

6.5.15 Up Link / A-B Block / INTERMODULATION

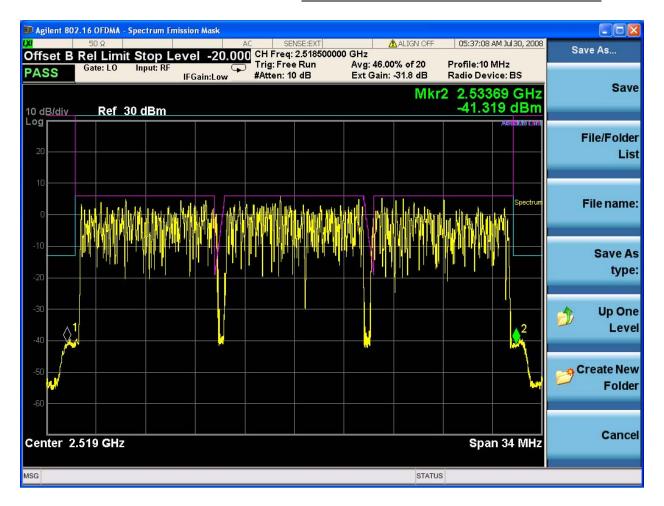
FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: Full FA

Input Level : <u>-56 dBm</u> System Gain : <u>80 dB</u>

Bandwidth: 30 MHz





6.5.16 Up Link / C-D Block / Low Edge

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: 1st FA (2541.5 MHz)



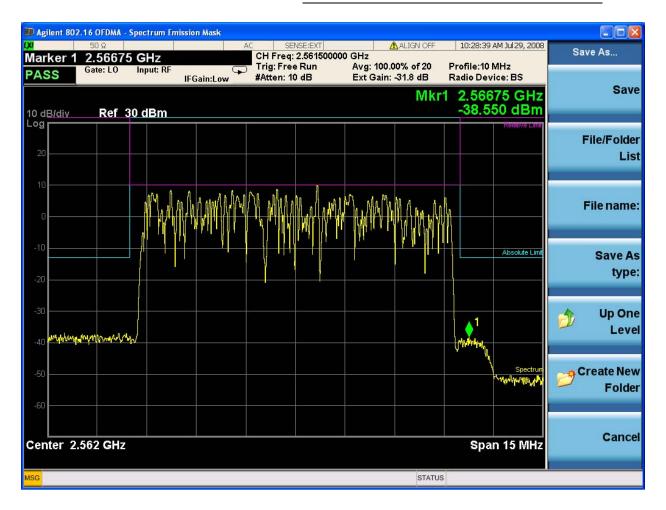


6.5.17 Up Link / C-D Block / High Edge

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: 3rd FA (2561.5 MHz)



