Title: Conducted Test Setup

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Appendix B: Emission Test Results

Testing Laboratory: Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134, USA

Radiated Spurious Emissions

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

Using Vasona, configure the spectrum analyzer as shown below (be sure to enter all losses between the transmitter output and the spectrum analyzer). Place the radio in continuous transmit mode.

Span:	1GHz – 18 GHz
Reference Level:	80 dBuV
Attenuation:	10 dB
Sweep Time:	Coupled
Resolution Bandwidth:	1MHz
Video Bandwidth:	1 MHz for peak, 10 Hz for average
Detector:	Peak

Maximize Turntable (find worst case table angle), Maximize Antenna (find worst case height)

Save 2 plots: 1) Average Plot (Vertical and Horizontal), Limit= 54dBuV @3m
2) Peak plot (Vertical and Horizontal), Limit = 74dBuV @3m

Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands.

This report represents the worst case data for all supported operating modes and antennas. There are no measurable emissions above 18 GHz.

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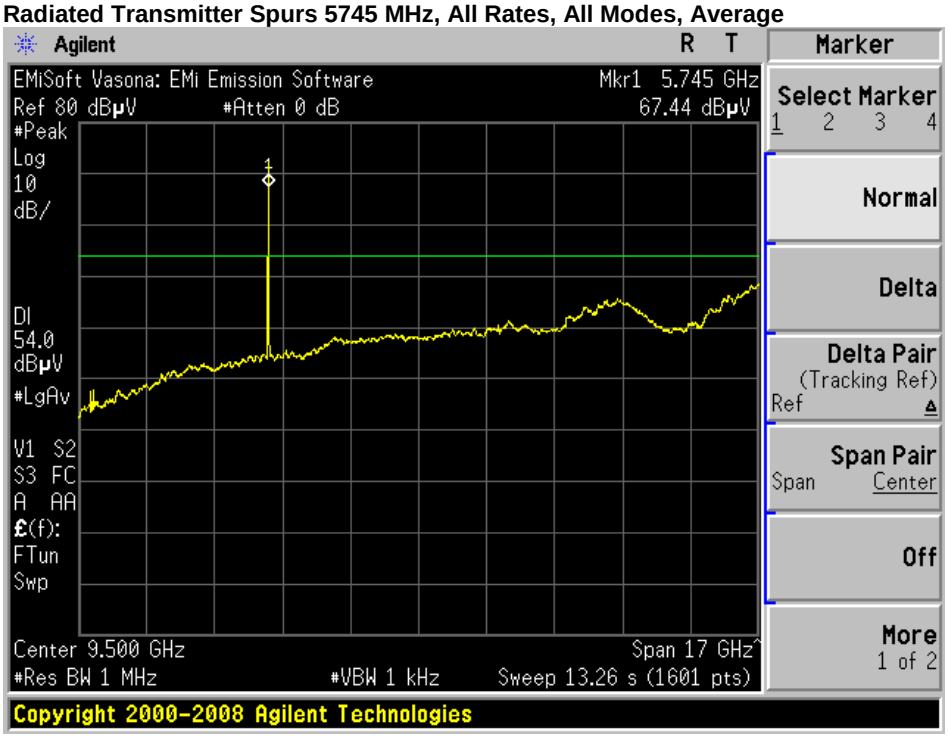
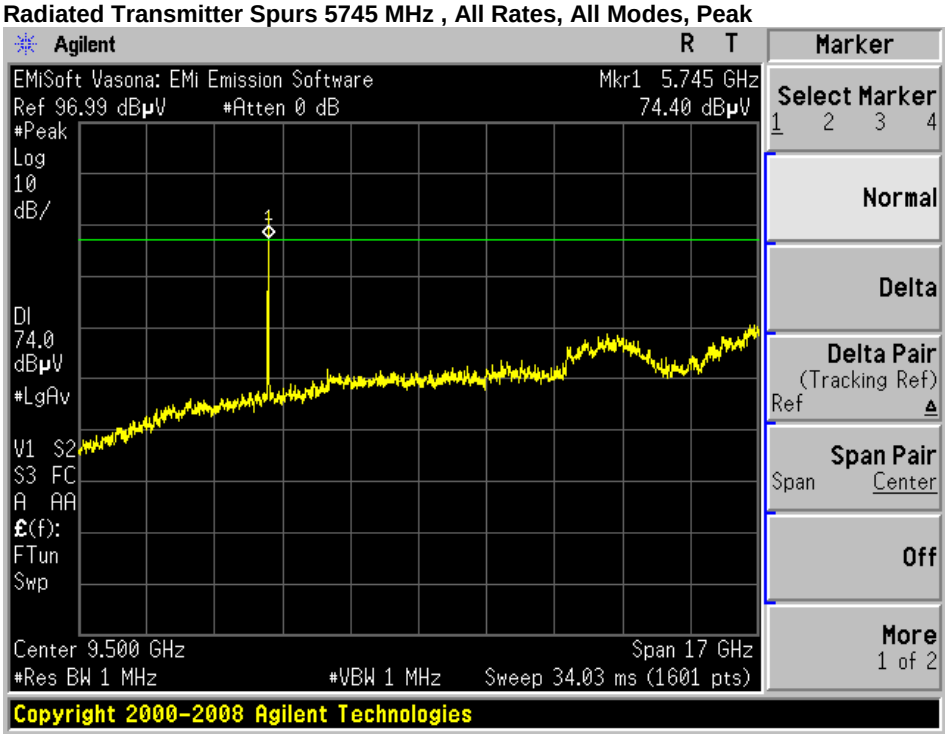
Transmitter Radiated Spurious Emissions

