

7.4. PANEL ANTENNA RESULTS

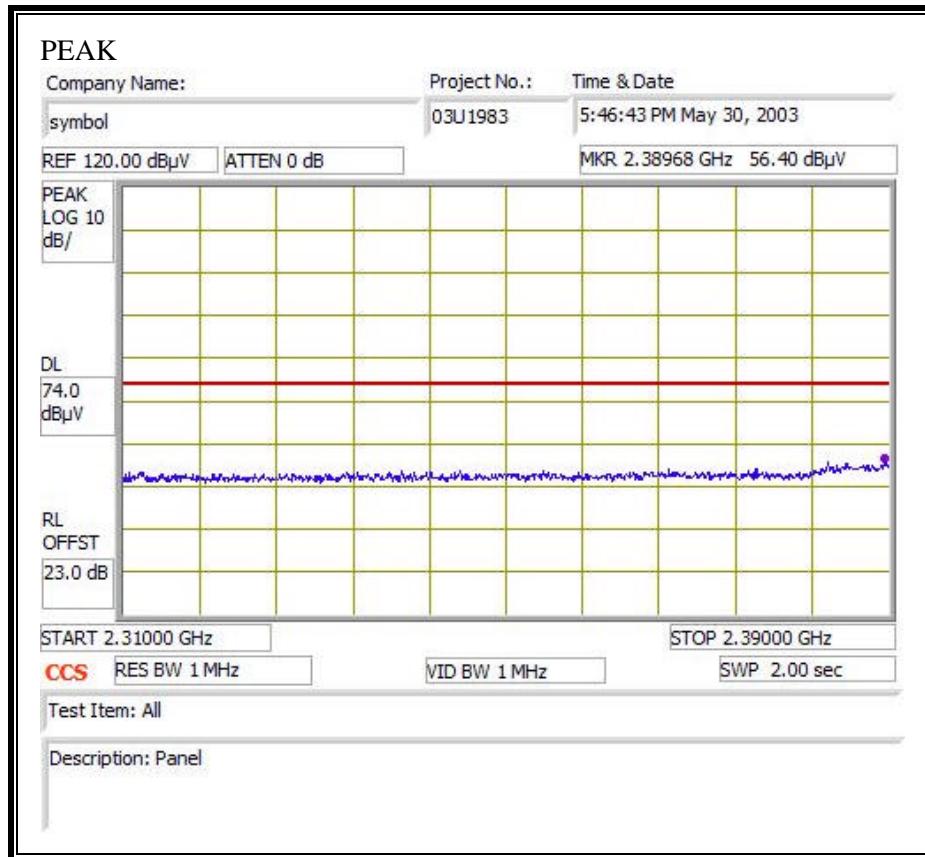
SETUP PHOTOS

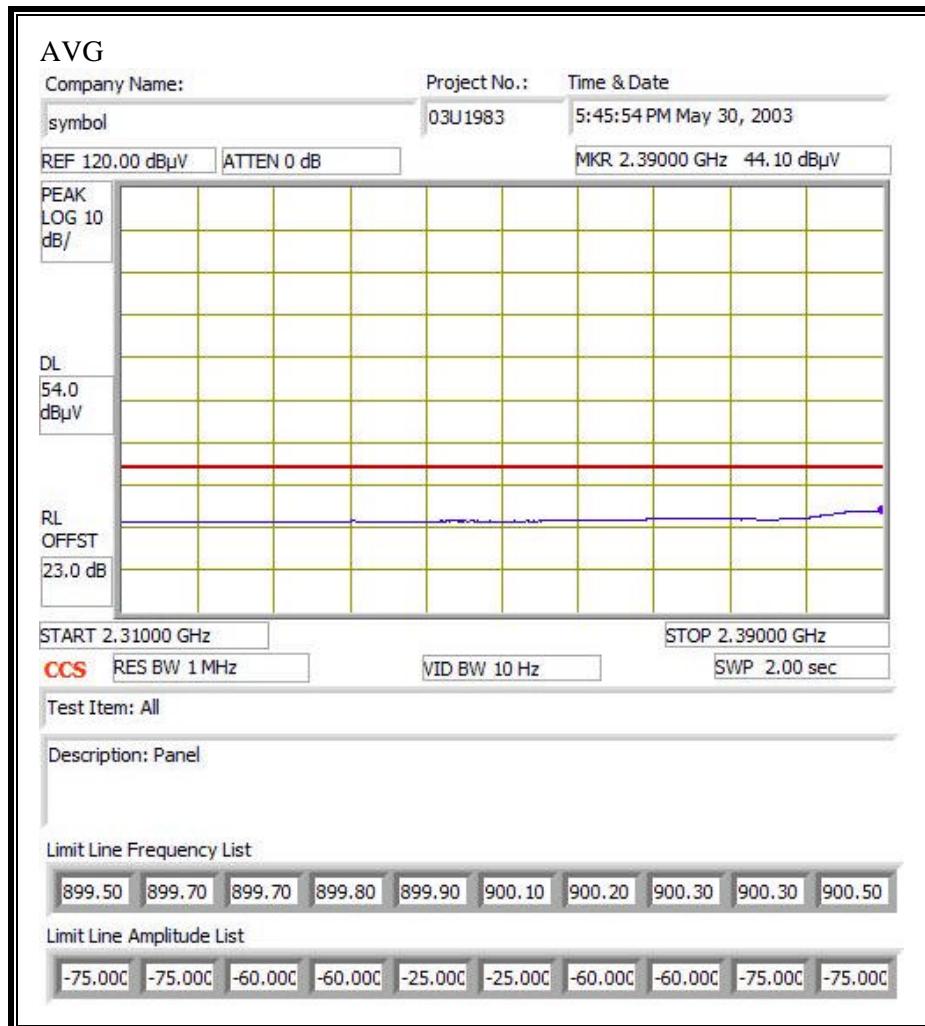


RADIATED BACK PHOTO

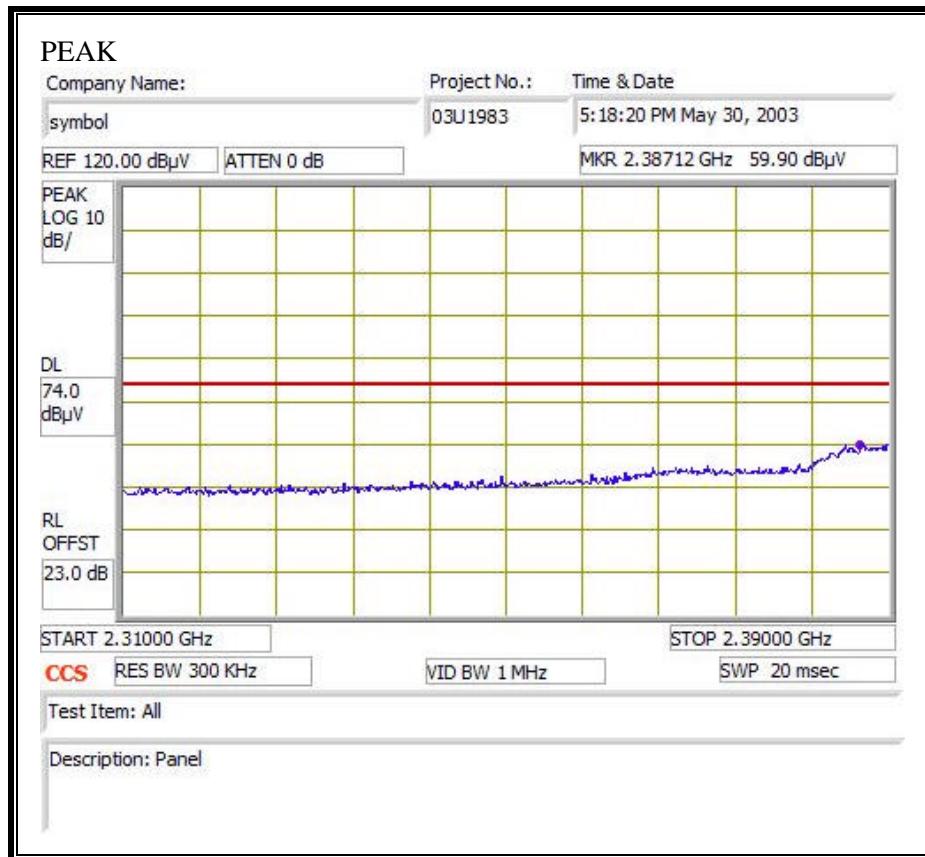


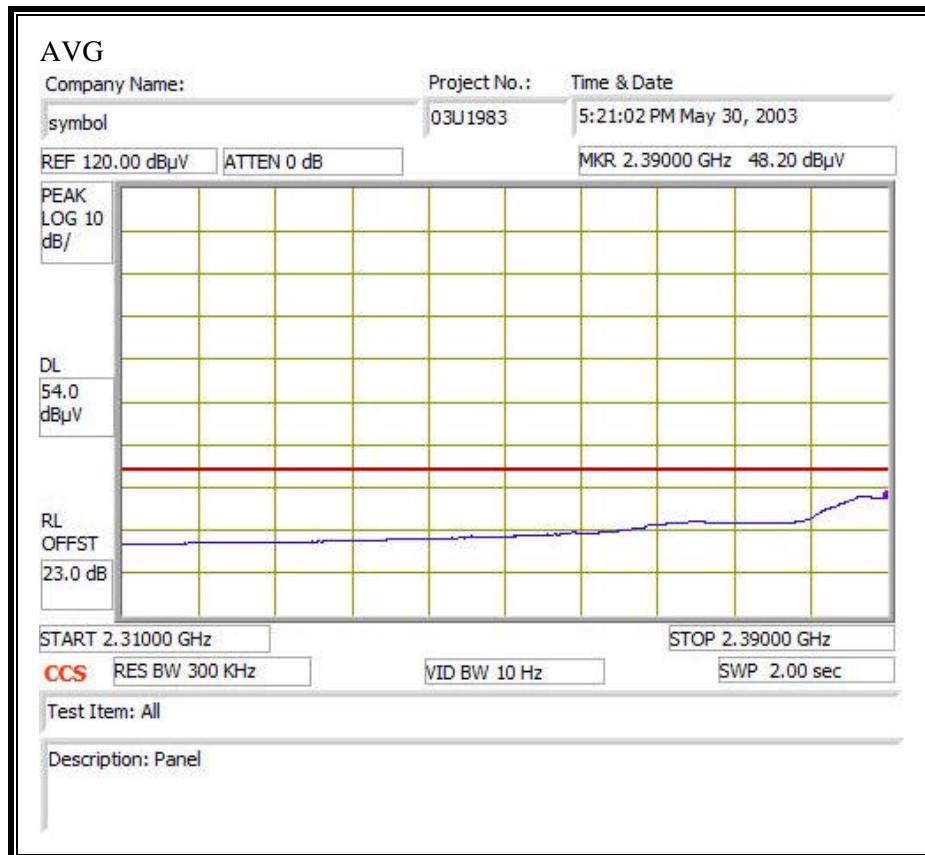
