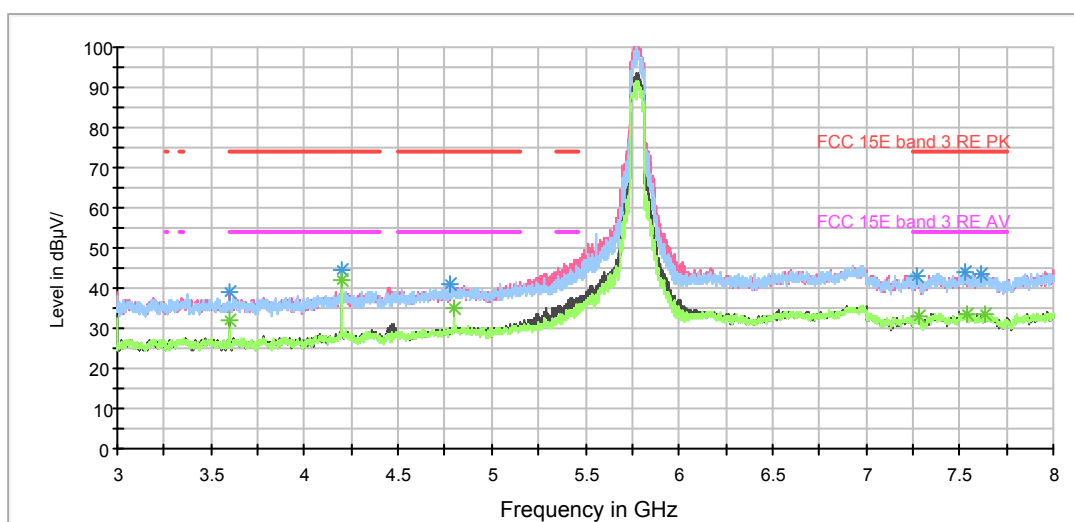
## 802.11ac (HT80) CH155

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

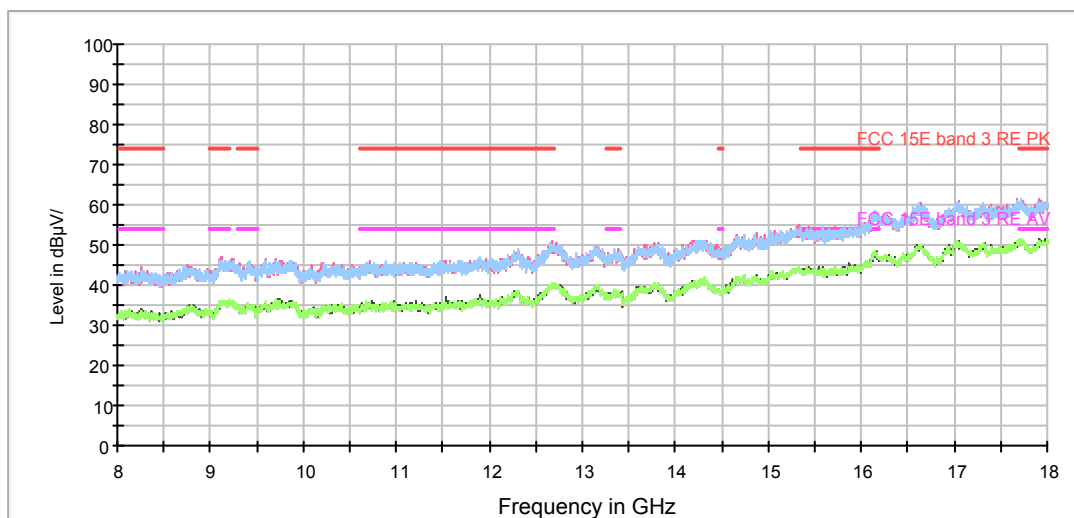
RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

