

DTV12 Reverse Frequency Transmit Off-Axis Summary

6/1/2012

OS1 (102.8W) Beam 12

Antenna Gain Relative to -X axis

The antenna is left or right hand circularly polarized (LHCP, RHCP)

Three frequencies were analyzed, 17.305, 17.500, and 17.695 GHz

Total number of sheets = 6 (2 polarizations x 3 frequencies)

Each sheet has two header lines and four columns

column 1: Elevation angle relative to -x axis in degrees, rotation about z, $\pm 60^\circ$ every 5° (negative toward

column 2: Azimuth angle relative to -x axis in degrees, rotation about y, $\pm 30^\circ$ every 5° (positive toward l

column 3: Co-polarized antenna gain, dBi (RHCP gain for RHCP port or LHCP gain for LHCP port)

column 4: Cross-polarized antenna gain, dBi (LHCP gain for RHCP port or RHCP gain for LHCP port)

Kevin Clancy

DTV12 Antenna Project Engineer

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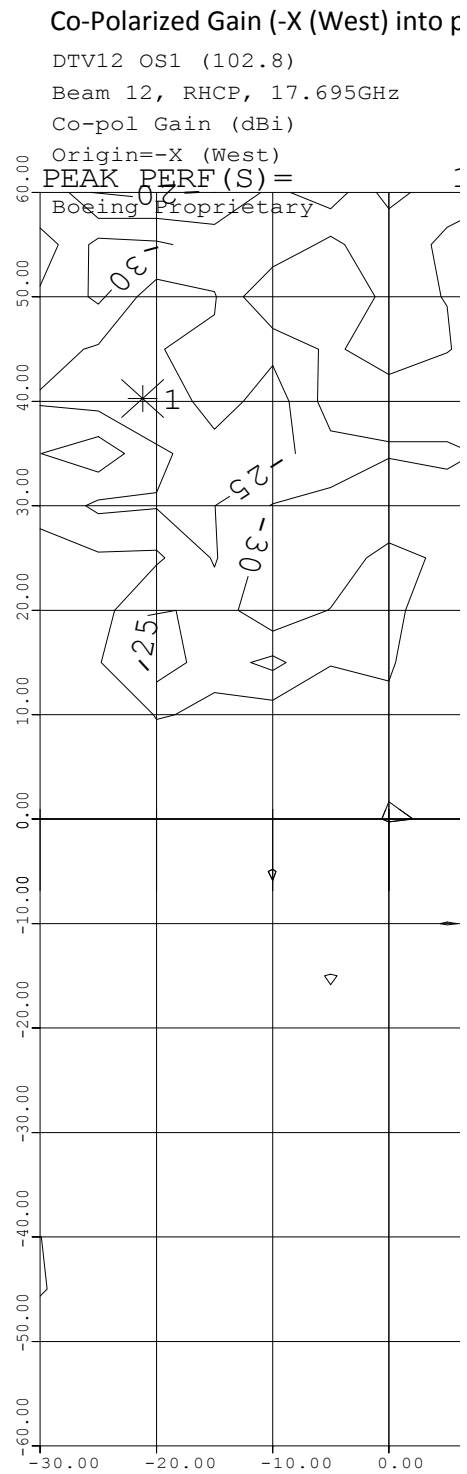
l south)
Earth)

Beam 12 OS1 RHCP 17.695

Z-Rotation (Deg.)	Y-Rotation (Deg.)	Co-pol Gain (dBi)	Cross-pol Gain (dBi)
-60	-30	-28.036	-25.39
-60	-25	-32.996	-22.412
-60	-20	-39.398	-25.775
-60	-15	-36.741	-26.241
-60	-10	-41.132	-33.838
-60	-5	-42.566	-28.806
-60	0	-43.659	-27.844
-60	5	-34.094	-27.628
-60	10	-29.904	-39.027
-60	15	-35.433	-27.521
-60	20	-34.386	-29.651
-60	25	-36.528	-30.267
-60	30	-30.51	-28.988
-55	-30	-34.161	-22.352
-55	-25	-35.742	-21.655
-55	-20	-46.638	-27.236
-55	-15	-35.255	-26.273
-55	-10	-47.455	-31.422
-55	-5	-35.456	-27.123
-55	0	-41.211	-27.514
-55	5	-32.766	-27.232
-55	10	-31.327	-33.347
-55	15	-40.414	-27.923
-55	20	-37.106	-29.539
-55	25	-40.352	-28.231
-55	30	-36.394	-29.649
-50	-30	-32.759	-21.556
-50	-25	-40.953	-23.449
-50	-20	-38.929	-28.386
-50	-15	-37.685	-32.95
-50	-10	-36.613	-28.606
-50	-5	-30.882	-28.382
-50	0	-35.584	-27.524
-50	5	-31.331	-27.08
-50	10	-56.831	-29.072
-50	15	-32.713	-26.905
-50	20	-35.81	-30.147
-50	25	-28.484	-34.569
-50	30	-30.374	-30.631
-45	-30	-29.567	-24.33

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qg925b



BOTH AXES ARE

-45	-25	-33.27	-23.794
-45	-20	-32.507	-23.011
-45	-15	-34.169	-24.853
-45	-10	-35.16	-35.736
-45	-5	-31.974	-39.771
-45	0	-31.864	-29.357
-45	5	-31.265	-26.999
-45	10	-29.806	-33.377
-45	15	-32.581	-29.572
-45	20	-33.143	-30.439
-45	25	-28.015	-35.62
-45	30	-30.802	-31.709
-40	-30	-29.887	-23.689
-40	-25	-35.312	-25.396
-40	-20	-33.739	-24.376
-40	-15	-49.525	-30.656
-40	-10	-33.298	-25.25
-40	-5	-47.271	-27.483
-40	0	-30.399	-32.626
-40	5	-38.87	-27.197
-40	10	-42.066	-30.976
-40	15	-32.877	-31.725
-40	20	-29.997	-32.754
-40	25	-30.892	-31.391
-40	30	-31.869	-32.257
-35	-30	-38.389	-22.538
-35	-25	-51.279	-28.769
-35	-20	-36.704	-27.723
-35	-15	-54.762	-27.621
-35	-10	-38.972	-33.577
-35	-5	-32.78	-28.085
-35	0	-30.545	-33.584
-35	5	-33.741	-30.865
-35	10	-32.636	-28.588
-35	15	-51.436	-29.015
-35	20	-29.709	-29.581
-35	25	-30.781	-29.292
-35	30	-31.307	-32.84
-30	-30	-38.538	-23.339
-30	-25	-33.513	-23.385
-30	-20	-59.415	-28.829
-30	-15	-46.745	-27.896
-30	-10	-34.581	-29.864
-30	-5	-32.764	-32.53

-30	0	-33.878	-31.36
-30	5	-38.016	-29.988
-30	10	-36.138	-30.238
-30	15	-34.738	-29.811
-30	20	-29.355	-34.047
-30	25	-26.34	-36.693
-30	30	-27.787	-30.722
-25	-30	-34.555	-24.065
-25	-25	-33.462	-23.526
-25	-20	-32.398	-25.68
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-25	-10	-35.084	-30.633
-25	-5	-35.057	-33.228
-25	0	-35.11	-32.092
-25	5	-45.395	-27.617
-25	10	-30.356	-32.916
-25	15	-36.001	-29.083
-25	20	-34.636	-30.69
-25	25	-31.038	-32.418
-25	30	-29.531	-30.393
-20	-30	-46.259	-29.636
-20	-25	-35.503	-25.673
-20	-20	-47.485	-28.197
-20	-15	-42.61	-27.456
-20	-10	-38.587	-29.428
-20	-5	-33.11	-34.366
-20	0	-44.999	-27.826
-20	5	-31.686	-32.214
-20	10	-28.557	-32.778
-20	15	-37.376	-29.734
-20	20	-27.683	-31.395
-20	25	-27.472	-32.959
-20	30	-32.413	-29.562
-15	-30	-58.186	-32.865
-15	-25	-47.959	-29.47
-15	-20	-36.611	-35.108
-15	-15	-37.622	-27.321
-15	-10	-35.556	-31.013
-15	-5	-29.338	-35.256
-15	0	-35.574	-28.572
-15	5	-41.487	-28.16
-15	10	-30.541	-32.366
-15	15	-30.208	-30.665
-15	20	-27.502	-31.894

