

AM MINOR CHANGE WORKSHEET

Proposed facility:

Frequency (kHz) 580 (circle one) File No. 0000237014
Power (kW): Night 4.4 DA/~~ND~~ Facility ID 17396
Day 20.0 ~~DA~~/ND Call sign KIDO
CH _____ DA/ND City & state Nampa, ID
Applicant Townsquare

Proposed changes:

43 33 34.6 > 43 25 43.6 5.0 > 20.0 DT; 5.0 > 4.4 NT; DAN-U
116 24 5.4 > 116 19 46.4
v8 mi > 5 mi

Comments:

Townsquare proposes continued operation of KIDO on 580 kHz with a power of 20 kW daytime and 4.4 kW nighttime, using the existing six tower KBOI array. Non-directional daytime operation will use tower #5 (NW) of the KBOI array, identified by ASR# 1040305.

Engineering Checks	Legal Review	Reviewers' signatures	
<input type="checkbox"/> Database OK (AMQ)	<input type="checkbox"/> Major NEPA	_____	_____
<input type="checkbox"/> Environmental (RFR)	<input type="checkbox"/> Other _____	Staff Attorney	Date
<input type="checkbox"/> Other _____		<u>Gorton@hatdaw.com</u>	
Worksheets (attach)	Miscellaneous	Staff Engineer	Date
<input type="checkbox"/> Category A <input type="checkbox"/> Category G	<input type="checkbox"/> Waiver _____	<u>edelozier@wbklaw.co</u>	
<input type="checkbox"/> Category B <input type="checkbox"/> Category H	<input type="checkbox"/> Other _____	Supervisory Attorney	Date
<input type="checkbox"/> Category C <input type="checkbox"/> Category I	<input type="checkbox"/> Informal Objection	_____	_____
<input type="checkbox"/> Category D <input type="checkbox"/> Category J	<input type="checkbox"/> Non-routine grant	Supervisory Engineer	Date
<input type="checkbox"/> Category E <input type="checkbox"/> Critical Hours	<input type="checkbox"/> BMP: (for permit being modified)	_____	_____
<input type="checkbox"/> Category F <input type="checkbox"/> Class C RSS	File No. _____	_____	_____
<input type="checkbox"/> Other _____	Expires _____	_____	_____

Geographic Coordinates (NAD 1983) Tower Registration:
43 o 25 ' 43.6 " N. Lat. ASRN: _____
116 o 19 ' 46.4 " W. Long. Overall Height (if not registered): _____ meters

Antenna and ground system:

The ground system consists of 120 equally spaced buried copper radials about the base of each tower, each 112 meters in length except where terminated by property boundaries or where intersecting radials are shortened and bonded to a transverse copper strap midway between adjacent towers.

Conditions:

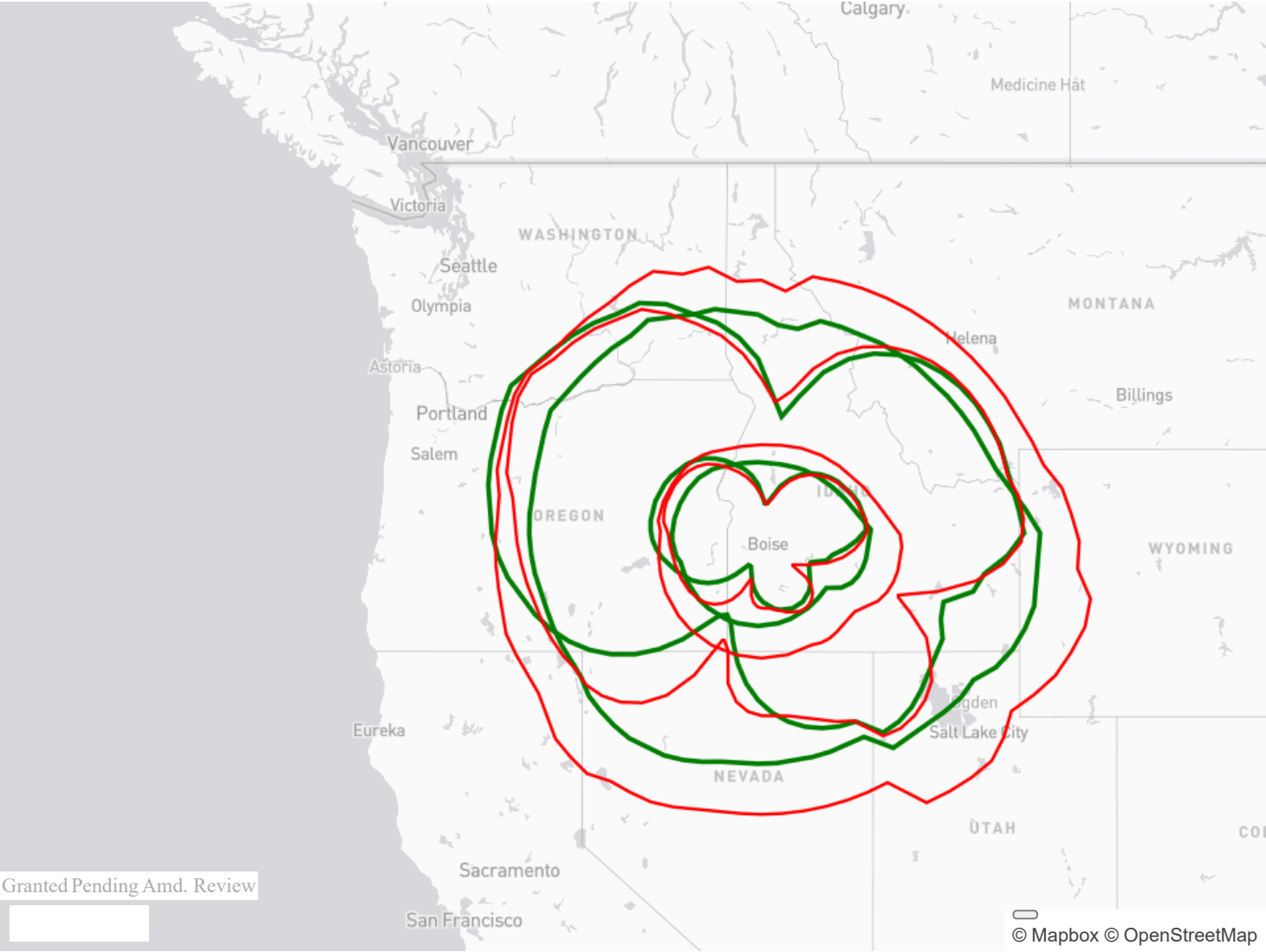
AM Single Station Report

Single Station Report as of 2024-03-25 02:36:39pm ET

Table of Contents
DAY NITE CRI UNL
City of License Coverage
Location Tests
Overlap Tests
Critical Hours Tests
Nighttime Incoming RSS
Nighttime Outgoing RSS

KIDO - 0000237014		
29 Jan 2024		
NAMP, ID		
580 kHz (AM) Class B	PEN	MOD MIN
Admin Public 17396 LICEN		

Active files for Facility ID: 17396



US	KIDO - 0000237014 29 Jan 2024			Engineering Links	SSR RSS-IN RSS-OUT JSON ALLO BCM RADIAT ScratchSSR
	NAMPA, ID			DAY	Non-Directional: 20 kW
	580 kHz (AM)	PEN	MOD MIN	NITE	Directional: 4.4 kW, 6 Towers
	Class B				
	Admin Public 17396 LICEN				
	KIDO - BL-4694 09 Apr 2019			Engineering Links	SSR RSS-IN RSS-OUT JSON ALLO BCM RADIAT ScratchSSR
	NAMPA, ID			DAY	Non-Directional: 5 kW
	580 kHz (AM)	GRA	L2C	NITE	Directional: 5 kW, 4 Towers, 5 Augmentations
	Class B				
	Admin Public 17396 LICEN				

Detected Changes from Active Files

KIDO - BL-4694 09 Apr 2019		
NAMPA, ID		
580 kHz (AM)	GRA	L2C
Class B		

Admin Public 17396 LICEN			
Day	Nite	Cri	Unl
Coords (15.7 km)	Coords (15.7 km)		
5 → 20 kW	5 → 4.4 kW		
297.73 → 298.13 Vrms	661.44 → 650.02 Vrms		
Towers	Towers		
	Augmentations		
	NULL → 27.83 Q		

International Coordination Reports
[Link to Admin Intl](#)

Number of Operational Hour Modes: 2

Mode: DAY

Towers: 1, Augmentations: 0

KIDO - 0000237014 29 Jan 2024			Coordinates			Nominal Power	RMS Values		
			NAD83	Latitude	Longitude	Power	Theoretical	298.13	
NAMPA, ID			Decimal	43.42878	-116.32956	20 kW			
580 kHz (AM) Class B	PEN	MOD MIN	DD MM SS.S	43 25 43.60	116 19 46.40				
Admin Public 17396 LICEN									

Sunrise/Sunset Report:

America/Boise
(ST: -7, DT: -6)

Month	Local Sunrise	Local Sunset
Jan	8:15	17:30
Feb	7:45	18:15
Mar (ADV)	8:00	19:45
Apr (ADV)	7:00	20:30
May (ADV)	6:15	21:00
Jun (ADV)	6:00	21:30
Jul (ADV)	6:15	21:30
Aug (ADV)	6:45	20:45
Sep (ADV)	7:30	20:00
Oct (ADV)	8:00	19:00
Nov	7:45	17:15
Dec	8:15	17:15

Towers

Tower #	Ratio	Phase	Spacing	Orientation	Height	TL Type	A	B	C	D
1	1	0	0	0	77.9	0 - Neither	0	0	0	0

Theoretical Pattern

Azimuth	Elevation												
	0	5	10	15	20	25	30	35	40	45	50	55	60
Omni	1333.27	1326.49	1306.32	1273.29	1228.22	1172.21	1106.52	1032.54	951.71	865.40	774.92	681.42	585.87

Max Distance: 1300

Distances to Contours (km) from 43.4287777777778, -116.329555555556

0	1333.27	625.23	442.33	360.19	317.94	231.41	182.44	131.7	110.91	102.06	85.31	78.17	71.49	58.92	45.93	31.29	1.26	492.65	13852
5	1333.27	609.02	426.12	338.97	305.9	232.13	183.15	132.42	111.63	102.78	86.02	78.89	72.21	59.64	45.93	31.29	1.26	491.72	13867.6
10	1333.27	637.22	454.33	357.31	312.38	233.52	184.54	133.81	113.02	104.17	87.41	80.28	73.6	60.12	45.89	31.26	1.26	491.36	13867.8
15	1333.27	639.02	456.13	359.11	314.18	235.32	186.34	135.61	114.82	105.97	89.21	82.08	75.4	60.01	45.78	31.15	1.26	491.32	13867.9
20	1333.27	641.01	458.4	361.38	316.45	237.59	188.61	137.88	117.09	108.24	91.48	84.35	77.67	59.86	45.63	31	1.26	491.57	13867.1
25	1333.27	639.54	459.99	362.98	318.05	239.18	190.21	139.48	118.69	109.83	93.08	85.94	79.13	59.65	45.42	30.79	1.26	492.38	13849.4
30	1333.27	659.89	461.77	364.75	319.82	240.96	191.99	141.25	120.46	111.61	94.86	87.72	78.83	59.35	45.12	30.49	1.26	493.23	13848.9
35	1333.27	662.59	463.1	366.08	321.15	242.29	193.31	142.58	121.79	112.94	96.18	88.85	78.45	58.97	44.74	30.11	1.26	494.35	13849.7
40	1333.27	665.59	464.85	367.83	322.9	244.04	195.07	144.33	123.54	114.69	97.94	88.3	77.9	58.41	44.18	29.55	1.26	496.04	13831
45	1333.27	665.8	466.86	369.85	324.92	246.05	197.08	146.35	125.56	116.7	98.69	87.6	77.2	57.71	43.49	28.85	1.26	498.01	13812.3
50	1333.27	666.8	469.11	372.1	327.16	248.3	199.33	148.59	127.8	118.95	98.05	86.97	76.56	57.08	42.85	28.22	1.26	500.23	13794.5
55	1333.27	659.99	472.06	375.04	330.11	251.25	202.27	151.54	130.75	121.9	97.26	86.17	75.77	56.28	42.06	27.42	1.26	502.71	13776.3
60	1333.27	662.21	475.05	378.04	333.1	254.24	205.27	154.53	133.74	122.13	96.27	85.18	74.77	55.29	41.06	27.36	1.26	505.43	13758.3
65	1333.27	661.91	479.38	382.36	337.43	258.57	209.59	158.86	135	121.52	95.65	84.56	74.16	54.67	40.45	27.36	1.26	508.35	13741.6
70	1333.27	671.31	484.92	387.9	342.97	264.11	215.13	164.4	134.28	120.8	94.93	83.85	73.44	53.96	39.73	27.36	1.26	511.51	13722.8
75	1333.27	696.11	506.42	409.13	358.61	271.14	222.17	164.27	133.37	119.89	94.02	82.93	72.53	53.05	38.82	27.36	1.26	515.11	13689
80	1333.27	702.08	515.21	428.61	378.67	283.27	231.35	163.02	132.12	118.64	92.77	81.69	71.28	51.8	37.57	27.36	1.26	518.61	13671.4

85	1333.27	713.67	525.32	438.72	390.99	295.59	232.25	161.39	130.49	117.01	91.14	80.05	69.65	50.16	37.24	27.36	1.26	522.24	13654.3
90	1333.27	734.06	524.14	437.54	388.83	293.43	230.09	159.23	128.33	114.85	88.98	77.89	67.49	48.01	37.24	27.36	1.26	526.28	13620.5
95	1333.27	745.96	548.12	438.14	385.83	290.43	227.09	156.23	125.33	111.85	85.98	74.89	64.49	46.58	37.24	27.36	1.26	530.13	13603.2
100	1333.27	783.37	552.02	433.88	381.57	286.17	222.83	151.97	121.06	107.59	81.72	70.63	60.23	46.58	37.24	27.36	1.26	534.33	13570.2
105	1333.27	773.22	541.87	427.64	375.33	279.93	216.59	145.73	114.83	101.35	75.48	65.83	59.15	46.58	37.24	27.36	1.26	538.25	13554.6
110	1333.27	751.85	533.5	418.48	366.16	270.76	207.42	136.56	105.66	92.18	72.96	65.83	59.15	46.58	37.24	27.36	1.26	542.52	13521
115	1333.27	718.21	513.66	403.82	351.5	256.11	192.76	121.9	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	546.44	13505.4
120	1333.27	690.29	495.04	391.36	339.05	243.65	180.31	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	550.61	13473.7
125	1333.27	700.29	509.82	399.6	336.95	240.51	177.17	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	554.42	13458.3
130	1333.27	706.79	521.47	394.7	335.72	240.33	176.98	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	558.1	13442.8
135	1333.27	738.15	517.33	388.92	336.6	241.21	177.86	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	561.67	13426.9
140	1333.27	736.4	512.26	388.75	336.43	241.04	177.69	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	565.37	13396.1
145	1333.27	718.41	505.29	386.06	333.74	238.34	175	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	568.59	13380.6
150	1333.27	666.68	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	571.59	13365.7
155	1333.27	665.1	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	574.35	13350.9
160	1333.27	649.1	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	576.55	13351.1
165	1333.27	622.77	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	578.78	13336.4
170	1333.27	622.77	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	580.73	13321.7
175	1333.27	622.77	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	582.08	13321.6
180	1333.27	622.77	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	583.18	13321.8
185	1333.27	622.77	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	584.13	13307.1
190	1333.27	622.77	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	584.51	13306.9
195	1333.27	628.79	445.9	348.88	303.95	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	584.57	13307
200	1333.27	635.22	452.33	355.31	310.38	219.95	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	584.29	13307.3
205	1333.27	649.87	458.81	361.8	316.32	220.93	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	583.38	13321.3
210	1333.27	642.99	459.46	362.44	315.27	219.88	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	582.46	13321.5
215	1333.27	658.5	460.7	363.68	313.07	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	581.21	13322
220	1333.27	676.09	472.71	362.87	310.55	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	579.37	13336.1
225	1333.27	692.53	469.58	359.74	307.42	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	577.54	13335.8
230	1333.27	682.16	465.06	355.22	302.91	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	575.1	13351.3
235	1333.27	638.11	449.66	350.11	297.79	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	572.41	13366.5
240	1333.27	614.53	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	569.51	13380.5
245	1333.27	622.77	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	566.34	13396.9
250	1333.27	632.2	442.94	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	563.03	13411.3
255	1333.27	633.27	446.43	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	559.51	13426.9
260	1333.27	626.33	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	555.57	13457.5
265	1333.27	622.77	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	551.79	13473.8
270	1333.27	622.77	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	547.92	13489.9
275	1333.27	622.77	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	543.72	13521
280	1333.27	622.77	439.88	342.86	297.93	219.07	170.09	119.36	98.57	89.72	72.96	65.83	59.15	46.58	37.24	27.36	1.26	539.78	13537.1
285	1333.27	624.83	441.93	344.92	299.98	221.12	172.15	121.41	100.62	91.77	75.02	67.88	61.2	48.63	37.24	27.36	1.26	535.52	13570.9
290	1333.27	638.85	455.95	353.01	308.08	229.22	180.25	129.51	108.72	99.87	83.12	75.98	69.3	53.86	39.63	27.36	1.26	531.61	13586.6
295	1333.27	644.23	461.33	355.81	310.88	232.02	183.04	132.31	111.52	102.67	85.91	78.77	72.09	55.38	41.15	27.36	1.26	527.46	13620
300	1333.27	649.58	466.69	359.19	312.95	234.08	185.11	134.38	113.59	104.73	87.98	80.84	74.16	56.46	42.23	27.6	1.26	523.67	13637.1
305	1333.27	661.28	478.39	366.92	314.57	235.7	186.73	136	115.21	106.35	89.6	82.46	75.78	57.28	43.06	28.42	1.26	519.98	13654.6
310	1333.27	658.32	482.22	375.35	316.36	237.5	188.52	137.79	117	108.15	91.39	84.26	77.4	57.92	43.69	29.06	1.26	516.16	13688.7
315	1333.27	662.21	472.56	375.55	321.14	239.19	190.22	139.48	118.69	109.84	93.09	85.95	77.86	58.37	44.14	29.51	1.26	512.77	13706.2
320	1333.27	656.05	473.16	376.14	328.99	240.67	191.7	140.96	120.17	111.32	94.56	87.43	78.21	58.73	44.5	29.87	1.26	509.28	13741.2
325	1333.27	656.81	473.91	376.9	330.63	241.56	192.58	141.85	121.06	112.21	95.45	88.32	78.49	59.01	44.78	30.15	1.26	506.28	13758.6
330	1333.27	658.08	473.45	376.43	323.87	240.84	191.87	141.13	120.34	111.49	94.74	87.6	78.64	59.16	44.93	30.3	1.26	503.49	13776.8
335	1333.27	669.58	482.53	375.23	316.79	237.93	188.95	138.22	117.43	108.58	91.82	84.69	78.01	59.35	45.12	30.49	1.26	500.94	13794.2
340	1333.27	674.52	488.53	360.82	313.06	234.2	185.23	134.49	113.7	104.85	88.1	80.96	74.28	59.65	45.42	30.79	1.26	498.63	13812
345	1333.27	650.45	467.55	361.88	311.33	232.47	183.5	132.76	111.98	103.12	86.37	79.23	72.55	59.86	45.63	31	1.26	496.57	13830.5
350	1333.27	649.13	470.38	362.46	310.53	231.66	182.69	131.96	111.17	102.31	85.56	78.42	71.74	59.17	45.78	31.15	1.26	495.07	13830.7
Azimuth	Field	0.005	0.025	0.0625	0.1	0.25	0.5	1.25	2	2.5	4	5	6.25	10	15	25	1000	SW 0.5 50	SW 0.25 10

