



ENGINEERING STATEMENT

IN SUPPORT OF MODIFICATION OF A LICENSED FACILITY WXVO-LD PASCAGOULA, MS

Background

Weathervision 7, LLC (Weathervision) is the licensee of digital low-power television station WXVO-LD (File No. BLDVL-20120628ABG, Facility ID. 125534) near Pascagoula, MS. The station experienced damage to its antenna from Hurricane Zeta in October 2020 and it intends to replace the antenna. Weathervision seeks to modify the WXVO-LD license to specify the new, replacement antenna.

Proposed Facility Parameters

Weathervision is proposing the following parameters for the WXVO-LD digital operation at the new site:

Coordinates:	30° 29' 10.0" N (NAD83) 88° 42' 53.0" W
ASR:	1262082
ERP:	3.0 kW
RCAMSL:	161.0m
RCAGL:	150.0m
Antenna:	Kathrein/Scala 2x2 DRV (DA)
Mask:	Stringent

PROVIDING COMMUNICATION SYSTEMS ENGINEERING

CORPORATE OFFICE
1475 NORTH 200 WEST
NEPHI, UT 84648

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FAX: (435) 623-8610

REGIONAL OFFICE
6197 MILLER RD.
SWARTZ CREEK, MI 48473

TEL: (810)-226-0750

Interference

An interference study was conducted of the proposed facility parameters using the FCC TVStudy software (Version 2.2.5) with the default parameters. The results of the study (copy attached hereto) show that potential interference is not predicted to exceed 0.49% to any full-service DTV or Class A stations or 1.99% to any low power stations as required by the Commission's Rules.

Environmental/RFR

This report addresses only the conditions specified in 47CFR1.1307 that deal with Radio Frequency Radiation. Any other non-RFR conditions that might require the preparation of an EA are beyond the scope of this report; since the structure is existing and registered, such conditions should not be an issue requiring further consideration.

The location of the proposed facility is assumed to currently be "in compliance" with FCC guidelines for human exposure to RFR (as defined in OET-65). The worst case ground level RFR contributed to the site by this proposal in public areas is calculated to be 0.000412 mW/cm², which is less than 5% of the MPE for public exposure (0.2 mW/cm²) at Ch. 13 (210-216 MHz). Per Section 1.1307(b) of the FCC Rules, the proposed operation would be categorically excluded from taking corrective action in areas with levels above the MPE limit where the contribution to the RFR from the proposed facility is less than 5%.

Weathervision agrees to comply with the Commission's requirements regarding power adjustments or cessation of operation as may be necessary to ensure a compliant environment for worker access. Workers will be trained on RFR issues and encouraged to wear personal RFR monitors when on the structure.

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Certification

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.

A handwritten signature in black ink, appearing to read "B. Pidek", is written over a horizontal line.

Benjamin L. Pidek, P.E.
April 7, 2021

Attached:
TVStudy Interference Check Report
Azimuth and Elevation Pattern Plots and Tabulations for Proposed Antenna

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TVStudy TV Interference Check Report for Proposed WXVO-LD Facility

Study created: 2021.04.06 19:57:51

Study build station data: LMS TV 2021-04-06

Proposal: WXVO-LD D13 LD LIC PASCAGOULA, MS
 File number: WXVO_C13_KAT2x2DRV
 Facility ID: 125534
 Station data: User record
 Record ID: 1785
 Country: U.S.

Build options:
 Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WBQP-CD	D12	DC	CP	PENSACOLA, FL	BLANK0000129473	143.4 km
No	WBQP-CD	D12	DC	LIC	PENSACOLA, FL	BLDVA20120802AAK	139.9
No	WJTV	D12	DT	LIC	JACKSON, MS	BLCDT20111014ABR	252.5
No	W13DT-D	D13	LD	CP	MONTGOMERY, AL	BNPDTL20090825BZO	311.2
No	WMBB	D13	DT	LIC	PANAMA CITY, FL	BLCDT20090220AAF	318.9
No	WBRZ-TV	D13	DT	LIC	BATON ROUGE, LA	BLCDT20110420ABI	238.6
No	KLTM-TV	D13	DT	LIC	MONROE, LA	BLEDT20090619ABS	371.0
No	WTOK-TV	D13	DT	LIC	MERIDIAN, MS	BLANK0000124908	204.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D13
 Mask: Stringent
 Latitude: 30 29 10.00 N (NAD83)
 Longitude: 88 42 53.00 W
 Height AMSL: 161.0 m
 HAAT: 0.0 m
 Peak ERP: 3.00 kW
 Antenna: KAT 2x2 DRV 0.0 deg
 Elev Pattern: Generic
 Elec Tilt: 1.00

