

**ENGINEERING STATEMENT**  
**IN SUPPORT OF**  
**REQUEST FOR SPECIAL TEMPORARY AUTHORITY**  
**WTBT-DT**  
**TAMPA, FL**

**Background**

New York Spectrum Holding Company, LLC (NYSHC), licensee of WTBT-LD (Facility ID. 168481), is seeking Special Temporary Authority to operate WTBT-LD with the parameters specified in its recently filed displacement application.

**Proposed Parameters**

NYSHC is proposing the following parameters for the WTBT-LD digital operation on Ch. 27:

Coordinates:	27° 50' 51.5" N (NAD83) 82° 15' 49.4" W
ERP:	15.0 kW
RCAMSL:	413.2m
RCAGL:	390.0m
Antenna:	Scala 4x2 750-10325
Mask:	Full-Service

### **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 from the proposed facility 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 a multi-user site and it 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 is calculated to be 0.001082 mW/cm<sup>2</sup> at 2m AGL. The calculated RFR is much less than 5% of the maximum permissible exposure (MPE) for public areas (0.367333 mW/cm<sup>2</sup>) at Ch. 27 (548-554 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%.

NYSCH 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.

**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.



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Benjamin Pidek, P.E.  
October 13, 2021

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

## TVStudy TV Interference Check Report for WTBT-LD on Ch. 27

Study created: 2021.09.01 20:43:17

Study build station data: LMS TV 2021-09-01

Proposal: WTBT-LD D27 LD CP TAMPA, FL  
File number: WTBT-C27-KAT750-15k-WEDUTwr  
Facility ID: 168481  
Station data: User record  
Record ID: 1894  
Country: U.S.

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

Search options:  
Non-U.S. records included

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WXAX-CD	D26	DC	LIC	CLEARWATER, FL	BLANK0000158053	0.0 km
No	WGVY-LD	D26	LD	CP	GAINESVILLE, FL	BLANK0000140066	210.7
No	WGVY-LD	D26	LD	LIC	GAINESVILLE, FL	BLDTL20080605AAQ	210.6
No	W26DP-D	D26	LD	LIC	INVERNESS, FL	BLDTT20100122AAL	116.4
No	WHDN-CD	D26	DC	CP	NAPLES, FL	BLANK0000003751	188.3
No	WHDN-CD	D26	DC	LIC	NAPLES, FL	BLANK0000001626	188.2
No	W26FI-D	D26	LD	CP	OKEECHOBEE, FL	BLANK0000071804	95.1
No	W26FI-D	D26	LD	APP	OKEECHOBEE, FL	BLANK0000149833	92.2
No	WKMG-TV	D26	DT	LIC	ORLANDO, FL	BLANK0000149963	145.2
No	WSNN-LD	D26	LD	LIC	SARASOTA, FL	BLANK0000059117	59.7
No	WOCD-LD	D27	LD	LIC	DUNNELLON, FL	BLANK0000154197	136.9
No	WOCD-LD	D27	LD	APP	DUNNELLON, FL	BLANK0000158154	145.1
No	WOCD-LD	N27-	TX	LIC	DUNNELLON, FL	BLTTL20090331AEX	143.6
No	WLZE-LD	D27	LD	CP	FORT MYERS, FL	BLANK0000145004	126.5
No	WYME-CD	D27	DC	LIC	GAINESVILLE, FL	BLANK0000098965	200.4
No	WWRJ-LD	D27	LD	LIC	JACKSONVILLE, FL	BLANK0000149999	280.8
No	WWRJ-LD	D27	LD	CP	JACKSONVILLE, FL	BLANK0000150180	278.7
No	WWRJ-LD	N27-	TX	LIC	JACKSONVILLE, FL	BLTTL20140115AAF	280.8
No	WGZT-LP	N27	TX	LIC	KEY WEST, FL	BLTTL20030804AAH	369.2
No	WGZT-LP	D27	LD	CP	KEY WEST, FL	BLANK0000152223	369.1
No	WSFL-TV	D27	DT	LIC	MIAMI, FL	BLANK0000070454	290.8
Yes	WRDQ	D27	DT	LIC	ORLANDO, FL	BLANK0000149085	143.0
No	W27EO-D	D27	LD	LIC	PANAMA CITY, FL	BLANK0000157414	410.8
No	WTXL-TV	D27	DT	LIC	TALLAHASSEE, FL	BLCDT20090217ABY	354.5
No	W28EZ-D	D28	LD	CP	GAINESVILLE, FL	BNPDTL20090825AQO	176.9
No	WZVN-TV	D28	DT	LIC	NAPLES, FL	BLANK0000107164	124.1
No	WRBW	D28	DT	LIC	ORLANDO, FL	BLANK0000143935	142.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D27  
Mask: Full Service  
Latitude: 27 50 51.50 N (NAD83)  
Longitude: 82 15 49.40 W  
Height AMSL: 413.2 m  
HAAT: 0.0 m  
Peak ERP: 15.0 kW