Mode: NITE

Towers: 6, Augmentations: 0

KIDO - 0000237014 29 Jan 2024			Coordinates			Nominal Power	RMS Values	
			NAD83	Latitude	Longitude	Power	Theoretical	650.02
NAMPA, ID			Decimal	43.42878	-116.32956	4.4 kW	Standard	683.15
580 kHz (AM)	PEN	MOD MIN	DD MM SS.S	43 25 43.60	116 19 46.40			
Class B								
Admin Public 17396 LICEN								

Sunrise/Sunset Report:

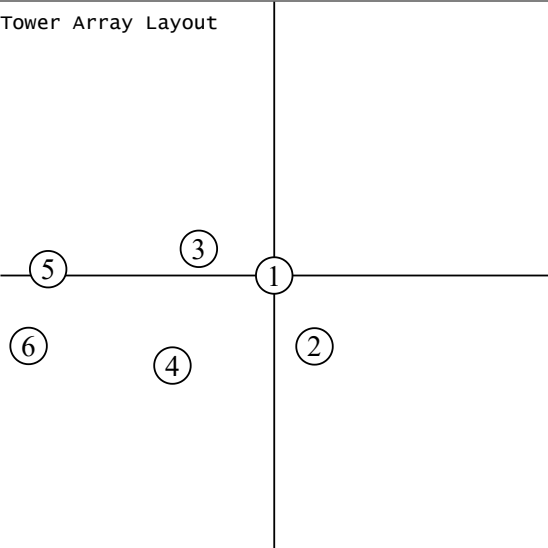
America/Boise
(ST: -7, DT: -6)

Month	Local Sunrise	Local Sunset
Jan	8:15	17:30
Feb	7:45	18:15
Mar (ADV)	8:00	19:45
Apr (ADV)	7:00	20:30
May (ADV)	6:15	21:00
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Aug (ADV)	6:45	20:45
Sep (ADV)	7:30	20:00
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Nov	7:45	17:15
Dec	8:15	17:15

Towers

Tower #	Ratio	Phase	Spacing	Orientation	Height	TL Type	A	B	C	D
1	0.589	172.4	0	0	77.9	0 - Neither	0	0	0	0
2	0.325	50.9	77.7	150.4	77.9	0 - Neither	0	0	0	0
3	1.0	0	76.2	289.5	77.9	0 - Neither	0	0	0	0
4	0.307	129.3	129.5	228.5	77.9	0 - Neither	0	0	0	0
5	0.556	-165.6	215.5	271.6	77.9	0 - Neither	0	0	0	0
6	0.456	-26.0	243.5	254.0	77.9	0 - Neither	0	0	0	0

Tower Array Layout



Creating NIF 6.08 for 25076f918d319bbb018d3ce86f5d04eb
Using Custom Q Value: 27.83

Pattern Parameters		Local Maxima/Minima		
K(1 Ohm)	774.712910	Type	Azimuth	Field
Computed Q	27.825354	MIN	5.9	167.90
ERSS used to compute Q	1113.014153	MAX	50.3	916.51
1 Ohm Theoretical RMS	650.011169	MIN	105.5	80.64

Applicant RMS	650.020000	MAX	138.6	465.18
Applicant K	774.757385	MIN	203.0	30.01
K(used for pattern)	774.757385	MAX	307.1	1252.48
Recomputed Theoretical RMS	650.020020			
Standard RMS	683.146057			
Augmented RMS	683.146057			

Theoretical Pattern

Azimuth	Elevation												
	0	5	10	15	20	25	30	35	40	45	50	55	60
0	238.91	239.07	239.45	239.73	239.45	237.98	234.68	228.92	220.15	208.02	192.41	173.43	151.45
5	159.76	160.48	162.52	165.58	169.11	172.45	174.81	175.38	173.44	168.40	159.89	147.78	132.20
10	201.72	200.66	197.60	192.88	186.98	180.39	173.50	166.45	159.14	151.16	142.00	131.10	118.03
15	317.32	314.34	305.59	291.65	273.42	252.10	229.02	205.55	182.93	162.04	143.26	126.37	110.63
20	445.35	440.81	427.45	405.99	377.61	343.85	306.53	267.66	229.23	193.13	160.86	133.31	110.48
25	566.67	560.83	543.60	515.85	479.00	434.90	385.74	333.95	282.02	232.37	187.19	148.18	116.31
30	672.85	665.94	645.57	612.72	569.00	516.52	457.79	395.54	332.62	271.83	215.72	166.52	125.80
35	758.75	751.05	728.32	691.65	642.78	584.00	518.03	447.84	376.53	307.12	242.43	184.95	136.65
40	821.29	813.08	788.84	749.70	697.47	634.56	563.79	488.28	411.23	335.81	264.97	201.34	147.12
45	859.11	850.67	825.74	785.46	731.68	666.80	593.68	515.46	435.35	356.54	281.99	214.40	156.07
50	872.39	863.97	839.10	798.92	745.23	680.43	607.30	528.88	448.32	368.67	292.83	223.43	162.80
55	862.48	854.30	830.14	791.11	738.98	676.06	605.02	528.74	450.15	372.10	297.26	228.11	166.93
60	831.59	823.82	800.87	763.84	714.47	654.97	587.85	515.77	441.37	367.13	295.41	228.44	168.33
65	782.33	775.09	753.73	719.37	673.70	618.86	557.21	491.12	422.82	354.38	287.70	224.61	167.06
70	717.40	710.78	691.29	660.07	618.85	569.68	514.78	456.18	395.67	334.75	274.74	217.04	163.32
75	639.39	633.44	616.02	588.32	552.10	509.43	462.35	412.55	361.27	309.32	257.37	206.27	157.41
80	550.67	545.44	530.23	506.32	475.58	440.12	401.81	361.95	321.14	279.37	236.55	192.97	149.73
85	453.49	449.02	436.10	416.19	391.34	363.73	335.10	306.27	277.01	246.38	213.43	177.91	140.73
90	350.24	346.49	335.87	320.04	301.39	282.30	264.35	247.67	230.93	212.07	189.29	161.95	130.92
95	244.00	240.86	232.21	220.20	207.87	198.07	192.11	188.91	185.49	178.51	165.58	145.99	120.79
100	141.04	137.95	129.78	119.84	113.10	113.94	122.50	134.47	144.44	148.32	143.91	130.94	110.84
105	72.35	67.43	53.38	33.04	19.74	39.12	67.72	93.91	113.70	124.75	125.97	117.66	101.49
110	119.92	115.63	103.56	86.36	69.40	61.63	68.92	85.01	100.82	111.02	113.15	106.77	93.05
115	207.65	203.34	191.03	172.57	151.05	130.59	115.54	108.37	107.46	108.12	105.94	98.51	85.65
120	290.39	285.47	271.25	249.28	222.04	192.75	164.97	141.86	124.94	113.15	103.41	92.63	79.27
125	358.90	353.31	337.06	311.61	279.31	243.14	206.47	172.55	143.87	121.26	103.57	88.41	73.71
130	408.48	402.36	384.51	356.40	320.33	279.28	236.57	195.50	158.88	128.41	104.21	84.91	68.68
135	436.28	429.87	411.15	381.59	343.49	299.78	253.76	208.71	167.51	132.22	103.64	81.30	63.89
140	441.28	434.88	416.19	386.62	348.43	304.45	257.83	211.73	168.96	131.64	100.94	76.99	59.15
145	424.69	418.63	400.89	372.82	336.50	294.55	249.87	205.36	163.61	126.67	95.87	71.81	54.46
150	390.36	384.91	368.98	343.72	310.96	272.98	232.32	191.50	152.80	118.10	88.82	65.94	50.04
155	345.05	340.41	326.82	305.24	277.14	244.38	209.02	173.13	138.66	107.34	80.67	59.99	46.40
160	298.27	294.48	283.34	265.55	242.23	214.79	184.80	153.95	123.89	96.25	72.67	54.88	44.24
165	260.83	257.68	248.42	233.56	213.89	190.49	164.61	137.65	111.13	86.71	66.25	51.74	44.27
170	239.90	237.03	228.57	214.94	196.85	175.25	151.30	126.37	102.03	80.09	62.62	51.52	46.92
175	232.80	229.87	221.22	207.34	189.03	167.34	143.59	119.33	96.34	76.65	62.36	54.62	52.13
180	227.98	224.88	215.80	201.32	182.41	160.35	136.71	113.34	92.30	75.77	65.35	60.80	59.54
185	213.07	209.98	200.96	186.68	168.28	147.26	125.47	105.06	88.27	76.95	71.35	69.62	68.76
190	180.15	177.38	169.33	156.79	141.03	123.78	107.19	93.54	84.67	80.86	80.45	80.78	79.53
195	126.32	124.24	118.31	109.50	99.45	90.29	84.28	82.74	85.15	89.40	93.06	94.23	91.70
200	52.92	52.00	49.97	48.97	51.70	59.41	70.84	83.60	95.41	104.51	109.61	109.94	105.17
205	37.32	38.03	41.07	48.16	59.76	74.58	90.61	105.79	118.33	126.79	130.14	127.85	119.86
210	135.93	135.03	132.84	130.75	130.46	133.16	138.72	145.70	151.95	155.34	154.25	147.75	135.63
215	238.05	235.89	229.89	221.38	212.24	204.32	198.71	195.24	192.52	188.49	181.20	169.30	152.30
220	337.10	333.86	324.62	310.79	294.39	277.60	262.15	248.72	236.69	224.45	210.08	192.05	169.63
225	427.85	423.76	412.01	394.02	371.92	348.08	324.54	302.50	281.91	261.64	240.01	215.52	187.37
230	506.75	502.11	488.66	467.85	441.77	412.82	383.17	354.23	326.35	298.78	270.18	239.24	205.24
235	572.23	567.32	553.06	530.78	502.46	470.37	436.60	402.59	368.86	334.99	299.97	262.80	223.00

240	624.74	619.84	605.55	583.05	554.08	520.63	484.53	447.11	408.90	369.73	328.92	285.86	240.42
245	666.61	661.93	648.24	626.48	598.08	564.62	527.58	488.03	446.45	402.80	356.78	308.18	257.28
250	701.60	697.27	684.53	664.08	636.94	604.25	567.06	526.11	481.81	434.25	383.42	329.57	273.42
255	734.28	730.31	718.57	699.48	673.67	641.83	604.58	562.37	515.51	464.21	408.78	349.88	288.67
260	769.15	765.44	754.40	736.22	711.18	679.58	641.71	597.79	548.06	492.87	432.83	368.97	302.89
265	809.70	806.06	795.15	776.99	751.65	719.16	679.58	633.03	579.77	520.29	455.48	386.70	315.91
270	857.63	853.80	842.30	823.07	796.07	761.26	718.62	668.31	610.66	546.37	476.55	402.87	327.55
275	912.54	908.27	895.44	874.04	844.04	805.47	758.44	703.22	640.36	570.74	495.74	417.23	337.64
280	972.09	967.17	952.42	927.92	893.81	850.33	797.82	736.82	668.12	592.86	512.62	429.46	345.94
285	1032.52	1026.81	1009.75	981.57	942.67	893.56	834.94	767.68	692.88	611.95	526.66	439.21	352.23
290	1089.24	1082.70	1063.20	1031.17	987.26	932.37	867.56	794.09	713.38	627.11	537.25	446.08	356.28
295	1137.45	1130.12	1108.31	1072.64	1024.05	963.79	893.30	814.21	728.28	637.42	543.77	449.69	357.85
300	1172.58	1164.58	1140.84	1102.13	1049.65	984.96	909.85	826.27	736.27	641.96	545.62	449.68	356.74
305	1190.71	1182.24	1157.14	1116.31	1061.14	993.44	915.24	828.75	736.23	639.96	542.31	445.73	352.79
310	1188.91	1180.23	1154.50	1112.70	1056.35	987.37	907.97	820.49	727.31	630.82	533.44	437.63	345.89
315	1165.50	1156.88	1131.34	1089.87	1034.00	965.70	887.17	800.80	709.00	614.20	518.81	425.26	336.00
320	1120.16	1111.88	1087.36	1047.53	993.84	928.16	852.62	769.50	681.18	590.00	498.37	408.63	323.14
325	1053.89	1046.21	1023.47	986.48	936.54	875.32	804.74	726.93	644.07	558.43	472.28	387.89	307.45
330	968.77	961.91	941.58	908.45	863.59	808.40	744.53	673.83	598.28	519.94	440.92	363.30	289.15
335	867.59	861.72	844.28	815.78	777.03	729.13	673.39	611.36	544.72	475.24	404.82	335.31	268.54
340	753.43	748.65	734.42	711.08	679.19	639.53	593.06	540.96	484.56	425.30	364.76	304.49	246.06
345	629.31	625.68	614.88	597.07	572.59	541.88	505.56	464.40	419.33	371.40	321.76	271.64	222.27
350	498.31	495.90	488.69	476.72	460.07	438.90	413.42	384.00	351.08	315.25	277.22	237.80	197.90
355	364.74	363.61	360.17	354.32	345.90	334.70	320.55	303.29	282.88	259.40	233.10	204.39	173.88

