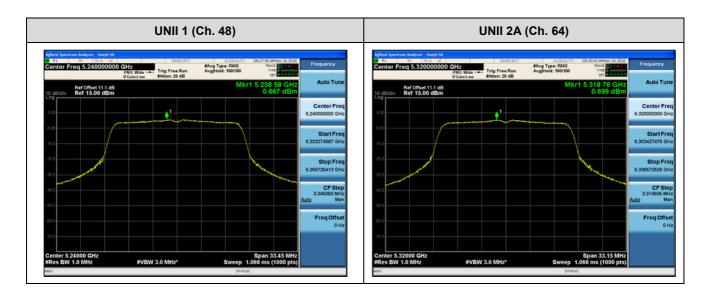


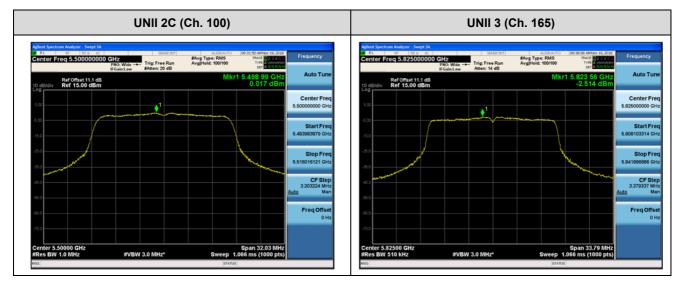
## [Ant1]

■ Test Plots(802.11ac(VHT20))

### Note:

In order to simplify the report, attached plots were only channel of highest power.





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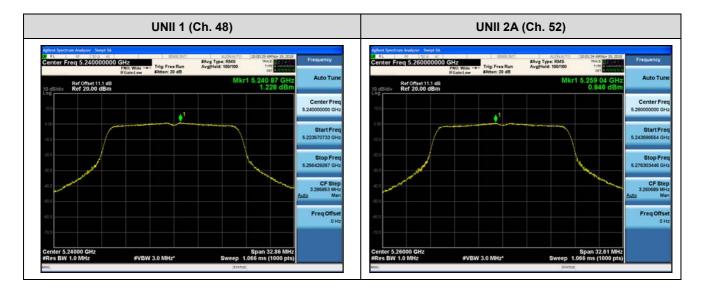


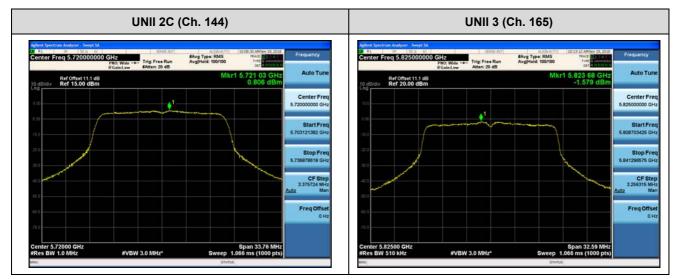
## [Ant2]

■ Test Plots(802.11ac(VHT20))

### Note:

In order to simplify the report, attached plots were only channel of highest power.





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FCC ID: A3LSMG8870

# [Ant1]

802.11ac(VI	HT40) Mode				
Frequency [MHz]	Channel No.	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)
5190	38	-4.205	0.231	-3.974	11
5230	46	-2.665	0.580	-2.085	11
5270	54	-2.921	0.580	-2.341	11
5310	62	-3.262	0.580	-2.682	11
5510	102	-5.282	0.231	-5.051	11
5590	118	-3.865	0.580	-3.285	11
5710	142	-3.680	0.417	-3.263	11
5755	151	-6.188	0.580	-5.608	30
5795	159	-5.763	0.231	-5.532	30

# [Ant2]

802.11ac(VI	HT40) Mode				
Frequency [MHz]	Channel No.	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)
5190	38	-4.012	0.221	-3.791	11
5230	46	-3.167	0.411	-2.756	11
5270	54	-3.658	0.221	-3.437	11
5310	62	-3.614	0.221	-3.393	11
5510	102	-5.895	0.569	-5.326	11
5590	118	-4.179	0.569	-3.610	11
5710	142	-3.563	0.411	-3.152	11
5755	151	-6.241	0.569	-5.672	30
5795	159	-5.958	0.221	-5.737	30

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# ■ Sum Data of Ant.1 and Ant.2

Frequency (MHz)	Channel No.	Mode	[Ant1] Total PSD(dBm)	[Ant2] Total PSD(dBm)	[MIMO] Total PSD(dBm)	Limit (dBm)				
5190	38	802.11ac	-3.974	-3.791	-0.87	11				
5230	46	40MHz BW	-2.085	-2.756	0.60	11				
5270	54	802.11ac	-2.341	-3.437	0.16	11				
5310	62	40MHz BW	-2.682	-3.393	-0.01	11				
5510	102	000 44	-5.051	-5.326	-2.18	11				
5590	118	802.11ac 40MHz BW	-3.285	-3.610	-0.43	11				
5710	142	40IVII IZ DVV	-3.263	-3.152	-0.20	11				
5755	151	802.11ac	-5.608	-5.672	-2.63	30				
5795	159	40MHz BW	-5.532	-5.737	-2.62	30				

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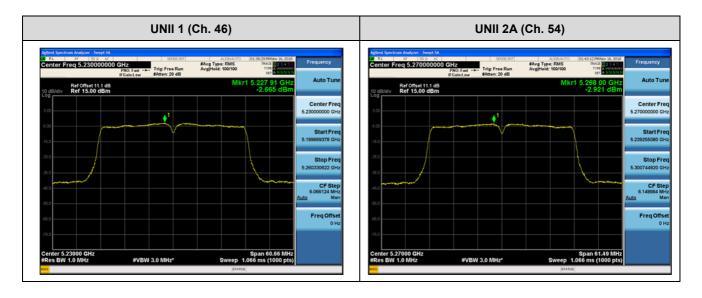


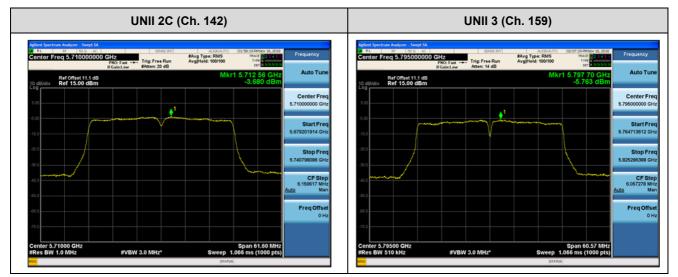
## [Ant1]

**■** Test Plots(802.11ac(VHT40))

### Note:

In order to simplify the report, attached plots were only channel of highest power.





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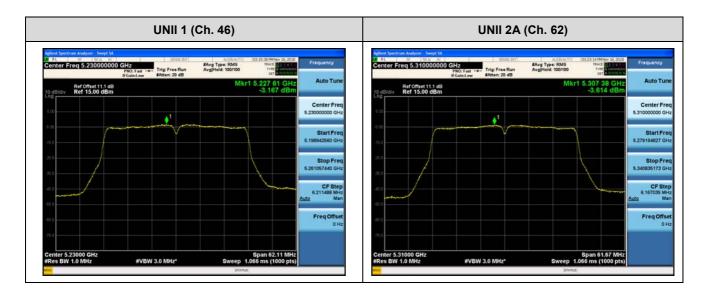


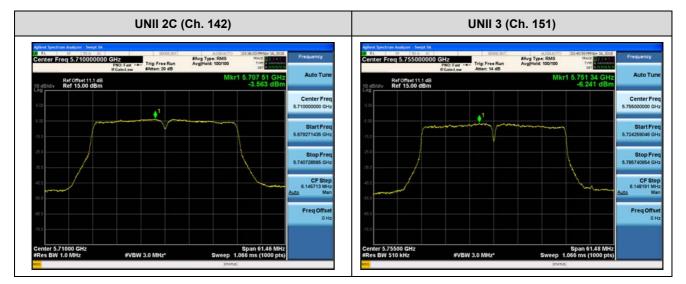
## [Ant2]

**■** Test Plots(802.11ac(VHT40))

### Note:

In order to simplify the report, attached plots were only channel of highest power.





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FCC ID: A3LSMG8870

# [Ant1]

802.11ac(VI	HT80) Mode				
Frequency [MHz]	Channel No.	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)
5210	42	-8.711	0.992	-7.719	11
5290	58	-6.217	0.992	-5.225	11
5530	106	-8.769	0.992	-7.777	11
5610	122	-7.346	0.992	-6.354	11
5690	138	-6.720	0.992	-5.728	11
5775	155	-9.746	0.992	-8.754	30

# [Ant2]

802.11ac(VI	HT80) Mode				
Frequency [MHz]	Channel No.	Measured Density (dBm)	Density Factor		Limit (dBm)
5210	42	-8.780	0.981	-7.799	11
5290	58	-7.914	1.845	-6.069	11
5530	106	-8.875	0.981	-7.894	11
5610	122	-8.186	1.938	-6.248	11
5690	138	-6.543	0.981	-5.562	11
5775	155	-9.789	1.659	-8.130	30

### ■ Sum Data of Ant.1 and Ant.2

Frequency (MHz)	Channel No.	Mode	[Ant1] Total PSD(dBm)	[Ant2] Total PSD(dBm)	[MIMO] Total PSD(dBm)	Limit (dBm)				
5210	42	802.11ac 80MHz BW	-7.719	-7.799	-4.75	11				
5290	58	802.11ac 80MHz BW	-5.225	-6.069	-2.62	11				
5530	106	802.11ac 80MHz BW	-7.777	-7.894	-4.82	11				
5610	122	802.11ac 80MHz BW	-6.354	-6.248	-3.29	11				
5690	138	802.11ac 80MHz BW	-5.728	-5.562	-2.63	11				
5775	155	802.11ac 80MHz BW	-8.754	-8.130	-5.42	30				



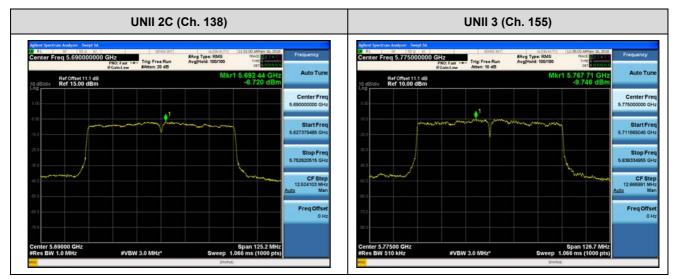
## [Ant1]

**■** Test Plots(802.11ac(VHT80))

### Note:

In order to simplify the report, attached plots were only channel of highest power.





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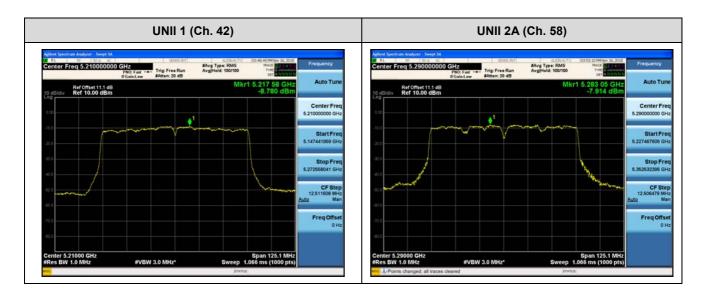


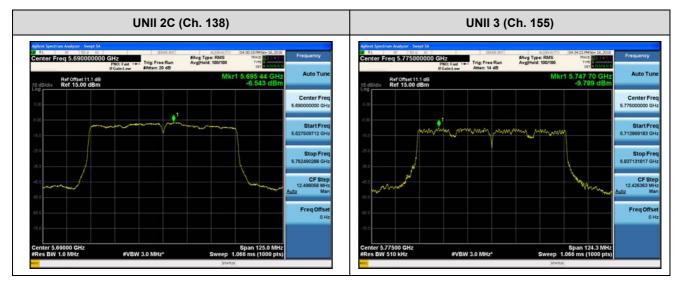
## [Ant2]

**■** Test Plots(802.11ac(VHT80))

### Note:

In order to simplify the report, attached plots were only channel of highest power.





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FCC ID: A3LSMG8870

# [Ant1]

# ■Straddle channels TEST RESULTS for 802.11a/n\_HT20/ac\_VHT20

Conducted Power Density Measurements (UNII 2C Band 5720MHz)

			Test Result						
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Pass/Fail		
		802.11a	2.370	0.310	2.680	11.00	Pass		
5720	144	802.11n	0.829	0.330	1.159	11.00	Pass		
		802.11ac	-0.157	0.325	0.168	11.00	Pass		

### Conducted Power Density Measurements (UNII 3 Band 5720MHz)

			Test Result						
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Pass/Fail		
		802.11a	-1.981	0.310	-1.671	30.00	Pass		
5720	144	802.11n	-3.576	0.330	-3.246	30.00	Pass		
		802.11ac	-4.561	0.325	-4.236	30.00	Pass		

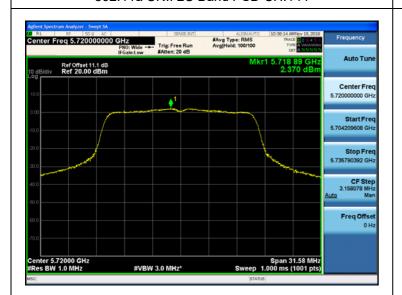
F-TP22-03 (Rev.00) 1 2 9 / 311 **HCT CO.,LTD.** 



#### FCC ID: A3LSMG8870

### ■Straddle channels TEST Plot for 802.11a/n\_HT20/ac\_VHT20

### 802.11a UNII 2C Band PSD CH.144



### 802.11a UNII 3 Band PSD CH.144



### 802.11n HT20 UNII 2C Band PSD CH.144



### 802.11n HT20 UNII 3 Band PSD CH.144



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#### FCC ID: A3LSMG8870

## 802.11ac\_VHT20 UNII 2C Band PSD CH.144



### 802.11ac\_VHT20 UNII 3 Band PSD CH.144



F-TP22-03 (Rev.00) 1 3 1 / 311 HCT CO.,LTD.



FCC ID: A3LSMG8870

# ■Straddle channels TEST RESULTS for 802.11n\_HT40/ac\_VHT40

Conducted Power Density Measurements (UNII 2C Band 5710MHz)

			Test Result						
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Pass/Fail		
E710	140	802.11n	-3.270	0.232	-3.038	11.00	Pass		
5710	142	802.11ac	-4.227	0.417	-3.810	11.00	Pass		

# Conducted Power Density Measurements (UNII 3 Band 5710MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Total PSD (dBm)	Limit (dBm)	Pass/Fail	
F710	140	802.11n	-8.253	0.232	-8.021	30.00	Pass	
5710	142	802.11ac	-9.233	0.417	-8.816	30.00	Pass	

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FCC ID: A3LSMG8870

### ■Straddle channels TEST Plot for 802.11n\_HT40/ac\_VHT40

802.11n\_HT40 UNII 2C Band PSD CH.142



802.11n\_HT40 UNII 3 Band PSD CH.142



802.11ac\_VHT40 UNII 2C Band PSD CH.142



802.11ac VHT40 UNII 3 Band PSD CH.142



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### **■**Straddle channels TEST RESULTS

Conducted Power Density Measurements (UNII 2C Band 5690MHz)

					Test Result		
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Pass/Fail
5690	138	802.11ac	-6.927	0.992	-5.935	11.00	Pass

### Conducted Power Density Measurements (UNII 3 Band 5690MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Pass/Fail	
5690	138	802.11ac	-12.081	0.992	-11.089	30.00	Pass	

### ■Straddle channels TEST Plot for 802.11ac\_VHT80

802.11ac\_VHT80 UNII 2C Band PSD CH.138



### 802.11ac\_VHT80 UNII 3 Band PSD CH.138

FCC ID: A3LSMG8870



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FCC ID: A3LSMG8870

# [Ant2]

# ■Straddle channels TEST RESULTS for 802.11a/n\_HT20/ac\_VHT20

Conducted Power Density Measurements (UNII 2C Band 5720MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Pass/Fail	
		802.11a	3.534	0.313	3.847	11.00	Pass	
5720	144	802.11n	1.811	0.328	2.139	11.00	Pass	
		802.11ac	0.707	0.419	1.126	11.00	Pass	

### Conducted Power Density Measurements (UNII 3 Band 5720MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Pass/Fail	
		802.11a	-1.009	0.313	-0.696	30.00	Pass	
5720	144	802.11n	-2.586	0.328	-2.258	30.00	Pass	
		802.11ac	-3.420	0.419	-3.001	30.00	Pass	

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#### FCC ID: A3LSMG8870

# ■Straddle channels TEST Plot for 802.11a/n\_HT20/ac\_VHT20

### 802.11a UNII 2C Band PSD CH.144



### 802.11a UNII 3 Band PSD CH.144



# 802.11n\_HT20 UNII 2C Band PSD CH.144



802.11n\_HT20 UNII 3 Band PSD CH.144



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### FCC ID: A3LSMG8870

# 802.11ac\_VHT20 UNII 2C Band PSD CH.144



### 802.11ac\_VHT20 UNII 3 Band PSD CH.144



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FCC ID: A3LSMG8870

# ■Straddle channels TEST RESULTS for 802.11n\_HT40/ac\_VHT40

Conducted Power Density Measurements (UNII 2C Band 5710MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Pass/Fail	
F710	140	802.11n	-2.216	0.224	-1.992	11.00	Pass	
5710	142	802.11ac	-3.413	0.411	-3.002	11.00	Pass	

# Conducted Power Density Measurements (UNII 3 Band 5710MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Pass/Fail	
5710	142	802.11n	-7.304	0.224	-7.080	30.00	Pass	
57 10	142	802.11ac	-8.189	0.411	-7.778	30.00	Pass	

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#### FCC ID: A3LSMG8870

# ■Straddle channels TEST Plot for 802.11n\_HT40/ac\_VHT40

802.11n\_HT40 UNII 2C Band PSD CH.142



802.11n\_HT40 UNII 3 Band PSD CH.142



802.11ac\_VHT40 UNII 2C Band PSD CH.142



802.11ac\_VHT40 UNII 3 Band PSD CH.142



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### **■**Straddle channels TEST RESULTS