Antenna: Kathrein 750-10325 QW Offset 260.0 deg  
Elev Pattn: Generic  
Elec Tilt: 0.60

50.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.559 kW	392.9 m	42.5 km
45.0	0.002	396.9	12.8
90.0	0.000	386.7	2.4
135.0	0.018	382.6	22.9
180.0	3.46	382.8	52.8
225.0	12.1	394.2	60.1
270.0	10.6	405.1	59.9
315.0	13.6	405.7	61.4

Database HAAT does not agree with computed HAAT  
Database HAAT: 0 m    Computed HAAT: 393 m

Distance to Canadian border: 1537.1 km

Distance to Mexican border: 1467.0 km

Conditions at FCC monitoring station: Vero Beach FL  
Bearing: 99.1 degrees    Distance: 162.5 km

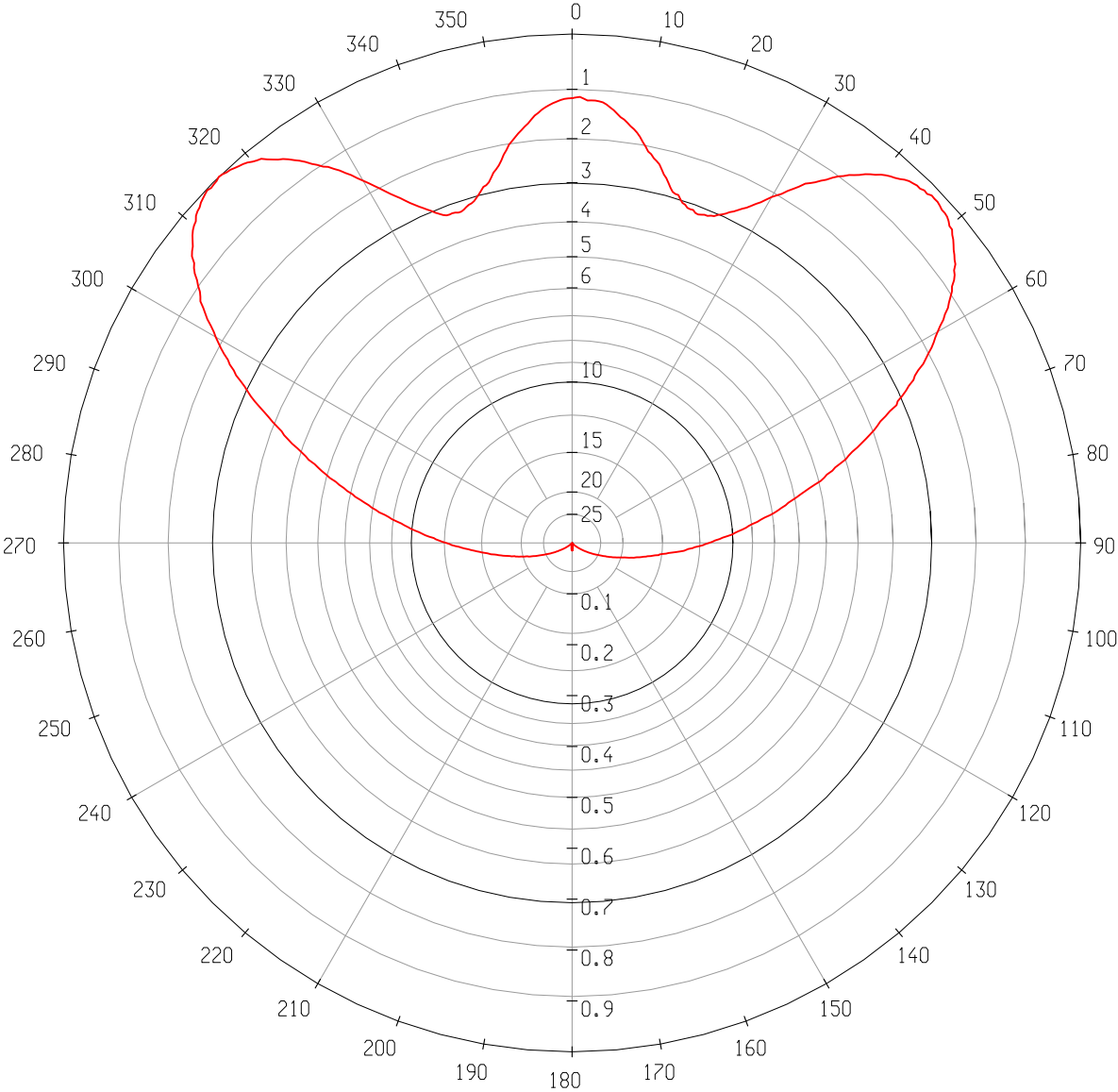
Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 308.9 degrees    Distance: 2505.8 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.**