Standard Pattern

Azimuth	Elevation												
	0	5	10	15	20	25	30	35	40	45	50	55	60
0	252.55	252.70	253.04	253.26	252.85	251.20	247.61	241.42	232.09	219.25	202.74	182.71	159.54
5	170.27	170.99	173.04	176.08	179.60	182.89	185.14	185.53	183.30	177.84	168.74	155.89	139.40
10	213.81	212.69	209.45	204.44	198.17	191.14	183.78	176.23	168.39	159.85	150.06	138.46	124.60
15	334.47	331.33	322.14	307.50	288.35	265.95	241.69	217.01	193.21	171.20	151.38	133.52	116.87
20	468.53	463.76	449.73	427.20	397.40	361.95	322.77	281.95	241.59	203.67	169.76	140.77	116.71
25	595.72	589.59	571.49	542.36	503.67	457.37	405.76	351.38	296.86	244.73	197.28	156.31	122.80
30	707.09	699.84	678.45	643.96	598.06	542.96	481.29	415.93	349.88	286.05	227.15	175.48	132.71
35	797.22	789.14	765.28	726.77	675.46	613.74	544.47	470.78	395.90	323.03	255.12	194.77	144.05
40	862.85	854.23	828.77	787.67	732.84	666.79	592.48	513.19	432.29	353.11	278.73	211.93	155.01
45	902.54	893.68	867.50	825.21	768.73	700.61	623.84	541.70	457.59	374.84	296.58	225.62	164.38
50	916.47	907.63	881.52	839.33	782.96	714.91	638.12	555.79	471.19	387.57	307.94	235.08	171.42
55	906.08	897.49	872.11	831.13	776.40	710.33	635.73	555.64	473.12	391.17	312.59	239.98	175.74
60	873.66	865.50	841.40	802.52	750.68	688.20	617.72	542.04	463.90	385.95	310.65	240.32	177.21
65	821.97	814.36	791.93	755.85	707.90	650.32	585.58	516.17	444.45	372.59	302.56	236.31	175.89
70	753.84	746.88	726.42	693.64	650.34	598.72	541.06	479.52	415.98	352.00	288.98	228.38	171.97
75	671.99	665.75	647.46	618.36	580.33	535.52	486.07	433.77	379.90	325.34	270.77	217.10	165.78
80	578.94	573.45	557.48	532.37	500.09	462.84	422.59	380.72	337.84	293.96	248.96	203.17	157.74
85	477.06	472.36	458.80	437.89	411.78	382.78	352.69	322.38	291.61	259.40	224.75	187.40	148.33
90	368.91	364.98	353.82	337.20	317.60	297.52	278.62	261.04	243.38	223.48	199.48	170.70	138.06
95	257.86	254.57	245.49	232.89	219.91	209.55	203.17	199.65	195.88	188.39	174.68	154.01	127.48
100	150.95	147.73	139.24	128.89	121.77	122.37	130.89	143.00	153.09	156.88	152.06	138.30	117.09
105	81.40	76.54	62.94	44.52	33.97	48.45	75.13	101.16	121.19	132.35	133.36	124.44	107.34
110	129.27	124.85	112.45	94.87	77.68	69.63	76.33	92.08	107.90	118.10	120.02	113.10	98.54
115	219.98	215.48	202.61	183.34	160.87	139.50	123.71	116.02	114.74	115.10	112.52	104.51	90.84
120	306.31	301.15	286.25	263.23	234.69	204.01	174.90	150.66	132.84	120.31	109.90	98.40	84.22
125	377.97	372.11	355.07	328.38	294.51	256.58	218.14	182.59	152.49	128.72	110.06	94.02	78.45
130	429.90	423.48	404.75	375.26	337.42	294.37	249.58	206.52	168.12	136.16	110.73	90.40	73.25
135	459.02	452.30	432.66	401.64	361.66	315.82	267.55	220.31	177.12	140.12	110.14	86.66	68.30
140	464.26	457.55	437.93	406.91	366.84	320.70	271.80	223.47	178.63	139.52	107.34	82.21	63.42
145	446.88	440.52	421.91	392.46	354.35	310.34	263.48	216.81	173.05	134.35	102.09	76.86	58.60

150	410.92	405.20	388.48	361.98	327.61	287.78	245.14	202.34	161.79	125.45	94.80	70.83	54.09
155	363.47	358.61	344.36	321.72	292.24	257.88	220.80	183.19	147.08	114.29	86.38	64.74	50.38
160	314.55	310.57	298.88	280.22	255.77	226.99	195.55	163.23	131.75	102.82	78.17	59.53	48.19
165	275.42	272.12	262.41	246.82	226.19	201.66	174.53	146.29	118.54	93.00	71.61	56.34	48.22
170	253.59	250.58	241.70	227.40	208.44	185.79	160.70	134.60	109.14	86.20	67.91	56.12	50.91
175	246.19	243.10	234.03	219.49	200.30	177.58	152.71	127.33	103.28	82.69	67.64	59.26	56.22
180	241.15	237.91	228.39	213.22	193.41	170.31	145.58	121.14	99.13	81.78	70.69	65.56	63.82
185	225.63	222.39	212.94	197.99	178.73	156.74	133.96	112.61	95.01	82.99	76.82	74.61	73.33
190	191.40	188.50	180.09	166.98	150.51	132.49	115.13	100.79	91.31	86.99	86.16	86.13	84.49
195	135.82	133.65	127.48	118.32	107.83	98.22	91.75	89.78	91.81	95.76	99.18	100.06	97.14
200	62.78	61.86	59.77	58.50	60.59	67.46	78.23	90.65	102.33	111.36	116.34	116.40	111.18
205	48.88	49.39	51.76	57.76	68.28	82.42	98.18	113.36	125.99	134.47	137.70	135.07	126.51
210	145.68	144.73	142.39	140.09	139.61	142.16	147.66	154.65	160.90	164.20	162.85	155.86	142.99
215	251.66	249.38	243.07	234.12	224.47	216.07	210.05	206.25	203.22	198.82	191.01	178.39	160.43
220	355.16	351.75	342.05	327.52	310.28	292.61	276.33	262.14	249.40	236.43	221.24	202.21	178.58
225	450.19	445.90	433.56	414.66	391.45	366.38	341.63	318.43	296.74	275.37	252.58	226.79	197.16
230	532.89	528.01	513.90	492.04	464.64	434.22	403.06	372.63	343.30	314.29	284.20	251.65	215.89
235	601.55	596.39	581.42	558.02	528.27	494.56	459.07	423.32	387.86	352.25	315.42	276.34	234.51
240	656.63	651.48	636.47	612.84	582.41	547.26	509.33	470.01	429.86	388.68	345.79	300.53	252.76
245	700.55	695.63	681.25	658.40	628.56	593.41	554.49	512.93	469.23	423.37	375.01	323.94	270.45
250	737.25	732.71	719.32	697.84	669.33	634.98	595.90	552.88	506.33	456.35	402.95	346.37	287.38
255	771.54	767.38	755.04	734.98	707.87	674.41	635.27	590.93	541.69	487.79	429.56	367.67	303.38
260	808.14	804.24	792.64	773.53	747.22	714.02	674.23	628.08	575.84	517.86	454.79	387.71	318.29
265	850.69	846.86	835.39	816.32	789.69	755.55	713.97	665.07	609.12	546.64	478.56	406.31	331.95
270	900.99	896.96	884.87	864.68	836.31	799.73	754.95	702.09	641.53	574.00	500.67	423.28	344.17
275	958.62	954.13	940.65	918.16	886.65	846.13	796.73	738.73	672.70	599.58	520.80	438.34	354.75
280	1021.12	1015.94	1000.45	974.71	938.89	893.22	838.06	773.99	701.83	622.79	538.52	451.18	363.46
285	1084.54	1078.54	1060.62	1031.03	990.17	938.59	877.02	806.38	727.82	642.82	553.25	461.41	370.07
290	1144.08	1137.20	1116.73	1083.09	1036.98	979.33	911.26	834.10	749.34	658.74	564.36	468.62	374.31
295	1194.68	1186.98	1164.08	1126.62	1075.59	1012.30	938.28	855.22	764.97	669.56	571.21	472.41	375.96
300	1231.56	1223.16	1198.22	1157.57	1102.46	1034.53	955.65	867.88	773.36	674.33	573.16	472.40	374.80
305	1250.59	1241.69	1215.34	1172.45	1114.52	1043.42	961.31	870.49	773.32	672.23	569.68	468.25	370.66
310	1248.70	1239.58	1212.56	1168.67	1109.49	1037.06	953.68	861.81	763.96	662.63	560.37	459.75	363.41
315	1224.13	1215.07	1188.25	1144.70	1086.04	1014.31	931.85	841.15	744.75	645.19	545.01	446.77	353.03
320	1176.53	1167.84	1142.09	1100.26	1043.88	974.90	895.58	808.30	715.54	619.79	523.56	429.33	339.54
325	1106.97	1098.91	1075.02	1036.18	983.74	919.44	845.33	763.61	676.60	586.66	496.19	407.56	323.08
330	1017.62	1010.43	989.08	954.28	907.17	849.21	782.13	707.89	628.54	546.27	463.27	381.76	303.88
335	911.44	905.27	886.96	857.02	816.33	766.01	707.48	642.33	572.33	499.37	425.40	352.39	282.26
340	791.64	786.62	771.67	747.16	713.66	672.00	623.19	568.46	509.21	446.97	383.37	320.07	258.68
345	661.42	657.61	646.26	627.55	601.82	569.55	531.39	488.15	440.79	390.43	338.28	285.62	233.74
350	524.04	521.51	513.93	501.33	483.82	461.56	434.77	403.83	369.22	331.55	291.57	250.14	208.19
355	384.09	382.89	379.26	373.08	364.19	352.38	337.45	319.26	297.75	273.03	245.34	215.13	183.02

Max Distance: 1300

Distances to Contours (km) from 43.428777777778, -116.329555555556																				
0	252.55	435.32	289.4	210.07	179.02	129.15	100.01	69.94	57.6	50.16	35.73	29.95	24.82	16.43	12.09	8	0.25	100.01	129.15	25.42
5	170.27	377.83	251.68	184.01	156.46	112.51	86.73	60.16	44.55	37.85	25.96	21.32	17.35	12.2	8.81	5.71	0.17	86.73	112.51	17.74
10	213.81	430.52	272.31	200.48	170.94	123.66	96	67.46	52.08	44.66	31.32	26.03	21.37	14.52	10.6	6.95	0.21	96	123.66	21.92
15	334.47	481.16	314.49	234.96	201.28	146.8	114.96	82.18	68.65	60.14	43.84	37.19	31.24	20.82	14.98	10.08	0.33	114.96	146.8	31.94
20	468.53	521.14	349.15	264.41	227.72	167.31	131.84	95.44	80.42	73.65	55.06	47.35	40.35	27.86	19.39	13.14	0.46	131.84	167.31	41.18
25	595.72	550.12	374.83	286.69	247.88	183.16	144.85	105.6	89.42	82.52	63.95	55.46	47.7	33.65	23.94	15.74	0.58	144.85	183.16	48.63
30	707.09	577.68	394.29	303.85	263.59	195.78	155.33	113.89	96.84	89.55	70.67	61.62	53.3	38.12	27.49	17.83	0.68	155.33	195.78	54.28
35	797.22	604.04	408.06	316.25	275.01	205.03	163.02	119.99	102.28	94.73	75.44	66.01	57.3	41.32	30.02	19.41	0.77	163.02	205.03	58.33
40	862.85	606.58	418.23	325.39	283.58	212.15	169.12	124.98	106.83	99.09	78.39	68.72	59.76	43.23	31.5	20.51	0.83	169.12	212.15	60.82
45	902.54	604.41	425.01	331.65	289.48	217.32	173.66	128.88	110.48	102.64	79.74	69.91	60.8	43.98	31.98	21.15	0.87	173.66	14768.6	61.88
50	916.47	608.39	428.84	335.34	293.05	220.63	176.76	131.76	113.27	103.03	79.81	69.92	60.76	43.83	31.76	21.37	0.88	225.537	18864.5	61.85
55	906.08	619.12	430.59	337.2	294.99	222.76	179.05	134.21	113.77	101.65	78.49	68.64	59.52	42.67	30.66	21.2	0.87	235.185	17842.4	60.61

