No	Δ Frequency (Hz)	Temp. (°C)	P406 (dBm)	P121.5 (dBm)
1	49922,42	-20,9	36,8	18,8
2	49922,40	-20,9	36,7	18,3
3	49922,72	-20,9	36,7	18,3
4	49923,27	-20,8	36,8	18,8
5	49922,89	-21,0	36,8	18,6
6	49923,59	-20,9	36,7	18,8
7	49923,31	-21,0	36,8	18,8
8	49923,46	-20,9	36,8	18,8
9	49923,13	-20,9	36,8	18,8
10	49923,48	-20,9	36,8	18,8
11	49923,80	-21,0	36,8	18,8
12	49923,18	-21,0	36,8	18,8
13	49923,59	-21,0	36,8	18,8
14	49923,39	-20,9	36,8	18,8
15	49923,75	-20,9	36,8	18,8
16	49923,21	-20,8	36,8	18,8
17	49923,83	-20,8	36,8	18,8
18	49923,68	-20,9	36,7	18,8

No	Temp.	Slope	Sigma	P406	Short term	P121.5
1	-20,8	1,6E-10	6,5E-10	36,7	2,7E-10	18,7
18	-20,8	1,1E-10	3,8E-10	36,7	4,0E-10	18,7
31	-20,6	1,3E-10	4,0E-10	36,7	3,1E-10	18,8
61	-20,4	1,4E-11	6,2E-10	36,7	3,4E-10	18,8
91	-20,5	8,6E-11	5,6E-10	36,7	2,0E-10	18,8
121	-21,0	8,3E-11	7,0E-10	36,7	3,2E-10	18,8
151	-21,3	3,5E-11	4,2E-10	36,7	2,8E-10	18,8
181	-21,6	7,0E-12	4,5E-10	36,7	2,7E-10	18,7
211	-21,7	7,8E-11	5,7E-10	36,8	2,7E-10	18,8
241	-21,7	5,6E-11	5,4E-10	36,7	2,1E-10	18,8
271	-21,7	8,8E-11	6,3E-10	36,7	2,5E-10	18,8
301	-21,7	9,0E-12	4,3E-10	36,7	1,4E-10	18,9
331	-21,9	-3,2E-11	4,7E-10	36,8	1,3E-10	18,8
361	-21,8	3,4E-11	3,4E-10	36,8	2,4E-10	18,8
391	-21,7	-3,3E-11	4,5E-10	36,7	2,4E-10	18,8
421	-21,6	5,5E-11	5,2E-10	36,8	2,5E-10	18,8
451	-21,6	-6,7E-11	4,9E-10	36,8	2,3E-10	18,8
481	-21,6	-1,3E-11	3,1E-10	36,8	4,4E-10	18,8
511	-21,6	-9,3E-11	5,7E-10	36,8	2,5E-10	18,9
541	-21,6	-1,8E-11	4,3E-10	36,8	2,3E-10	18,8
571	-21,6	-2,5E-12	4,8E-10	36,8	3,1E-10	18,9
601	-21,4	-2,3E-11	6,8E-10	36,8	3,0E-10	18,8
631	-21,3	-2,8E-11	4,6E-10	36,8	2,6E-10	18,8
661	-21,3	-7,2E-11	4,8E-10	36,8	3,2E-10	18,8
691	-21,2	-6,7E-11	3,6E-10	36,8	2,8E-10	18,8
721	-21,2	3,9E-11	3,3E-10	36,8	3,7E-10	18,7
751	-21,0	7,4E-11	5,9E-10	36,8	3,1E-10	18,8
781	-20,9	-1,7E-11	5,8E-10	36,8	2,5E-10	18,8
811	-21,0	6,6E-11	6,7E-10	36,8	2,3E-10	18,5
841	-20,9	-2,7E-11	4,5E-10	36,8	2,1E-10	18,9

No	Temp.	Slope	Sigma	P406	Short term	P121.5
871	-20,8	1,1E-11	3,2E-10	36,8	2,0E-10	18,8
901	-20,7	4,0E-11	5,9E-10	36,8	2,4E-10	18,8
931	-20,7	3,0E-11	5,1E-10	36,8	3,7E-10	18,8
961	-20,6	-5,7E-11	4,4E-10	36,8	3,9E-10	18,9
991	-20,5	-7,8E-12	6,2E-10	36,8	4,0E-10	18,8
1021	-20,5	2,3E-11	5,5E-10	36,8	4,1E-10	18,7
1051	-20,5	1,5E-11	4,8E-10	36,8	2,7E-10	18,8
1081	-20,3	5,9E-12	5,0E-10	36,8	3,0E-10	18,8
1111	-20,4	3,1E-11	4,3E-10	36,8	3,6E-10	18,8
1141	-20,3	-1,2E-11	4,1E-10	36,8	2,9E-10	18,8
1171	-20,3	-1,6E-11	4,7E-10	36,8	3,4E-10	18,4
1201	-20,4	-3,4E-11	7,2E-10	36,8	3,1E-10	18,8
1231	-20,3	1,3E-10	5,6E-10	36,8	2,1E-10	18,4
1261	-20,2	3,7E-11	4,5E-10	36,8	2,0E-10	18,8
1291	-20,3	1,1E-11	4,7E-10	36,8	3,0E-10	18,9
1321	-20,5	2,1E-11	3,4E-10	36,8	2,5E-10	18,7
1351	-20,7	-2,4E-11	3,5E-10	36,8	2,9E-10	18,9
1381	-20,9	6,5E-11	3,9E-10	36,8	3,1E-10	18,8
1411	-21,0	2,8E-11	5,8E-10	36,8	2,2E-10	18,8
1441	-21,2	-6,8E-11	5,1E-10	36,8	3,6E-10	18,8
1471	-21,3	2,4E-11	5,8E-10	36,8	2,2E-10	18,8
1501	-21,4	4,1E-11	4,4E-10	36,8	2,7E-10	18,9
1531	-21,4	3,6E-11	4,3E-10	36,8	2,0E-10	18,8
1561	-21,4	7,4E-11	6,4E-10	36,8	3,8E-10	18,6
1591	-21,6	4,8E-11	4,3E-10	36,8	2,4E-10	18,8
1621	-21,6	5,0E-11	5,1E-10	36,8	3,0E-10	18,8
1651	-21,5	-1,0E-11	3,5E-10	36,8	1,9E-10	18,8
1681	-21,5	1,7E-11	3,7E-10	36,8	3,3E-10	18,8
1711	-21,4	-5,7E-11	5,2E-10	36,8	2,0E-10	18,8
1741	-21,3	6,6E-11	4,5E-10	36,8	1,3E-10	18,9 24
1771	-21,2	1,8E-11	5,0E-10	36,8	2,5E-10	18,8
1801	-21,1	-4,7E-11	6,1E-10	36,8	2,6E-10	18,6
1831	-21,1	-3,1E-11	3,7E-10	36,8	2,4E-10	18,9
1861	-21,0	-8,4E-11	5,7E-10	36,8	2,4E-10 2,0E-10	18,4
1891	-20,8	5,9E-11	5,7E-10 5,3E-10	36,8	3,5E-10	18,8
1921	-20,8	-2,4E-12	4,3E-10	36,8	2,3E-10	18,8
1951	-20,6	-6,8E-12	5,5E-10	36,8	3,0E-10	
1981	-20,6	-1,3E-11	4,9E-10	36,8	2,7E-10	18,8
2011	-20,5	1,2E-11	4,8E-10	36,8	3,2E-10	18,8
2041	-20,3	-1,8E-12	4,3E-10	36,8	3,2E-10 3,3E-10	18,5
2071	-20,2	2,3E-11	6,2E-10	36,8	2,0E-10	18,8
2101	-20,2	-5,0E-11	4,1E-10	36,8	3,6E-10	18,8
2131	-19,9	-3,0E-11 -3,3E-11	4,1E-10 4,3E-10	36,8	2,3E-10	18,8
2161	-19,8	-3,3E-11 -4,2E-11	7,6E-10	36,8	2,3E-10 2,6E-10	18,8
2191	-19,8	-4,2E-11 -2,3E-11	4,5E-10	36,8	2,6E-10 3,1E-10	18,7
2221	-19,8	3,2E-11	5,0E-10			18,6
2251	-19,8	6,7E-12	4,0E-10	36,8	2,4E-10	18,9
2231	-19,8	-4,1E-11		36,8	2,8E-10	18,8
2311	-19,8	-4,1E-11 -3,7E-11	6,3E-10	36,8	4,3E-10	18,8
2341	-19,8	-3,/E-11 -1,8E-11	5,6E-10 5,5E-10	36,8	3,4E-10	18,8
2371			1	36,8	2,9E-10	18,7
<u> </u>	-19,9	-4,5E-11	4,2E-10	36,8	2,4E-10	18,8

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No	Temp.	Slope	Sigma	P406	Short term	P121.5
2401	-19,8	3,8E-11	5,0E-10	36,8	3,0E-10	18,4
2431	-19,8	1,0E-10	7,2E-10	36,8	2,6E-10	18,8
2461	-19,8	4,2E-11	4,6E-10	36,8	4,1E-10	18,6
2491	-19,6	-6,8E-11	6,0E-10	36,8	3,3E-10	18,6
2521	-19,7	9,5E-11	5,2E-10	36,8	1,8E-10	18,8
2551	-19,7	-4,5E-12	4,6E-10	36,8	2,8E-10	18,9
2581	-19,7	-2,3E-11	4,4E-10	36,8	2,8E-10	18,8
2611	-19,8	2,0E-11	3,9E-10	36,8	2,8E-10	18,2
2641	-19,7	-2,0E-11	3,7E-10	36,8	2,5E-10	18,9
2671	-19,5	-1,3E-11	4,1E-10	36,8	3,1E-10	18,8
2701	-19,7	-1,5E-11	3,4E-10	36,8	2,5E-10	18,8
2731	-19,6	6,0E-12	4,6E-10	36,8	2,7E-10	18,8
2761	-19,7	-3,5E-11	4,6E-10	36,8	3,7E-10	18,8
2791	-19,6	-2,9E-12	4,7E-10	36,8	3,9E-10	18,8
2821	-19,8	6,0E-11	5,9E-10	36,8	3,3E-10	18,8
2851	-19,7	-3,8E-11	4,4E-10	36,8	3,5E-10	18,8
2881	-19,7	1,8E-11	4,1E-10	36,8	3,9E-10	18,8
2911	-19,7	-2,7E-11	5,3E-10	36,8	1,6E-10	18,3
2941	-19,6	-3,9E-13	5,6E-10	36,8	2,7E-10	18,8
2971	-19,6	7,0E-11	4,0E-10	36,8	3,0E-10	18,8
3001	-19,6	8,0E-11	4,5E-10	36,8	3,3E-10	18,8
3031	-19,6	-1,7E-11	4,8E-10	36,8	2,9E-10	18,3
3061	-19,8	6,0E-11	3,6E-10	36,8	3,3E-10	18,4
3091	-19,9	-2,6E-11	3,9E-10	36,7	2,4E-10	18,8
3121	-20,0	-6,0E-12	5,2E-10	36,7	3,7E-10	18,9
3151	-20,3	-8,5E-11	7,0E-10	36,7	2,4E-10	18,6
3181	-20,5	-5,8E-11	4,4E-10	36,7	3,4E-10	18,8
3211	-20,6	4,6E-11	5,8E-10	36,7	2,6E-10	18,8
3241	-20,9	5,5E-11	4,1E-10	36,7	3,0E-10	18,8
3271	-20,9	1,3E-11	4,7E-10	36,7	3,1E-10	18,8
3301	-21,1	5,3E-11	4,8E-10	36,7	3,3E-10	18,9
3331	-21,1	-9,6E-11	4,4E-10	36,7	1,8E-10	18,8
3361	-21,2	3,4E-11	3,8E-10	36,7	2,8E-10	18,9
3391	-21,2	-5,4E-11	5,5E-10	36,6	2,6E-10	18,6
3421	-21,1	2,3E-12	5,9E-10	36,6	2,6E-10	18,8
3451	-21,1	1,3E-12	6,0E-10	36,6	2,5E-10	18,8
3481	-21,1	-6,3E-11	5,0E-10	36,4	3,4E-10	18,8
3511	-21,0	-2,2E-10	5,0E-10	36,4	2,5E-10	18,8
3541	-20,9	-4,0E-10	7,3E-10	36,2	5,7E-10	18,8
3571	-20,8	-4,3E-10	1,5E-09	35,7	1,2E - 9	18,8
3601						
3631						
3661						1 1

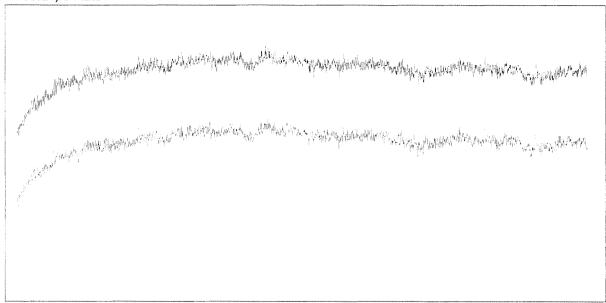
Beacon message after 48 hours of Operating Lifetime Test:

FFFE2F5F7F03C48000009C00400



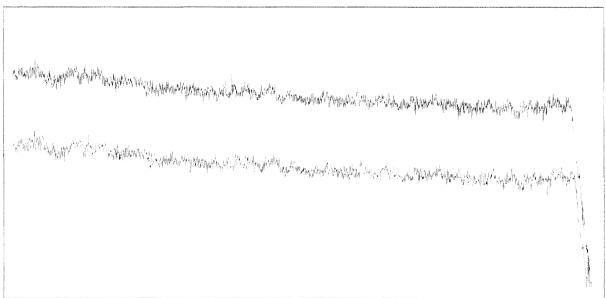
Frequency variation

406024,934 kHz



406024,919 kHz

406024,934 kHz



406024,919 kHz

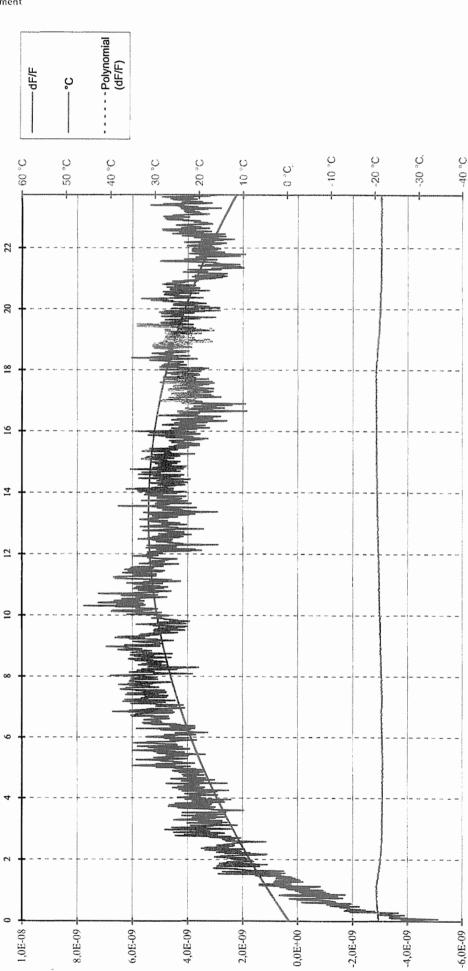
--- Initial tracing --- Smoothed tracing