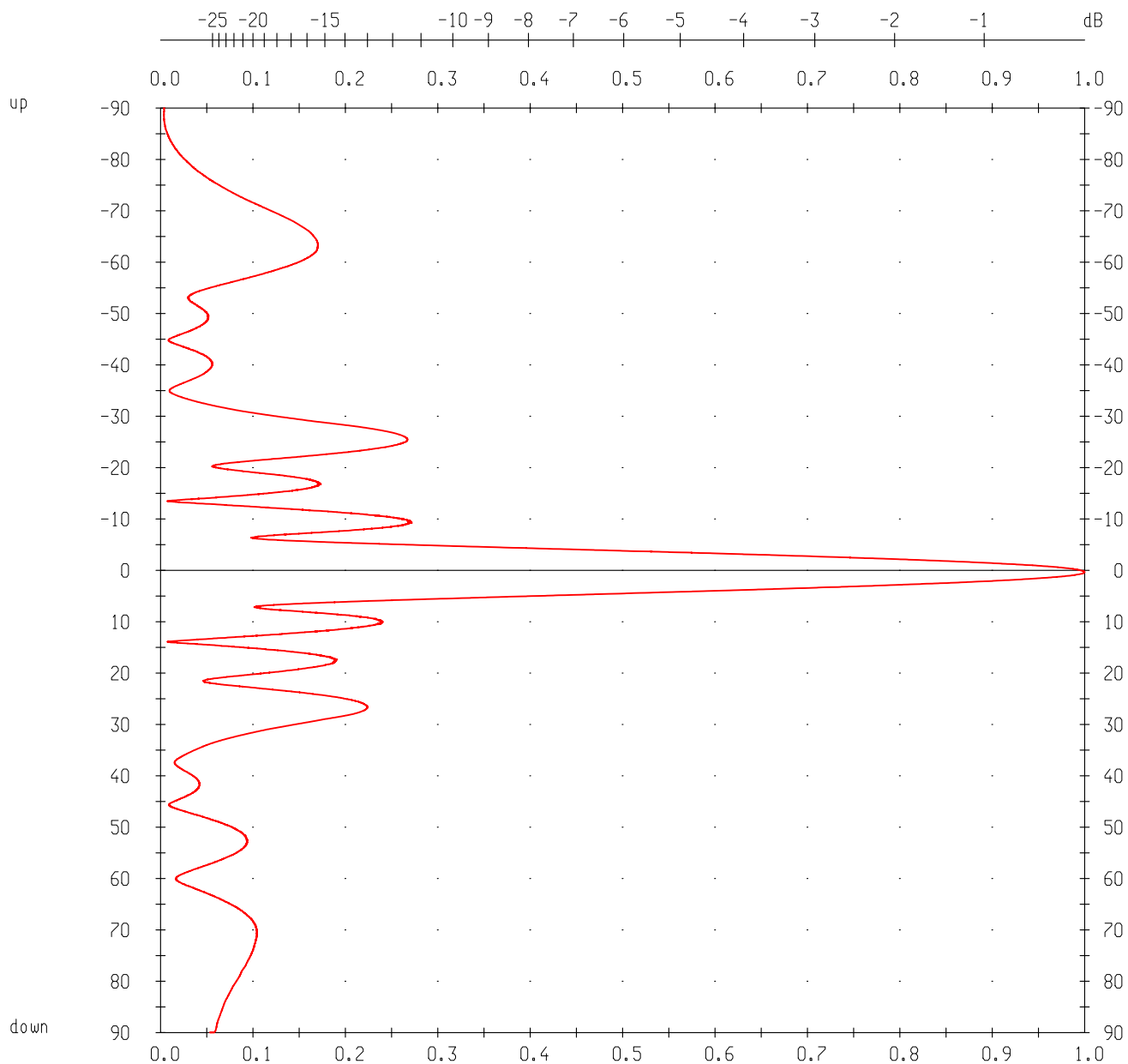
frequency in MHz 551.000  
down-tilt in 0.0  
max / mean in dB 5.31