60	873.66	615.82	429.77	336.76	294.84	223.21	180.01	135.69	110.74	98.74	75.83	66.12	57.12	40.51	28.92	20.68	0.84	180.01	27326.7	58.18
65	821.97	616.79	427.6	335.44	293.95	223.4	180.99	134.14	106.79	94.95	72.5	62.96	54.15	37.96	27.83	19.83	0.79	180.99	223.4	55.21
70	753.84	606.85	424.01	332.84	292.06	223.13	181.82	128.1	101.38	89.88	67.99	58.75	50.22	34.61	26.34	18.66	0.73	181.82	223.13	51.25
75	671.99	598.47	432.63	334.08	289.54	222.6	180.81	120.36	94.44	83.32	62.23	53.35	45.21	31.58	24.44	17.19	0.65	180.81	222.6	46.17
80	578.94	595.42	435.4	338.13	290.98	222.07	168.78	110.53	85.68	75.03	54.97	46.58	38.91	28.81	22.13	15.41	0.56	168.78	222.07	39.82
85	477.06	585.11	430.29	330.7	284.9	204.72	153.75	98.25	74.77	64.73	46.02	38.78	34.08	25.47	19.37	13.32	0.46	153.75	204.72	34.64
90	368.91	557.16	400.13	302.63	258.77	182.68	134.67	82.85	61.12	51.94	38.03	33.4	29.16	21.46	16.11	10.9	0.36	134.67	182.68	29.66
95	257.86	542.32	357.91	265.28	224.25	153.9	109.89	63.01	45.76	40.51	30.79	26.78	23.15	16.68	12.29	8.14	0.25	109.89	153.9	23.58
100	150.95	475.3	298.37	213.9	177.14	114.98	76.75	44.17	33.85	29.57	21.8	18.67	15.9	11.1	7.97	5.14	0.15	76.75	114.98	16.22
105	81.4	397.6	233.98	159.34	127.51	74.26	51.69	30.98	22.94	19.69	13.99	11.78	9.86	6.66	4.67	2.94	0	51.69	74.26	10.08
110	129.27	441.53	267.74	185.7	150.21	90.35	64.87	40.57	30.84	26.82	19.59	16.71	14.16	9.8	6.99	4.47	0.13	64.87	90.35	14.46
115	219.98	490.26	306.78	216.48	176.75	110.47	82.57	53.77	41.98	37.03	27.89	24.15	20.79	14.83	10.85	7.12	0.22	82.57	110.47	21.18
120	306.31	507.62	329.96	234.83	192.46	126.12	95.15	63.24	50.09	44.52	34.15	29.84	25.92	18.87	14.02	9.38	0.3	95.15	126.12	26.38
125	377.97	549.24	354.95	251.99	208.01	136.94	103.82	69.79	55.73	49.76	38.56	33.89	29.6	21.82	16.4	11.11	0.37	103.82	136.94	30.11
130	429.9	569.59	364.29	264.91	219.92	143.96	109.45	74.01	59.37	53.15	41.45	36.54	32.02	23.79	18	12.29	0.42	109.45	143.96	32.56
135	459.02	601.8	372.47	272.42	226.91	147.63	112.38	76.22	61.29	54.93	42.96	37.93	33.31	24.83	18.85	12.93	0.45	112.38	147.63	33.86
140	464.26	599.65	373.36	273.2	227.6	148.27	112.9	76.61	61.62	55.24	43.23	38.18	33.53	25.02	19	13.05	0.45	112.9	148.27	34.09
145	446.88	574.67	366.57	266.79	221.5	146.12	111.17	75.32	60.5	54.19	42.35	37.36	32.78	24.4	18.5	12.67	0.44	111.17	146.12	33.32
150	410.92	494.87	317.9	235.09	199.51	141.46	107.45	72.51	58.07	51.94	40.42	35.59	31.16	23.08	17.42	11.87	0.4	107.45	141.46	31.69
155	363.48	484.02	306.06	225.23	190.8	134.88	102.17	68.53	54.65	48.76	37.71	33.1	28.89	21.25	15.93	10.77	0.36	102.17	134.88	29.39
160	314.55	458.26	292.49	213.99	180.89	127.44	96.21	64.04	50.78	45.16	34.68	30.33	26.36	19.22	14.31	9.59	0.31	96.21	127.44	26.83
165	275.42	443.44	280.28	204.04	172.16	120.91	90.96	60.09	47.38	42.02	32.04	27.92	24.18	17.49	12.93	8.6	0.27	90.96	120.91	24.62
170	253.59	434.41	272.84	198.02	166.93	117	87.82	57.71	45.35	40.14	30.47	26.49	22.89	16.48	12.13	8.03	0.25	87.82	117	23.31
175	246.19	431.22	270.17	195.91	165.07	115.61	86.7	56.88	44.63	39.48	29.92	25.99	22.44	16.12	11.85	7.83	0.24	86.7	115.61	22.86
180	241.15	429.01	268.33	194.44	163.78	114.65	85.93	56.31	44.13	39.02	29.55	25.65	22.13	15.88	11.66	7.69	0.24	85.93	114.65	22.54
185	225.63	421.96	262.49	189.76	159.71	111.61	83.48	54.46	42.57	37.57	28.34	24.56	21.15	15.11	11.07	7.27	0.22	83.48	111.61	21.55
190	191.4	404.17	248.33	178.59	150	104.37	77.64	50.08	38.84	34.14	25.52	22.01	18.86	13.35	9.7	6.32	0.19	77.64	104.37	19.23
195	135.82	377.06	220.52	156.98	131.33	90.43	66.4	41.7	31.78	27.68	20.27	17.32	14.7	10.2	7.29	4.68	0.13	66.4	90.43	15
200	62.78	301.54	166.31	116.17	96.13	63.98	45.11	26.33	19.2	16.36	11.44	9.57	7.96	5.32	3.7	2.31	0	45.11	63.98	8.15
205	48.88	282.32	151.23	104.94	86.43	56.68	39.32	22.33	16.03	13.57	9.36	7.78	6.44	4.25	2.94	1.82	0	39.32	56.68	6.59
210	145.68	397.69	230.2	161.2	134.98	93.17	68.6	43.33	33.14	28.92	21.28	18.21	15.49	10.79	7.74	4.98	0.14	68.6	93.17	15.8
215	251.66	455.96	282.19	197.48	166.45	116.64	87.54	57.5	45.16	39.97	30.33	26.36	22.77	16.38	12.06	7.97	0.25	87.54	116.64	23.2
220	355.16	507.17	316.95	223.42	189.18	133.67	101.2	67.8	54.02	48.16	37.22	32.65	28.47	20.91	15.67	10.57	0.35	101.2	133.67	28.97
225	450.19	534.33	341.47	242.57	206.22	146.53	111.5	75.57	60.72	54.4	42.52	37.52	32.92	24.52	18.59	12.74	0.44	111.5	146.53	33.47
230	532.89	541.8	356.11	256.92	219.01	156.31	119.32	81.44	65.8	59.12	46.56	41.25	36.36	27.34	20.92	14.49	0.52	119.32	156.31	36.95
235	601.55	542.89	365.8	267.43	228.54	163.65	125.22	85.85	69.62	62.69	49.62	44.08	38.97	29.51	22.71	15.85	0.58	125.22	163.65	39.58
240	656.63	540.96	364.74	275.3	235.64	169.13	129.61	89.14	72.46	65.36	51.91	46.21	40.93	31.14	24.07	16.9	0.64	129.61	22955	41.56
245	700.55	548.38	371.45	281.12	240.93	173.28	132.95	91.63	74.63	67.36	53.64	47.81	42.42	32.38	25.12	17.71	0.68	238.308	13622.4	43.06
250	737.26	558.23	376.68	285.77	245.16	176.62	135.62	93.65	76.35	68.98	55.03	49.12	43.61	33.38	25.96	18.36	0.71	284.1	18633.3	44.27
255	771.54	563.61	381.4	289.96	248.99	179.63	138.03	95.45	77.91	70.45	56.3	50.28	44.7	34.3	26.73	18.97	0.74	314.78	16855.6	45.37
260	808.14	567.38	386.27	294.31	252.95	182.72	140.54	97.32	79.53	71.95	57.59	51.49	45.83	35.24	27.54	19.59	0.78	340.03	15802.3	46.5
265	850.69	570.7	391.74	299.11	257.4	186.21	143.37	99.43	81.36	73.65	59.06	52.87	47.09	36.31	28.44	20.3	0.82	362.66	15184.1	47.78
270	900.99	577.22	397.84	304.5	262.34	190.2	146.57	101.81	83.42	75.59	60.74	54.41	48.54	37.53	29.48	21.12	0.86	384.31	14835.4	49.25
275	958.62	584.34	404.35	310.42	267.78	194.57	150.1	104.44	85.7	77.7	62.57	56.13	50.13	38.88	30.62	22.04	0.92	405.27	14668.4	50.84
280	1021.12	591.68	411.1	316.57	273.44	199.07	153.77	107.19	88.07	79.91	64.48	57.9	51.78	40.28	31.83	22.99	0.98	425.51	14593.9	52.52
285	1084.54	600.83	419.69	324.38	280.93	205.52	159.4	111.9	92.41	84.12	68.39	61.69	55.45	41.66	32.99	23.93	1.03	444.28	14560.8	56.19
290	1144.08	620	438.3	337.68	293.85	217.6	170.71	122.4	102.59	94.14	78.16	71.36	65	48.21	34.87	24.78	1.09	459.88	14586.7	65.76
295	1194.68	632.94	450.7	344.74	300.61	223.62	176.16	127.17	107.1	98.53	82.34	75.43	69	51.29	37.7	25.5	1.14	471.96	14607.7	69.76
300	1231.56	641.65	459.22	349.84	305.5	227.98	180.11	130.65	110.37	101.74	85.39	78.4	71.91	53.5	39.71	26	1.17	478.8	14673.9	72.68
305	1250.59	653.41	470.89	359.53	308.56	230.77	182.7	132.99	112.6	103.94	87.51	80.49	73.93	54.89	41.02	26.84	1.19	479.65	14787.3	74.74
310	1248.7	658.2	472.55	365.97	310.21	232.45	184.4	134.71	114.34	105.68	89.25	82.24	74.5	55.47	41.61	27.44	1.19	474.39	14926.5	75.73
315	1224.13	645.11	462.72	366.32	310.05	232.63	184.84	135.47	115.24	106.62	90.3	83.33	74.07	55.19	41.44	27.41	1.16	461.93	15156.1	75.3
320	1176.53	641.96	459.87	363.75	312.06	231.13	183.87	135.12	115.14	106.62	90.5	82.7	72.71	54.09	40.59	26.83	1.12	442.57	15456.6	73.9
325	1106.97	634.61	453.3	357.72	305.75	227.48	181.06	133.25	113.64	105.29	89.46	80.16	70.41	52.19	39.02	25.7	1.06	415.46	15910.3	71.56
330	1017.62	636.67	446.09	350.61	294.9	220.6	175.34	128.81	109.72	101.57	86.15	76.57	67.05	49.41	36.74	23.98	0.97	379.72	16634.4	68.19
335	911.44	622.42	442.26	324.45	282.2	209.87	166.08	121.16	102.7	94.84	79.94	71.96	62.82	45.93	33.88	21.86	0.87	333.29	17903.8	63.91
340	791.64	608.33	415.9	307.5	266.32	196.47	154.55	111.62	93.94	86.42	72.15	66.09	57.72	41.78	30.5					

350	524.04	544.11	360.97	268.05	230.3	167.91	131.13	93.44	77.88	71.24	58.75	51.28	43.92	30.71	21.68	14.31	0.51	131.13	167.91	44.8
Azimuth	Field	0.005	0.025	0.0625	0.1	0.25	0.5	1.25	2	2.5	4	5	6.25	10	15	25	1000	SW 0.5 50	SW 0.25 10	6.08

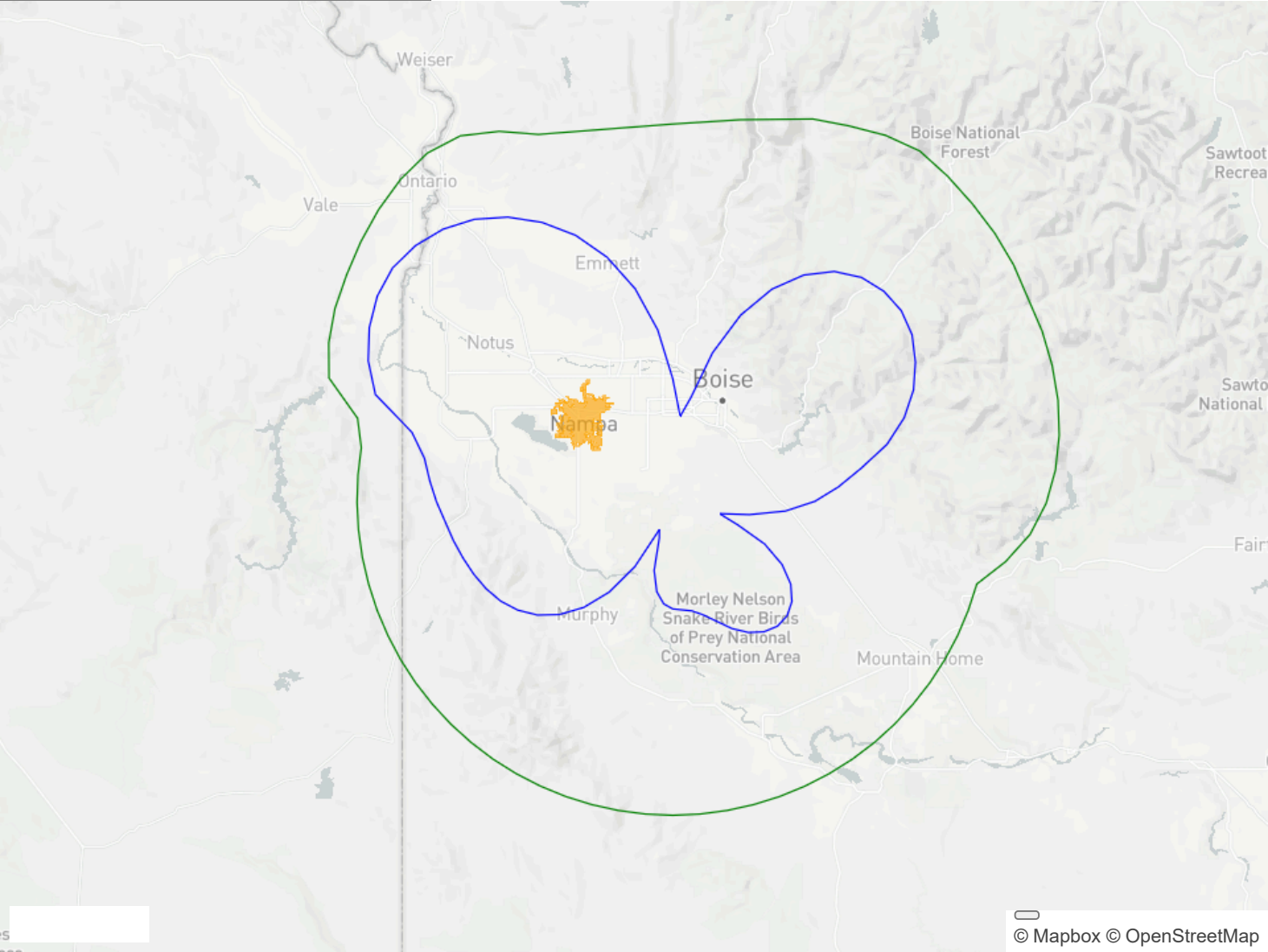
Contour generation time in seconds: 3.145457983017

City of License Coverage Detail

KIDO - 0000237014		
29 Jan 2024		
NAMPA, ID		
580 kHz (AM)	PEN	MOD MIN
Class B		
Admin Public 17396 LICEN		

City of License Coverage			
Mode		Area (sq km)	Population
DAY 5 mV/m	City	81	81557
	Intersection	81	81557
	Ratio	100%	100%

City of License Coverage			
Mode		Area (sq km)	Population
NITE 6.08 mV/m	City	81	81557
	Intersection	81	81557
	Ratio	100%	100%



Checking For Blanketing Interference (1V/m contour pop > 300, <1% of 25 mV/m pop)

1 V/m Population: 18

Location Clearance Tests

Monitoring Station Distances from 10 mV/m Contour

Daypart	Monitoring Station Name	State	Contour Distance (km)	Site Distance (km)
DAY	Ferndale	WA	720.4	779.4
DAY	Livermore	CA	735.4	782.0
DAY	Douglas	AZ	1401.8	1448.4
DAY	Grand Island	NE	1451.7	1501.9
DAY	Kingsville	TX	2381.8	2428.4
DAY	Allegan	MI	2411.0	2464.0
DAY	Powder Springs	GA	2879.0	2927.6
DAY	Kenai	AK	2956.3	3015.3
DAY	Canandaigua	NY	3093.8	3147.5
DAY	Laurel	MD	3258.9	3311.3
DAY	Vero Beach	FL	3597.4	3644.0
DAY	Belfast	ME	3687.2	3741.7
DAY	Waipahu	HI	4505.3	4551.9
DAY	Santa Isabel	PR	5398.1	5445.4
NITE	Ferndale	WA	724.9	779.4
NITE	Livermore	CA	753.2	782.0
NITE	Douglas	AZ	1424.1	1448.4
NITE	Grand Island	NE	1468.6	1501.9
NITE	Kingsville	TX	2403.7	2428.4
NITE	Allegan	MI	2425.8	2464.0
NITE	Powder Springs	GA	2896.7	2927.6
NITE	Kenai	AK	2960.4	3015.3
NITE	Canandaigua	NY	3107.9	3147.5
NITE	Laurel	MD	3274.1	3311.3
NITE	Vero Beach	FL	3615.8	3644.0
NITE	Belfast	ME	3700.7	3741.7
NITE	Waipahu	HI	4514.4	4551.9
NITE	Santa Isabel	PR	5416.2	5445.4

Site Distance from Quiet Zone areas

Daypart	Quiet Zone	Distance (km)
DAY	NRAO-WV	3011.0
NITE	NRAO-WV	3011.0
DAY	Table Mountain	989.0
NITE	Table Mountain	989.0

Nearby Non-Directional AM Facilities	KBOI - BL-20000621AFE 28 Jun 2000					
	BOISE, ID			DAY	DAY	0 km, °
	670 kHz (AM) Class B	GRA	L2C	NITE	DAY	0 km, °
	Admin Public 51211 LICEN					
Nearby Directional AM Facilities	KBOI - BL-20000621AFE 28 Jun 2000					
	BOISE, ID			DAY	NITE	0 km, °
	670 kHz (AM) Class B	GRA	L2C	NITE	NITE	0 km, °
	Admin Public 51211 LICEN					

ASRN/TOWAIR Checks

Mode	Tower	Height(m)	ASRN	Result	Description
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DAY	1	114.3	1040305	OK	Tower is Registered
NITE	1	114.3	1040309	OK	Tower is Registered
NITE	2	114.3	1040310	OK	Tower is Registered
NITE	3	114.3	1040311	OK	Tower is Registered
NITE	4	114.3	1040312	OK	Tower is Registered
NITE	5	114.3	1040305	OK	Tower is Registered
NITE	6	114.3	1040313	OK	Tower is Registered

Overlap Tests

ALLO Style Nearby Station Search

Nearby Station Radii

Relationship	Co	1st Adj	2nd Adj	3rd Adj	
Dist (km)	500	300	200	100	Recompute
Daypart	Day	▼			

Domestic

Frequency	Relationship	Callsign	Class	City	File Number	Status	DA?	Daypart	Latitude	Longitude	Distance (km)	Bearing
580	0	KIDO	B	NAMPA, ID	0000237014	PEN	N	DAY	43.4287777777778	-116.329555555556	0	0.0
580	0	KIDO	B	NAMPA, ID	BL-4694	GRA	N	DAY	43.5596111111111	-116.4015	16	338.3

Foreign

Frequency	Relationship	Callsign	Class	City	File Number	Status	DA?	Daypart	Latitude	Longitude	Distance (km)	Bearing
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Co/1st Class A Stations

Number of Results: 5

Filing Links	Callsign	Facility ID	File Number	Frequency/Class	Community	State Code	Country Code	Op Hours	Directional Ind	Power	# Towers	# Augs	Status	Engineering Links
Admin Public	CJFX	106084		580 A	ANTIGONISH	NS	CA	UNL	Y	25 kW	2		GRA	SSR RSS-IN RSS-OUT JSON ALLO BCM RADIAT ScratchSSR
Admin Public	CJFX	106084		580 A	ANTIGONISH	NS	CA	UNL	Y	10 kW	2		GRA	SSR RSS-IN RSS-OUT JSON ALLO BCM RADIAT ScratchSSR
Admin Public	CMAA	99150		580 A	PINAR DEL RI	NUL	CU	NITE	N	30 kW	1		GRA	SSR RSS-IN RSS-OUT JSON ALLO BCM RADIAT ScratchSSR
Admin Public	HJHP	99148		580 A	CALI 15	NUL	CO	NITE	N	25 kW	1		GRA	SSR RSS-IN RSS-OUT JSON ALLO BCM RADIAT ScratchSSR
Admin Public	YVMJ	99159		580 A	MARACAIBO 9	NUL	VE	NITE	Y	50 kW	2		GRA	SSR RSS-IN RSS-OUT JSON ALLO BCM RADIAT ScratchSSR

Checking Co-Channel Domestic Overlap ... 0.073791027069092 sec
Checking Co-Channel CA/MX Overlap... 1.2726519107819 sec
Checking Co-Channel Class A Domestic Overlap... 1.2770590782166 sec
Checking Co-Channel Region 2 Class A Overlap... 1.2972939014435 sec
Checking First-Adjacent Domestic Overlap... 1.4501659870148 sec
Checking First Adjacent CA/MX/R2 NZ1 Overlap
Checking First Adjacent CA/MX/R2 NZ2 Overlap... 1.495894908905 sec
Checking Second Adjacent Domestic Overlap... 1.5888710021973 sec
Checking Third Adjacent Domestic Overlap... 1.6142840385437 sec