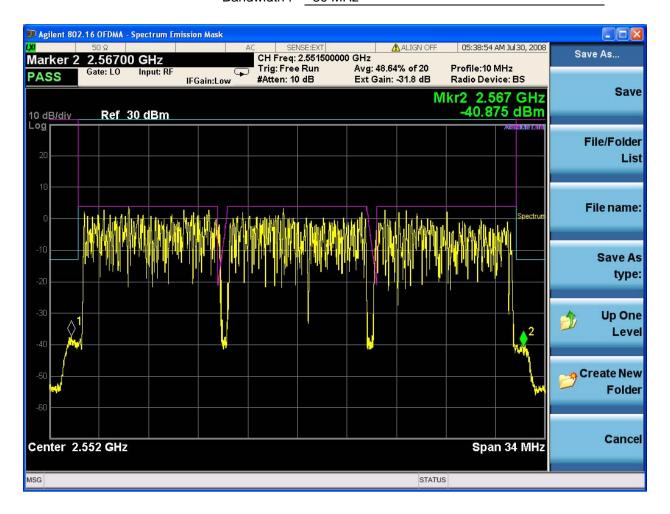


6.5.18 Up Link / C-D Block / INTERMODULATION

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: Full FA



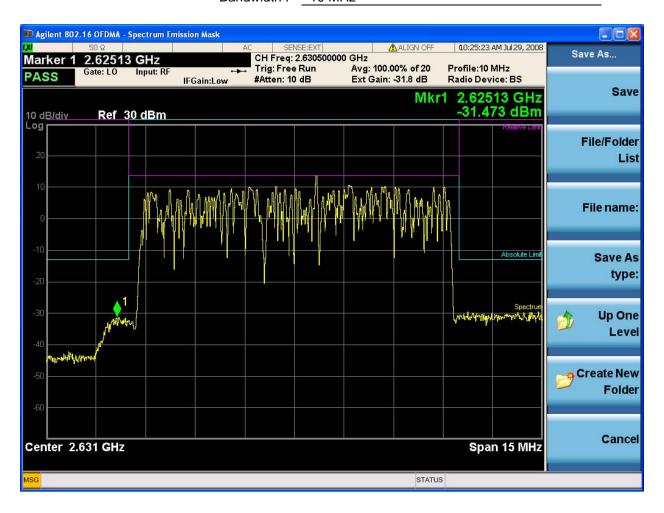


6.5.19 Up Link / E-F Block / Low Edge

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: 1st FA (2630.5 MHz)



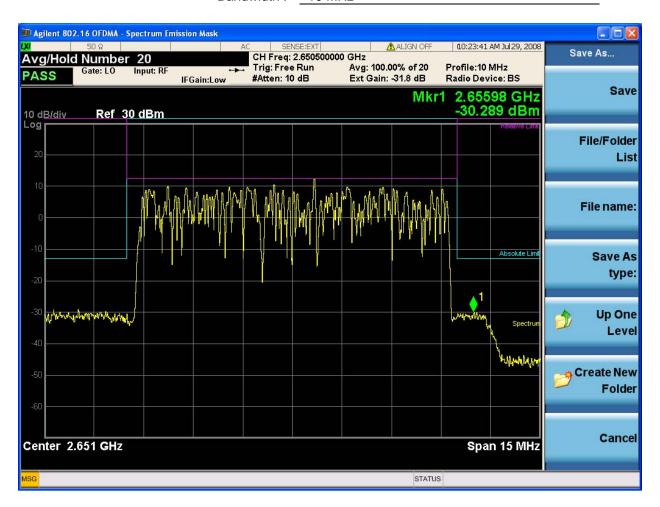


6.5.20 Up Link / E-F Block / High Edge

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: 3rd FA (2650.5 MHz)





6.5.21 Up Link / E-F Block / INTERMODULATION

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: Full FA

Input Level : -56 dBm
System Gain : 80 dB
Bandwidth : 30 MHz

👊 Agilent 802.16 OFDMA - Spectrum Emission Mask 05:42:10 AM Jul 30, 2008 Save As... CH Freq: 2.640500000 GHz Marker 1 2.62500 GHz Trig: Free Run #Atten: 10 dB Avg: 60.11% of 20 Ext Gain: -31.8 dB Profile:10 MHz PASS Radio Device: BS IFGain:Low Save Mkr1 2.625 GHz -33.489 dBm 10 dB/div Ref 30 dBm File/Folder List File name: Save As type: **Up One** Level **Create New** Folder Cancel Center 2.641 GHz Span 34 MHz STATUS

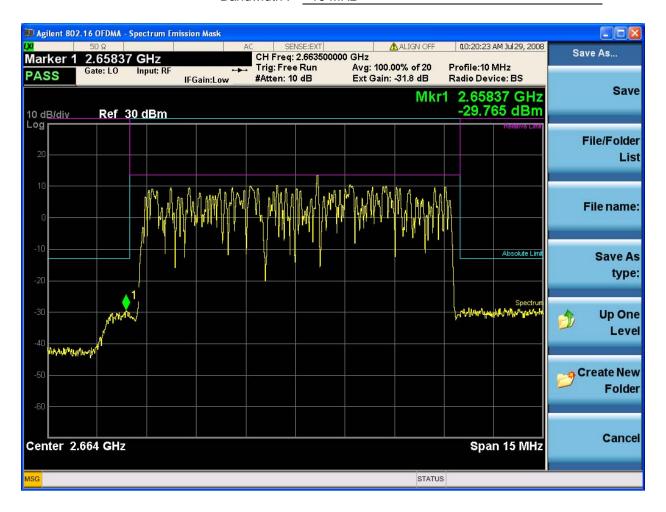


6.5.22 Up Link / H-G Block / Low Edge

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: 1st FA (2663.5 MHz)