ADJACENT RESTRICTED BAND (LOW CHANNEL, HORIZONTAL)



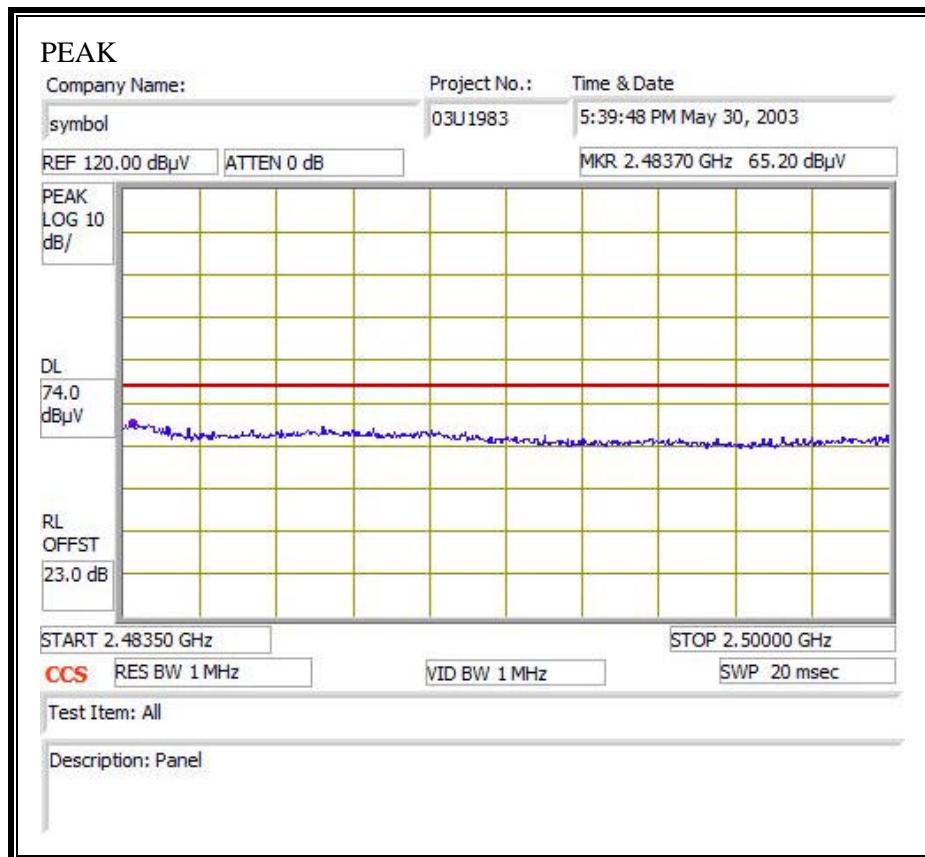


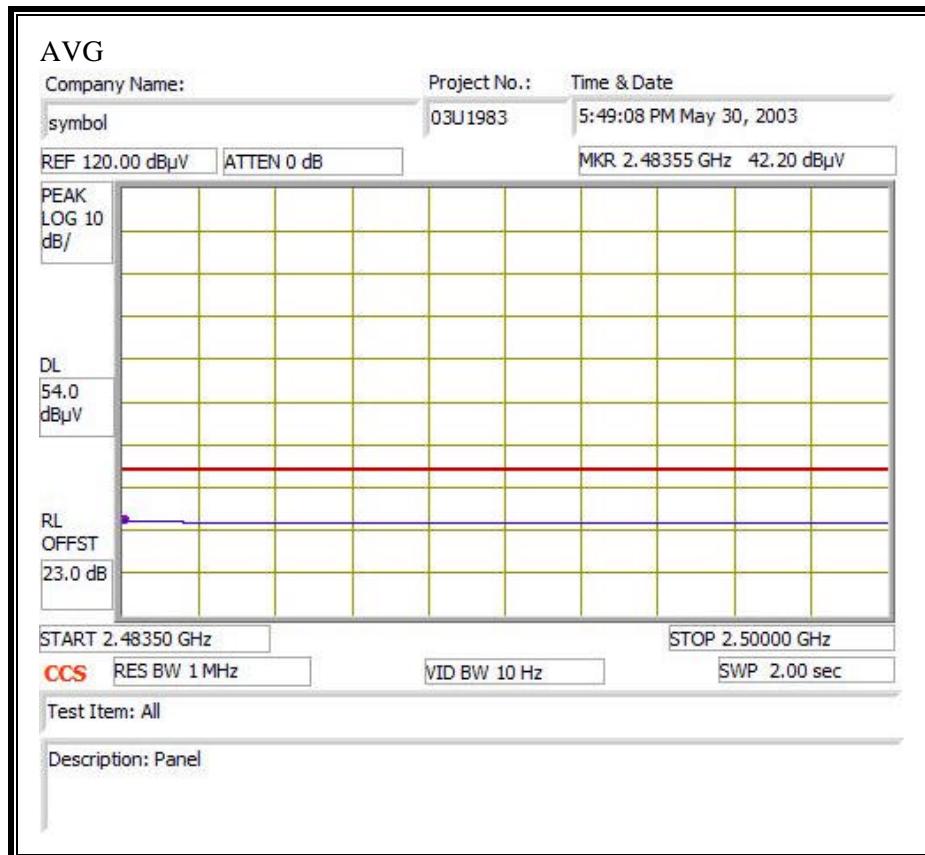
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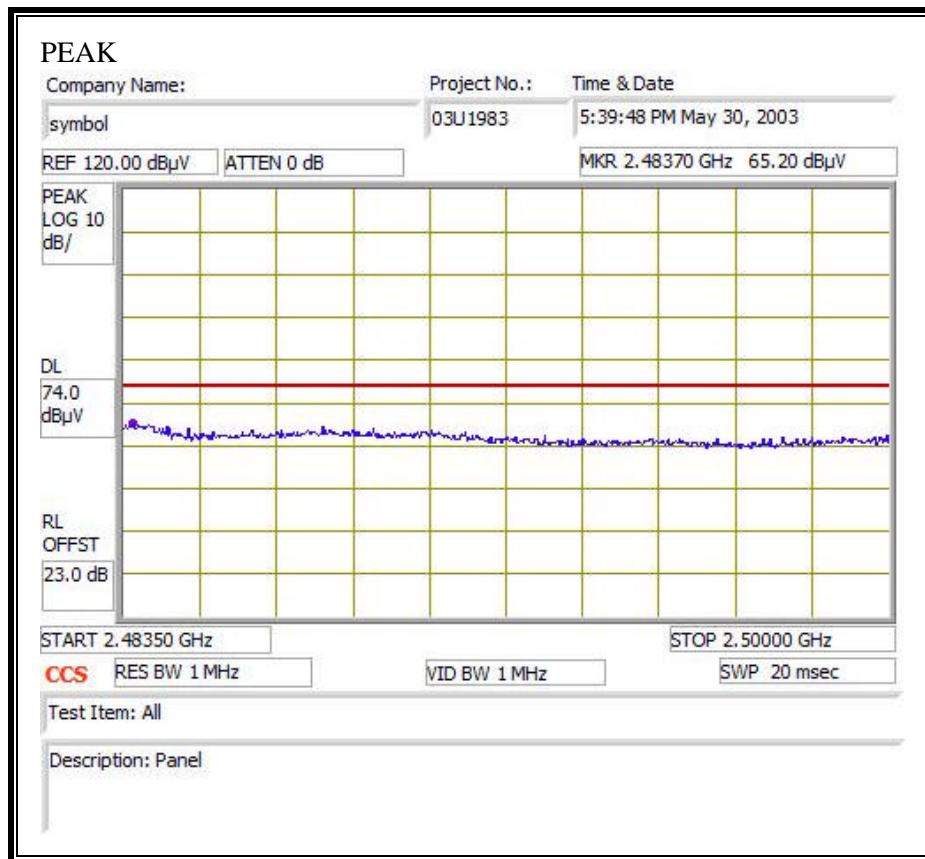


