

**FCC ID : H38UT-86P**

**Measurement Result:**

*( Test Frequency: 794.900MHz , Horizontal , 30 MHz ~ 1 GHz )*

Test Conditions:

Testing room :    Temperature : 26 °C    Humidity : 73 % RH  
 Testing site    :    Temperature : 31 °C    Humidity : 75 % RH

<i>Frequency</i>	<i>Reading Amplitude</i>	<i>Ant. Height</i>	<i>Table</i>	<i>Correction Factors</i>	<i>Corrected Power</i>	<i>Attenuated below the mean power</i>	<i>minimum Attenuation limit</i>
MHz	dBμV	m	degree	dB/m	dBm	dB	dB

198.727	33.57	1.00	150	-13.32	-50.49	44.80	9.77
397.452	27.91	1.00	27	-19.59	-49.88	44.19	9.77
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Note:

1. Margin = Amplitude - limit, *if margin is minus means under limit.*
2. Corrected Amplitude = Reading Amplitude – Correction Factors
3. Correction factor = Antenna factor + ( Cable Loss – Amplitude Gain )  
 ( For example :794.900MHz correction Amplitude= 66.59 – (-26.25) = 92.84dBμV/m )
4. FI(Volt) =  $10^{FI (dB\mu V/m) / 20} \times 10^{-6}$   
 FI ( Volt ) =  $10^{92.84/20} \times 10^{-6} = 0. 04385 \text{ V}$
5. P (watt ) =  $FI^2( Volt ) \times d^2( meter) / 49.2$   
 FI ( mW ) =  $( 0.04385 \times 3 )^2 / 49.2 = 0.351785 \text{ mW}$   
 FI ( dBm ) =  $10 \log 0.351785 (mW) / 1(mW) = -4.537 (dBm)$
6. Mean Power =  $10 \log (p) (dB) = 10 \log ( 0.27008 ) = -5.685$   
 Attenuated below the mean power = P – Corrected Power  
 (For example : -5.685 – ( - 50.49 ) ) = 44.80 (dB )

7. Attenuation required =  $43 + 10 \log ( 0.47564 \text{ mW } ) = 9.77$

**Measurement Result:**

**( Test Frequency: 794.900MHz , Horizontal , 1GHz ~ 18GHz )**

<b>Radiated Emission</b>				<b>Correction Factors</b>	<b>Corrected Amplitude</b> dBm	<b>Attenuated below the mean power</b> (dB)	<b>minimum Attenuation Limit</b> (dB)
<b>Frequency</b> (GHz)	<b>Amplitude</b> (dB $\mu$ V/m)	<b>Ant. H.</b> (cm)	<b>Table</b> ( ° )	( dB )			

1.589	68.03	1.00	64	-8.67	-38.02	32.33	9.77
2.380	64.14	1.00	198	-8.67	-41.91	36.22	9.77
2.770	51.97	1.00	44	-6.84	-52.25	46.56	9.77
2.980	62.81	1.00	10	-6.84	-41.41	35.72	9.77
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**Radiated Emission Test Result:**

**( Test Frequency: 794.900MHz , Vertical , 30MHz ~ 1GHz )**

<i>Frequency</i>	<i>Reading Amplitude</i>	<i>Ant. Height</i>	<i>Table</i>	<i>Correction Factors</i>	<i>Corrected Power</i>	<i>Attenuated below the mean power</i>	<i>minimum Attenuation limit</i>
MHz	dBμV	m	degree	dB/m	dBm	dB	dB

198.727	30.86	3.96	11	-13.54	44.40	-52.98	9.77
397.451	25.16	1.00	6	-19.14	44.30	-53.08	9.77
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**Radiated Emission Test Result:**

*( Test Frequency: 794.900MHz , Vertical , 1GHz ~ 18GHz )*

<i>Radiated Emission</i>				<i>Correction Factors</i>	<i>Corrected Amplitude</i> dBm	<i>Attenuated below the mean power</i> (dB)	<i>minimum Attenuation Limit</i> (dB)
<i>Frequency</i> (GHz)	<i>Amplitude</i> (dBμV/m)	<i>Ant. H.</i> (cm)	<i>Table</i> ( ° )	( dB )			

1.589	64.21	1.00	134	-8.67	-41.84	36.15	9.77
2.380	65.97	1.00	327	-8.67	-40.08	34.39	9.77
2.770	61.97	1.00	50	-6.84	-42.25	36.56	9.77
2.980	74.31	1.00	94	-6.84	-29.91	24.22	9.77
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**Measurement Result:**

**( Test Frequency: 800.200MHz , Horizontal , 30MHz ~ 1GHz )**

<i>Frequency</i>	<i>Reading Amplitude</i>	<i>Ant. Height</i>	<i>Table</i>	<i>Correction Factors</i>	<i>Corrected Power</i>	<i>Attenuated below the mean power</i>	<i>minimum Attenuation limit</i>
MHz	dBμV	m	degree	dB/m	dBm	dB	dB