Radiated Transmitter Spurs 5745 MHz, All Rates, All Modes, Average



Radiated Transmitter Spurs 5745 MHz , All Rates, All Modes, Peak



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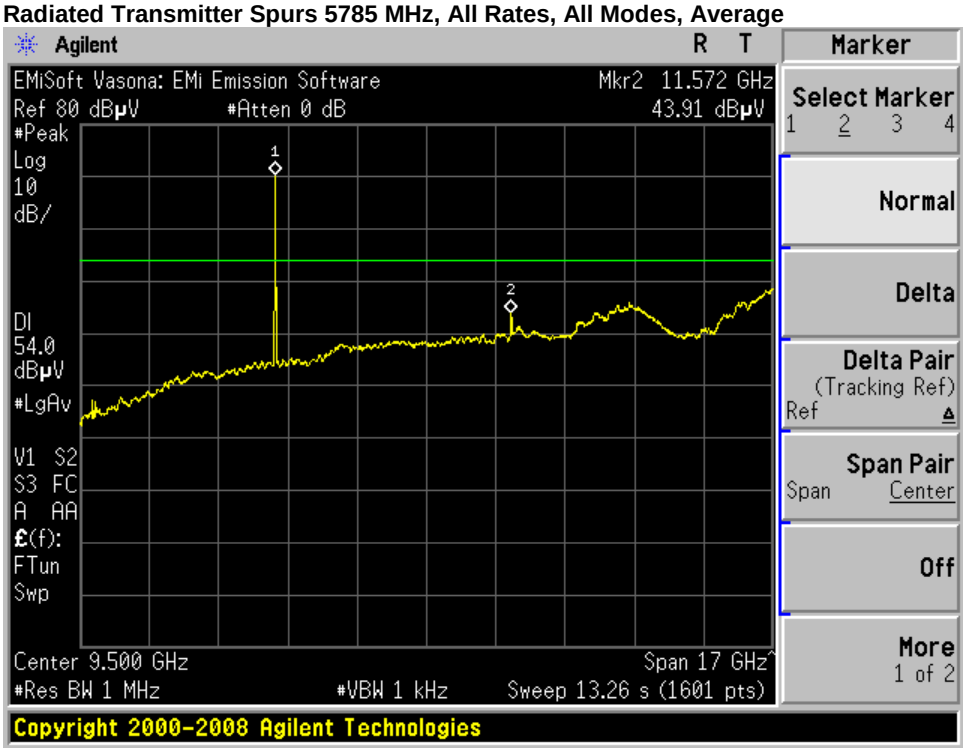
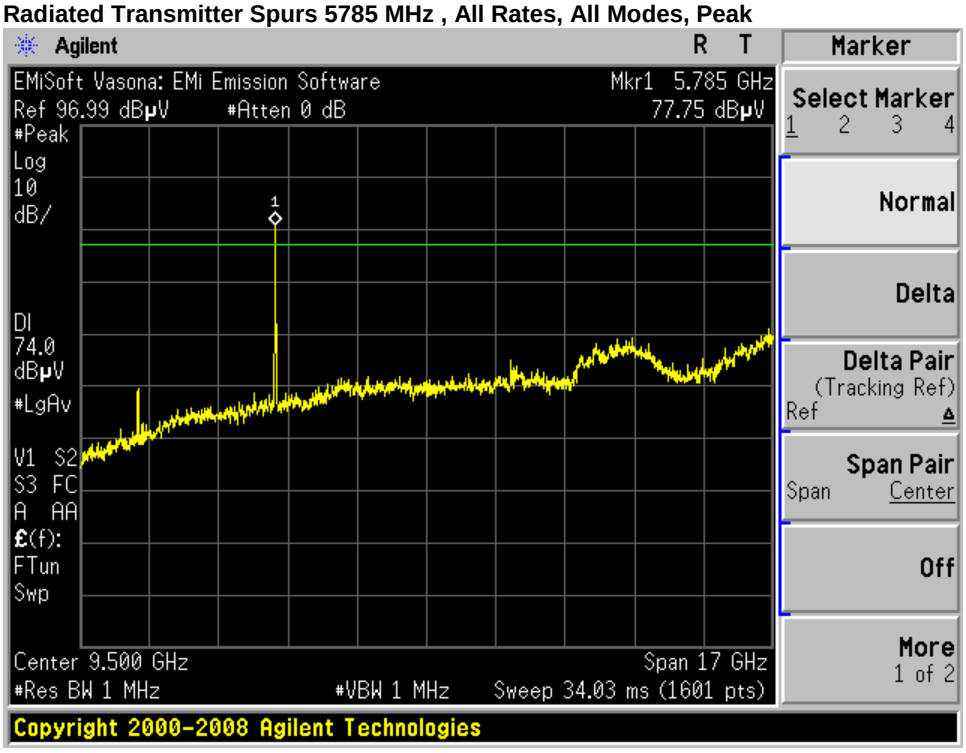
Radiated Transmitter Spurs 5785 MHz, All Rates, All Modes, Average



