Emissions Test Data

Client:	Wavespan Corporation	Date:	7/12/1999	Test Engr:	Chris Byleckie
Product:	Stratum 100 ODU	File:	T33772	Proj. Engr:	Mark Briggs
Objective	Class II Permissive Change	Site:	SVOATS #1	Contact:	Roger Eline
Spec:	FCC 15.E	Distance:	3 m	Approved:	

Ambient Conditions
Temperature: 32 °C
Humidity: 42 % RH

except in 15.205 bands, peak limit is 68.2 dBuV/m
based on -27dBm/MHz EIRP

Run #1: Radiated emissions, 1 - 40 GHz

Stratum 100 ODU B

Frequency	Level	Pol	FCC	FCC	Detector	Azimuth	Height	Comments
MHz	dBuV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
10650.00	47.9	v	54.0	-6.1	Avg	0	1.0	
10650.00	47.9	h	54.0	-6.1	Avg	0	1.3	
17346.00	61.8	v	68.2	-6.4	Pk	0	1.0	
1800.00	61.4	v	68.2	-6.8	Pk	0	1.0	
17346.00	60.0	h	68.2	-8.2	Pk	0	1.3	
1800.00	58.6	h	68.2	-9.6	Pk	0	1.3	
11564.00	44.2	v	54.0	-9.8	Avg	0	1.0	
11564.00	43.2	h	54.0	-10.8	Avg	0	1.3	
6244.00	55.7	h	68.2	-12.5	Pk	0	1.3	
6280.00	54.9	h	68.2	-13.3	Pk	0	1.3	
6280.00	53.8	v	68.2	-14.4	Pk	0	1.0	
10650.00	59.5	h	74.0	-14.5	Pk	0	1.3	
10650.00	59.1	v	74.0	-14.9	Pk	0	1.0	
11564.00	56.3	v	74.0	-17.7	Pk	0	1.0	
6244.00	49.2	v	68.2	-19.0	Pk	0	1.0	
11564.00	54.8	h	74.0	-19.2	Pk	0	1.3	

Run #2 Out-Of Band Spurious Emissions Stratum 100 ODU B

The following plots were taken for out of band emissions
Antenna Gain is 28 dBi for 2' dish, 34 dBi for 4' dish, 38 dBi for 6' dish, and 40 dBi for the 8' dish
Below 26 GHz, limit is -27-40 or -67 dbM/MHz
Cable loss between 26 and 31 GHz for the cable to be used with the dish antennas is more than 8 dB,
so the limit here is -27-40+8 or -59 dBm
Cable loss above 31 GHz for the cable to be used with the dish antennas is more than 10 dB,
so the limit here is -27-40+10 or -57 dBm
Frequency Range of Plot

30 MHz - 1GHz	maximum OOB is -74.4 dBm/MHz
1GHz - 2.9 GHz	maximum OOB is -73.4 dBm/MHz
2.9GHz - 6.5 GHz	maximum OOB is -69.0 dBm/MHz
26.5 - 31 GHz	maximum OOB is -66.0 dBm/MHz
31 - 40 GHz	maximum OOB is -57.7 dBm/MHz