LIFE TEST AT -20 °C Manufacturer: STANDARD COMMUNICATIONS PTY. LTD. Model: MT400

Number: C204

FREQUENCY VARIATION



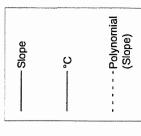


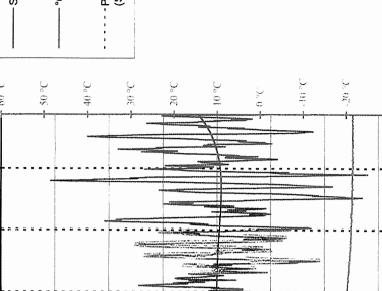
LIFE TEST AT -20 °C

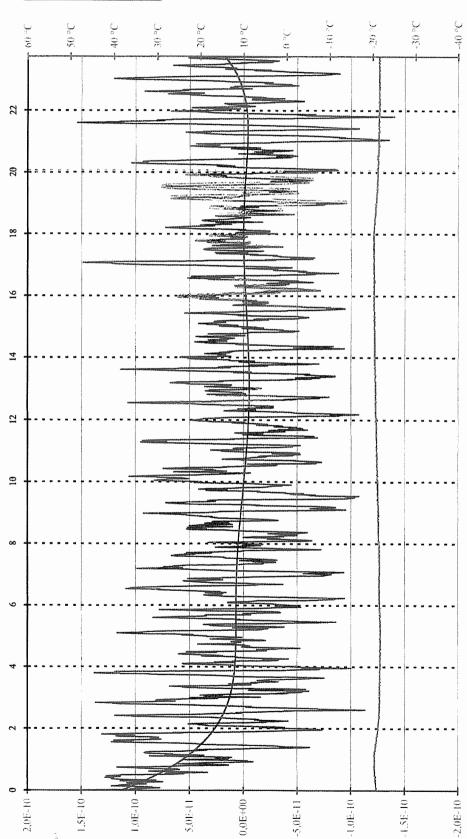
Manufacturer: STANDARD COMMUNICATIONS PTY. LTD. Model: MT400

Number: C204

MEDIUM TERM STABILITY: MEAN SLOPE /mn (-1,0E-9 to 1,0E-9)









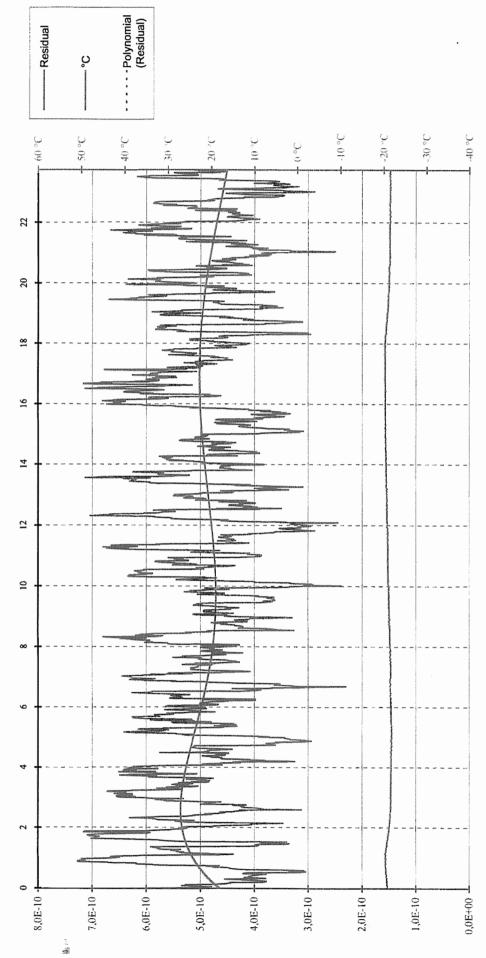


LIFE TEST AT -20 °C

Manufacturer: STANDARD COMMUNICATIONS PTY. LTD. Model: MT400

Number: C204

MEDIUM TERM STABILITY: RESIDUAL (≤3,0E-9)

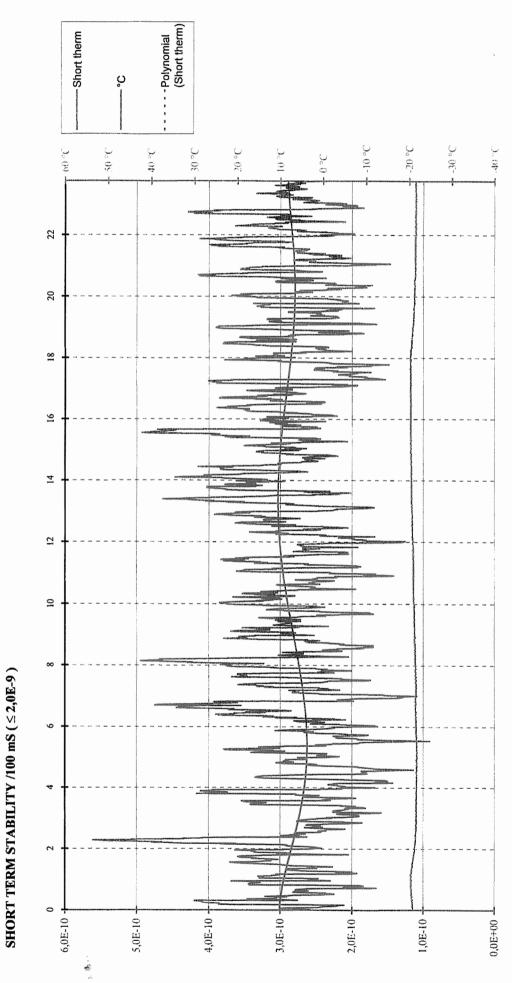




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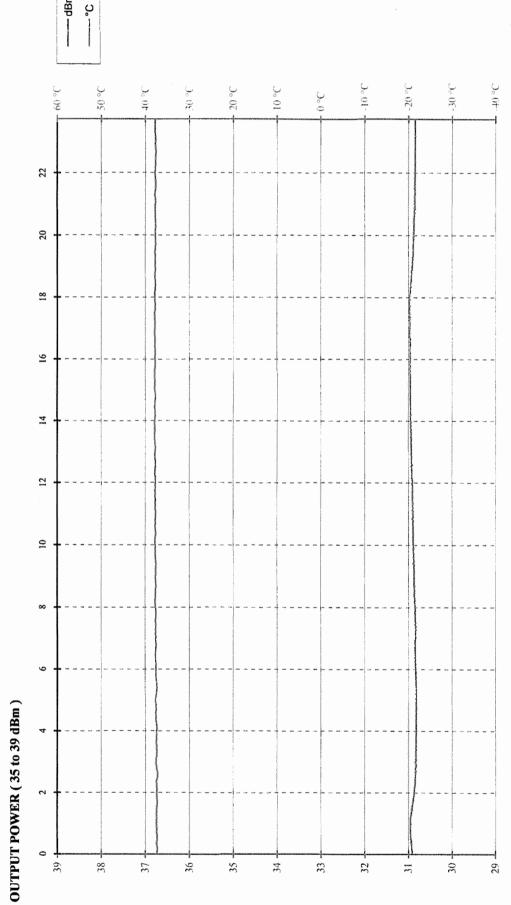
LIFE TEST AT -20 °C Manufacturer: STANDARD COMMUNICATIONS PTY. LTD.
Model: MT400
Number: C204





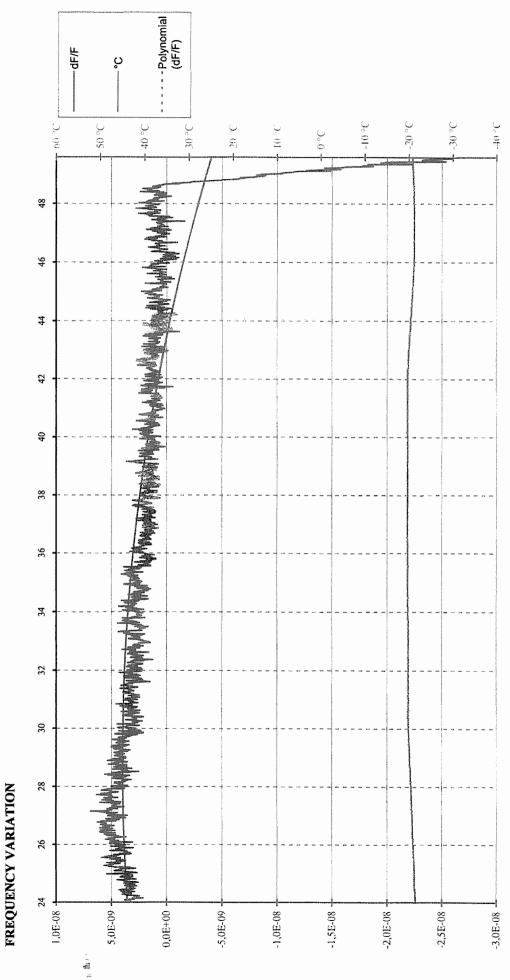
LIFE TEST AT -20 °C

Manufacturer : STANDARD COMMUNICATIONS PTY. LTD.
Model : MT400
Numero : C204









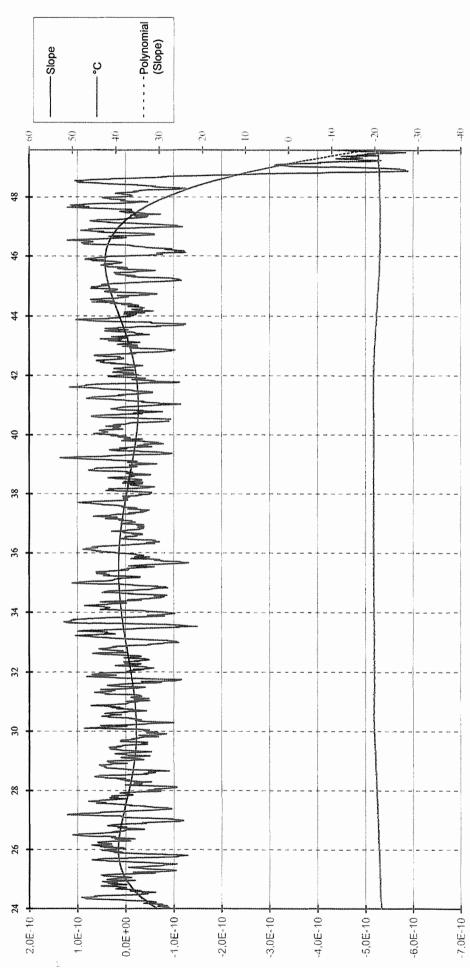


LIFE TEST AT -20 °C

Manufacturer: STANDARD COMMUNICATIONS PTY. LTD.
Model: MT400

Numero: C204

MEDIUM TERM STABILITY: MEAN SLOPE/mn (-1,0E-9 to 1,0E-9)

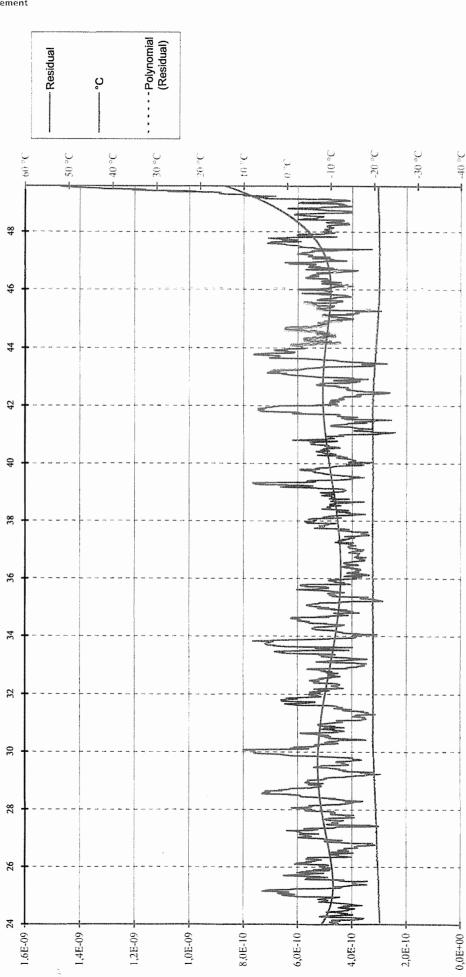




LIFE TEST AT -20 °C

Manufacturer: STANDARD COMMUNICATIONS PTY. LTD.
Model: MT400
Numero: C204

MEDIUM TERM STABILITY: RESIDUAL (≤3,0E-9)



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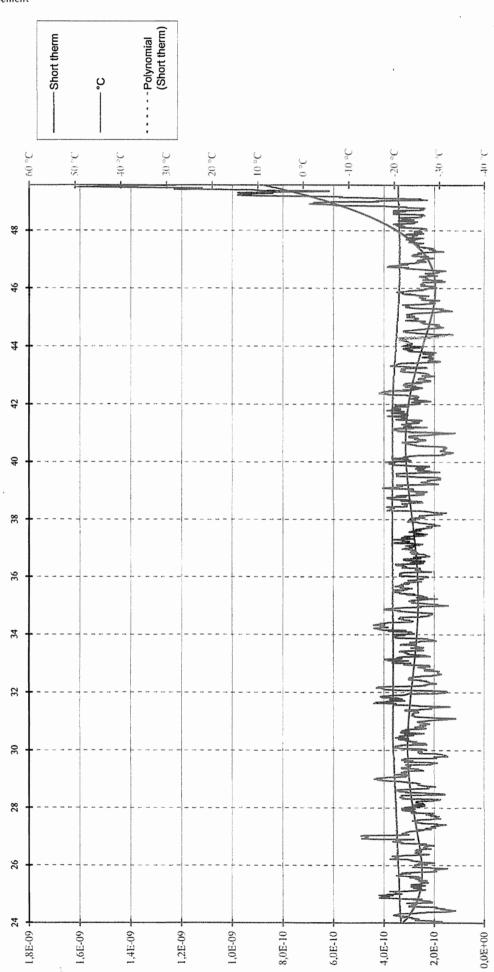


LIFE TEST AT -20 °C

Manufacturer: STANDARD COMMUNICATIONS PTY. LTD. Model: MT400

Numero: C204

SHORT TERM STABILITY /100 mS (< 2,0E-9)



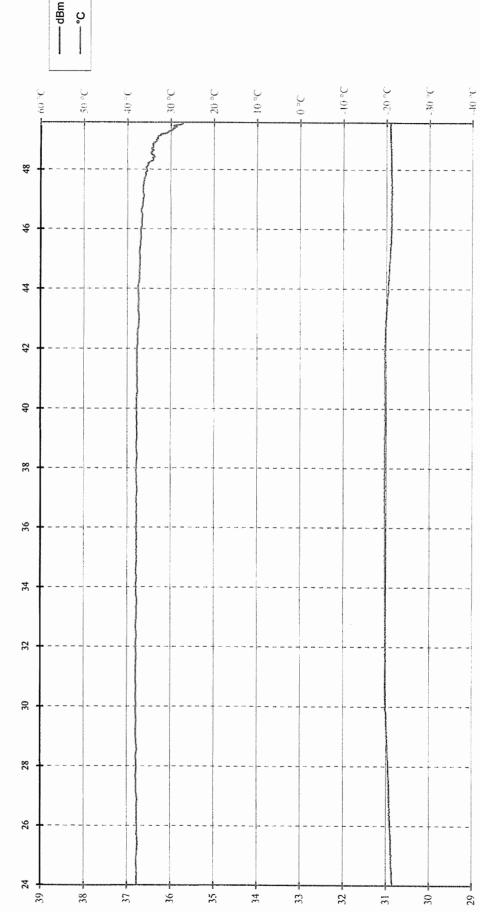
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LIFE TEST AT -20 °C