-15	25	-29.096	-31.282
-15	30	-29.741	-30.138
-10	-30	-37.176	-26.403
-10	-25	-36.528	-29.624
-10	-20	-33.199	-29.453
-10	-15	-35.458	-26.793
-10	-10	-33.019	-29.681
-10	-5	-52.253	-28.335
-10	0	-32.093	-32.736
-10	5	-29.72	-34.876
-10	10	-31.31	-33.594
-10	15	-31.099	-29.949
-10	20	-31.641	-31.593
-10	25	-30.119	-32.159
-10	30	-33.375	-29.487
-5	-30	-37.068	-26.971
-5	-25	-40.629	-29.518
-5	-20	-33.155	-26.402
-5	-15	-37.979	-26.629
-5	-10	-29.361	-30.849
-5	-5	-40.84	-30.169
-5	0	-45.608	-28.408
-5	5	-40.47	-31.478
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0	15	-33.562	-30.071
0	20	-27.022	-33.229
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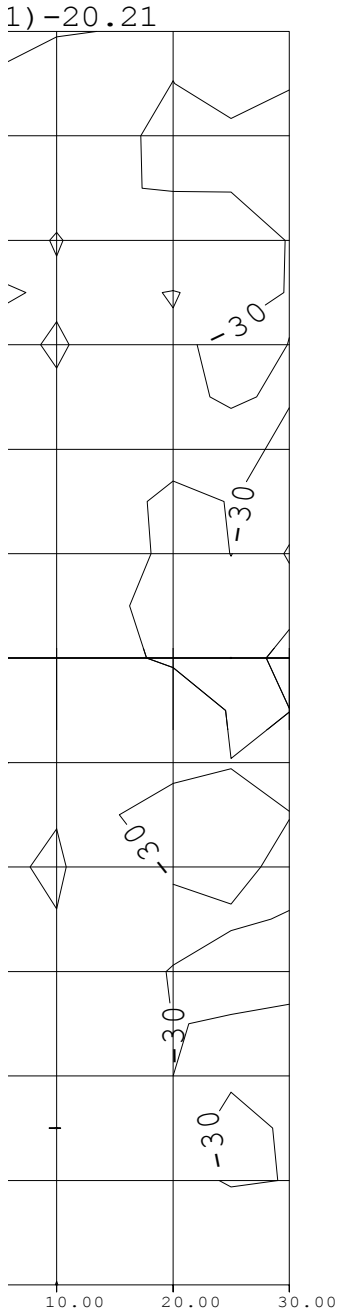
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20	25	-33.213	-31.408
20	30	-25.742	-30.917
25	-30	-31.774	-23.36
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25	15	-32.972	-31.524
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35	10	-32.952	-31.883
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35	25	-38.862	-31.394
35	30	-29.109	-31.822

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40	-15	-27.812	-24.098
40	-10	-22.113	-31.083
40	-5	-32.353	-36.096
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40	15	-40.69	-29.669
40	20	-63.464	-29.625
40	25	-43.583	-29.628
40	30	-28.954	-32.256
45	-30	-26.641	-31.506
45	-25	-24.44	-30.935
45	-20	-24.893	-30.695
45	-15	-25.681	-38.525
45	-10	-26.332	-30.057
45	-5	-30.983	-24.757
45	0	-26.944	-43.075
45	5	-29.355	-32.887
45	10	-37.479	-31.445
45	15	-32.05	-31.474
45	20	-27.671	-31.872
45	25	-28.861	-31.581
45	30	-28.981	-31.358
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50	-20	-22.083	-30.568
50	-15	-24.651	-28.105
50	-10	-35.533	-26.642
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50	0	-28.739	-33.247
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55	0	-25.259	-34.116
55	5	-31.787	-28.373
55	10	-51.694	-28.613
55	15	-37.418	-29.174
55	20	-29.823	-32.813
55	25	-36.823	-32.188
55	30	-30.076	-30.591
60	-30	-31.388	-25.038
60	-25	-18.452	-23.316
60	-20	-19.309	-20.996
60	-15	-20.008	-18.509
60	-10	-26.291	-32.423
60	-5	-22.022	-31.929
60	0	-32.139	-29.641
60	5	-26.409	-37.699
60	10	-27.352	-31.491
60	15	-31.225	-30.212
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60	25	-30.803	-32.33
60	30	-33.702	-32.931

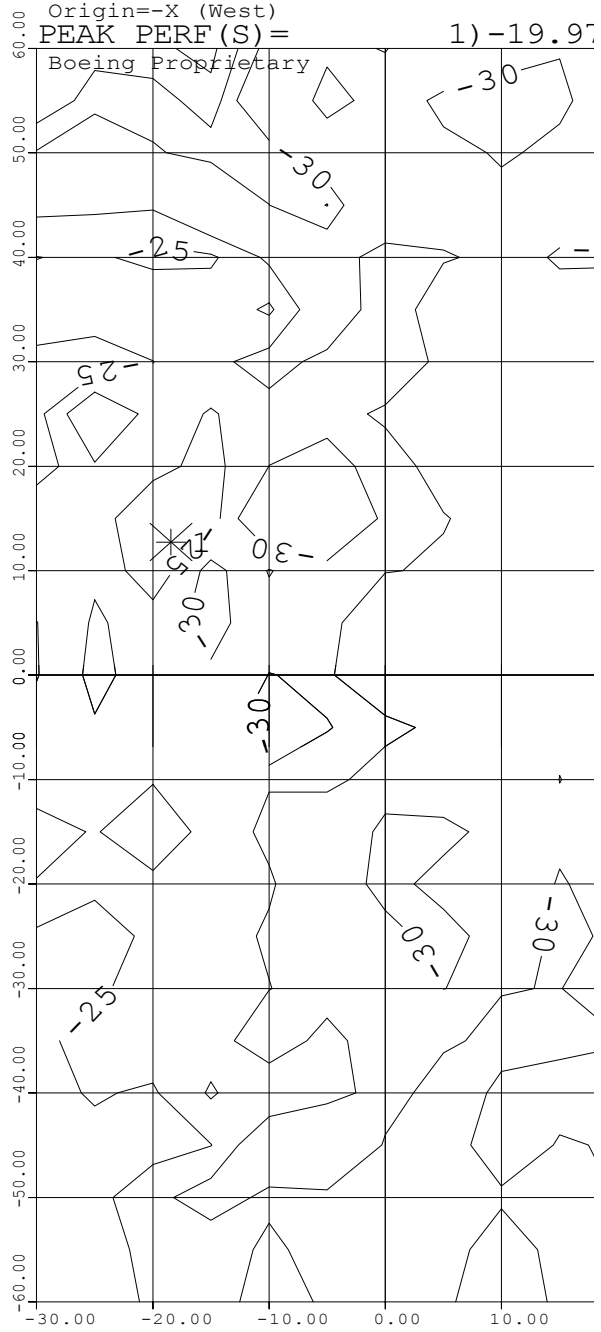
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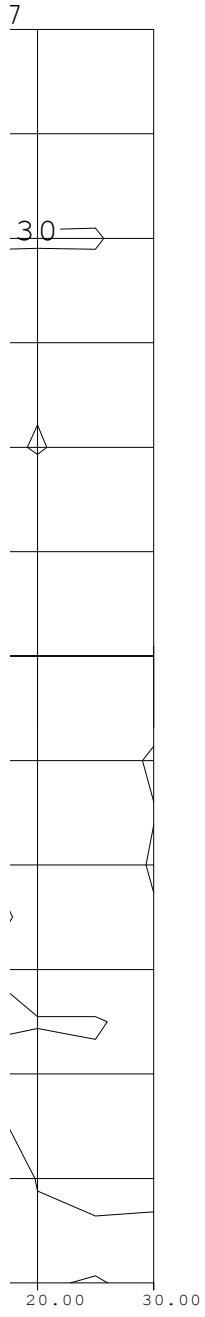
Cross-Polarized Gain (-X (West) into page)

DTV12 OS1 (102.8)
Beam 12, RHCP, 17.695GHz
Cross-pol Gain (dBi)