Checking Co-Channel Class A Skywave Overlap... 1.6232318878174 sec
Checking First Adjacent Class A Skywave Overlap... 1.6266460418701 sec

Critical Hours Studies

No Class A stations found on this frequency

Incoming RSS Study for:

KIDO - 0000237014

29 Jan 2024

NAMPA, ID

580 kHz (AM)

Class B

PEN

MOD

MIN

[Admin](#) | [Public](#) | [17396 LICEN](#)

[Customize](#)

Study Country Code: US

Show Class D

Summary	
RSS Cutoff	SW10%
50%	6.08
25%	6.94
0%	7.75

RSS for 580 kHz at 43.4287777777778, -116.329555555556 using SW10%

File Number	Status	Callsign	Facility ID	Frequency (kHz)	Op Hours	Azimuth	Distance (km)	Center Rad	Bracket Rad	SW10% Multiplier	Limit	RSS	Reason
MX_SAN FELIPE_307820	GRA	XE/O	100843	580B	NITE	354.96	1381	961.201	964.472	26.35	5.082		Objected
BL-20011108AAQ	GRA	KMJ/	26923	580B	NITE	17.88	795.1	332.576	379.154	61.57	4.669	4.669	
BMML-20201006ABA	GRA	KUBC/	73626	580B	NITE	310.81	900.8	281.329	287.5	48.45	2.786	5.437	
BML-20020912ABX	GRA	WIBW/	63169	580B	NITE	292.36	1778.7	1034.18	1035.22	13.19	2.73	6.084	
CA_EDMONTON_314703	GRA	CKUA/A	106081	580B	NITE	191.98	1122.2	500.824	507.523	23.81	2.416	6.546	
CA_SALMON ARM_1439586	GRA	C580/A	189785	580B	NITE	163.17	841.7	253.818	256.65	45.03	2.311	6.942	
CA_SALMON ARM_314704	GRA	CKXR/	106082	580B	NITE	163.17	841.7	253.818	256.65	45.03	2.311		Not Accepted
CA_EDMONTON_1774119	GRA	CHAH/A	202009	580B	NITE	192.05	1119.8	432.457	433.988	23.92	2.077		Dup FacID
CA_EDMONTON_1825428	GRA	CHAH/A	202009	580B	NITE	192.05	1119.8	431.961	433.491	23.92	2.074		Dup Geo/Freq
CA_WINNIPEG_314705	GRA	CKY/A	106083	580B	NITE	252.15	1613.9	744.137	745.064	11.38	1.696	7.146	
CA_WINNIPEG_1012582	GRA	CKY/A	106083	580B	NITE	252.15	1613.9	744.137	745.064	11.38	1.696		Dup FacID
BL-4694	GRA	KIDO/	17396	580B	NITE	159.26	15.6	12.7066	17.329	471.75	1.635		Colocated
BL-19931105AB	GRA	KQNT/A	60421	590B	UNL	170.91	470.9	615.603	642.063	116.4	1.495	7.301	
CU_PINAR DEL RI_305980	GRA	CMAA/	99150	580A	NITE	315.73	3798.1	1694.98	1694.98	3.76	1.276		Cuban
BL-19880531AH	GRA	KZMX/	46713	580B	NITE	274.26	1036.5	158.462	159.463	34.46	1.099	7.383	
VE_MARACAIBO 9_305989	GRA	YVMJ/	99159	580A	NITE	318.66	5618.5	2719.25	2719.25	1.92	1.043		IFRB List B
BL-8120	GRA	KVI/	35853	570B	UNL	130.79	650.5	650.57	665.468	73.89	0.983	7.448	
PE_MARANON_305987	GRA	OAX2E/	99157	580B	NITE	329.13	6573.2	2188.21	2188.21	2.16	0.944	7.508	
MX_LA LOMA_1649134	GRA	XELRDA/O	100849	580B	NITE	323.52	2149.6	404.543	404.546	11.66	0.943		Dup FacID
BML-20020124ADF	GRA	KTMT/	57733	580B	NITE	72.61	534.2	41.2994	43.722	104.98	0.918	7.564	
BL-19861021AL	GRA	WKTY/	36207	580B	NITE	277.77	2015.8	514.583	514.797	8.35	0.86	7.613	
BL-5108	GRA	KRFE/A	60804	580B	NITE	315.42	1670.3	235.727	236.097	17.41	0.822	7.657	
BML-20001103ACL	GRA	KJMJ/	20492	580B	NITE	309.46	2492.1	488.733	488.733	7.91	0.773	7.696	

File Number	Status	Callsign	Facility ID	Frequency (kHz)	Op Hours	Azimuth	Distance (km)	Center Rad	Bracket Rad	SW10% Multiplier	Limit	RSS	Reason
BL-20010418ABK	GRA	KSAZ/	51079	580B	NITE	341.59	1297.3	131.6	131.833	28.64	0.755	7.733	
CO_CALI 15_305978	GRA	HJHP/	99148	580A	NITE	324.55	5914	1547.89	1547.89	2.19	0.679		IFRB List B
BL-19980722AA	GRA	KUGN/A	12506	590B	NITE	95.54	544.8	268.499	288.416	100.29	0.579	7.754	
JM_GALINA_305984	GRA	RJR/	99154	580B	NITE	315.85	4612.3	974.005	974.005	2.57	0.5		IFRB List B

Displayed results limited >0.5 or 100 rows for SSR

Outgoing RSS Study for:

KIDO - 0000237014

29 Jan 2024

NAMPA, ID

580 kHz (AM)

Class B

PEN

MOD

MIN

[Admin](#) | [Public](#) | [17396 LICEN](#)

[Customize](#)

Report generation time in seconds: 1.6072969436646

AM Nighttime Skywave Contribution Study

File Number	Class	Status	Frequency	Op Hours	Callsign	Facility ID	Result	Link	Individual Contribution	Max Contribution by Existing Auth
BML-20020124ADF	B	GRA	580	NITE	KTMT	57733	(15.837 <= 16.129)	Study	15.837	16.129
CA_SALMON ARM_314704	B	GRA	580	NITE	CKXR	106082	(10.39 <= 10.541)	Study	10.39	10.541
CA_SALMON ARM_1439586	B	GRA	580	NITE	C580	189785	(10.39 <= 10.54)	Study	10.39	10.54
CA_WINNIPEG_314705	B	GRA	580	NITE	CKY	106083	3.7	Study	3.7	3.606
CA_WINNIPEG_1012582	B	GRA	580	NITE	CKY	106083	3.7	Study	3.7	3.606
BMML-20201006ABA	B	GRA	580	NITE	KUBC	73626	(3.584 <= 3.704)	Study	3.584	3.704
BL-19880531AH	B	GRA	580	NITE	KZMX	46713	(3.19 <= 3.192)	Study	3.19	3.192
BL-4694	B	GRA	580	NITE	KIDO	17396	3.175 (Colocated)	Study	3.175	0
CA_EDMONTON_1825428	B	GRA	580	NITE	CHAH	202009	2.215	Study	2.215	1.215
CA_EDMONTON_1774119	B	GRA	580	NITE	CHAH	202009	2.215	Study	2.215	1.215
CA_EDMONTON_314703	B	GRA	580	NITE	CKUA	106081	2.192	Study	2.192	1.208
BL-19980722AA	B	GRA	590	NITE	KUGN	12506	(1.976 <= 2.35)	Study	1.976	2.35
BL-20010418ABK	B	GRA	580	NITE	KSAZ	51079	(1.873 <= 2.485)	Study	1.873	2.485
BL-8120	B	GRA	570	UNL	KVI	35853	(1.744 <= 1.749)	Study	1.744	1.749
MX_SAN FELIPE_307820	B	GRA	580	NITE	XE	100843	(1.608 <= 1.801)	Study	1.608	1.801
CA_THUNDER BAY_1439599	B	GRA	580	NITE	C58T	189786	(1.393 <= 1.433)	Study	1.393	1.433
CA_THUNDER BAY_314709	B	GRA	580	NITE	CKPR	106087	(1.393 <= 1.433)	Study	1.393	1.433
BL-5108	B	GRA	580	NITE	KRFE	60804	(1.37 <= 1.419)	Study	1.37	1.419
MX_CHIHUAHUA_307824	B	GRA	580	NITE	XEFI	100847	(1.078 <= 1.225)	Study	1.078	1.225
BL-19931105AB	B	GRA	590	UNL	KQNT	60421	(1.068 <= 1.098)	Study	1.068	1.098
BL-19861021AL	B	GRA	580	NITE	WKTY	36207	(0.957 <= 0.965)	Study	0.957	0.965
BL-19910522AB	B	GRA	570	UNL	KNRS	63818	(0.866 <= 0.867)	Study	0.866	0.867
MX_CD. OBREGON_1199844	B	GRA	580	NITE	XEHO	171811	(0.833 <= 1.12)	Study	0.833	1.12
MX_CD.OBREGON_307844	B	GRA	580	NITE	XEHO1	100866	(0.833 <= 1.12)	Study	0.833	1.12
BL-20011108AAQ	B	GRA	580	NITE	KMJ	26923	0.774	Study	0.774	0.449
MX_LA LOMA_1787841	B	GRA	580	NITE	XELRDA	100849	(0.772 <= 0.796)	Study	0.772	0.796
MX_LA LOMA_1649134	B	GRA	580	NITE	XELRDA	100849	(0.772 <= 0.796)	Study	0.772	0.796
MX_LA LOMA_1825802	B	GRA	580	NITE	XELRDA	100849	(0.772 <= 0.796)	Study	0.772	0.796
MX_PIEDRAS NEGRAS_406543	B	GRA	580	NITE	XEMU1	110563	(0.764 <= 0.787)	Study	0.764	0.787
MX_PIEDRAS NEGRAS_307827	B	GRA	580	NITE	XELRDA	100849	(0.764 <= 0.787)	Study	0.764	0.787
BL-20090226ACO	B	GRA	580	NITE	WTCM	70524	(0.633 <= 0.637)	Study	0.633	0.637
CA_WINDSOR_314710	C	GRA	580	UNL	CKWW	106088	(0.512 <= 0.522)	Study	0.512	0.522

Displayed results limit to contributions $\geq .5$ for SSR

AM Daytime Study

Reference Station:

Call: KIDO

Freq: 580 kHz

NAMPA, ID, US

Lat: 43-25-44 N

Power: 20.0 kW

Lng: 116-19-42.98 W

Theo RMS: 298.13 mV/m @ 1km

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swch	TL Swch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	77.9	0	0	0.0	0.0	0.0	0.0

Call	Freq	City	ST	Dist	Azi	In	Out
KIDO	580	NAMPA	ID	15.7	338.2	-109044.00	-66212.00
KTMT	580	ASHLAND	OR	535.6	252.7	88.18	4.04
KUBC	580	MONTROSE	CO	901.9	130.7	244.55	173.01
KMJ	580	FRESNO	CA	794.4	198.0	329.61	251.57
C580	580	SALMON ARM	BC	841.8	343.1	362.78	284.69
CKXR	580	SALMON ARM	BC	841.8	343.1	362.98	284.77
KZMX	580	HOT SPRINGS	SD	1039.4	94.3	318.72	313.83
CHAH	580	EDMONTON	AB	1120.1	12.1	440.23	404.45
CHAH	580	EDMONTON	AB	1120.1	12.1	440.23	404.45
CKUA	580	EDMONTON	AB	1122.5	12.0	439.36	405.24
KSAZ	580	MARANA	AZ	1295.8	161.5	597.09	627.77
XE	580	SAN FELIPE	BN	1378.6	174.9	541.86	758.58
CKY	580	WINNIPEG	MB	1617.8	72.2	619.73	929.76
CKY	580	WINNIPEG	MB	1617.8	72.2	619.73	929.76
XE	580	CD.GUZMAN	CH	1574.0	153.0	1088.40	1017.80