Manufacturer: STANDARD COMMUNICATIONS PTY. LTD.
Model: MT400
Numero: C204

OUTPUT POWER (35 to 39 dBm)



TEMPERATURE GRADIENT TEST RESULT ON MT400 STANDARD COMMUNICATIONS PTY. LTD. EPIRB N° C204

at -20° C, 22° C and 55° C

No	Δ Frequency (Hz)	Temp. (°C)	P406 (dBm)	P121.5 (dBm)
1	49943,19	-20,8	36,5	18,6
2	49942,77	-20,7	36,5	18,6
3	49944,32	-20,7	36,4	18,6
4	49944,22	-20,6	36,5	18,6
5	49945,31	-20,6	36,4	18,6
6	49945,38	-20,7	36,5	18,6
7	49945,40	-20,7	36,5	18,5
8	49945,64	-20,7	36,4	18,5
9	49946,22	-20,7	36,5	18,4
10	49946,48	-20,7	36,5	18,4
11	49946,49	-20,6	36,5	18,4
12	49946,13	-20,7	36,5	18,6
13	49947,04	-20,7	36,5	18,5
14	49947,32	-20,6	36,5	18,3
15	49947,18	-20,7	36,4	18,5
16	49947,77	-20,8	36,5	18,6
17	49947,77	-20,7	36,4	18,3
18	49947,65	-20,7	36,4	18,1

No	Temp.	Slope	Sigma	P406	Short term	P121.5
1	-20,7	7,3E-10	1,1E-9	36,5	3,4E-10	18,6
18	-20,7	5,0E-11	4,8E-10	36,4	2,7E-10	18,6
31	-20,8	-8,7E-11	5,1E-10	36,4	2,4E-10	18,6
61	-20,7	-6,8E-11	5,5E-10	36,4	1,8E-10	18,6
91	-19,5	2,4E-11	4,5E-10	36,4	2,5E-10	18,2
121	-17,5	-1,2E-10	5,1E-10	36,4	2,7E-10	18,5
151	-15,4	5,9E-11	6,4E-10	36,4	3,1E-10	18,5
181	-13,4	5,7E-11	4,8E-10	36,4	3,3E-10	18,0
211	-11,4	3,5E-11	4,0E-10	36,3	2,4E-10	18,4
241	-9,3	2,3E-11	6,8E-10	36,3	3,2E-10	18,5
271	-7,0	4,0E-12	7,7E-10	36,3	2,0E-10	18,5
301	-4,8	5,7E-11	9,0E-10	36,3	1,7E-10	18,1
331	-2,4	3,6E-11	7,7E-10	36,3	2,9E-10	18,4
361	-0,3	7,0E-11	1,0E-9	36,2	2,2E-10	18,3
391	2,1	5,4E-11	6,7E-10	36,2	3,7E-10	18,4
421	4,1	-9,5E-11	6,1E-10	36,2	1,9E-10	18,0
451	6,0	2,3E-12	7,1E-10	36,1	3,2E-10	18,4
481	8,2	-6,3E-12	7,2E-10	36,1	2,4E-10	18,3
511	10,2	2,2E-11	3,8E-10	36,1	2,3E-10	18,4
541	12,4	-3,3E-11	5,0E-10	36,0	2,0E-10	18,4
571	14,5	-1,4E-11	5,3E-10	36,0	1,5E-10	18,0
601	16,6	-6,3E-11	6,0E-10	36,0	2,8E-10	18,3
631	18,8	-1,1E-10	4,3E-10	35,9	2,3E-10	18,3
661	20,8	-1,0E-10	8,1E-10	35,9	2,2E-10	18,3
691	22,9	-8,5E-11	7,3E-10	35,9	2,3E-10	18,2
721	25,0	-7,5E-12	6,6E-10	35,8	2,6E-10	18,2
751	27,2	-6,6E-11	6,5E-10	35,8	1,8E-10	18,2
781	29,3	9,5E-12	6,1E-10	35,8	2,1E-10	18,0
811	31,5	2,9E-11	7,0E-10	35,7	2,1E-10	17,7
841	33,6	-1,0E-11	5,7E-10	35,6	2,3E-10	17,7



No	Temp.	Slope	Sigma	P406	Short term	P121.5
871	35,7	-1,0E-10	4,7E-10	35,5	1,9E-10	18,2
901	37,8	2,0E-11	6,0E-10	35,4	2,0E-10	18,0
931	39,9	1,1E-11	5,0E-10	35,6	2,9E-10	18,2
961	41,9	-8,3E-11	5,1E-10	35,6	2,3E-10	18,0
991	44,0	-8,0E-11	3,8E-10	35,5	2,6E-10	17,7
1021	46,0	6,3E-13	5,1E-10	35,5	2,0E-10	18,1
1051	48,0	-2,2E-11	4,7E-10	35,5	3,2E-10	18,1
1081	50,0	-1,8E-11	5,5E-10	35,4	2,6E-10	17,5
1111	52,1	-2,9E-11	6,8E-10	35,4	1,9E-10	18,0
1141	54,3	-9,4E-11	5,4E-10	35,4	2,5E-10	18,0
1171	55,3	-7,9E-11	6,2E-10	35,3	3,1E-10	18,1
1201	55,4	5,5E-11	3,9E-10	35,3	1,3E-10	17,6
1231	55,7	7,4E-12	5,2E-10	35,3	1,9E-10	18,1
1261	55,6	2,2E-11	4,5E-10	35,3	2,6E-10	18,0
1291	55,6	1,7E-11	4,4E-10	35,3	1,8E-10	18,0
1321	54,1	7,8E-11	4,0E-10	35,3	1,8E-10	18,1
1351	51,9	2,2E-11	5,1E-10	35,3	2,3E-10	18,1
1381	49,9	8,2E-11	5,0E-10	35,4	3,1E-10	18,1
1411	47,8	7,7E-12	4,6E-10	35,4	2,1E-10	18,1
1441	45,4	5,6E-11	5,5E-10	35,4	2,2E-10	18,1
1471	43,2	7,9E-11	3,6E-10	35,5	1,4E-10	17,9
1501	40,9	6,8E-11	4,6E-10	35,5	1,8E-10	18,2
1531	38,9	1,2E-10	6,0E-10	35,5	1,9E-10	18,3
1561	36,9	1,7E-10	6,4E-10	35,6	2,0E-10	18,1
1591	34,8	1,1E-12	6,5E-10	35,6	1,1E-10	18,3
1621	32,8	4,1E-11	5,0E-10	35,6	2,4E-10	18,3
1651	30,6	1,2E-12	5,9E-10	35,7	1,7E-10	18,3
1681	28,2	8,1E-11	6,6E-10	35,7	2,9E-10	18,3
1711	25,9	7,0E-11	9,6E-10	35,7	1,8E-10	18,3
1741	23,9	6,7E-11	7,7E-10	35,8	2,3E-10	18,3
1771	21,7	1,3E-10	7,8E-10	35,8	2,1E-10	18,4
1801	19,6	-5,0E-12	5,8E-10	35,8	3,2E-10	18,3
1831	17,4	7,4E-12	6,0E-10	35,9	1,4E-10	18,4
1861	15,4	3,9E-11	7,6E-10	35,9	1,4E-10	18,4
1891	13,3	1,1E-10	6,5E-10	35,9	3,3E-10	18,4
1921	11,3	1,4E-10	5,1E-10	36,0	2,1E-10	18,4
1951	9,2	4,7E-11	3,1E-10	36,0	2,3E-10	18,4
1981	7,1	7,5E-12	4,9E-10	36,0	1,9E-10	18,4
2011	5,4	-7,5E-11	5,7E-10	36,1	2,2E-10	18,4
2041	3,2	2,7E-11	5,7E-10	36,1	2,6E-10	18,2
2071	1,4	7,5E-11	7,4E-10	36,1	3,0E-10	18,3
2101	-0,8	8,1E-11	8,1E-10	36,2	2,0E-10	18,1
2131	-2,8	-1,3E-12	9,5E-10	36,2	2,5E-10	18,5
2161	-4,9	-4,7E-11	1,1E-9	36,2	3,1E-10	18,6
2191	-7,2	2,0E-11	1,0E-9	36,3	2,3E-10	18,6
2221	-9,0	-1,2E-10	8,5E-10	36,3	2,8E-10	18,5
2251	-11,0	-9,4E-11	1,0E-9	36,3	2,4E-10	18,5
2281	-13,3	-4,6E-11	6,8E-10	36,4	2,8E-10	18,6
2311	-15,3	-9,5E-11	5,7E-10	36,4	2,3E-10	18,4
2341 2371	-17,5	-8,7E-11	4,4E-10	36,4	2,9E-10	18,2
23/1	-19,5	-8,6E-11	6,2E-10	36,5	2,4E-10	18,7

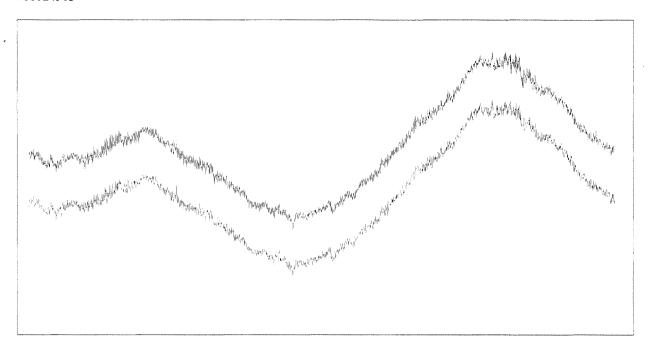


No	Temp.	Slope	Sigma	P406	Short term	P121.5
2401	-20,5	1,9E-11	5,7E-10	36,5	3,7E-10	18,6
2431	-20,7	-8,3E-11	4,4E-10	36,5	2,4E-10	18,6
2461	-20,6	-4,3E-11	6,0E-10	36,5	3,9E-10	18,7
2491	-20,7	-4,3E-11	5,8E-10	36,5	2,8E-10	18,6
2521	-20,7	-1,1E-10	6,6E-10	36,5	2,7E-10	18,4
2551	-20,7	-3,0E-11	4,4E-10	36,5	1,9E-10	18,7
2581	-20,7	-1,1E-10	5,8E-10	36,5	3,5E-10	18,4
2611						
2641						
2671						
2701						
2731						
2761						
2791						
2821						
2851						
2881						
2911						
2941						
2971						
3001						
3031						
3061						
3091						
3121 3151						
3131						
3211						
3241						
3271						
3301						
3331						
3361						
3391						
3421						
3451				,		
3481						
3511						
3541						
3571						
3601						
3631						
3661						
3691						
3721						
3751						
3781						
3811						
3841						
3871						
3901						

Beacon message at the end of Frequency Stability Test with $\,$ Temperature Gradient: $\bf FFFE2F5F7F03C48000009C00400$

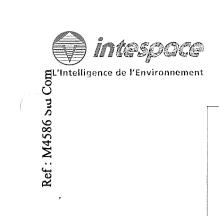
Frequency variation

406024963



406024939

- Initial tracing - Smoothed tracing

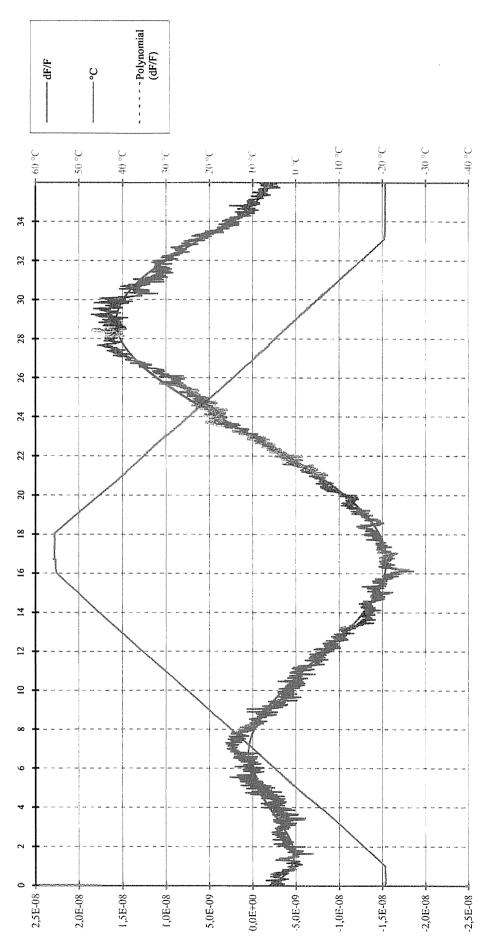


TEMPERATURE GRADIENT TEST RESULTS (5°C/hour)

Manufacturer: STANDARD COMMUNICATIONS PTY. LTD. Model: MT400

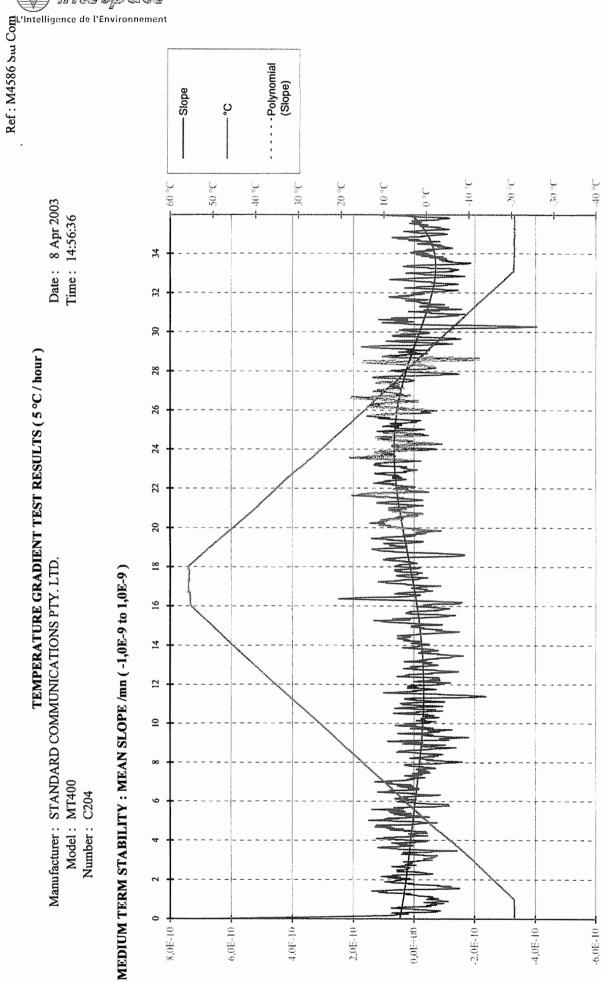
Number: C204

FREQUENCY VARIATION





TEMPERATURE GRADIENT TEST RESULTS (5°C/hour)