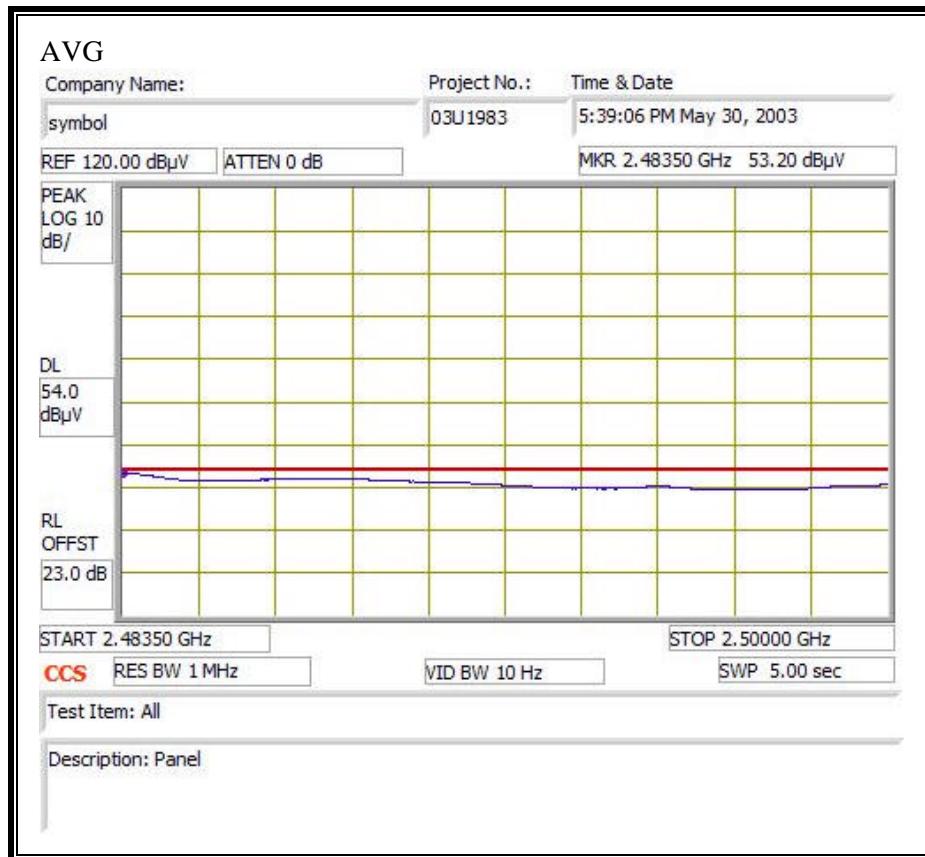
ADJACENT RESTRICTED BAND (HIGH CHANNEL, HORIZONTAL)





ADJACENT RESTRICTED BAND (HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS

06/05/03 High Frequency Measurement Compliance Certification Services, Morgan Hill Open Field Site																																
<p>Test Engr: Yan Zheng Project #: 03U1983 Company: Symbol EUT Descrip.: 802.11b EUT M/N: LA4121 Test Target: Mode Oper: Transmitt</p> <p>Test Equipment:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">EMCO Horn 1-18GHz</td> <td style="width: 25%;">Pre-amplifier 1-26GHz</td> <td style="width: 25%;">Spectrum Analyzer</td> <td style="width: 25%;">Horn > 18GHz</td> </tr> <tr> <td>T73; S/N: 6717 @1m</td> <td>T86 Miteq 924341</td> <td>HP 8566B Analyzer</td> <td>T117; ARA 18-26GHz; S/N:1013</td> </tr> </table> <p>Hi Frequency Cables —</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"><input type="checkbox"/> (2 ft)</td> <td style="width: 25%;"><input checked="" type="checkbox"/> (2 ~ 3 ft)</td> <td style="width: 25%;"><input type="checkbox"/> (4 ~ 6 ft)</td> <td style="width: 25%;"><input checked="" type="checkbox"/> (12 ft)</td> </tr> </table> <p>Peak Measurements: 1 MHz Resolution Bandwidth 1MHz Video Bandwidth</p> <p>Average Measurements: 1 MHz Resolution Bandwidth 10Hz Video Bandwidth</p>																		EMCO Horn 1-18GHz	Pre-amplifier 1-26GHz	Spectrum Analyzer	Horn > 18GHz	T73; S/N: 6717 @1m	T86 Miteq 924341	HP 8566B Analyzer	T117; ARA 18-26GHz; S/N:1013	<input type="checkbox"/> (2 ft)	<input checked="" type="checkbox"/> (2 ~ 3 ft)	<input type="checkbox"/> (4 ~ 6 ft)	<input checked="" type="checkbox"/> (12 ft)			
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Channel 11 (2462MHz)																																
4.924	9.8	51.0	38.3	34.0	4.5	-45.7	0.0	1.0	44.7	32.0	74.0	54.0	-29.3	-22.0	H																	
4.924	9.8	57.9	43.0	34.0	4.5	-45.7	0.0	1.0	51.6	36.7	74.0	54.0	-22.4	-17.3	V																	
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4.874	9.8	52.0	38.9	33.9	4.4	-45.6	0.0	1.0	45.7	32.6	74.0	54.0	-28.3	-21.4	H																	
4.874	9.8	55.5	42.2	33.9	4.4	-45.6	0.0	1.0	49.2	35.9	74.0	54.0	-24.8	-18.1	V																	
								1.0																								
Channel 1 (2412MHz)																																
4.824	9.8	59.1	44.9	33.9	4.4	-45.6	0.0	1.0	52.8	38.6	74.0	54.0	-21.2	-15.4	H																	
4.824	9.8	57.2	43.6	33.9	4.4	-45.6	0.0	1.0	50.9	37.3	74.0	54.0	-23.1	-16.7	V																	
								1.0																								
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">f Measurement Frequency</td> <td style="width: 33%;">Amp Preamp Gain</td> <td style="width: 33%;">Avg Lim Average Field Strength Limit</td> </tr> <tr> <td>Dist Distance to Antenna</td> <td>D Corr Distance Correct to 3 meters</td> <td>Pk Lim Peak Field Strength Limit</td> </tr> <tr> <td>Read Analyzer Reading</td> <td>Avg Average Field Strength @ 3 m</td> <td>Avg Mar Margin vs. Average Limit</td> </tr> <tr> <td>AF Antenna Factor</td> <td>Peak Calculated Peak Field Strength</td> <td>Pk Mar Margin vs. Peak Limit</td> </tr> <tr> <td>CL Cable Loss</td> <td>HPF High Pass Filter</td> <td></td> </tr> </table>																		f Measurement Frequency	Amp Preamp Gain	Avg Lim Average Field Strength Limit	Dist Distance to Antenna	D Corr Distance Correct to 3 meters	Pk Lim Peak Field Strength Limit	Read Analyzer Reading	Avg Average Field Strength @ 3 m	Avg Mar Margin vs. Average Limit	AF Antenna Factor	Peak Calculated Peak Field Strength	Pk Mar Margin vs. Peak Limit	CL Cable Loss	HPF High Pass Filter	
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CL Cable Loss	HPF High Pass Filter																															

Note: no other harmonics or spurious detected above 1 GHz.