Radiated Transmitter Spurs 5785 MHz , All Rates, All Modes, Peak



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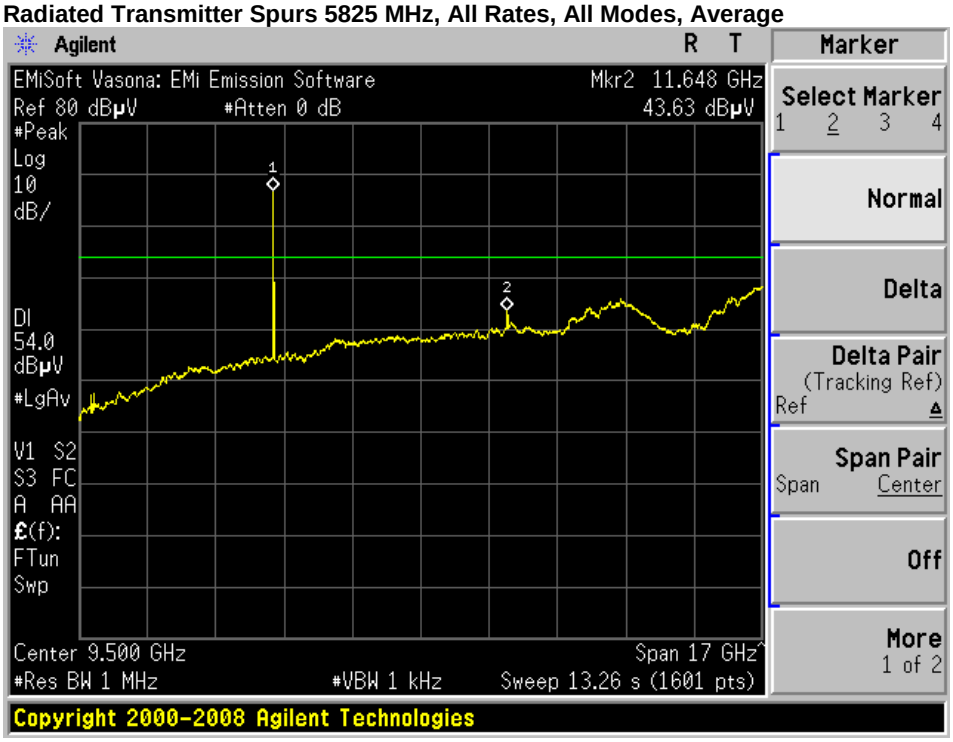
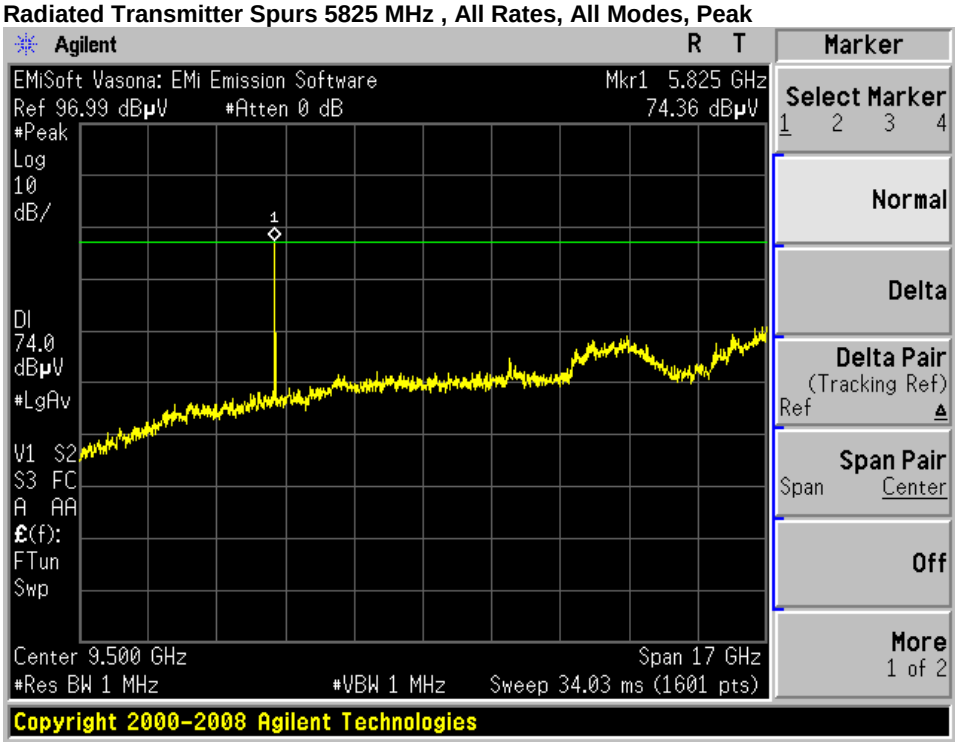
Radiated Transmitter Spurs 5825 MHz, All Rates, All Modes, Average