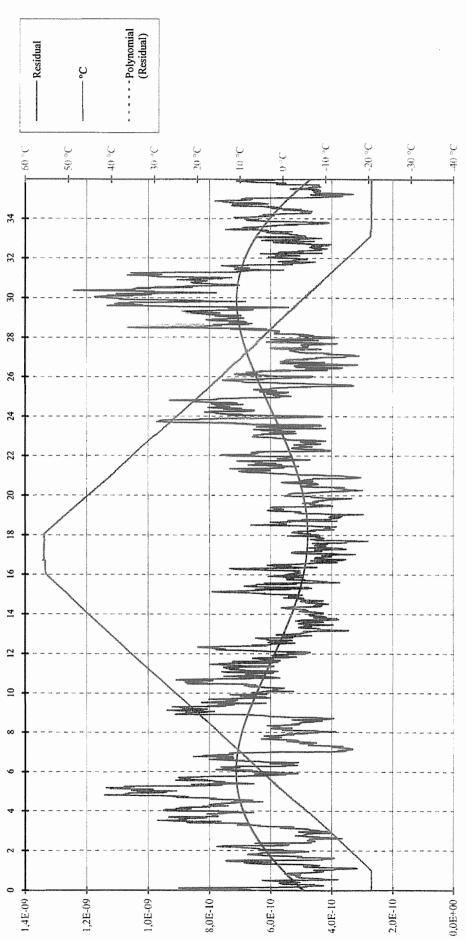




TEMPERATURE GRADIENT TEST RESULTS (5°C/hour)

Manufacturer: STANDARD COMMUNICATIONS PTY. LTD.
Model: MT400
Number: C204

MEDIUM TERM STABILITY: RESIDUAL (≤3,0E-9)



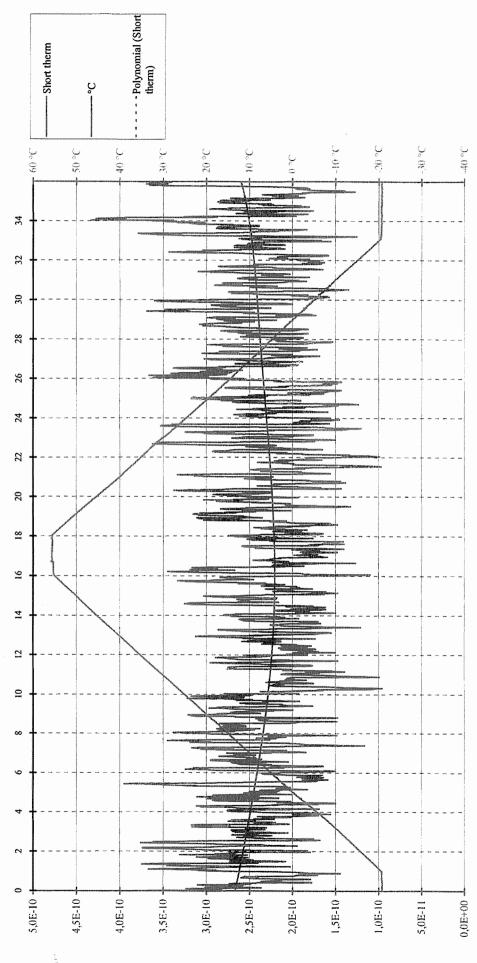


TEMPERATURE GRADIENT TEST RESULTS (5°C/hour)

Manufacturer: STANDARD COMMUNICATIONS PTY. LTD. Model: MT400

Number: C204

SHORT TERM STABILITY /100 mS (< 2,0E-9)







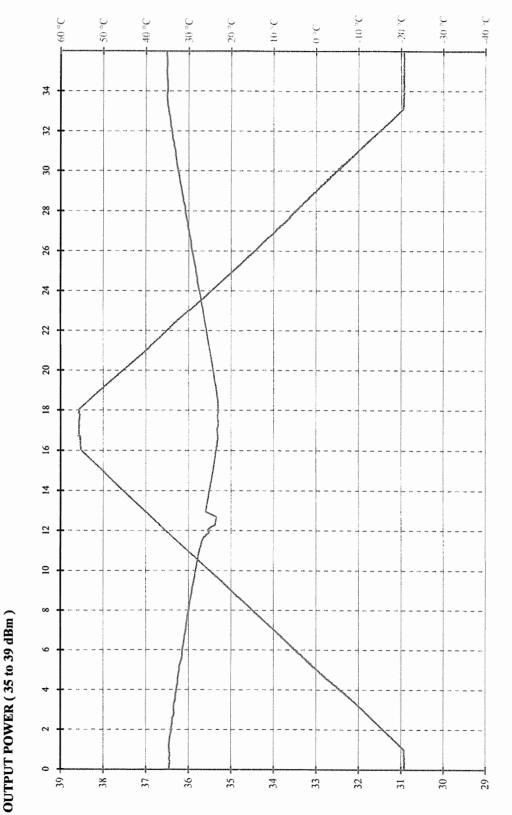
Date: 8 Apr 2003 Time: 14:56:36

TEMPERATURE GRADIENT TEST RESULTS (5°C/hour)

Manufacturer: STANDARD COMMUNICATIONS PTY. LTD.
Model: MT400
Number: C204

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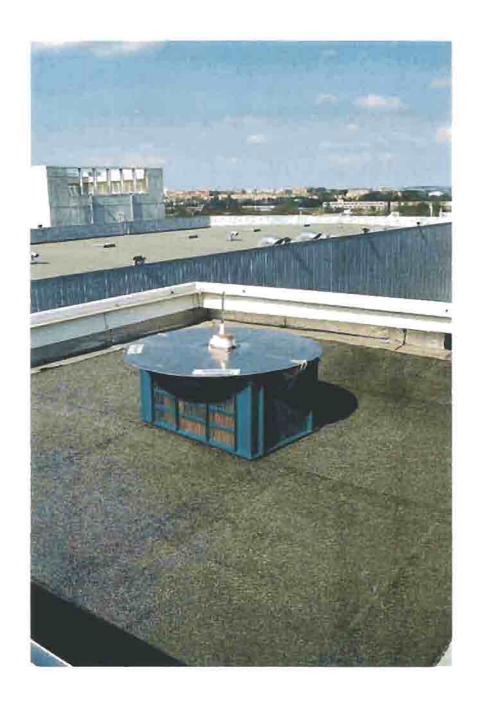




SATELLITE QUALITATIVE TEST RESULTS ON MT400 STANDARD COMMUNICATIONS PTY. LTD. EPIRB N° C204



SATELLITE TEST SITE





RECHERCHE du 31/03/2003 09:34:17

Code balise: BEFE07890000001

Nom balise: ???????? Pays: 503 AUSTRALIA Classe utilisateur: TEST--

Classe utilisateur : TEST--Periode de consultation : 16/03/2003 09 a 31/03/2003 09

Position de reference : et Toutes les luts Tous les satellites Date activation balise : // : Recherche dans base principale

Resultats edites suivant chronologie du TCA

*****	******	*****		(由安全会)	1. 按:	******	· 9 2 2 2 2 2 2 2 1	***	****	*****	***		*****	*****	*	****	京印 由:	***	***	***	****	*****
	ZA.	TPC					I.ONG1													CF	SRCE	MCCN
	医白杏田的染染素																			命命令者	*****	44448
	3 08H59					43.561		98	1					-47.840				0	0.5	4/0		7E+05
	3 09H08 3 09H08			5		43.568 43.566		89 89	3					63.433 63.422			4	0	3.6	4/0 4/0		7E+05
	3 09H54	-) 18		43.560		98	3					22.967			4	0	3.6 0.3			7E+05
	3 09H54					43.559		98	I					22.962		-	-4	0	0.3	4/0		7E+05
	3 10H01			6		43.565		82	6	2972				-78.245			-4	0	4.2			7E+05
	3 10H01			6		43.567	1.477	82	é					-78.252			-4	0	4.2	4/0		7E+05
	3 10H27			3		43.553		50	39	2978				36,616			-4	0	0.0	1/0		7E+05
	3 10H27			3		43.551	1.509	50	39	2977				86.607			-4	0	0.0	1/0		7E+05
* 28/03	3 10H50	10H59	* S04	16	*	43.559	1.482	98	1	2972	0.23	*	40.565	16,314	*	5.5	4	0	0.2	4/0	2271	7E+05
* 28/00	3 10H50	12H38	* 504	16	*	43.559	1,482	98	1	2972	0.27	*	40.565	16.312	*	5.5	-4	0	0.2	4/0	2271	7E+05
* 28/0	3 11H34	11H42	* 509	15	ø	43.559	1.478	99	1	2970	0.14	*	48.571	-24,208	*	9.6	4	0	0.2	4/0	2271	7E+05
	3 11H34					43.559		99	1					-24,208		9.6		0	0.2	4/0		7E+05
	3 12H06					43.560		99	1					35.996			4	0	0.2	4.0		7E-05
	3 12H06					43.560		99	1					35.982			-4	0	0.2	4/0		7E+05
	3 12H30					43.559		99	1					-31.086			4	0	0.2	4/0		7E+05
	3 13H13			8		43,562		94	2					-73,496			4	0	1.5	4/0		7E+05
	3 13H13					43.564		94	2					-73.505			4	0	1.5	4/0		7E+05
	3 13H46 3 13H46					43.559 43.559		99 99	1					-11.521 -11.515			4	0	0.1	4/0		7E+05
	3 13H46 3 13H46					43.560		99	1	2969				-11.522		7 4 10	-4	0	0.1	4/0 4/0		7E+05
	3 14H09					43.564		85	5	-,				-81.307			4	0	3.4	4/0		7E+05
	3 15H28					43.560		98	1					-58.676			4	0	0.4			7E+05
	3 15H28					43.561	1.482	98	ì					-58.678			4	0	0.4	4/0		7E+05
	3 15H28					43.565		98	i					-58.683			4	ű.	0.4	4/0		7E+05
	3 15H42					43.567		97	2					51.860			4	0	2.1	4/0		7E+05
	3 15H42			4		43.565		97	2					51.858			-4	0	2.1	4/0		7E+05
* 28/0	3 16H26	16H33	* S07	14		43,561		98	1	2970	0.14	*	53,153	52,712	8	18.1	4	0	0.4	4/0	2271	7E+05
28/0	3 16H26	18H14	* 507	14		43.560	1.481	98	1	2970	0.13	*	53.153	52.710	÷	18.1	-4	0	0.4	4/0	2271	7E+05
* 28/0	3 17H06	17H14	* S06	16		43.562	1.483	99	1	2969	0.36	*	49.056	28.624	*	10.1	4	0	0.2	4/0	2271	7E+05
* 28/0	3 17H26	17H36	* C04	5	*	43.548	1.655	64	19	2969	14.23	*	43.462	2,639	*	0.2	4	0	0.4	3/0	2272	7E+05
* 28/0	3 17H26	19H21	* C04	5	*	43.548	1.656	64	19	2969	14.28	*	43.461	2.648	*	0.2	-4	0	0.4	3/0	2272	7E+05
* 28/0	3 17H26	02H44	* C04	5	187	43,550	1.641	63	20				43.471	2.501	*	0.2	-4	0	0.4	3/0	2271	7E+05
* 28/0 .	3 18H05	18H14	* S07	17	#	43,562	1.493	95	2				44.241			1.5	4	0	0.2	4/0	2271	7E+05
	3 18H47			18		43,560		97	ł					-18.624		7.5	4	0	0,4	4/0		7E+05
	3 19H13					43.559		99	1					-53.048			4	0	0.2	4/0		7E+05
	3 19H13					43.562		99	1					-53.081			-4	0	0.3	4/0		7E+05
	3 19H38					43,559		98	1					55,998			4	0	0.4			7E+05
	3 19H38					43.560		98	1	2971				55,995			-4	0	0.4	4/0		7E+05
	3 19H46 3 19H46					43.559 43.562		98 98	1	2970				-42.213 -42.215			4	0	0.3	4/0 4/0		7E+05
	3 19040 3 20H37					43.562		99	1	2970				46,728			4	0	0.3	4/0		7E+05
	3 20H37					43.560		99	1	2971				46.727			-4	0	0.2	4/0		7E+05
	3 21H17					43,562		96	1				44.882			2.7	4	0	0.2	4/0		7E+05
	3 21H17					43,562		96	i	2970			44.882			2.7	-4	0	0.2	4/0	2271	
	3 22H17			12		43.555		85	3					-0.785			4	ő	0.3	4/0		7E+05
	3 22H17					43.554		50	2					-0.439			-4	0	0.2	4/0		7E+05
* 28/0	3 22H57	23H05	* S09	15	*	43,560	1.478	99	1	2969	0.12	碘	35.353	-38.916	*	15.4	4	0	0.2	4/0	2271	7E+05
	3 22H57					43,562		99	1					-38,917				0	0.2			7E+05
* 28/0	3 23H58	00H05	* S04	13	ф	43.558		97	1					-48.145				0	0.7			7E-05
* 29/0	3 00H25	00H32	* S08	12	*	43,560	1.480	99	1	2970	0.05	49	31.745	58.964	*	22.2	4	0	0.2	4/0	2272	7E+05
* 29/0	3 00H25	02H16	* S08				1.481	99	1	2970	0.21	*	31,744	58.959	#	22.2	-4	0	0.2	4/0	2272	7E+05
	3 00H25						1.482	99	1					58.957			-4	0	0.2			7E+05
	3 02H07						1.481	98	1					11.684			4	0	0,1			7E+05
	3 02H07						1.483	99	1					11.677			-4	0	0.1			7E+05
	3 02H35					43,551		42	1					61.783			4	0	0.7			7E+05
≈ 29/0	3 02H35	04H32	* C04	4	*	43.551	1.480	42	1	2968	1.04	*	48,428	61.783	牵	19.8	-4	0	0.7	4/0	2271	7E+05