KIDO

Freq: 580 kHz

Class: B

Latitude: 43-25-44 N

Longitude: 116-19-42.98 W

Power: 20 kW

RMS: 298.13 mV/m @1km

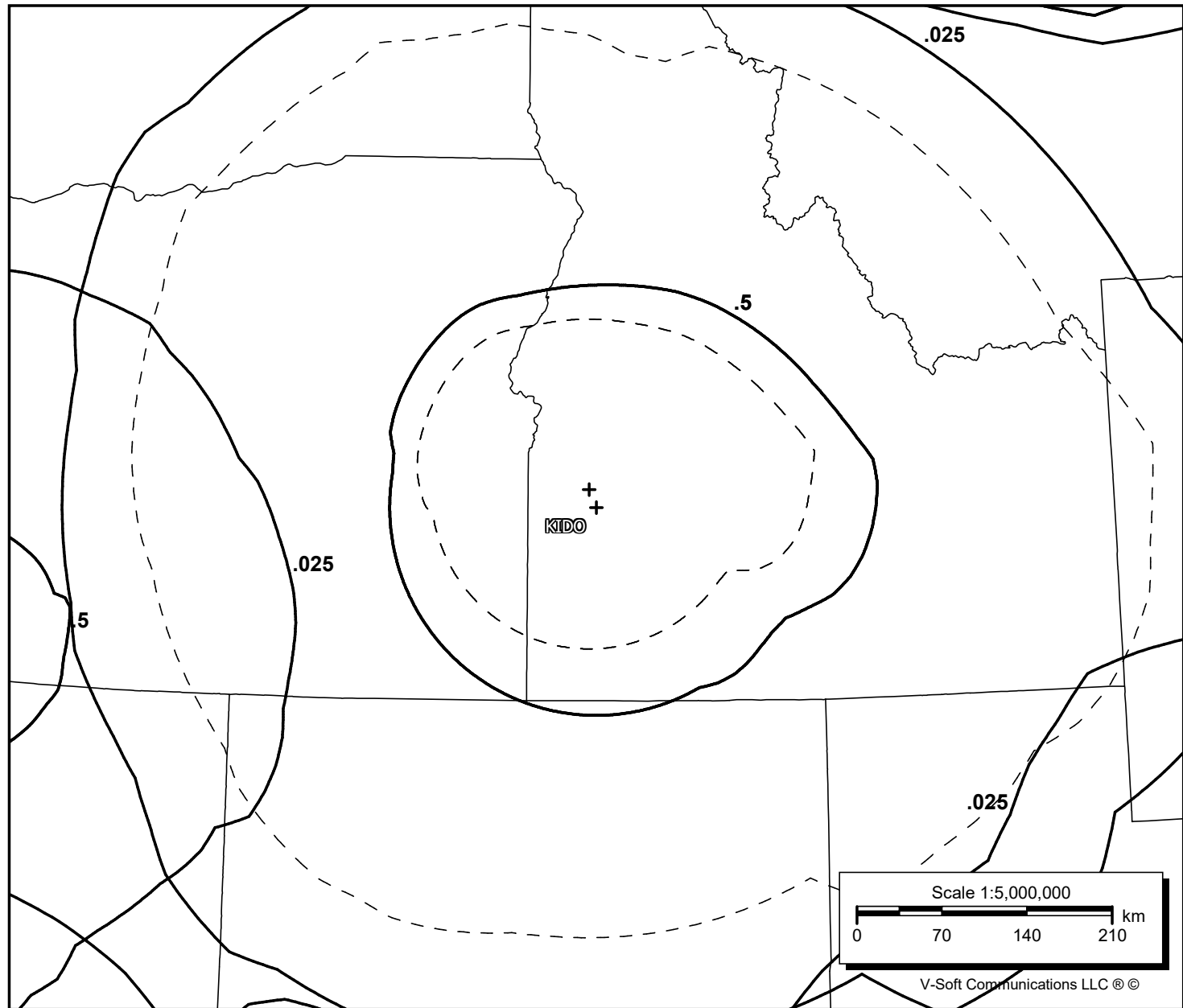
Towers: 1

Augs: 0

— Causes

— Receives

— No Ix



Scale 1:5,000,000

0 70 140 210 km

V-Soft Communications LLC ©

KIDO

Freq: 580 kHz

Class: B

Latitude: 43-25-44 N

Longitude: 116-19-42.98 W

Power: 20 kW

RMS: 298.13 mV/m @1km

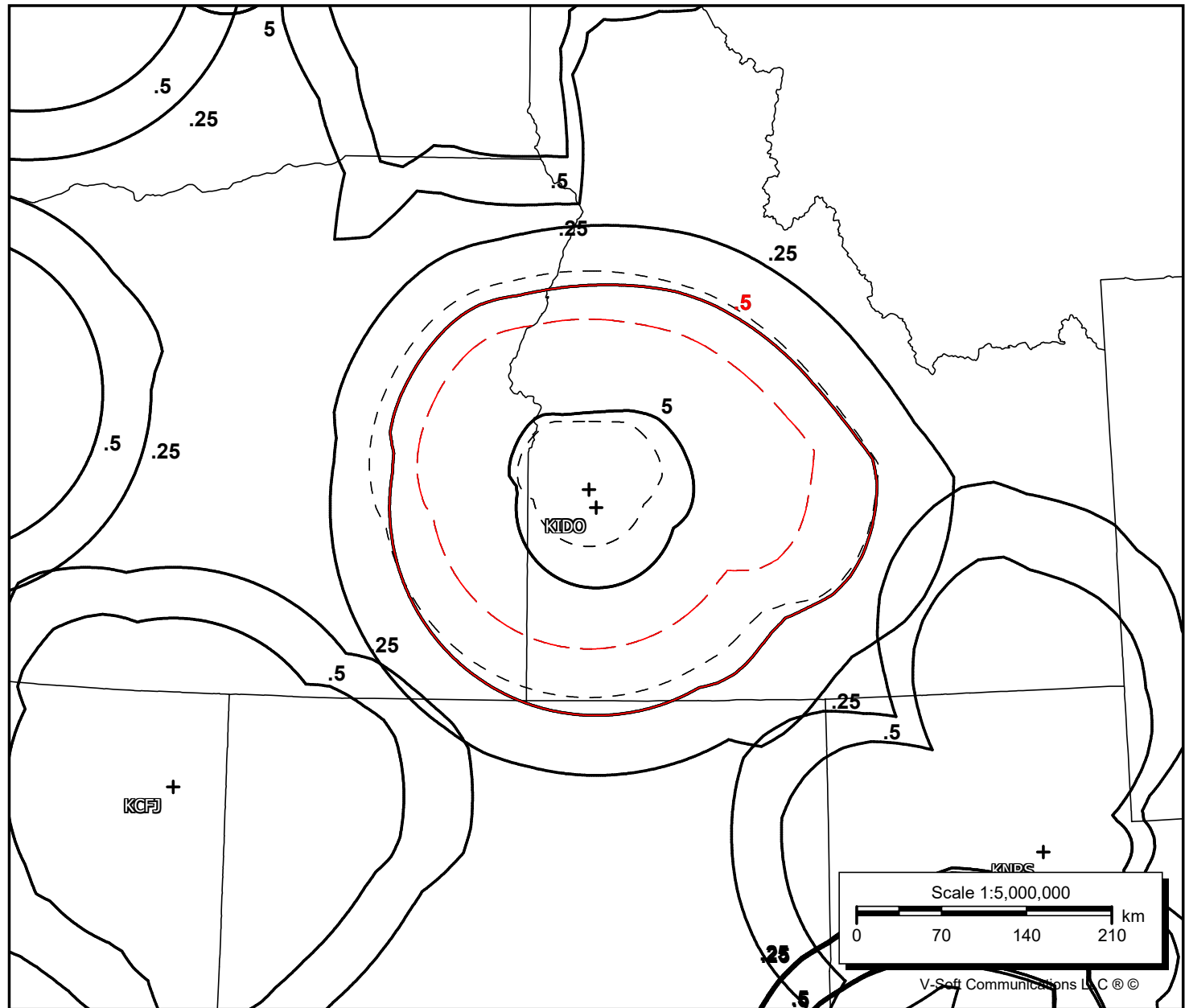
Towers: 1

Augs: 0

— Causes

— Receives

— No Ix



AM Daytime Study

Reference Station:

Call: KIDO

Freq: 580 kHz

NAMPA, ID, US

Lat: 43-25-44 N

Power: 20.0 kW

Lng: 116-19-42.98 W

Theo RMS: 298.13 mV/m @ 1km

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swch	TL Swch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	77.9	0	0	0.0	0.0	0.0	0.0

Call	Freq	City	ST	Dist	Azi	In	Out
KCFJ	570	ALTURAS	CA	417.6	234.2	54.88	47.47
KQNT	590	SPOKANE	WA	470.8	350.9	69.17	60.13
KNRS	570	SALT LAKE CITY	UT	464.8	130.0	100.95	79.05
KUGN	590	EUGENE	OR	546.3	275.5	204.34	195.11
KSUB	590	CEDAR CITY	UT	689.9	158.3	237.45	228.25
KSUB	590	CEDAR CITY	UT	689.9	158.3	237.46	228.26
KSUB	590	CEDAR CITY	UT	689.9	158.3	239.60	229.98
KVI	570	SEATTLE	WA	651.5	310.7	287.53	278.59
KPQ	560	WENATCHEE	WA	545.7	323.6	409.15	409.15
KGEZ	600	KALISPELL	MT	549.5	17.6	439.33	439.33
CKEK	570	CRANBROOK	BC	673.2	4.2	454.64	454.64
KGLE	590	GLENDIVE	MT	992.2	70.0	603.81	599.88
KTIE	590	SAN BERNARDI	CA	1042.1	184.3	629.75	625.27
KLAC	570	LOS ANGELES	CA	1051.4	188.3	685.85	675.96
CKSW	570	SWIFT CURREN	SK	989.9	44.1	688.57	688.57
KCSJ	590	PUEBLO	CO	1133.3	123.5	776.34	745.52
CKWL	570	WILLIAMS LAKE	BC	1057.3	333.3	805.11	805.11

```
Call: KIDO
Freq: 580 kHz
NAMPA, ID, US
Hours: N
Lat: 43-25-44 N      [NAD83]
Lng: 116-19-42.98 W
Power: 4.4 kW -      Custom Q Value Used: 27.83
Theo RMS: 650.02 mV/m @ 1km @ 4.4 kW
```

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	0.589	172.4	0.0	0.0	77.9	0	0	0.0	0.0	0.0	0.0
2	0.325	50.9	77.7	150.4	77.9	0	0	0.0	0.0	0.0	0.0
3	1.000	0.0	76.2	289.5	77.9	0	0	0.0	0.0	0.0	0.0
4	0.307	129.3	129.5	228.5	77.9	0	0	0.0	0.0	0.0	0.0
5	0.556	-165.6	215.5	271.6	77.9	0	0	0.0	0.0	0.0	0.0
6	0.456	-26.0	243.5	254.0	77.9	0	0	0.0	0.0	0.0	0.0

Call Letters	Ct	St	City	Azi (deg)	Ang Low (deg)	Ang High (deg)	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
CKUA/A 50% = 4.384,	CA	AB	EDMONTON	9.82	7.16	7.16	52.65	2.192	208.16	208.19	-0.03
KUBC=1.97 KTMT=1.89 WIBW=1.35											
KZMX 50% = 12.304,	US	SD	HOT SPRINGS	85.40	5.57	10.64	34.47	3.193	463.17	462.77	0.40
25% = 12.711; WIBW=9.64 KUBC=7.65 KIDO=3.19											
CHAH/A 50% = 4.438,	CA	AB	EDMONTON	9.89	7.18	7.18	52.89	2.219	209.81	209.39	0.42
25% = 5.389; CKY/A=4.44 KUBC=1.98 KTMT=1.90 WIBW=1.35											
CHAH/A 50% = 4.438,	CA	AB	EDMONTON	9.89	7.18	7.18	52.89	2.219	209.81	209.39	0.42
25% = 5.389; CKY/A=4.44 KUBC=1.98 KTMT=1.90 WIBW=1.35											
KVI 50% = 3.925,	US	WA	SEATTLE	315.14	11.01	18.70	73.88	1.749	1183.79	1179.86	3.92
25% = 4.739; KPQ=3.93 KIDO=1.75 KLAC=1.44 WNAX=1.39											
C580/A 50% = 14.468,	CA	BC	SALMON ARM	345.37	10.92	10.92	81.99	10.541	642.87	633.88	8.99
25% = 15.908; KIDO=10.54 CHAH/A=9.91 KTMT=4.70 CKY/A=4.65											
CKXR/ 50% = 14.467,	CA	BC	SALMON ARM	345.38	10.92	10.92	81.99	10.540	642.75	633.75	9.01
25% = 15.908; KIDO=10.54 CHAH/A=9.91 KTMT=4.70 CKY/A=4.65											
KMJ 50% = 2.998,	US	CA	FRESNO	199.84	8.47	14.93	61.57	0.886	71.95	62.75	9.19
25% = 3.632; WIBW=2.59 KLAC=1.51 OAX2E-A=1.19 KRFE=1.02 KJMJ=0.98 CHAH/A=0.89											
KUBC 50% = 8.581,	US	CO	MONTROSE	125.27	7.05	12.82	48.45	3.703	382.18	369.84	12.34
25% = 10.474; WIBW=8.58 KIDO=3.70 KSAZ=3.60 KRFE=3.07											
KQNT 50% = 2.095,	US	WA	SPOKANE	351.56	15.93	25.84	116.40	1.098	471.67	458.92	12.76
25% = 2.582; KXSP=1.42 KIDO=1.10 CHOF/A=1.08 KTIE=0.85 CKXR/ =0.82 KCSJ=0.67 CFAR/ =0.66											
KTMT 50% = 19.372,	US	OR	ASHLAND	256.91	13.87	22.89	104.95	16.130	768.44	754.30	14.14
25% = 19.372; KIDO=16.13 KMJ=10.73											
KSAZ 50% = 8.398,	US	AZ	MARANA	158.48	3.41	7.51	28.64	2.486	433.90	326.91	106.99
25% = 9.96; KMJ=6.90 WIBW=4.78 XEHO1/A=3.00 KRFE=2.74 KIDO=2.49 KUBC=2.45											
XE/O 50% = 6.41,	MX	BN	SAN FELIPE	174.05	4.78	4.78	32.93	3.205	486.61	244.17	242.44
25% = 8.083; KSAZ=4.88 KMJ=4.16 XEHO1/A=2.93 WIBW=2.63 XEFI/A=2.13 KRFE=2.05											
WIBW 50% = 3.689,	US	KS	TOPEKA	98.72	0.62	3.64	13.19	1.128	427.60	176.97	250.63
25% = 4.547; KXSP=2.80 KZMX=1.73 OAX2E-A=1.66 WTCM=1.55 C58T/ =1.40 WCHS=1.20 WKTY=1.13											
KNRS 50% = 6.525,	US	UT	SALT LAKE CITY	127.19	16.18	26.19	126.13	1.631	646.63	343.30	303.33
25% = 6.525; KVI=4.23 WNAX=3.83 KLAC=3.16											

WKTY	US WI LA CROSSE	80.30	0.00	2.21	8.35	1.511	904.45	573.02	331.44
50% = 5.466,	25% = 6.043; CKPR/A=4.45	WIBW=3.18	WCHS=1.83	CKY/A=1.82					
KUGN	US OR EUGENE	280.19	13.57	22.45	100.27	2.754	1373.40	985.22	388.18
50% = 11.017,	25% = 11.017; KQNT=11.02								
CKY/A	CA MB WINNIPEG	58.15	3.13	3.13	20.91	5.501	1315.23	884.86	430.37
50% = 11.002,	25% = 13.084; WKTY=9.15	CKPR/A=6.11	CKUA/A=3.77	KIDO=3.61	CFRA/A=3.49	WIBW=3.27			
CKY/A	CA MB WINNIPEG	58.15	3.13	3.13	20.91	5.501	1315.23	884.86	430.37
50% = 11.002,	25% = 13.084; WKTY=9.15	CKPR/A=6.11	CKUA/A=3.77	KIDO=3.61	CFRA/A=3.49	WIBW=3.27			
KRFE	US TX LUBBOCK	126.33	1.16	4.37	17.41	3.677	1056.31	393.57	662.74
50% = 13.609,	25% = 14.71; WIBW=13.61	KJMJ=5.58							
KSUB	US UT CEDAR CITY	156.34	10.22	17.53	74.71	1.810	1211.12	331.20	879.93
50% = 6.716,	25% = 7.238; KTIE=4.21	KQNT=4.15	KCSJ=3.18	KXSP=2.70					
XEHO/O	MX SO CD. OBREGON	159.90	1.72	1.72	13.22	3.195	1208.01	315.04	892.97
50% = 6.866,	25% = 7.913; XEFI/A=3.64	XEAV/A=3.46	KSAZ=3.42	WIBW=3.19	KRFE=2.62	XELRDA/A=2.12	KMJ=2.04		
XEHO1/A	MX SO CD. OBREGON	159.90	1.72	1.72	13.22	3.195	1208.01	315.04	892.97
50% = 6.866,	25% = 7.913; XEFI/A=3.64	XEAV/A=3.46	KSAZ=3.42	WIBW=3.19	KRFE=2.62	XELRDA/A=2.12	KMJ=2.04		
WCHS	US WV CHARLESTON	89.12	0.00	0.00	3.94	1.095	1390.57	388.31	1002.26
50% = 3.174,	25% = 4.379; WMBS=1.97	OAX2E-A=1.93	WTAG=1.56	WHP=1.54	CKWW/A=1.29	KJMJ=1.14	C58T/ =1.14		
WKAQ=1.13	WIBW=1.10								
XEFI/A	MX CH CHIHUAHUA	147.52	1.55	1.55	12.53	3.646	1455.19	430.17	1025.01
50% = 8.129,	25% = 10.576; WIBW=6.06	XEAV/A=4.00	KSAZ=3.65	KRFE=3.61	XEHO1/A=3.54	XELRDA/A=3.34			
KMJ=3.00									
KLAC	US CA LOS ANGELES	189.43	5.41	10.41	40.44	1.096	1354.91	192.91	1162.00
50% = 3.401,	25% = 4.383; KVI=2.79	KMJ=1.94	WNAX=1.70	KNRS=1.38	KLIF=1.27	XENZ/A=1.12			
KJMJ	US LA ALEXANDRIA	114.74	0.00	0.00	7.91	2.408	1522.75	215.16	1307.58
50% = 8.395,	25% = 9.632; WIBW=8.40	WGAC=3.89	OAX2E-A=2.67						
WTCM	US MI TRAVERSE CITY	75.93	0.00	0.11	4.83	2.168	2244.39	655.40	1588.99
50% = 8.671,	25% = 8.671; WKZO=5.68	CKPR/A=4.83	WKTY=4.42						
CJFX/A (79)	CA NS ANTIGONISH	64.36	0.00	0.00	0.50	0.254	2535.64g	829.62	1706.02
50% = 3.974,	25% = 3.974; CFRA/A=3.39	CHLC/A=2.08							
CJFX/A (82)	CA NS ANTIGONISH	65.39	0.00	0.00	0.50	0.254	2544.22g	817.25	1726.97
50% = 3.943,	25% = 4.303; CFRA/A=3.94	CHLC/A=1.72							
WGAC	US GA AUGUSTA	98.65	0.00	0.00	4.02	1.675	2084.71	178.65	1906.05
50% = 5.297,	25% = 6.885; WCHS=4.07	WDWD=3.39	WWNC=2.60	OAX2E-A=2.58	WHP=1.76	WKAQ=1.67			
WHP	US PA HARRISBURG	82.41	0.00	0.00	2.60	1.366	2631.88	530.84	2101.04
50% = 4.72,	25% = 5.464; WCHS=3.92	WTAG=2.62	OAX2E-A=1.72	CFRA/A=1.66	WGAC=1.37				
C58T/	CA ON THUNDER BAY	65.54	0.26	0.26	8.54	5.029	2943.88	815.31	2128.58
50% = 10.058,	25% = 10.058; CFRA/A=10.06								
CKPR/A	CA ON THUNDER BAY	65.54	0.26	0.26	8.54	5.029	2943.88	815.31	2128.58
50% = 10.058,	25% = 10.058; CFRA/A=10.06								
WNAX	US SD YANKTON	85.58	1.87	5.35	15.98	0.876	2740.47	464.22	2276.25
50% = 2.661,	25% = 3.523; WWNC=2.01	KWTO=1.74	WIBW=1.21	KVI=1.06	WSYR=1.04	TISBJ-A=0.94	KNRS=0.88		
KTIE	US CA SAN BERNARDINO	184.93	5.50	10.54	40.96	2.107	2572.00	222.04	2349.96
50% = 7.653,	25% = 8.428; KSUB=7.65	KQNT=2.78	KUGN=2.17						
XELRDA/O	MX CI LA LOMA	134.14	0.24	0.24	8.48	4.838	2854.22	455.72	2398.51
50% = 9.677,	25% = 11.527; WIBW=9.68	XEAV/A=3.92	KJMJ=3.69	XEFI/A=3.21					