48.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.025 kW	136.4 m	20.2 km
45.0	0.378	150.2	37.4
90.0	2.45	159.6	52.0
135.0	1.11	156.3	46.0
180.0	0.108	155.8	29.2
225.0	1.11	154.8	45.9
270.0	2.45	148.6	50.7
315.0	0.378	136.8	35.9

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Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 150 m

Distance to Canadian border: 1355.9 km

Distance to Mexican border: 947.0 km

Conditions at FCC monitoring station: Powder Springs GA
Bearing: 44.0 degrees Distance: 530.7 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 310.1 degrees Distance: 1836.0 km

Study cell size: 1.00 km
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

No IX check failures found.

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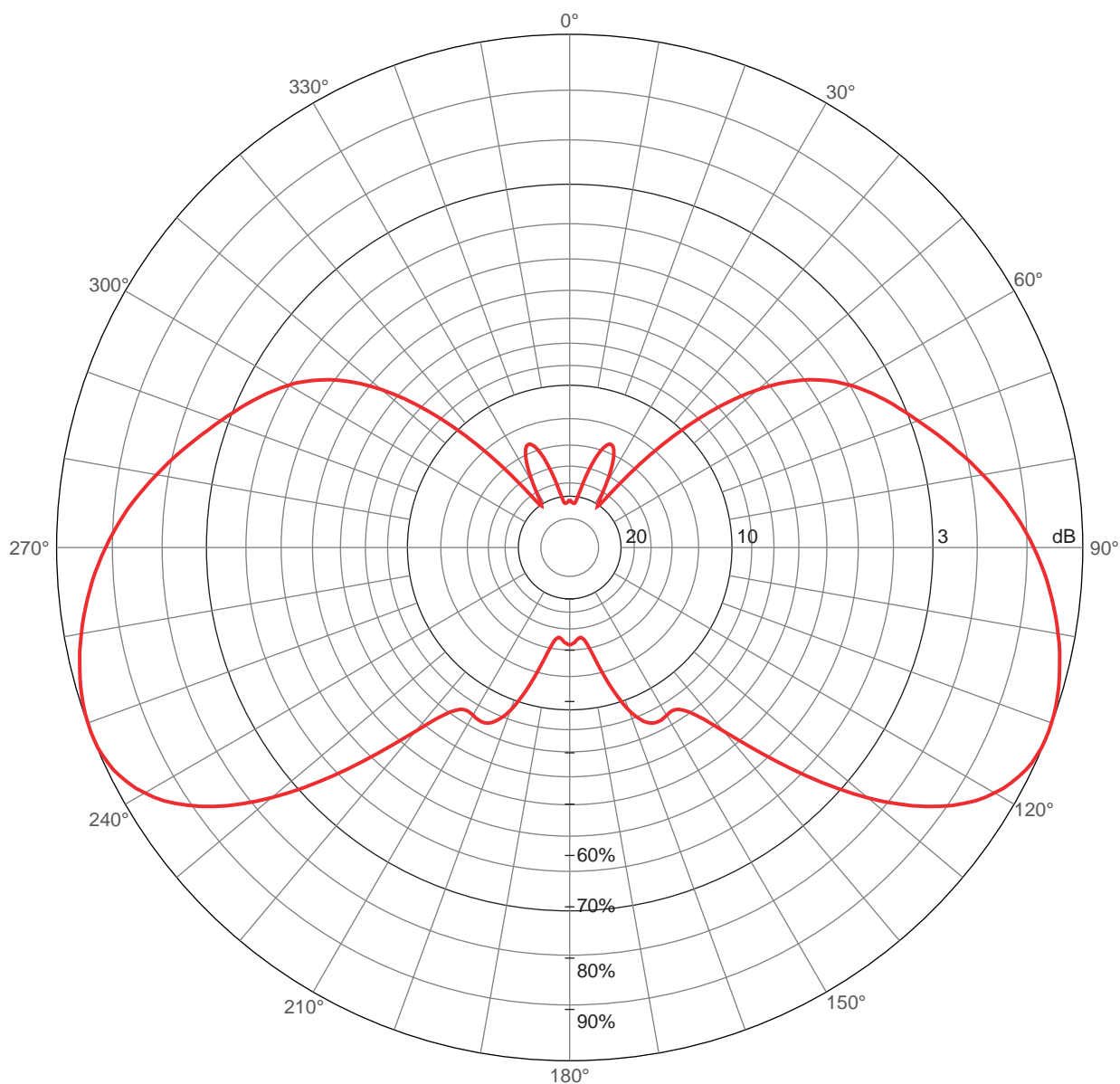
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Azimuthal Pattern (polar-linear)