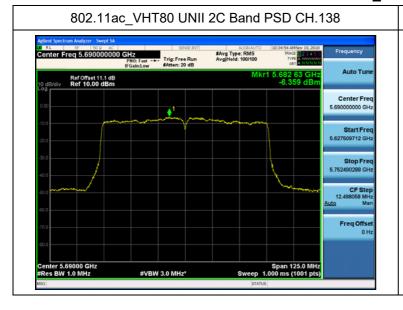
Conducted Power Density Measurements (UNII 2C Band 5690MHz)

					Test Result		
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Pass/Fail
5690	138	802.11ac	-6.359	0.981	-5.378	11.00	Pass

### Conducted Power Density Measurements (UNII 3 Band 5690MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)	Pass/Fail	
5690	138	802.11ac	-11.654	0.981	-10.673	30.00	Pass	

### ■Straddle channels TEST Plot for 802.11ac\_VHT80



# 802.11ac\_VHT80 UNII 3 Band PSD CH.138

FCC ID: A3LSMG8870



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# 10.6 FREQUENCY STABILITY. 10.6.1 20MHz BW

[Ant1]

Startup after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,180,000,000 Hz

CHANNEL: 36

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5180076.86	76.86
100%		-30	5180079.38	79.38
100%		-20	5180094.06	94.06
100%		-10	5180083.94	83.94
100%	3.85	0	5180051.06	51.06
100%		+10	5180015.36	15.36
100%		+30	5180048.19	48.19
100%		+40	5180038.89	38.89
100%		+50	5180077.90	77.90
End. Point	3.60	+20	5180089.18	89.18

FCC ID: A3LSMG8870

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

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OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,260,000,000 Hz

CHANNEL: 52

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5260054.83	54.83
100%		-30	5260033.32	33.32
100%		-20	5260088.74	88.74
100%		-10	5260059.39	59.39
100%	3.85	0	5260031.33	31.33
100%		+10	5260005.06	5.06
100%		+30	5260073.34	73.34
100%		+40	5260098.76	98.76
100%		+50	5260096.90	96.90
End. Point	3.60	+20	5260025.93	25.93

FCC ID: A3LSMG8870

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

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OPERATING BAND: UNII Band 2C

OPERATING FREQUENCY: 5,500,000,000 Hz

CHANNEL: 100

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5500045.89	45.89
100%		-30	5500023.76	23.76
100%		-20	5500048.68	48.68
100%		-10	5500001.14	1.14
100%	3.85	0	5500079.94	79.94
100%		+10	5500002.89	2.89
100%		+30	5500047.43	47.43
100%		+40	5500051.75	51.75
100%		+50	5500034.07	34.07
End. Point	3.60	+20	5500096.46	96.46

FCC ID: A3LSMG8870

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

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OPERATING BAND:UNII Band 3OPERATING FREQUENCY:5,745,000,000 HzCHANNEL:149

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5745062.94	62.94
100%		-30	5745045.41	45.41
100%		-20	5745019.32	19.32
100%		-10	5745024.91	24.91
100%	3.85	0	5745055.71	55.71
100%		+10	5745090.09	90.09
100%		+30	5745030.53	30.53
100%		+40	5745097.62	97.62
100%		+50	5745071.64	71.64
End. Point	3.60	+20	5745004.18	4.18

FCC ID: A3LSMG8870

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 4 4 / 311 **HCT CO.,LTD.** 



### 2 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,180,000,000 Hz

CHANNEL: 36

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5180078.76	78.76
100%		-30	5180019.44	19.44
100%		-20	5180017.66	17.66
100%		-10	5180083.27	83.27
100%	3.85	0	5180035.69	35.69
100%		+10	5180095.07	95.07
100%		+30	5180006.86	6.86
100%		+40	5180022.53	22.53
100%		+50	5180071.46	71.46
End. Point	3.60	+20	5180064.93	64.93

FCC ID: A3LSMG8870

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

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Report No.: HCT-RF-1811-FC021-R2 FCC ID: A3LSMG8870

OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,260,000,000 Hz

CHANNEL: 52

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5260029.88	29.88
100%		-30	5260045.02	45.02
100%		-20	5260075.45	75.45
100%		-10	5260043.49	43.49
100%	3.85	0	5260078.72	78.72
100%		+10	5260083.53	83.53
100%		+30	5260053.88	53.88
100%		+40	5260057.95	57.95
100%		+50	5260064.71	64.71
End. Point	3.60	+20	5260081.11	81.11

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 4 6 / 311 **HCT CO.,LTD.** 



Report No.: HCT-RF-1811-FC021-R2 FCC ID: A3LSMG8870

 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,500,000,000 Hz

 CHANNEL:
 100

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5500045.79	45.79
100%		-30	5500044.18	44.18
100%		-20	5500030.43	30.43
100%		-10	5500066.72	66.72
100%	3.85	0	5500072.92	72.92
100%		+10	5500062.49	62.49
100%		+30	5500002.11	2.11
100%		+40	5500096.74	96.74
100%		+50	5500081.28	81.28
End. Point	3.60	+20	5500028.51	28.51

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 4 7 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,745,000,000 Hz

CHANNEL: 149

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5745032.02	32.02
100%		-30	5745040.36	40.36
100%		-20	5745032.05	32.05
100%	3.85	-10	5745010.13	10.13
100%		0	5745039.66	39.66
100%		+10	5745095.49	95.49
100%		+30	5745060.03	60.03
100%		+40	5745081.25	81.25
100%		+50	5745034.50	34.50
End. Point	3.60	+20	5745056.03	56.03

FCC ID: A3LSMG8870

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 4 8 / 311 **HCT CO.,LTD.** 



### 5 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,180,000,000 Hz

CHANNEL: 36

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5180062.58	62.58
100%		-30	5180085.88	85.88
100%		-20	5180056.75	56.75
100%		-10	5180095.63	95.63
100%	3.85	0	5180077.67	77.67
100%		+10	5180041.40	41.40
100%		+30	5180040.65	40.65
100%		+40	5180002.68	2.68
100%		+50	5180056.23	56.23
End. Point	3.60	+20	5180054.40	54.40

FCC ID: A3LSMG8870

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 4 9 / 311 **HCT CO.,LTD.** 



Report No.: HCT-RF-1811-FC021-R2 FCC ID: A3LSMG8870

OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,260,000,000 Hz

CHANNEL: 52

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5260052.10	52.10
100%		-30	5260062.86	62.86
100%		-20	5260074.93	74.93
100%	3.85	-10	5260021.85	21.85
100%		0	5260084.46	84.46
100%		+10	5260034.65	34.65
100%		+30	5260076.10	76.10
100%		+40	5260018.10	18.10
100%		+50	5260017.62	17.62
End. Point	3.60	+20	5260064.60	64.60

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 5 0 / 311 **HCT CO.,LTD.** 



Report No.: HCT-RF-1811-FC021-R2 FCC ID: A3LSMG8870

 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,500,000,000 Hz

 CHANNEL:
 100

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5500055.94	55.94
100%		-30	5500095.57	95.57
100%		-20	5500035.33	35.33
100%		-10	5500009.06	9.06
100%	3.85	0	5500025.69	25.69
100%		+10	5500055.20	55.2
100%		+30	5500064.66	64.66
100%		+40	5500073.54	73.54
100%		+50	5500070.72	70.72
End. Point	3.60	+20	5500068.75	68.75

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 5 1 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,745,000,000 Hz

CHANNEL: 149

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5745084.66	84.66
100%		-30	5745080.35	80.35
100%		-20	5745046.42	46.42
100%	3.85	-10	5745001.12	1.12
100%		0	5745039.18	39.18
100%		+10	5745012.67	12.67
100%		+30	5745079.64	79.64
100%		+40	5745039.46	39.46
100%		+50	5745098.83	98.83
End. Point	3.60	+20	5745003.27	3.27

FCC ID: A3LSMG8870

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 5 2 / 311 **HCT CO.,LTD.** 



## 10 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,180,000,000 Hz

CHANNEL: 36

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5180068.16	68.16
100%		-30	5180078.61	78.61
100%		-20	5180005.15	5.15
100%	3.85	-10	5180066.86	66.86
100%		0	5180094.05	94.05
100%		+10	5180084.93	84.93
100%		+30	5180052.30	52.30
100%		+40	5180016.59	16.59
100%		+50	5180079.74	79.74
End. Point	3.60	+20	5180057.90	57.90

FCC ID: A3LSMG8870

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 5 3 / 311 **HCT CO.,LTD.** 



Report No.: HCT-RF-1811-FC021-R2 FCC ID: A3LSMG8870

OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,260,000,000 Hz

CHANNEL: 52

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5260074.91	74.91
100%		-30	5260043.60	43.60
100%		-20	5260018.85	18.85
100%	3.85	-10	5260054.80	54.8
100%		0	5260049.34	49.34
100%		+10	5260061.68	61.68
100%		+30	5260058.78	58.78
100%		+40	5260086.99	86.99
100%		+50	5260005.26	5.26
End. Point	3.60	+20	5260099.36	99.36

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 5 4 / 311 **HCT CO.,LTD.** 



Report No.: HCT-RF-1811-FC021-R2 FCC ID: A3LSMG8870

OPERATING BAND: UNII Band 2C

OPERATING FREQUENCY: 5,500,000,000 Hz

CHANNEL: 100

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5500077.75	77.75
100%		-30	5500097.84	97.84
100%		-20	5500013.62	13.62
100%		-10	5500008.19	8.19
100%	3.85	0	5500035.67	35.67
100%		+10	5500070.06	70.06
100%		+30	5500026.25	26.25
100%		+40	5500052.52	52.52
100%		+50	5500055.80	55.80
End. Point	3.60	+20	5500066.34	66.34

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 5 5 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,745,000,000 Hz

CHANNEL: 149

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5745014.90	14.90
100%		-30	5745072.04	72.04
100%		-20	5745073.47	73.47
100%		-10	5745021.19	21.19
100%	3.85	0	5745071.79	71.79
100%		+10	5745028.02	28.02
100%		+30	5745004.12	4.12
100%		+40	5745089.55	89.55
100%		+50	5745066.43	66.43
End. Point	3.60	+20	5745084.63	84.63

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 5 6 / 311 **HCT CO.,LTD.** 



[Ant2]

# Startup after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,180,000,000 Hz

CHANNEL: 36

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5180060.65	60.65
100%		-30	5180092.76	92.76
100%		-20	5180065.40	65.40
100%		-10	5180011.50	11.50
100%	3.85	0	5180018.36	18.36
100%		+10	5180068.51	68.51
100%		+30	5180018.23	18.23
100%		+40	5180098.83	98.83
100%		+50	5180083.63	83.63
End. Point	3.60	+20	5180076.42	76.42

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 5 7 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,260,000,000 Hz

CHANNEL: 52

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5260097.11	97.11
100%		-30	5260068.39	68.39
100%		-20	5260062.11	62.11
100%		-10	5260094.18	94.18
100%	3.85	0	5260050.66	50.66
100%		+10	5260050.36	50.36
100%		+30	5260049.43	49.43
100%		+40	5260081.94	81.94
100%		+50	5260067.78	67.78
End. Point	3.60	+20	5260043.17	43.17

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 5 8 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2C

OPERATING FREQUENCY: 5,500,000,000 Hz

CHANNEL: 100

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5500034.44	34.44
100%		-30	5500093.60	93.60
100%		-20	5500043.76	43.76
100%		-10	5500037.10	37.10
100%	3.85	0	5500041.64	41.64
100%		+10	5500034.56	34.56
100%		+30	5500065.49	65.49
100%		+40	5500017.17	17.17
100%		+50	5500065.22	65.22
End. Point	3.60	+20	5500094.24	94.24

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 5 9 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,745,000,000 Hz

CHANNEL: <u>149</u>

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5745016.48	16.48
100%		-30	5745018.49	18.49
100%		-20	5745054.80	54.80
100%		-10	5745019.90	19.90
100%	3.85	0	5745067.33	67.33
100%		+10	5745075.92	75.92
100%		+30	5745002.07	2.07
100%		+40	5745029.68	29.68
100%		+50	5745098.24	98.24
End. Point	3.60	+20	5745057.05	57.05

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 6 0 / 311 **HCT CO.,LTD.** 



# 2 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,180,000,000 Hz

CHANNEL: 36

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5180049.20	49.20
100%		-30	5180087.52	87.52
100%		-20	5180021.43	21.43
100%		-10	5180009.78	9.78
100%	3.85	0	5180044.71	44.71
100%		+10	5180056.16	56.16
100%		+30	5180033.30	33.30
100%		+40	5180029.40	29.40
100%		+50	5180067.54	67.54
End. Point	3.60	+20	5180001.79	1.79

FCC ID: A3LSMG8870

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 6 1 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,260,000,000 Hz

CHANNEL: 52

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5260033.43	33.43
100%		-30	5260086.65	86.65
100%		-20	5260014.27	14.27
100%		-10	5260067.02	67.02
100%	3.85	0	5260082.76	82.76
100%		+10	5260089.70	89.70
100%		+30	5260064.44	64.44
100%		+40	5260004.02	4.02
100%		+50	5260096.16	96.16
End. Point	3.60	+20	5260018.37	18.37

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 6 2 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,500,000,000 Hz

 CHANNEL:
 100

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5500094.15	94.15
100%		-30	5500051.08	51.08
100%		-20	5500008.67	8.67
100%		-10	5500091.34	91.34
100%	3.85	0	5500005.20	5.20
100%		+10	5500090.67	90.67
100%		+30	5500051.02	51.02
100%		+40	5500046.04	46.04
100%		+50	5500028.36	28.36
End. Point	3.60	+20	5500046.03	46.03

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 6 3 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,745,000,000 Hz

CHANNEL: 149

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5745011.95	11.95
100%		-30	5745022.64	22.64
100%		-20	5745064.58	64.58
100%		-10	5745054.48	54.48
100%	3.85	0	5745089.54	89.54
100%		+10	5745039.93	39.93
100%		+30	5745078.61	78.61
100%		+40	5745010.60	10.60
100%		+50	5745067.78	67.78
End. Point	3.60	+20	5745013.11	13.11

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 6 4 / 311 **HCT CO.,LTD.** 



# 5 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,180,000,000 Hz

CHANNEL: 36

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5180088.47	88.47
100%		-30	5180060.60	60.60
100%		-20	5180015.35	15.35
100%		-10	5180012.78	12.78
100%	3.85	0	5180061.55	61.55
100%		+10	5180051.99	51.99
100%		+30	5180090.45	90.45
100%		+40	5180091.22	91.22
100%		+50	5180081.18	81.18
End. Point	3.60	+20	5180036.92	36.92

FCC ID: A3LSMG8870

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 6 5 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,260,000,000 Hz

CHANNEL: 52

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5260043.42	43.42
100%		-30	5260096.79	96.79
100%		-20	5260064.64	64.64
100%		-10	5260017.08	17.08
100%	3.85	0	5260051.79	51.79
100%		+10	5260017.82	17.82
100%		+30	5260062.41	62.41
100%		+40	5260064.89	64.89
100%		+50	5260080.74	80.74
End. Point	3.60	+20	5260068.04	68.04

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 6 6 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,500,000,000 Hz

 CHANNEL:
 100

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5500010.66	10.66
100%		-30	5500054.36	54.36
100%		-20	5500090.20	90.20
100%		-10	5500036.77	36.77
100%	3.85	0	5500080.05	80.05
100%		+10	5500056.02	56.02
100%		+30	5500016.33	16.33
100%		+40	5500015.50	15.50
100%		+50	5500086.83	86.83
End. Point	3.60	+20	5500027.84	27.84

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 6 7 / 311 **HCT CO.,LTD.** 



FCC ID: A3LSMG8870

OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,745,000,000 Hz

CHANNEL: 149

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5745066.21	66.21
100%		-30	5745076.53	76.53
100%		-20	5745076.37	76.37
100%	3.85	-10	5745015.57	15.57
100%		0	5745001.55	1.55
100%		+10	5745095.70	95.70
100%		+30	5745065.46	65.46
100%		+40	5745033.87	33.87
100%		+50	5745015.09	15.09
End. Point	3.60	+20	5745043.26	43.26

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 6 8 / 311 **HCT CO.,LTD.** 



# epoit No.: 11C1-RF-1011-FC021-R2

FCC ID: A3LSMG8870

# 10 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,180,000,000 Hz

CHANNEL: 36

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5180017.10	17.10
100%		-30	5180030.55	30.55
100%		-20	5180076.13	76.13
100%		-10	5180067.25	67.25
100%	3.85	0	5180037.93	37.93
100%		+10	5180091.81	91.81
100%		+30	5180037.11	37.11
100%		+40	5180054.26	54.26
100%		+50	5180088.38	88.38
End. Point	3.60	+20	5180042.16	42.16

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 6 9 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,260,000,000 Hz

CHANNEL: 52

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5260082.37	82.37
100%		-30	5260082.56	82.56
100%		-20	5260073.85	73.85
100%		-10	5260057.57	57.57
100%	3.85	0	5260019.37	19.37
100%		+10	5260005.95	5.95
100%		+30	5260041.43	41.43
100%		+40	5260038.72	38.72
100%		+50	5260014.31	14.31
End. Point	3.60	+20	5260055.61	55.61

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 7 0 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2C

OPERATING FREQUENCY: 5,500,000,000 Hz

CHANNEL: 100

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5500002.72	2.72
100%		-30	5500037.26	37.26
100%		-20	5500025.03	25.03
100%		-10	5500026.39	26.39
100%	3.85	0	5500026.20	26.20
100%		+10	5500029.54	29.54
100%		+30	5500094.17	94.17
100%		+40	5500068.76	68.76
100%		+50	5500080.82	80.82
End. Point	3.60	+20	5500039.54	39.54

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 7 1 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,745,000,000 Hz

CHANNEL: 149

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5745099.33	99.33
100%		-30	5745082.23	82.23
100%		-20	5745029.35	29.35
100%		-10	5745018.95	18.95
100%	3.85	0	5745056.89	56.89
100%		+10	5745075.20	75.20
100%		+30	5745076.40	76.40
100%		+40	5745033.77	33.77
100%		+50	5745039.69	39.69
End. Point	3.60	+20	5745021.06	21.06