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BOTH AXES ARE IN DEG

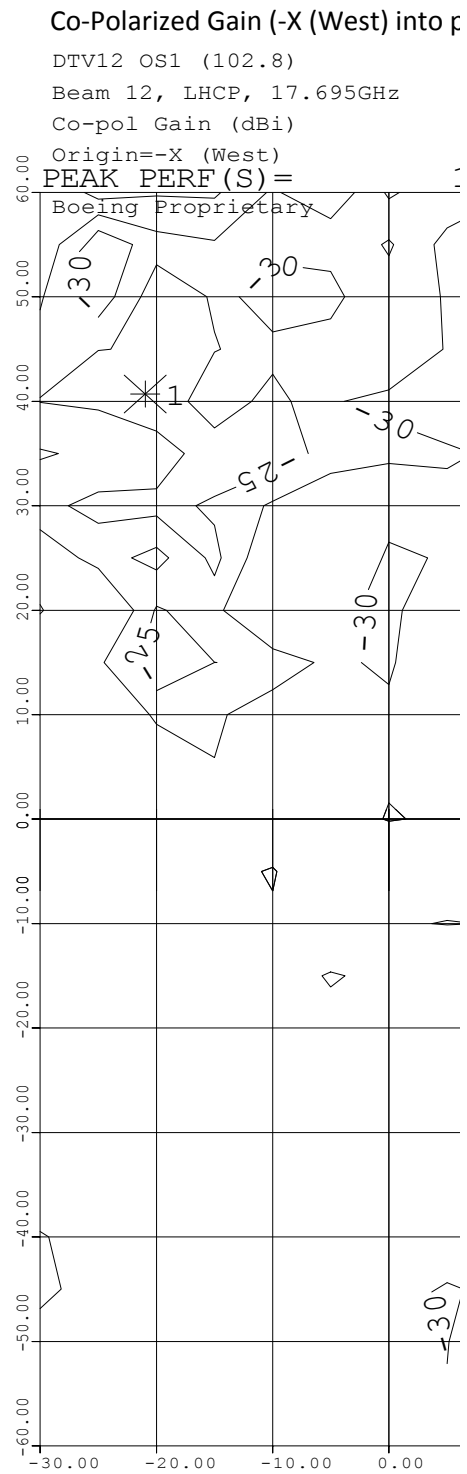


EG

Beam 12 OS1 LHCP 17.695

Z-Rotation (Deg.)	Y-Rotation (Deg.)	Co-pol Gain (dBi)	Cross-pol Gain (dBi)
-60	-30	-25.984	-25.967
-60	-25	-33.336	-22.137
-60	-20	-35.699	-25.891
-60	-15	-36.956	-26.504
-60	-10	-36.664	-31.633
-60	-5	-46.78	-28.895
-60	0	-42.875	-27.856
-60	5	-32.462	-27.227
-60	10	-31.026	-34.086
-60	15	-32.649	-27.565
-60	20	-33.637	-29.247
-60	25	-37.439	-30.888
-60	30	-28.659	-27.592
-55	-30	-31.533	-21.688
-55	-25	-39.623	-21.381
-55	-20	-40.751	-26.596
-55	-15	-41.226	-25.745
-55	-10	-43.339	-30.391
-55	-5	-36.641	-27.034
-55	0	-39.32	-27.65
-55	5	-30.805	-26.643
-55	10	-32.952	-32.334
-55	15	-58.814	-28.782
-55	20	-37.15	-29.589
-55	25	-38.967	-29.597
-55	30	-37.712	-29.777
-50	-30	-32.944	-21.513
-50	-25	-38.646	-22.578
-50	-20	-34.651	-29.843
-50	-15	-41.6	-30.386
-50	-10	-39.22	-28.702
-50	-5	-31.648	-27.121
-50	0	-34.787	-27.258
-50	5	-29.406	-26.2
-50	10	-46.001	-30.491
-50	15	-29.974	-26.335
-50	20	-35.519	-30.005
-50	25	-29.975	-36.735
-50	30	-33.04	-32.152
-45	-30	-28.249	-25.126

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BOTH AXES ARE

-45	-25	-33.089	-24.339
-45	-20	-34.728	-22.57
-45	-15	-32.019	-25.649
-45	-10	-40.056	-36.35
-45	-5	-33.594	-37.823
-45	0	-31.804	-28.296
-45	5	-29.332	-26.139
-45	10	-31.712	-37.185
-45	15	-30.628	-28.6
-45	20	-32.185	-29.804
-45	25	-27.594	-35.709
-45	30	-30.515	-30.267
-40	-30	-29.014	-24.759
-40	-25	-35.879	-25.576
-40	-20	-32.593	-24.896
-40	-15	-72.456	-30.781
-40	-10	-31.284	-25.19
-40	-5	-39.122	-28.681
-40	0	-30.844	-30.836
-40	5	-34.889	-27.016
-40	10	-45.546	-32.132
-40	15	-33.793	-31.759
-40	20	-30.024	-35.444
-40	25	-31.877	-31.46
-40	30	-33.051	-32.514
-35	-30	-38.886	-21.909
-35	-25	-40.466	-28.825
-35	-20	-37.251	-27.787
-35	-15	-43.42	-28.366
-35	-10	-40.826	-35.378
-35	-5	-31.003	-27.302
-35	0	-31.095	-32.07
-35	5	-34.332	-30.887
-35	10	-30.734	-27.515
-35	15	-43.712	-28.749
-35	20	-31.392	-31.436
-35	25	-33.374	-30.267
-35	30	-30.486	-34.224
-30	-30	-40.25	-23.058
-30	-25	-36.318	-23.03
-30	-20	-45.139	-30.139
-30	-15	-41.76	-29.404
-30	-10	-34.071	-29.369
-30	-5	-32.083	-31.304

-30	0	-33.808	-30.763
-30	5	-40.992	-31.564
-30	10	-37.814	-31.808
-30	15	-32.875	-28.752
-30	20	-29.796	-33.543
-30	25	-25.814	-35.332
-30	30	-28.13	-33.07
-25	-30	-35.353	-24.279
-25	-25	-33.1	-23.62
-25	-20	-32.306	-25.085
-25	-15	-40.519	-28.954
-25	-10	-35.41	-30.303
-25	-5	-35.304	-33.844
-25	0	-34.393	-31.927
-25	5	-39.505	-27.464
-25	10	-30.935	-32.808
-25	15	-41.436	-29.328
-25	20	-32.648	-29.9
-25	25	-30.019	-32.631
-25	30	-28.223	-28.492
-20	-30	-38.706	-29.596
-20	-25	-35.387	-25.301
-20	-20	-39.356	-29.54
-20	-15	-37.858	-28.013
-20	-10	-39.322	-29.766
-20	-5	-33.648	-35.826
-20	0	-38.095	-27.903
-20	5	-30.822	-31.406
-20	10	-27.759	-30.587
-20	15	-35.091	-28.827
-20	20	-28.211	-33.586
-20	25	-27.838	-33.327
-20	30	-35.269	-29.081
-15	-30	-40.688	-31.915
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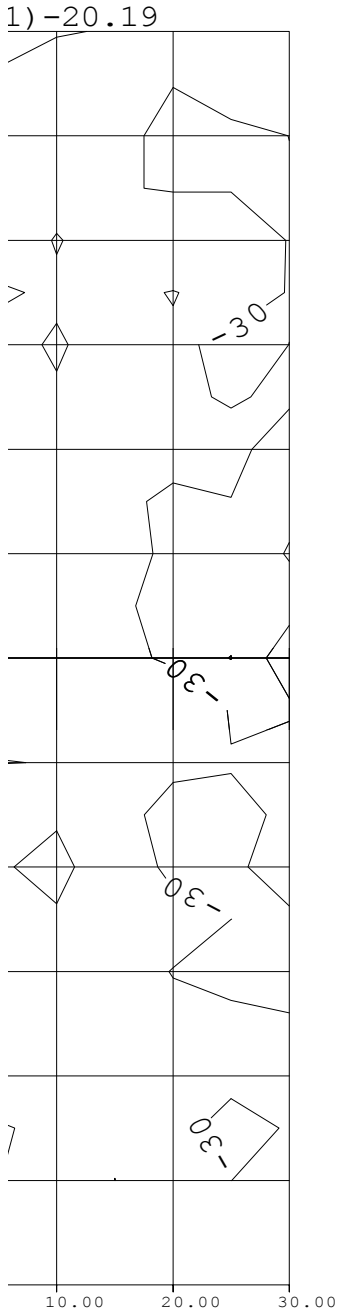
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page)



IN DEG

Cross-Polarized Gain (-X (West) into page)

DTV12 OS1 (102.8)

Beam 12, LHCP, 17.695GHz

Cross-pol Gain (dBi)

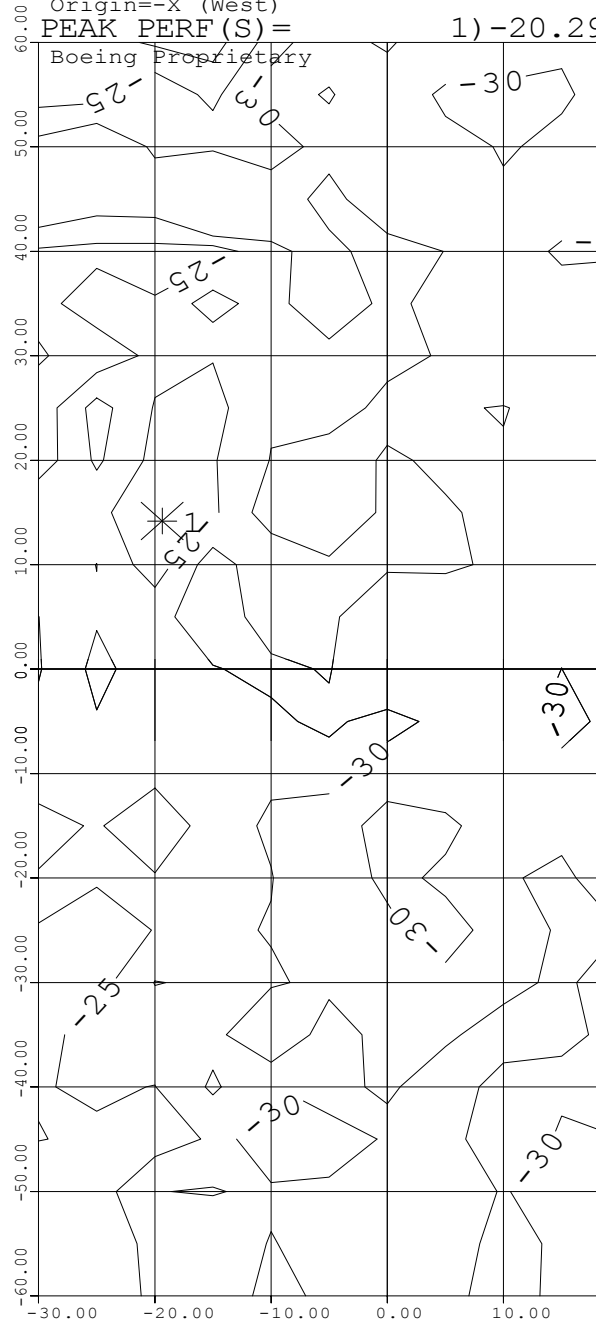
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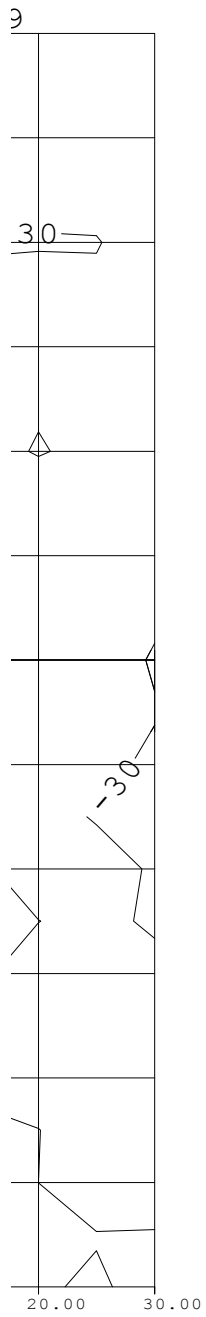
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Boeing Proprietary