7.5. PATCH ANTENNA RESULTS

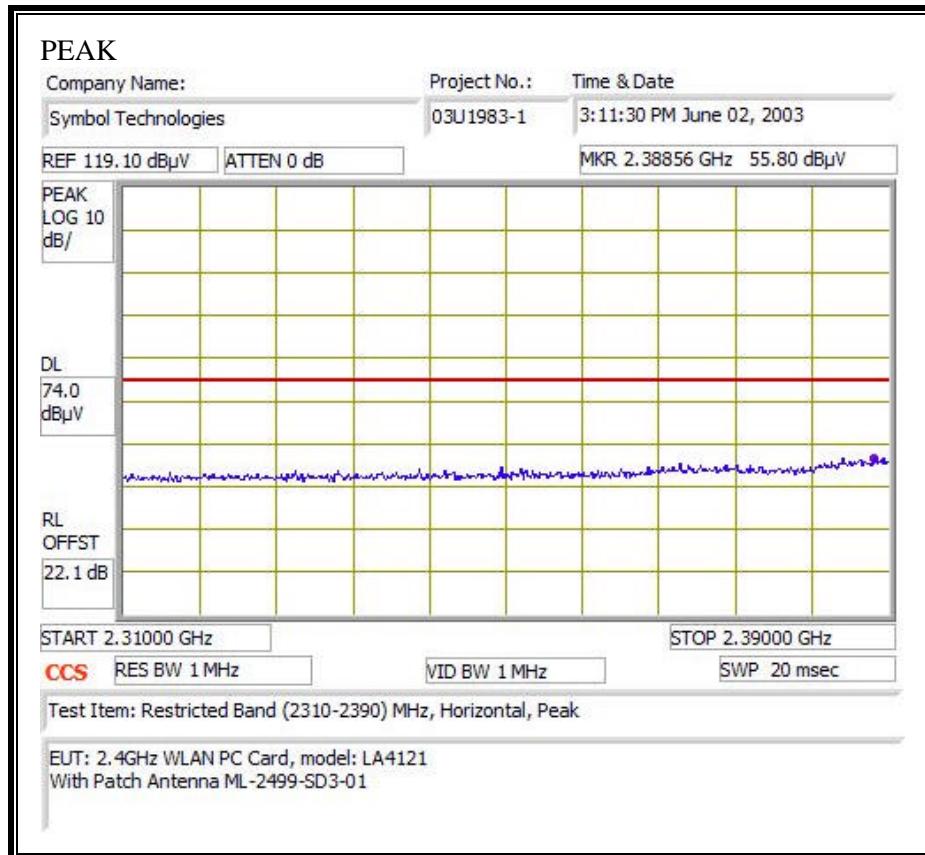
SETUP PHOTOS

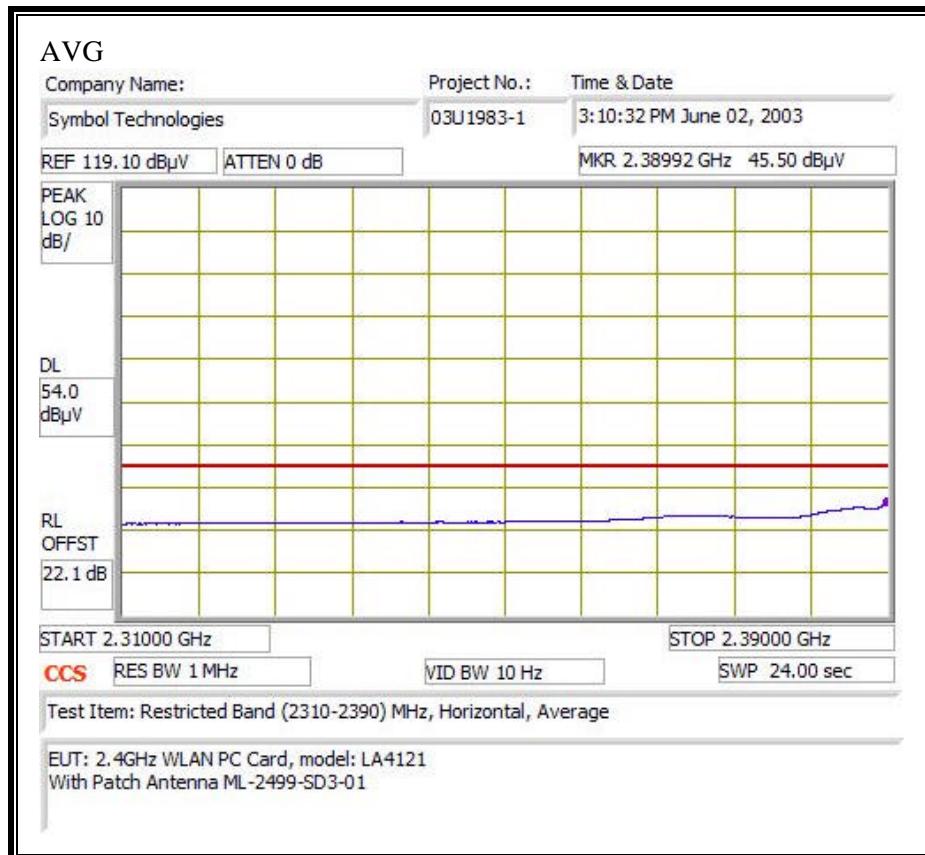


RADIATED BACK PHOTO

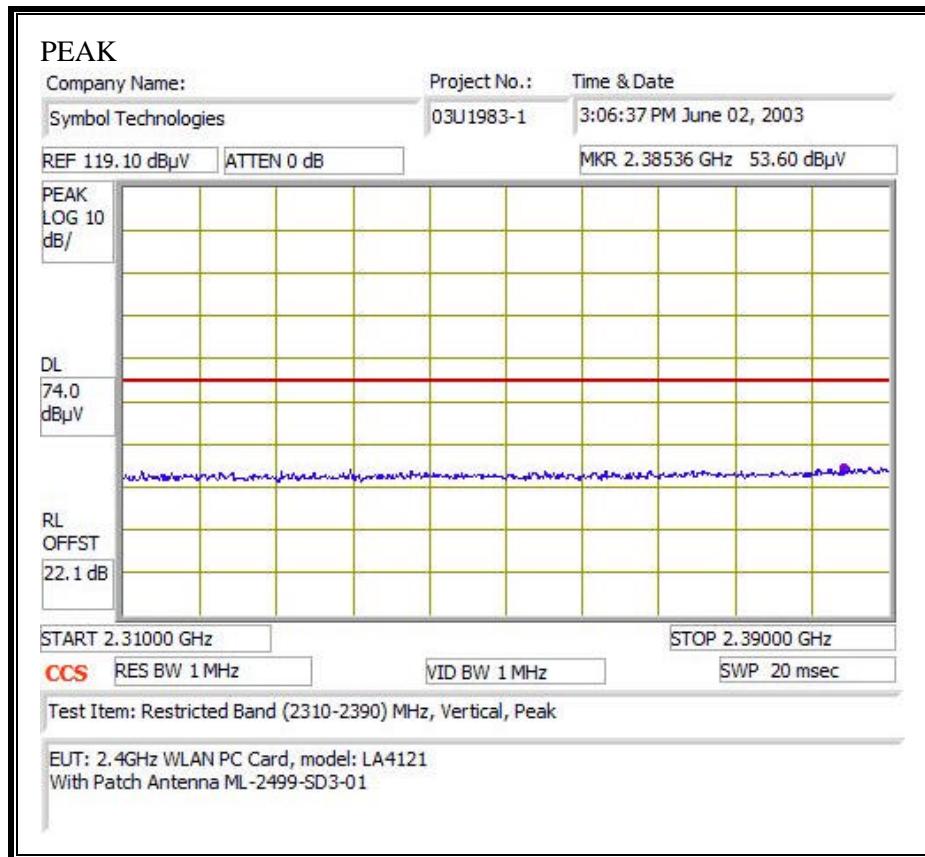


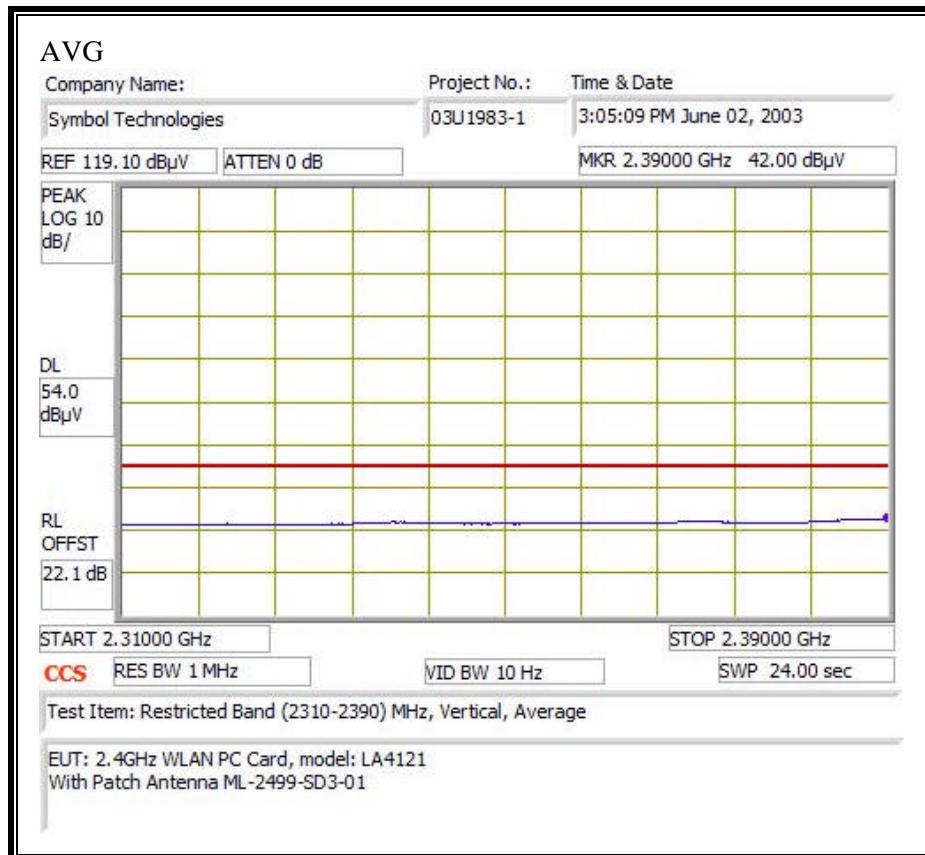
ADJACENT RESTRICTED BAND (LOW CHANNEL, HORIZONTAL)



