

SATELLITE EARTH STATION
 FREQUENCY COORDINATION DATA
 02/15/2011

Company	TELESAT	
Owner Code		
Earth Station Name, State	PHOENIX, AZ	
Latitude (DMS) (NAD83)	33 23 49.2 N	
Longitude (DMS) (NAD83)	112 0 3.6 W	
Ground Elevation AMSL (ft/m)	1136.00 / 346.25	
Antenna Centerline AGL (ft/m)	9.00 / 2.74	
Transmit Antenna Type:	FCC32	Prodelin 1.2 Meter Model 1125
14.0 GHz Gain (dBi) / Diameter (m)	43.2 / 1.2	
3 dB / 15 dB Half Beamwidth	0.25 / 0.50	
Operating Mode	TRANSMIT ONLY	
Modulation	DIGITAL	
Emission / Transmit Band (MHz)	2M02G7W	2M02G7W / 14000.0000 - 14500.0000
Max. Available RF Power (dBW)/4 kHz	-19.60	
(dBW)/MHz	4.40	
Max. EIRP (dBW)/4 kHz	23.60	
(dBW)/MHz	47.60	
Max. Permissible Interference Power		
14.0 GHz, 20% (dBW/4 kHz)	-151.0	
14.0 GHz, 0.0025% (dBW/4 kHz)	-128.0	
Range of Satellite Arc (Geostationary)		
Degrees Longitude	63.0 W / 63.0 W	
Azimuth Range (Min/Max)	115.6 / 115.6	
Corresponding Elevation Angles	25.4 / 25.4	
Radio Climate	A	
Rain Zone	5	
Max. Great Circle Coordination Distance (mi./km)		
14.0 GHz	73.6 / 118.4	
Precipitation Scatter Contour Radius (mi./km)		
14.0 GHz	62.1 / 100.0	

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 Antenna Centerline (ft/m) 9.00 / 2.74 Agl
 Antenna Model Prodelin 1.2 Meter
 Objectives: Transmit -151.0 (dBW /4 kHz) Tx Power -19.6 (dBW/4 kHz)

Azimuth (Deg)	Horizon Elevation Angle (Deg)	Antenna Disc. Angle (Deg)	Antenna Gain (dBi)	14.0 GHz Coordination Distance (km)
0	0.00	112.96	-10.00	102.2
5	0.00	108.51	-10.00	102.2
10	0.00	104.04	-10.00	102.2
15	0.00	99.54	-10.00	102.2
20	0.00	95.03	-10.00	102.2
25	0.00	90.52	-10.00	102.2
30	0.22	85.99	-10.00	100.7
35	0.21	81.47	-10.00	101.5
40	0.21	76.96	-10.00	101.4
45	0.00	72.51	-10.00	102.2
50	0.27	68.00	-10.00	100.0
55	0.00	63.64	-10.00	102.2
60	0.59	59.11	-10.00	100.0
65	0.00	54.98	-10.00	102.2
70	0.51	50.56	-10.00	100.0
75	0.61	46.38	-9.66	100.0
80	0.00	42.69	-8.76	105.2
85	0.00	38.92	-7.75	107.6
90	0.00	35.40	-6.72	110.1
95	0.00	32.22	-5.70	112.6
100	0.00	29.48	-4.74	115.0
105	0.00	27.34	-3.92	117.0
110	0.00	25.92	-3.34	118.4
115	0.23	25.13	-3.01	117.1
120	0.27	25.45	-3.14	113.1
125	0.32	26.65	-3.64	108.4
130	0.39	28.60	-4.41	101.3
135	0.50	31.17	-5.34	100.0
140	0.64	34.20	-6.35	100.0
145	1.01	37.49	-7.35	100.0
150	1.70	40.93	-8.30	100.0
155	1.59	45.02	-9.33	100.0
160	1.89	49.08	-10.00	100.0
165	2.00	53.34	-10.00	100.0
170	2.15	57.68	-10.00	100.0
175	2.62	62.03	-10.00	100.0
180	2.63	66.54	-10.00	100.0

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Azimuth (Deg)	Horizon Elevation Angle (Deg)	Antenna Disc. Angle (Deg)	Antenna Gain (dBi)	14.0 GHz Coordination Distance (km)
185	3.03	71.03	-10.00	100.0
190	3.35	75.59	-10.00	100.0
195	3.59	80.19	-10.00	100.0
200	3.28	84.84	-10.00	100.0
205	3.23	89.47	-10.00	100.0
210	3.23	94.10	-10.00	100.0
215	2.98	98.71	-10.00	100.0
220	2.75	103.30	-10.00	100.0
225	2.11	107.80	-10.00	100.0
230	0.82	112.10	-10.00	100.0
235	0.36	116.44	-10.00	100.0
240	0.27	120.80	-10.00	100.0
245	0.00	125.02	-10.00	102.2
250	0.00	129.24	-10.00	102.2
255	0.00	133.35	-10.00	102.2
260	0.00	137.31	-10.00	102.2
265	0.00	141.08	-10.00	102.2
270	0.00	144.60	-10.00	102.2
275	0.00	147.78	-10.00	102.2
280	0.00	150.52	-10.00	102.2
285	0.00	152.66	-10.00	102.2
290	0.00	154.08	-10.00	102.2
295	0.00	154.64	-10.00	102.2
300	0.00	154.29	-10.00	102.2
305	0.00	153.06	-10.00	102.2
310	0.00	151.06	-10.00	102.2
315	0.00	148.45	-10.00	102.2
320	0.00	145.36	-10.00	102.2
325	0.00	141.91	-10.00	102.2
330	0.00	138.19	-10.00	102.2
335	0.00	134.27	-10.00	102.2
340	0.00	130.19	-10.00	102.2
345	0.00	126.00	-10.00	102.2
350	0.00	121.71	-10.00	102.2
355	0.00	117.36	-10.00	102.2