<div>KATHREIN</div> <div>Rosenheim Germany</div> <div>BCA/Mi 2.9.21 9:33</div>	4x2 750-10325 array configured for reduced rear @ ch 27	Typ Nr.
		Bl.:

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

### TABULATED DATA FOR AZIMUTH PATTERN

ANGLE	FIELD	ANGLE	FIELD	ANGLE	FIELD	ANGLE	FIELD	ANGLE	FIELD	ANGLE	FIELD	ANGLE	FIELD
0	0.911	52	0.976	104	0.155	156	0.003	208	0.006	260	0.187	312	0.997
1	0.913	53	0.970	105	0.146	157	0.002	209	0.007	261	0.197	313	1.000
2	0.909	54	0.961	106	0.137	158	0.002	210	0.008	262	0.209	314	1.000
3	0.908	55	0.951	107	0.130	159	0.001	211	0.009	263	0.219	315	0.999
4	0.906	56	0.940	108	0.123	160	0.001	212	0.010	264	0.232	316	0.996
5	0.898	57	0.929	109	0.115	161	0.001	213	0.011	265	0.244	317	0.990
6	0.888	58	0.915	110	0.109	162	0.000	214	0.011	266	0.257	318	0.983
7	0.877	59	0.901	111	0.103	163	0.000	215	0.012	267	0.270	319	0.975
8	0.868	60	0.884	112	0.096	164	0.000	216	0.013	268	0.284	320	0.966
9	0.858	61	0.869	113	0.090	165	0.000	217	0.013	269	0.298	321	0.955
10	0.841	62	0.853	114	0.084	166	0.000	218	0.014	270	0.314	322	0.941
11	0.829	63	0.835	115	0.079	167	0.000	219	0.014	271	0.330	323	0.928
12	0.816	64	0.818	116	0.074	168	0.000	220	0.015	272	0.342	324	0.913
13	0.805	65	0.799	117	0.069	169	0.001	221	0.015	273	0.359	325	0.897
14	0.790	66	0.780	118	0.065	170	0.001	222	0.016	274	0.376	326	0.880
15	0.773	67	0.762	119	0.060	171	0.001	223	0.016	275	0.393	327	0.865
16	0.764	68	0.740	120	0.056	172	0.001	224	0.017	276	0.408	328	0.849
17	0.755	69	0.720	121	0.052	173	0.002	225	0.018	277	0.425	329	0.832
18	0.743	70	0.700	122	0.049	174	0.002	226	0.019	278	0.444	330	0.813
19	0.735	71	0.680	123	0.045	175	0.002	227	0.020	279	0.462	331	0.797
20	0.731	72	0.660	124	0.041	176	0.002	228	0.021	280	0.480	332	0.781
21	0.729	73	0.640	125	0.038	177	0.003	229	0.022	281	0.500	333	0.768
22	0.727	74	0.621	126	0.035	178	0.003	230	0.024	282	0.518	334	0.757
23	0.726	75	0.601	127	0.033	179	0.003	231	0.025	283	0.538	335	0.743
24	0.730	76	0.582	128	0.030	180	0.003	232	0.028	284	0.557	336	0.734
25	0.737	77	0.559	129	0.028	181	0.003	233	0.030	285	0.578	337	0.729
26	0.744	78	0.538	130	0.026	182	0.003	234	0.033	286	0.598	338	0.723
27	0.752	79	0.519	131	0.024	183	0.002	235	0.035	287	0.618	339	0.720
28	0.763	80	0.500	132	0.022	184	0.002	236	0.038	288	0.638	340	0.720
29	0.776	81	0.484	133	0.021	185	0.002	237	0.041	289	0.658	341	0.724
30	0.791	82	0.465	134	0.019	186	0.002	238	0.044	290	0.679	342	0.728
31	0.806	83	0.445	135	0.018	187	0.002	239	0.047	291	0.699	343	0.735
32	0.822	84	0.426	136	0.017	188	0.001	240	0.051	292	0.719	344	0.741
33	0.840	85	0.410	137	0.016	189	0.001	241	0.056	293	0.739	345	0.754
34	0.852	86	0.394	138	0.015	190	0.001	242	0.060	294	0.761	346	0.767
35	0.867	87	0.376	139	0.014	191	0.001	243	0.065	295	0.780	347	0.774
36	0.884	88	0.359	140	0.014	192	0.000	244	0.069	296	0.800	348	0.788
37	0.898	89	0.343	141	0.013	193	0.000	245	0.074	297	0.819	349	0.802
38	0.911	90	0.328	142	0.013	194	0.000	246	0.079	298	0.837	350	0.819
39	0.925	91	0.312	143	0.012	195	0.000	247	0.085	299	0.854	351	0.834
40	0.937	92	0.297	144	0.012	196	0.000	248	0.091	300	0.871	352	0.847
41	0.948	93	0.283	145	0.011	197	0.000	249	0.097	301	0.889	353	0.858
42	0.958	94	0.270	146	0.011	198	0.000	250	0.105	302	0.905	354	0.871
43	0.967	95	0.255	147	0.010	199	0.001	251	0.111	303	0.921	355	0.882
44	0.974	96	0.239	148	0.009	200	0.001	252	0.118	304	0.930	356	0.890
45	0.980	97	0.227	149	0.008	201	0.001	253	0.125	305	0.944	357	0.899
46	0.985	98	0.216	150	0.007	202	0.002	254	0.134	306	0.957	358	0.906
47	0.988	99	0.204	151	0.007	203	0.003	255	0.142	307	0.967	359	0.910
48	0.988	100	0.193	152	0.006	204	0.003	256	0.150	308	0.975		
49	0.987	101	0.183	153	0.005	205	0.004	257	0.158	309	0.983		
50	0.986	102	0.173	154	0.004	206	0.005	258	0.168	310	0.989		
51	0.982	103	0.164	155	0.004	207	0.006	259	0.177	311	0.994		