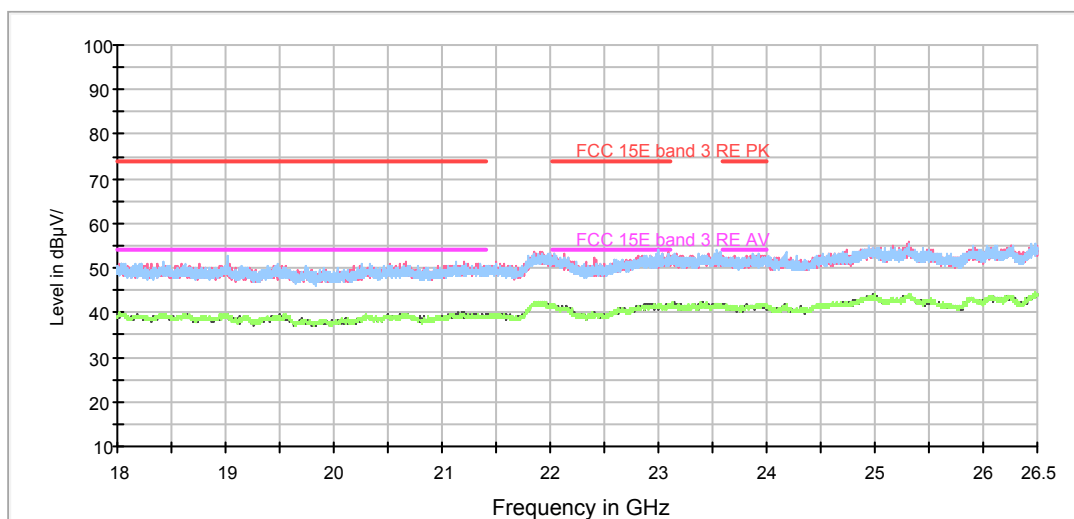
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

BELL\_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz





Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3600.000000	39.0	100.0	V	0.0	41.2	-2.2	35.0	74
4200.000000	44.7	100.0	H	53.0	44.3	0.4	29.3	74
4782.500000	41.2	100.0	V	104.0	40.1	1.1	32.8	74
7276.875000	42.9	100.0	V	342.0	35.9	7.0	31.1	74
7526.250000	44.2	100.0	V	0.0	37.1	7.1	29.8	74
7616.250000	43.7	100.0	H	280.0	36.9	6.8	30.3	74

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3600.000000	31.8	100.0	V	0.0	34.0	-2.2	22.2	54
4200.000000	41.9	100.0	H	53.0	41.5	0.4	12.1	54
4800.000000	34.8	100.0	H	29.0	33.5	1.3	19.2	54
7278.750000	32.9	100.0	V	0.0	25.9	7.0	21.1	54
7536.250000	33.5	100.0	V	0.0	26.5	7.0	20.5	54
7640.625000	33.5	100.0	V	176.0	26.6	6.9	20.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

## 5.6. Conducted Emission

### Ambient condition

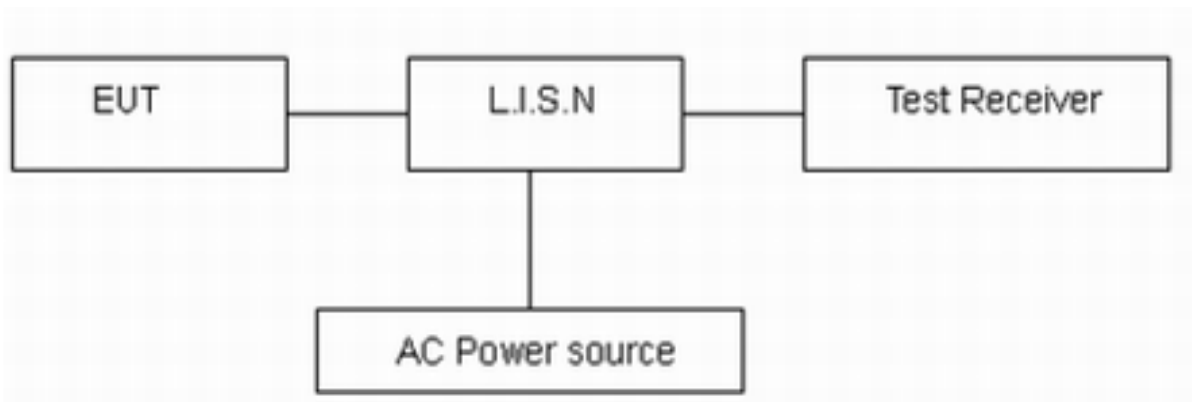
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

### Methods of Measurement

The EUT IS placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10-2013. Connect the AC power line of the EUT to the LISN Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9kHz, VBW is set to 30kHz The measurement result should include both L line and N line.