Radiated Transmitter Spurs 5825 MHz , All Rates, All Modes, Peak



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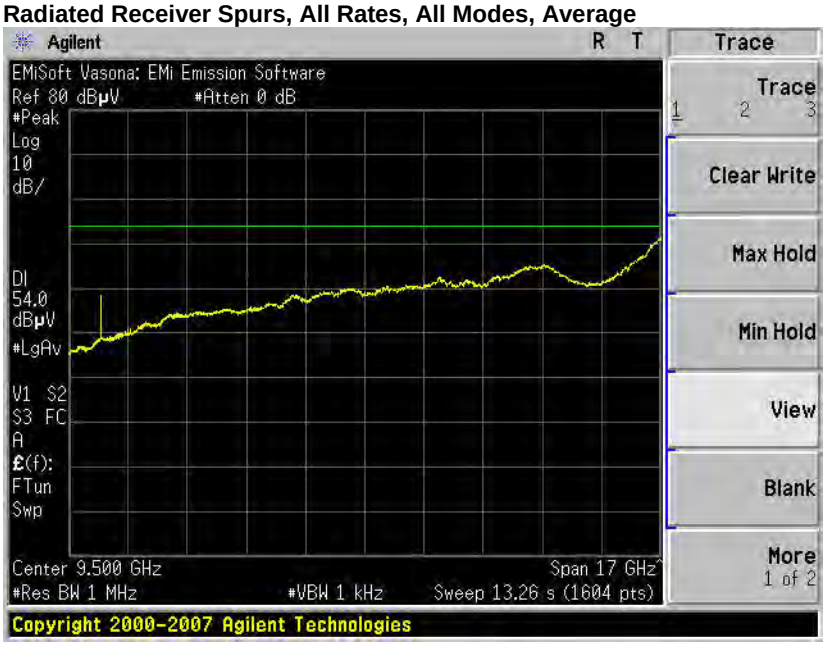
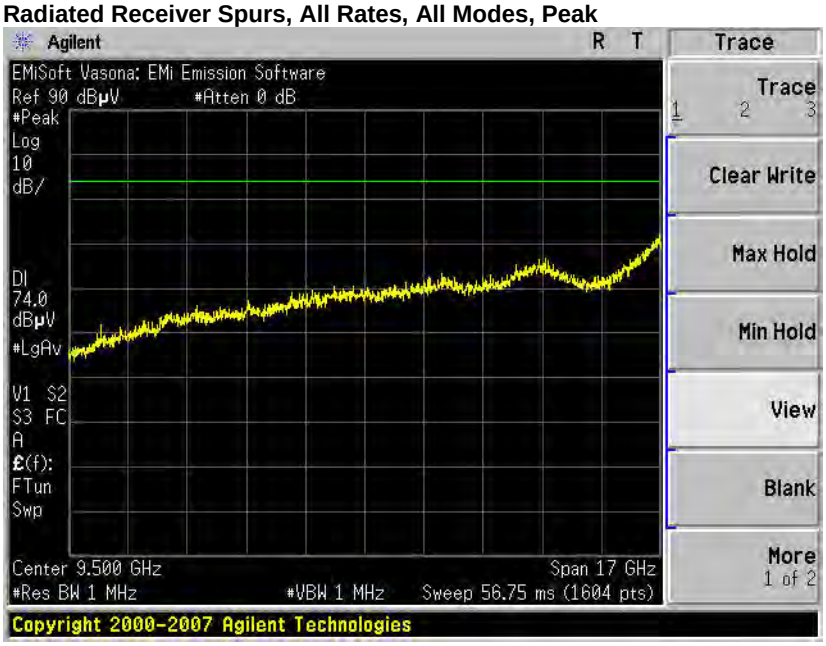
Receiver Radiated Spurious Emissions

Radiated Receiver Spurs, All Rates, All Modes, Average



Radiated Receiver Spurs, All Rates, All Modes, Peak



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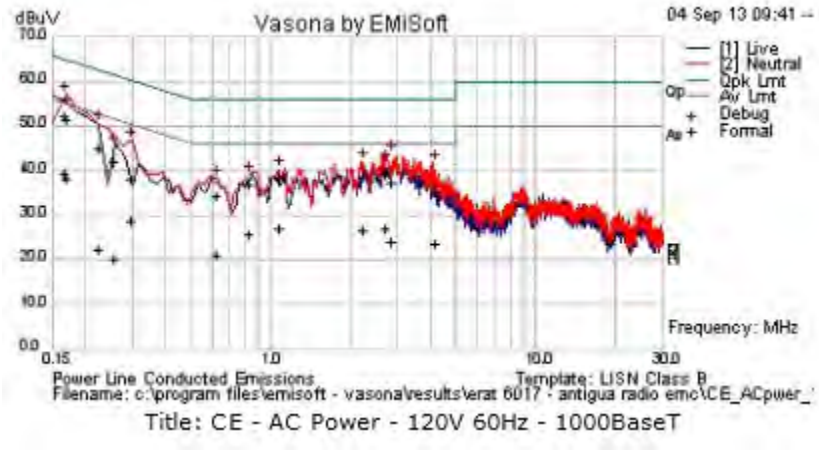
Conducted Emissions