frequency in MHz 551.000  
azimut in 0.0  
omni-dir in dBd 9.48

<b>KATHREIN</b> Rosenheim Germany	4x2 750-10325 array configured for reduced rear @ ch 27	Typ Nr.
		Bl.:
BCA/Mi 2.9.21 9:33		



# Kathrein Scala 4x2 750 10325 - Ch. 27

## TABULATED DATA FOR ELEVATION PATTERN

ANGLE	FIELD	ANGLE	FIELD	ANGLE	FIELD
-10	0.272	24	0.318	58	0.175
-9	0.340	25	0.296	59	0.179
-8	0.478	26	0.281	60	0.186
-7	0.546	27	0.244	61	0.188
-6	0.677	28	0.223	62	0.190
-5	0.737	29	0.175	63	0.189
-4	0.793	30	0.153	64	0.187
-3	0.887	31	0.132	65	0.185
-2	0.924	32	0.100	66	0.183
-1	0.978	33	0.088	67	0.178
0	0.993	34	0.073	68	0.174
1	0.999	35	0.071	69	0.168
2	0.988	36	0.074	70	0.163
3	0.971	37	0.077	71	0.155
4	0.912	38	0.079	72	0.151
5	0.873	39	0.080	73	0.146
6	0.775	40	0.078	74	0.137
7	0.717	41	0.071	75	0.133
8	0.592	42	0.065	76	0.125
9	0.525	43	0.048	77	0.122
10	0.456	44	0.038	78	0.440
11	0.316	45	0.027	79	0.440
12	0.247	46	0.003	80	0.440
13	0.113	47	0.010	81	0.440
14	0.051	48	0.037	82	0.440
15	0.062	49	0.050	83	0.440
16	0.113	50	0.076	84	0.440
17	0.158	51	0.089	85	0.440
18	0.234	52	0.101	86	0.440
19	0.262	53	0.123	87	0.440
20	0.301	54	0.133	88	0.440
21	0.314	55	0.151	89	0.440
22	0.325	56	0.159	90	0.440
23	0.324	57	0.171		