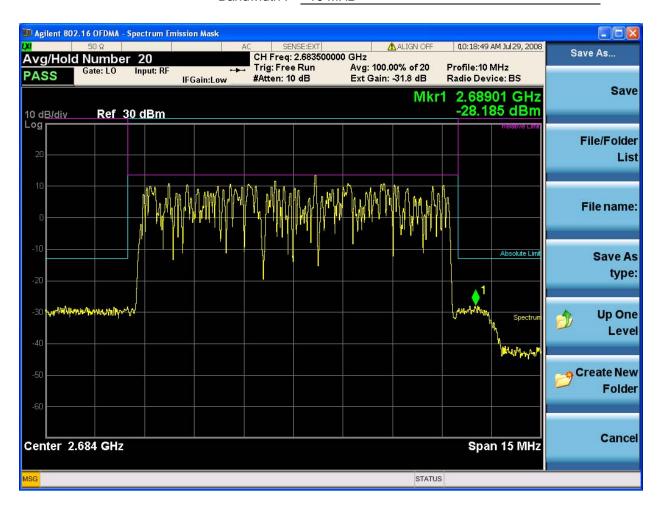


6.5.23 Up Link / H-G Block / High Edge

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: 3rd FA (2683.5 MHz)



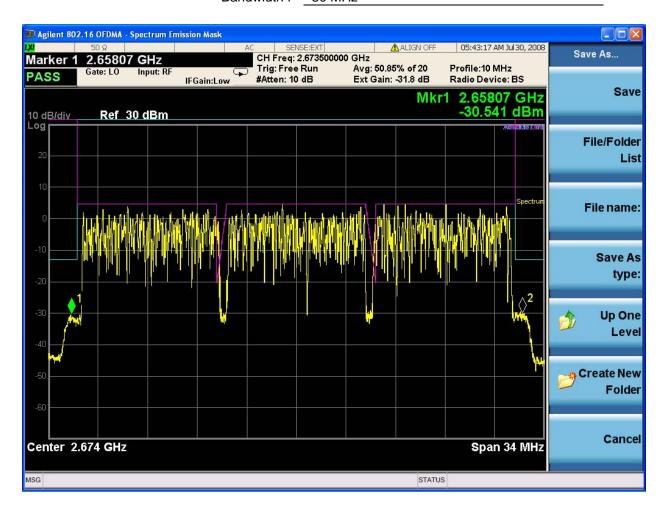


6.5.24 Up Link / H-G Block / INTERMODULATION

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: Full FA





6.6 Field Strength of Spurious Radiation

6.6.1 Down Link / A-B Block

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Down Link

Operating Frequency: Full FA





6.6.2 Down Link / C-D Block

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Down Link

Operating Frequency : Full FA

Input Level : <u>-56 dBm</u> System Gain : 80 dB

Bandwidth: 30 MHz





6.6.3 Down Link / E-F Block

FCC Rules : Part 2 §2.1051 & §27.53(I)

Path: Down Link

Operating Frequency: Full FA





6.6.4 Down Link / F-G Block

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Down Link

Operating Frequency: Full FA





6.6.5 Up Link / A-B Block

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: Full FA

Input Level : -56 dBm System Gain : 80 dB

Bandwidth : 30 MHz





6.6.6 Up Link / C-D Block

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: Full FA

Input Level : -56 dBm System Gain : 80 dB

Bandwidth: 30 MHz





6.6.7 Up Link / E-F Block

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: Full FA





6.6.8 Up Link / F-G Block

FCC Rules: Part 2 §2.1051 & §27.53(I)

Path: Up Link

Operating Frequency: Full FA

Input Level : -56 dBm
System Gain : 80 dB
Bandwidth : 30 MHz

🅦 Agilent Spectrum Analyzer - Swept SA 11:53:29 AM Jul 29, 2008 Save As... Video BW 3.0 MHz Avg Type: Log-Pwr Avg|Hold:>20/20 Ext Gain: -31.8 dB TRACE 1 2 3 4 5 (Trig: Free Run Atten: 10 dB PNO: Fast 😱 Input: RF DET PSSNNN Save 10 dB/div Ref 30.00 dBm File/Folder List File name: -13.00 dB Save As type: **Up One** Level **Create New** Folder Cancel Stop 26.50 GHz Start 30 MHz #Res BW 1.0 MHz **#VBW 3.0 MHz** Sweep 66.2 ms (1001 pts) STATUS