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 7 2 / 311 **HCT CO.,LTD.** 



# 10.6.2 40MHz BW

[Ant1]

# Startup after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,190,000,000 Hz

CHANNEL: 38

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
Voltage	1 OWCI	icinp.	ricquericy	rrequeries
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5190062.49	62.49
100%		-30	5190046.64	46.64
100%		-20	5190046.97	46.97
100%		-10	5190021.83	21.83
100%	3.85	0	5190012.97	12.97
100%		+10	5190052.72	52.72
100%		+30	5190003.45	3.45
100%		+40	5190033.22	33.22
100%		+50	5190059.66	59.66
End. Point	3.60	+20	5190043.95	43.95

FCC ID: A3LSMG8870

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 7 3 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,270,000,000 Hz

CHANNEL: 54

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5270076.93	76.93
100%		-30	5270094.52	94.52
100%		-20	5270002.24	2.24
100%		-10	5270077.95	77.95
100%	3.85	0	5270091.02	91.02
100%		+10	5270059.88	59.88
100%		+30	5270042.34	42.34
100%		+40	5270018.28	18.28
100%		+50	5270012.07	12.07
End. Point	3.60	+20	5270077.87	77.87

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 7 4 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2C

OPERATING FREQUENCY: 5,510,000,000 Hz

CHANNEL: 102

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5510088.71	88.71
100%		-30	5510048.52	48.52
100%		-20	5510084.70	84.70
100%		-10	5510035.46	35.46
100%	3.85	0	5510009.40	9.40
100%		+10	5510078.15	78.15
100%		+30	5510006.84	6.84
100%		+40	5510063.60	63.60
100%		+50	5510085.71	85.71
End. Point	3.60	+20	5510053.92	53.92

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 7 5 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,755,000,000 Hz

CHANNEL: 151

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5755084.50	84.50
100%		-30	5755034.79	34.79
100%		-20	5755017.62	17.62
100%		-10	5755047.53	47.53
100%	3.85	0	5755030.63	30.63
100%		+10	5755091.31	91.31
100%		+30	5755031.16	31.16
100%		+40	5755084.50	84.50
100%		+50	5755087.75	87.75
End. Point	3.60	+20	5755024.87	24.87

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 7 6 / 311 **HCT CO.,LTD.** 



# 2 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,190,000,000 Hz

CHANNEL: 38

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5190093.49	93.49
100%		-30	5190031.14	31.14
100%		-20	5190075.68	75.68
100%		-10	5190062.35	62.35
100%	3.85	0	5190028.70	28.70
100%		+10	5190002.60	2.60
100%		+30	5190085.78	85.78
100%		+40	5190087.14	87.14
100%		+50	5190039.90	39.90
End. Point	3.60	+20	5190042.59	42.59

FCC ID: A3LSMG8870

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 7 7 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,270,000,000 Hz

CHANNEL: 54

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5270018.62	18.62
100%		-30	5270027.81	27.81
100%		-20	5270016.95	16.95
100%		-10	5270059.85	59.85
100%	3.85	0	5270077.28	77.28
100%		+10	5270069.02	69.02
100%		+30	5270053.37	53.37
100%		+40	5270039.38	39.38
100%		+50	5270073.69	73.69
End. Point	3.60	+20	5270027.85	27.85

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 7 8 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,510,000,000 Hz

 CHANNEL:
 102

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5510091.18	91.18
100%		-30	5510011.94	11.94
100%		-20	5510097.03	97.03
100%	3.85	-10	5510079.62	79.62
100%		0	5510058.78	58.78
100%		+10	5510032.33	32.33
100%		+30	5510093.15	93.15
100%		+40	5510062.58	62.58
100%		+50	5510051.22	51.22
End. Point	3.60	+20	5510081.75	81.75

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 7 9 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 3

 OPERATING FREQUENCY:
 5,755,000,000 Hz

 CHANNEL:
 151

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5755076.63	76.63
100%		-30	5755079.35	79.35
100%		-20	5755028.62	28.62
100%		-10	5755002.23	2.23
100%	3.85	0	5755071.41	71.41
100%		+10	5755089.21	89.21
100%		+30	5755032.11	32.11
100%		+40	5755081.67	81.67
100%		+50	5755049.51	49.51
End. Point	3.60	+20	5755085.17	85.17

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 8 0 / 311 **HCT CO.,LTD.** 



# 5 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,190,000,000 Hz

CHANNEL: 38

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5190092.75	92.75
100%		-30	5190079.83	79.83
100%		-20	5190046.88	46.88
100%		-10	5190022.12	22.12
100%	3.85	0	5190088.78	88.78
100%		+10	5190014.68	14.68
100%		+30	5190066.13	66.13
100%		+40	5190088.89	88.89
100%		+50	5190066.99	66.99
End. Point	3.60	+20	5190002.50	2.50

FCC ID: A3LSMG8870

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 8 1 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,270,000,000 Hz

CHANNEL: 54

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5270007.11	7.11
100%		-30	5270032.28	32.28
100%		-20	5270071.65	71.65
100%		-10	5270022.34	22.34
100%	3.85	0	5270059.14	59.14
100%		+10	5270085.59	85.59
100%		+30	5270087.47	87.47
100%		+40	5270042.34	42.34
100%		+50	5270072.03	72.03
End. Point	3.60	+20	5270066.68	66.68

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 8 2 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,510,000,000 Hz

 CHANNEL:
 102

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5510015.28	15.28
100%		-30	5510018.52	18.52
100%		-20	5510031.59	31.59
100%		-10	5510034.81	34.81
100%	3.85	0	5510084.58	84.58
100%		+10	5510021.61	21.61
100%		+30	5510011.88	11.88
100%		+40	5510039.47	39.47
100%		+50	5510063.18	63.18
End. Point	3.60	+20	5510090.83	90.83

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 8 3 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,755,000,000 Hz

CHANNEL: 151

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5755080.37	80.37
100%		-30	5755031.89	31.89
100%		-20	5755030.25	30.25
100%	3.85	-10	5755063.10	63.1
100%		0	5755054.55	54.55
100%		+10	5755076.47	76.47
100%		+30	5755041.51	41.51
100%		+40	5755082.47	82.47
100%		+50	5755087.60	87.60
End. Point	3.60	+20	5755023.45	23.45

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 8 4 / 311 **HCT CO.,LTD.** 



# 10 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,190,000,000 Hz

CHANNEL: 38

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5190084.33	84.33
100%		-30	5190083.09	83.09
100%		-20	5190042.12	42.12
100%		-10	5190070.51	70.51
100%	3.85	0	5190029.78	29.78
100%		+10	5190025.48	25.48
100%		+30	5190039.68	39.68
100%		+40	5190082.40	82.40
100%		+50	5190047.97	47.97
End. Point	3.60	+20	5190078.35	78.35

FCC ID: A3LSMG8870

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 8 5 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2A

 OPERATING FREQUENCY:
 5,270,000,000 Hz

 CHANNEL:
 54

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5270018.06	18.06
100%		-30	5270011.26	11.26
100%		-20	5270061.78	61.78
100%	3.85	-10	5270050.15	50.15
100%		0	5270063.06	63.06
100%		+10	5270023.15	23.15
100%		+30	5270096.63	96.63
100%		+40	5270022.49	22.49
100%		+50	5270039.83	39.83
End. Point	3.60	+20	5270053.77	53.77

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 8 6 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,510,000,000 Hz

 CHANNEL:
 102

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5510001.32	1.32
100%		-30	5510094.17	94.17
100%		-20	5510034.66	34.66
100%		-10	5510058.45	58.45
100%	3.85	0	5510094.63	94.63
100%		+10	5510068.73	68.73
100%		+30	5510005.79	5.79
100%		+40	5510058.65	58.65
100%		+50	5510070.76	70.76
End. Point	3.60	+20	5510010.04	10.04

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 8 7 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,755,000,000 Hz

CHANNEL: 151

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5755096.87	96.87
100%		-30	5755027.54	27.54
100%		-20	5755047.28	47.28
100%		-10	5755068.40	68.4
100%	3.85	0	5755035.05	35.05
100%		+10	5755074.95	74.95
100%		+30	5755008.45	8.45
100%		+40	5755061.91	61.91
100%		+50	5755010.53	10.53
End. Point	3.60	+20	5755038.45	38.45

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 8 8 / 311 **HCT CO.,LTD.** 



[Ant2]

# Startup after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,190,000,000 Hz

CHANNEL: 38

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5190051.24	51.24
100%		-30	5190083.74	83.74
100%		-20	5190096.20	96.20
100%		-10	5190075.55	75.55
100%	3.85	0	5190062.76	62.76
100%		+10	5190095.81	95.81
100%		+30	5190038.41	38.41
100%		+40	5190061.38	61.38
100%		+50	5190042.80	42.80
End. Point	3.60	+20	5190009.51	9.51

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 8 9 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,270,000,000 Hz

CHANNEL: 54

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5270002.15	2.15
100%		-30	5270029.28	29.28
100%		-20	5270072.71	72.71
100%		-10	5270080.54	80.54
100%	3.85	0	5270080.47	80.47
100%		+10	5270036.27	36.27
100%		+30	5270072.14	72.14
100%		+40	5270079.61	79.61
100%		+50	5270011.84	11.84
End. Point	3.60	+20	5270077.67	77.67

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 9 0 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,510,000,000 Hz

 CHANNEL:
 102

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5510029.11	29.11
100%		-30	5510064.43	64.43
100%		-20	5510073.05	73.05
100%		-10	5510051.62	51.62
100%	3.85	0	5510097.82	97.82
100%		+10	5510074.43	74.43
100%		+30	5510033.49	33.49
100%		+40	5510075.38	75.38
100%		+50	5510066.06	66.06
End. Point	3.60	+20	5510070.75	70.75

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 9 1 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,755,000,000 Hz

CHANNEL: 151

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5755065.84	65.84
100%		-30	5755042.31	42.31
100%		-20	5755022.16	22.16
100%	3.85	-10	5755059.40	59.40
100%		0	5755084.26	84.26
100%		+10	5755029.36	29.36
100%		+30	5755072.48	72.48
100%		+40	5755001.84	1.84
100%		+50	5755093.27	93.27
End. Point	3.60	+20	5755032.44	32.44

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 9 2 / 311 **HCT CO.,LTD.** 



# 2 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,190,000,000 Hz

CHANNEL: 38

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5190005.71	5.71
100%		-30	5190010.39	10.39
100%		-20	5190028.76	28.76
100%		-10	5190063.84	63.84
100%	3.85	0	5190071.54	71.54
100%		+10	5190080.29	80.29
100%		+30	5190004.20	4.20
100%		+40	5190049.83	49.83
100%		+50	5190019.12	19.12
End. Point	3.60	+20	5190006.25	6.25

FCC ID: A3LSMG8870

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 9 3 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,270,000,000 Hz

CHANNEL: 54

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5270016.65	16.65
100%		-30	5270081.48	81.48
100%		-20	5270068.31	68.31
100%	3.85	-10	5270073.08	73.08
100%		0	5270072.12	72.12
100%		+10	5270052.22	52.22
100%		+30	5270005.59	5.59
100%		+40	5270032.37	32.37
100%		+50	5270024.35	24.35
End. Point	3.60	+20	5270023.89	23.89

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 9 4 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2C

OPERATING FREQUENCY: 5,510,000,000 Hz

CHANNEL: 102

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5510044.69	44.69
100%		-30	5510022.90	22.90
100%		-20	5510042.75	42.75
100%	3.85	-10	5510085.89	85.89
100%		0	5510031.03	31.03
100%		+10	5510021.50	21.50
100%		+30	5510004.95	4.95
100%		+40	5510068.21	68.21
100%		+50	5510006.91	6.91
End. Point	3.60	+20	5510002.43	2.43

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 9 5 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3
OPERATING FREQUENCY: 5,755,000,000 Hz

CHANNEL: <u>151</u>

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5755070.17	70.17
100%		-30	5755092.73	92.73
100%		-20	5755049.76	49.76
100%	3.85	-10	5755034.95	34.95
100%		0	5755057.13	57.13
100%		+10	5755063.71	63.71
100%		+30	5755025.10	25.10
100%		+40	5755026.92	26.92
100%		+50	5755075.51	75.51
End. Point	3.60	+20	5755042.86	42.86

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 9 6 / 311 **HCT CO.,LTD.** 



## 5 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,190,000,000 Hz

CHANNEL: 38

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5190033.58	33.58
100%		-30	5190037.56	37.56
100%		-20	5190097.59	97.59
100%	3.85	-10	5190075.03	75.03
100%		0	5190052.36	52.36
100%		+10	5190025.94	25.94
100%		+30	5190063.73	63.73
100%		+40	5190008.16	8.16
100%		+50	5190049.75	49.75
End. Point	3.60	+20	5190065.81	65.81

FCC ID: A3LSMG8870

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 9 7 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,270,000,000 Hz

CHANNEL: 54

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5270068.76	68.76
100%		-30	5270011.69	11.69
100%		-20	5270083.89	83.89
100%	3.85	-10	5270053.05	53.05
100%		0	5270085.97	85.97
100%		+10	5270079.62	79.62
100%		+30	5270031.20	31.20
100%		+40	5270055.78	55.78
100%		+50	5270069.57	69.57
End. Point	3.60	+20	5270061.74	61.74

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 9 8 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,510,000,000 Hz

 CHANNEL:
 102

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5510093.65	93.65
100%		-30	5510082.49	82.49
100%		-20	5510076.86	76.86
100%		-10	5510057.57	57.57
100%	3.85	0	5510056.59	56.59
100%		+10	5510076.15	76.15
100%		+30	5510043.85	43.85
100%		+40	5510019.74	19.74
100%		+50	5510052.84	52.84
End. Point	3.60	+20	5510096.34	96.34

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 1 9 9 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,755,000,000 Hz

CHANNEL: 151

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5755033.95	33.95
100%		-30	5755046.22	46.22
100%		-20	5755020.84	20.84
100%	3.85	-10	5755049.25	49.25
100%		0	5755066.88	66.88
100%		+10	5755006.21	6.21
100%		+30	5755084.16	84.16
100%		+40	5755024.03	24.03
100%		+50	5755011.92	11.92
End. Point	3.60	+20	5755052.15	52.15

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 0 0 / 311 **HCT CO.,LTD.** 



10 minutes after the EUT is energized

# FCC ID: A3LSMG8870

**OPERATING BAND:** UNII Band 1

**OPERATING FREQUENCY:** 5,190,000,000 Hz

CHANNEL: 38

3.85 VDC REFERENCE VOLTAGE:

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5190090.29	90.29
100%		-30	5190076.81	76.81
100%		-20	5190058.23	58.23
100%	3.85	-10	5190010.48	10.48
100%		0	5190001.60	1.60
100%		+10	5190016.87	16.87
100%		+30	5190012.85	12.85
100%		+40	5190093.15	93.15
100%		+50	5190002.70	2.70
End. Point	3.60	+20	5190043.84	43.84

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

HCT CO.,LTD. F-TP22-03 (Rev.00) 2 0 1 / 311



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,270,000,000 Hz

CHANNEL: 54

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5270004.56	4.56
100%		-30	5270056.30	56.30
100%		-20	5270053.63	53.63
100%		-10	5270003.10	3.10
100%	3.85	0	5270055.80	55.80
100%		+10	5270051.13	51.13
100%		+30	5270094.08	94.08
100%		+40	5270015.15	15.15
100%		+50	5270025.23	25.23
End. Point	3.60	+20	5270067.20	67.20

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 0 2 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,510,000,000 Hz

 CHANNEL:
 102

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5510060.29	60.29
100%		-30	5510097.27	97.27
100%		-20	5510068.23	68.23
100%	3.85	-10	5510055.02	55.02
100%		0	5510096.13	96.13
100%		+10	5510015.95	15.95
100%		+30	5510048.98	48.98
100%		+40	5510066.44	66.44
100%		+50	5510054.84	54.84
End. Point	3.60	+20	5510016.90	16.90

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 0 3 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,755,000,000 Hz

CHANNEL: 151

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5755030.26	30.26
100%		-30	5755038.12	38.12
100%		-20	5755053.81	53.81
100%		-10	5755011.14	11.14
100%	3.85	0	5755082.90	82.90
100%		+10	5755001.29	1.29
100%		+30	5755069.72	69.72
100%		+40	5755046.74	46.74
100%		+50	5755080.30	80.30
End. Point	3.60	+20	5755050.21	50.21

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 0 4 / 311 **HCT CO.,LTD.** 



# 10.6.3 80MHz BW

[Ant1]

# Startup after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,210,000,000 Hz

CHANNEL: 42

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5210008.32	8.32
100%		-30	5210035.91	35.91
100%		-20	5210044.61	44.61
100%	3.85	-10	5210027.45	27.45
100%		0	5210045.25	45.25
100%		+10	5210092.10	92.10
100%		+30	5210097.63	97.63
100%		+40	5210009.98	9.98
100%		+50	5210090.20	90.20
End. Point	3.60	+20	5210018.69	18.69

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 0 5 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2A

 OPERATING FREQUENCY:
 5,290,000,000 Hz

 CHANNEL:
 58

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5290094.07	94.07
100%		-30	5290043.65	43.65
100%		-20	5290098.39	98.39
100%		-10	5290002.71	2.71
100%	3.85	0	5290013.93	13.93
100%		+10	5290087.38	87.38
100%		+30	5290090.35	90.35
100%		+40	5290064.76	64.76
100%		+50	5290025.57	25.57
End. Point	3.60	+20	5290080.21	80.21

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 0 6 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,530,000,000 Hz

 CHANNEL:
 106

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5530097.39	97.39
100%		-30	5530022.52	22.52
100%		-20	5530034.30	34.30
100%		-10	5530077.51	77.51
100%	3.85	0	5530047.39	47.39
100%		+10	5530039.83	39.83
100%		+30	5530005.98	5.98
100%		+40	5530089.35	89.35
100%		+50	5530056.29	56.29
End. Point	3.60	+20	5530036.05	36.05