* TCA TPC * SL PTS * LAT1 LONG1 PB MAJ BIAIS ERR * LAT2 LONG2 * CTA FB WF SDV CF SRCE MCCN 为全球点或的效应或在实验 用有少多实际,我 的现在分词感染的(少有的数据)法特别的现在分词或自己的 的复数分别的使用不是有的的原源)的自己的实现实现实力是有效的 * 29/03 03H47 03H55 * S08 15 * 43,560 1,479 99 2970 0.08 * 50,923 -35.858 * 13.6 4 0 0.2 4/0 2271 7E+05 * 29/03 03H47 12H03 * S08 16 * 43.560 1.477 2970 0.18 * 50.888 -35.832 * 13.6 -4 0 0.2 4/0 2272 7E+05 99 1 *29/03 03H47 13H44 * \$08 16 * 43.560 1.477 99 2970 0.21 * 50.889 -35.834 * 13.6 -4 0 0.2 4/0 2271 7E+05 1 2970 1.31 * 43.994 6.753 * 1.6 4 0 0.5 4/0 2271 7E+05 * 29/03 04H22 04H32 * C04 5 * 43.560 1.496 95 * 29/03 04H22 06H15 * C04 5 * 43.560 1.494 95 2970 1.19 * 43.994 6.756 * 1.6 -4 0 0.5 4/0 2272 7E+05 2 * 29/03 04H22 16H18 * C04 5 * 43.560 1.502 95 2970 1.82 * 43.993 6.747 * 1.6 -4 0 0.5 4/0 2271 7E+05 2967 0.27 * 32.725 52.909 * 19.9 4 0 0.7 4/0 2271 7E+05 * *29/03 05H25 05H32 * S06 10 * 43.558 1.482 * 29/03 05H26 12H03 * S08 5 * 43.563 1.454 2966 2.07 * 59.462 -86.671 * 27.9 -4 0 7.3 4/0 2272 7E+05 73 5 * 29/03 05H26 13H44 * S08 5 * 43.564 1.454 2966 2.07 * 59.464 -86.674 * 27.9 -4 0 7.3 4/0 2271 7E+05 78 * 29/03 06H07 06H15 * C04 12 * 43.560 1.477 2969 0.23 * 40.321 -43.570 * 17.4 4 0 0.3 4/0 2272 7E+05 00 ı 2970 0.55 * 40.316 -43.565 * 17.4 -4 0 * 29/03/06H07 16H18 * C04 12 * 43,556 1.474 90 0.3 4:0 2271 7E+05 2970 0.45 * 40.317 -43.565 * 17.4 -4 0 0.3 4/0 2272 7E+05 * 29/03 06H07 18H04 * C04 12 * 43.557 1.475 * 29/03 06H19 06H28 * 507 16 * 43.561 1.480 2971 0.14 * 37.930 29.891 * 10.7 4 0 0.2 4/0 2271 7E+05 2971 0.09 * 37,942 29,922 * 10.7 -4 0 0.2 4/0 2271 7E+05 * 29/03 06H19 08H08 * S07 17 * 43.560 1.480 99 *29/03 07H07 07H16 * S06 18 * 43.555 1.497 2967 1.51 * 42.663 5.831 * 1.5 4 0 0.5 4/0 2271 7E+05 88 2970 0.13 * 47.187 -17.355 * 7.1 4 0 * 29/03 07H59 08H08 * S07 17 * 43.561 1.478 QQ 1 0.3 4/0 2271 7E+05 2969 0.28 * 47.173 -17.343 * 7.1 -4 0 0.3 4/0 2272 7E+05 *29/03 07H59 09H43 * S07 18 * 43.561 1.476 * 29/03 07H59 17H50 * S07 18 * 43.561 1.476 98 2970 0.30 * 47.174 -17.348 * 7.1 -4 0 0.3 4/0 2271 7E+05 * 29/03 08H47 08H54 * S06 13 * 43.561 1.472 2965 0.58 * 52.180 -41.634 * 15.5 4 0 0.4 4/0 2271 7E+05 98 * 29/03 08H54 08H58 * S04 4 * 43.572 1.483 2972 1.43 * 29.520 69.842 * 26.4 4 0 1.7 4/0 2272 7E+05 89 2 4 • 43.574 * 29/03 08H54 10H45 * S04 2972 1.81 * 29.516 69.836 * 26.4 -4 0 1.401 20 1.7 4/0 2271 7E+05 * 29/03 09H32 09H40 * S09 16 * 43.561 1.481 2968 0.19 * 37.077 33.576 * 12.2 4 0 0.2 4/0 2271 7E+05 00 * 29/03 09H32 11H20 * S09 16 * 43.561 1.482 99 2968 0.21 * 37.076 33.575 * 12.2 -4 0 0.2 4/0 2271 7E÷05 *29/03/09H38/09H43/*S07 9 * 43,562 1,478 2968 0.30 * 56.031 -66,241 * 22.8 -4 0 0.8 4/0 2272 7E+05 9 * 43.562 1.476 2968 0.35 * 56.027 -66.246 * 22.8 -4 0 0.8 4/0 2272 7E+05 * 29/03 09H38 16H09 * \$07 * 29/03 09H38 17H50 * S07 9 * 43.562 1.477 2968 0.37 * 56.027 -66.245 * 22.8 -4 0 0.8 4/0 2271 7E+05 * 29/03 10H36 10H45 * S04 17 * 43.560 1.482 2966 0.17 * 39.229 22.894 * 8.0 4 0 0.2 4/0 2271 7E+05 99 * 29/03 10H36 12H25 * S04 17 * 43.560 1.482 2966 0.20 * 39.229 22.893 * 8.0 -4 0 00 1 0.2 4/0 2271 7E+05 * 29/03 10H36 14H00 * S04 17 * 43,560 1.481 2966 0.14 * 39.229 22.894 * 8.0 -4 0 0.2 4/0 2272 7E+05 2967 0.20 * 46.509 -13.602 * 5.8 4 0 * 29/03 11H12 11H20 * S09 16 * 43.560 1.477 0.1 4/0 2271 7E+05 2967 0.23 * 46.500 -13.594 * 5.8 -4 0 17 * 43.560 1.477 * 29/03 11H12 12H56 * S09 0.1 4/0 2271 7E+05 * 29/03 11H12 19H22 * S09 17 * 43.559 1.478 2967 0.11 * 46.501 -13.607 * 5.8 -4 0 0.1 4:0 2272 7E+05 99 2962 0.30 * 51.388 41.347 * 14.5 4 0 17 * 43.561 1.483 99 * 29/03 11H55 12H03 * S08 0.3 4/0 2272 7E+05 2962 0.20 * 51.389 41.343 * 14.5 -4 0 0.3 4/0 2271 7E+05 17 * 43.561 1.482 99 * 29/03 11H55 13H44 * S08 * 29/03 12H17 12H25 * S04 16 * 43,560 2964 0.09 * 48.719 -24.479 * 9.7 4 0 0.2 4/0 2271 7E+05 1.480 aa 2964 0.11 * 48.699 -24.462 * 9.7 -4 0 * 29/03 12H17 14H00 * \$04 17 * 43,560 1,481 0.2 4/0 2272 7E+05 2964 0.05 * 48.698 -24.468 * 9.7 -4 0 0.2 4/0 2271 7E+05 * 29/03 12H17 22H12 * S04 17 * 43.560 1.480 2967 0.86 * 55,611 -62,151 * 21,7 -4 0 1.0 4/0 2271 7E+05 * 29/03 12H51 12H56 * S09 10 * 43.567 1.485 96 2967 0.92 * 55.609 -62.161 * 21.7 -4 0 1.0 4/0 2272 7E+05 * 29/03 12H51 19H22 * S09 10 * 43.567 1.485 96 2967 0.78 * 55.607 -62.158 * 21.7 -4 0 1.0 4/0 2271 7E+05 * 29/03 12H51 21H03 * S09 10 * 43,566 1,483 OΚ 2963 0.59 * 42.024 -6.155 * 2.7 4 0 0.2 4/0 2271 7E+05 * 29/03 13H35 13H44 * S08 17 * 43.558 1.472 98 18 * 43.558 1.473 2963 0.56 * 42.018 -6.156 * 2.7 -4 0 * 29/03 13H35 15H23 * S08 98 0.1 4/0 2271 7E+05 * 29/03 13H55 14H00 * S04 8 * 43.561 1.476 2963 0.31 * 57.603 -74.072 * 24.9 4 0 2.5 4/0 2272 7E+05 2963 0.73 * 57.600 -74.080 * 24.9 -4 0 2.5 4/0 2272 7E+05 * 29/03 13H55 20H30 * S04 8 * 43.563 1.472 90 * 29/03 13H55 22H12 * S04 2963 0.83 * 57.599 -74.078 * 24.9 -4 0 2.5 4/0 2271 7E+05 8 * 43,563 1,470 90 * 29/03 15H17 15H23 * S08 12 * 43,558 1.481 98 2964 0.21 * 32.209 -53.439 * 21.2 4 0 0.4 4/0 2271 7E+05 1 * 29/03 15H17 00H19 * S08 13 * 43.562 1.482 98 2963 0.32 * 32,146 -53,415 * 21,2 -4 0 0,4 4/0 2271 7E+05 1 * 29:03 16H03 16H09 * S07 10 * 43.558 1.474 2965 0.50 * 55,194 64,500 * 21.6 4 0 0.9 4/0 2272 7E+05 * 29/03 16H03 17H50 * S07 10 * 43.558 1.476 96 2 2965 0.31 * 55.193 64.503 * 21.6 -4 0 0.9 4/0 2271 7E+05 2 * * 29/03 16H07 18H04 * C04 04 9 2272 7E+05 2964 0.46 * 40,722 35.661 * 13.1 4 1 0.0 1/0 2271 7E+05 *29/03 16H09 16H18 * C04 3 * 43.562 1.485 50 46 * 29/03 16H54 17H02 * S06 17 * 43.561 1.485 98 2963 0.44 * 50.269 34.625 * 12.2 4 0 0.4 4/0 2271 7E+05 1 * 29/03 17H42 17H50 * S07 17 * 43.560 1.481 98 2966 0.14 * 46.361 16.046 * 5.6 4 0 0.2 4/0 2271 7E+05 17 * 43.560 1.481 2966 0.11 * 46.360 16.044 * 5.6 -4 0 0.2 4/0 2271 7E+05 * 29/03 17H42 19H30 * S07 98 1 2966 0.55 * 44.976 -15.797 * 5.9 4 0 0.2 4/0 2272 7E+05 *29/03 17H54 18H04 * C04 12 * 43.555 1.480 99 1 * 29/03 17H54 03H13 * C04 13 * 43.560 1.480 99 2966 0.07 * 44.960 -15.809 * 5.9 -4 0 0.2 4/0 2271 7E+05 2966 0.03 * 44.952 -15.843 * 5.9 -4 0 0.2 4/0 2272 7E+05 * 29/03 17H54 06H41 * C04 12 * 43.560 1.479 ពូត្ 1 2966 0.39 * 40.627 -12.619 * 5.2 4 0 0.4 4/0 2271 7E+05 * 29/03 18H34 18H43 * S06 19 * 43.559 1.475 96 * 29/03 19H16 19H22 * S09 10 * 43,560 1,478 2968 0.15 * 55.880 67.413 * 22.4 4 0 0.6 4/0 2272 7E+05 98 * 29/03 19H16 21H03 * S09 10 * 43.561 1.477 2967 0.22 * 55.884 67.413 * 22.4 -4 0 0.6 4/0 2271 7E+05 2968 0.22 * 55.881 67.412 * 22.4 -4 0 0.6 4/0 2272 7E+05 * 29/03 19H16 22H43 * S09 10 * 43.558 1.477 * 29/03 19H22 19H30 * S07 16 * 43.559 1.476 2968 0.30 * 37.068 -31.221 * 12.4 4 0 0.2 4/0 2271 7E+05 16 * 43.560 1.477 2968 0.19 * 37.069 -31.222 * 12.4 -4 0 0.2 4/0 2271 7E+05 * 29/03 19H22 06H03 * S07 90 2968 0.13 * 48.476 -72.074 * 23.5 -4 0 0.6 4/0 2271 7E+05 * 29/03 19H42 03H13 * C04 11 * 43,560 1,478 97 1 *29/03 19H42 06H41 * C04 11 * 43.561 1.474 97 2968 0.43 * 48.474 -72.073 * 23.5 -4 0 0.6 4/0 2272 7E+05 * 29/03/20H16 | 20H21 | * S06 10 * 43.567 1.471 2964 1.03 * 30.636 -59.491 * 23.6 4 0 1.5 4/0 2271 7E+05 91 2 2969 0.52 * 53.557 53.519 * 18.3 4 0 0.4 4/0 2272 7E+05 * 29/03 20H23 20H30 * S04 14 * 43.556 1.482 2969 0.47 * 53.559 53.518 * 18.3 -4 0 0.4 4/0 2271 7E+05 * 29/03 20H23 22H12 * S04 14 * 43,556 1,481 98 2968 0.21 * 46.960 18.830 * 6.6 4 0 0.1 4/0 2271 7E+05 * 29/03 20H55 21H03 * S09 17 * 43.560 1.482 99 1 *29/03 20H55 22H43 * S09 17 * 43.559 1.480 2968 0.12 * 46,960 18.831 * 6.6 -4 0 0.1 4/0 2272 7E+05 QQ 2968 0.17 * 46.961 18.832 * 6.6 -4 0 0.1 4/0 2271 7E+05 17 * 43.560 1.482 * 29/03 20H55 09H16 * S09 99 2967 1.31 * 44.384 5.605 * 1.7 4 0 0.2 4/0 2271 7E+05 * 29/03 22H03 22H12 * S04 18 * 43,563 1.495 95 1.41 * 44.385 5.609 * 1.7 -4 0 0.2 4/0 2271 7E+05 * 29/03 22H03 23H51 * S04 18 * 43,563 1.496 95 2967 2967 0.17 * 37.534 -29.349 * 11.3 4 0 0.2 4/0 2272 7E+05 * 29/03 22H35 22H43 * S09 17 * 43.560 1,477 99 1 * 29/03 22H35 09H16 * S09 16 * 43,562 1,478 99 2967 0.21 * 37.531 -28.368 * 11.3 -4 0 0.2 4/0 2271 7E+05