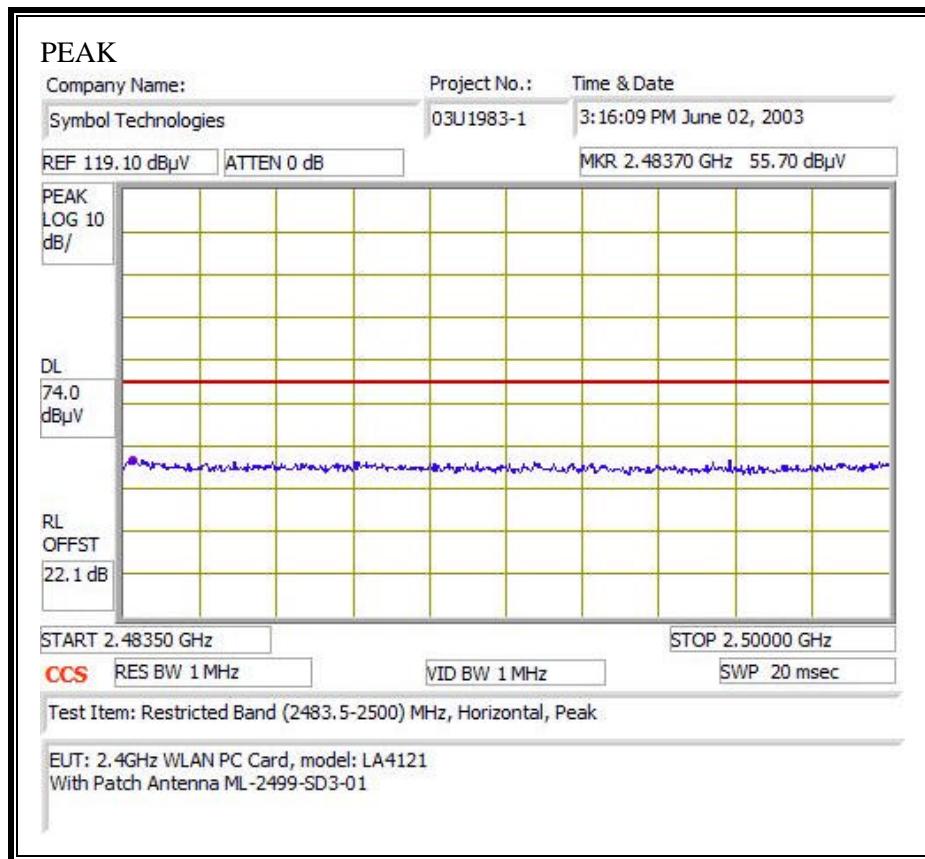


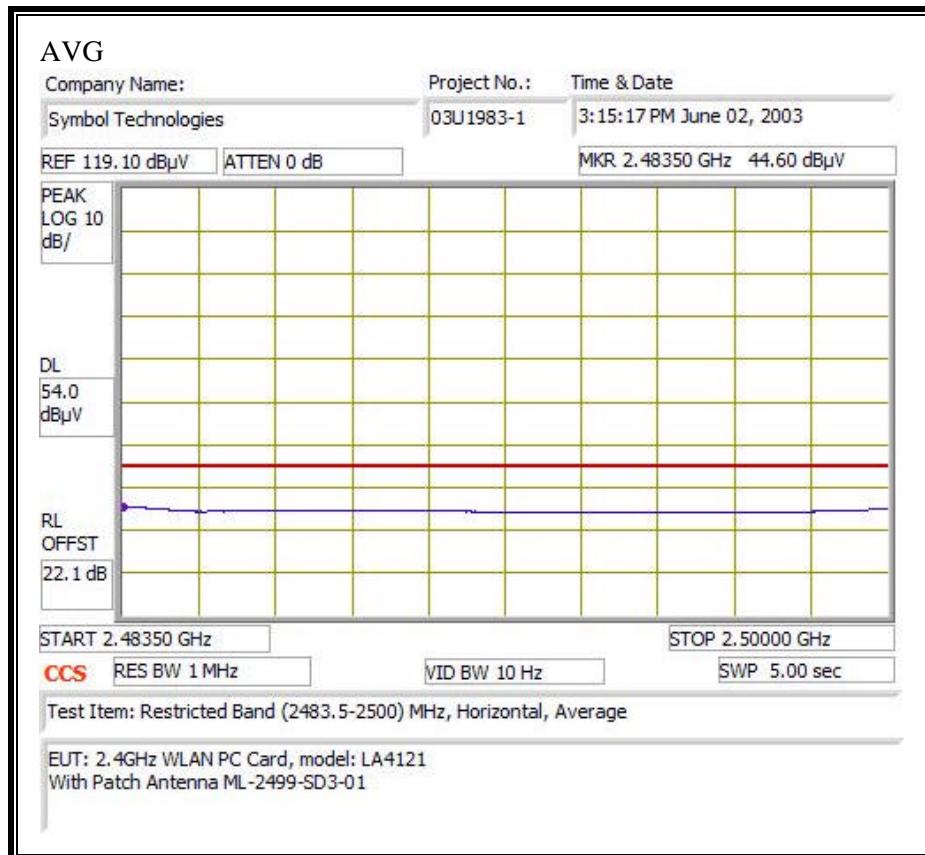
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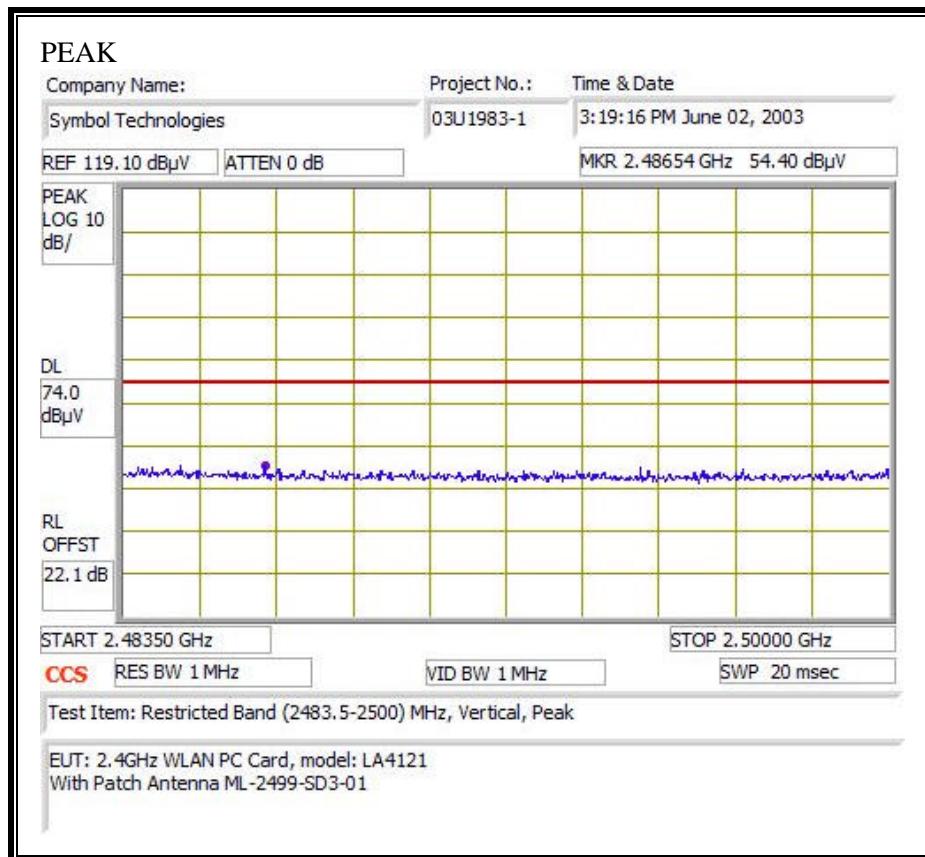