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 0 7 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,775,000,000 Hz

CHANNEL: 155

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5775093.33	93.33
100%		-30	5775013.28	13.28
100%		-20	5775048.64	48.64
100%		-10	5775089.04	89.04
100%	3.85	0	5775023.53	23.53
100%		+10	5775053.65	53.65
100%		+30	5775032.77	32.77
100%		+40	5775050.34	50.34
100%		+50	5775013.55	13.55
End. Point	3.60	+20	5775086.42	86.42

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 0 8 / 311 **HCT CO.,LTD.** 



# 2 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,210,000,000 Hz

CHANNEL: 42

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5210042.72	42.72
100%		-30	5210015.21	15.21
100%		-20	5210051.54	51.54
100%		-10	5210096.82	96.82
100%	3.85	0	5210073.09	73.09
100%		+10	5210064.43	64.43
100%		+30	5210018.63	18.63
100%		+40	5210097.13	97.13
100%		+50	5210020.50	20.50
End. Point	3.60	+20	5210028.20	28.20

FCC ID: A3LSMG8870

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 0 9 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,290,000,000 Hz

CHANNEL: 58

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5290063.60	63.60
100%		-30	5290020.66	20.66
100%		-20	5290091.27	91.27
100%		-10	5290094.30	94.30
100%	3.85	0	5290021.74	21.74
100%		+10	5290004.87	4.87
100%		+30	5290041.78	41.78
100%		+40	5290039.05	39.05
100%		+50	5290027.36	27.36
End. Point	3.60	+20	5290059.25	59.25

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 1 0 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2C

OPERATING FREQUENCY: 5,530,000,000 Hz

CHANNEL: 106

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5530074.81	74.81
100%		-30	5530094.82	94.82
100%		-20	5530043.51	43.51
100%	3.85	-10	5530057.31	57.31
100%		0	5530099.19	99.19
100%		+10	5530072.23	72.23
100%		+30	5530031.45	31.45
100%		+40	5530035.64	35.64
100%		+50	5530018.99	18.99
End. Point	3.60	+20	5530054.38	54.38

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 1 1 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,775,000,000 Hz

CHANNEL: 155

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5775003.77	3.77
100%		-30	5775005.27	5.27
100%		-20	5775063.31	63.31
100%		-10	5775020.65	20.65
100%	3.85	0	5775067.41	67.41
100%		+10	5775073.82	73.82
100%		+30	5775071.40	71.40
100%		+40	5775074.91	74.91
100%		+50	5775075.15	75.15
End. Point	3.60	+20	5775056.84	56.84

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 1 2 / 311 **HCT CO.,LTD.** 



## 5 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,210,000,000 Hz

CHANNEL: 42

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5210077.81	77.81
100%		-30	5210038.47	38.47
100%		-20	5210071.18	71.18
100%	3.85	-10	5210041.40	41.40
100%		0	5210067.41	67.41
100%		+10	5210086.71	86.71
100%		+30	5210060.15	60.15
100%		+40	5210036.71	36.71
100%		+50	5210048.93	48.93
End. Point	3.60	+20	5210032.36	32.36

FCC ID: A3LSMG8870

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 1 3 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,290,000,000 Hz

CHANNEL: 58

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5290006.21	6.21
100%		-30	5290054.64	54.64
100%		-20	5290022.14	22.14
100%		-10	5290014.45	14.45
100%	3.85	0	5290081.33	81.33
100%		+10	5290026.09	26.09
100%		+30	5290011.75	11.75
100%		+40	5290021.04	21.04
100%		+50	5290099.18	99.18
End. Point	3.60	+20	5290093.58	93.58

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 1 4 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2C

OPERATING FREQUENCY: 5,530,000,000 Hz

CHANNEL: 106

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5530034.35	34.35
100%		-30	5530059.83	59.83
100%		-20	5530009.32	9.32
100%		-10	5530043.52	43.52
100%	3.85	0	5530062.06	62.06
100%		+10	5530002.56	2.56
100%		+30	5530098.71	98.71
100%		+40	5530038.11	38.11
100%		+50	5530003.10	3.10
End. Point	3.60	+20	5530083.92	83.92

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 1 5 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,775,000,000 Hz

CHANNEL: <u>155</u>

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5775014.91	14.91
100%		-30	5775059.82	59.82
100%		-20	5775073.46	73.46
100%	3.85	-10	5775021.14	21.14
100%		0	5775095.54	95.54
100%		+10	5775070.28	70.28
100%		+30	5775036.81	36.81
100%		+40	5775084.64	84.64
100%		+50	5775045.96	45.96
End. Point	3.60	+20	5775090.48	90.48

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 1 6 / 311 **HCT CO.,LTD.** 



## 10 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,210,000,000 Hz

CHANNEL: 42

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5210066.45	66.45
100%		-30	5210064.88	64.88
100%		-20	5210040.71	40.71
100%		-10	5210022.99	22.99
100%	3.85	0	5210059.27	59.27
100%		+10	5210024.57	24.57
100%		+30	5210044.90	44.90
100%		+40	5210012.51	12.51
100%		+50	5210099.27	99.27
End. Point	3.60	+20	5210007.73	7.73

FCC ID: A3LSMG8870

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 1 7 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,290,000,000 Hz

CHANNEL: 58

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5290091.17	91.17
100%		-30	5290050.96	50.96
100%		-20	5290076.29	76.29
100%	3.85	-10	5290027.19	27.19
100%		0	5290055.15	55.15
100%		+10	5290077.22	77.22
100%		+30	5290037.27	37.27
100%		+40	5290049.42	49.42
100%		+50	5290051.72	51.72
End. Point	3.60	+20	5290038.97	38.97

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 1 8 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,530,000,000 Hz

 CHANNEL:
 106

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5530049.42	49.42
100%		-30	5530076.88	76.88
100%		-20	5530031.77	31.77
100%		-10	5530015.43	15.43
100%	3.85	0	5530031.31	31.31
100%		+10	5530088.27	88.27
100%		+30	5530025.38	25.38
100%		+40	5530069.95	69.95
100%		+50	5530082.98	82.98
End. Point	3.60	+20	5530079.60	79.6

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 1 9 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,775,000,000 Hz

CHANNEL: 155

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5775001.58	1.58
100%		-30	5775007.12	7.12
100%		-20	5775077.46	77.46
100%		-10	5775073.46	73.46
100%	3.85	0	5775056.72	56.72
100%		+10	5775099.12	99.12
100%		+30	5775095.83	95.83
100%		+40	5775019.47	19.47
100%		+50	5775026.43	26.43
End. Point	3.60	+20	5775093.35	93.35

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 2 0 / 311 **HCT CO.,LTD.** 



FCC ID: A3LSMG8870

[Ant2]

### Startup after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,210,000,000 Hz

CHANNEL: 42

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5210045.84	45.84
100%		-30	5210069.11	69.11
100%		-20	5210074.82	74.82
100%		-10	5210058.42	58.42
100%	3.85	0	5210029.63	29.63
100%		+10	5210029.55	29.55
100%		+30	5210086.48	86.48
100%		+40	5210008.81	8.81
100%		+50	5210070.51	70.51
End. Point	3.60	+20	5210035.19	35.19

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 2 1 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,290,000,000 Hz

CHANNEL: 58

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5290052.85	52.85
100%		-30	5290068.99	68.99
100%		-20	5290076.16	76.16
100%	3.85	-10	5290084.71	84.71
100%		0	5290033.70	33.70
100%		+10	5290080.92	80.92
100%		+30	5290098.24	98.24
100%		+40	5290017.07	17.07
100%		+50	5290031.52	31.52
End. Point	3.60	+20	5290015.76	15.76

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 2 2 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2C

OPERATING FREQUENCY: 5,530,000,000 Hz

CHANNEL: 106

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5530017.59	17.59
100%		-30	5530036.79	36.79
100%		-20	5530036.50	36.50
100%		-10	5530049.13	49.13
100%	3.85	0	5530052.16	52.16
100%		+10	5530076.59	76.59
100%		+30	5530077.47	77.47
100%		+40	5530040.07	40.07
100%		+50	5530008.06	8.06
End. Point	3.60	+20	5530034.09	34.09

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 2 3 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,775,000,000 Hz

CHANNEL: 155

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5775068.92	68.92
100%		-30	5775078.80	78.80
100%		-20	5775067.99	67.99
100%	3.85	-10	5775092.84	92.84
100%		0	5775052.51	52.51
100%		+10	5775097.06	97.06
100%		+30	5775018.96	18.96
100%		+40	5775080.69	80.69
100%		+50	5775048.21	48.21
End. Point	3.60	+20	5775005.57	5.57

FCC ID: A3LSMG8870

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 2 4 / 311 **HCT CO.,LTD.** 



## 2 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,210,000,000 Hz

CHANNEL: 42

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5210030.32	30.32
100%		-30	5210018.61	18.61
100%		-20	5210009.57	9.57
100%	3.85	-10	5210052.35	52.35
100%		0	5210076.71	76.71
100%		+10	5210096.88	96.88
100%		+30	5210017.33	17.33
100%		+40	5210088.95	88.95
100%		+50	5210010.25	10.25
End. Point	3.60	+20	5210061.70	61.70

FCC ID: A3LSMG8870

# Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 2 5 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,290,000,000 Hz

CHANNEL: 58

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5290001.57	1.57
100%		-30	5290096.48	96.48
100%		-20	5290095.05	95.05
100%	3.85	-10	5290074.96	74.96
100%		0	5290083.81	83.81
100%		+10	5290021.39	21.39
100%		+30	5290010.03	10.03
100%		+40	5290021.20	21.20
100%		+50	5290047.21	47.21
End. Point	3.60	+20	5290079.03	79.03

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 2 6 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,530,000,000 Hz

 CHANNEL:
 106

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5530078.35	78.35
100%		-30	5530070.45	70.45
100%		-20	5530069.52	69.52
100%	3.85	-10	5530022.90	22.90
100%		0	5530024.42	24.42
100%		+10	5530032.02	32.02
100%		+30	5530023.36	23.36
100%		+40	5530057.82	57.82
100%		+50	5530027.22	27.22
End. Point	3.60	+20	5530096.66	96.66

#### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 2 7 / 311 **HCT CO.,LTD.** 



OPERATING FREQUENCY:

OPERATING BAND: UNII Band 3

CHANNEL: 155

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Temp. Frequency	
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5775021.75	21.75
100%		-30	5775091.72	91.72
100%		-20	5775061.95	61.95
100%		-10	5775065.15	65.15
100%	3.85	0 5775061.84		61.84
100%		+10	5775047.68	47.68
100%		+30	5775023.32	23.32
100%		+40	5775017.38	17.38
100%		+50	5775084.43	84.43
End. Point	3.60	+20 5775024.78		24.78

5,775,000,000 Hz

FCC ID: A3LSMG8870

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 2 8 / 311 **HCT CO.,LTD.** 



## 5 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,210,000,000 Hz

CHANNEL: 42

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp. Frequency		Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5210029.60	29.60
100%		-30	5210070.88	70.88
100%		-20	5210013.40	13.40
100%		-10	5210002.61	2.61
100%	3.85	0	5210069.16	69.16
100%		+10	5210080.41	80.41
100%		+30	5210077.45	77.45
100%		+40	5210039.80	39.80
100%		+50	5210023.74	23.74
End. Point	3.60	+20 5210059.96		59.96

FCC ID: A3LSMG8870

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

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OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,290,000,000 Hz

CHANNEL: 58

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Temp. Frequency	
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5290095.86	95.86
100%		-30	5290086.31	86.31
100%		-20	5290099.08	99.08
100%		-10	5290099.87	99.87
100%	3.85	0 5290058.27		58.27
100%		+10 5290048.61		48.61
100%		+30	5290017.37	17.37
100%		+40	5290038.59	38.59
100%		+50	5290013.47	13.47
End. Point	3.60	+20 5290018.87		18.87

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 3 0 / 311 **HCT CO.,LTD.** 



 OPERATING BAND:
 UNII Band 2C

 OPERATING FREQUENCY:
 5,530,000,000 Hz

 CHANNEL:
 106

 REFERENCE VOLTAGE:
 3.85 VDC

Voltage	Power	Temp.	Temp. Frequency	
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5530054.09	54.09
100%		-30	5530069.95	69.95
100%		-20	5530008.98	8.98
100%		-10	5530039.06	39.06
100%	3.85	0	5530039.78	39.78
100%		+10	5530095.64	95.64
100%		+30	5530082.47	82.47
100%		+40	5530088.70	88.70
100%		+50	5530074.91	74.91
End. Point	3.60	+20 5530019.67		19.67

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

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OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,775,000,000 Hz

CHANNEL: 155

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp. Frequency		Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5775040.48	40.48
100%		-30	5775001.72	1.72
100%		-20	5775069.81	69.81
100%		-10	5775094.10	94.10
100%	3.85	0	5775021.63	21.63
100%		+10	5775055.42	55.42
100%		+30	5775070.46	70.46
100%		+40	5775023.25	23.25
100%		+50	5775058.43	58.43
End. Point	3.60	+20 5775056.71		56.71

FCC ID: A3LSMG8870

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

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## 10 minutes after the EUT is energized

OPERATING BAND: UNII Band 1

OPERATING FREQUENCY: 5,210,000,000 Hz

CHANNEL: 42

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Temp. Frequency	
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5210030.61	30.61
100%		-30	5210080.12	80.12
100%		-20	5210041.48	41.48
100%		-10	5210075.76	75.76
100%	3.85	0	5210001.71	1.71
100%		+10	5210073.88	73.88
100%		+30	5210053.14	53.14
100%		+40	5210044.88	44.88
100%		+50	5210081.95	81.95
End. Point	3.60	+20 5210006.05		6.05

FCC ID: A3LSMG8870

## Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 3 3 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 2A

OPERATING FREQUENCY: 5,290,000,000 Hz

CHANNEL: 58

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp.	Temp. Frequency	
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5290025.68	25.68
100%		-30	5290096.91	96.91
100%		-20	5290042.84	42.84
100%		-10	5290089.11	89.11
100%	3.85	0 5290088.37		88.37
100%		+10	5290079.30	79.30
100%		+30	5290067.60	67.60
100%		+40	5290086.55	86.55
100%		+50	5290041.76	41.76
End. Point	3.60	+20 5290050.06		50.06

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

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REFERENCE VOLTAGE:

OPERATING BAND: UNII Band 2C
OPERATING FREQUENCY: 5,530,000,000 Hz
CHANNEL: 106

Voltage	Power	Temp.	Frequency	Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5530002.15	2.15
100%		-30	5530068.17	68.17
100%		-20	5530035.12	35.12
100%		-10	5530013.06	13.06
100%	3.85	0 5530061.62		61.62
100%		+10	5530007.30	7.30
100%		+30	5530024.16	24.16
100%		+40	5530074.24	74.24
100%		+50	5530099.90	99.90
End. Point	3.60	+20 5530016.11		16.11

3.85 VDC

FCC ID: A3LSMG8870

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

F-TP22-03 (Rev.00) 2 3 5 / 311 **HCT CO.,LTD.** 



OPERATING BAND: UNII Band 3

OPERATING FREQUENCY: 5,775,000,000 Hz

CHANNEL: 155

REFERENCE VOLTAGE: 3.85 VDC

Voltage	Power	Temp. Frequency		Frequency
(%)	(VDC)	(℃)	(kHz)	Error (kHz)
100%		+20(Ref)	5775078.61	78.61
100%		-30	5775059.46	59.46
100%		-20	5775033.40	33.40
100%		-10	5775097.11	97.11
100%	3.85	0	5775011.84	11.84
100%		+10	5775002.44	2.44
100%		+30	5775070.32	70.32
100%		+40	5775047.17	47.17
100%		+50	5775086.85	86.85
End. Point	3.60	+20 5775069.91		69.91

### Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

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## **10.7 RADIATED SPURIOUS EMISSIONS**

Frequency Range: 9 kHz - 30MHz

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin	
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB	
No Critical peaks found								

#### Note:

- 1. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
- 2. Distance extrapolation factor = 40\*log (specific distance / test distance) (dB)
- 3. Limit line = specific Limits (dBuV) + Distance extrapolation factor
- 4. The test results for below 30 MHz is correlated to an open site.
  The result on OATS is about 2 dB higher than semi-anechoic chamber(10 m chamber)

Frequency Range: Below 1 GHz

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin	
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB	
No Critical peaks found								

#### Note:

1. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode

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# Frequency Range : Above 1 GHz

Band: UNII 1

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5180 MHz

Channel No. 36 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10360	53.60	-1.02	V	52.58	68.20	15.62	PK
15540	51.62	-1.27	V	50.35	73.98	23.63	PK
15540	38.13	-1.27	V	36.86	53.98	17.12	AV
10360	54.32	-1.02	Н	53.30	68.20	14.90	PK
15540	52.12	-1.27	Н	50.85	73.98	23.13	PK
15540	38.37	-1.27	Н	37.10	53.98	16.88	AV

Band: UNII 1

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5200 MHz

Channel No. 40 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10400	53.88	-0.29	V	53.59	68.20	14.61	PK
15600	52.39	-3.24	V	49.15	73.98	24.83	PK
15600	39.27	-3.24	V	36.03	53.98	17.95	AV
10400	54.86	-0.29	Н	54.57	68.20	13.63	PK
15600	53.46	-3.24	Н	50.22	73.98	23.76	PK
15600	39.56	-3.24	Н	36.32	53.98	17.66	AV

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Band: UNII 1

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5240 MHz

Channel No. 48 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10480	54.14	-3.09	V	51.05	68.20	17.15	PK
15720	51.20	-3.17	٧	48.03	73.98	25.95	PK
15720	39.56	-3.17	V	36.39	53.98	17.59	AV
10480	54.80	-3.09	Н	51.71	68.20	16.49	PK
15720	53.92	-3.17	Н	50.75	73.98	23.23	PK
15720	39.76	-3.17	Н	36.59	53.98	17.39	AV