Antenna, Order No. 600256
Panels per Bay: 2

Frequency: 213 MHz
Azimuthal Directivity: 4.28 dB
Directivity: 8.26 dBd

No.	Azimuth [°]	Radius [mm]	Offset [mm]	Power	Phase [°]
1	100	900	0	1	0
2	260	900	0	1	0

simulation with typical exactness of +/- 8% of max signal

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2x2 DRV H-pol Panel array

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Azimuthal Pattern

Angle	dB	Angle	dB	Angle	dB	Angle	dB	Angle	dB	Angle	dB	Angle	dB	Angle	dB
0	-20.73	45	-9	90	-0.87	135	-4.31	180	-14.45	225	-4.31	270	-0.87	315	-9
1	-20.75	46	-8.37	91	-0.8	136	-4.76	181	-14.48	226	-3.88	271	-0.94	316	-9.72
2	-21	47	-7.79	92	-0.73	137	-5.22	182	-14.57	227	-3.48	272	-1.02	317	-10.5
3	-21.09	48	-7.28	93	-0.67	138	-5.69	183	-14.64	228	-3.09	273	-1.1	318	-11.41
4	-21.16	49	-6.81	94	-0.61	139	-6.16	184	-14.78	229	-2.74	274	-1.18	319	-12.4
5	-21.26	50	-6.41	95	-0.55	140	-6.6	185	-14.94	230	-2.41	275	-1.26	320	-13.5
6	-21.25	51	-6.03	96	-0.49	141	-7.04	186	-15.03	231	-2.1	276	-1.36	321	-14.76
7	-21.1	52	-5.69	97	-0.44	142	-7.45	187	-15.07	232	-1.82	277	-1.45	322	-16.13
8	-20.65	53	-5.4	98	-0.39	143	-7.77	188	-14.96	233	-1.55	278	-1.55	323	-17.48
9	-19.98	54	-5.12	99	-0.34	144	-8.05	189	-14.8	234	-1.33	279	-1.65	324	-18.83
10	-19.25	55	-4.88	100	-0.3	145	-8.24	190	-14.47	235	-1.12	280	-1.75	325	-19.89
11	-18.48	56	-4.67	101	-0.25	146	-8.4	191	-14.03	236	-0.93	281	-1.85	326	-20.2
12	-17.58	57	-4.47	102	-0.21	147	-8.48	192	-13.53	237	-0.77	282	-1.95	327	-19.89
13	-16.84	58	-4.29	103	-0.18	148	-8.51	193	-12.94	238	-0.61	283	-2.06	328	-19.06
14	-16.1	59	-4.14	104	-0.14	149	-8.49	194	-12.36	239	-0.49	284	-2.16	329	-18.03
15	-15.48	60	-3.98	105	-0.11	150	-8.46	195	-11.77	240	-0.39	285	-2.28	330	-17.01
16	-14.89	61	-3.84	106	-0.08	151	-8.42	196	-11.22	241	-0.29	286	-2.38	331	-16.12
17	-14.38	62	-3.72	107	-0.05	152	-8.39	197	-10.69	242	-0.22	287	-2.49	332	-15.32
18	-13.97	63	-3.59	108	-0.03	153	-8.39	198	-10.24	243	-0.15	288	-2.6	333	-14.7
19	-13.69	64	-3.47	109	-0.01	154	-8.41	199	-9.8	244	-0.1	289	-2.71	334	-14.18
20	-13.45	65	-3.36	110	-0.01	155	-8.46	200	-9.44	245	-0.06	290	-2.81	335	-13.82
21	-13.31	66	-3.24	111	0	156	-8.56	201	-9.14	246	-0.03	291	-2.92	336	-13.53
22	-13.3	67	-3.14	112	0	157	-8.69	202	-8.91	247	-0.01	292	-3.03	337	-13.35
23	-13.35	68	-3.03	113	-0.01	158	-8.91	203	-8.72	248	0	293	-3.13	338	-13.3
24	-13.53	69	-2.93	114	-0.03	159	-9.13	204	-8.56	249	0	294	-3.24	339	-13.31
25	-13.82	70	-2.82	115	-0.05	160	-9.44	205	-8.46	250	-0.01	295	-3.36	340	-13.45
26	-14.18	71	-2.72	116	-0.1	161	-9.8	206	-8.41	251	-0.01	296	-3.47	341	-13.65
27	-14.7	72	-2.6	117	-0.15	162	-10.24	207	-8.39	252	-0.03	297	-3.59	342	-13.97
28	-15.32	73	-2.49	118	-0.22	163	-10.69	208	-8.41	253	-0.05	298	-3.72	343	-14.38
29	-16.12	74	-2.38	119	-0.29	164	-11.19	209	-8.43	254	-0.08	299	-3.84	344	-14.84
30	-17.01	75	-2.28	120	-0.39	165	-11.77	210	-8.48	255	-0.11	300	-3.98	345	-15.48
31	-18.03	76	-2.17	121	-0.49	166	-12.32	211	-8.5	256	-0.14	301	-4.11	346	-16.1
32	-19.07	77	-2.06	122	-0.61	167	-12.94	212	-8.51	257	-0.17	302	-4.29	347	-16.84
33	-19.89	78	-1.95	123	-0.77	168	-13.52	213	-8.48	258	-0.21	303	-4.47	348	-17.58
34	-20.28	79	-1.85	124	-0.93	169	-14.03	214	-8.4	259	-0.25	304	-4.67	349	-18.48
35	-19.89	80	-1.75	125	-1.12	170	-14.47	215	-8.24	260	-0.3	305	-4.88	350	-19.25
36	-18.9	81	-1.65	126	-1.33	171	-14.8	216	-8.05	261	-0.34	306	-5.12	351	-19.98
37	-17.48	82	-1.55	127	-1.55	172	-14.96	217	-7.76	262	-0.39	307	-5.4	352	-20.65
38	-16.13	83	-1.45	128	-1.82	173	-15.07	218	-7.45	263	-0.44	308	-5.69	353	-21.1
39	-14.76	84	-1.36	129	-2.09	174	-15.03	219	-7.04	264	-0.49	309	-6.03	354	-21.25
40	-13.5	85	-1.27	130	-2.39	175	-14.94	220	-6.6	265	-0.55	310	-6.39	355	-21.26
41	-12.4	86	-1.18	131	-2.73	176	-14.82	221	-6.16	266	-0.61	311	-6.81	356	-21.16
42	-11.41	87	-1.1	132	-3.09	177	-14.64	222	-5.69	267	-0.67	312	-7.27	357	-21.09
43	-10.53	88	-1.02	133	-3.47	178	-14.57	223	-5.22	268	-0.73	313	-7.79	358	-21
44	-9.72	89	-0.94	134	-3.88	179	-14.48	224	-4.76	269	-0.8	314	-8.37	359	-20.75