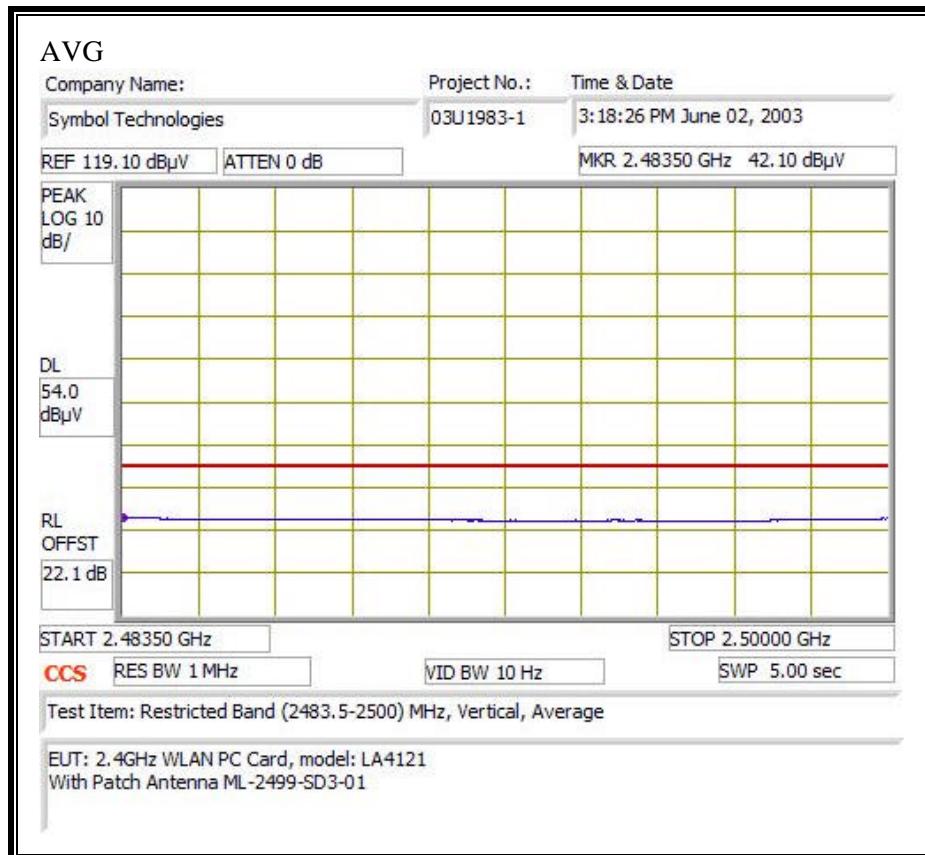
ADJACENT RESTRICTED BAND (HIGH CHANNEL, HORIZONTAL)





ADJACENT RESTRICTED BAND (HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS

06/05/03 High Frequency Measurement Compliance Certification Services, Morgan Hill Open Field Site																									
<p>Test Engr: Frank Ibrahim Project #: 03U1983 Company: Symbol EUT Descrip.: 802.11b EUT M/N: LA4121 Test Target: FCC 15.247 Mode Oper: Transmit</p>																									
<p>Test Equipment:</p> <table border="1"><tr><td>EMCO Horn 1-18GHz</td><td>Pre-amplifier 1-26GHz</td><td>Spectrum Analyzer</td><td>Horn > 18GHz</td></tr><tr><td>T60; S/N: 2238 @3m</td><td>T87 Miteq 924342</td><td>HP 8566B Analyzer</td><td>T117; ARA 18-26GHz; S/N:1013</td></tr></table>																		EMCO Horn 1-18GHz	Pre-amplifier 1-26GHz	Spectrum Analyzer	Horn > 18GHz	T60; S/N: 2238 @3m	T87 Miteq 924342	HP 8566B Analyzer	T117; ARA 18-26GHz; S/N:1013
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Channel 1 (2412MHz)																									
4.924	9.8	54.6	42.9	33.2	4.5	-44.8	0.0	1.0	48.4	36.7	74.0	54.0	-25.6	-17.3		V									
4.924	9.8	50.7	38.8	33.2	4.5	-44.8	0.0	1.0	44.5	32.6	74.0	54.0	-29.5	-21.4		H									
Channel 6 (2437MHz)																									
4.874	9.8	52.7	41.0	33.1	4.4	-44.7	0.0	1.0	46.5	34.8	74.0	54.0	-27.5	-19.2		V									
4.874	9.8	50.0	38.4	33.1	4.4	-44.7	0.0	1.0	43.8	32.2	74.0	54.0	-30.2	-21.8		H									
Channel 11 (2462MHz)																									
4.824	9.8	51.5	40.0	33.1	4.4	-44.7	0.0	1.0	45.3	33.8	74.0	54.0	-28.7	-20.2		V									
4.824	9.8	47.3	35.3	33.1	4.4	-44.7	0.0	1.0	41.1	29.1	74.0	54.0	-32.9	-24.9		H									
<p>f Measurement Frequency Dist Distance to Antenna Read Analyzer Reading AF Antenna Factor CL Cable Loss</p> <p>Amp Preamp Gain D Corr Distance Correct to 3 meters Avg Average Field Strength @ 3 m Peak Calculated Peak Field Strength HPF High Pass Filter</p> <p>Avg Lim Average Field Strength Limit Pk Lim Peak Field Strength Limit Avg Mar Margin vs. Average Limit Pk Mar Margin vs. Peak Limit</p>																									

Note: no other harmonics or spurious detected above 1 GHz.