XELRDA/O	MX CI LA LOMA	134.14	0.24	0.24	8.48	4.838	2854.22	455.72	2398.51
50% = 9.677,	25% = 11.527; WIBW=9.68	XEAV/A=3.92	KJMJ=3.69	XEFI/A=3.21					
XELRDA/O	MX CI LA LOMA	134.14	0.24	0.24	8.48	4.838	2854.22	455.72	2398.51
50% = 9.677,	25% = 11.527; WIBW=9.68	XEAV/A=3.92	KJMJ=3.69	XEFI/A=3.21					
XELRDA/A	MX CI PIEDRAS NEGRAS	134.00	0.21	0.21	8.39	4.832	2878.90	455.12	2423.78
50% = 9.665,	25% = 11.509; WIBW=9.66	XEAV/A=3.92	KJMJ=3.68	XEFI/A=3.18					
XEMU1/A	MX CI PIEDRAS NEGRAS	134.00	0.21	0.21	8.39	4.832	2878.90	455.12	2423.78
50% = 9.665,	25% = 11.509; WIBW=9.66	XEAV/A=3.92	KJMJ=3.68	XEFI/A=3.18					
XEAV/A	MX JA GUADALAJARA	150.36	0.00	0.00	4.19	3.017	3601.90	407.76	3194.15
50% = 6.034,	25% = 7.531; XE/A=3.58	XEUQA1/A=3.51	XEDZ/A=3.36	XEUE/A=2.68	XEHP/A=2.20	XELRDA/A=2.08			
XEFI/A=2.00									
KCSJ	US CO PUEBLO	115.91	4.70	9.37	32.71	2.268	3466.02	232.44	3233.58
50% = 7.82,	25% = 9.07; KXSP=7.82	KSUB=3.81	KQNT=2.57						
CKWW/A	CA ON WINDSOR	81.38	0.00	0.00	4.65	3.602	3877.35	551.58	3325.77
50% = 7.205,	25% = 8.648; CKPR/A=4.50	WCHS=4.22	WTAG=3.73	WHP=3.19	WIBW=2.63	WTCM=2.42			
KXSP	US NE OMAHA	91.04	1.10	4.29	13.88	1.023	3685.96	345.83	3340.13
50% = 3.084,	25% = 4.093; WMT=3.08	WIBW=1.54	KQNT=1.38	XEPH/A=1.30	KSUB=1.12				
WTAG	US MA WORCESTER	76.26	0.00	0.00	1.59	1.348	4233.74	649.53	3584.21
50% = 4.516,	25% = 5.392; WMCA=3.88	WSYR=2.31	WEZE=2.14	OAX2E-A=1.49	WCHS=1.37				
XEHP/A	MX TA CD.VICTORIA	138.79	0.00	0.00	4.64	3.888	4192.68	465.17	3727.51
50% = 7.776,	25% = 10.945; XEAV/A=6.25	XE/A=4.63	XEDZ/A=3.73	WIBW=3.51	XEUE/A=3.47	XEUQA1/A=3.25			
XELRDA/A=3.25									
XEHP1/A	MX TA CD.VICTORIA	138.79	0.00	0.00	4.64	3.888	4192.68	465.17	3727.51
50% = 7.776,	25% = 10.945; XEAV/A=6.25	XE/A=4.63	XEDZ/A=3.73	WIBW=3.51	XEUE/A=3.47	XEUQA1/A=3.25			
XELRDA/A=3.25									
CMAA-D (76)	CU NU PINAR DEL RI	112.67	0.00	0.00	0.76	0.742	4907.06P	177.05	4730.02
50% = 1.484,	25% = 1.893; WKAQ=1.14	XEYI/A=0.95	KJMJ=0.74	XEUE/A=0.56					
OAX2E-A=0.56	WTAG=0.46								
KLIF	US TX DALLAS	118.18	0.00	2.03	11.63	1.211	5206.12	276.23	4929.89
50% = 3.504,	25% = 4.958; TISBJ-A=2.02	KWTO=1.73	WWNC=1.61	WIBW=1.61	XETD/A=1.44	XELQ/A=1.44	KJMJ=1.43		
KLAC=1.27	XENZ/A=1.24	XEVX1/A=1.22	XEME/A=1.21						
XE/A	MX SL CD.VALLS	140.73	0.00	0.00	3.98	4.319	5423.53	463.08	4960.45
50% = 9.122,	25% = 10.735; XEAV/A=6.73	XEDZ/A=4.39	XEUE/A=4.32	XEUQA1/A=3.89	XEHP/A=3.15	XELRDA/A=2.65			
XEUE/A	MX CS TUXTLA GUTIERRE	136.30	0.00	0.00	2.22	2.479	5588.02	462.69	5125.33
50% = 4.958,	25% = 6.406; XEDZ/A=4.10	XEAV/A=2.79	XE/A=2.39	XEYI/A=2.06	XEUQA1/A=1.87	OAX2E-A=1.72			
XEUQA1/A	MX QE QUERETARO	144.77	0.00	0.00	3.76	4.541	6039.86	448.15	5591.70
50% = 9.082,	25% = 10.902; XEAV/A=7.86	XE/A=4.55	XEDZ/A=4.39	XEUE/A=4.14					
WKAQ	US PR SAN JUAN	104.46	0.00	0.00	1.60	1.904	5960.63	84.01	5876.62
50% = 6.647,	25% = 7.618; OAX2E-A=5.65	ZYH-290-A=3.50	WCHS=2.27	UNK-A=2.21	WHP=1.95				
CJFX/A (75)	CA NS ANTIGONISH	60.03	0.00	0.00	0.50	0.763	7629.71S	873.41	6756.30
50% = 1.526,	25% = 1.526; CHLC/A=1.16	CFRA/A=1.00							
XEDZ1/A	MX VC FORTIN DE LAS F	140.35	0.00	0.00	2.93	4.246	7245.07	463.76	6781.31
50% = 8.492,	25% = 9.815; XEUE/A=6.46	XEAV/A=5.51	XE/A=3.79	XEUQA1/A=3.14					
XEDZ/A	MX VC CORDOBA	140.35	0.00	0.00	2.93	4.245	7251.04	463.76	6787.28
50% = 8.491,	25% = 9.811; XEUE/A=6.46	XEAV/A=5.51	XE/A=3.79	XEUQA1/A=3.13					
XEDZ/A	MX VC CORDOBA	140.43	0.00	0.00	2.93	4.246	7256.58	463.62	6792.96
50% = 8.493,	25% = 9.814; XEUE/A=6.45	XEAV/A=5.52	XE/A=3.78	XEUQA1/A=3.14					

XEYI/A	MX QR CANCUN	122.80	0.00	0.00	2.23	3.188	7150.96	348.68	6802.28
50% = 6.376,	25% = 6.658; KJMJ=4.52	XEUE/A=4.50	XEDZ/A=1.92						
XEYI1/O	MX QR CANCUN	122.80	0.00	0.00	2.23	3.188	7150.96	348.68	6802.28
50% = 6.376,	25% = 6.658; KJMJ=4.52	XEUE/A=4.50	XEDZ/A=1.92						
TGY-B	GT NU PROGRESO	134.79	0.00	0.00	0.74	1.452	9856.18	458.28	9397.90
50% = 2.904,	25% = 3.255; XEUE/A=2.90	XEDZ/A=1.13	OAX2E-A=0.95						
KLBJ	US TX AUSTIN	125.29	0.00	1.28	10.77	2.496	11590.94	381.51	11209.43
50% = 7.607,	25% = 9.985; XEPH/A=4.97	KXSP=4.37	KCSJ=3.75	XEE/A=3.53	KFNS=3.52	XEFD/A=2.94	WVLK=2.89		
KLBJ	US TX AUSTIN	125.40	0.00	1.19	10.63	2.504	11775.81	382.94	11392.87
50% = 7.583,	25% = 10.015; XEPH/A=5.06	KXSP=4.29	KCSJ=3.67	XEE/A=3.56	KFNS=3.51	XEFD/A=3.04	WVLK=2.93		
RJR-B	JM NU GALINA	114.48	0.00	0.00	0.55	1.300	11769.30	210.50	11558.80
50% = 2.601,	25% = 2.74; WKAQ=2.60	OAX2E-A=0.86							
CFRA/A	CA ON OTTAWA	72.16	0.00	0.00	3.09	7.798	12636.96	719.98	11916.98
50% = 15.597,	25% = 19.024; WTAG=15.60	WCHS=6.74	CKWW/A=6.44	CHLC/ =5.64					
CFRA/A	CA ON OTTAWA	72.16	0.00	0.00	3.09	7.798	12636.96	719.98	11916.98
50% = 15.597,	25% = 19.024; WTAG=15.60	WCHS=6.74	CKWW/A=6.44	CHLC/ =5.64					
WWNC	US NC ASHEVILLE	95.34	0.00	0.00	4.25	1.147	13501.58	250.29	13251.29
50% = 3.342,	25% = 4.587; KLIF=2.06	TISBJ-A=1.94	WKBN=1.77	WAAX=1.54	WCHS=1.43	WWRC=1.41	WNAX=1.39		
WKYX=1.23									
CJFX/A (74)	CA NS ANTIGONISH	62.17	0.00	0.00	0.50	1.433	14326.70S	853.46	13473.24
50% = 2.865,	25% = 2.865; CFRA/A=2.03	CHLC/A=2.02							
WKBN	US OH YOUNGSTOWN	82.88	0.00	0.00	3.44	1.106	16099.76	521.11	15578.64
50% = 3.981,	25% = 4.5; WMCA=2.57	WSYR=2.32	WWNC=1.96	WCHS=1.30	TISBJ-A=1.22	CKGL/A=1.11			
CMMF-D	CU NU BARACOA 1	110.01	0.00	0.00	0.55	1.796	16451.78	129.45	16322.33
50% = 3.593,	25% = 3.593; WKAQ=3.59								
KUAI	US HI ELELEE	253.00	0.00	0.00	3.34	1.313	19639.67	757.80	18881.88
50% = 1.243,	25% = 1.509; KLAC=0.90	KGUM=0.61	KMJ=0.61	CB 57-A=0.52	KVI=0.50	KNRS=0.46			
KSSK	US HI HONOLULU	250.80	0.00	0.00	3.50	1.396	19931.41	742.76	19188.65
50% = 1.314,	25% = 1.432; KUGN=1.15	KMJ=0.63	KQNT=0.41	KHAR=0.39					
KSSK	US HI HONOLULU	250.80	0.00	0.00	3.50	1.396	19931.41	742.76	19188.65
50% = 1.314,	25% = 1.432; KUGN=1.15	KMJ=0.63	KQNT=0.41	KHAR=0.39					
KFNS	US IL WOOD RIVER	93.88	0.00	1.02	7.80	3.282	21037.15	282.70	20754.45
50% = 12.634,	25% = 13.129; KXSP=12.63	WKZO=3.57							
WKZO	US MI KALAMAZOO	82.07	0.00	0.00	5.10	2.183	21411.18	537.67	20873.51
50% = 7.497,	25% = 8.732; KXSP=6.23	KFNS=4.17	WVLK=2.90	CJCL/B=2.49	WDWD=2.32				
WSYR	US NY SYRACUSE	76.77	0.00	0.00	2.23	0.987	22130.24	640.19	21490.05
50% = 3.917,	25% = 4.04; WMCA=2.79	WKBN=2.75	TISBJ-A=0.99						
YVMJ-B (270)	VE NU MARACAIBO 9	120.84	0.00	0.00	0.41	1.865	22747.61P	319.58	22428.04
50% = 3.73,	25% = 3.73; WKAQ=2.70	OAX2E-A=2.57							
WMBS	US PA UNIONTOWN	84.79	0.00	0.00	3.28	1.528	23285.10	481.48	22803.62
50% = 4.367,	25% = 6.11; KXSP=2.85	WKZO=2.49	CJCL/B=2.18	WEZE=2.02	WARM=1.96	WDWD=1.96	WVLK=1.91		
WCHS=1.67									
HOH 4-B	PM NU RPC 3	129.67	0.00	0.00	0.45	2.083	23303.03	427.17	22875.86
50% = 4.166,	25% = 4.166; OAX2E-A=4.17								
WDWD	US GA ATLANTA	100.57	0.00	0.00	4.87	2.352	24128.41	139.85	23988.56
50% = 7.457,	25% = 9.409; WMBS=5.94	WKZO=4.51	KXSP=3.68	WVLK=3.32	KFNS=2.89				

HRZQ-B	HN NU	TEGUCIGALPA	130.67	0.00	0.00	0.65	3.183	24517.09	435.14	24081.95
50% = 2.423,	25% = 2.656;	XEUE/A=2.11	OAX2E-A=1.19	XEYI/A=0.86	XEDZ/A=0.67					
WTBN	US FL	PINELLAS PARK	108.59	0.00	0.00	3.98	1.991	25004.65	106.85	24897.80
50% = 6.528,	25% = 7.963;	WWNC=5.21	TISBJ-A=3.93	KLIF=3.03	XEME/A=2.71	WAAX=2.06				
WKYX	US KY	PADUCAH	97.48	0.00	0.06	6.79	3.464	25500.11	203.58	25296.53
50% = 13.857,	25% = 13.857;	WWNC=11.94	WAAX=7.03							
WMCA	US NY	NEW YORK	80.14	0.00	0.00	2.04	1.073	26336.95	576.12	25760.84
50% = 3.558,	25% = 4.293;	WSYR=2.52	WTAG=1.81	WWRC=1.74	WWNC=1.53	WKBN=1.45	TISBJ-A=1.15			
WEZE	US MA	BOSTON	75.83	0.00	0.00	1.49	1.063	35608.73	657.22	34951.51
50% = 3.589,	25% = 4.252;	WTAG=2.81	WARM=2.23	WROW=1.57	UNK-A=1.25	KXSP=1.08				
WAAX	US AL	GADSDEN	101.63	0.00	0.00	5.38	4.146	38542.03	120.37	38421.66
50% = 15.398,	25% = 16.583;	WWNC=15.40	WKYX=6.16							
WARM	US PA	SCRANTON	79.62	0.00	0.00	2.30	1.817	39518.93	586.44	38932.49
50% = 6.836,	25% = 7.267;	WEZE=5.18	WMBS=4.46	CJCL/B=2.46						
WVLK	US KY	LEXINGTON	91.62	0.00	0.00	4.93	3.930	39885.83	333.01	39552.82
50% = 14.897,	25% = 15.721;	WKZO=11.03	WDWD=7.15	WMBS=7.01	KXSP=5.02					
KHAR	US AK	ANCHORAGE	323.37	0.00	0.00	1.88	1.735	46172.60	1131.91	45040.69
50% = 0.863,	25% = 0.995;	CFTK/ =0.73	KSSK=0.46	KUGN=0.40	KQNT=0.29					
WWRC	US MD	BETHESDA	84.84	0.00	0.00	2.74	2.713	49466.23	480.42	48985.81
50% = 9.799,	25% = 10.85;	WKBN=9.80	WSYR=3.55	WWNC=3.01						
LU20-A	AR NU	TRELEW	145.14	0.00	0.00	0.11	1.127	49452.29	446.13	49006.16
50% = 2.232,	25% = 2.347;	LV15-A=2.23	CX58-A=0.73							
HJHP-B (330)	CO NU	CALI 15	126.81	0.00	0.00	0.37	3.804	51766.05S	399.24	51366.81
50% = 7.607,	25% = 7.607;	OAX2E-A=7.61								
CHLC/	CA QC	HAUTERIVE	62.88	0.00	0.00	2.24	24.116	53811.19	846.12	52965.07
50% = 48.232,	25% = 52.034;	CFRA/A=48.23	WTAG=19.52							
CHLC/A	CA QC	BAIE COMEAU	62.88	0.00	0.00	2.24	24.116	53811.19	846.12	52965.07
50% = 48.232,	25% = 52.034;	CFRA/A=48.23	WTAG=19.52							
NEW BAIE COMEAU/CA QC	BAIE COMEAU		62.88	0.00	0.00	2.24	24.116	53811.19	846.12	52965.07
50% = 48.232,	25% = 52.034;	CFRA/A=48.23	WTAG=19.52							
WAFC	US FL	CLEWISTON	108.56	0.00	0.00	3.53	4.094	58006.56	106.35	57900.21
50% = 16.374,	25% = 16.374;	WDWD=16.37								
LV15-A	AR NU	VILLA MERCED	139.80	0.00	0.00	0.13	1.578	60814.12	464.51	60349.61
50% = 3.156,	25% = 3.857;	LU20-A=3.16	ZYK-318-A=1.46	CX58-A=1.30	ZP61-A=1.05					
ZYI-776-A	BR NU	RECIFE 1	101.73							