Frequency: 213 MHz

Gain: 7.96 dBd

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WXVO

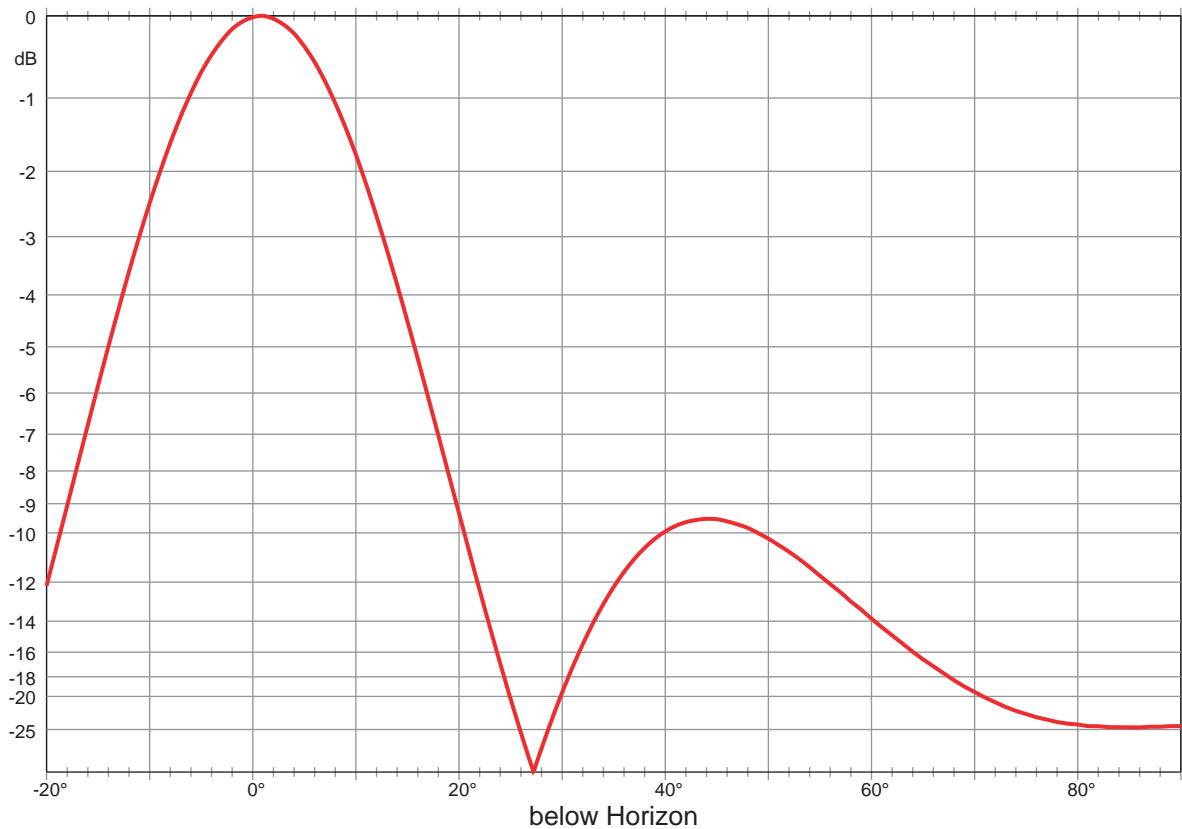
Date: 2020.11.05

2x2 DRV H-pol Panel array

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Elevation Pattern (cartesian-linear)