6.7 Frequency Stability / Temperature Variation

6.7.1 Test Result 1 (Down Link / A-B Block)

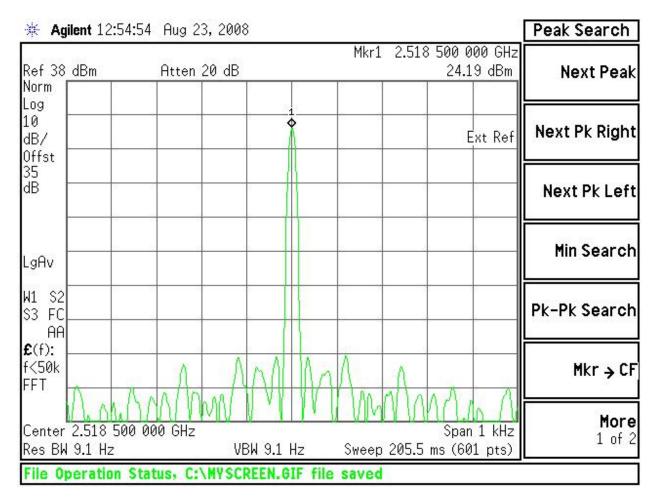
FCC Rules : Part 2 §2.1055 & §90.231

Path: Down Link

Operating Frequency : 2518.5 MHz

Modulation : Non-Modulation

Reference Voltage : 220.0 Vac





6.7.2 Test Result 2 (Down Link / C-D Block)

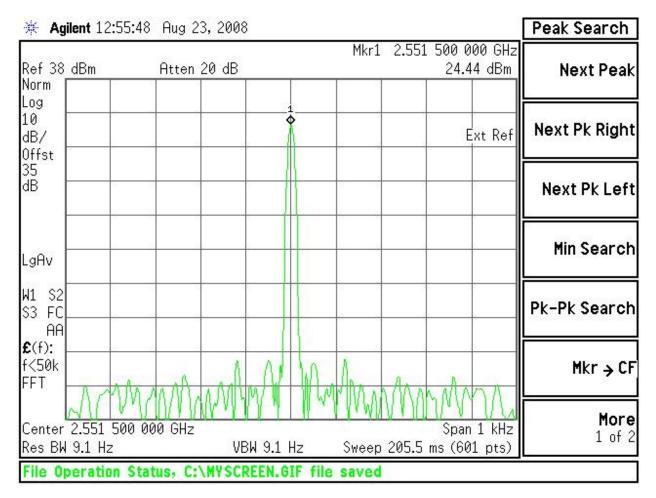
FCC Rules: Part 2 §2.1055 & §90.231

Path: Down Link

Operating Frequency: 2551.5 MHz

Modulation : Non-Modulation

Reference Voltage : 220.0 Vac





6.7.3 Test Result 3 (Down Link / E-F Block)

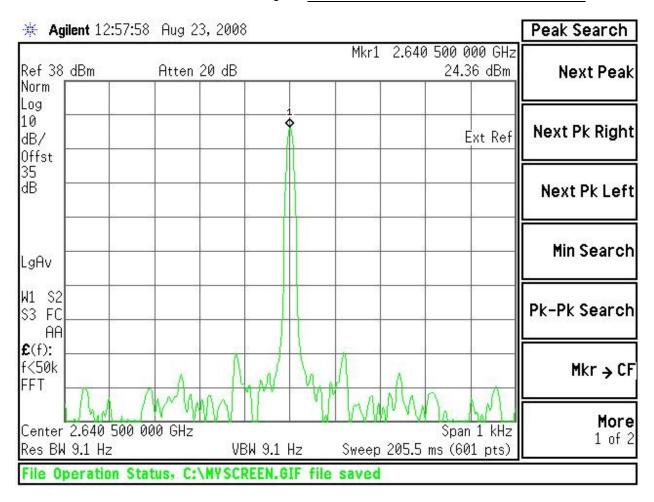
FCC Rules: Part 2 §2.1055 & §90.231

Path: Down Link

Operating Frequency: 2640.5 MHz

Modulation : Non-Modulation

Reference Voltage: 220.0 Vac





6.7.4 Test Result 4 (Down Link / G-H Block)