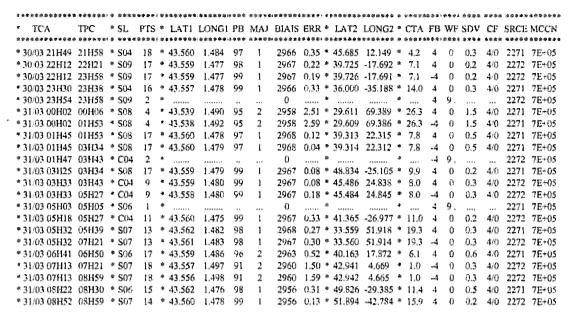
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* TCA FPC *SL PTS * LAT1 LONG1 PB MAJ BIAIS ERR * LAT2 LONG2 * CTA FB WF SDV CF SRCE MCCN * 29/03 22H35 18H59 * S09 16 * 43.562 1.479 2967 0.23 * 37.532 -28.370 * 11.3 -4 0 0.2 4/0 2272 7E+05 00 1 * 29/03 23H44 23H51 * \$04 15 * 43.559 1.478 2967 0.16 * 34,674 -41.711 * 16.5 4 0 0.3 4/0 2271 7E+05 99 1 * 29/03 23H44 10H31 * S04 15 * 43.562 1.481 2967 0.27 * 34.678 -41.712 * 16.5 -4 0 0.3 4/0 2272 7E+05 99 * 29/03 23H44 21H58 * S04 15 * 43.562 1.481 99 2967 0.28 * 34.678 -41.713 * 16.5 -4 0 0.3 4/0 2271 7E+05 9 * 43.560 1,483 2966 0.26 * 30.647 64.163 * 24.2 4 0 0.9 4/0 2271 7E+05 *30/03/00H14 00H19 * 508 2 2966 0.41 * 30.644 64.160 * 24.2 -4 0 0.9 4/0 2271 7E+05 * 30/03 00H14 02H04 * \$08 9 * 43,559 1.484 95 2 0 * * -4 9. 2271 7E+05 0 * * -4 9. 2271 7E+05 0 * * -4 9. 2272 7E+05 2967 0.23 * 40.413 16.995 * 5.7 4 0 0.1 4/0 2271 7E+05 * 30/03 01H16 03H13 * C04 1 * * 30/03 01H16 06H41 * C04 1 * ****** * 30/03 01H56 02H04 * S08 17 * 43.559 1.482 * 30/03 01H56 03H44 * \$08 17 * 43,559 1,483 99 2967 0.31 * 40.413 16.992 * 5.7 -4 0 0.1 4/0 2271 7E+05 1 7 • 43.559 2967 0.11 * 46,541 43.297 * 14.0 4 0 * 30/03 03H04 03H13 * C04 1,479 0.3 4/0 2271 7E+05 1 7 * 43.557 1.481 * 30/03 03H04 05H00 * C04 2967 0.32 * 46.537 43.299 * 14.0 -4 0 0.3 4/0 2271 7E+05 90 1 *30/03 03H04 06H41 * C04 7 * 43.560 1.479 2967 0.04 * 46.540 43.301 * 14.0 -4 0 0.3 4/0 2272 7E+05 QQ 2965 0.55 * 49.870 -30.427 * 11.8 4 0 1.2 4/0 2271 7E-05 *30/03 03H36 03H44 * S08 17 * 43.559 1.473 95 2967 0.11 * 49.872 -30.432 * 11.8 -4 0 0.2 4/0 2271 7E+05 *30/03 03H36 05H19 * S08 17 * 43.560 1.478 00 1 * 30/03 04H50 05H00 * C04 11 * 43,558 2966 0.52 * 42.630 -10.407 * 4.7 4 0 1.473 QQ 0.1 4/0 2271 7E+05 * 30/03 04H50 06H41 * C04 11 * 43.558 1,475 2966 0.37 * 42.630 -10.407 * 4.7 -4 0 0.1 4/0 2272 7E+05 1 * 30/03 05H15 05H19 * S08 6 * 43,566 1,488 2970 0.96 * 58.714 -80.839 * 26.5 4 0 4.9 4/0 2271 7E+05 ลก 6 6 * 43.568 1.484 2970 1.02 * 58.709 -80.844 * 26.5 -4 0 4.9 4/0 2271 7E+05 * 30/03 05H15 11H51 * S08 80 ĥ *30/03 05H56 06H03 * S07 15 * 43.560 1.480 2967 0.06 * 35.739 40.943 * 15.0 4 0 0.2 4/0 2271 7E+05 90 1 2965 0.89 * 39.443 -59.707 * 23.6 4 0 0.5 4/0 2272 7E+05 *30/03 06H34 06H41 * C04 10 * 43.554 98 1.473 1 *30/03 06H54 07H03 * S06 15 * 43,557 1.482 2963 0.38 * 41.440 11.838 * 3.8 4 0 0.5 4/0 2271 7E+05 * 30/03 07H36 07H45 * S07 18 * 43.561 1.472 99 2963 0.57 * 45.064 -6.331 * 3.1 4 0 0.1 4/0 2271 7E+05 2963 0.68 * 45.063 -6.328 * 3.1 -4 0 0.1 4/0 2272 7E+05 * 30/03 07H36 09H21 * S07 18 * 43.561 1.471 QR *30/03 07H36 15H45 * S07 18 * 43.560 1.473 2963 0.53 * 45.064 -6.336 * 3.1 -4 0 0.1 4/0 2271 7E+05 QQ 3 2961 0.35 * 51.007 -35.457 * 13.5 4 0 0.5 4/0 2271 7E+05 *30/03 08H34 08H42 * S06 15 * 43.560 1.475 98 1 *30/03 09H09 09H16 * S09 15 * 43.560 1.482 2963 0.21 * 34.919 44.174 * 16.3 4 0 0.2 4/0 2271 7E+05 * 30/03 09H09 10H58 * S09 2963 0.22 * 34.919 44.173 * 16.3 -4 0 15 * 43.561 1.481 0.2 4/0 2271 7E+05 * 30/03 09H09 18H59 * S09 15 * 43.560 1.481 2964 0.11 * 34.919 44.177 * 16.3 -4 0 0.2 4/0 2272 7E+05 *30/03 09H15 09H21 * S07 12 * 43.562 1.478 2963 0.25 * 53.984 -54.331 * 19.5 4 0 0.5 4.0 2272 7E+05 98 13 * 43,561 1,474 2962 0.45 * 53.926 -54.265 * 19.5 -4 0 0.6 4/0 2271 7E+05 *30/03 09H15 15H45 * S07 98 1 *30/03 10H22 10H31 * S04 16 * 43.559 1.479 2960 0.13 * 37.850 29.429 * 10.6 4 0 0.2 4/0 2272 7E+05 90 * 30/03 10H22 21H58 * \$04 16 * 43.559 1.477 99 2960 0.20 * 37.853 29.425 * 10.6 -4 0 0.2 4/0 2271 7E+05 * 30/03 10H49 10H58 * 509 18 * 43.562 1.466 2961 1.08 * 44.436 -2.976 * 1.8 4 0 0.1 4/0 2271 7E+05 * 30/03 10H49 12H35 * S09 18 * 43,562 1.466 2961 1.12 * 44.436 -2.974 * 1.8 -4 0 QR 0.1 4/0 2271 7E+05 18 * 43.560 1.476 2961 0.29 * 44.438 -2.989 * 1.8 -4 0 * 30/03 10H49 18H59 * S09 98 0.1 4/0 2272 7E+05 * 30/03 11H44 11H51 * 508 12 * 43.562 1.479 2961 0.29 * 52,414 46,927 * 16.3 4 0 0.3 4/0 2271 7E+05 99 2961 0.20 * 52.414 46.927 * 16.3 -4 0 * 30/03 11H44 13H33 * S08 12 * 43.562 1.479 QQ 0.3 4/0 2271 7E+05 2961 0.30 * 47,400 -17.928 * 7.4 4 0 *30/03 12H03 12H11 * 504 17 * 43.560 1.476 00 0.2 4/0 2272 7E+05 * 30/03 12H03 20H16 * S04 17 * 43.560 1.475 2961 0.37 * 47.400 -17.933 * 7.4 -4 0 0.2 4/0 2272 7E+05 90 2961 0.22 * 47.401 -17.933 * 7.4 -4 0 0.2 4/0 2271 7E+05 * 30/03 12H03 21H58 * \$04 17 * 43,560 1,477 * 30/03 12H29 12H35 * S09 13 * 43,559 1,476 98 2961 0.26 * 53.540 -50.716 * 18.4 4 0 0.4 4/0 2271 7E+05 * 30/03 12H29 18H59 * S09 13 * 43,560 1,479 2962 0.06 * 53.537 -50.722 * 18.4 -4 0 0.4 4/0 2272 7E+05 98 1 2961 0.29 * 53.536 -50.720 * 18.4 -4 0 0.4 4/0 2271 7E+05 * 30/03 12H29 20H40 * S09 13 * 43.559 1.476 98 1 2961 2.17 * 43.119 -0.759 * 0.7 4 0 0.3 4/0 2271 7E+05 * 30/03 13H24 13H33 * S08 14 * 43.556 1.453 85 3 2961 1.82 * 43,179 -0.392 * 0.7 -4 0 0.2 4/0 2271 7E+05 *30/03 13H24 15H12 * S08 19 * 43.556 1.457 2962 0.68 * 56.458 -66.908 * 23.0 -4 0 0.9 4/0 2272 7E+05 * 30/03 13H42 20H16 * S04 10 * 43,565 1.474 96 *30/03 13H42 21H58 * S04 10 * 43.565 1.480 2962 0.57 * 56.460 -66.906 * 23.0 -4 0 0.9 4/0 2271 7E+05 96 *30/03 14H53 14H59 * C04 3 * 45.044 -1.155 50 2253 167.01* 39.413 68.559 * 26.9 4 12 55.0 1/0 2272 7E+05 45 * 30/03 15H05 15H12 * S08 14 * 43.559 1.476 QQ 1 2962 0.31 * 33.236 -48.174 * 19.1 4 0 0.4 4/0 2271 7E+05 98 2963 0.24 * 33.238 -48.176 * 19.1 -4 0 0.4 4/0 2271 7E+05 *30/03 15H05 00H06 * S08 14 * 43.561 1.477 * 30/03 15H40 15H45 * \$07 6 * 43,564 1,480 2961 0.47 * 57.121 76.530 * 24.8 4 0 83 3.6 4/0 2271 7E+05 * 30/03 16H37 16H47 * C04 5 * 43,560 1.480 2962 0.03 * 42,265 18,993 * 6.8 4 0 0.6 4/0 2272 7E+05 2962 0.02 * 42.265 18.993 * 6.8 -4 0 0.6 4/0 2272 7E+05 * 30/03 16H37 18H32 * C04 5 * 43.560 1.480 97 1 2964 0.35 * 51.451 40.800 * 14.3 4 0 0.3 4/0 2271 7E+05 * 30/03 16H41 16H49 * S06 14 * 43,558 1,483 99 1 * 30/03 17H18 17H27 * S07 17 * 43.561 1.480 99 2963 0.12 * 48.447 27.088 * 9.6 4 0 0.1 4/0 2271 7E+05 1 2966 0.32 * 41.887 -6.589 * 2.9 4 0 * 30/03 18H21 18H30 * S06 18 * 43.557 0.4 0.4 4/0 2271 7E+05 1.480 2 2966 0.21 * 46.383 -33.927 * 12.0 4 0 *30/03 18H23 18H32 * C04 14 * 43.560 1.477 00 0.1 4/0 2272 7E+05 *30/03 181123 03H43 * C04 15 * 43.565 1.477 2966 0.64 * 46.345 -33.954 * 12.0 -4 0 0.1 4/0 2272 7E+05 99 * 30/03 18H54 18H59 * S09 8 * 43.559 1.484 2967 0.39 * 57.675 78.946 * 25.4 4 0 1.5 4/0 2272 7E+05 94 2966 0.44 * 57.678 78.948 * 25.4 -4 0 1.5 4/0 2271 7E+05 94 * 30/03 18H54 20H40 * S09 8 * 43.562 1.484 * 30/03 18H54 22H21 * \$09 8 * 43,560 1,484 2967 0.40 * 57.676 78.945 * 25.4 -4 0 1.5 4/0 2272 7E+05 0.4 2965 0.21 * 39.307 -20.178 * 8.1 4 0 0.5 4/0 2271 7E+05 * 30/03 18H58 19H07 * S07 18 * 43,561 1.478 97 I 2964 0.31 * 39.308 -20.179 * 8.1 -4 0 0.5 4/0 2272 7E+05 * 30/03 18H58 20H43 * S07 18 * 43.563 1.480 97 1 2965 0.81 * 39.312 -20.180 * 8.1 -4 0 0.5 4/0 2271 7E+05 * 30/03 18H58 05H39 * \$07 18 * 43.567 1.481 97 * 30/03 20H03 20H09 * S06 2964 0.30 * 31.877 -53.554 * 21.3 4 0 0.6 4/0 2271 7E+05 11 * 43.562 1.477 97 *30/03 20H10 20H16 * S04 10 * 43.561 1.478 2966 0.18 * 54.890 60.528 * 20.4 4 0 0.4 4/0 2272 7E+05 2966 0.26 * 54.889 60.528 * 20.4 -4 0 0.4 4/0 2271 7E+05 * 30/03 20H10 21H58 * S04 10 * 43,558 1,481 98 1 2951 5.45 * 49.233 -91.559 * 28.5 -4 1 1.0 4/0 2272 7E+05 * 30/03/20H11 03H43 * C04 4 * 43,579 1.542 93 1 * 30/03 20H32 20H40 * S09 17 * 43.561 1.481 99 2965 0.22 * 48.990 29.472 * 10.4 4 0 0.3 4/0 2271 7E+05 1 * 30/03 20H32 22H21 * S09 17 * 43,560 1.480 99 2966 0.03 * 48.990 29.470 * 10.4 -4 0 4/0 2272 7E+05 1 0.3 0 ----- * 1032332 23121237 * 257. 4 9. 2 * 2272 7E+05 * 30/03 20H42 20H43 * S07 ******* . . +10 2 * ****** * 4 9. * 30:03 20H42 05H39 * S07 0 2271 7E+05 * 30/03 20H42 07H21 * S07 2 * **-4** 9. ..., 0 1296 2272 7E±05





Zones geographiques BORDE/MARSA numero de dossier xxx Nombre total de lignes (localisees + detectees) : $219 \pm 9 \approx 228$

Nombre de localisees : 219 Nombre de balises-passage : 117 Nombre de localisations uniques : 112 Date premiere loc : 28/03/2003 08:59 Date derniere loc : 31/03/2003 08:52 Duree de l'emission : 71H 52mn

Reference pour calcul des erreurs : lat=+43.560 long= +1.479



U.T.	MT400 N° : C204	MT400	Sarsat
	Message	Level (db)	Sat
16:21:15.2	5f7f03c48000000gc00400	-120	S7
		1	S7
` 1		1	S7
* 1		9	S7
		1	S7
			S7
, 1			S7
, I	5f7f03c48000009c00400	1	S7
	5f7f03c480000009c00400	8	S7
. 8	5f7f03c480000009c00400	1	S7
· 1	5f7f03c480000009c00400	8	S7
· 1	5f7f03c480000009c00400		S7
	5f7f03c480000009c00400		S7
. 8	5f7f03c480000009c00400	1	S7
	16:21:15,2 16:22:05,3 16:22:53,9 16:23:43,2 16:24:32,6 16:25:24,0 16:26:13,5 16:27:04,9 16:27:55,4 16:28:47,1 16:29:37,2 16:30:27,6 16:31:19,0 16:32:08,5	Message 16:21:15,2 5f7f03c48000009c00400 16:22:05,3 5f7f03c48000009c00400 16:22:53,9 5f7f03c48000009c00400 16:23:43,2 5f7f03c48000009c00400 16:24:32,6 5f7f03c48000009c00400 16:25:24,0 5f7f03c48000009c00400 16:26:13,5 5f7f03c48000009c00400 16:27:04,9 5f7f03c48000009c00400 16:27:55,4 5f7f03c48000009c00400 16:28:47,1 5f7f03c48000009c00400 16:29:37,2 5f7f03c48000009c00400 16:30:27,6 5f7f03c480000009c00400 16:31:19,0 5f7f03c480000009c00400	Message Level (db) 16:21:15,2 5f7f03c480000009c00400 -120 16:22:05,3 5f7f03c480000009c00400 -120 16:22:53,9 5f7f03c480000009c00400 -118 16:23:43,2 5f7f03c480000009c00400 -120 16:24:32,6 5f7f03c480000009c00400 -121 16:25:24,0 5f7f03c480000009c00400 -119 16:26:13,5 5f7f03c480000009c00400 -116 16:27:04,9 5f7f03c480000009c00400 -121 16:27:55,4 5f7f03c480000009c00400 -119 16:28:47,1 5f7f03c480000009c00400 -117 16:29:37,2 5f7f03c480000009c00400 -119 16:30:27,6 5f7f03c480000009c00400 -128 16:31:19,0 5f7f03c480000009c00400 -124