Antenna, Order No. 600256

Number of Bays: 2

Frequency: 213 MHz

Elevation Directivity: 3.98 dBd

Directivity: 8.26 dBd

Downtilt: 1°

Compensation: 0.77 %

No.	Vert. Distance [mm]	Power	Phase [°]
2	1600	1	7.1
1	0	1	0

Subject to alternation

Elevation Pattern

Angle	dB	Angle	dB	Angle	dB	Angle	dB	Angle	dB	Angle	dB	Angle	dB	Angle	dB
0	-0.02	45	-9.52	90	-24.33	135	-25.04	180	-31.39	225	-24.27	270	-24.83	315	-8.41
1	0	46	-9.59	91	-24.2	136	-25.49	181	-31.44	226	-24.05	271	-24.96	316	-8.34
2	-0.03	47	-9.7	92	-24.19	137	-25.97	182	-31.52	227	-23.73	272	-24.95	317	-8.29
3	-0.1	48	-9.82	93	-24.06	138	-26.5	183	-31.97	228	-23.55	273	-25.07	318	-8.29
4	-0.21	49	-10.01	94	-24.04	139	-27.08	184	-32.13	229	-23.28	274	-25.06	319	-8.33
5	-0.36	50	-10.21	95	-23.9	140	-27.71	185	-32.32	230	-23.15	275	-25.04	320	-8.43
6	-0.55	51	-10.46	96	-23.88	141	-28.41	186	-32.89	231	-23.03	276	-25.01	321	-8.58
7	-0.79	52	-10.72	97	-23.73	142	-29.31	187	-33.16	232	-22.93	277	-24.84	322	-8.79
8	-1.07	53	-11.01	98	-23.71	143	-30.16	188	-33.83	233	-22.85	278	-24.81	323	-9.07
9	-1.39	54	-11.35	99	-23.68	144	-31.26	189	-34.19	234	-22.78	279	-24.5	324	-9.43
10	-1.76	55	-11.72	100	-23.65	145	-32.34	190	-34.96	235	-22.72	280	-24.33	325	-9.87
11	-2.19	56	-12.1	101	-23.49	146	-33.73	191	-35.42	236	-22.68	281	-24.03	326	-10.42
12	-2.68	57	-12.48	102	-23.46	147	-35.32	192	-36.33	237	-22.65	282	-23.61	327	-11.1
13	-3.21	58	-12.94	103	-23.43	148	-37.2	193	-36.91	238	-22.75	283	-23.2	328	-11.93
14	-3.82	59	-13.36	104	-23.39	149	-39.49	194	-37.57	239	-22.74	284	-22.7	329	-12.95
15	-4.5	60	-13.86	105	-23.36	150	-42.44	195	-37.92	240	-22.73	285	-22.22	330	-14.24
16	-5.25	61	-14.36	106	-23.32	151	-46.61	196	-38.39	241	-22.74	286	-21.66	331	-15.9
17	-6.09	62	-14.86	107	-23.29	152	-54.33	197	-39.35	242	-22.88	287	-21.03	332	-18.14
18	-7.04	63	-15.39	108	-23.26	153	-65.37	198	-39.77	243	-22.9	288	-20.44	333	-21.43
19	-8.11	64	-15.97	109	-23.1	154	-51.07	199	-40.74	244	-22.92	289	-19.8	334	-27.27
20	-9.32	65	-16.54	110	-23.07	155	-46.3	200	-41.68	245	-22.96	290	-19.19	335	-66.78
21	-10.72	66	-17.09	111	-23.05	156	-43.76	201	-43.3	246	-23.12	291	-18.55	336	-26.68