The test is in transmitting mode.

### Test Setup



Note: AC Power source is used to change the voltage 110V/60Hz.

### Limits

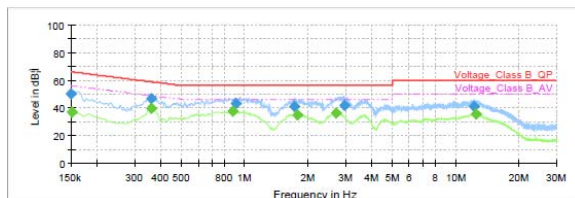
Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50
*: Decreases with the logarithm of the frequency.		

### Measurement Uncertainty

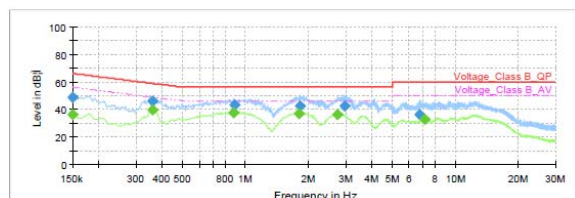
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 1.96$ ,  $U = 2.69$  dB.

**Test Results:**

Following plots, Blue trace uses the peak detection and Green trace uses the average detection. During the test, the Conducted Emission was performed in all modes with all channels, 802.11ac (HT20), Channel 165 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

**L Line**

Frequency (MHz)	QuasiPeak (dB;1V)	Average (dB;1V)	Limit (dB;1V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	49.82	---	66.00	16.18	1000.0	9.000	L1	ON	19.6
0.152250	---	37.04	55.88	18.84	1000.0	9.000	L1	ON	19.6
0.361500	---	39.60	48.69	9.10	1000.0	9.000	L1	ON	19.6
0.361500	46.29	---	58.69	12.41	1000.0	9.000	L1	ON	19.6
0.874500	---	37.59	46.00	8.41	1000.0	9.000	L1	ON	19.6
0.912750	42.98	---	56.00	13.02	1000.0	9.000	L1	ON	19.6
1.718250	40.93	---	56.00	15.07	1000.0	9.000	L1	ON	19.6
1.788000	---	35.05	46.00	10.95	1000.0	9.000	L1	ON	19.6
2.708250	---	36.20	46.00	9.80	1000.0	9.000	L1	ON	19.6
2.973750	41.80	---	56.00	14.20	1000.0	9.000	L1	ON	19.6
12.153750	40.82	---	60.00	19.18	1000.0	9.000	L1	ON	19.9
12.450750	---	35.65	50.00	14.35	1000.0	9.000	L1	ON	19.9

**N Line**

Frequency (MHz)	QuasiPeak (dB;1V)	Average (dB;1V)	Limit (dB;1V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	---	36.45	56.00	19.55	1000.0	9.000	N	ON	19.7
0.150000	48.46	---	66.00	17.54	1000.0	9.000	N	ON	19.7
0.361500	---	39.73	48.69	8.97	1000.0	9.000	N	ON	19.6
0.361500	46.08	---	58.69	12.61	1000.0	9.000	N	ON	19.6
0.874500	---	37.45	46.00	8.55	1000.0	9.000	N	ON	19.6
0.890250	42.76	---	56.00	13.24	1000.0	9.000	N	ON	19.6
1.799250	---	36.56	46.00	9.44	1000.0	9.000	N	ON	19.6
1.828500	42.54	---	56.00	13.46	1000.0	9.000	N	ON	19.6
2.733000	---	36.25	46.00	9.75	1000.0	9.000	N	ON	19.6
2.969250	42.06	---	56.00	13.94	1000.0	9.000	N	ON	19.6
6.758250	36.43	---	60.00	23.57	1000.0	9.000	N	ON	19.7
7.136250	---	32.83	50.00	17.17	1000.0	9.000	N	ON	19.7



