5-1 Test Result: Field Strength of Radiated Emissions

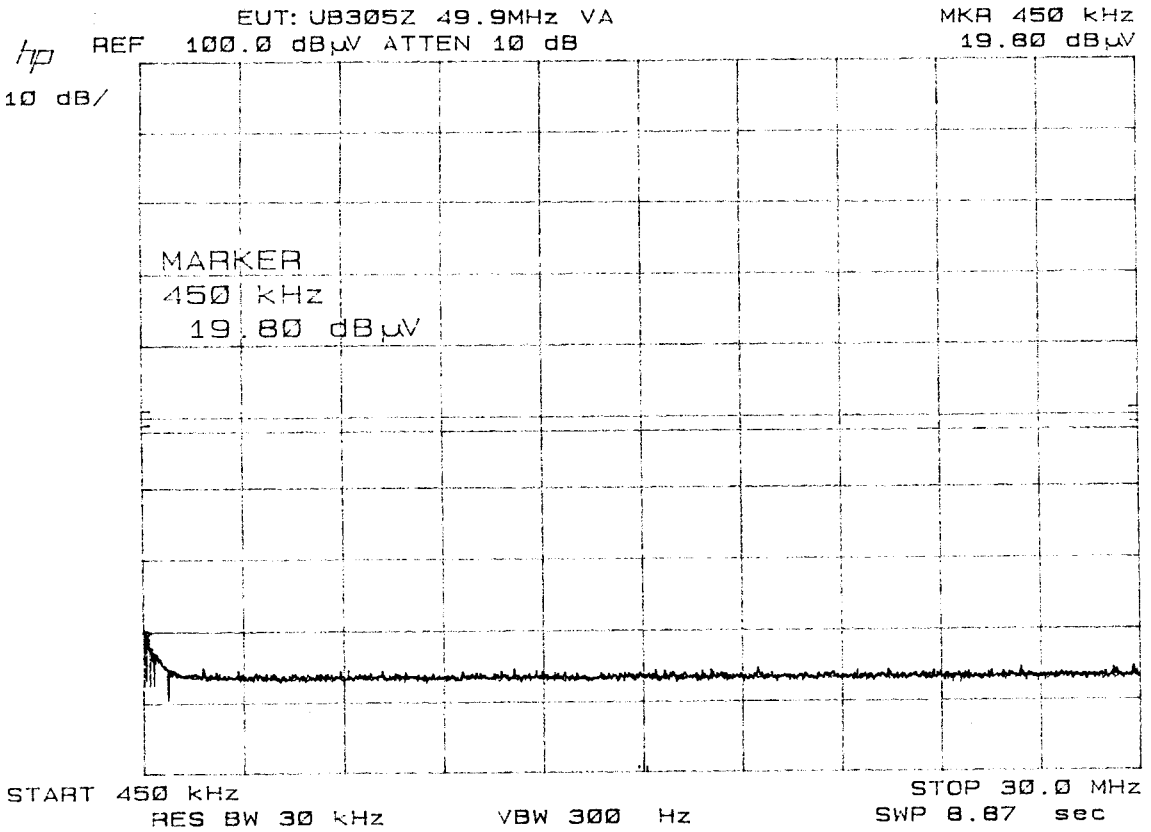
Tuned Frequency (MHz)	Emission Frequency (MHz)	FSM Reading (dBuV)	Amplifier Gain (dB)	Measured Level (dBuV)	Pol.	ACF (dB)	Field Strength (dBuV/m)	FCC Limit (dBuV/m)	MARGIN (dB)
(1) Test Results (25.000 - 54.000 MHz Band)									
25.005	1007.085	43.0	35.1	7.9	H	31.2	39.1	54.0	14.9
40.840	1006.980	44.8	35.1	9.7	H	31.2	40.9	54.0	13.1
49.900	1007.100	45.0	35.1	9.9	H	31.2	41.1	54.0	12.9
(2) Test Results (54.000 - 108.000 MHz Band)									
54.050	739.900	41.2	35.1	6.1	H	26.0	32.1	46.0	13.9
72.005	1007.085	43.5	35.1	8.4	H	31.2	39.6	54.0	14.4
107.900	1110.000	42.9	35.1	7.8	H	32.0	39.8	54.0	14.2
(3) Test Results (108.000 - 137.000 MHz Band)									
118.800	671.400	41.8	35.1	6.7	H	25.7	32.4	46.0	13.6
127.175	1006.875	42.4	35.1	7.3	H	31.2	38.5	54.0	15.5
135.500	1007.100	42.5	35.1	7.4	H	31.2	38.6	54.0	15.4
(4) Test Results (137.000 - 174.000 MHz Band)									
138.150	1006.950	43.5	35.1	8.4	H	31.2	39.6	54.0	14.4
162.400	1007.100	43.0	35.1	7.9	H	31.2	39.1	54.0	14.9
173.225	1007.025	42.7	35.1	7.6	H	31.2	38.8	54.0	15.2
(5) Test Results (174.000 - 311.000 MHz Band)									
197.750	1109.850	43.7	35.1	8.6	H	32.0	40.6	54.0	13.4
216.050	1006.950	43.5	35.1	8.4	H	31.2	39.6	54.0	14.4
310.9875	1006.838	43.0	35.1	7.9	H	31.2	39.1	54.0	14.9
(6) Test Results (311.000 - 512.000 MHz Band)									
311.0500	866.850	33.7	35.1	-1.4	V	27.5	26.1	46.0	19.9
406.875	NO EMISSIONS EXCEED 20dB BELOW THE FCC LIMIT.								
511.9125	866.963	33.8	35.1	-1.3	V	27.5	26.2	46.0	19.8
(7) Test Results (806.000 - 1300.000 MHz Band)									
806.000	1007.100	43.0	35.1	7.9	H	31.2	39.1	54.0	14.9
857.200	1007.100	43.5	35.1	8.4	V	31.2	39.6	54.0	14.4
954.9125	671.425	41.3	35.1	6.2	H	25.7	31.9	46.0	14.1
1240.0000	671.400	41.6	35.1	6.5	H	25.7	32.2	46.0	13.8
1299.9125	1007.145	44.0	35.1	8.9	H	31.2	40.1	54.0	13.9

Note: Other emissions not reported were more than 20dB below the FCC limits.