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 3 9 / 311 **HCT CO.,LTD.** 



Band: UNII 1

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5180 MHz

Channel No. 36 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10360	54.66	-1.02	V	53.64	68.20	14.56	PK
15540	53.18	-1.27	V	51.91	73.98	22.07	PK
15540	38.24	-1.27	V	36.97	53.98	17.01	AV
10360	53.89	-1.02	Н	52.87	68.20	15.33	PK
15540	52.11	-1.27	Н	50.84	73.98	23.14	PK
15540	38.20	-1.27	Н	36.93	53.98	17.05	AV

FCC ID: A3LSMG8870

Band: UNII 1

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5200 MHz

Channel No. 40 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10400	54.12	-0.29	V	53.83	68.20	14.37	PK
15600	52.61	-3.24	V	49.37	73.98	24.61	PK
15600	39.30	-3.24	V	36.06	53.98	17.92	AV
10400	54.55	-0.29	Н	54.26	68.20	13.94	PK
15600	53.51	-3.24	Н	50.27	73.98	23.71	PK
15600	39.48	-3.24	Н	36.24	53.98	17.74	AV

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Band: UNII 1

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5240 MHz

Channel No. 48 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10480	53.90	-3.09	V	50.81	68.20	17.39	PK
15720	52.64	-3.17	V	49.47	73.98	24.51	PK
15720	39.51	-3.17	V	36.34	53.98	17.64	AV
10480	55.52	-3.09	Н	52.43	68.20	15.77	PK
15720	53.93	-3.17	Н	50.76	73.98	23.22	PK
15720	39.74	-3.17	Н	36.57	53.98	17.41	AV

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 4 1 / 311 **HCT CO.,LTD.** 



Band: UNII 1

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5180 MHz

Channel No. 36 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10360	53.16	-1.02	V	52.14	68.20	16.06	PK
15540	52.88	-1.27	V	51.61	73.98	22.37	PK
15540	38.19	-1.27	V	36.92	53.98	17.06	AV
10360	53.67	-1.02	Н	52.65	68.20	15.55	PK
15540	53.40	-1.27	Н	52.13	73.98	21.85	PK
15540	38.10	-1.27	Н	36.83	53.98	17.15	AV

FCC ID: A3LSMG8870

Band: UNII 1

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5200 MHz

Channel No. 40 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10400	53.65	-0.29	V	53.36	68.20	14.84	PK
15600	52.42	-3.24	V	49.18	73.98	24.80	PK
15600	39.21	-3.24	V	35.97	53.98	18.01	AV
10400	54.73	-0.29	Н	54.44	68.20	13.76	PK
15600	53.09	-3.24	Н	49.85	73.98	24.13	PK
15600	39.42	-3.24	Н	36.18	53.98	17.80	AV

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Band: UNII 1

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5240 MHz

Channel No. 48 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10480	54.16	-3.09	V	51.07	68.20	17.13	PK
15720	52.47	-3.17	V	49.30	73.98	24.68	PK
15720	39.46	-3.17	V	36.29	53.98	17.69	AV
10480	55.48	-3.09	Н	52.39	68.20	15.81	PK
15720	53.74	-3.17	Н	50.57	73.98	23.41	PK
15720	39.60	-3.17	Н	36.43	53.98	17.55	AV

FCC ID: A3LSMG8870

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Band: UNII 1

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5190 MHz

Channel No. 38 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10380	53.63	-1.29	V	52.34	68.20	15.86	PK
15570	52.13	-1.21	V	50.92	73.98	23.06	PK
15570	39.70	-1.21	V	38.49	53.98	15.49	AV
10380	54.57	-1.29	Н	53.28	68.20	14.92	PK
15570	52.68	-1.21	Н	51.47	73.98	22.51	PK
15570	39.95	-1.21	Н	38.74	53.98	15.24	AV

FCC ID: A3LSMG8870

Band: UNII 1

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5230 MHz

Channel No. 46 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10460	53.98	-1.52	V	52.46	68.20	15.74	PK
15690	53.26	-1.90	V	51.36	73.98	22.62	PK
15690	40.04	-1.90	V	38.14	53.98	15.84	AV
10460	54.36	-1.52	Н	52.84	68.20	15.36	PK
15690	54.34	-1.90	Н	52.44	73.98	21.54	PK
15690	40.26	-1.90	Н	38.36	53.98	15.62	AV

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Band: UNII 1

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5190 MHz

Channel No. 38 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10380	54.16	-1.29	V	52.87	68.20	15.33	PK
15570	52.67	-1.21	V	51.46	73.98	22.52	PK
15570	39.56	-1.21	V	38.35	53.98	15.63	AV
10380	54.68	-1.29	Н	53.39	68.20	14.81	PK
15570	53.42	-1.21	Н	52.21	73.98	21.77	PK
15570	39.88	-1.21	Н	38.67	53.98	15.31	AV

FCC ID: A3LSMG8870

Band: UNII 1

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5230 MHz

Channel No. 46 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10460	53.49	-1.52	V	51.97	68.20	16.23	PK
15690	53.48	-1.90	V	51.58	73.98	22.40	PK
15690	40.10	-1.90	V	38.20	53.98	15.78	AV
10460	54.61	-1.52	Н	53.09	68.20	15.11	PK
15690	53.64	-1.90	Н	51.74	73.98	22.24	PK
15690	40.19	-1.90	Н	38.29	53.98	15.69	AV

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Band: UNII 1

Operation Mode: 802.11 ac(VHT80)

Transfer MCS Index: 0

Operating Frequency 5210 MHz

Channel No. 42 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10420	53.57	-1.73	V	51.84	68.20	16.36	PK
15630	52.18	-1.86	V	50.32	73.98	23.66	PK
15630	41.26	-1.86	V	39.40	53.98	14.58	AV
10420	54.48	-1.73	Н	52.75	68.20	15.45	PK
15630	52.86	-1.86	Н	51.00	73.98	22.98	PK
15630	41.49	-1.86	Н	39.63	53.98	14.35	AV

FCC ID: A3LSMG8870

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Band: UNII 2A

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5260 MHz

Channel No. 52 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10520	54.24	-1.52	V	52.72	68.20	15.48	PK
15780	52.46	-2.64	V	49.82	73.98	24.16	PK
15780	39.38	-2.64	V	36.74	53.98	17.24	AV
10520	55.22	-1.52	Н	53.70	68.20	14.50	PK
15780	53.44	-2.64	Н	50.80	73.98	23.18	PK
15780	39.56	-2.64	Н	36.92	53.98	17.06	AV

FCC ID: A3LSMG8870

Band: UNII 2A

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5300 MHz

Channel No. 60 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10600	53.44	-1.32	V	52.12	73.98	21.86	PK
10600	39.75	-1.32	V	38.43	53.98	15.55	AV
15900	52.08	-1.51	V	50.57	73.98	23.41	PK
15900	38.23	-1.51	V	36.72	53.98	17.26	AV
10600	53.75	-1.32	Н	52.43	73.98	21.55	PK
10600	40.08	-1.32	Н	38.76	53.98	15.22	AV
15900	52.48	-1.51	Н	50.97	73.98	23.01	PK
15900	38.76	-1.51	Н	37.25	53.98	16.73	AV

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Band: UNII 2A

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5320 MHz

Channel No. 64 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10640	52.58	-1.01	V	51.57	73.98	22.41	PK
10640	39.43	-1.01	V	38.42	53.98	15.56	AV
15960	53.26	-2.17	V	51.09	73.98	22.89	PK
15960	39.42	-2.17	V	37.25	53.98	16.73	AV
10640	53.56	-1.01	Н	52.55	73.98	21.43	PK
10640	39.61	-1.01	Н	38.60	53.98	15.38	AV
15960	54.33	-2.17	Н	52.16	73.98	21.82	PK
15960	39.50	-2.17	Н	37.33	53.98	16.65	AV

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 4 8 / 311 **HCT CO.,LTD.** 



Band: UNII 2A

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5260 MHz

Channel No. 52 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10520	54.62	-1.52	V	53.10	68.20	15.10	PK
15780	53.61	-2.64	V	50.97	73.98	23.01	PK
15780	39.32	-2.64	V	36.68	53.98	17.30	AV
10520	54.89	-1.52	Н	53.37	68.20	14.83	PK
15780	54.11	-2.64	Н	51.47	73.98	22.51	PK
15780	39.48	-2.64	Н	36.84	53.98	17.14	AV

FCC ID: A3LSMG8870

Band: UNII 2A

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5300 MHz

Channel No. 60 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10600	52.55	-1.32	V	51.23	73.98	22.75	PK
10600	40.35	-1.32	V	39.03	53.98	14.95	AV
15900	52.12	-1.51	V	50.61	73.98	23.37	PK
15900	38.44	-1.51	V	36.93	53.98	17.05	AV
10600	54.16	-1.32	Н	52.84	73.98	21.14	PK
10600	40.45	-1.32	Н	39.13	53.98	14.85	AV
15900	52.25	-1.51	Н	50.74	73.98	23.24	PK
15900	38.68	-1.51	Н	37.17	53.98	16.81	AV

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Band: UNII 2A

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5320 MHz

Channel No. 64 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10640	53.10	-1.01	V	52.09	73.98	21.89	PK
10640	39.50	-1.01	V	38.49	53.98	15.49	AV
15960	53.19	-2.17	V	51.02	73.98	22.96	PK
15960	39.38	-2.17	V	37.21	53.98	16.77	AV
10640	52.98	-1.01	Н	51.97	73.98	22.01	PK
10640	39.78	-1.01	Н	38.77	53.98	15.21	AV
15960	53.61	-2.17	Н	51.44	73.98	22.54	PK
15960	39.44	-2.17	Н	37.27	53.98	16.71	AV

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 5 0 / 311 **HCT CO.,LTD.** 



Band: UNII 2A

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5260MHz

Channel No. 52 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10520	53.28	-1.52	V	51.76	68.20	16.44	PK
15780	52.94	-2.64	V	50.30	73.98	23.68	PK
15780	39.35	-2.64	V	36.71	53.98	17.27	AV
10520	54.44	-1.52	Н	52.92	68.20	15.28	PK
15780	53.49	-2.64	Н	50.85	73.98	23.13	PK
15780	39.41	-2.64	Н	36.77	53.98	17.21	AV

FCC ID: A3LSMG8870

Band: UNII 2A

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5300 MHz

Channel No. 60 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10600	52.43	-1.32	V	51.11	73.98	22.87	PK
10600	40.33	-1.32	V	39.01	53.98	14.97	AV
15900	53.42	-1.51	V	51.91	73.98	22.07	PK
15900	38.47	-1.51	V	36.96	53.98	17.02	AV
10600	53.48	-1.32	Н	52.16	73.98	21.82	PK
10600	40.40	-1.32	Н	39.08	53.98	14.90	AV
15900	52.97	-1.51	Н	51.46	73.98	22.52	PK
15900	38.55	-1.51	Н	37.04	53.98	16.94	AV

F-TP22-03 (Rev.00) 2 5 1 / 311 **HCT CO.,LTD.** 



Band: UNII 2A

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5320 MHz

Channel No. 64 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10640	52.64	-1.01	V	51.63	73.98	22.35	PK
10640	39.84	-1.01	V	38.83	53.98	15.15	AV
15960	52.54	-2.17	V	50.37	73.98	23.61	PK
15960	39.05	-2.17	V	36.88	53.98	17.10	AV
10640	53.61	-1.01	Н	52.60	73.98	21.38	PK
10640	39.90	-1.01	Н	38.89	53.98	15.09	AV
15960	52.96	-2.17	Н	50.79	73.98	23.19	PK
15960	39.11	-2.17	Н	36.94	53.98	17.04	AV

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 5 2 / 311 **HCT CO.,LTD.** 



Band: UNII 2A

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5270 MHz

Channel No. 54 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10540	52.86	-1.03	V	51.83	68.20	16.37	PK
15810	52.28	-2.29	V	49.99	73.98	23.99	PK
15810	39.25	-2.29	V	36.96	53.98	17.02	AV
10540	53.48	-1.03	Н	52.45	68.20	15.75	PK
15810	53.06	-2.29	Н	50.77	73.98	23.21	PK
15810	39.46	-2.29	Н	37.17	53.98	16.81	AV

FCC ID: A3LSMG8870

Band: UNII 2A

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5310 MHz

Channel No. 62 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10620	52.05	-2.36	V	49.69	73.98	24.29	PK
10620	40.51	-2.36	V	38.15	53.98	15.83	AV
15930	52.44	-1.95	V	50.49	73.98	23.49	PK
15930	39.50	-1.95	V	37.55	53.98	16.43	AV
10620	53.56	-2.36	Н	51.20	73.98	22.78	PK
10620	40.91	-2.36	Н	38.55	53.98	15.43	AV
15930	52.27	-1.95	Н	50.32	73.98	23.66	PK
15930	40.15	-1.95	Н	38.20	53.98	15.78	AV

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Band: UNII 2A

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5270 MHz

Channel No. 54 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10540	53.24	-1.03	V	52.21	68.20	15.99	PK
15810	53.16	-2.29	V	50.87	73.98	23.11	PK
15810	39.28	-2.29	V	36.99	53.98	16.99	AV
10540	53.55	-1.03	Н	52.52	68.20	15.68	PK
15810	53.45	-2.29	Н	51.16	73.98	22.82	PK
15810	39.43	-2.29	Н	37.14	53.98	16.84	AV

FCC ID: A3LSMG8870

Band: UNII 2A

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5310 MHz

Channel No. 62 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10620	53.78	-2.36	V	51.42	73.98	22.56	PK
10620	40.76	-2.36	V	38.40	53.98	15.58	AV
15930	53.16	-1.95	V	51.21	73.98	22.77	PK
15930	39.45	-1.95	V	37.50	53.98	16.48	AV
10620	53.55	-2.36	Н	51.19	73.98	22.79	PK
10620	40.80	-2.36	Н	38.44	53.98	15.54	AV
15930	53.16	-1.95	Н	51.21	73.98	22.77	PK
15930	39.88	-1.95	Н	37.93	53.98	16.05	AV

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Band: UNII 2A

Operation Mode: 802.11 ac(VHT80)

Transfer MCS Index: 0

Operating Frequency 5290 MHz

Channel No. 58 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10580	52.91	-0.75	V	52.16	68.20	16.04	PK
15870	51.88	-2.64	V	49.24	73.98	24.74	PK
15870	40.66	-2.64	V	38.02	53.98	15.96	AV
10580	54.69	-0.75	Н	53.94	68.20	14.26	PK
15870	52.53	-2.64	Н	49.89	73.98	24.09	PK
15870	41.09	-2.64	Н	38.45	53.98	15.53	AV

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 5 5 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5500 MHz

Channel No. 100 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11000	52.88	0.37	V	53.25	73.98	20.73	PK
11000	39.35	0.37	V	39.72	53.98	14.26	AV
16500	51.78	0.03	V	51.81	68.20	16.39	PK
11000	52.80	0.37	Н	53.17	73.98	20.81	PK
11000	39.37	0.37	Н	39.74	53.98	14.24	AV
16500	52.48	0.03	Н	52.51	68.20	15.69	PK

FCC ID: A3LSMG8870

Band: UNII 2C

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5600 MHz

Channel No. 120 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11200	51.87	-1.31	V	50.56	73.98	23.42	PK
11200	39.17	-1.31	V	37.86	53.98	16.12	AV
16800	51.53	1.66	V	53.19	68.20	15.01	PK
11200	53.49	-1.31	Н	52.18	73.98	21.80	PK
11200	39.38	-1.31	Н	38.07	53.98	15.91	AV
16800	51.70	1.66	Н	53.36	68.20	14.84	PK

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Band:

Report No.: HCT-RF-1811-FC021-R2

UNII 2C

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5720 MHz

Channel No. 144 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11440	52.33	0.22	٧	52.55	73.98	21.43	PK
11440	38.86	0.22	V	39.08	53.98	14.90	AV
17160	50.41	1.94	V	52.35	68.20	15.85	PK
11440	53.05	0.22	Н	53.27	73.98	20.71	PK
11440	39.51	0.22	Н	39.73	53.98	14.25	AV
17160	50.66	1.94	Н	52.60	68.20	15.60	PK

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 5 7 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5500 MHz

Channel No. 100 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11000	52.85	0.37	V	53.22	73.98	20.76	PK
11000	39.25	0.37	V	39.62	53.98	14.36	AV
16500	50.49	0.03	V	50.52	68.20	17.68	PK
11000	53.11	0.37	Н	53.48	73.98	20.50	PK
11000	39.33	0.37	Н	39.70	53.98	14.28	AV
16500	52.16	0.03	Н	52.19	68.20	16.01	PK

FCC ID: A3LSMG8870

Band: UNII 2C

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5600 MHz

Channel No. 120 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11200	52.89	-1.31	V	51.58	73.98	22.40	PK
11200	39.30	-1.31	V	37.99	53.98	15.99	AV
16800	50.44	1.66	V	52.10	68.20	16.10	PK
11200	53.44	-1.31	Н	52.13	73.98	21.85	PK
11200	39.25	-1.31	Н	37.94	53.98	16.04	AV
16800	51.56	1.66	Н	53.22	68.20	14.98	PK

F-TP22-03 (Rev.00) 2 5 8 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5720 MHz

Channel No. 144 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11440	52.16	0.22	V	52.38	73.98	21.60	PK
11440	39.40	0.22	V	39.62	53.98	14.36	AV
17160	49.85	1.94	V	51.79	68.20	16.41	PK
11440	53.15	0.22	Н	53.37	73.98	20.61	PK
11440	39.48	0.22	Н	39.70	53.98	14.28	AV
17160	50.77	1.94	Н	52.71	68.20	15.49	PK

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 5 9 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5500 MHz

Channel No. 100 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11000	53.12	0.37	V	53.49	73.98	20.49	PK
11000	39.16	0.37	V	39.53	53.98	14.45	AV
16500	49.99	0.03	V	50.02	68.20	18.18	PK
11000	51.75	0.37	Н	52.12	73.98	21.86	PK
11000	39.25	0.37	Н	39.62	53.98	14.36	AV
16500	51.84	0.03	Н	51.87	68.20	16.33	PK