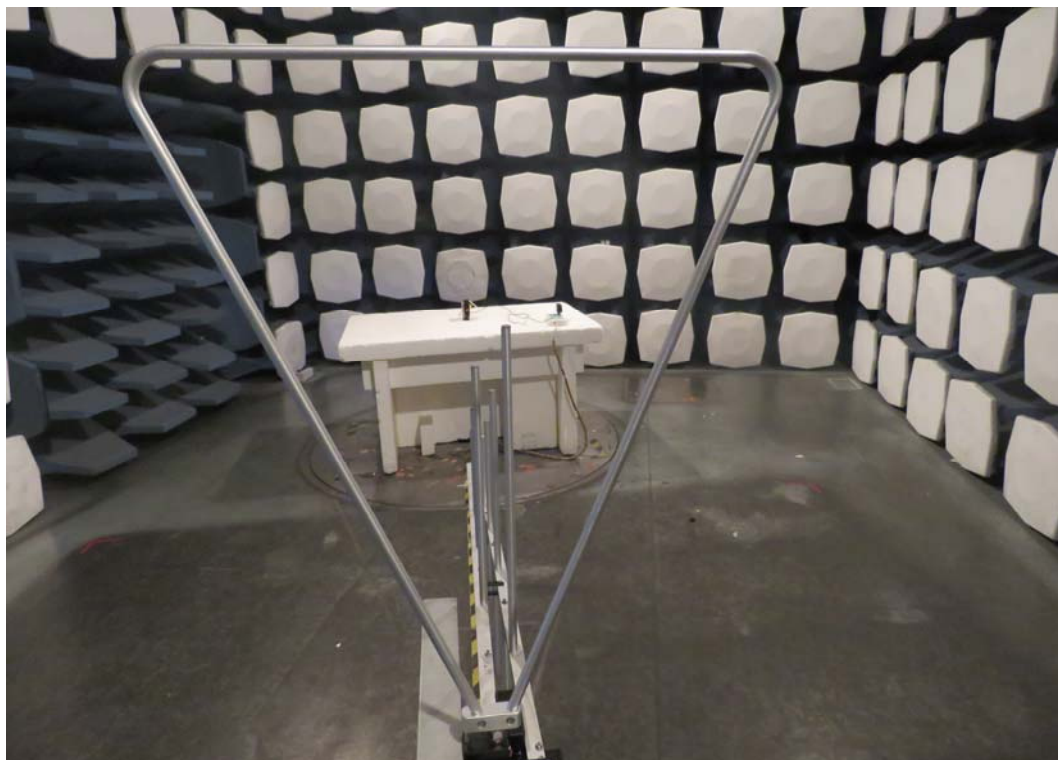
## 6. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Spectrum Analyzer	R&S	FSV40	15195-01-00	2018-05-20	2019-05-19
EMI Test Receiver	R&S	ESCI	100948	2018-05-20	2019-05-19
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2017-09-26	2019-09-25
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	9163-201	2017-11-18	2019-11-17
Double Ridged Waveguide Horn Antenna	R&S	HF907	100126	2018-07-07	2020-07-06
Standard Gain Horn	ETS-Lindgren	3160-09	00102643	2018-06-20	2020-06-19
Standard Gain Horn	STEATITE	QSH-SL-26-40 -K-15	16779	2017-07-20	2019-07-19
Broadband Horn Antenna	SCHWARZBECK	BBHA 9120D	430	2018-07-07	2020-07-06
EMI Test Receiver	R&S	ESR	101667	2018-05-20	2019-05-19
LISN	R&S	ENV216	101171	2016-12-16	2019-12-15
Spectrum Analyzer	KEYSIGHT	N9020A	MY54420163	2017-12-17	2018-12-16
RF Cable	Agilent	SMA 15cm	0001	/	/
TEMPERATURE CHAMBER	WEISS	VT4002	582261194500 10	2017-12-17	2018-12-16
AV Power Meter	R&S	NRP	104306	2018-05-20	2019-05-19
Power Probe	R&S	NRP-Z21	104799	2018-05-20	2019-05-19
DC Power Supply	GWINSTEK	GPS-3030D	GEP882653	2018-05-20	2020-05-19
Software	R&S	EMC32	9.26.0	/	/

