

# American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

March 18, 2004

RE: UTStarcom, Inc.

FCC ID: O6YUTS-FSU811

After a review of the submitted information, I have a few comments on the above referenced Application.

1) Please provide a description of all circuitry and devices provided for determining and stabilizing frequency, for suppression of spurious radiation, for limiting modulation, and for limiting power.

Response: This device uses a single chip digital synthesizer to determine frequency. Power limits are maintained by the same device. The unit only has one transmit power level which is not adjustable. Shielding is included on the radio PWB to suppress spurious radiation.

2) The users manual does not appear to contain the information necessary as given in the RF exposure exhibit. However the manual exhibit appear to possibly be incomplete. Please correct as necessary.

Response: Please refer to the revised manual uploaded with this response.

3) This device should likely be tested in standby mode to Part 15 Class A/B Verification requirements as necessary. However information regarding this does not appear to be in the manual. Please explain/correct as necessary.

Response: Please refer to the revised manual uploaded with this response.

4) Previous applications typically showed a frequency range of 1893.65 - 1909.85 for this applicant, while the web site for UTStarcom appears to state 1895 to 1918.1 MHz (see <http://www.utstar.com/Solutions/Wireless/PAS>). The 731 form and parts of this application state 1880.15 -1909. 85 MHz. Note that UTStarcom does not appear to show any previous approvals below 1890 MHz. Please confirm and justify the lowest and highest channels used by this device for purposes of FCC Certification.

Response: Yes, UTStarcom has confirmed that phones will be using the newly assigned PHS available channels, from 1880.15 to 1909.85 MHz.

5) Test data shown in 8.2 only appears to go down to 1890 MHz, while other parts of the test report (see item 4 above) appear to go down to 1880.15. Please explain.

Response: The data in the table was inadvertently left out; please refer to the revised test report.

6) The data shown in plot 8-3, 8-9, and 8-15, appear close to 1893.95 MHz, near the upper portion of this band. Is this the lowest channel for operation in 1890 -1895 MHz Block F?

Response: Please refer to the revised test report uploaded with this response. New plots for channel 240 have been included.

7) Are the channels shown in plots 8-1, 8-7, and 8-13 the lowest channels in block B.

Response: Yes, 1880.15, Channel 206 is the lowest available in the PHS band presently.

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8) It may be helpful for items 4-6 above to provide an actual list of operational frequencies, intended for operation in the U.S.

Response: Attached is a list of the PHS. Operational channels are 206-50 or 1880.15 –1909.85 MHz.

9) The results on page 13 do not agree with the results given in the plot, cover page, and 731 form.

Response: Please refer to the revised test report uploaded with this response.

10) The users manual mentions 10 mW TX power, while the test report appears to show 60 mW conducted power, and higher EIRP. Additionally, it appears that information on this system from UTStarcom's web site states that radios for this system can come in 10 mW, 200 mW, and 500 mW average powers. Please confirm that this device was tested at its maximum setting. Please explain and/or correct the necessary exhibits.

Response: 10mW is the average of 80mW peak. The 200mW and 500mW powers are other devices.

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The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination.

Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. Also, please note that partial responses increase processing time and should not be submitted. Any questions about the content of this correspondence should be directed to the sender.

Table 1. PHS Carrier Numbers and Center Frequencies

Carrier Numbers	Carrier Frequency [MHz]	Carrier Numbers	Carrier Frequency [MHz]	Carrier Numbers	Carrier Frequency [MHz]
<b>206</b>	<b>1880.15</b>	7	1896.95	63	1913.75
207	1880.45	8	1897.25	64	1914.05
208	1880.75	9	1897.55	65	1914.35
209	1881.05	10	1897.85	66	1914.65
210	1881.35	11	1898.15	67	1914.95
211	1881.65	12	1898.45	68	1915.25
212	1881.95	13	1898.75	69	1915.55
213	1882.25	14	1899.05	70	1915.85
214	1882.55	15	1899.35	71	1916.15
215	1882.85	16	1899.65	72	1916.45
216	1883.15	17	1899.95	73	1916.75
217	1883.45	18	1900.25	74	1917.05
218	1883.75	19	1900.55	75	1917.35
219	1884.05	20	1900.85	76	1917.65
220	1884.35	21	1901.15	77	1917.95
221	1884.65	22	1901.45	78	1918.25
222	1884.95	23	1901.75	79	1918.55
223	1885.25	24	1902.05	80	1918.85
224	1885.55	25	1902.35	81	1919.15
225	1885.85	26	1902.65	82	1919.45
226	1886.15	27	1902.95	83	1919.75
227	1886.45	28	1903.25	84	1920.05
228	1886.75	29	1903.55	85	1920.35
229	1887.05	30	1903.85	86	1920.65
230	1887.35	31	1904.15	87	1920.95
231	1887.65	32	1904.45	88	1921.25
232	1887.95	33	1904.75	89	1921.55
233	1888.25	34	1905.05	90	1921.85
234	1888.55	35	1905.35	91	1922.15
235	1888.85	36	1905.65	92	1922.45
236	1889.15	37	1905.95	93	1922.75
237	1889.45	38	1906.25	94	1923.05
238	1889.75	39	1906.55	95	1923.35
239	1890.05	40	1906.85	96	1923.65
240	1890.35	41	1907.15	97	1923.95
241	1890.65	42	1907.45	98	1924.25
242	1890.95	43	1907.75	99	1924.55
243	1891.25	44	1908.05	100	1924.85
244	1891.55	45	1908.35	101	1925.15
245	1891.85	46	1908.65	102	1925.45
246	1892.15	47	1908.95	103	1925.75
247	1892.45	48	1909.25	104	1926.05
248	1892.75	49	1909.55	105	1926.35
249	1893.05	<b>50</b>	<b>1909.85</b>	106	1926.65
250	1893.35	51	1910.15	107	1926.95
251	1893.65	52	1910.45	108	1927.25
252	1893.95	53	1910.75	109	1927.55
253	1894.25	54	1911.05	110	1927.85
254	1894.55	55	1911.35	111	1928.15
255	1894.85	56	1911.65	112	1928.45
<b>1</b>	<b>1895.15</b>	57	1911.95	113	1928.75
2	1895.45	58	1912.25	114	1929.05
3	1895.75	59	1912.55	115	1929.35
4	1896.05	60	1912.85	116	1929.65
5	1896.35	61	1913.15		
6	1896.65	62	1913.45		

Note: Additional carriers in the expanded PHS band are shown in bold.