FCC ID: A3LSMG8870

Band: UNII 2C

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5600 MHz

Channel No. 120 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11200	53.12	-1.31	V	51.81	73.98	22.17	PK
11200	39.36	-1.31	V	38.05	53.98	15.93	AV
16800	50.84	1.66	V	52.50	68.20	15.70	PK
11200	53.47	-1.31	Н	52.16	73.98	21.82	PK
11200	39.29	-1.31	Н	37.98	53.98	16.00	AV
16800	39.29	1.66	Н	40.95	68.20	27.25	PK

F-TP22-03 (Rev.00) 2 6 0 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5720 MHz

Channel No. 144 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11440	52.47	0.22	V	52.69	73.98	21.29	PK
11440	39.32	0.22	V	39.54	53.98	14.44	AV
17160	50.78	1.94	V	52.72	68.20	15.48	PK
11440	53.66	0.22	Н	53.88	73.98	20.10	PK
11440	39.51	0.22	Н	39.73	53.98	14.25	AV
17160	51.42	1.94	Н	53.36	68.20	14.84	PK

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 6 1 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5510 MHz

Channel No. 102 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11020	52.75	0.07	V	52.82	73.98	21.16	PK
11020	39.60	0.07	V	39.67	53.98	14.31	AV
16530	52.24	-0.71	V	51.53	68.20	16.67	PK
11020	53.60	0.07	Н	53.67	73.98	20.31	PK
11020	40.70	0.07	Н	40.77	53.98	13.21	AV
16530	52.53	-0.71	Н	51.82	68.20	16.38	PK

FCC ID: A3LSMG8870

Band: UNII 2C

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5590 MHz

Channel No. 118 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11180	52.44	-1.03	V	51.41	73.98	22.57	PK
11180	39.93	-1.03	V	38.90	53.98	15.08	AV
16770	51.72	2.85	V	54.57	68.20	13.63	PK
11180	53.59	-1.03	Н	52.56	73.98	21.42	PK
11180	40.50	-1.03	Н	39.47	53.98	14.51	AV
16770	51.88	2.85	Н	54.73	68.20	13.47	PK

F-TP22-03 (Rev.00) 2 6 2 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5710 MHz

Channel No. 142 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11420	52.82	-0.15	V	52.67	73.98	21.31	PK
11420	39.78	-0.15	V	39.63	53.98	14.35	AV
17130	50.80	4.39	V	55.19	68.20	13.01	PK
11420	53.31	-0.15	Н	53.16	73.98	20.82	PK
11420	39.97	-0.15	Н	39.82	53.98	14.16	AV
17130	51.11	4.39	Н	55.50	68.20	12.70	PK

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 6 3 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5510 MHz

Channel No. 102 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11020	53.66	0.07	V	53.73	73.98	20.25	PK
11020	40.37	0.07	V	40.44	53.98	13.54	AV
16530	53.17	-0.71	V	52.46	68.20	15.74	PK
11020	52.41	0.07	Н	52.48	73.98	21.50	PK
11020	40.65	0.07	Н	40.72	53.98	13.26	AV
16530	52.94	-0.71	Н	52.23	68.20	15.97	PK

FCC ID: A3LSMG8870

Band: UNII 2C

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5590 MHz

Channel No. 118 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11180	51.73	-1.03	V	50.70	73.98	23.28	PK
11180	40.25	-1.03	V	39.22	53.98	14.76	AV
16770	51.64	2.85	V	54.49	68.20	13.71	PK
11180	52.47	-1.03	Н	51.44	73.98	22.54	PK
11180	40.44	-1.03	Н	39.41	53.98	14.57	AV
16770	50.55	2.85	Н	53.40	68.20	14.80	PK

F-TP22-03 (Rev.00) 2 6 4 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5710 MHz

Channel No. 142 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11420	52.43	-0.15	V	52.28	73.98	21.70	PK
11420	39.85	-0.15	V	39.70	53.98	14.28	AV
17130	50.48	4.39	V	54.87	68.20	13.33	PK
11420	53.11	-0.15	Н	52.96	73.98	21.02	PK
11420	39.94	-0.15	Н	39.79	53.98	14.19	AV
17130	51.26	4.39	Н	55.65	68.20	12.55	PK

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 6 5 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 ac(VHT80)

Transfer MCS Index: 0

Operating Frequency 5530 MHz

Channel No. 106 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11060	52.52	-0.38	V	52.14	73.98	21.84	PK
11060	41.51	-0.38	V	41.13	53.98	12.85	AV
16590	51.33	1.18	V	52.51	68.20	15.69	PK
11060	52.96	-0.38	Н	52.58	73.98	21.40	PK
11060	41.76	-0.38	Н	41.38	53.98	12.60	AV
16590	51.51	1.18	Н	52.69	68.20	15.51	PK

FCC ID: A3LSMG8870

Band: UNII 2C

Operation Mode: 802.11 ac(VHT80)

Transfer MCS Index: 0

Operating Frequency 5610 MHz

Channel No. 122 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11220	52.06	-0.42	V	51.64	73.98	22.34	PK
11220	41.21	-0.42	V	40.79	53.98	13.19	AV
16830	51.22	2.52	V	53.74	68.20	14.46	PK
11220	53.57	-0.42	Н	53.15	73.98	20.83	PK
11220	41.30	-0.42	Н	40.88	53.98	13.10	AV
16830	52.68	2.52	Н	55.20	68.20	13.00	PK

F-TP22-03 (Rev.00) 2 6 6 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 ac(VHT80)

Transfer MCS Index: 0

Operating Frequency 5690 MHz

Channel No. 138 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11380	52.56	-0.42	V	52.14	73.98	21.84	PK
11380	41.67	-0.42	V	41.25	53.98	12.73	AV
17070	50.99	2.52	V	53.51	68.20	14.69	PK
11380	53.93	-0.42	Н	53.51	73.98	20.47	PK
11380	41.86	-0.42	Н	41.44	53.98	12.54	AV
17070	51.67	2.52	Н	54.19	68.20	14.01	PK

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 6 7 / 311 **HCT CO.,LTD.** 



Band: UNII 3

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5745MHz

Channel No. 149 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11490	52.58	-0.59	V	51.99	73.98	21.99	PK
11490	40.03	-0.59	V	39.44	53.98	14.54	AV
17235	50.86	3.63	V	54.49	68.20	13.71	PK
11490	53.41	-0.59	Н	52.82	73.98	21.16	PK
11490	40.16	-0.59	Н	39.57	53.98	14.41	AV
17235	51.29	3.63	Н	54.92	68.20	13.28	PK

FCC ID: A3LSMG8870

Band: UNII 3

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5785 MHz

Channel No. 157 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11570	51.54	-0.97	V	50.57	73.98	23.41	PK
11570	39.93	-0.97	V	38.96	53.98	15.02	AV
17355	49.84	5.02	V	54.86	68.20	13.34	PK
11570	53.56	-0.97	Н	52.59	73.98	21.39	PK
11570	39.95	-0.97	Н	38.98	53.98	15.00	AV
17355	50.06	5.02	Н	55.08	68.20	13.12	PK

F-TP22-03 (Rev.00) 2 6 8 / 311 **HCT CO.,LTD.** 



Band: UNII 3

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5825 MHz

Channel No. 165 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11650	53.46	-1.70	V	51.76	73.98	22.22	PK
11650	39.75	-1.70	V	38.05	53.98	15.93	AV
17475	51.18	5.75	V	56.93	68.20	11.27	PK
11650	53.23	-1.70	Н	51.53	73.98	22.45	PK
11650	39.93	-1.70	Н	38.23	53.98	15.75	AV
17475	50.60	5.75	Н	56.35	68.20	11.85	PK

FCC ID: A3LSMG8870

### [RSDB]

Operation Mode Antenna 1: 802.11b

Transfer Rate: 1 Mbps

Operating Frequency 2462 MHz

Channel No. 11 Ch

Band: UNII 3

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5825 MHz

Channel No. 165 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11650	53.38	-1.70	V	51.68	73.98	22.30	PK
11650	39.54	-1.70	V	37.84	53.98	16.14	AV
17475	51.62	5.75	V	57.37	68.20	10.83	PK

F-TP22-03 (Rev.00) 2 6 9 / 311 **HCT CO.,LTD.** 



Band: UNII 3

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5745MHz

Channel No. 149 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11490	53.18	-0.59	V	52.59	73.98	21.39	PK
11490	39.96	-0.59	V	39.37	53.98	14.61	AV
17235	50.99	3.63	V	54.62	68.20	13.58	PK
11490	54.46	-0.59	Н	53.87	73.98	20.11	PK
11490	40.04	-0.59	Н	39.45	53.98	14.53	AV
17235	51.42	3.63	Н	55.05	68.20	13.15	PK

FCC ID: A3LSMG8870

Band: UNII 3

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5785 MHz

Channel No. 157 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11570	52.68	-0.97	V	51.71	73.98	22.27	PK
11570	39.91	-0.97	V	38.94	53.98	15.04	AV
17355	49.94	5.02	V	54.96	68.20	13.24	PK
11570	53.41	-0.97	Н	52.44	73.98	21.54	PK
11570	39.88	-0.97	Н	38.91	53.98	15.07	AV
17355	50.16	5.02	Н	55.18	68.20	13.02	PK

F-TP22-03 (Rev.00) 2 7 0 / 311 **HCT CO.,LTD.** 



Band: UNII 3

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5825 MHz

Channel No. 165 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11650	53.34	-1.70	V	51.64	73.98	22.34	PK
11650	39.66	-1.70	V	37.96	53.98	16.02	AV
17475	50.78	5.75	V	56.53	68.20	11.67	PK
11650	53.11	-1.70	Н	51.41	73.98	22.57	PK
11650	39.51	-1.70	Н	37.81	53.98	16.17	AV
17475	50.33	5.75	Н	56.08	68.20	12.12	PK

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 7 1 / 311 **HCT CO.,LTD.** 



Band: UNII 3

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5745MHz

Channel No. 149 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11490	52.60	-0.59	V	52.01	73.98	21.97	PK
11490	39.78	-0.59	V	39.19	53.98	14.79	AV
17235	51.62	3.63	V	55.25	68.20	12.95	PK
11490	53.44	-0.59	Н	52.85	73.98	21.13	PK
11490	39.99	-0.59	Н	39.40	53.98	14.58	AV
17235	52.49	3.63	Н	56.12	68.20	12.08	PK

FCC ID: A3LSMG8870

Band: UNII 3

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5785 MHz

Channel No. 157 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11570	52.54	-0.97	V	51.57	73.98	22.41	PK
11570	39.81	-0.97	V	38.84	53.98	15.14	AV
17355	50.13	5.02	V	55.15	68.20	13.05	PK
11570	53.67	-0.97	Н	52.70	73.98	21.28	PK
11570	39.85	-0.97	Н	38.88	53.98	15.10	AV
17355	50.58	5.02	Н	55.60	68.20	12.60	PK

F-TP22-03 (Rev.00) 2 7 2 / 311 **HCT CO.,LTD.** 



Band:

Report No.: HCT-RF-1811-FC021-R2

UNII 3

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5825 MHz

Channel No. 165 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11650	53.18	-1.70	V	51.48	73.98	22.50	PK
11650	39.68	-1.70	V	37.98	53.98	16.00	AV
17475	50.71	5.75	V	56.46	68.20	11.74	PK
11650	53.89	-1.70	Н	52.19	73.98	21.79	PK
11650	39.72	-1.70	Н	38.02	53.98	15.96	AV
17475	51.22	5.75	Н	56.97	68.20	11.23	PK

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 7 3 / 311 **HCT CO.,LTD.** 



Band: UNII 3

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5755 MHz

Channel No. 151 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11510	51.82	-0.63	V	51.19	73.98	22.79	PK
11510	40.15	-0.63	V	39.52	53.98	14.46	AV
17265	50.38	4.53	V	54.91	68.20	13.29	PK
11510	52.98	-0.63	Н	52.35	73.98	21.63	PK
11510	40.38	-0.63	Н	39.75	53.98	14.23	AV
17265	51.25	4.53	Н	55.78	68.20	12.42	PK

FCC ID: A3LSMG8870

Band: UNII 3

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5795 MHz

Channel No. 159 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11590	52.13	-0.53	V	51.60	73.98	22.38	PK
11590	39.89	-0.53	V	39.36	53.98	14.62	AV
17385	49.82	4.95	V	54.77	68.20	13.43	PK
11590	53.22	-0.53	Н	52.69	73.98	21.29	PK
11590	40.47	-0.53	Н	39.94	53.98	14.04	AV
17385	50.41	4.95	Н	55.36	68.20	12.84	PK

F-TP22-03 (Rev.00) 2 7 4 / 311 **HCT CO.,LTD.** 



Band: UNII 3

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5755 MHz

Channel No. 151 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11510	52.54	-0.63	V	51.91	73.98	22.07	PK
11510	40.28	-0.63	V	39.65	53.98	14.33	AV
17265	50.89	4.53	V	55.42	68.20	12.78	PK
11510	53.09	-0.63	Н	52.46	73.98	21.52	PK
11510	40.43	-0.63	Н	39.80	53.98	14.18	AV
17265	51.37	4.53	Н	55.90	68.20	12.30	PK

FCC ID: A3LSMG8870

Band: UNII 3

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5795 MHz

Channel No. 159 Ch

Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11590	53.68	-0.53	V	53.15	73.98	20.83	PK
11590	40.22	-0.53	V	39.69	53.98	14.29	AV
17385	50.17	4.95	V	55.12	68.20	13.08	PK
11590	53.74	-0.53	Н	53.21	73.98	20.77	PK
11590	40.38	-0.53	Н	39.85	53.98	14.13	AV
17385	49.85	4.95	Н	54.80	68.20	13.40	PK

F-TP22-03 (Rev.00) 2 7 5 / 311 **HCT CO.,LTD.** 



Band: UNII 3

Operation Mode: 802.11 ac(VHT80)

Transfer MCS Index: 0

Operating Frequency 5775 MHz

Channel No. 155 Ch

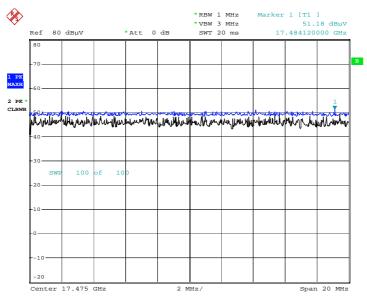
Frequency	Reading	A.F.+C.LA.G+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	[dBuV]	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11550	52.90	-0.48	٧	52.42	73.98	21.56	PK
11550	41.65	-0.48	٧	41.17	53.98	12.81	AV
17325	50.03	5.28	V	55.31	68.20	12.89	PK
11550	53.38	-0.48	Н	52.90	73.98	21.08	PK
11550	41.89	-0.48	Н	41.41	53.98	12.57	AV
17325	51.68	5.28	Н	56.96	68.20	11.24	PK

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 7 6 / 311 **HCT CO.,LTD.** 

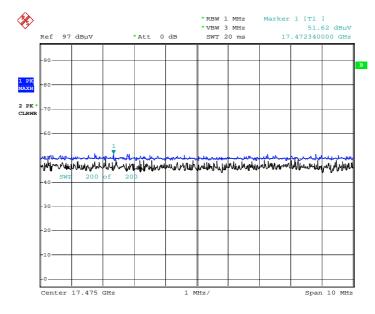
#### **■ Test Plots**

### Peak Reading (802.11a, Ch.165 3rd Harmonic, X-V)\_[MIMO]



Date: 16.NOV.2018 09:46:36

### Peak Reading (802.11a, Ch.165 3rd Harmonic, X-V)\_[RSDB]

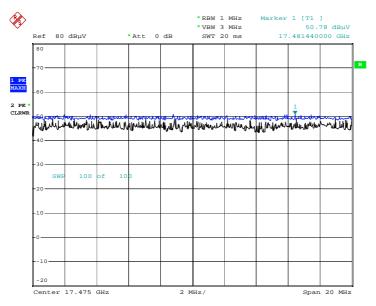


Date: 19.NOV.2018 16:02:40

F-TP22-03 (Rev.00) 2 7 7 / 311 **HCT CO.,LTD.** 

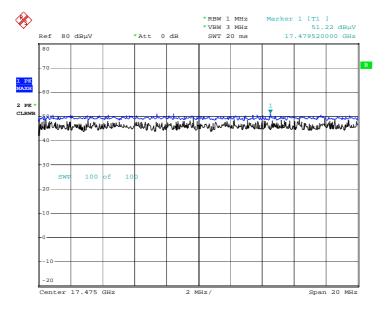


### Peak Reading (802.11n\_HT20, Ch.165 3rd Harmonic, X-V) \_[MIMO]



Date: 16.NOV.2018 09:47:14

### Peak Reading (802.11ac\_VHT20, Ch.165 3rd Harmonic, X-H) \_[MIMO]

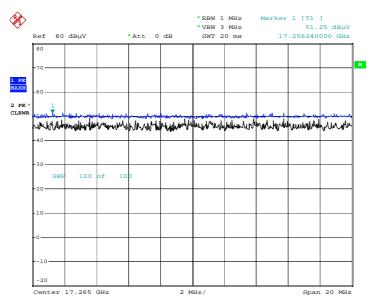


Date: 16.NOV.2018 09:47:38

F-TP22-03 (Rev.00) 2 7 8 / 311 **HCT CO.,LTD.** 

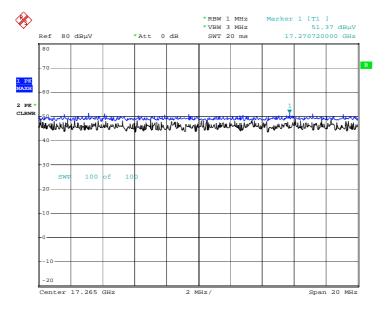


### Peak Reading (802.11n\_HT40, Ch.151 3rd Harmonic, X-H) \_[MIMO]



Date: 16.NOV.2018 09:48:57

# Peak Reading (802.11ac\_VHT40, Ch.151 3rd Harmonic, X-H) \_[MIMO]

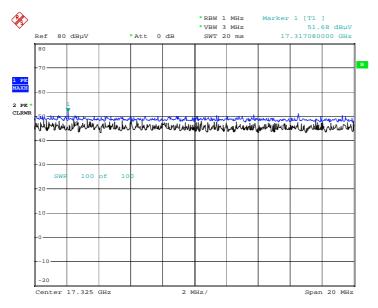


Date: 16.NOV.2018 09:49:27

F-TP22-03 (Rev.00) 2 7 9 / 311 **HCT CO.,LTD.** 



### Peak Reading (802.11ac\_VHT80, Ch.155 3rd Harmonic, X-H) \_[MIMO]



Date: 16.NOV.2018 09:49:51

Note: Only the worst case plots for Radiated Spurious Emissions.