200.049	32.79	1.00	150	-13.40	-51.19	44.52	8.22
400.100	22.68	2.47	7	-19.71	-54.99	44.43	8.22
600.148	24.69	1.00	84	-23.25	-51.19	48.23	8.22
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Note:

- Margin = Amplitude - limit, *if margin is minus means under limit.*
- Corrected Amplitude = Reading Amplitude – Correction Factors
- Correction factor = Antenna factor + ( Cable Loss – Amplitude Gain )  
( For example :794.900MHz correction Amplitude= 65.99 – (-26.64) = 92.63dBμV/m )
- FI(Volt) =  $10^{FI (dB\mu V/m) / 20} \times 10^{-6}$   
FI ( Volt ) =  $10^{92.63/20} \times 10^{-6} = 0.04281 \text{ V}$
- P (watt ) =  $FI^2 ( Volt ) \times d^2 (meter) / 49.2$   
FI ( mW ) =  $( 0.04281 \times 3 )^2 / 49.2 = 0.335179 \text{ mW}$   
FI ( dBm ) =  $10 \log 0.335179 (mW) / 1(mW) = -4.7472 (dBm)$
- Mean Power =  $10 \log (p) (dB) = 10 \log ( 0.21077 ) = -6.762$   
Attenuated below the mean power = P – Corrected Power  
(For example : -6.762 – ( - 51.19 ) ) = 53.94 (dB )
- Attenuation required =  $43 + 10 \log ( 0.33287 \text{ mW } ) = 8.22$

**Measurement Result:**

**( Test Frequency: 800.200MHz , Horizontal , 1GHz ~ 18GHz )**

<b>Radiated Emission</b>				<b>Correction Factors</b>	<b>Corrected Amplitude</b> dBm	<b>Attenuated below the mean power</b> (dB)	<b>minimum Attenuation Limit</b> (dB)
<b>Frequency</b> (GHz)	<b>Amplitude</b> (dBμV/m)	<b>Ant. H.</b> (cm)	<b>Table</b> ( ° )	( dB )			

1.400	72.05	1.00	9	-8.67	-34.00	27.24	8.22
1.600	70.25	1.00	141	-8.67	-35.80	29.04	8.22
2.390	69.97	1.00	95	-8.67	-36.08	29.32	8.22
2.790	61.81	1.00	417	-6.84	-42.41	35.65	8.22
3.000	69.31	1.00	206	-6.84	-34.91	28.15	8.22
3.190	63.64	1.00	4	-6.84	-40.58	33.82	8.22
5.990	38.58	1.00	189	9.72	-49.08	42.32	8.22
6.800	40.91	1.00	206	9.72	-46.75	39.99	8.22
7.410	42.48	1.00	40	9.72	-45.18	38.42	8.22
7.610	42.75	1.00	146	9.72	-44.91	38.15	8.22
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**Radiated Emission Test Result:**

*( Test Frequency: 800.200MHz , Vertical , 30MHz ~ 1GHz )*

<i>Frequency</i>	<i>Reading Amplitude</i>	<i>Ant. Height</i>	<i>Table</i>	<i>Correction Factors</i>	<i>Corrected Power</i>	<i>Attenuated below the mean power</i>	<i>minimum Attenuation limit</i>
MHz	dBµV	m	degree	dB/m	dBm	dB	dB

200.052	30.39	2.44	56	-13.64	-53.35	46.59	8.22
600.152	22.44	1.00	13	-23.56	-51.38	44.62	8.22
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**Radiated Emission Test Result:**

**( Test Frequency: 800.200MHz , Vertical , 1GHz ~ 18GHz )**

<b>Radiated Emission</b>				<b>Correction Factors</b>	<b>Corrected Amplitude</b> dBm	<b>Attenuated below the mean power</b> (dB)	<b>minimum Attenuation Limit</b> (dB)
<b>Frequency</b> (GHz)	<b>Amplitude</b> (dB $\mu$ V/m)	<b>Ant. H.</b> (cm)	<b>Table</b> ( ° )	( dB )			

1.400	71.20	2.44	10	-8.67	-34.85	28.09	8.22
1.600	62.90	1.00	58	-8.67	-43.15	36.39	8.22
2.390	69.14	1.00	151	-8.67	-36.91	30.15	8.22
2.790	73.81	1.00	206	-6.84	-30.41	23.65	8.22
3.000	75.47	1.00	27	-6.84	-28.75	21.99	8.22
3.190	63.81	1.00	116	-6.84	-40.41	33.65	8.22
5.990	47.41	1.00	237	9.72	-40.25	33.49	8.22
6.800	54.91	1.00	308	9.72	-32.75	25.99	8.22
7.000	51.41	1.00	346	9.72	-36.25	29.49	8.22
7.200	51.25	1.00	15	9.72	-36.41	29.65	8.22
7.410	52.41	1.00	97	9.72	-35.25	28.49	8.22
7.610	57.08	1.00	2	9.72	-30.58	23.82	8.22