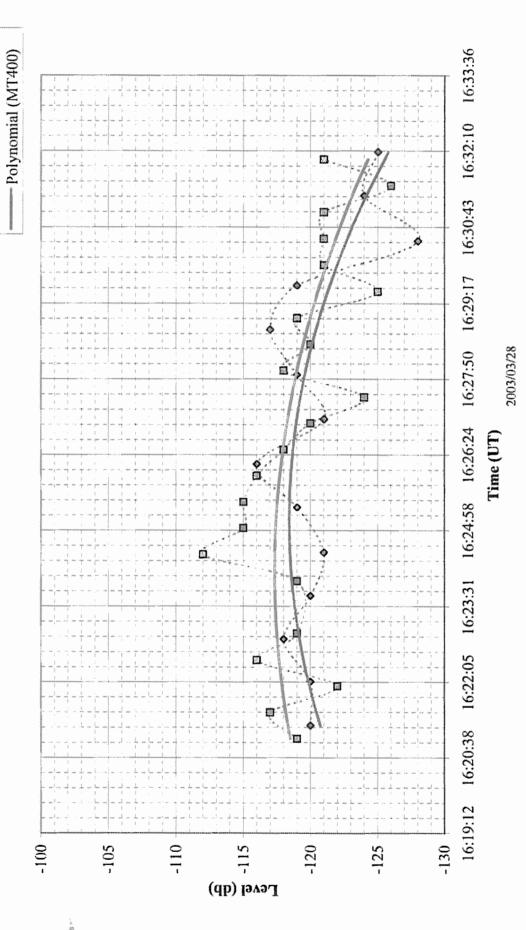
Date	U.T.	Datation Ref	Reference	Sarsat
and the second s		Message	Level (db)	Sat
2003/03/28	16:21:00,3	ce300000000000dbd0e40 0	-119	S 7
2003/03/28	16:21:30,3	ce300000000000dbd0e40 0	-117	S 7
2003/03/28	16:22:00,3	ce300000000000dbd0e40 0	-122	S 7
2003/03/28	16:22:30,3	ce300000000000dbd0e40 0	-116	S 7
2003/03/28	16:23:00,3	ce300000000000dbd0e40 0	-119	S 7
2003/03/28	16:24:00,3	ce3000000000000dbd0e40 0	-119	S 7
2003/03/28	16:24:30,3	ce300000000000dbd0e40 0	-112	S7
2003/03/28	16:25:00,3	ce300000000000dbd0e40 0	-115	S 7
2003/03/28	16:25:30,3	ce300000000000dbd0e40 0	-115	S7
2003/03/28	16:26:00,3	ce300000000000dbd0e40 0	-116	S7
2003/03/28	16:26:30,3	ce300000000000dbd0e40 0	-118	S 7
2003/03/28	16:27:00,3	ce300000000000dbd0e40 0	-120	S7
2003/03/28	16:27:30,3	ce300000000000dbd0e40 0	-124	S 7
2003/03/28	16:28:00,3	ce300000000000dbd0e40 0	-118	S7
2003/03/28	16:28:30,3	ce300000000000dbd0e40 0	-120	S7
2003/03/28	16:29:00,3	ce300000000000dbd0e40 0	-119	S7
2003/03/28	16:29:30,3	ce300000000000dbd0e40 0	-125	S7
2003/03/28	16:30:00,3	ce300000000000dbd0e40 0	-121	S7
2003/03/28	16:30:30,3	ce3000000000000dbd0e40 0	-121	S 7
28/03/2003	16:31:00,3	ce300000000000dbd0e40 0	-121	S7
28/03/2003	16:31:30,3	ce3000000000000dbd0e40 0	-126	S 7
28/03/2003	16:32:00,3	ce300000000000dbd0e40 0	-121	S 7
NO.				
TERRORIE CONTRACTOR CO				



Polynomial (Reference)

-- • -- MT400 -- • -- Reference

Level comparative Satellite





ANNEX A

ANTENNA TEST RESULTS ON
MT460 STANDARD COMMUNICATIONS PTY. LTD. EPIRB
N° C293

Note: Theses tests are out of Cofrac Accreditation Scope

ANNEX A

ANTENNA TEST RESULTS ON MT400 STANDARD COMMUNICATIONS PTY. LTD. EPIRB $$\rm N^{\circ}$ C203





1 - ADMINISTRATION

1. WORK ORDER:

Reference ITS:

M4586

1. TEST TEAM:

A.COURTINADE

1. SCHEDULE:

26 March 2003

2 - PURPOSE

The radiation tests of the dedicated radio beacon are performed in INTESPACE EMC Laboratory in compliance with the test methods described in the COSPAS-SARSAT 406 MHz distress beacon type approval standard: C/S T. 007- Issue 3 - Revision 9 - October 2002.

3 - RADIO BEACON IDENTIFICATIONS

Manufacturer:

Standard Communications Pty Ltd

Model No:

MT400

Serial No:

C203

Antenna:

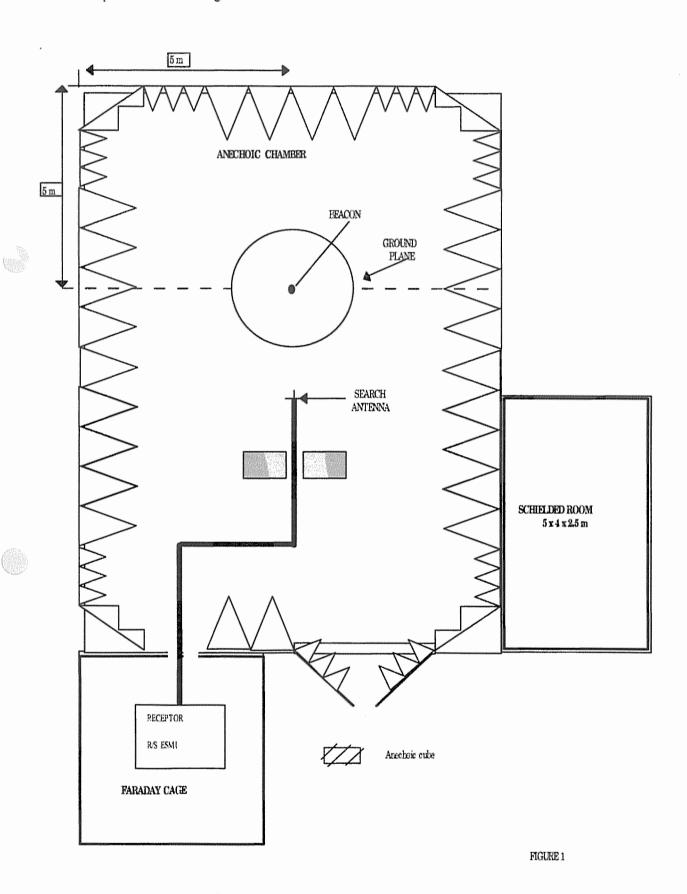
Standard Communications P/N: 46A0427

4-TEST SITE DESCRIPTION

Tests are performed in an anechoic chamber (size 16 m x 10 m x 11 m)

Walls, ceilling and doors are lined with EMERSON CUMING foams VHP 36 and VHP 26 type.

The EPIRB is placed as shown on figure N° 1 and N° 2.



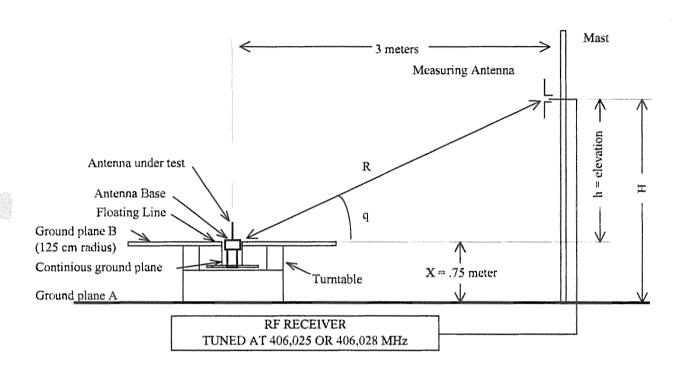


FIGURE B2c: Equipement Test Set Up For BEACON Antenna Test

(For BEACON designed for normal operation in water, ex: EPIRB)

5 - TEST METHOD

The test method describes here after, according to "C/S T 007 - Issue 3 -Revision 9 - October 2002 " test sequences is executed for 406 MHz frequency . Following measurements are performed:

- 1/Electrical ground plane of 1.25 m of radius is placed at flotation level of the beacon.
- 2/ EPIRB transmitting antenna polarization is determined prior to test.
- 3/ Determination of E field strength in term of $dB\mu V/m$ at 3 m far from the EPIRB for all direction (0° to 360° by step of 30°) and for search antenna elevation (10° to 50°). Search antenna is left in vertical and horizontal position for all elevations. Length of search antenna is adjusted to proper 1/2 λ conditions.
- 4/ An ERP (Equivalent Radiated Power) from the PLB is calculated
- 5/ERP is corrected with ERP_{Loss} factor (end of life factor)
- 6/ Actual ERP are compared to specified ERP to be in the range 1.6 W to 20 W (+ 32 dBm to + 43 dBm).

6 - TESTS EQUIPMENTS

6.1. SEARCH ANTENNA

· 406 MHz test:

EMCO Ref 3121 C- DB4 Dipole antenna

Serial number:

S/N 9109-763

Calibration validity:

juin-02

6.2. SPECTRUM ANALYSER

· R/S ESMI

6.3. CABLES

• 20 m cable SUCOFLEX type 100 - cable loss at 406 MHz is: 3,5 dB

7 - TESTS OPERATIONS

7.1. EMISSION FIELD STRENGTH FROM EPIRB

The electrical field intensity is measured with the following antenna:

EMCO 3121 C - DB4 - SN- 763

EPIRB electric field strength is obtained from measurement of the output voltage ($dB\mu V$ RMS) at antenna port (typical set up are shown figure N° 3 for 406 MHz) and computed with following parameters:

- · Antenna factor of search antenna AF in dB (manufacturer calibration)
- Directivity factor of the antenna Dm in dB (Theoritical directivity shown paragraph B-5-4 of C/S T007) as:

$$Dm = 20 \log [\cos (90 \times \sin q) / \cos q]$$

- Cable loss L = 3,5 dB at 406 MHz
- DF: distance factor in dB To calculate field at a constant distance (3 m) from EPIRB due to the elevation of the search antenna.
- Power correction factor: end of life correction factor ERP_{Loss} is calculated from the difference between RF power measured during test and end of life power after 24 hours operation at min. Temp. This factor is applied to correct ERP as shown on final test result table
- · The measurements are performed on the carrier signal, just before to apply the modulation.
- The effective field strength at 3 m from EPIRB is computed from :

$$EdB\mu V/m = UdB\mu V + AF + L + DF$$

Where: $UdB\mu V = 20log(CorV_v^2 + V_h^2)^{1/2}$

CorVv = Induced voltage with search antenna in vertical polar corrected by Dm

Vh = Induced voltage with search antenna in horizontal polar

7.2. POWER CORRECTION FACTORS

EOL factor

	RF Power	RF Power	Loss Factor
TEST FREQUENCY	measured at	measured at the end of	ERP _{LOSS}
	Ambient Temp. Test	Operating Lifetime Test	
406 MHz	36,1 dBm	36,6 dBm	-0.5 dB

The ERPLOSS loss factor is rounded to: 0.0 dB

8 - RADIATED POWER CALCULATIONS

8.1. EFFECTIVE RADIATED POWER OF EPIRB

ERP of EPIRB is directly calculated from equation:

$$ERP = E^2 \times D^2 / 30$$

ERP = W

E = V/m

D = m

Results shown in table No C1 are given in dBm where:

ERP dBm = 10 log (ERP W) + 30

and apparent antenna gain:

GidB = ERPdBm - RF PowerdBm

9 - SUCCESS CRITERIA

90% of EPIRB measurements must be equal or greater than 1,6 W ERP (32 dBm). and less than 20 W ERP (43 dBm)

10 - EPIRB ANTENNA POLARIZATION

EPIRB antenna polarization is checked according to C/S T007 procedure paragraph B9 EPIRB antenna polarization is declared vertical when measurement obtained with vertical polarization search antenna are 10 dB greater or more than measurement obtained with

Antenna model	Angle Azi / Elev	Vertical measurement dBµV	Horizontal measurement dBµV	Δ	Antenna Polarization
	0°/10°	109,9	79,3	30,5	Vertical

Table 1 to the second of the s	int	ورع	pc	1 CE	
Fintellin	jence da	l'En	viran	nemer	i î
Ref : M4586 Std Com-Rew					
Std C					
1586					
F: M		r			т-
2			7.75	3	
		1	-	1	1.

Angle en Hauteur m Affichage

10 1,28 1,78 Hauteur (m 0,75
20 1,84 2,34 plan de sol
30 2,48 2,98 pistance (m 3
40 3,27 3,77 mesure
50 4,33 4,83 Offset (m) 0,5
Hauteur = Hauteur plan de sol + Distance de mesure * TAN(A) 26/03/2003 Date: BALISE A 406 MHz Standard Communications MT400 S/N : C204 36,6 dBm 36,1 dBm -0,5 P2 P. pied d'ant à T°C min/24h :

P1 P. pied d'antenne à 22°C: ERP(loss) P1-P2: 3,5 Pertes du cable :

21

A.F. DIPOLE:

en dB 0,13 1,25 3,84 ă Dm en dB -0,19 -5,05 -1,76 -0,78 -3,16 ANGLE D'ELEV. 50 2 8 30 40

Df (Distance factor)= 20*LOG(1/COS A)

Dm (Directivity factor)= 20*LOG(COS(90*SIN A)/COS A)

Vt_{rec}=20log((CVv²+Vh²)12) $CVv_{rec} = Vv_{rec} - Dm$

 $E(dB\mu V/m) = U(dB\mu V) + AF + Cable + Df$

 $E.R.P.(w) = (E^2(V/m) * R^2(m)) / 30$

GAIN (dB) = E.R.P. (dBm) - Pt (dBm)