F-TP22-03 (Rev.00) 2 8 0 / 311 **HCT CO.,LTD.** 



Report No.: HCT-RF-1811-FC021-R2 FCC ID: A3LSMG8870

### 10.8 RADIATED RESTRICTED BAND EDGE

Band: UNII 1

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5180 MHz

Channel No. 36 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5150	59.40	5.07	Н	64.47	73.98	9.51	PK
5150	45.38	5.07	Н	50.45	53.98	3.53	AV
5150	59.54	5.07	V	64.61	73.98	9.37	PK
5150	44.59	5.07	V	49.66	53.98	4.32	AV

Band: UNII 1

Operation Mode: 802.11 n\_HT20

Transfer MCS Index: 0

Operating Frequency 5180 MHz

Channel No. 36 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5150	53.15	5.07	Н	58.22	73.98	15.76	PK
5150	39.82	5.07	Н	44.89	53.98	9.09	AV
5150	52.85	5.07	V	57.92	73.98	16.06	PK
5150	39.61	5.07	V	44.68	53.98	9.30	AV

F-TP22-03 (Rev.00) 2 8 1 / 311 **HCT CO.,LTD.** 



Band: UNII 1

Operation Mode: 802.11 ac\_VHT20

Transfer MCS Index: 0

Operating Frequency 5180 MHz

Channel No. 36 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5150	52.50	5.07	Н	57.57	73.98	16.41	PK
5150	39.43	5.07	Н	44.5	53.98	9.48	AV
5150	51.37	5.07	V	56.44	73.98	17.54	PK
5150	39.16	5.07	V	44.23	53.98	9.75	AV

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 8 2 / 311 **HCT CO.,LTD.** 



Band: UNII 1

Operation Mode: 802.11 n\_HT40

Transfer MCS Index: 0

Operating Frequency 5190 MHz

Channel No. 38 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5150	57.52	5.07	Н	62.59	73.98	11.39	PK
5150	44.94	5.07	Н	50.01	53.98	3.97	AV
5150	56.51	5.07	V	61.58	73.98	12.40	PK
5150	44.61	5.07	V	49.68	53.98	4.30	AV

FCC ID: A3LSMG8870

Band: UNII 1

Operation Mode: 802.11 ac\_VHT40

Transfer MCS Index: 0

Operating Frequency 5190 MHz

Channel No. 38 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5150	55.27	5.07	Н	60.34	73.98	13.64	PK
5150	43.11	5.07	Н	48.18	53.98	5.80	AV
5150	54.79	5.07	V	59.86	73.98	14.12	PK
5150	42.45	5.07	V	47.52	53.98	6.46	AV

F-TP22-03 (Rev.00) 2 8 3 / 311 **HCT CO.,LTD.** 



Band: UNII 1

Operation Mode: 802.11 ac\_VHT80

Transfer MCS Index: 0

Operating Frequency 5210 MHz

Channel No. 42 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5150	55.71	5.07	Н	60.78	73.98	13.20	PK
5150	45.08	5.07	Н	50.15	53.98	3.83	AV
5150	55.08	5.07	V	60.15	73.98	13.83	PK
5150	44.72	5.07	V	49.79	53.98	4.19	AV

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 8 4 / 311 **HCT CO.,LTD.** 



Band: UNII 2A

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5320 MHz

Channel No. 64 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5350	57.17	4.42	Н	61.59	73.98	12.39	PK
5350	43.63	4.42	Н	48.05	53.98	5.93	AV
5350	56.59	4.42	V	61.01	73.98	12.97	PK
5350	43.15	4.42	V	47.57	53.98	6.41	AV

FCC ID: A3LSMG8870

Band: UNII 2A

Operation Mode: 802.11 n\_HT20

Transfer MCS Index: 0

Operating Frequency 5320 MHz

Channel No. 64 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5350	56.26	4.42	Н	60.68	73.98	13.30	PK
5350	41.79	4.42	Н	46.21	53.98	7.77	AV
5350	55.87	4.42	V	60.29	73.98	13.69	PK
5350	41.32	4.42	V	45.74	53.98	8.24	AV

F-TP22-03 (Rev.00) 2 8 5 / 311 **HCT CO.,LTD.** 



Band: UNII 2A

Operation Mode: 802.11 ac\_VHT20

Transfer MCS Index: 0

Operating Frequency 5320 MHz

Channel No. 64 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5350	54.04	4.42	Н	58.46	73.98	15.52	PK
5350	40.09	4.42	Н	44.51	53.98	9.47	AV
5350	53.25	4.42	V	57.67	73.98	16.31	PK
5350	39.56	4.42	V	43.98	53.98	10.00	AV

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 8 6 / 311 **HCT CO.,LTD.** 



Band: UNII 2A

Operation Mode: 802.11 n\_HT40

Transfer MCS Index: 0

Operating Frequency 5310 MHz

Channel No. 62 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5350	59.07	4.42	Н	63.49	73.98	10.49	PK
5350	45.58	4.42	Н	50	53.98	3.98	AV
5350	58.11	4.42	V	62.53	73.98	11.45	PK
5350	44.89	4.42	V	49.31	53.98	4.67	AV

FCC ID: A3LSMG8870

Band: UNII 2A

Operation Mode: 802.11 ac\_VHT40

Transfer MCS Index: 0

Operating Frequency 5310 MHz

Channel No. 62 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5350	57.35	4.42	Н	61.77	73.98	12.21	PK
5350	43.43	4.42	Н	47.85	53.98	6.13	AV
5350	56.68	4.42	V	61.1	73.98	12.88	PK
5350	43.05	4.42	V	47.47	53.98	6.51	AV

F-TP22-03 (Rev.00) 2 8 7 / 311 **HCT CO.,LTD.** 



Band:

Report No.: HCT-RF-1811-FC021-R2

UNII 2A

Operation Mode: 802.11 ac\_VHT80

Transfer MCS Index: 0

Operating Frequency 5290 MHz

Channel No. 58 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5350	56.95	4.42	Н	61.37	73.98	12.61	PK
5350	45.76	4.42	Н	50.18	53.98	3.80	AV
5350	55.29	4.42	V	59.71	73.98	14.27	PK
5350	45.35	4.42	V	49.77	53.98	4.21	AV

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 8 8 / 311 **HCT CO.,LTD.** 



Report No.: HCT-RF-1811-FC021-R2 FCC ID: A3LSMG8870

Band: UNII 2C

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5500 MHz

Channel No. 100 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	DBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5460	52.33	5.72	Н	58.05	73.98	15.93	PK
5460	38.58	5.72	Н	44.3	53.98	9.68	AV
5470	62.18	5.26	Н	67.44	73.98	6.54	PK
5470	45.14	5.26	Н	50.4	53.98	3.58	AV
5460	53.53	5.72	V	59.25	73.98	14.73	PK
5460	38.24	5.72	V	43.96	53.98	10.02	AV
5470	60.97	5.26	V	66.23	73.98	7.75	PK
5470	44.62	5.26	V	49.88	53.98	4.10	AV

Band: UNII 2C

Operation Mode: 802.11 n\_HT20

Transfer MCS Index: 0

Operating Frequency 5500 MHz

Channel No. 100 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	DBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5460	50.15	5.72	Н	55.87	73.98	18.11	PK
5460	36.97	5.72	Н	42.69	53.98	11.29	AV
5470	56.06	5.26	Н	61.32	73.98	12.66	PK
5470	41.02	5.26	Н	46.28	53.98	7.70	AV
5460	49.15	5.72	V	54.87	73.98	19.11	PK
5460	36.87	5.72	V	42.59	53.98	11.39	AV
5470	55.31	5.26	V	60.57	73.98	13.41	PK
5470	40.74	5.26	V	46	53.98	7.98	AV

F-TP22-03 (Rev.00) 2 8 9 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 ac\_VHT20

Transfer MCS Index: 0

Operating Frequency 5500 MHz

Channel No. 100 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	DBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5460	49.81	5.72	Н	55.53	73.98	18.45	PK
5460	35.67	5.72	Н	41.39	53.98	12.59	AV
5470	50.76	5.26	Н	56.02	68.20	12.18	PK
5460	49.77	5.72	V	55.49	73.98	18.49	PK
5460	35.48	5.72	V	41.2	53.98	12.78	AV
5470	50.35	5.26	V	55.61	68.20	12.59	PK

FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 9 0 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 n\_HT40

Transfer MCS Index: 0

Operating Frequency 5510 MHz

Channel No. 102 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	DBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5460	54.12	5.72	Н	59.84	73.98	14.14	PK
5460	39.16	5.72	Н	44.88	53.98	9.10	AV
5470	59.72	5.26	Н	64.98	73.98	9.00	PK
5470	45.59	5.26	Н	50.85	53.98	3.13	AV
5460	53.65	5.72	V	59.37	73.98	14.61	PK
5460	38.74	5.72	V	44.46	53.98	9.52	AV
5470	58.99	5.26	V	64.25	73.98	9.73	PK
5470	45.12	5.26	V	50.38	53.98	3.60	AV

FCC ID: A3LSMG8870

Band: UNII 2C

Operation Mode: 802.11 ac\_VHT40

Transfer MCS Index: 0

Operating Frequency 5510 MHz

Channel No. 102 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	DBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5460	53.92	5.72	Н	59.64	73.98	14.34	PK
5460	38.86	5.72	Н	44.58	53.98	9.40	AV
5470	60.39	5.26	Н	65.65	73.98	8.33	PK
5470	45.52	5.26	Н	50.78	53.98	3.20	AV
5460	52.99	5.72	V	58.71	73.98	15.27	PK
5460	38.45	5.72	V	44.17	53.98	9.81	AV
5470	59.61	5.26	V	64.87	73.98	9.11	PK
5470	45.08	5.26	V	50.34	53.98	3.64	AV

F-TP22-03 (Rev.00) 2 9 1 / 311 **HCT CO.,LTD.** 



Band: UNII 2C

Operation Mode: 802.11 ac\_VHT80

Transfer MCS Index: 0

Operating Frequency 5530 MHz

Channel No. 106 Ch

		AN.+CL+AMP+ATT.					
Frequency	Reading	+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	DBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
5460	54.18	5.72	Н	59.90	73.98	14.08	PK
5460	43.85	5.72	Н	49.57	53.98	4.41	AV
5470	58.14	5.26	Н	63.4	68.20	4.80	PK
5460	53.58	5.72	V	59.3	73.98	14.68	PK
5460	43.60	5.72	V	49.32	53.98	4.66	AV
5470	57.25	5.26	V	62.51	68.20	5.69	PK

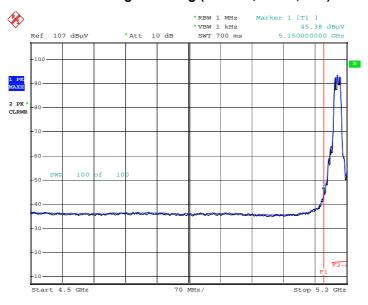
FCC ID: A3LSMG8870

F-TP22-03 (Rev.00) 2 9 2 / 311 **HCT CO.,LTD.** 



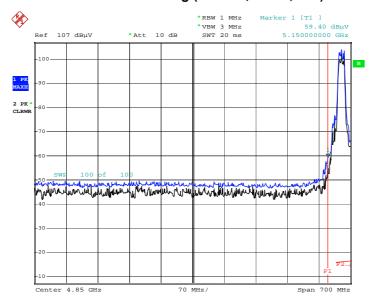
### ■ Test Plots(UNII 1, 2A, 2C)

### Average Reading (802.11a, Ch.36, Y-H)



Date: 1.NOV.2018 13:10:34

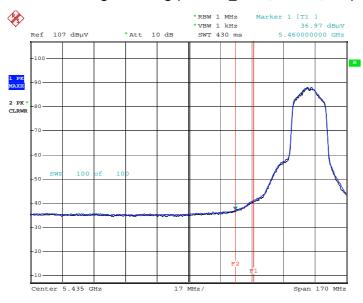
### Peak Reading (802.11a, Ch.36, Y-H)



Date: 1.NOV.2018 13:11:17

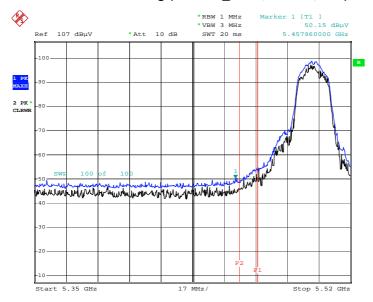
F-TP22-03 (Rev.00) 2 9 3 / 311 **HCT CO.,LTD.** 

### Average Reading (802.11n\_HT20, Ch.100, Y-H)



Date: 1.NOV.2018 13:22:21

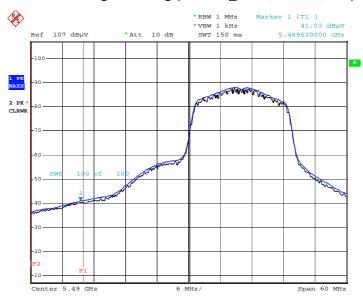
### Peak Reading (802.11n\_HT20, Ch.100, Y-H)



Date: 1.NOV.2018 13:21:05

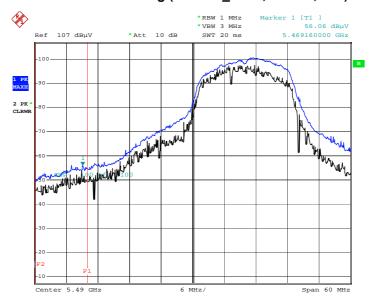
F-TP22-03 (Rev.00) 2 9 4 / 311 **HCT CO.,LTD.** 

### Average Reading (802.11n\_HT20, Ch.100, Y-H)



Date: 1.NOV.2018 13:18:20

### Peak Reading (802.11n\_HT20, Ch.100, Y-H)

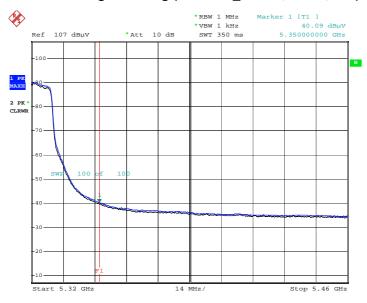


Date: 1.NOV.2018 13:20:28

F-TP22-03 (Rev.00) 2 9 5 / 311 **HCT CO.,LTD.** 

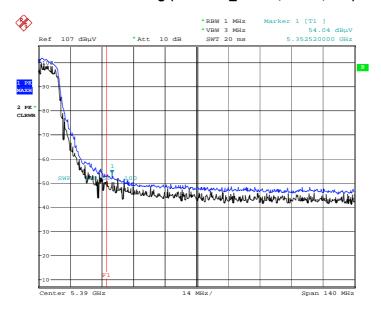


### Average Reading (802.11ac\_VHT20, Ch.64, Z-H)



Date: 1.NOV.2018 10:26:49

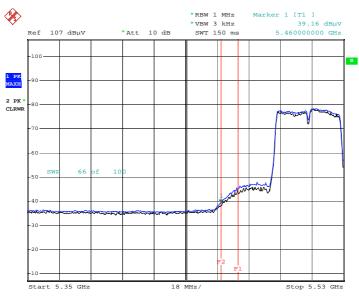
## Peak Reading (802.11ac\_VHT20, Ch.64, Z-H)



Date: 1.NOV.2018 10:27:36

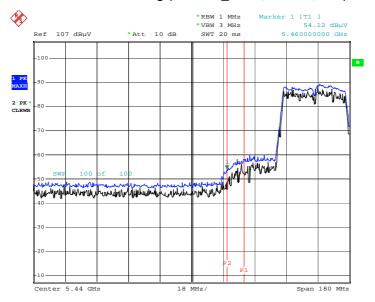
F-TP22-03 (Rev.00) 2 9 6 / 311 **HCT CO.,LTD.** 

### Average Reading (802.11n\_HT40, Ch.102, Y-H)



Date: 1.NOV.2018 11:25:39

### Peak Reading (802.11n\_HT40, Ch.102, Y-H)

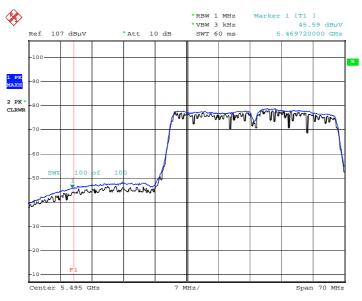


Date: 1.NOV.2018 11:26:15

F-TP22-03 (Rev.00) 2 9 7 / 311 **HCT CO.,LTD.** 

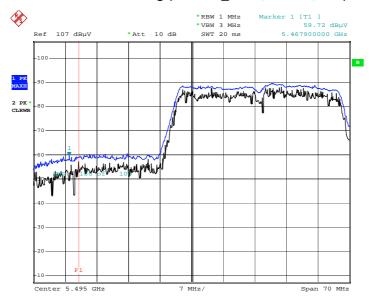


### Average Reading (802.11n\_HT40, Ch.102, Y-H)



Date: 1.NOV.2018 11:23:20

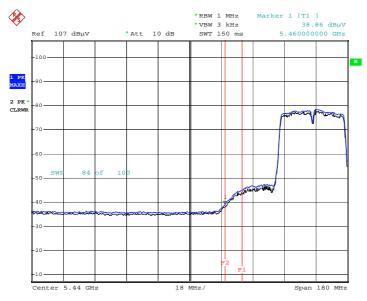
### Peak Reading (802.11n\_HT40, Ch.102, Y-H)