5-2 Test Result: Power Line Conducted Emissions

Tuned Frequency (MHz)	Emission Frequency (MHz)	Measured Level (dBuV)
49.9000	NO EMISSIONS EXCEED 20dB BELOW THE FCC LIMIT.	
72.0050	NO EMISSIONS EXCEED 20dB BELOW THE FCC LIMIT.	
127.1750	NO EMISSIONS EXCEED 20dB BELOW THE FCC LIMIT.	
162.4000	NO EMISSIONS EXCEED 20dB BELOW THE FCC LIMIT.	
216.0500	NO EMISSIONS EXCEED 20dB BELOW THE FCC LIMIT.	
406.8750	NO EMISSIONS EXCEED 20dB BELOW THE FCC LIMIT.	
857.2000	NO EMISSIONS EXCEED 20dB BELOW THE FCC LIMIT.	
1299.9125	NO EMISSIONS EXCEED 20dB BELOW THE FCC LIMIT.	

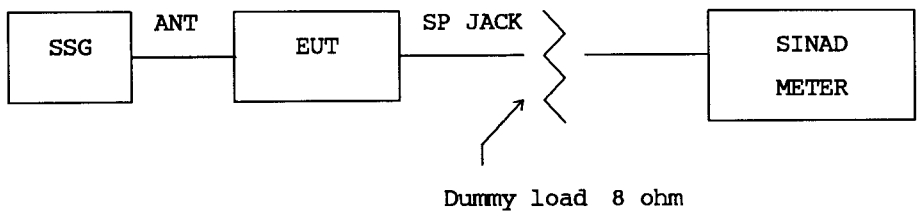
All emissions not reported were more than 20 dB below the limit.
(See attached example for 49.90MHz reception.)



5-3 Test Result: Cellular image rejection 15.121(b)

Rationale:
In order for measuring image(spurious) rejection ratio on scanning receiver, use of one SSG method would be suitable rather than two or three SSG method since cellular image reception would be considered as unwanted reception solely at outside of cellular band.

Test set-up:



Conditions: AF Signal : 1 kHz
Deviation : +/- 3kHz (for frequency modulation)
Modulation : 60 % (for amplitude modulation)

Test frequencies: 824.01MHz, 836.52MHz, 849.00MHz
869.01MHz, 881.52MHz, 894.00MHz

A) Initial screening

A-1) Disable the output signal of SSG. Disconnect dummy load and enable the EUT to confirm the presence of audio noise on speaker.

A-2) Set the EUT with "Squelched Threshold" to prevent audio signal.

A-3) Set the frequency of SSG to cellular band, and apply 60dBuV of RF output to EUT. Note that 60dBuV signal level corresponds approx. 66dB above the "Squelched Threshold" sensitivity of -6dBuV (not, receiving sensitivity). This is approx. 28dB (= 66 - 38) above the FCC limit.

A-4) Enable EUT and search the cellular frequencies on the all of receiving range.

A-5) List the all of detected frequencies if EUT detects them, and the following steps shall be taken to determine the actual image rejection ratio individually.

A-6) Repeat the above procedure for remaining frequencies.

A-7) Go to Part B of the test.

B) Measuring the image rejection ratio

B-1) Based on Initial screening, both of EUT and SSG shall be set to the frequency at which obtained in A-5) in the above. Connect the dummy load and set the squelch volume of EUT to unsquelched for obtaining the audio signal.

B-2) Adjust and record the RF output of SSG to obtain 12dB SINAD on EUT. SSG level at which obtaining the 12dB SINAD is receiving sensitivity of EUT (not, tight squelch sensitivity).

B-3) Adjust the frequency of SSG to the corresponded cellular frequency associated with A-5. Adjust and record the RF output of SSG to obtain 12dB SINAD on EUT.

B-4) Image rejection ratio is obtained as differences between B-2) and B-3).

C) Test Data

Spec. : At least 38dB

UB-305Z (BC780XLT)

Cellular Frequency (MHz)	Image/sprious (Frequency stopped on EUT) (MHz)	Image Rjection Ratio (dB)
824.01	62.7900	62.6
	809.1600	65.4
836.52	75.2800	61.4
	821.6700	65.6
	851.3700	64.8
	932.2550	59.2
	932.3800	58.4
849.00	29.2000	56.0
	819.8000	60.0
	863.8500	64.0
	919.6250	59.2
	919.7500	60.0
	919.8750	60.0
869.01	107.7900	64.4
	854.1600	66.0
	910.4800	60.8
881.52	120.2800	58.4
	806.4300	65.6
	866.6700	66.0
	896.3700	63.2
894.00	44.2000	64.0
	849.8000	63.2
	908.8500	62.4