qq925b FP: Jun 1 12 1:47: 4P



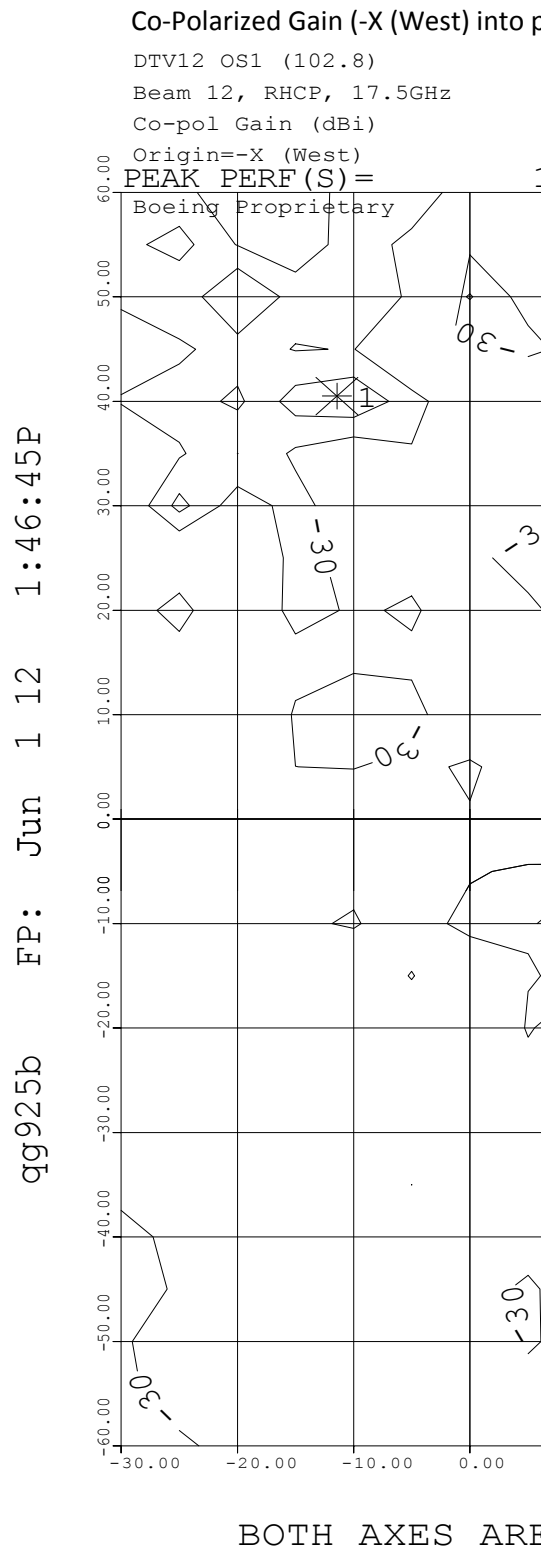
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EG

Beam 12 OS1 RHCP 17.5

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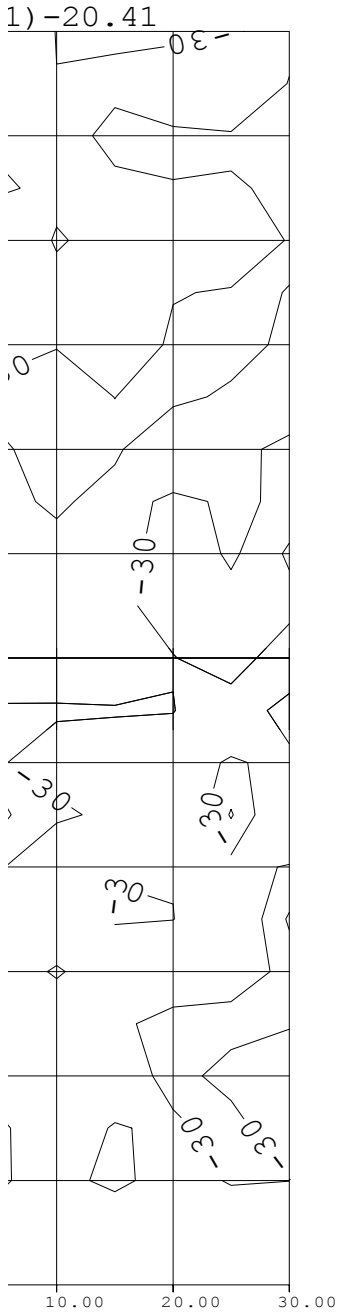
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40	-15	-22.692	-25.784
40	-10	-20.885	-30.414
40	-5	-27.667	-29.967
40	0	-35.67	-24.914
40	5	-41.192	-26.755
40	10	-28.875	-29.799
40	15	-34.508	-29.446
40	20	-32.289	-29.294
40	25	-42.168	-28.216
40	30	-28.909	-30.897
45	-30	-37.202	-22.071
45	-25	-30.962	-24.166
45	-20	-27.491	-32.693
45	-15	-30.265	-26.006
45	-10	-29.79	-30.231
45	-5	-38.376	-26.272
45	0	-31.782	-30.646
45	5	-28.104	-29.291
45	10	-33.256	-27.806
45	15	-32.58	-29.671
45	20	-30.085	-28.523
45	25	-31.122	-28.133
45	30	-27.907	-30.461
50	-30	-27.672	-29.297
50	-25	-25.916	-35.349
50	-20	-36.358	-26.538
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50	-10	-27.066	-31.959
50	-5	-30.66	-28.665
50	0	-24.628	-35.224
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50	10	-35.735	-28.708
50	15	-26.383	-32.279
50	20	-29.567	-29.48
50	25	-27.736	-28.257
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55	-30	-28.594	-20.507
55	-25	-31.798	-27.092
55	-20	-24.757	-21.945
55	-15	-22.051	-32.437
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55	-5	-31.419	-23.188
55	0	-31.315	-31.195
55	5	-32.191	-28.802
55	10	-30.184	-30.029
55	15	-33.075	-29.744
55	20	-31.962	-29.377
55	25	-55.582	-27.762
55	30	-29.007	-30.297
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60	-20	-21.392	-27.468
60	-15	-21.971	-25.541
60	-10	-27.156	-31.751
60	-5	-26.8	-30.119
60	0	-32.912	-30.07
60	5	-38.822	-27.981
60	10	-29.693	-28.877
60	15	-27.636	-30.017
60	20	-29.28	-28.765
60	25	-28.209	-30.232
60	30	-36.576	-28.494

page)



IN DEG

Cross-Polarized Gain (-X (West) into page)

DTV12 OS1 (102.8)

Beam 12, RHCP, 17.5GHz

Cross-pol Gain (dBi)