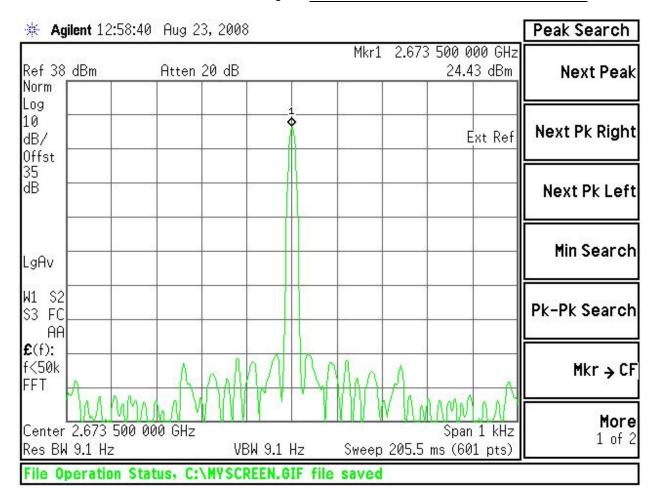
FCC Rules: Part 2 §2.1055 & §90.231

Path: Down Link

Operating Frequency: 2673.5 MHz

Modulation : Non-Modulation

Reference Voltage: 220.0 Vac



More

1 of 2

August 19, 2008

Span 1 kHz

Sweep 205.5 ms (601 pts)

Data of Issue:



Center 2.518 500 000 GHz

File Operation Status, C:\MYSCREEN.GIF

Res BW 9.1 Hz

BWS TECH Inc.

6.7.5 Test Result 5 (Up Link / A-B Block)

FCC Rules: Part 2 §2.1055 & §90.231

Path: Up Link

Operating Frequency : 2518.5 MHz

Modulation : Non-Modulation
Reference Voltage : 220.0 Vac

Peak Search * Agilent 12:55:04 Aug 23, 2008 Mkr1 2.518 500 000 GHz Ref 38 dBm Atten 20 dB 24.31 dBm **Next Peak** Norm Log 10 **Next Pk Right** Ext Ref dB/ Offst 35 dΒ Next Pk Left Min Search LgAv W1 S2 Pk-Pk Search S3 FC AA £(f): f<50k Mkr → CF FFT