Test Result Table

Frequency MHz	Raw dBuV	Cable Loss	Factors dB	Level dBuV	Measurement Type	Line	Limit dBuV	Margin dB	Pass /Fail	Comments
0.168	29.9	21.2	0.2	51.3	Qp	L	65.1	-13.7	Pass	
0.256	21.3	20.7	0.1	42.1	Qp	L	61.6	-19.5	Pass	
0.222	23.9	20.9	0.1	44.9	Qp	L	62.7	-17.9	Pass	
2.695	19	20	0	39	Qp	L	56	-17	Pass	
0.826	16.7	20	0	36.7	Qp	L	56	-19.3	Pass	
0.618	14.2	20	0	34.3	Qp	L	56	-21.7	Pass	
0.293	17.7	20.6	0	38.3	Qp	N	60.4	-22.1	Pass	
1.07	18.4	20	0	38.4	Qp	N	56	-17.6	Pass	
2.834	17.2	20	0	37.2	Qp	N	56	-18.8	Pass	
0.166	30.8	21.3	0.2	52.3	Qp	N	65.2	-12.9	Pass	
2.221	18.6	20	0	38.7	Qp	N	56	-17.3	Pass	
4.111	15.3	20	0	35.4	Qp	N	56	-20.6	Pass	
0.168	17	21.2	0.2	38.4	Av	L	55.1	-16.7	Pass	
0.256	-0.4	20.7	0.1	20.4	Av	L	51.6	-31.2	Pass	
0.222	1.4	20.9	0.1	22.4	Av	L	52.7	-30.3	Pass	
2.695	7	20	0	27.1	Av	L	46	-18.9	Pass	
0.826	5.5	20	0	25.6	Av	L	46	-20.4	Pass	
0.618	0.9	20	0	21	Av	L	46	-25	Pass	
0.293	8	20.6	0	28.6	Av	N	50.4	-21.8	Pass	
1.07	7	20	0	27	Av	N	46	-19	Pass	
2.834	4	20	0	24	Av	N	46	-22	Pass	
0.166	18.2	21.3	0.2	39.6	Av	N	55.2	-15.5	Pass	
2.221	6.5	20	0	26.5	Av	N	46	-19.5	Pass	
4.111	3.5	20	0	23.6	Av	N	46	-22.4	Pass	

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Test Setup for Conducted Measurements

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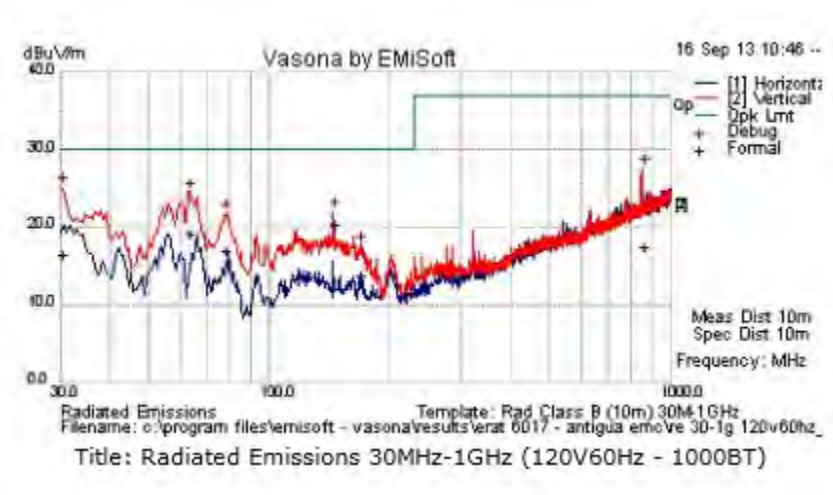
Radiated emissions



Test Result Table

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail	Comments
30.449	22.5	0.7	-6.8	16.3	Qp	V	149	290	30	-13.7	Pass	
63.207	38.4	1	-20.2	19.2	Qp	V	197	87	30	-10.8	Pass	
144.011	34	1.4	-14.9	20.5	Qp	V	119	255	30	-9.5	Pass	
77.91	35.5	1.1	-19.8	16.8	Qp	V	119	19	30	-13.2	Pass	
853.084	20.6	3.3	-6.4	17.5	Qp	V	274	6	37	-19.5	Pass	
168.944	27.9	1.5	-15.7	13.7	Qp	V	115	34	30	-16.3	Pass	

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