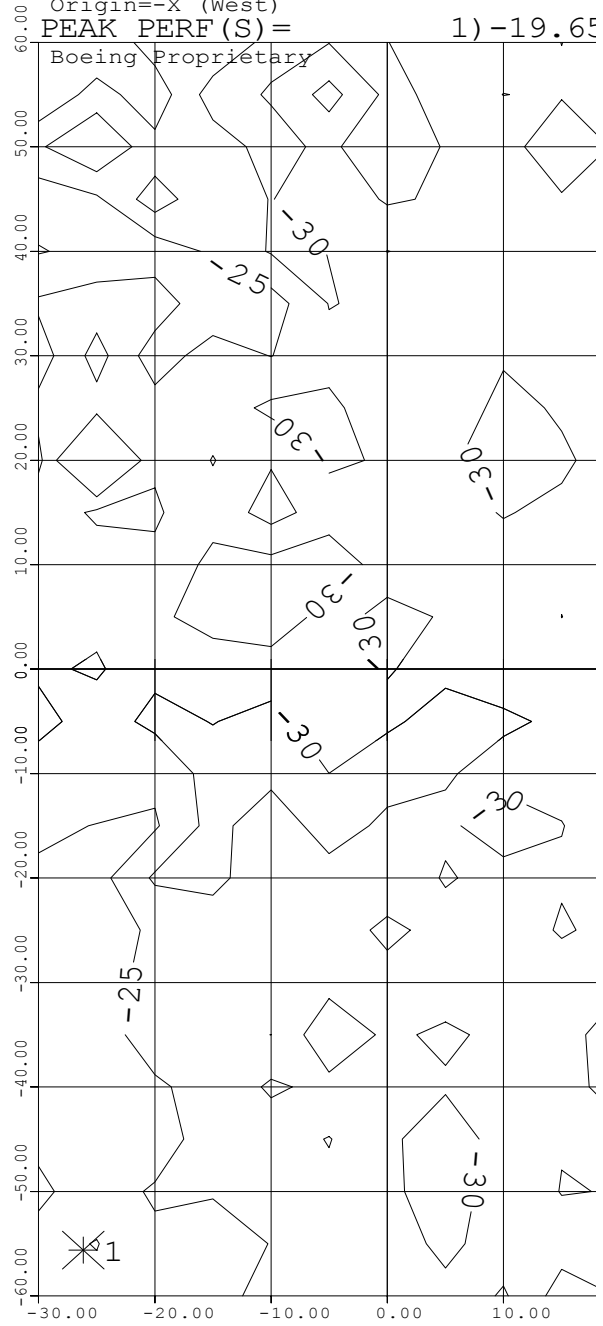
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PEAK PERF (S) =

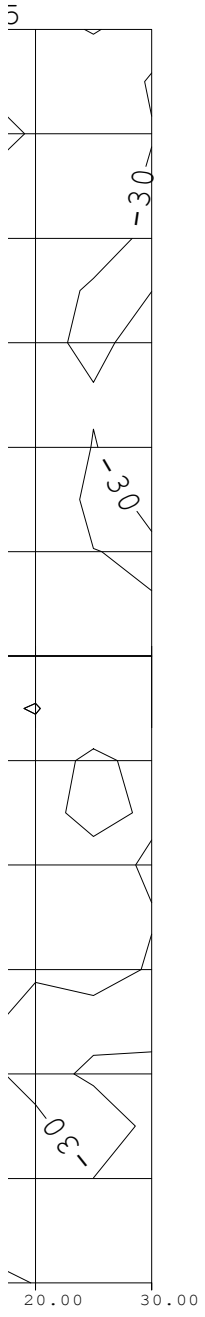
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Boeing Proprietary

qq925b FP: Jun 1 12 1:46:54P



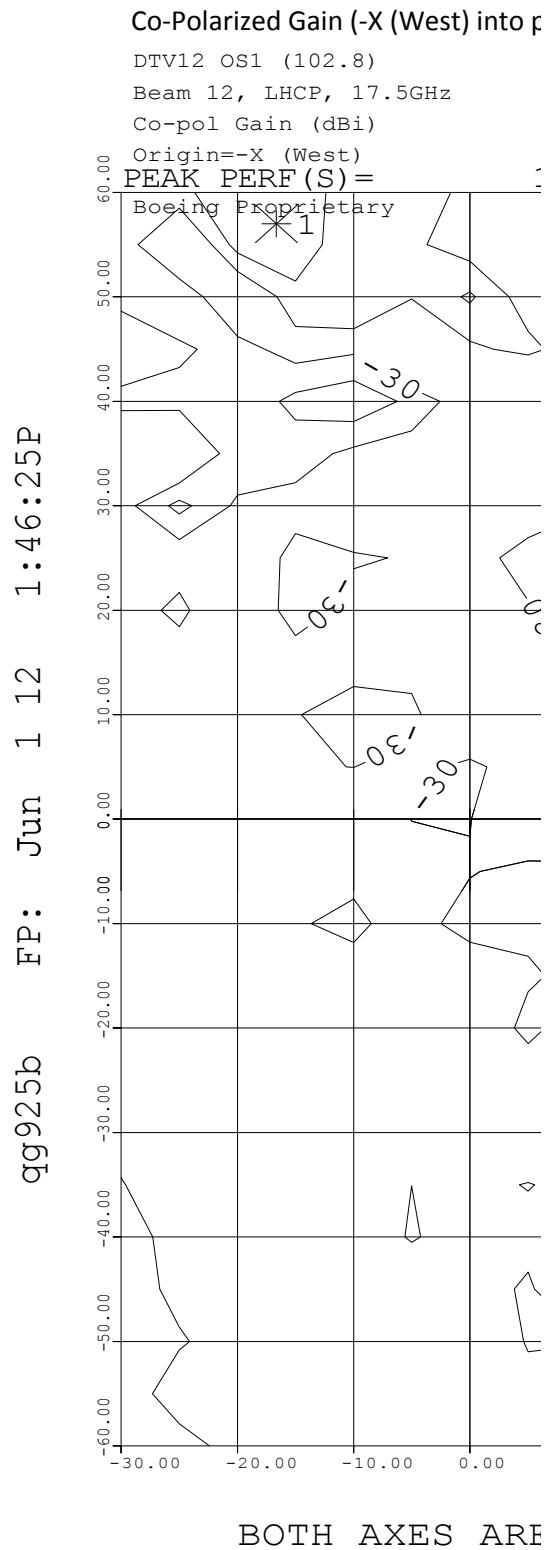
BOTH AXES ARE IN DEG



EG

Beam 12 OS1 LHCP 17.5

Z-Rotation (Deg.)	Y-Rotation (Deg.)	Co-pol Gain (dBi)	Cross-pol Gain (dBi)
-60	-30	-24.424	-21.138
-60	-25	-27.447	-20.622
-60	-20	-32.385	-22.697
-60	-15	-32.684	-24.984
-60	-10	-32.573	-23.926
-60	-5	-35.94	-25.039
-60	0	-38.896	-25.948
-60	5	-36.606	-30.923
-60	10	-35.394	-24.312
-60	15	-29.307	-30.325
-60	20	-33.288	-29.997
-60	25	-30.397	-26.987
-60	30	-27.611	-31.756
-55	-30	-26.076	-20.975
-55	-25	-33.441	-19.292
-55	-20	-34.23	-23.666
-55	-15	-37.861	-24.241
-55	-10	-33.716	-23.698
-55	-5	-40.138	-26.315
-55	0	-38.286	-27.452
-55	5	-32.1	-34.23
-55	10	-35.734	-27.412
-55	15	-34.5	-27.29
-55	20	-35.318	-29.201
-55	25	-31.632	-25.232
-55	30	-34.621	-28.083
-50	-30	-28.954	-18.821
-50	-25	-29.321	-20.942
-50	-20	-33.201	-25.751
-50	-15	-40.809	-24.315
-50	-10	-36.48	-26.733
-50	-5	-57.618	-26.291
-50	0	-36.163	-28.337
-50	5	-29.489	-35.665
-50	10	-29.599	-25.223
-50	15	-26.975	-27.687
-50	20	-31.93	-29.458
-50	25	-31.194	-30.964
-50	30	-32.079	-29.456
-45	-30	-26.474	-21.712



-45	-25	-31.785	-21.995
-45	-20	-42.773	-21.625
-45	-15	-33.457	-30.858
-45	-10	-41.156	-26.329
-45	-5	-35.555	-24.496
-45	0	-34.719	-28.582
-45	5	-28.578	-32.359
-45	10	-41.584	-27.48
-45	15	-27.458	-27.518
-45	20	-29.87	-27.193
-45	25	-25.491	-33.092
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-40	-30	-28.164	-21.042
-40	-25	-31.543	-24.208
-40	-20	-32.979	-26.155
-40	-15	-33.666	-24.563
-40	-10	-34.92	-33.096
-40	-5	-29.338	-26.591
-40	0	-33.627	-28.574
-40	5	-32.924	-28.653
-40	10	-50.556	-27.59
-40	15	-35.668	-27.897
-40	20	-26.237	-34.317
-40	25	-34.352	-29.006
-40	30	-35.176	-29.853
-35	-30	-29.289	-20.383
-35	-25	-39.024	-23.97
-35	-20	-36.475	-27.202
-35	-15	-40.658	-26.934
-35	-10	-32.011	-24.252
-35	-5	-30.016	-34.887
-35	0	-32.362	-28.501
-35	5	-29.591	-29.89
-35	10	-33.145	-27.721
-35	15	-31.393	-28.602
-35	20	-26.652	-33.478
-35	25	-27.002	-33.346
-35	30	-27.385	-28.568
-30	-30	-34.623	-20.153
-30	-25	-41.496	-22.701
-30	-20	-47.291	-26.799
-30	-15	-35.74	-28.57
-30	-10	-35.872	-31.71
-30	-5	-36.396	-29.979

-30	0	-35.781	-27.702
-30	5	-39.156	-27.646
-30	10	-29.918	-30.934
-30	15	-34.416	-28.159
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-25	10	-38.293	-28.867
-25	15	-30.131	-30.42
-25	20	-30.18	-30.86
-25	25	-33.224	-27.362
-25	30	-24.627	-32.065
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-15	20	-35.374	-28.325

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-10	-30	-36.133	-28.68
-10	-25	-40.033	-29.776
-10	-20	-48.693	-26.791
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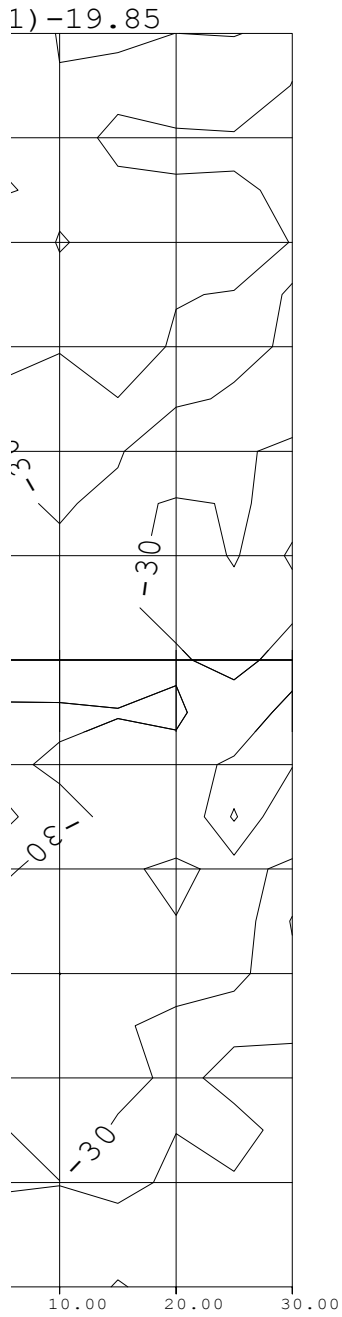
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45	-25	-30.972	-26.95
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55	15	-34.146	-29.713
55	20	-31.963	-29.929
55	25	-48.322	-28.077
55	30	-29.392	-30.12
60	-30	-21.679	-24.133
60	-25	-26.096	-19.458
60	-20	-21.905	-23.838
60	-15	-21.591	-24.822
60	-10	-28.179	-37.073
60	-5	-26.022	-29.912
60	0	-31.985	-29.482
60	5	-37.739	-28.363
60	10	-29.35	-29.295
60	15	-27.544	-29.402
60	20	-30.071	-29.844
60	25	-28.793	-31.109
60	30	-37.366	-29.122

page)



IN DEG

Cross-Polarized Gain (-X (West) into page)

DTV12 OS1 (102.8)

Beam 12, LHCP, 17.5GHz

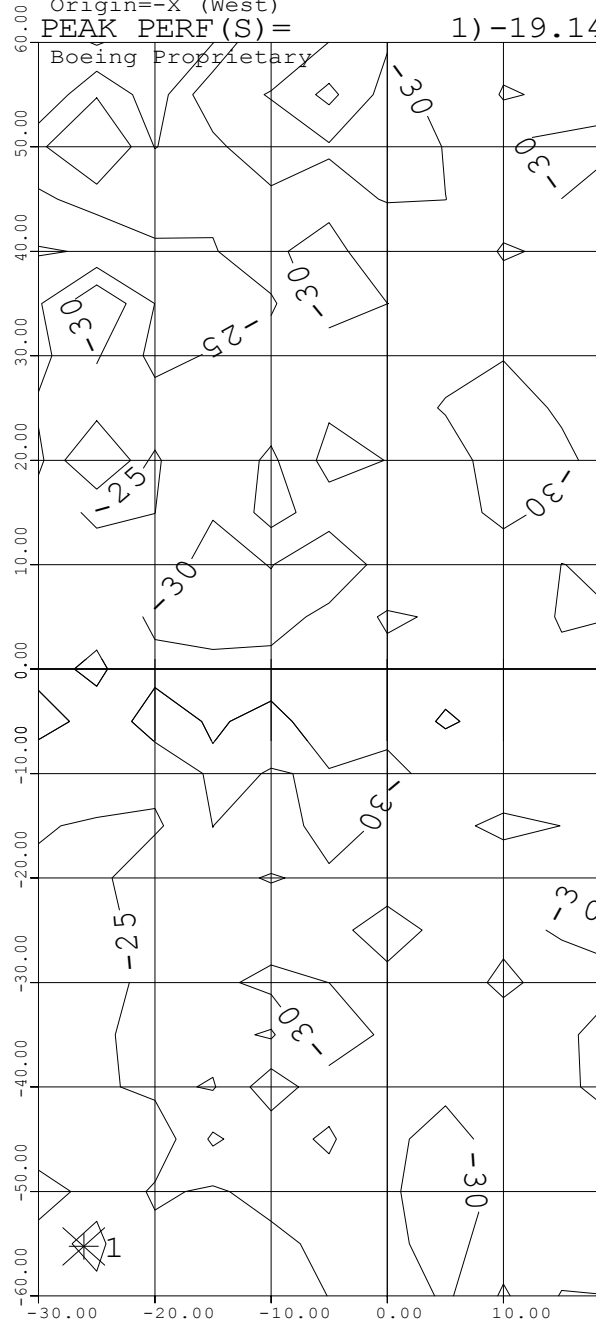
Cross-pol Gain (dBi)

Origin=-X (West)

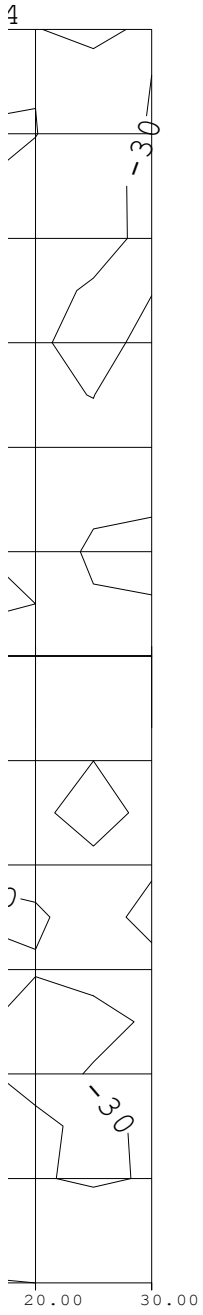
PEAK PERF(S) =

1) -19.14

Boeing Proprietary
qg925b FP: Jun 1 12 1:46:31P



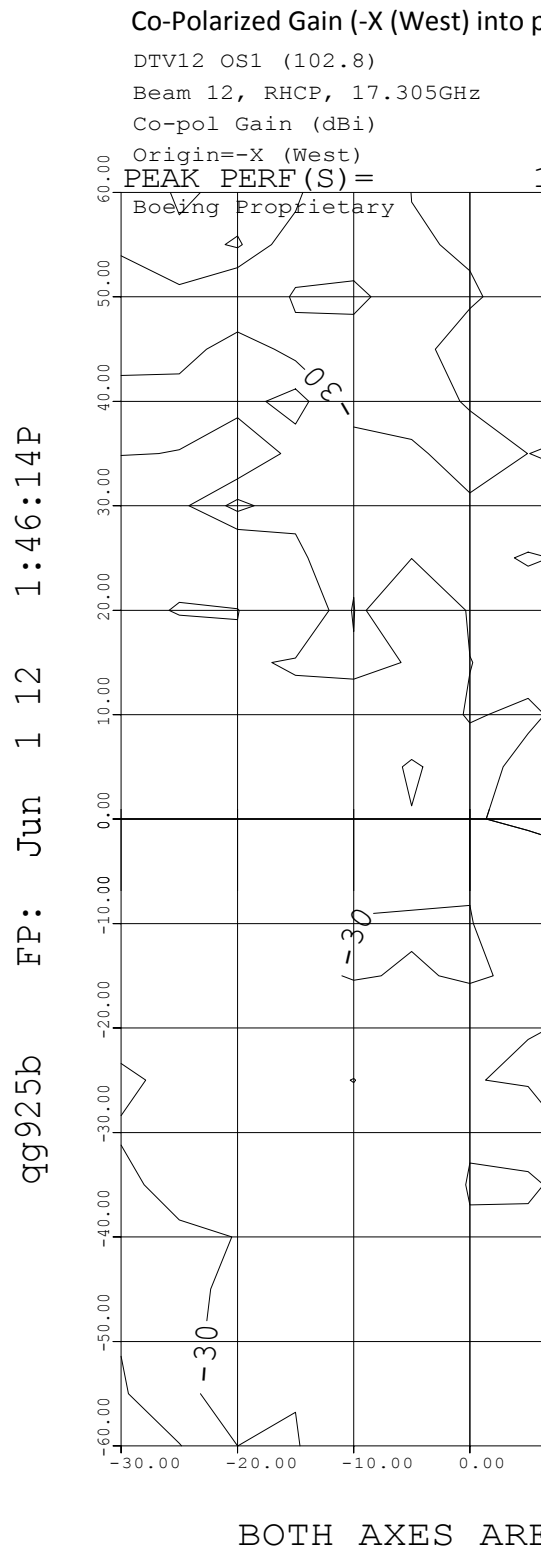
BOTH AXES ARE IN DEG



EG

Beam 12 OS1 RHCP 17.305

Z-Rotation (Deg.)	Y-Rotation (Deg.)	Co-pol Gain (dBi)	Cross-pol Gain (dBi)
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-60	-25	-24.791	-20.544
-60	-20	-30.01	-20.475
-60	-15	-28.675	-23.45
-60	-10	-46.872	-21.359
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-60	5	-31.243	-26.103
-60	10	-29.417	-30.146
-60	15	-43.331	-23.984
-60	20	-43.855	-25.252
-60	25	-30.065	-29.017
-60	30	-31.794	-26.238
-55	-30	-24.392	-18.95
-55	-25	-29.18	-18.785
-55	-20	-31.435	-21.478
-55	-15	-30.728	-23.547
-55	-10	-45.767	-21.395
-55	-5	-48.8	-24.29
-55	0	-35.277	-27.036
-55	5	-35.574	-23.933
-55	10	-37.872	-26.963
-55	15	-31.706	-27.776
-55	20	-38.915	-26.769
-55	25	-28.271	-28.035
-55	30	-34.331	-28.325
-50	-30	-25.241	-18.549
-50	-25	-27.703	-21.178
-50	-20	-32.982	-22.59
-50	-15	-36.376	-22.913
-50	-10	-40.713	-23.134
-50	-5	-36.666	-26.351
-50	0	-34.262	-27.582
-50	5	-48.7	-23.934
-50	10	-27.043	-32.511
-50	15	-27.122	-31.259
-50	20	-31.673	-28.666
-50	25	-30.038	-27.961
-50	30	-29.466	-27.769
-45	-30	-25.605	-17.889



-45	-25	-28.423	-19.619
-45	-20	-31.355	-21.516
-45	-15	-33.129	-27.278
-45	-10	-33.969	-25.939
-45	-5	-31.706	-27.958
-45	0	-33.31	-27.935
-45	5	-31.911	-26.488
-45	10	-37.806	-27.176
-45	15	-26.623	-32.36
-45	20	-29.594	-28.025
-45	25	-25.134	-32.14
-45	30	-35.073	-27.304
-40	-30	-26.537	-17.93
-40	-25	-28.03	-22.187
-40	-20	-30.215	-26.547
-40	-15	-42.028	-22.283
-40	-10	-40.469	-25.605
-40	-5	-32.454	-25.97
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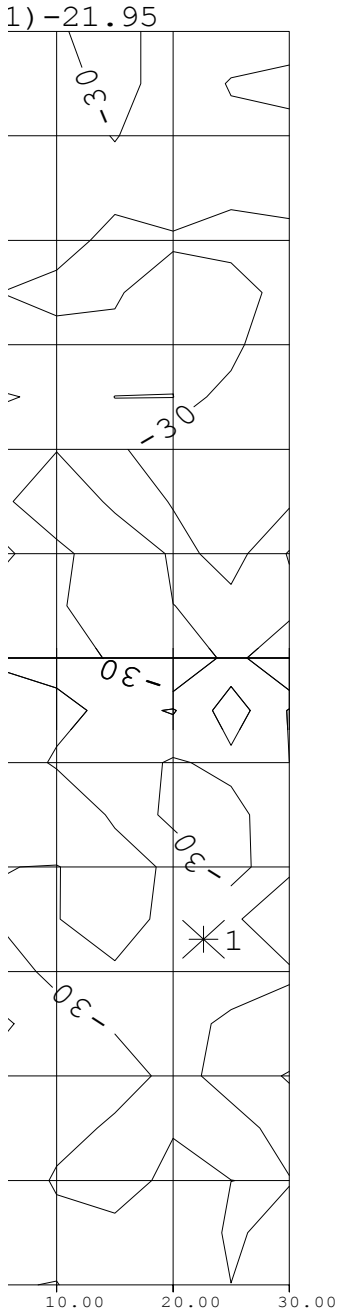
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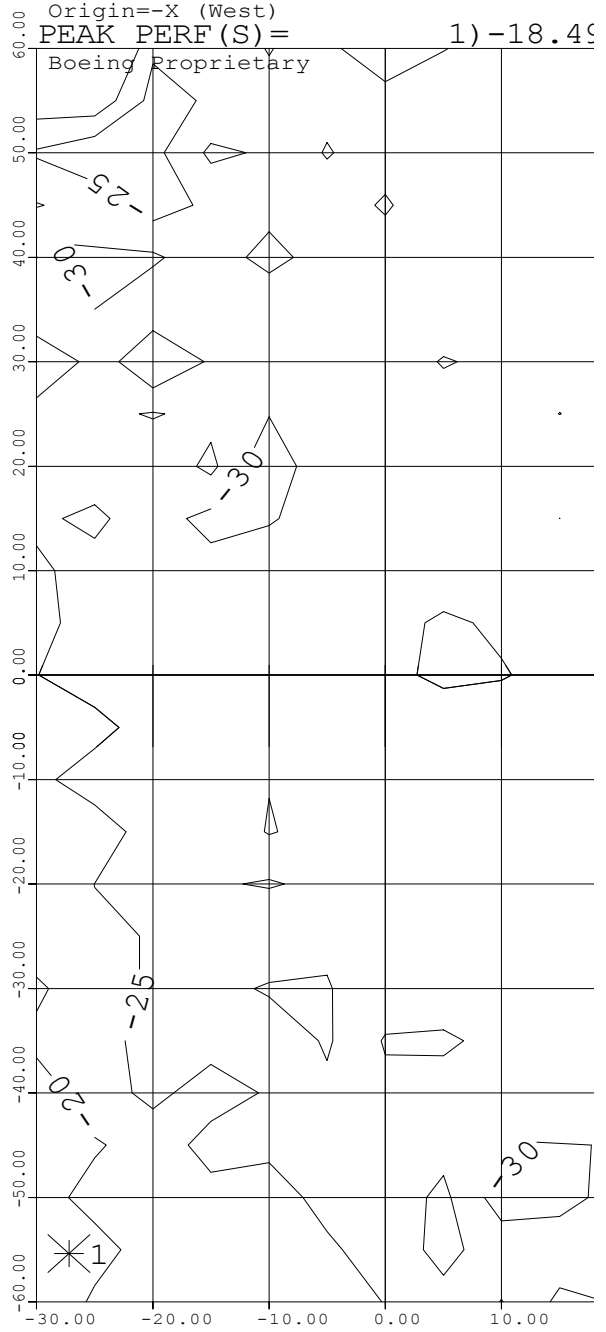
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IN DEG

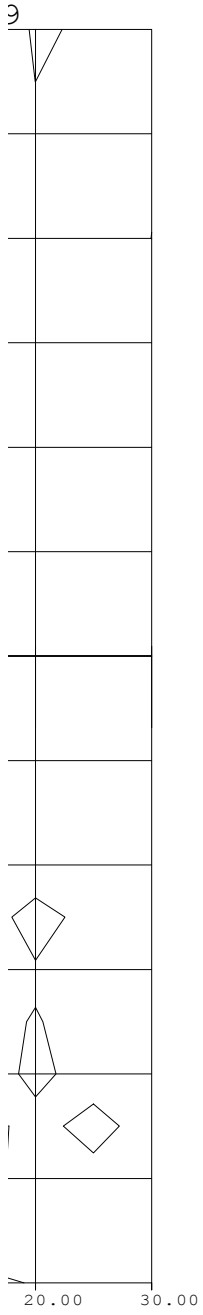
Cross-Polarized Gain (-X (West) into page)

DTV12 OS1 (102.8)
Beam 12, RHCP, 17.305GHz
Cross-pol Gain (dBi)



qq925b FP: Jun 1 12 1:46:20P

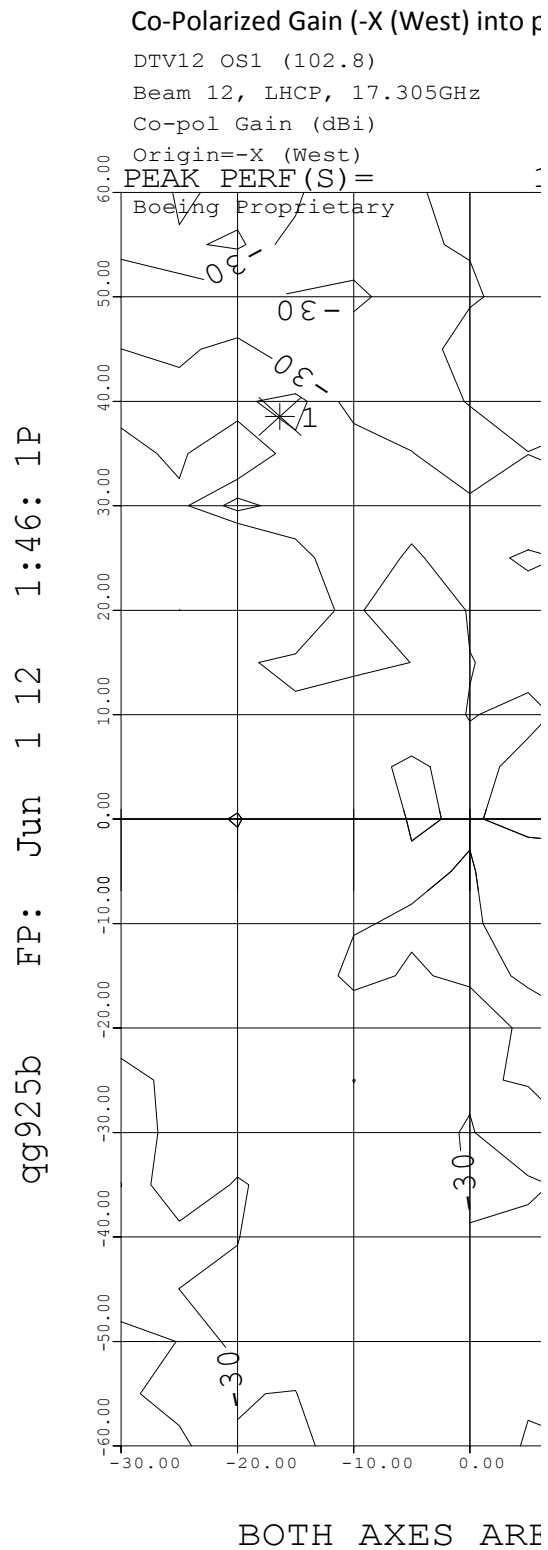
BOTH AXES ARE IN DEG



EG

Beam 12 OS1 LHCP 17.305

Z-Rotation (Deg.)	Y-Rotation (Deg.)	Co-pol Gain (dBi)	Cross-pol Gain (dBi)
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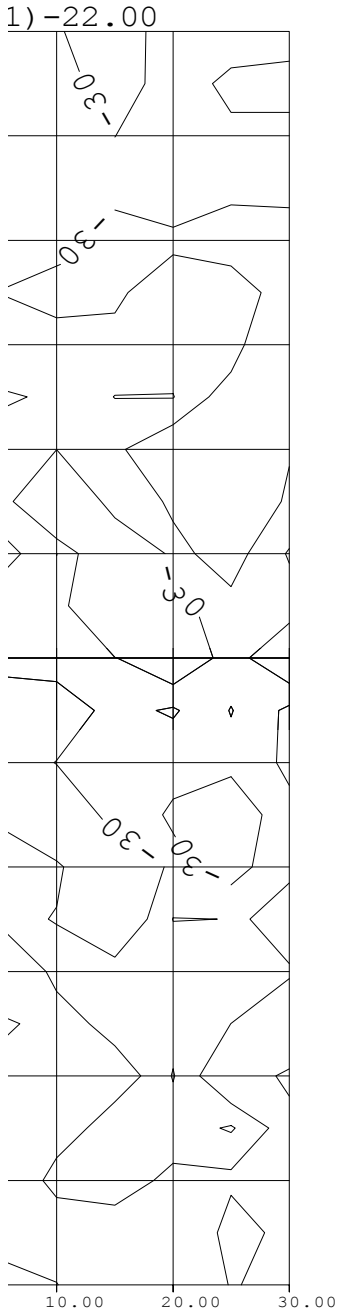
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15	15	-26.064	-29.527
15	20	-30.855	-26.699
15	25	-32.248	-29.267
15	30	-29.638	-26.904
20	-30	-33.636	-29.519
20	-25	-29.985	-28.018
20	-20	-31.286	-29.602
20	-15	-39.453	-24.51
20	-10	-25.439	-37.265
20	-5	-51.383	-25.024
20	0	-28.324	-30.497
20	5	-27.386	-28.552

20	10	-29.893	-27.754
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20	20	-34.594	-26.943
20	25	-31.833	-28.595
20	30	-30.182	-27.18
25	-30	-31.25	-26.499
25	-25	-38.444	-27.504
25	-20	-43.725	-26.397
25	-15	-31.07	-25.777
25	-10	-27.816	-30.512
25	-5	-30.524	-28.932
25	0	-28.153	-30.494
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25	10	-29.111	-28.732
25	15	-24.876	-30.799
25	20	-24.812	-29.507
25	25	-33.199	-28.342
25	30	-40.311	-25.78
30	-30	-38.859	-22.17
30	-25	-31.275	-25.698
30	-20	-22.967	-33.847
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30	-5	-28.6	-29.806
30	0	-28.279	-27.725
30	5	-25.414	-30.764
30	10	-27.44	-29.505
30	15	-28.521	-28.835
30	20	-27.707	-26.587
30	25	-26.551	-29.642
30	30	-41.619	-26.749
35	-30	-31.884	-28.348
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35	15	-30.942	-28.759
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45	-5	-34.408	-27.921
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55	10	-26.825	-29.605
55	15	-33.639	-27.627
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55	25	-31.598	-28.598
55	30	-31.924	-27.384
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60	10	-29.262	-27.953
60	15	-34.923	-27.384
60	20	-25.698	-29.754
60	25	-26.292	-28.758
60	30	-27.434	-30.193

page)



IN DEG

Cross-Polarized Gain (-X (West) into page)

DTV12 OS1 (102.8)

Beam 12, LHCP, 17.305GHz

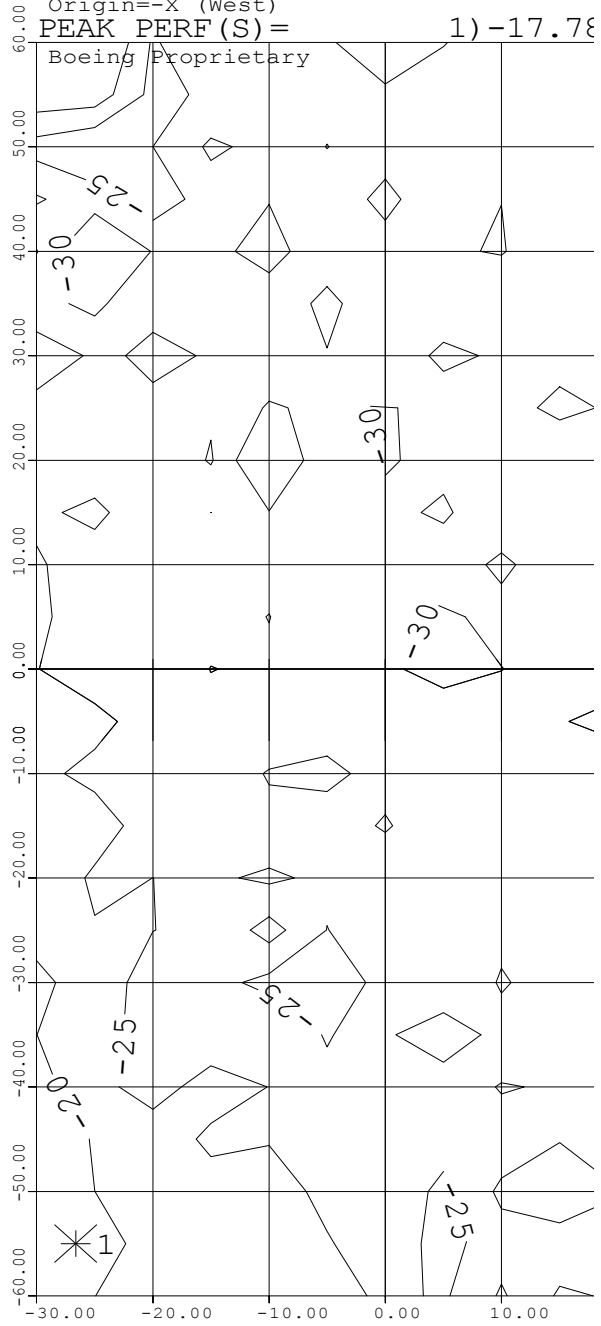
Cross-pol Gain (dBi)

Origin=-X (West)

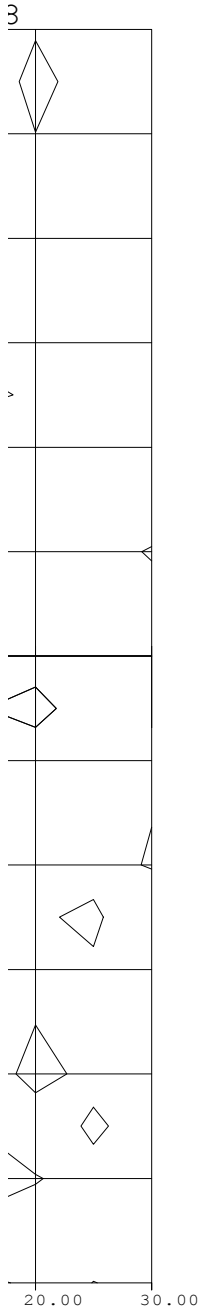
PEAK PERF(S) =

1) -17.78

qq925b FP: Jun 1 12 1:46: 9P



BOTH AXES ARE IN DEG



EG