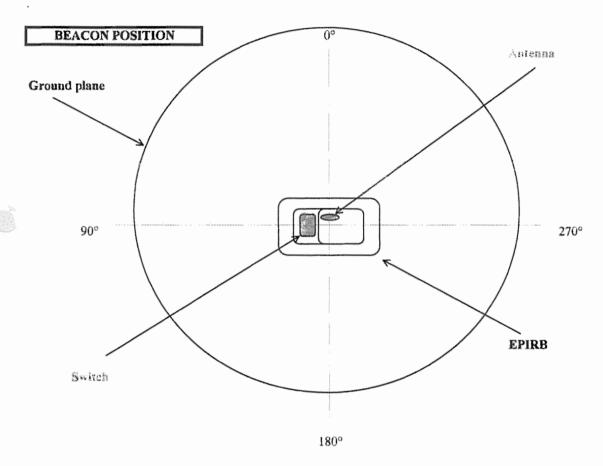
									~~~																			
			Champ	dBµV/m		138,3	138,3	138,3	138,2	138,2	138,2	138,0	138,0	138,0	138,0	138,2	138,3	138,5	138.2									
					Vtrc	E,III	111,3	111,3	111,2	111,2	111,2	0,111	0'111	0,111	111.0	111,2	111,3	111,5	111.2									
					Ecart	27,4	31,1	30,9	30,1	28,1	28,1	26,3	28,1	27,1	27,1	27,9	26,6	27,6	28.2									
		30	Tension	dΒμV	Vhree	85,7	82,0	82,2	82,8	84,8	84,8	86,5	84,7	85,7	85,7	0,28	86,5	85,7	84.8									
dB.					Cor Vvrec	113,1	113,1	113,1	112,9	112,9	112,9	112,8	112,8	112,8	112,8	112,9	113,1	113,3	113.0									
M _{toc} < i 10					VVmc	111,3	111,3	111,3	111,2	111,2	111,2	0,111	0,111	0,111	111,0	111,2	111,3	111,5	111.2									
We-Vh- < à 10 dB		*******	Champ	dBµV/m		137,0	137,2	137,2	137,0	137,0	137,0	137,0	136,8	137,0	136,8	136,8	137,2	137,0	137.0									
					Vtnc	112,0	112,1	112,1	112,0	112,0	112,0	112,0	8,111	112,0	8,111	8,111	112,1	112,0	9111									
					Ecart	32,9	28,9	31,6	32,8	29,3	30,4	33,6	29,1	32,6	32,9	28,3	30,1	32,6	31.2									
	(degrés)	20	Tension	dΒμV	Vh _{rec}	0,67	83,2	80,5	79,2	82,7	81,5	78,3	82,7	79,3	78,8	83,5	82,0	79,3	80.8									
	ELEVATION ANGLE (degrés)	ION ANGL	TION ANGL					Cor Vv _{rec}	6,111	112,1	112,1	6,111	111,9	6,111	6,111	8,111	6,111	8,111	8'111	112,1	6,111	111.9						
					Vvrec	111,2	111,3	111,3	111,2	111,2	111,2	111,2	0,111	111,2	0.111	0,111	111,3	111,2	111.2									
			Champ	dBµV/m		134,5	134,3	134,0	134,0	134,0	134,2	134,5	134,3	134,5	134,3	134,2	134,2	134,5	134.3									
														Vtree	6,601	1001	109,4	109,4	109,4	109,5	109,9	109,7	6,601	109,7	109,5	109,5	6,601	109.6
																				Ecart	30,5	29,2	33,7	31,2	29,0	28,9	28,9	26,0
MP		10	Tension	dΒμV	Vhree	79,3	80,5	75,7	78,2	80,3	80,7	81,0	83,7	80,5	79,0	84,7	79,0	79,3	80.1									
CALCUL DU CHAMP					CorVvrrc	109,9	109,7	109,4	109,4	109,4	109,5	6,601	109,7	6,601	109,7	109,5	109,5	6,601	9.601									
CALCU					Vvrec	109,7	109,5	109,2	109,2	109,2	109,3	109,7	109,5	109,7	109,5	109,3	109,3	109,7	109.4									
			AZIMUTH	(degrés)		0	30	09	96	120	150	180	210	240	270	300	330	360	Champ moven									
		,										-			-													

						VVice	VV _{rec} - V thec < a 1 to dis	ED OB				
			4	40					5	50		
AZIMUTH			Tension			Champ			Tension			Champ
(degrés)			dΒμV			dBμV/m			dΒμV			dBµV/m
	Vvrec	Cor Vvrec	Vhree	Ecart	Vtree		Vvrec	Cor Vvrcc	Vhree	Ecart	Vtree	
0	0,901	109,2	76,3	32,8	109,2	136,0	0,96	101,1	88,0	13,1	101,3	129,6
30	106,0	109,2	78,0	31,2	109,2	136,0	6,36	101,4	89,2	12,2	9,101	0,061
09	106,0	109,2	82,7	26,5	109,2	136,0	0,96	101,1	8,06	10,2	101,4	129,8
06	105,8	0,601	81,3	27,7	0,601	135,8	0,96	101,1	91,2	6.6	101,5	129,8
120	0,901	109,2	77,5	31,7	109,2	136,0	96,2	101,2	7,06	9,01	9,101	129,9
150	0,901	109,2	77,5	31,7	109,2	136,0	5'96	9,101	90,5	1.11	6,101	130,2
180	0'901	109,2	76,3	32,8	109,2	136,0	5,96	9'101	90,3	11,2	6,101	130,2
210	105,8	0,601	76,7	32,3	109,0	135,8	96,2	101,2	5'06	10,7	101,6	129,9
240	105,7	8,801	75,5	33,3	108,8	135,7	8'56	6'001	606	9,01	101,2	129,6
270	105,5	108,7	72,8	35,8	108,7	135,5	95,7	100,7	89,3	11,4	0,101	129,4
300	105,8	0,601	64,2	44,8	109,0	135,8	95,7	100,7	88,0	12,7	100,9	129,3
330	106,0	109,2	72,8	36,3	109,2	136,0	8,56	100,9	86,5	14,4	101,0	129,4
360	106,0	109,2	76,0	33,2	109,2	136,0	96,2	101,2	88,0	13,2	101,4	129,8
Champ moyen	105,9	1,601	76,0	33,1	1001	135,9	1,96	101,1	89,5	11,6	101,4	129,8





EPIRB  $0^{\circ}$ axis is identified with  $0^{\circ}$  azimuth direction of turn table . Antenna is the center of rotation of azimuth angle.



# NOT TO SCALE

## 12 - RESULTS

Test frequency	Polarization	Reference ERP	Measurement ERP
406 MHz	Vertical	1.6 W < ERP Ref < 20 W	According table C1
		32 dBm < ERP Ref < 43 dBm	

## CONCLUSIONS

The ERP Beacon is just in the ERP reference.

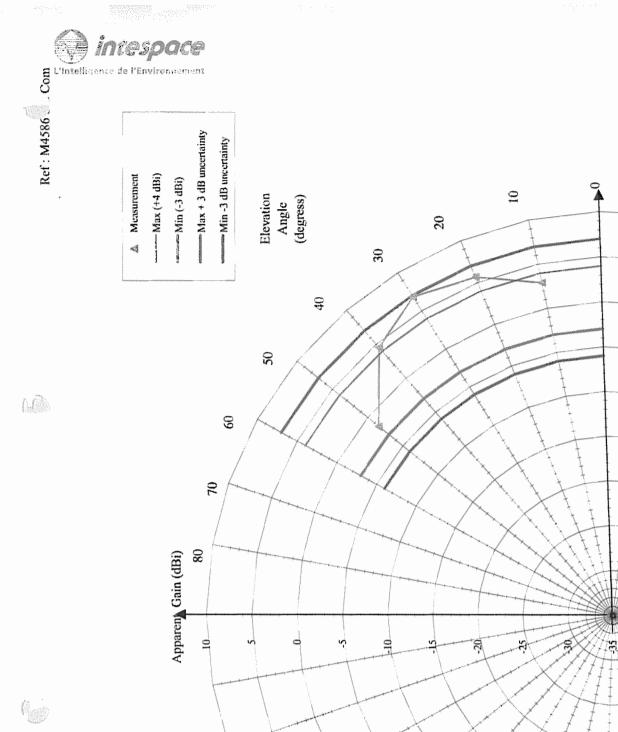


# Table C1: EFFECTIVE RADIATED POWER (dBm) / ANTENNA GAIN (dBi)

Azimuth				Elevatio	n Angle (	Degrees)				
Angle	1	0	2	0	3	0	4	0	5	0
(Degrees)	dBm	dBi	dBm	dBi	dBm	dBi	dBm	dBi	dBm	dBi
0	39,27	3,17	41,76	5,66	43,08	6,98	40,75	4,65	34,37	-1,73
30	39,10	3,00	41,93	5,83	43,11	7,01	40,75	4,65	34,75	-1,35
60	38,77	2,67	41,92	5,82	43,11	7,01	40,76	4,66	34,56	-1,54
90	38,77	2,67	41,76	5,66	42,95	6,85	40,59	4,49	34,59	-1,51
120	38,77	2,67	41,77	5,67	42,95	6,85	40,75	4,65	34,70	-1,40
150	38,93	2,83	41,76	5,66	42,95	6,85	40,75	4,65	34,99	-1,11
180	39,27	3,17	41,76	5,66	42,79	6,69	40,75	4,65	34,98	-1,12
210	39,11	3,01	41,60	<b>5,5</b> 0	42,78	6,68	40,58	4,48	34,69	-1,41
240	39,27	3,17	41,76	5,66	42,78	6,68	40,42	4,32	34,36	-1,74
270	39,10	3,00	41,59	5,49	42,78	6,68	40,25	4,15	34,14	-1,96
300	38,94	2,84	41,60	5,50	42,95	6,85	40,58	4,48	34,06	-2,04
330	38,93	2,83	41,92	5,82	43,11	7,01	40,75	4,65	34,15	-1,95
Average	39,02	2,92	41,76	5,66	42,94	6,84	40,64	4,54	34,53	-1.57
Overall Gain Variation	0,50	) dB	0,33	3 dB	0,33	3 dB	0,51 dB		0,93	3 dB

$$ERP_{max EOL} = MAX [ERP_{max}, (ERP_{max} - ERP_{LOSS})] = MAX ( 43.11 \cdot 0.00 ) = 43.1 dBm$$

$$ERP_{min EOL} = MIN [ERP_{min}, (ERP_{min} - ERP_{LOSS})] = MIN ( 34.06 \cdot 0.00 ) = 34.1 dBm$$



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Ref: M4586 Std Com

# ANNEX B

MANUFACTURER DOCUMENTATION ON MT400 STANDARD COMMUNICATIONS PTY, LTD. EPIRB

# ANNEX C

# APPLICATION FOR A COSPAS-SARSAT 406 MHz BEACON TYPE APPROVAL CERTIFICATE

Beacon Manufacturer: S7	ANDARD CON	MUNICATION	S PTY. LTD.
Beacon Model: MT400			
Name and Location of Beacon T	est Facility:	INTESPACE	, Toulouse (France)
Beacon Type: Aviation:	Land:	Mar	itime: 🗸
Specified Operating Temperatu	re Range:	<u>-20</u> °C to	<u>+55</u> ℃
Specified Operating Lifetime: 2	4 hr 48 hr	r. 🗸 Other	Specify:
Beacon Battery Type(s): Chemistry: _ L	THIUM SULPH	HUR DIOXIDE (	'LiSO2)
Manufacturer &	model no.:_ SA	FT, LO 26 SX	
Size & number o	f cells: D S	ZE (R20-D), Q	UANTITY TWO (2)
Extra Features in Beacon:	No	Yes	Details
a) Auxiliary Radio-Locating Devi	ce:	✓	Frequency: 121.5 MHz Power: 16dBm (E.R.P.) Tx. Duty Cycle: Continuous (>96%)
b) Transmits Encoded Position Da	ta: 🗸		Nav. Device (Internal or External)  Type (GPS, GLONASS, etc.)  Manufacturer
c) Transmits Long Message (144 bi	ts):	****	Model
d) Automatic Activation:	$\checkmark$		
e) Built-in Strobe Light:	20.00	$\checkmark$	Intensity: _ >0.75cd (IMO effective)_ Flash rate: _ 21/min
f) Self-test mode	may olds has	$\checkmark$	
g) Other:	***	$\checkmark$	Specify: Audible Annunciator
	Standard (C/S 1	$\Gamma.007$ ) and compl	en successfully tested in accordance with lies with the Cospas-Sarsat Specification
Dated:	Signed:		(for test facility)

Send to: Cospas-Sarsat Secretariat c/o Inmarsat, 99 City Road, London ECTY 1AX, United Kingdom

REV	ECO No	DETAILS	BY	DATE
1	Create	Required to support product release	CJWD	1-07-2003

<b>Specification</b>	Performance Perfor
Modes of operation	
Normal (Activated)	121.5MHz modulated 406MHz modulated
	Strobe & Audible alert
End of Life (Activated)	121.5MHz modulated
	At >48hrs+, other functions as supported by remaining battery capacity
Self Test	121.5MHz, full power short burst
	406MHz with inverted synchronisation, full power, one burst
Operational	Strobe & Audible alert
Duration	48hrs minimum continuous
Warm-up	None required, full specification performance at activation
User Data	Programmable via external interface
Protocol	All Short Protocols supported and programmable via external interface
400 D. 4781 D. 1.1	(refer to manufacturer for currently approved protocols)
406 Repetition Period Strobe Rate	50s nominal, fully random variance up to ± 2.5s maximum 20 flashes nominal per minute
Transmission Frequencies	20 lidalies nominal per minute
VHF	121.5MHz
UHF	406.028 MHz (programmable 406.000MHz to 406.100MHz)
Transmission Output Power	
VHF	$50\text{mW} \pm 3\text{dB} \text{ (PERP)}$
UHF	5W ± 2dB
Modulation Format 406MHz	Phase shift key (PSK)
121.5MHz	Swept tone amplitude modulation
COSPAS/SARSAT Compatibility	
406MHz	Yes, meets requirements of C/S T.001 (Class 2)
121.5MHz	Yes, is phase coherent
Activation	A4 11 12 4 11 19 1
Method Delay	Manually activated by slider switch Will not transmit until activated for 60s~70s
Battery	Will not transmit drift activated for 605-705
Replacement period	Within 5 years after date of manufacture
Replacement method	Service centre, or factory only (non-user replaceable)
Chemistry	LiSO ₂
No./Size	2 D size cells
Physical	IEO 04007 D. ACINIZO 4000 4. ETOL EN 000 000
Ruggedness & Durability Environmental sealing	IEC 61097-2, AS/NZS 4280.1, ETSI EN 300 066 IEC 61097-2, AS/NZS 4280.1, ETSI EN 300 066
CHANGILLIGH SEALING	1 10 0 1031-2, MONNEO 4200.1, E131 EN 300 000

AUTHORED BY C.J.W.Duncan		COMMUNICA Ville (PO Box 296) NSW			46 814
CHECKED BY L.May	TITLE MT4	00 EPIRB, Ted	chnical D	ata Sheet	en des des des des des de la constitución de la con
APPROVED BY C.J.W.Duncan	PART NO	DRAWING NO <b>41843</b>	REVISION 1	SHEET 1 OF 2 FILE: 41843-1.DOC	A4

REV	ECO No	DETAILS	BY	DATE
1	Create	Required to support product release	CJWD	1-07-2003

Specification	Performance
Temperature	
Operating Storage	
Size Heigh Width Depth	102mm (max)
Weight Beacor Bracket	
Other Features Retention Lanyard Retro-reflective tape Solid-state Strobe Antenna Bracke	Large surface area, encircling unit above waterline Meets or exceeds IMO requirements High durability stainless steel tape construction

AUTHORED BY C.J.W.Duncan	STANDARD COMMUNICATIONS PTY LTD 6 Frank St. Gladesville (PO Box 296) NSW 2111 AUSTRALIA ABN: 93 000 346 814						
CHECKED BY L.May	MT400 EPIRB, Technical Data Sheet						
APPROVED BY C.J.W.Duncan	PART NO	DRAWING NO <b>41843</b>	REVISION 1	SHEET 2 OF 2 FILE: 41843-1.DOC	A4		
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Document: Revision: ED030703-13

Status RELEASE Issue Date 03-07-2003

# MT400 406MHz EPIRB

# PHOTOGRAPHS OF TEST UNIT