7.6. DIPOLE ANTENNA RESULTS

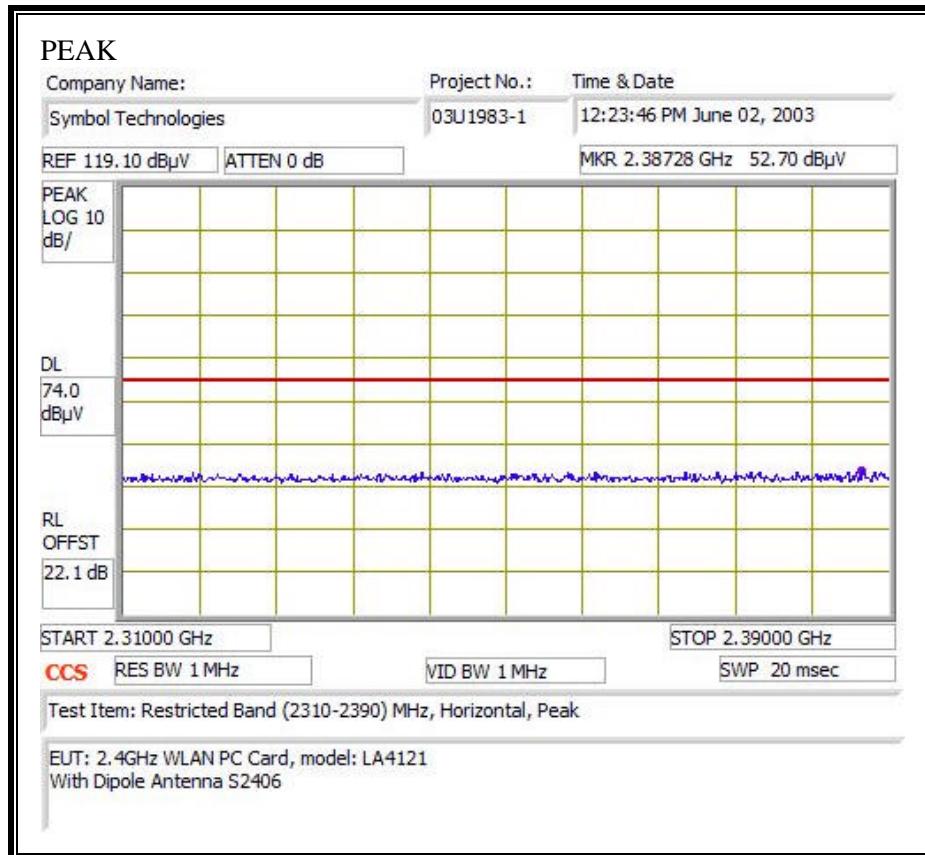
SETUP PHOTOS

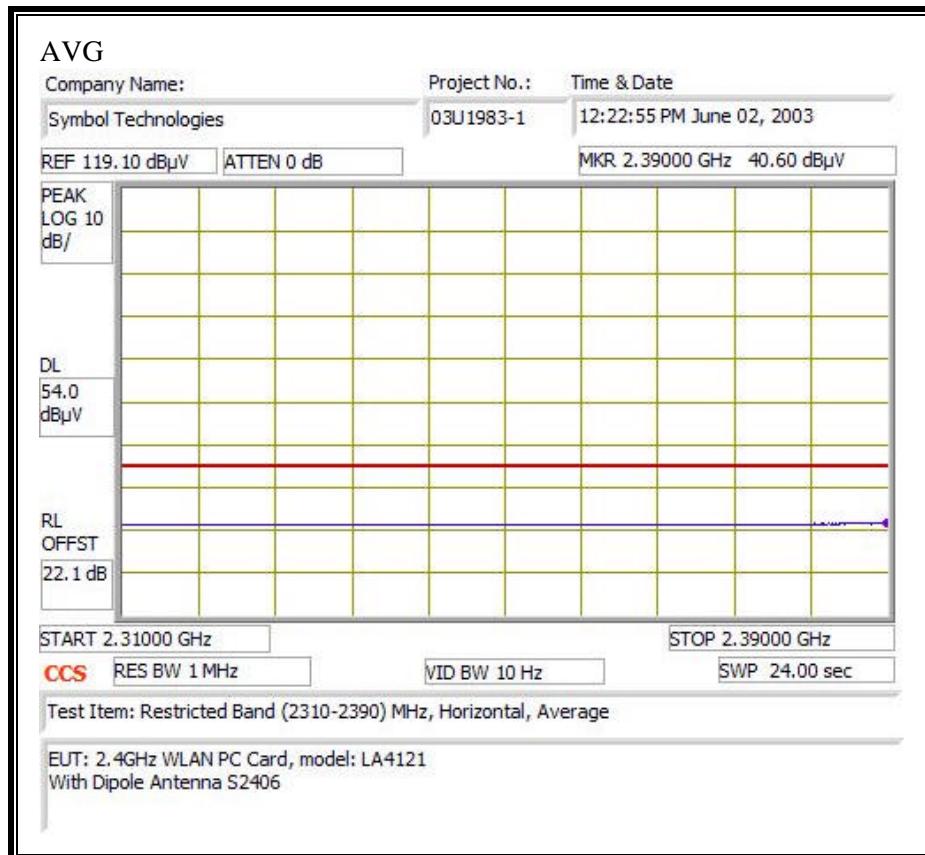


RADIATED BACK PHOTO

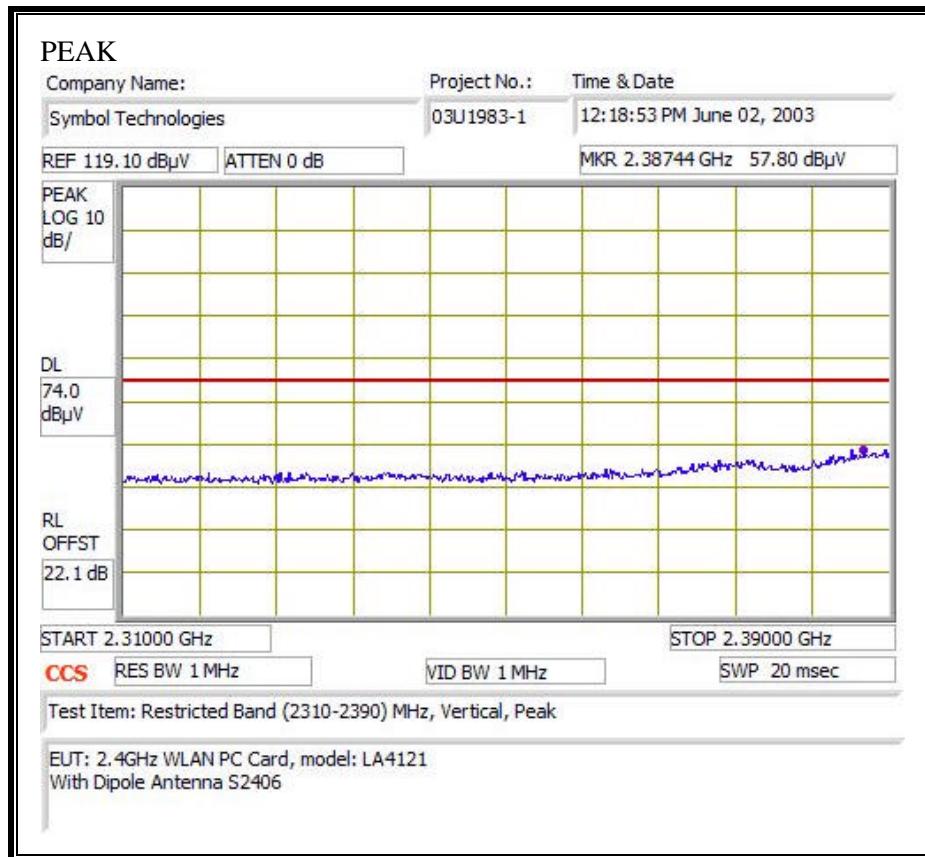


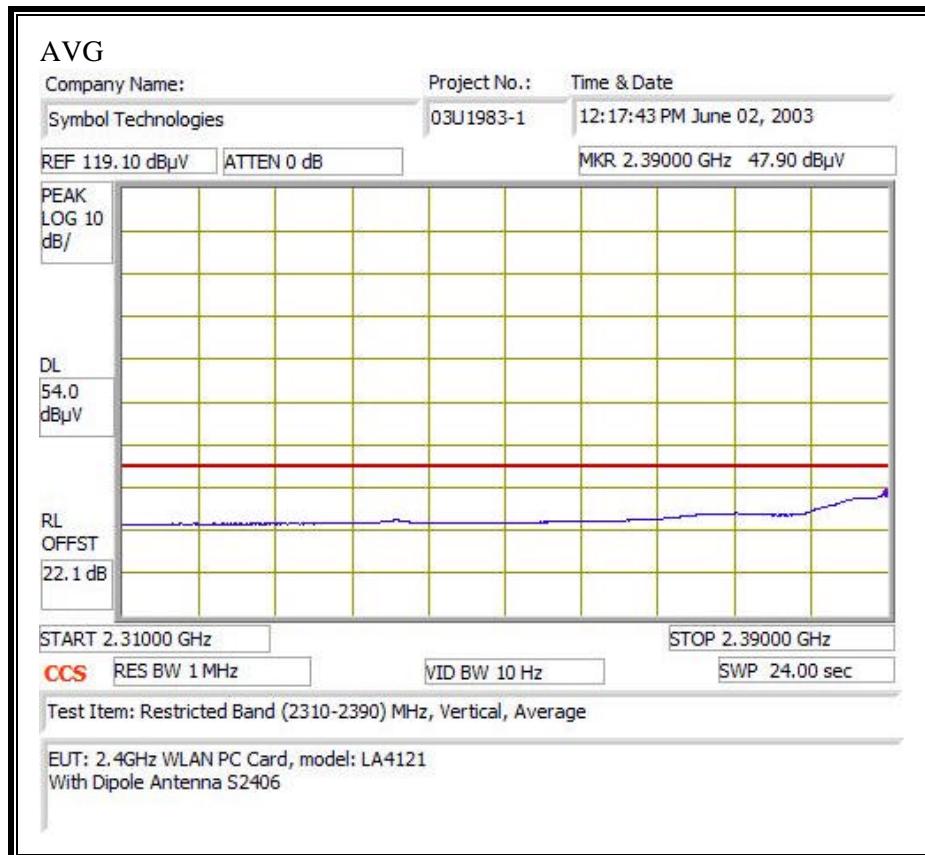
ADJACENT RESTRICTED BAND (LOW CHANNEL, HORIZONTAL)