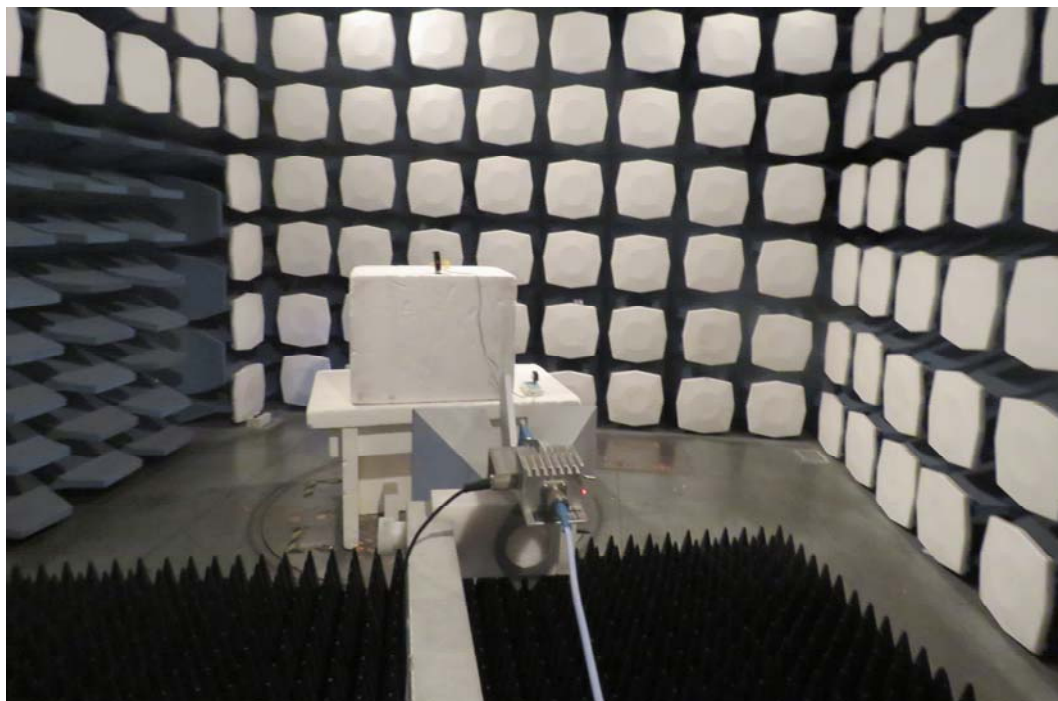
\*\*\*\*\*END OF REPORT \*\*\*\*\*

## ANNEX A: Test Setup

### A.1 Test Setup



30MHz-1GHz



Above 1GHz

**Picture 2 Radiated Emission Test Setup**



Picture 3 Conducted Emission Test Setup

## ANNEX B: Product Change Description

### Product Change Description

We, **Nokia Shanghai Bell Co. Ltd.** declare on our sole responsibility that the product,  
**HA-020W-A**

is the variant of the initial certified product,

**HA-020W-A**

Except the following changes on the latest MODEL: **HA-020W-A**

#### SOFTWARE MODIFICATIONS:

Protocol Stack changes: **NO**

MMS/STK changes: **NO**

JAVA changes: **NO**

Other changes detailed: **Yes, Enabled DFS feature in software configuration.**

#### HARDWARE MODIFICATION:

Band changes: **NO**

Power Amplifier changes: **NO**

Antenna changes: **NO**

PCB Layout changes: **NO**

Components on PCB changes: **NO**

LCD changes: **NO**

Speaker changes: **NO**

Camera changes: **NO**

Vibrator changes: **NO**

Bluetooth changes: **NO**

FM changes: **NO**

Other changes: **NO**

#### MECHANICAL MODIFICATIONS:

Use new metal front/back cover or keypad: **NO**

Mechanical shell changes: **NO**

Other changes detailed: **NO**

#### ACCESSORY MODIFICATIONS:

Battery changes: **NO**

AC Adaptor changes: **NO**

Earphone changes: **NO**



Signature:

Print name: Liguang Leng

Date: November 29, 2018

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