**Measurement Result:**

**( Test Frequency: 804.900MHz , Horizontal , 30MHz ~ 1GHz )**

<i>Frequency</i>	<i>Reading Amplitude</i>	<i>Ant. Height</i>	<i>Table</i>	<i>Correction Factors</i>	<i>Corrected Power</i>	<i>Attenuated below the mean power</i>	<i>minimum Attenuation limit</i>
MHz	dBμV	m	degree	dB/m	dBm	dB	dB

201.227	34.45	1.00	150	-13.49	-49.44	44.49	9.93
402.452	32.01	1.00	28	-19.81	-45.56	40.61	9.93
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Note:

1. Margin = Amplitude - limit, *if margin is minus means under limit.*
2. Corrected Amplitude = Reading Amplitude – Correction Factors
3. Correction factor = Antenna factor + ( Cable Loss – Amplitude Gain )  
( For example :794.900MHz correction Amplitude= 68.37 – (-26.17) = 94.54dBμV/m )
4.  $FI(\text{Volt}) = 10^{FI(\text{dB}\mu\text{V}/\text{m}) / 20} \times 10^{-6}$   
 $FI(\text{ Volt }) = 10^{94.54/20} \times 10^{-6} = 0.05333 \text{ V}$
5.  $P(\text{watt}) = FI^2(\text{ Volt }) \times d^2(\text{meter}) / 49.2$   
 $FI(\text{ mW }) = ( 0.05333 \times 3 )^2 / 49.2 = 0.520328 \text{ mW}$   
 $FI(\text{ dBm }) = 10 \log 0.520328(\text{ mW}) / 1(\text{mW}) = -2.837(\text{ dBm})$
6. Mean Power =  $10 \log(p)(\text{dB}) = 10 \log(0.31961) = -4.954$   
Attenuated below the mean power = P – Corrected Power  
(For example : -4.954 – ( - 49.44 ) ) = 44.49 (dB )
7. Attenuation required =  $43 + 10 \log(0.49349 \text{ mW}) = 9.93$

**Measurement Result:**

**( Test Frequency: 804.900MHz , Horizontal , 1GHz ~ 18GHz )**

<b>Radiated Emission</b>				<b>Correction Factors</b>	<b>Corrected Amplitude</b> dBm	<b>Attenuated below the mean power</b> (dB)	<b>minimum Attenuation Limit</b> (dB)
<b>Frequency</b> (GHz)	<b>Amplitude</b> (dBμV/m)	<b>Ant. H.</b> (cm)	<b>Table</b> ( ° )	( dB )			

1.207	66.14	1.00	64	-8.67	-39.91	34.96	9.93
1.609	68.37	1.00	150	-8.67	-37.68	32.73	9.93
2.010	57.80	1.00	29	-8.67	-48.25	43.3	9.93
2.410	60.11	1.00	146	-8.64	-45.91	40.96	9.93
2.810	60.97	1.00	228	-6.84	-43.25	38.30	9.93
3.010	57.97	1.00	339	-6.84	-46.25	41.30	9.93
3.220	59.31	1.00	8	-6.84	-44.91	39.96	9.93
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**Radiated Emission Test Result:**

**( Test Frequency: 804.900MHz , Vertical , 30MHz ~ 1GHz )**

<i>Frequency</i>	<i>Reading Amplitude</i>	<i>Ant. Height</i>	<i>Table</i>	<i>Correction Factors</i>	<i>Corrected Power</i>	<i>Attenuated below the mean power</i>	<i>minimum Attenuation limit</i>
MHz	dBμV	m	degree	dB/m	dBm	dB	dB

201.226	31.72	2.47	4	-13.72	-51.94	46.99	9.93
402.452	29.99	1.00	9	-19.36	-48.03	43.08	9.93
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**Radiated Emission Test Result:**

**( Test Frequency: 804.900MHz , Vertical , 1GHz ~ 18GHz )**

<b>Radiated Emission</b>				<b>Correction Factors</b>	<b>Corrected Amplitude</b> dBm	<b>Attenuated below the mean power</b> (dB)	<b>minimum Attenuation Limit</b> (dB)
<b>Frequency</b> (GHz)	<b>Amplitude</b> (dBμV/m)	<b>Ant. H.</b> (cm)	<b>Table</b> ( ° )	( dB )			

1.207	59.45	1.00	35	-8.67	50.78	-46.60	41.65
1.609	64.08	1.00	35	-8.67	55.41	-41.97	37.02
2.010	56.97	1.00	39	-8.67	48.30	-49.08	44.13
2.410	63.11	1.00	167	-8.64	54.47	-42.91	37.96
2.810	67.97	1.00	229	-6.84	61.13	-36.25	31.30
3.010	64.97	1.00	64	-6.84	58.13	-39.25	34.30
3.220	61.14	1.00	181	-6.84	54.30	-43.08	38.13
3.420	62.31	1.00	38	-6.84	55.47	-41.91	36.96
3.620	57.61	1.00	239	-5.64	51.97	-45.41	40.46
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