VBW 9.1 Hz



6.7.6 Test Result 6 (Up Link / C-D Block)

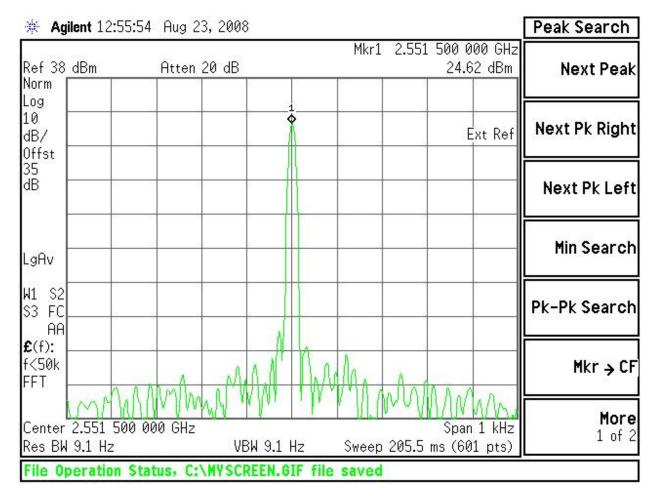
FCC Rules: Part 2 §2.1055 & §90.231

Path: Up Link

Operating Frequency: 2551.5 MHz

Modulation : Non-Modulation

Reference Voltage : 220.0 Vac





6.7.7 Test Result 7 (Up Link / E-F Block)

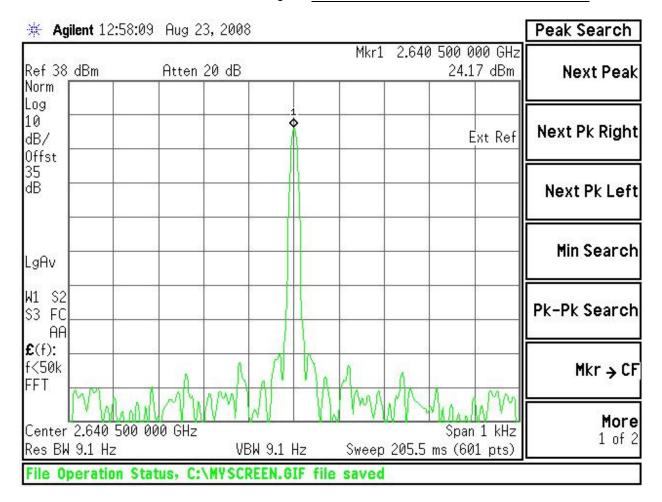
FCC Rules: Part 2 §2.1055 & §90.231

Path: Up Link

Operating Frequency: 2640.5 MHz

Modulation : Non-Modulation

Reference Voltage: 220.0 Vac





6.7.8 Test Result 8 (Up Link / G-H Block)

File Operation Status, C:\MYSCREEN.GIF

FCC Rules: Part 2 §2.1055 & §90.231

Path: Up Link

Operating Frequency: 2673.5 MHz

Modulation : Non-Modulation
Reference Voltage : 220.0 Vac

* Agilent 12:58:48 Aug 23, 2008 Peak Search Mkr1 2.673 500 000 GHz Ref 38 dBm Atten 20 dB 24.23 dBm **Next Peak** Norm Log 10 **Next Pk Right** Ext Ref dB/ Offst 35 dΒ Next Pk Left Min Search LgAv W1 S2 Pk-Pk Search S3 FC AA £(f): f<50k Mkr → CF FFT More Center 2.673 500 000 GHz Span 1 kHz 1 of 2 Sweep 205.5 ms (601 pts) Res BW 9.1 Hz VBW 9.1 Hz



7. TEST EQUIPMENTS LIST

	EQUIPMENT	MODEL	MANUFACTURE	SERIAL NUMBER	Calibration Due date
1	Receiver	ESVS30	Rohde & Schwarz	832854/010	06/22/09
2	Spectrum analyzer	FSP7	Rohde & Schwarz	100001	02/22/09
3	Signal Generator	E4432B	Agilent	US40053157	07/15/09
4	Signal Generator	E4438C	Agilent	MY45091894	06/22/09
5	Signal Generator	GT9000	Gigatronics	9604010	02/22/09
6	Signal Generator	2022D	Marconi Instrument	119157/001	11/14/2008
7	Signal Generator	2030D	Marconi Instrument	119330/022	11/16/2008
8	Modulation Analyzer	8901B	Agilent	3028A03124	02/22/09
9	Audio Analyzer	8903B	Agilent	3011A09344	02/22/09
10	Digital Oscilloscope	TDS3032	Tektronix	B019436	11/20/08
11	Frequency Counter	R5372	Advantest	41855204	02/22/09
12	Shield Room (7m x 4m x 3m)	N/A	SJEMC	0004	N/A
13	Turn Table	OSC-30	N/A	BWS-01	N/A
14	Antenna Mast	JAC-3	Dail EMC	N/A	N/A
15	Temperature & Humidity chanber	EN-GLMP-54	Enex	N/A	03/21/09
16	Bilog Antenna	VULB9160	Schwarzbeck	VULB9160-3122	12/29/08
17	Bilog Antenna	VULB9161	Schwarzbeck	VULB9161-4067	12/23/08
18	Bilog Antenna	VULB9161	Schwarzbeck	VULB9161-4068	12/23/08
19	Horn Antenna	BBHA 9120 D	Schwarzbeck	BBHA 9120 D 234	03/15/09
20	Horn Antenna	BBHA 9170	Schwarzbeck	BBHA9170157	02/13/09
21	Power Meter	E4418A	Agilent	GB38272621	11/14/08
22	Power Sensor	E9301B	Agilent	US40010238	11/14/08
23	Power supply	IPS-30B03DD	Interact	42052	03/20/09
24	Directional Coupler	778D	Agilent	1144A08477	11/14/08
25	Power Divider/Combiner	11636A	Agilent	05774	11/14/08
26	Power Divider/Combiner	11636A	Agilent	05870	11/14/08