QAMnet

Model#: EMLT-1550-NC-05 **Description:** 5 dBm Externally Modulated Transmitter

Date: 12/18/07 **Transmitter S/N:** 8150047

Test by: Ken Corelli **EDFA S/N:** NA

1. Output Power Measurement			
Tx Only Output Power (dBm):	5.4	**Stability (+/-dB):**	0.05
With EDFA Output Power (dBm):	N/A	**Stability (+/-dB):**	N/A

Frequency Channels 130 total, 70 Analog + 60 Digital **NTSC**

Receiver input level: *0 dBm* Frequency Tested 325.25MHz (#48) OMI Value: 2.0%

2. RF Input Power vs. CTB Measurement				
Matrix Gen. Attenuation (dB)	**RF Input Level (dBmV)**	**CW Carrier Level (dBmV)**	**Distortion Level (dBmV)**	**Calculated CTB**
31.00	8.4	28.2	-25.90	54.10

3. RF Input Power vs. CSO Measurement						
Matrix Gen. Attenuation (dB)	**RF Input Level (dBmV)**	**CW Carrier Level (dBm)**	**Distortion Level (dBm)**		**Calculated CSO**	
31.00	8.4	28.2	-35.70	-35.90	63.90	64.10

4. CNR Measurement @ Ch#48, OMI @ 2.0%					
CNR Measured with 100KHz RBW (dB)	**Noise Floor Difference (dB)**	**C. F. For Noise Floor (dB)**	**Test System C.F. (dB)**	**Conversion from 100KHz to 4MHz (dB)**	**Finalized CNR**
66.80	16.4	0.1	0.50	16.0	51.38

12dBm Output Level, Set at HA9-9.28dB, EDFA Power Level: +23.5dB

5. SBS Measurement		18.5dBm
Output Power from EDFA (dBm)	**Received Power afeter 48km (dBm)**	**Total Loss (dB)**
		0

Maximum SBS Suppression Level

6. Wavelength Measurement	
Laser Wavelength (nm):	1544.716

Transmitter Setting:

SBS Setting	13.5 dBm
RF Modulation Mode	AGC, -3.8 dBm OMI

Test Instruments Used:

Frequency Generator	Matrix ASX-16C
Spectrum Analyzer	HP 8595E
Optical Attenuator	JDSU HA9
Optical Power Meter	Newport 1835C
Detector Type	818-IS
Receiver	RF Optics FOS 860A

Note: