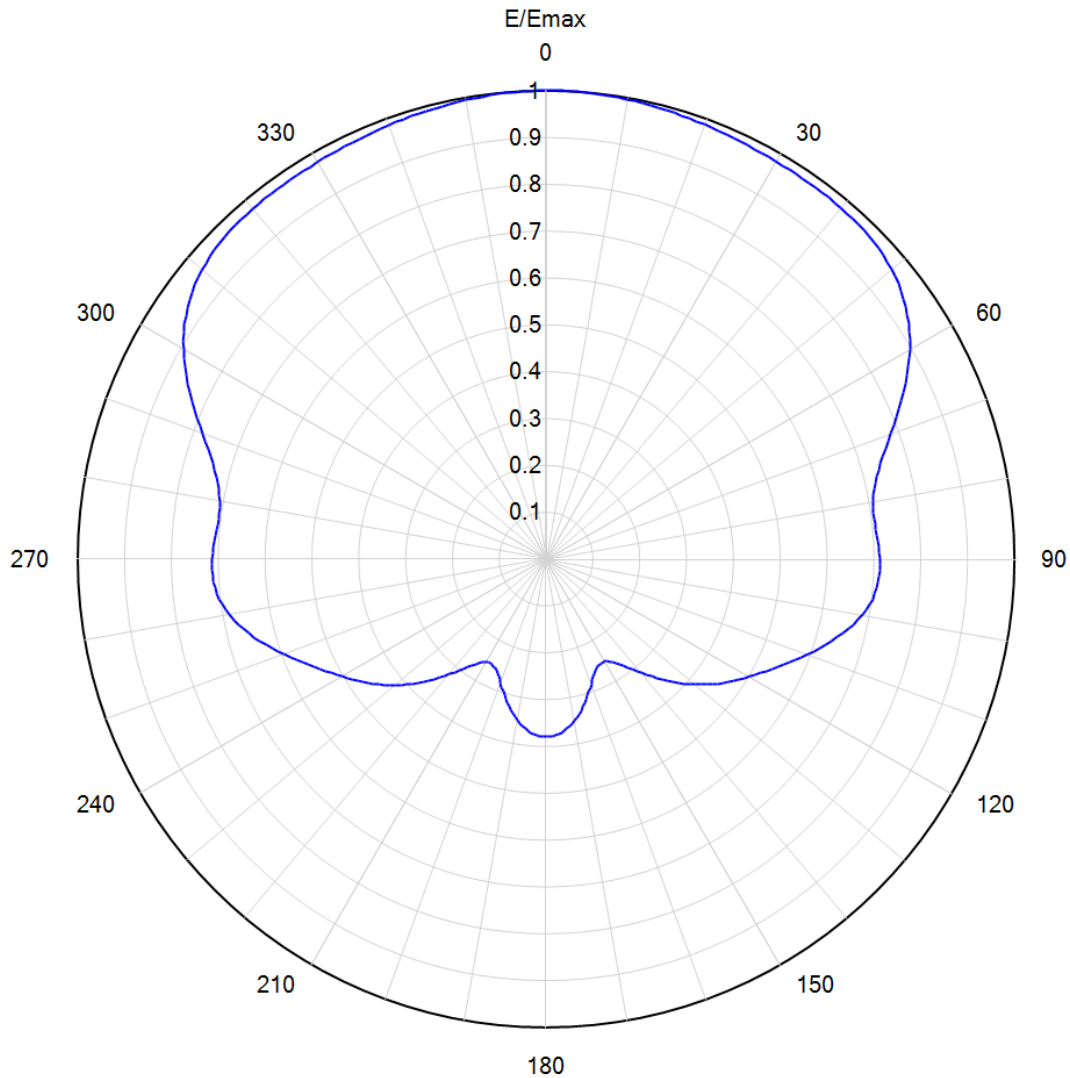




Azimuth Pattern



Model: SAA26-KSTR-E300-ET6R-3433

Location:

Customer:

Date: September 1, 2017

Rotation Angle: 0 degrees

Note: Pattern Tolerance +/-5% of Emax

Polarization: Horizontal

Frequency: 587.00 MHz

Directivity: 1.9 (2.81 dB)

Elevation Angle: 0.75 degrees

Horizontal Unit Pattern:

File = KSTR-HRP-HP.pat



Model: **SAA26-KSTR-G300-ET6R-3433**
Location:
Customer:
Date: **September 1, 2017**

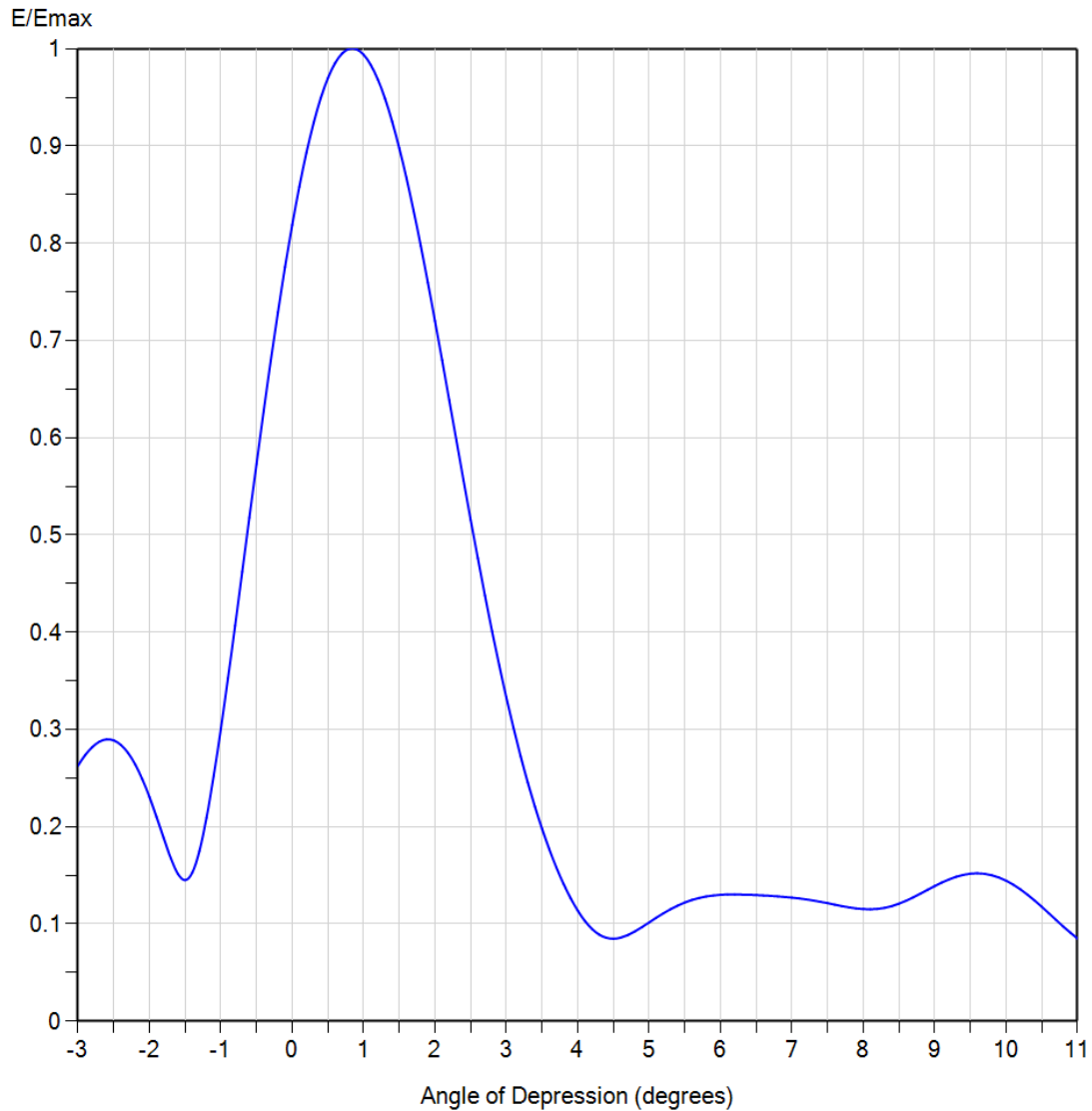
Polarization: **Horizontal**
Frequency (MHz): **587.00**
Directivity: **1.9 (2.81 dB)**
Elevation Angle: **0.75 degrees**
Rotation Angle: **0 degrees**

TABULATED AZIMUTH PATTERN

Angl	Field	Angl	Field	Angl	Field	Angl	Field	Angl	Field	Angl	Field	Angl	Field	Angl	Field
0	1.000	45	0.975	90	0.713	135	0.368	180	0.380	225	0.371	270	0.713	315	0.971
1	1.000	46	0.973	91	0.713	136	0.358	181	0.380	226	0.381	271	0.712	316	0.973
2	1.000	47	0.971	92	0.713	137	0.348	182	0.379	227	0.391	272	0.710	317	0.974
3	1.000	48	0.969	93	0.713	138	0.338	183	0.377	228	0.401	273	0.709	318	0.974
4	1.000	49	0.966	94	0.711	139	0.328	184	0.375	229	0.410	274	0.707	319	0.975
5	0.999	50	0.963	95	0.709	140	0.318	185	0.372	230	0.420	275	0.706	320	0.976
6	0.999	51	0.959	96	0.706	141	0.308	186	0.369	231	0.429	276	0.705	321	0.976
7	0.998	52	0.954	97	0.703	142	0.299	187	0.365	232	0.437	277	0.705	322	0.976
8	0.998	53	0.950	98	0.698	143	0.290	188	0.360	233	0.446	278	0.705	323	0.976
9	0.997	54	0.944	99	0.692	144	0.282	189	0.355	234	0.454	279	0.706	324	0.977
10	0.997	55	0.938	100	0.686	145	0.275	190	0.350	235	0.463	280	0.708	325	0.977
11	0.996	56	0.931	101	0.679	146	0.268	191	0.344	236	0.470	281	0.710	326	0.977
12	0.995	57	0.923	102	0.671	147	0.263	192	0.338	237	0.479	282	0.714	327	0.977
13	0.994	58	0.915	103	0.663	148	0.258	193	0.331	238	0.487	283	0.719	328	0.977
14	0.993	59	0.906	104	0.654	149	0.255	194	0.325	239	0.494	284	0.725	329	0.977
15	0.992	60	0.897	105	0.645	150	0.252	195	0.318	240	0.502	285	0.732	330	0.978
16	0.991	61	0.887	106	0.635	151	0.251	196	0.311	241	0.511	286	0.740	331	0.978
17	0.990	62	0.876	107	0.625	152	0.251	197	0.303	242	0.519	287	0.749	332	0.979
18	0.989	63	0.865	108	0.615	153	0.252	198	0.296	243	0.527	288	0.759	333	0.979
19	0.988	64	0.854	109	0.604	154	0.254	199	0.290	244	0.536	289	0.770	334	0.980
20	0.987	65	0.842	110	0.594	155	0.257	200	0.283	245	0.545	290	0.781	335	0.980
21	0.987	66	0.831	111	0.584	156	0.261	201	0.277	246	0.554	291	0.792	336	0.981
22	0.986	67	0.818	112	0.574	157	0.266	202	0.271	247	0.564	292	0.804	337	0.982
23	0.985	68	0.807	113	0.564	158	0.271	203	0.266	248	0.574	293	0.815	338	0.983
24	0.984	69	0.795	114	0.554	159	0.277	204	0.261	249	0.584	294	0.828	339	0.984
25	0.983	70	0.783	115	0.545	160	0.283	205	0.258	250	0.595	295	0.839	340	0.985
26	0.983	71	0.772	116	0.536	161	0.290	206	0.255	251	0.605	296	0.851	341	0.986
27	0.982	72	0.762	117	0.527	162	0.297	207	0.253	252	0.615	297	0.862	342	0.987
28	0.982	73	0.752	118	0.518	163	0.304	208	0.252	253	0.625	298	0.873	343	0.988
29	0.981	74	0.743	119	0.510	164	0.311	209	0.252	254	0.635	299	0.884	344	0.989
30	0.981	75	0.735	120	0.502	165	0.318	210	0.254	255	0.645	300	0.894	345	0.990
31	0.980	76	0.728	121	0.494	166	0.325	211	0.256	256	0.655	301	0.903	346	0.991
32	0.980	77	0.722	122	0.486	167	0.332	212	0.260	257	0.663	302	0.912	347	0.992
33	0.980	78	0.717	123	0.477	168	0.338	213	0.265	258	0.672	303	0.920	348	0.993
34	0.980	79	0.713	124	0.470	169	0.344	214	0.271	259	0.679	304	0.928	349	0.994
35	0.980	80	0.710	125	0.461	170	0.350	215	0.277	260	0.686	305	0.935	350	0.995
36	0.980	81	0.708	126	0.453	171	0.356	216	0.285	261	0.693	306	0.941	351	0.996
37	0.980	82	0.706	127	0.444	172	0.361	217	0.293	262	0.698	307	0.946	352	0.997
38	0.980	83	0.706	128	0.436	173	0.365	218	0.302	263	0.703	308	0.951	353	0.997
39	0.979	84	0.706	129	0.427	174	0.369	219	0.311	264	0.707	309	0.956	354	0.998
40	0.979	85	0.707	130	0.418	175	0.372	220	0.320	265	0.710	310	0.960	355	0.998
41	0.978	86	0.708	131	0.408	176	0.375	221	0.330	266	0.712	311	0.963	356	0.999
42	0.978	87	0.710	132	0.399	177	0.377	222	0.340	267	0.713	312	0.966	357	0.999
43	0.977	88	0.711	133	0.389	178	0.379	223	0.351	268	0.713	313	0.968	358	1.000
44	0.976	89	0.712	134	0.379	179	0.380	224	0.361	269	0.713	314	0.970	359	1.000



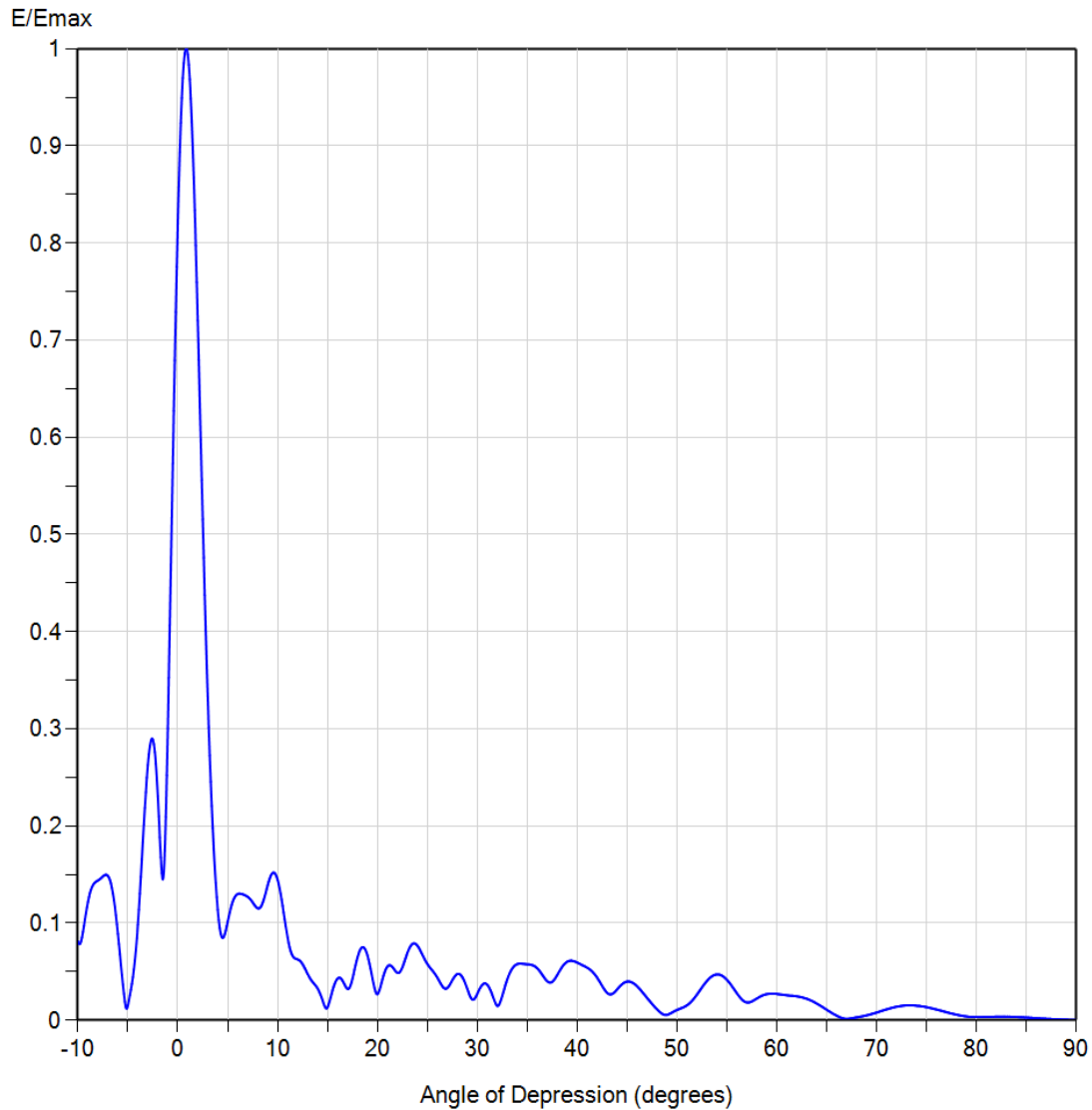
Elevation Pattern



Model:	SAA26-KSTR-E300-ET6R-3433	Frequency:	587.00 MHz
Polarization:	<u>Horizontal</u>	Directivity (Main Lobe):	24.0 (13.80 dBd)
Location:		Directivity (At Horizon):	16.1 (12.07 dBd)
Customer:		Beam Tilt:	0.75 degrees
Date:	September 1, 2017	Azimuth Angle:	0 degrees



Elevation Pattern



Model:	SAA26-KSTR-E300-ET6R-3433	Frequency:	587.00 MHz
Polarization:	<u>Horizontal</u>	Directivity (Main Lobe):	24.0 (13.80 dBd)
Location:		Directivity (At Horizon):	16.1 (12.07 dBd)
Customer:		Beam Tilt:	0.75 degrees
Date:	September 1, 2017	Azimuth Angle:	0 degrees



Model: **SAA26-KSTR-G300-ET6R-3433**
Location:
Customer:
Date: **September 1, 2017**

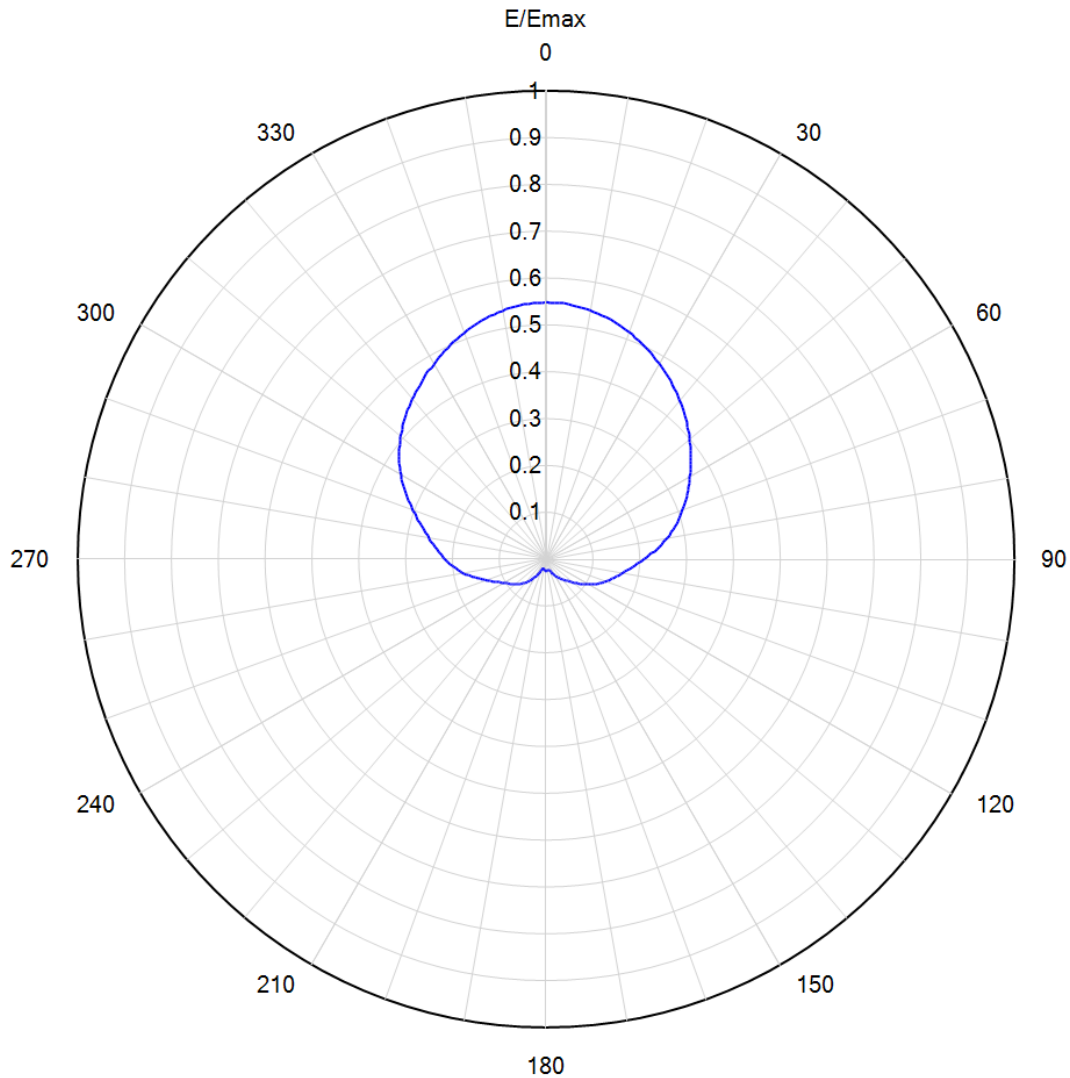
Polarization: **Horizontal**
Frequency (MHz): **587.00**
Directivity (Main Lobe): **24.0 (13.80 dB)**
Directivity (At Horizon): **16.1 (12.07 dB)**
Beam Tilt: **0.75 degrees**

TABULATED ELEVATION PATTERN

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.081	2.4	0.556	10.6	0.111	30.5	0.036	51.0	0.015	71.5	0.013
-9.5	0.091	2.6	0.476	10.8	0.097	31.0	0.036	51.5	0.020	72.0	0.014
-9.0	0.122	2.8	0.401	11.0	0.085	31.5	0.026	52.0	0.027	72.5	0.015
-8.5	0.139	3.0	0.333	11.5	0.066	32.0	0.015	52.5	0.034	73.0	0.015
-8.0	0.144	3.2	0.273	12.0	0.063	32.5	0.025	53.0	0.041	73.5	0.015
-7.5	0.148	3.4	0.221	12.5	0.058	33.0	0.042	53.5	0.045	74.0	0.015
-7.0	0.149	3.6	0.177	13.0	0.048	33.5	0.053	54.0	0.047	74.5	0.014
-6.5	0.131	3.8	0.141	13.5	0.039	34.0	0.058	54.5	0.046	75.0	0.013
-6.0	0.089	4.0	0.114	14.0	0.033	34.5	0.058	55.0	0.042	75.5	0.012
-5.5	0.037	4.2	0.095	14.5	0.020	35.0	0.058	55.5	0.035	76.0	0.011
-5.0	0.015	4.4	0.086	15.0	0.013	35.5	0.057	56.0	0.028	76.5	0.010
-4.5	0.044	4.6	0.086	15.5	0.031	36.0	0.053	56.5	0.021	77.0	0.008
-4.0	0.099	4.8	0.092	16.0	0.043	36.5	0.047	57.0	0.018	77.5	0.007
-3.5	0.184	5.0	0.102	16.5	0.041	37.0	0.040	57.5	0.019	78.0	0.006
-3.0	0.263	5.2	0.111	17.0	0.032	37.5	0.040	58.0	0.022	78.5	0.005
-2.8	0.282	5.4	0.119	17.5	0.043	38.0	0.047	58.5	0.025	79.0	0.004
-2.6	0.290	5.6	0.125	18.0	0.065	38.5	0.055	59.0	0.027	79.5	0.003
-2.4	0.284	5.8	0.128	18.5	0.075	39.0	0.060	59.5	0.027	80.0	0.003
-2.2	0.264	6.0	0.130	19.0	0.067	39.5	0.061	60.0	0.027	80.5	0.003
-2.0	0.231	6.2	0.130	19.5	0.043	40.0	0.059	60.5	0.026	81.0	0.003
-1.8	0.188	6.4	0.130	20.0	0.027	40.5	0.057	61.0	0.026	81.5	0.004
-1.6	0.151	6.6	0.129	20.5	0.042	41.0	0.054	61.5	0.025	82.0	0.004
-1.4	0.153	6.8	0.128	21.0	0.055	41.5	0.050	62.0	0.025	82.5	0.004
-1.2	0.209	7.0	0.127	21.5	0.055	42.0	0.044	62.5	0.024	83.0	0.004
-1.0	0.300	7.2	0.125	22.0	0.049	42.5	0.035	63.0	0.022	83.5	0.003
-0.8	0.407	7.4	0.123	22.5	0.055	43.0	0.028	63.5	0.020	84.0	0.003
-0.6	0.518	7.6	0.120	23.0	0.069	43.5	0.027	64.0	0.017	84.5	0.003
-0.4	0.627	7.8	0.117	23.5	0.079	44.0	0.032	64.5	0.014	85.0	0.003
-0.2	0.729	8.0	0.115	24.0	0.077	44.5	0.037	65.0	0.011	85.5	0.002
0.0	0.819	8.2	0.115	24.5	0.067	45.0	0.040	65.5	0.007	86.0	0.002
0.2	0.893	8.4	0.118	25.0	0.058	45.5	0.039	66.0	0.005	86.5	0.002
0.4	0.949	8.6	0.124	25.5	0.051	46.0	0.035	66.5	0.002	87.0	0.001
0.6	0.985	8.8	0.131	26.0	0.044	46.5	0.029	67.0	0.001	87.5	0.001
0.8	1.000	9.0	0.139	26.5	0.035	47.0	0.023	67.5	0.002	88.0	0.001
1.0	0.994	9.2	0.146	27.0	0.033	47.5	0.017	68.0	0.003	88.5	0.001
1.2	0.968	9.4	0.150	27.5	0.041	48.0	0.011	68.5	0.004	89.0	0.000
1.4	0.925	9.6	0.152	28.0	0.048	48.5	0.007	69.0	0.005	89.5	0.000
1.6	0.867	9.8	0.150	28.5	0.044	49.0	0.006	69.5	0.006	90.0	0.000
1.8	0.798	10.0	0.145	29.0	0.032	49.5	0.008	70.0	0.008		
2.0	0.720	10.2	0.136	29.5	0.021	50.0	0.011	70.5	0.010		
2.2	0.639	10.4	0.124	30.0	0.027	50.5	0.013	71.0	0.011		



Azimuth Pattern



Model: SAA26-KSTR-E300-ET6R-3433

Location:

Customer:

Date: September 1, 2017

Rotation Angle: 0 degrees

Note: Pattern Tolerance +/-5% of Emax

Polarization: Vertical

Frequency: 587.00 MHz

Directivity: 3.2 (5.01 dB)

Elevation Angle: 0.75 degrees

Horizontal Unit Pattern:

File = KSTR-HRP-VP.pat



Model: **SAA26-KSTR-G300-ET6R-3433**
Location:
Customer:
Date: **September 1, 2017**

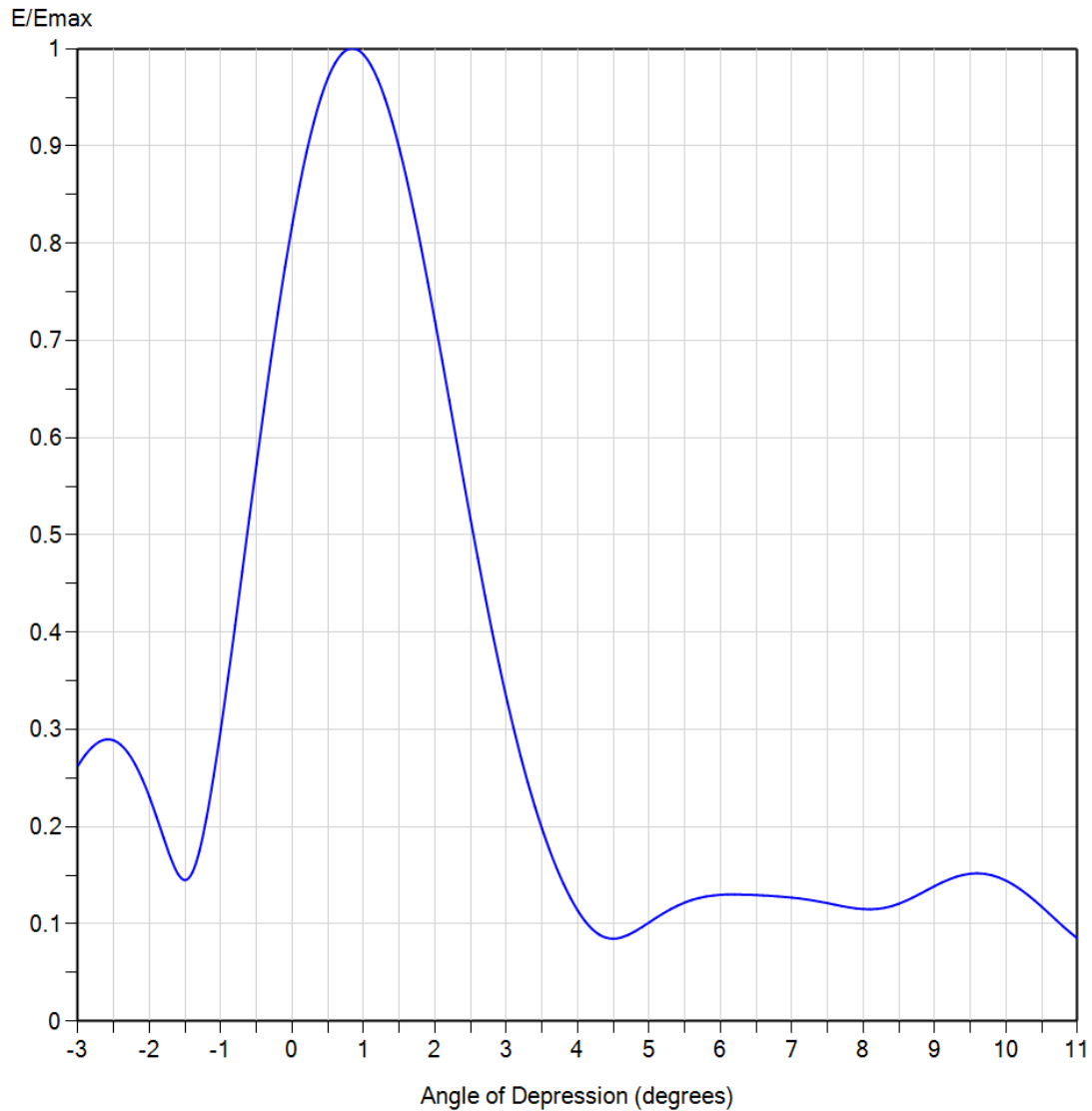
Polarization: **Vertical**
Frequency (MHz): **587.00**
Directivity: **3.2 (5.01 dB)**
Elevation Angle: **0.75 degrees**
Rotation Angle: **0 degrees**

TABULATED AZIMUTH PATTERN

Angl	Field	Angl	Field	Angl	Field	Angl	Field	Angl	Field	Angl	Field	Angl	Field	Angl	Field
0	1.000	45	0.771	90	0.384	135	0.123	180	0.047	225	0.136	270	0.394	315	0.778
1	1.000	46	0.764	91	0.375	136	0.119	181	0.047	226	0.140	271	0.401	316	0.785
2	1.000	47	0.755	92	0.366	137	0.116	182	0.047	227	0.143	272	0.407	317	0.792
3	0.999	48	0.747	93	0.357	138	0.112	183	0.046	228	0.147	273	0.414	318	0.799
4	0.998	49	0.739	94	0.349	139	0.109	184	0.046	229	0.150	274	0.420	319	0.805
5	0.996	50	0.730	95	0.340	140	0.106	185	0.045	230	0.153	275	0.427	320	0.812
6	0.995	51	0.722	96	0.333	141	0.103	186	0.044	231	0.156	276	0.433	321	0.818
7	0.993	52	0.714	97	0.325	142	0.100	187	0.043	232	0.159	277	0.440	322	0.825
8	0.990	53	0.706	98	0.318	143	0.097	188	0.042	233	0.163	278	0.447	323	0.832
9	0.988	54	0.697	99	0.311	144	0.095	189	0.042	234	0.166	279	0.455	324	0.838
10	0.985	55	0.689	100	0.305	145	0.092	190	0.041	235	0.169	280	0.462	325	0.845
11	0.982	56	0.681	101	0.299	146	0.089	191	0.040	236	0.172	281	0.470	326	0.851
12	0.978	57	0.672	102	0.293	147	0.087	192	0.039	237	0.176	282	0.478	327	0.858
13	0.975	58	0.664	103	0.287	148	0.084	193	0.039	238	0.180	283	0.486	328	0.864
14	0.971	59	0.656	104	0.282	149	0.082	194	0.039	239	0.183	284	0.495	329	0.870
15	0.966	60	0.648	105	0.277	150	0.079	195	0.039	240	0.187	285	0.504	330	0.877
16	0.962	61	0.640	106	0.272	151	0.076	196	0.039	241	0.192	286	0.513	331	0.883
17	0.957	62	0.632	107	0.267	152	0.074	197	0.040	242	0.196	287	0.522	332	0.890
18	0.952	63	0.624	108	0.262	153	0.071	198	0.041	243	0.201	288	0.532	333	0.896
19	0.947	64	0.616	109	0.257	154	0.068	199	0.042	244	0.207	289	0.541	334	0.902
20	0.942	65	0.608	110	0.252	155	0.066	200	0.044	245	0.212	290	0.551	335	0.908
21	0.936	66	0.600	111	0.247	156	0.063	201	0.047	246	0.218	291	0.561	336	0.914
22	0.931	67	0.592	112	0.242	157	0.060	202	0.049	247	0.224	292	0.571	337	0.920
23	0.925	68	0.584	113	0.237	158	0.058	203	0.052	248	0.231	293	0.581	338	0.926
24	0.919	69	0.576	114	0.232	159	0.056	204	0.055	249	0.237	294	0.592	339	0.932
25	0.913	70	0.569	115	0.227	160	0.053	205	0.059	250	0.245	295	0.602	340	0.937
26	0.907	71	0.561	116	0.222	161	0.051	206	0.062	251	0.252	296	0.612	341	0.943
27	0.901	72	0.552	117	0.217	162	0.050	207	0.066	252	0.259	297	0.622	342	0.948
28	0.894	73	0.544	118	0.211	163	0.048	208	0.070	253	0.267	298	0.632	343	0.953
29	0.888	74	0.536	119	0.206	164	0.047	209	0.074	254	0.275	299	0.642	344	0.958
30	0.881	75	0.527	120	0.200	165	0.046	210	0.078	255	0.283	300	0.652	345	0.963
31	0.874	76	0.518	121	0.195	166	0.045	211	0.082	256	0.291	301	0.662	346	0.967
32	0.868	77	0.509	122	0.189	167	0.044	212	0.086	257	0.299	302	0.671	347	0.972
33	0.861	78	0.500	123	0.183	168	0.044	213	0.090	258	0.307	303	0.681	348	0.976
34	0.854	79	0.491	124	0.178	169	0.044	214	0.094	259	0.315	304	0.690	349	0.979
35	0.847	80	0.481	125	0.172	170	0.044	215	0.098	260	0.323	305	0.699	350	0.983
36	0.840	81	0.472	126	0.167	171	0.044	216	0.102	261	0.331	306	0.708	351	0.986
37	0.832	82	0.462	127	0.161	172	0.045	217	0.106	262	0.338	307	0.716	352	0.989
38	0.825	83	0.452	128	0.156	173	0.045	218	0.110	263	0.346	308	0.724	353	0.991
39	0.817	84	0.442	129	0.151	174	0.045	219	0.114	264	0.353	309	0.733	354	0.993
40	0.810	85	0.433	130	0.146	175	0.046	220	0.118	265	0.360	310	0.741	355	0.995
41	0.803	86	0.423	131	0.141	176	0.046	221	0.122	266	0.367	311	0.748	356	0.997
42	0.795	87	0.413	132	0.136	177	0.047	222	0.126	267	0.374	312	0.756	357	0.999
43	0.787	88	0.403	133	0.131	178	0.047	223	0.129	268	0.381	313	0.764	358	0.999
44	0.779	89	0.393	134	0.127	179	0.047	224	0.133	269	0.388	314	0.771	359	1.000



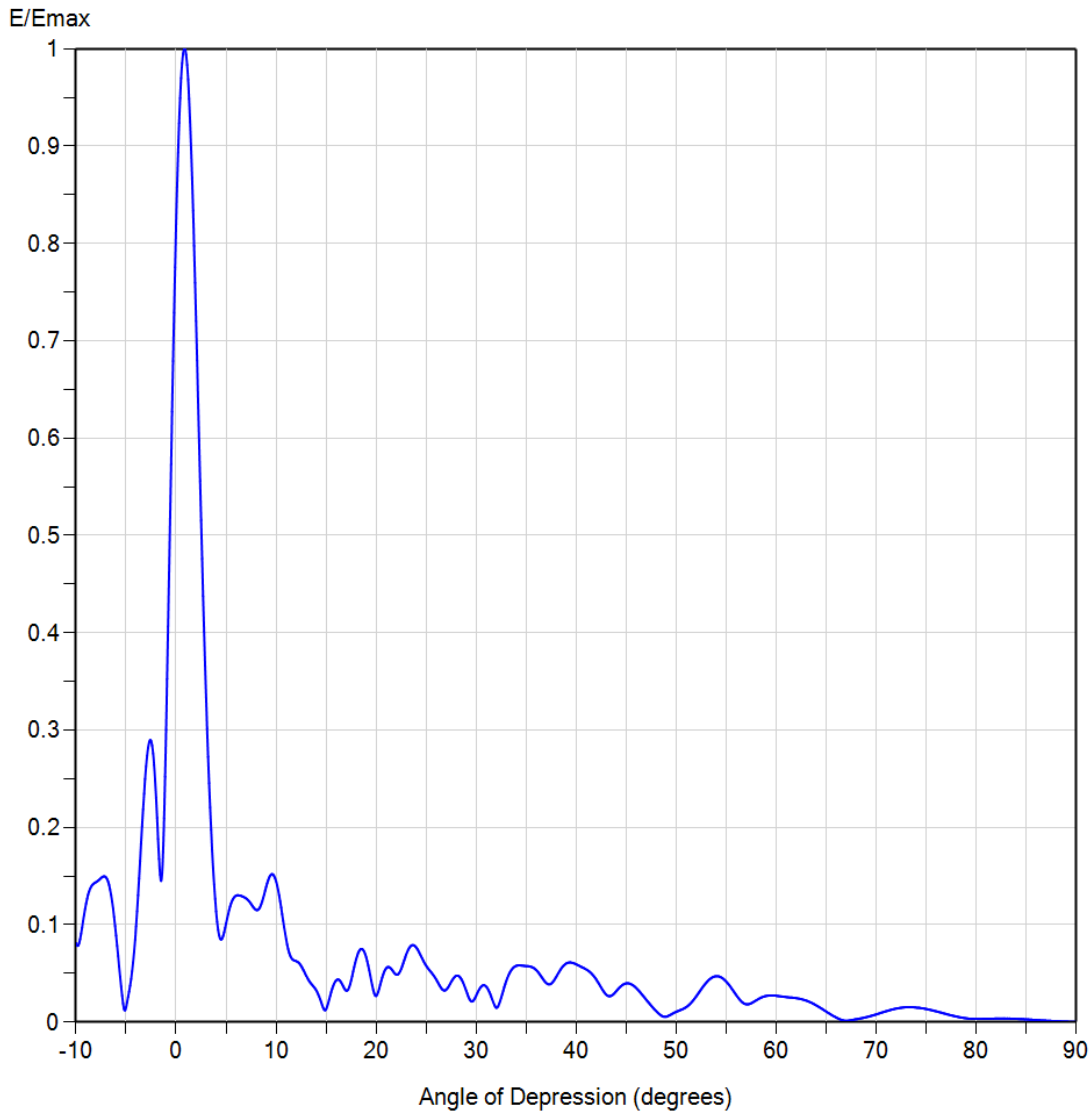
Elevation Pattern



Model:	SAA26-KSTR-E300-ET6R-3433	Frequency:	587.00 MHz
Polarization:	<u>Vertical</u>	Directivity (Main Lobe):	24.0 (13.80 dBd)
Location:		Directivity (At Horizon):	16.1 (12.07 dBd)
Customer:		Beam Tilt:	0.75 degrees
Date:	September 1, 2017	Azimuth Angle:	359 degrees



Elevation Pattern



Model:	SAA26-KSTR-E300-ET6R-3433	Frequency:	587.00 MHz
Polarization:	<u>Vertical</u>	Directivity (Main Lobe):	24.0 (13.80 dBd)
Location:		Directivity (At Horizon):	16.1 (12.07 dBd)
Customer:		Beam Tilt:	0.75 degrees
Date:	September 1, 2017	Azimuth Angle:	359 degrees



Model: **SAA26-KSTR-G300-ET6R-3433**
Location:
Customer:
Date: **September 1, 2017**

Polarization: **Vertical**
Frequency (MHz): **587.00**
Directivity (Main Lobe): **24.0 (13.80 dB)**
Directivity (At Horizon): **16.1 (12.07 dB)**
Beam Tilt: **0.75 degrees**

TABULATED ELEVATION PATTERN

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.081	2.4	0.556	10.6	0.111	30.5	0.036	51.0	0.015	71.5	0.013
-9.5	0.091	2.6	0.476	10.8	0.097	31.0	0.036	51.5	0.020	72.0	0.014
-9.0	0.122	2.8	0.401	11.0	0.085	31.5	0.026	52.0	0.027	72.5	0.015
-8.5	0.139	3.0	0.333	11.5	0.066	32.0	0.015	52.5	0.034	73.0	0.015
-8.0	0.144	3.2	0.273	12.0	0.063	32.5	0.025	53.0	0.041	73.5	0.015
-7.5	0.148	3.4	0.221	12.5	0.058	33.0	0.042	53.5	0.045	74.0	0.015
-7.0	0.149	3.6	0.177	13.0	0.048	33.5	0.053	54.0	0.047	74.5	0.014
-6.5	0.131	3.8	0.141	13.5	0.039	34.0	0.058	54.5	0.046	75.0	0.013
-6.0	0.089	4.0	0.114	14.0	0.033	34.5	0.058	55.0	0.042	75.5	0.012
-5.5	0.037	4.2	0.095	14.5	0.020	35.0	0.058	55.5	0.035	76.0	0.011
-5.0	0.015	4.4	0.086	15.0	0.013	35.5	0.057	56.0	0.028	76.5	0.010
-4.5	0.044	4.6	0.086	15.5	0.031	36.0	0.053	56.5	0.021	77.0	0.008
-4.0	0.099	4.8	0.092	16.0	0.043	36.5	0.047	57.0	0.018	77.5	0.007
-3.5	0.184	5.0	0.102	16.5	0.041	37.0	0.040	57.5	0.019	78.0	0.006
-3.0	0.263	5.2	0.111	17.0	0.032	37.5	0.040	58.0	0.022	78.5	0.005
-2.8	0.282	5.4	0.119	17.5	0.043	38.0	0.047	58.5	0.025	79.0	0.004
-2.6	0.290	5.6	0.125	18.0	0.065	38.5	0.055	59.0	0.027	79.5	0.003
-2.4	0.284	5.8	0.128	18.5	0.075	39.0	0.060	59.5	0.027	80.0	0.003
-2.2	0.264	6.0	0.130	19.0	0.067	39.5	0.061	60.0	0.027	80.5	0.003
-2.0	0.231	6.2	0.130	19.5	0.043	40.0	0.059	60.5	0.026	81.0	0.003
-1.8	0.188	6.4	0.130	20.0	0.027	40.5	0.057	61.0	0.026	81.5	0.004
-1.6	0.151	6.6	0.129	20.5	0.042	41.0	0.054	61.5	0.025	82.0	0.004
-1.4	0.153	6.8	0.128	21.0	0.055	41.5	0.050	62.0	0.025	82.5	0.004
-1.2	0.209	7.0	0.127	21.5	0.055	42.0	0.044	62.5	0.024	83.0	0.004
-1.0	0.300	7.2	0.125	22.0	0.049	42.5	0.035	63.0	0.022	83.5	0.003
-0.8	0.407	7.4	0.123	22.5	0.055	43.0	0.028	63.5	0.020	84.0	0.003
-0.6	0.518	7.6	0.120	23.0	0.069	43.5	0.027	64.0	0.017	84.5	0.003
-0.4	0.627	7.8	0.117	23.5	0.079	44.0	0.032	64.5	0.014	85.0	0.003
-0.2	0.729	8.0	0.115	24.0	0.077	44.5	0.037	65.0	0.011	85.5	0.002
0.0	0.819	8.2	0.115	24.5	0.067	45.0	0.040	65.5	0.007	86.0	0.002
0.2	0.893	8.4	0.118	25.0	0.058	45.5	0.039	66.0	0.005	86.5	0.002
0.4	0.949	8.6	0.124	25.5	0.051	46.0	0.035	66.5	0.002	87.0	0.001
0.6	0.985	8.8	0.131	26.0	0.044	46.5	0.029	67.0	0.001	87.5	0.001
0.8	1.000	9.0	0.139	26.5	0.035	47.0	0.023	67.5	0.002	88.0	0.001
1.0	0.994	9.2	0.146	27.0	0.033	47.5	0.017	68.0	0.003	88.5	0.001
1.2	0.968	9.4	0.150	27.5	0.041	48.0	0.011	68.5	0.004	89.0	0.000
1.4	0.925	9.6	0.152	28.0	0.048	48.5	0.007	69.0	0.005	89.5	0.000
1.6	0.867	9.8	0.150	28.5	0.044	49.0	0.006	69.5	0.006	90.0	0.000
1.8	0.798	10.0	0.145	29.0	0.032	49.5	0.008	70.0	0.008		
2.0	0.720	10.2	0.136	29.5	0.021	50.0	0.011	70.5	0.010		
2.2	0.639	10.4	0.124	30.0	0.027	50.5	0.013	71.0	0.011		