22	-12.38	67	-17.68	112	-23.02	157	-41.91	202	-45.23	247	-23.16	292	-17.89	337	-20.52
23	-14.37	68	-18.32	113	-23	158	-40.6	203	-48.22	248	-23.21	293	-17.26	338	-16.85
24	-16.88	69	-18.93	114	-22.99	159	-39.66	204	-53.72	249	-23.25	294	-16.68	339	-14.22
25	-20.29	70	-19.51	115	-22.86	160	-38.7	205	-92.97	250	-23.31	295	-16.08	340	-12.17
26	-25.67	71	-20.13	116	-22.85	161	-38.24	206	-52.84	251	-23.36	296	-15.46	341	-10.48
27	-40.57	72	-20.7	117	-22.86	162	-37.63	207	-46.41	252	-23.53	297	-14.89	342	-9.06
28	-30.12	73	-21.3	118	-22.87	163	-37.5	208	-42.54	253	-23.59	298	-14.36	343	-7.84
29	-23.18	74	-21.84	119	-22.76	164	-36.77	209	-39.54	254	-23.64	299	-13.81	344	-6.77
30	-19.56	75	-22.31	120	-22.79	165	-36.49	210	-37.33	255	-23.7	300	-13.27	345	-5.82
31	-17.17	76	-22.79	121	-22.82	166	-36.3	211	-35.49	256	-23.75	301	-12.81	346	-4.99
32	-15.45	77	-23.18	122	-22.87	167	-35.79	212	-33.92	257	-23.8	302	-12.3	347	-4.25
33	-14.11	78	-23.59	123	-22.81	168	-35.34	213	-32.54	258	-23.85	303	-11.87	348	-3.58
34	-13.06	79	-23.87	124	-22.88	169	-34.55	214	-31.33	259	-23.9	304	-11.44	349	-2.99
35	-12.23	80	-24.04	125	-22.96	170	-34.19	215	-30.24	260	-24.07	305	-11.01	350	-2.47
36	-11.55	81	-24.33	126	-23.06	171	-33.51	216	-29.4	261	-24.11	306	-10.62	351	-2.01
37	-11	82	-24.36	127	-23.17	172	-33.24	217	-28.5	262	-24.15	307	-10.26	352	-1.6
38	-10.56	83	-24.52	128	-23.3	173	-32.66	218	-27.82	263	-24.19	308	-9.94	353	-1.24
39	-10.22	84	-24.54	129	-23.44	174	-32.47	219	-27.06	264	-24.35	309	-9.63	354	-0.94
40	-9.95	85	-24.56	130	-23.61	175	-31.97	220	-26.49	265	-24.37	310	-9.36	355	-0.67
41	-9.75	86	-24.58	131	-23.8	176	-31.85	221	-25.97	266	-24.52	311	-9.09	356	-0.46
42	-9.62	87	-24.45	132	-24.13	177	-31.77	222	-25.49	267	-24.54	312	-8.89	357	-0.29
43	-9.54	88	-24.46	133	-24.36	178	-31.39	223	-25.05	268	-24.68	313	-8.7	358	-0.15
44	-9.51	89	-24.33	134	-24.75	179	-31.37	224	-24.65	269	-24.82	314	-8.52	359	-0.07

Frequency: 213 MHz

Gain: 7.96 dBd

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Weathervision 7

WXVO

Date: 2020.11.05

2x2 DRV H-pol Panel array

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