Date: 1.NOV.2018 11:25:07

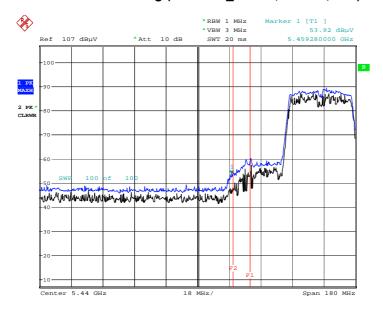
F-TP22-03 (Rev.00) 2 9 8 / 311 **HCT CO.,LTD.** 

### Average Reading (802.11ac\_VHT40, Ch.102, Y-H)



Date: 1.NOV.2018 11:29:14

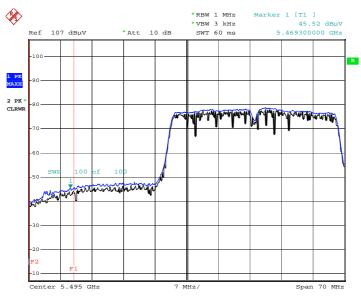
### Peak Reading (802.11ac\_VHT40, Ch.102, Y-H)



Date: 1.NOV.2018 11:29:55

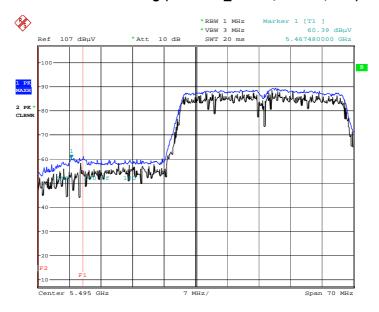
F-TP22-03 (Rev.00) 2 9 9 / 311 **HCT CO.,LTD.** 

### Average Reading (802.11ac\_VHT40, Ch.102, Y-H)



Date: 1.NOV.2018 11:27:20

#### Peak Reading (802.11ac\_VHT40, Ch.102, Y-H)

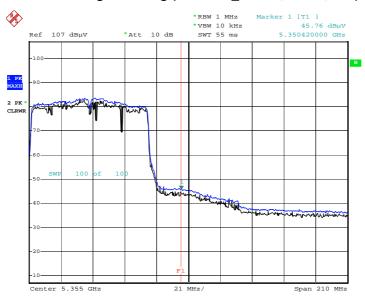


Date: 1.NOV.2018 11:28:33

F-TP22-03 (Rev.00) 3 0 0 / 311 **HCT CO.,LTD.** 

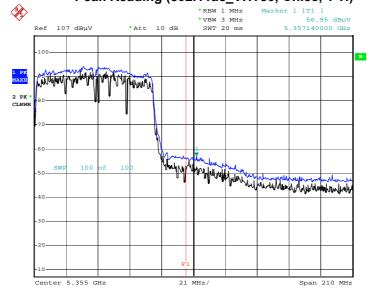


#### Average Reading (802.11ac\_VHT80, Ch.58, Y-H)



Date: 1.NOV.2018 11:15:36

#### Peak Reading (802.11ac\_VHT80, Ch.58, Y-H)

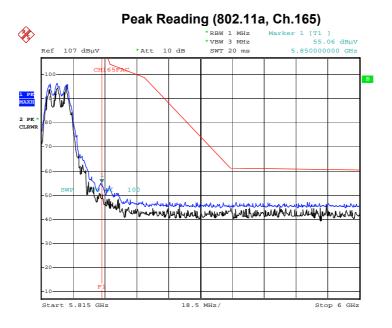


Date: 1.NOV.2018 11:16:46

F-TP22-03 (Rev.00) 3 0 1 / 311 **HCT CO.,LTD.** 

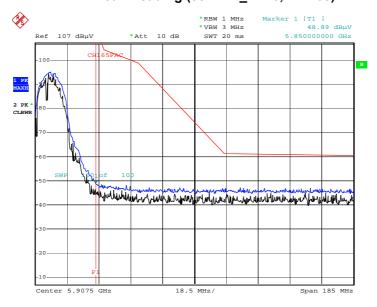


#### ■ Test Plots(UNII 3)



Date: 1.NOV.2018 13:33:04

#### Peak Reading (802.11n\_HT20, Ch.165)

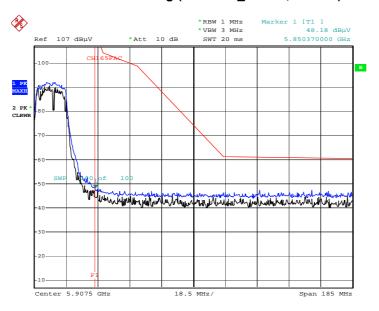


Date: 1.NOV.2018 13:48:58

F-TP22-03 (Rev.00) 3 0 2 / 311 **HCT CO.,LTD.** 

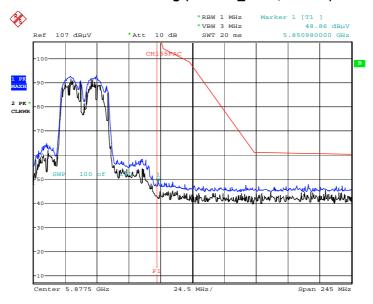


#### Peak Reading (802.11ac\_VHT20, Ch.165)



Date: 1.NOV.2018 13:49:54

#### Peak Reading (802.11n\_HT40, Ch.159)

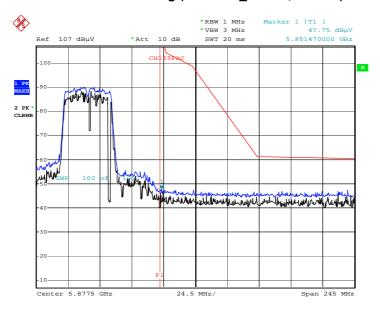


Date: 1.NOV.2018 13:55:25

F-TP22-03 (Rev.00) 3 0 3 / 311 **HCT CO.,LTD.** 

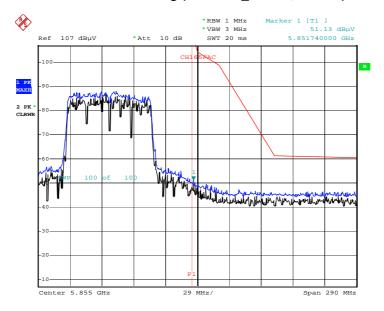


#### Peak Reading (802.11ac\_VHT40, Ch.159)



Date: 1.NOV.2018 13:56:26

### Peak Reading (802.11ac\_VHT80, Ch.155)



Date: 1.NOV.2018 13:57:33

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#### 10.9 POWERLINE CONDUCTED EMISSIONS

#### **Conducted Emissions (Line 1)**

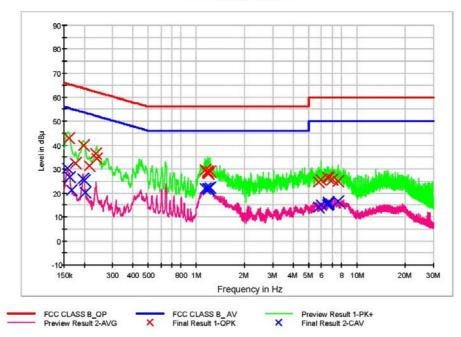
EMI Auto Test(5)

# **HCT TEST Report**

#### **Common Information**

EUT: SM-G8870
Manufacturer: SAMSUNG
Test Site: SHIELD ROOM
Operating Conditions: WLAN 5G MODE

FCC CLASS B\_Exten Cable



#### Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.160000	42.8	9.000	Off	N	9.7	22.6	65.5
0.176000	32.4	9.000	Off	N	9.7	32.3	64.7
0.198000	39.9	9.000	Off	N	9.7	23.8	63.7
0.216000	31.2	9.000	Off	N	9.7	31.7	63.0
0.236000	36.3	9.000	Off	N	9.7	25.9	62.2
0.240000	34.6	9.000	Off	N	9.7	27.5	62.1
1.138000	29.8	9.000	Off	N	9.8	26.2	56.0
1.174000	28.8	9.000	Off	N	9.8	27.2	56.0
1.180000	28.2	9.000	Off	N	9.8	27.8	56.0
1.186000	28.0	9.000	Off	N	9.8	28.0	56.0
1.192000	28.1	9.000	Off	N	9.8	28.0	56.0
1.216000	28.8	9.000	Off	N	9.8	27.2	56.0
5.800000	24.6	9.000	Off	N	10.1	35.4	60.0
5.960000	25.7	9.000	Off	N	10.1	34.3	60.0
6.584000	26.8	9.000	Off	N	10.1	33.2	60.0
6.612000	26.3	9.000	Off	N	10.1	33.7	60.0
7.006000	25.7	9.000	Off	N	10.1	34.3	60.0
7.642000	25.1	9.000	Off	N	10.2	34.9	60.0

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#### Final Result 2

Frequency	CAverage	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBuV)	(kHz)			(dB)	(dB)	(dBuV)
0.158000	30.3	9.000	Off	N	9.7	25.3	55.6
0.162000	26.5	9.000	Off	N	9.7	28.8	55.4
0.166000	21.2	9.000	Off	N	9.7	34.0	55.2
0.196000	26.0	9.000	Off	N	9.7	27.7	53.8
0.200000	25.4	9.000	Off	N	9.7	28.2	53.6
0.204000	20.0	9.000	Off	N	9.7	33.4	53.4
1.138000	21.9	9.000	Off	N	9.8	24.1	46.0
1.180000	21.8	9.000	Off	N	9.8	24.2	46.0
1.184000	21.9	9.000	Off	N	9.8	24.1	46.0
1.188000	21.7	9.000	Off	N	9.8	24.3	46.0
1.192000	21.5	9.000	Off	N	9.8	24.5	46.0
1.216000	22.2	9.000	Off	N	9.8	23.8	46.0
5.800000	14.2	9.000	Off	N	10.1	35.8	50.0
5.960000	14.9	9.000	Off	N	10.1	35.1	50.0
6.550000	15.2	9.000	Off	N	10.1	34.8	50.0
6.606000	15.6	9.000	Off	N	10.1	34.4	50.0
6.616000	16.2	9.000	Off	N	10.1	33.8	50.0
7.642000	16.4	9.000	Off	N	10.2	33.6	50.0

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#### **Conducted Emissions (Line 2)**

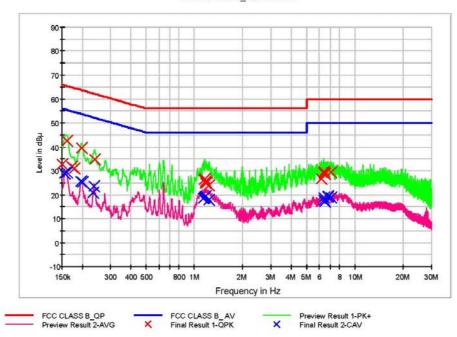
EMI Auto Test(5)

# **HCT TEST Report**

#### **Common Information**

EUT: SM-G8870
Manufacturer: SAMSUNG
Test Site: SHIELD ROOM
Operating Conditions: WLAN 5G MODE

#### FCC CLASS B\_Exten Cable



#### Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	32.8	9.000	Off	L1	9.7	33.2	66.0
0.160000	42.6	9.000	Off	L1	9.7	22.9	65.5
0.172000	31.8	9.000	Off	L1	9.7	33.0	64.9
0.178000	31.1	9.000	Off	L1	9.7	33.5	64.6
0.198000	39.6	9.000	Off	L1	9.7	24.1	63.7
0.240000	34.9	9.000	Off	L1	9.7	27.2	62.1
1.152000	26.3	9.000	Off	L1	9.8	29.7	56.0
1.162000	26.5	9.000	Off	L1	9.8	29.5	56.0
1.174000	25.6	9.000	Off	L1	9.8	30.4	56.0
1.180000	25.0	9.000	Off	L1	9.8	31.0	56.0
1.192000	25.0	9.000	Off	L1	9.8	31.0	56.0
1.234000	23.8	9.000	Off	L1	9.8	32.2	56.0
6.154000	26.6	9.000	Off	L1	10.1	33.4	60.0
6.392000	29.0	9.000	Off	L1	10.1	31.0	60.0
6.440000	29.5	9.000	Off	L1	10.1	30.5	60.0
6.444000	29.6	9.000	Off	L1	10.1	30.4	60.0
6.470000	28.6	9.000	Off	L1	10.1	31.4	60.0
7.078000	29.2	9.000	Off	L1	10.1	30.8	60.0

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#### Final Result 2

Frequency	CAverage	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBuV)	(kHz)			(dB)	(dB)	(dBuV)
0.156000	28.9	9.000	Off	L1	9.7	26.7	55.7
0.160000	29.4	9.000	Off	L1	9.7	26.1	55.5
0.196000	25.5	9.000	Off	L1	9.7	28.3	53.8
0.200000	25.3	9.000	Off	L1	9.7	28.3	53.6
0.234000	20.7	9.000	Off	L1	9.7	31.6	52.3
0.238000	23.4	9.000	Off	L1	9.7	28.7	52.2
1.138000	18.6	9.000	Off	L1	9.8	27.4	46.0
1.152000	18.9	9.000	Off	L1	9.8	27.1	46.0
1.162000	19.1	9.000	Off	L1	9.8	26.9	46.0
1.166000	19.2	9.000	Off	L1	9.8	26.8	46.0
1.174000	19.4	9.000	Off	L1	9.8	26.6	46.0
1.234000	17.7	9.000	Off	L1	9.8	28.3	46.0
6.392000	18.7	9.000	Off	L1	10.1	31.3	50.0
6.440000	18.0	9.000	Off	L1	10.1	32.0	50.0
6.470000	17.0	9.000	Off	L1	10.1	33.0	50.0
6.768000	19.3	9.000	Off	L1	10.1	30.7	50.0
6.784000	19.2	9.000	Off	L1	10.1	30.8	50.0
7.078000	18.7	9.000	Off	L1	10.1	31.3	50.0

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## 11. LIST OF TEST EQUIPMENT

## 11.1 LIST OF TEST EQUIPMENT(Conducted Test)

Manufacturer	Model / Equipment	Calibration	Calibration	Serial No.	
		Date	Interval		
Rohde & Schwarz	ENV216 / LISN	12/20/2017	Annual	102245	
Rohde & Schwarz	ESCI / Test Receiver	06/27/2018	Annual	100033	
ESPAC	SU-642 /Temperature Chamber	03/30/2018	Annual	0093008124	
Agilent	N9020A / Signal Analyzer	06/08/2018	Annual	MY51110085	
Agilent	N9030A / Signal Analyzer	11/22/2017	Annual	MY49431210	
Agilent	N1911A / Power Meter	04/16/2018	Annual	MY45100523	
Agilent	N1921A / Power Sensor	04/16/2018	Annual	MY52260025	
Agilent	87300B / Directional Coupler	11/20/2017	Annual	3116A03621	
Hewlett Packard	11667B / Power Splitter	06/07/2018	Annual	05001	
Hewlett Packard	E3632A / DC Power Supply	06/26/2018	Annual	KR75303960	
Agilent	8493C / Attenuator(10 dB)	07/10/2018	Annual	07560	
Rohde & Schwarz	EMC32 / Software	N/A	N/A	N/A	
HCT CO., LTD.	FCC WLAN&BT&BLE Conducted Test Software	N/A	N/A	N/A	
	v3.0	IN/A	IN/A	IV/A	

#### Note:

- 1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
- 2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

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## 11.2 LIST OF TEST EQUIPMENT(Radiated Test)

		Calibration	Calibration		
Manufacturer	Model / Equipment	Date	Interval	Serial No.	
Innco system	CO3000 / Controller(Antenna mast)	N/A	N/A	CO3000-4p	
Innco system	MA4640/800-XP-EP / Antenna Position Tower	N/A	N/A	N/A	
Audix	EM1000 / Controller	N/A	N/A	060520	
Audix	Turn Table	N/A	N/A	N/A	
Rohde & Schwarz	Loop Antenna	04/19/2017	Biennial	1513-175	
Schwarzbeck	VULB 9168 / Hybrid Antenna	04/06/2017	Biennial	760	
Schwarzbeck	VULB 9160 / TRILOG Antenna	08/09/2018	Biennial	9160-3368	
Schwarzbeck	BBHA 9120D / Horn Antenna	05/02/2017	Biennial	9120D-937	
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	12/04/2017	Biennial	BBHA9170541	
Rohde & Schwarz	FSP(9 kHz ~ 30 GHz) / Spectrum Analyzer	09/03/2018	Annual	100688	
Rohde & Schwarz	FSV40-N / Spectrum Analyzer	09/28/2018	Annual	101068-SZ	
Wainwright Instruments	WHK3.0/18G-10EF / High Pass Filter	06/07/2018	Annual	8	
Wainwright Instruments	WHKX7.0/18G-8SS / High Pass Filter	05/09/2018	Annual	29	
Wainwright Instruments	WRCJV2400/2483.5-2370/2520-60/12SS / Band Reject Filter	06/29/2018	Annual	2	
Wainwright Instruments	WRCJV5100/5850-40/50-8EEK / Band Reject Filter	01/03/2018	Annual	2	
Api tech.	18B-03 / Attenuator (3 dB)	06/07/2018	Annual	1	
Agilent	8493C-10 / Attenuator(10 dB)	07/17/2018	Annual	08285	
CERNEX	CBLU1183540 / Power Amplifier	07/10/2018	Annual	22964	
CERNEX	CBL06185030 / Power Amplifier	07/10/2018	Annual	22965	
CERNEX	CBL18265035 / Power Amplifier	01/10/2018	Annual	22966	
CERNEX	CBL26405040 / Power Amplifier	06/29/2018	Annual	25956	
TESCOM	TC-3000C / Bluetooth Tester	03/27/2018	Annual	3000C000276	

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#### Note:

- 1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
- 2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

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# 12. ANNEX A\_ TEST SETUP PHOTO

Please refer to test setup photo file no. as follows;

No.	Description
1	HCT-RF-1811-FC016-P
2	HCT-RF-1811-FC017-P
3	HCT-RF-1811-FC018-P
4	HCT-RF-1811-FC019-P
5	HCT-RF-1811-FC020-P
6	HCT-RF-1811-FC021-P
7	HCT-RF-1811-FC022-P

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