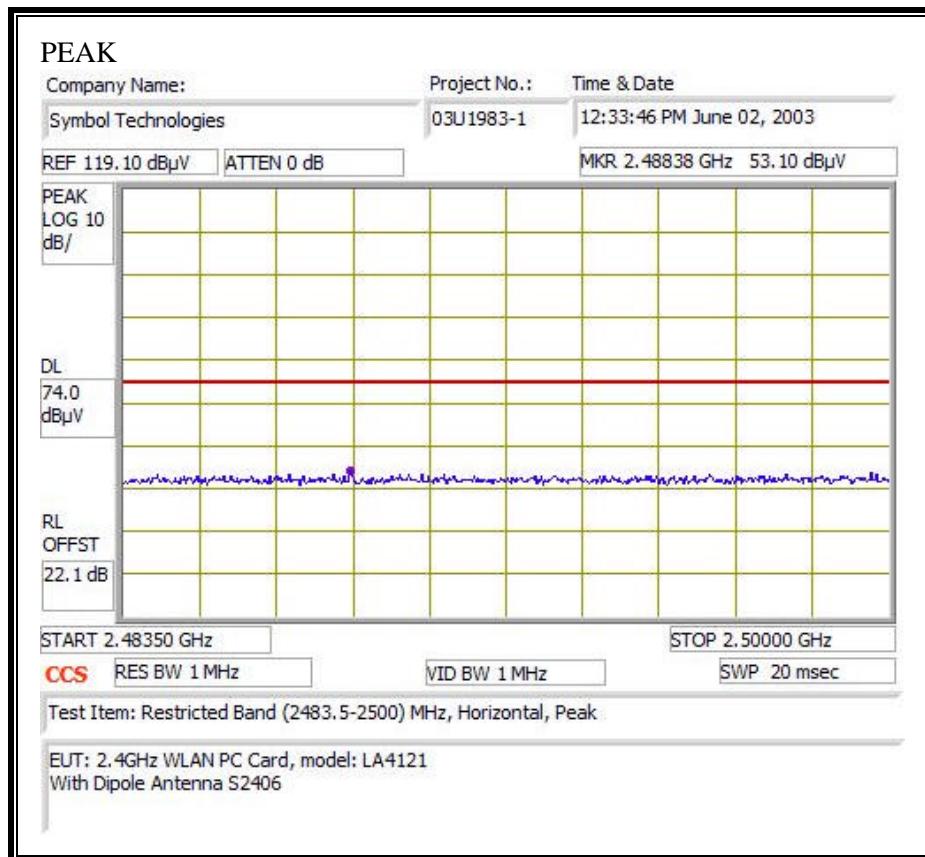


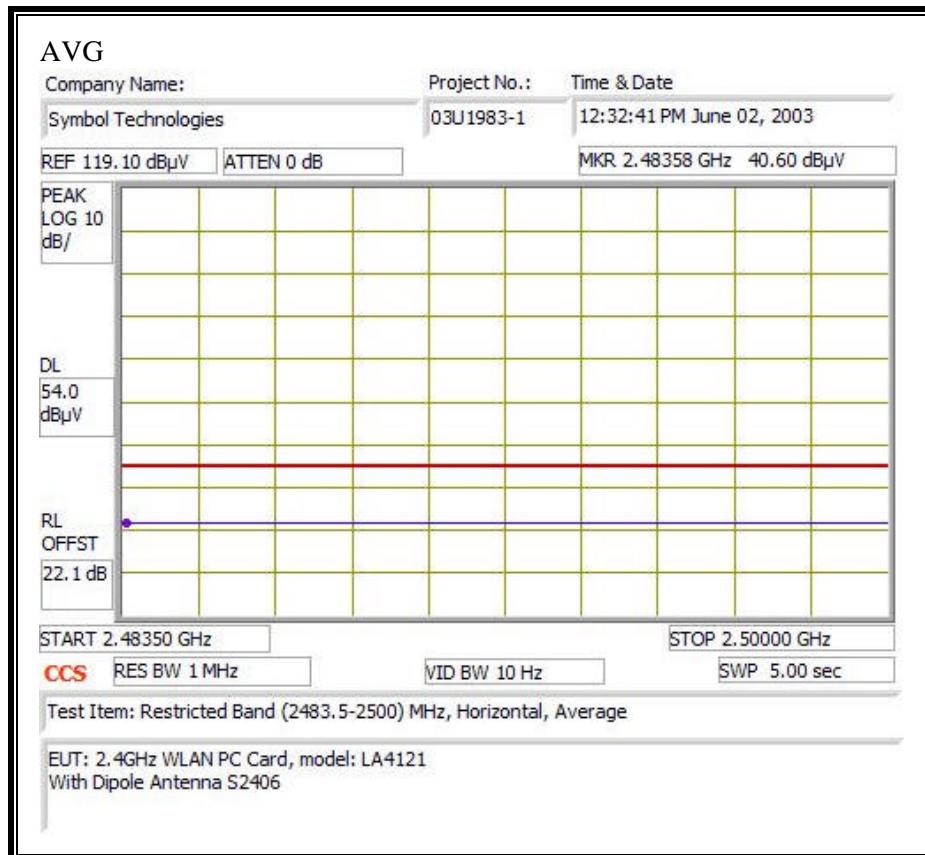
ADJACENT RESTRICTED BAND (LOW CHANNEL, VERTICAL)



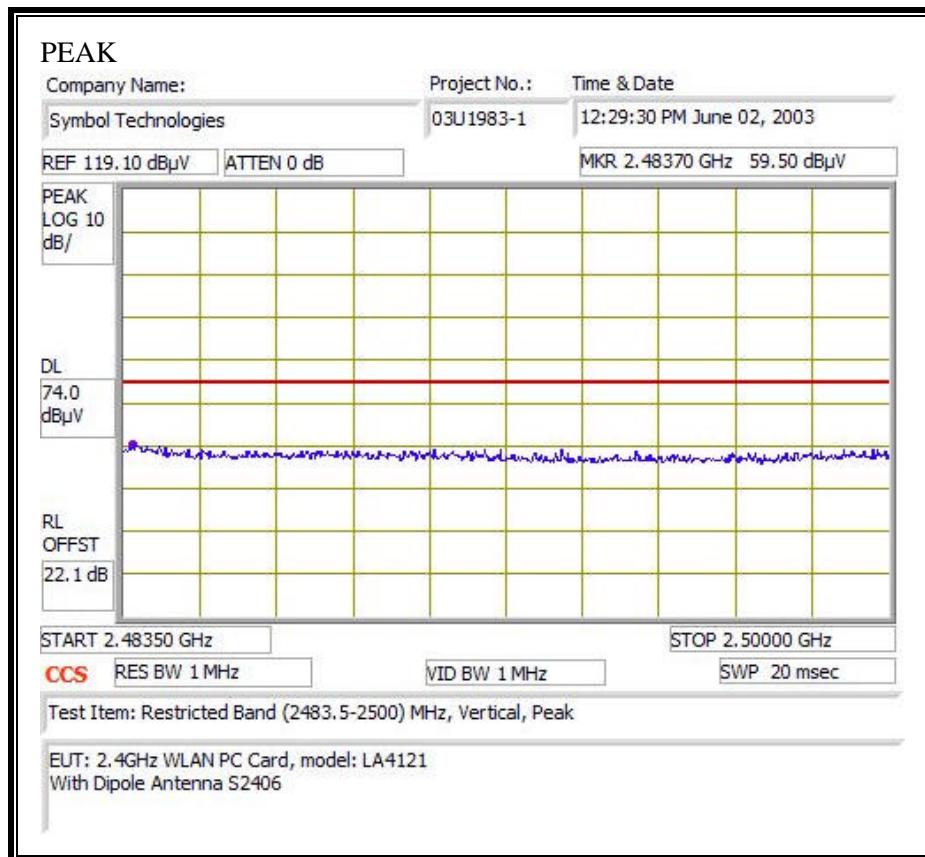


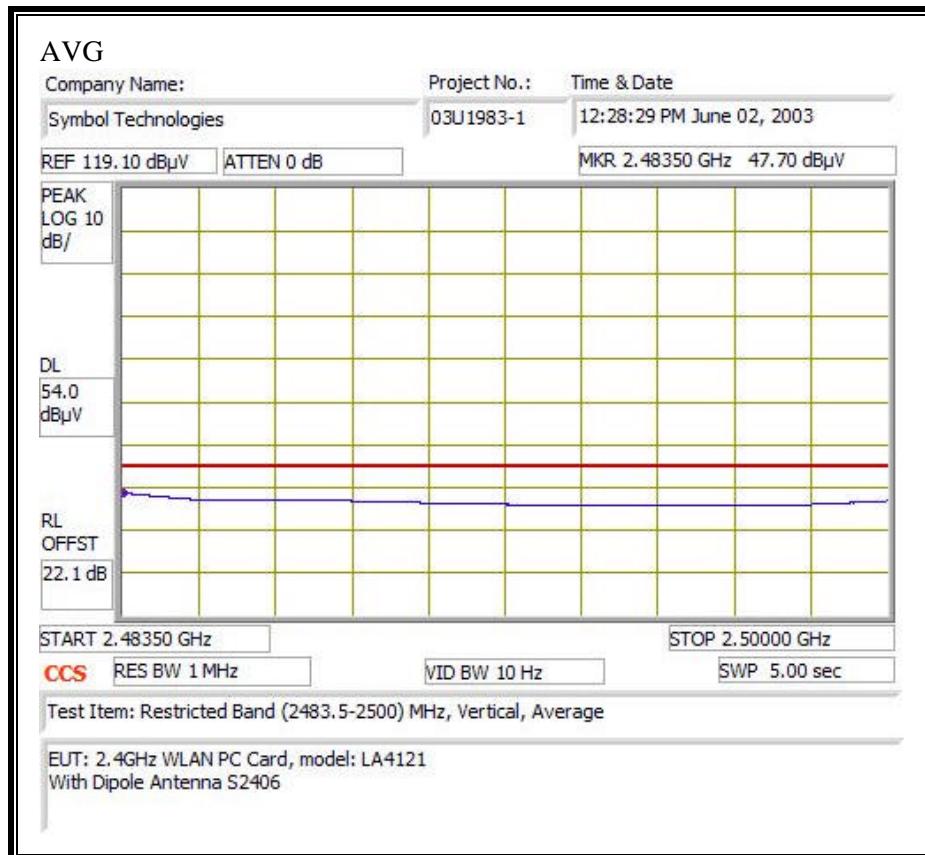
ADJACENT RESTRICTED BAND (HIGH CHANNEL, HORIZONTAL)





ADJACENT RESTRICTED BAND (HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS

06/05/03 High Frequency Measurement Compliance Certification Services, Morgan Hill Open Field Site																									
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4.924	9.8	54.8	42.8	33.2	4.5	-44.8	0.0	1.0	48.6	36.6	74.0	54.0	-25.4	-17.4	V										
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7.7. WORST-CASE EMISSIONS 30 TO 1000 MHz

RESULTS

 COMPLIANCE Certification Services		<p>Project #: 03u1983-1 Report #: 030605B1 Date & Time: 06/05/03 5:15 PM Test Engr: Chin pang</p>									
FCC, VCCI, CISPR, CE, AUSTEL, NZ UL, CSA, TUV, BSMI, DHHS, NVLAP											
561F MONTEREY ROAD, SAN JOSE, CA 95037-9001 PHONE: (408) 463-0885 FAX: (408) 463-0888											
<p>Company: Symbol EUT Description: LA4121 with Yagi Antenna Test Configuration : EUT/Laptop/Yagi Antenna Type of Test: FCC Class B Mode of Operation: Tx</p>											
<< Main Sheet											
Freq. (MHz)	Reading (dBuV)	AF (dB)	Closs (dB)	Pre-amp (dB)	Level (dBuV/m)	Limit FCC B	Margin (dB)	Pol (H/V)	Az (Deg)	Height (Meter)	Mark (P/Q/A)
573.70	46.80	18.56	6.05	28.90	42.50	46.00	-3.50	3mV	0.00	1.50	P
395.20	50.20	15.29	4.92	28.50	41.91	46.00	-4.09	3mH	0.00	1.50	P
485.60	47.30	17.45	5.53	28.79	41.49	46.00	-4.51	3mV	0.00	1.20	P
573.70	45.50	18.56	6.05	28.90	41.20	46.00	-4.80	3mH	0.00	2.00	P
801.60	42.40	19.75	7.32	28.51	40.96	46.00	-5.04	3mV	0.00	1.00	P
503.30	45.70	17.82	5.65	28.83	40.34	46.00	-5.66	3mV	0.00	1.00	P
6 Worst Data											

END OF REPORT