ZP61-A	PA NU NEEMBUCO 2	130.66	0.00	0.00	0.13	2.584	96840.94	435.09	96405.85
50% = 5.168, 25% = 6.298; ZYK-318-A=5.17 LV15-A=2.34 ZYI-387-A=2.05 CP 91-A=1.80									
UNK-A	BR NU PIRIPIRI	103.84	0.00	0.00	0.15	2.982	98590.50	89.14	98501.37
50% = 5.963, 25% = 6.26; ZYI-776-A=5.96 ZYK780-A=1.90									
ZYH-290-A	BR NU TEFE	120.91	0.00	0.00	0.22	4.904	110936.24	320.68	110615.56
50% = 4.266, 25% = 4.266; OAX2E-A=3.76 CP 91-A=2.02									
CX58-A	UY NU MONTEVIDEO	134.34	0.00	0.00	0.12	2.632	111139.18	456.56	110682.63
50% = 5.264, 25% = 5.792; ZYK-318-A=4.29 LV15-A=3.05 LU20-A=2.41									
ZYL-328-A	BR NU UBERLANDIA	118.63	0.00	0.00	0.13	3.047	113386.30	283.90	113102.40
50% = 6.093, 25% = 6.926; ZYJ-465-A=5.30 ZYK-318-A=3.00 ZYI-387-A=2.40 ZYK780-A=2.26									
OAX2E-A	PE NU MARANON	135.28	0.00	0.00	0.27	6.145	113760.28	459.95	113300.33
50% = 2.119, 25% = 2.119; ZYH-290-A=1.68 CP 91-A=1.29									
ZYJ-330-A	BR NU SANTA HELENA	126.76	0.00	0.00	0.13	3.087	116554.81	398.76	116156.05
50% = 6.175, 25% = 7.626; ZYK-318-A=6.17 ZYI-387-A=2.84 ZYJ-465-A=2.72 ZP61-A=2.13									
ZYH-477-A	BR NU ALCOBACA	111.43	0.00	0.00	0.12	3.179	128946.12	154.39	128791.73
50% = 6.357, 25% = 6.357; ZYJ-465-A=5.05 ZYI-776-A=3.86									
UNK-A	BR NU TEIXEIRA DE S	111.80	0.00	0.00	0.12	3.215	129684.58	161.13	129523.45
50% = 6.431, 25% = 6.431; ZYJ-465-A=5.26 ZYI-776-A=3.70									
LRF374-A	AR RG BASE MARAMBI	155.00	0.00	0.00	0.09	2.475	140563.16	363.49	140199.67
50% = 0.354, 25% = 0.398; LU20-A=0.35 OAX2E-A=0.11 ZYK-318-A=0.10 LV15-A=0.10									
ZYK-299-A	BR NU SAO GABRIEL	130.25	0.00	0.00	0.12	3.512	142538.26	431.92	142106.34
50% = 7.023, 25% = 7.582; ZYK-318-A=7.02 LV15-A=2.06 ZP61-A=1.98									
ZYK-724-A	BR NU PALMITAL	122.54	0.00	0.00	0.13	3.799	145681.68	344.94	145336.74
50% = 7.597, 25% = 8.085; ZYK-318-A=5.60 ZYJ-465-A=5.14 ZYI-387-A=2.77									
CP 91-A	BL NU LA PAZ	132.09	0.00	0.00	0.18	5.464	153755.43	444.98	153310.45
50% = 3.52, 25% = 3.52; OAX2E-A=2.88 ZYH-290-A=2.02									
ZYK-540-A	BR NU AMERICANA	120.54	0.00	0.00	0.13	4.219	166760.84	314.81	166446.03
50% = 8.437, 25% = 8.437; ZYJ-465-A=6.78 ZYK-318-A=5.02									
HCPC2-B	EC NU GUAYAQUIL 2	134.38	0.00	0.00	0.30	11.468	192010.51	456.70	191553.81
50% = 22.936, 25% = 22.936; OAX2E-A=22.94									
ZYK780-A	BR NU PORTO NACION	113.13	0.00	0.00	0.15	5.828	193065.18	185.52	192879.65
50% = 2.878, 25% = 3.365; ZYI-776-A=2.01 ZYJ-465-A=1.55 UNK-A=1.36 ZYL-328-A=1.16 ZYI-387-A=0.99									
ZYH-290-A=0.84									

Protected Station: CKUA/A, 580 kHz - EDMONTON, AB, CA
 Coordinates: 53-20-34.20 N, 113-27-30.60 W
 Standard: Canadian (Figure 4) [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
CKY/A	0580	4.384	100.0
-----	50%	-----	-----
KUBC	0580	1.970	44.9
KTMT	0580	1.892	39.3
WIBW	0580	1.347	26.0
-----	25%	-----	-----
WKTY	0580	1.306	24.4
KMJ	0580	1.299	23.6
*KIDO	0580	1.208	21.3
KZMX	0580	1.182	20.4
CFRA/A	0580	1.096	18.5
CKXR/	0580	1.053	17.5
C58T/	0580	0.877	14.4

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
CKY/A	0580	4.384	100.0
*KIDO-PRO	0580	2.192	50.0
-----	50%	-----	-----
KUBC	0580	1.970	40.1
KTMT	0580	1.892	35.8
-----	25%	-----	-----
WIBW	0580	1.347	24.0
WKTY	0580	1.306	22.6
KMJ	0580	1.299	21.9
KZMX	0580	1.182	19.5
CFRA/A	0580	1.096	17.7
CKXR/	0580	1.053	16.8
C58T/	0580	0.877	13.7

Protected Station: KZMX, 580 kHz - HOT SPRINGS, SD, US
 Coordinates: 43-27-23.90 N, 103-28-35.70 W
 Standard: FCC Rules (1992 Skywave Propagation Model) [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
WIBW	0580	9.639	100.0
KUBC	0580	7.647	79.3
-----	50%	-----	-----
*KIDO	0580	3.193	25.9
-----	25%	-----	-----
KMJ	0580	3.165	24.9
WKTY	0580	3.151	24.0
CKY/A	0580	2.900	21.5
CHAH/A	0580	1.567	11.3

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
WIBW	0580	9.639	100.0
KUBC	0580	7.647	79.3
-----	50%	-----	-----
*KIDO-PRO	0580	3.190	25.9
-----	25%	-----	-----
KMJ	0580	3.165	24.9
WKTY	0580	3.151	24.0
CKY/A	0580	2.900	21.5
CHAH/A	0580	1.567	11.3

Protected Station: CHAH/A, 580 kHz - EDMONTON, AB, CA
 Coordinates: 53-19-10.20 N, 113-26-50.60 W
 Standard: Canadian (Figure 4) [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
CKY/A	0580	4.438	100.0
-----	50%	-----	-----
KUBC	0580	1.980	44.6
KTMT	0580	1.896	39.0
WIBW	0580	1.352	25.9
-----	25%	-----	-----
WKTY	0580	1.310	24.3
KMJ	0580	1.302	23.4

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
CKY/A	0580	4.438	100.0
-----	50%	-----	-----
*KIDO-PRO	0580	2.215	49.8
KUBC	0580	1.980	39.9
KTMT	0580	1.896	35.4
-----	25%	-----	-----
WIBW	0580	1.352	23.8
WKTY	0580	1.310	22.4

*KIDO	0580	1.215	21.3	KMJ	0580	1.302	21.7
KZMX	0580	1.188	20.3	KZMX	0580	1.188	19.4
CKXR/	0580	1.117	18.7	CKXR/	0580	1.117	17.9
CFRA/A	0580	1.095	18.0	CFRA/A	0580	1.095	17.3
CKPR/A	0580	0.878	14.2	CKPR/A	0580	0.878	13.6

Protected Station: CHAH/A, 580 kHz - EDMONTON, AB, CA
 Coordinates: 53-19-10.20 N, 113-26-50.60 W
 Standard: Canadian (Figure 4) [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
CKY/A	0580	4.438	100.0
-----	50%	-----	-----
KUBC	0580	1.980	44.6
KTMT	0580	1.896	39.0
WIBW	0580	1.352	25.9
-----	25%	-----	-----
WKTY	0580	1.310	24.3
KMJ	0580	1.302	23.4
*KIDO	0580	1.215	21.3
KZMX	0580	1.188	20.3
CKXR/	0580	1.117	18.7
CFRA/A	0580	1.095	18.0
CKPR/A	0580	0.878	14.2

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
CKY/A	0580	4.438	100.0
-----	50%	-----	-----
*KIDO-PRO	0580	2.215	49.8
KUBC	0580	1.980	39.9
KTMT	0580	1.896	35.4
-----	25%	-----	-----
WIBW	0580	1.352	23.8
WKTY	0580	1.310	22.4
KMJ	0580	1.302	21.7
KZMX	0580	1.188	19.4
CKXR/	0580	1.117	17.9
CFRA/A	0580	1.095	17.3
CKPR/A	0580	0.878	13.6

Protected Station: KVI, 570 kHz - SEATTLE, WA, US
 Coordinates: 47-25-18.40 N, 122-25-48.50 W
 Standard: FCC Rules (1992 Skywave Propagation Model) [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
KPQ	0560	3.925	100.0
-----	50%	-----	-----
*KIDO	0580	1.749	44.5
KLAC	0570	1.435	33.3
WNAX	0570	1.389	30.6
-----	25%	-----	-----
KNRS	0570	0.845	17.8
CKXR/	0580	0.739	15.3
KTMT	0580	0.701	14.4
CKWL/	0570	0.628	12.7
CKEK/A	0570	0.600	12.0
CB 57-A	0570	0.506	10.1

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
KPQ	0560	3.925	100.0
-----	50%	-----	-----
*KIDO-PRO	0580	1.743	44.4
KLAC	0570	1.435	33.4
WNAX	0570	1.389	30.6
-----	25%	-----	-----
KNRS	0570	0.845	17.8
CKXR/	0580	0.739	15.3
KTMT	0580	0.701	14.4
CKWL/	0570	0.628	12.7
CKEK/A	0570	0.600	12.0
CB 57-A	0570	0.506	10.1

Protected Station: C580/A, 580 kHz - SALMON ARM, BC, CA
 Coordinates: 50-43-04.70 N, 119-20-28.20 W
 Standard: Canadian (Figure 4) [10%]

Current:

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)

*KIDO	0580	10.541	100.0
CHAH/A	0580	9.909	94.0
-----	50%	-----	
KTMT	0580	4.703	32.5
CKY/A	0580	4.652	30.5
-----	25%	-----	
KMJ	0580	3.085	19.3
KUBC	0580	1.905	11.7

Call	Freq (kHz)	Limit (mV/m)	(%)

*KIDO-PRO	0580	10.394	100.0
CHAH/A	0580	9.909	95.3
-----	50%	-----	
KTMT	0580	4.703	32.7
CKY/A	0580	4.652	30.7
-----	25%	-----	
KMJ	0580	3.085	19.5
KUBC	0580	1.905	11.8

Protected Station: CKXR/ , 580 kHz - SALMON ARM, BC, CA
Coordinates: 50-43-04.70 N, 119-20-24.20 W
Standard: Canadian (Figure 4) [10%]

Current:

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)

*KIDO	0580	10.540	100.0
CHAH/A	0580	9.910	94.0
-----	50%	-----	
KTMT	0580	4.703	32.5
CKY/A	0580	4.652	30.5
-----	25%	-----	
KMJ	0580	3.085	19.3
KUBC	0580	1.905	11.7

Call	Freq (kHz)	Limit (mV/m)	(%)

*KIDO-PRO	0580	10.392	100.0
CHAH/A	0580	9.910	95.3
-----	50%	-----	
KTMT	0580	4.703	32.7
CKY/A	0580	4.652	30.7
-----	25%	-----	
KMJ	0580	3.085	19.5
KUBC	0580	1.905	11.8

Protected Station: KMJ, 580 kHz - FRESNO, CA, US
Coordinates: 36-39-32.80 N, 119-20-50.40 W
Standard: FCC Rules (1992 Skywave Propagation Model) [10%]

Current:

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)

WIBW	0580	2.593	100.0
KLAC	0570	1.505	58.0
-----	50%	-----	
OAX2E-A	0580	1.191	39.7
KRFE	0580	1.023	31.7
KJMJ	0580	0.977	28.8
CHAH/A	0580	0.886	25.1
-----	25%	-----	
KSAZ	0580	0.845	23.2
XEHO1/A	0580	0.844	22.6
KTIE	0590	0.831	21.7
KUBC	0580	0.803	20.5
CKXR/	0580	0.746	18.6
KTMT	0580	0.726	17.8
XEAV/A	0580	0.718	17.3
CKY/A	0580	0.706	16.8
XEFI/A	0580	0.678	15.9
KSUB	0590	0.652	15.1
KNRS	0570	0.624	14.3
KZMX	0580	0.620	14.0

Call	Freq (kHz)	Limit (mV/m)	(%)

WIBW	0580	2.593	100.0
KLAC	0570	1.505	58.0
-----	50%	-----	
OAX2E-A	0580	1.191	39.7
KRFE	0580	1.023	31.7
KJMJ	0580	0.977	28.8
CHAH/A	0580	0.886	25.1
-----	25%	-----	
KSAZ	0580	0.845	23.2
XEHO1/A	0580	0.844	22.6
KTIE	0590	0.831	21.7
KUBC	0580	0.803	20.5
*KIDO-PRO	0580	0.773	19.3
CKXR/	0580	0.746	18.3
KTMT	0580	0.726	17.5
XEAV/A	0580	0.718	17.0
CKY/A	0580	0.706	16.5
XEFI/A	0580	0.678	15.7
KSUB	0590	0.652	14.9
KNRS	0570	0.624	14.1

WKTY	0580	0.464	10.4	KZMX	0580	0.620	13.8
XELRDA/A	0580	0.462	10.3	WKTY	0580	0.464	10.2
*KIDO	0580	0.449	10.0	XELRDA/A	0580	0.462	10.1

Protected Station: KUBC, 580 kHz - MONTROSE, CO, US
 Coordinates: 38-25-32 N, 107-52-59.20 W
 Standard: FCC Rules (1992 Skywave Propagation Model) [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
WIBW	0580	8.581	100.0
-----	50%	-----	-----
*KIDO	0580	3.703	43.1
KSAZ	0580	3.598	38.4
KRFE	0580	3.068	30.6
-----	25%	-----	-----
KMJ	0580	2.485	23.7
KZMX	0580	2.363	21.9
KJMJ	0580	2.147	19.4
KNRS	0570	1.476	13.1
OAX2E-A	0580	1.410	12.4
CHAH/A	0580	1.178	10.3
CKY/A	0580	1.164	10.1

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
WIBW	0580	8.581	100.0
-----	50%	-----	-----
KSAZ	0580	3.598	41.9
*KIDO-PRO	0580	3.584	38.5
KRFE	0580	3.068	30.7
-----	25%	-----	-----
KMJ	0580	2.485	23.8
KZMX	0580	2.363	22.0
KJMJ	0580	2.147	19.5
KNRS	0570	1.476	13.1
OAX2E-A	0580	1.410	12.4
CHAH/A	0580	1.178	10.3
CKY/A	0580	1.164	10.1

Protected Station: KQNT, 590 kHz - SPOKANE, WA, US
 Coordinates: 47-36-54.60 N, 117-15-00.70 W
 Standard: FCC Rules (1992 Skywave Propagation Model) [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
KXSP	0590	1.420	100.0
*KIDO	0580	1.098	77.3
CHOF/A	0600	1.079	60.0
-----	50%	-----	-----
KTIE	0590	0.845	40.3
CKXR/	0580	0.823	36.4
KCSJ	0590	0.674	28.0
CFAR/	0590	0.661	26.4
-----	25%	-----	-----
XEPH/A	0590	0.585	22.6
KSUB	0590	0.581	21.9
CFTK/	0590	0.509	18.7
KUGN	0590	0.484	17.5
KSSK	0590	0.468	16.7
XEE/A	0590	0.460	16.1
KGEZ	0600	0.402	13.9
XECJU/A	0590	0.357	12.2
KMJ	0580	0.341	11.6
CFNL/A	0590	0.329	11.1
KTMT	0580	0.316	10.6
CKUA/A	0580	0.314	10.5
XEHQ/A	0590	0.310	10.3

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
KXSP	0590	1.420	100.0
CHOF/A	0600	1.079	75.9
*KIDO-PRO	0580	1.068	59.8
-----	50%	-----	-----
KTIE	0590	0.845	40.6
CKXR/	0580	0.823	36.6
KCSJ	0590	0.674	28.1
CFAR/	0590	0.661	26.6
-----	25%	-----	-----
XEPH/A	0590	0.585	22.7
KSUB	0590	0.581	22.0
CFTK/	0590	0.509	18.8
KUGN	0590	0.484	17.6
KSSK	0590	0.468	16.7
XEE/A	0590	0.460	16.2
KGEZ	0600	0.402	14.0
XECJU/A	0590	0.357	12.3
KMJ	0580	0.341	11.6
CFNL/A	0590	0.329	11.2
KTMT	0580	0.316	10.6
CKUA/A	0580	0.314	10.5
XEHQ/A	0590	0.310	10.3

 Protected Station: KTMT, 580 kHz - ASHLAND, OR, US
 Coordinates: 42-09-50.50 N, 122-38-56.10 W
 Standard: FCC Rules (1992 Skywave Propagation Model) [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
*KIDO	0580	16.130	100.0
KMJ	0580	10.728	66.5
-----	50%	-----	
-----	25%	-----	
KUGN	0590	2.710	13.9

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
*KIDO-PRO	0580	15.833	100.0
KMJ	0580	10.728	67.7
-----	50%	-----	
-----	25%	-----	
KUGN	0590	2.710	14.1

 Protected Station: KSAZ, 580 kHz - MARANA, AZ, US
 Coordinates: 32-27-11.30 N, 111-17-06.40 W
 Standard: FCC Rules (1992 Skywave Propagation Model) [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
KMJ	0580	6.905	100.0
WIBW	0580	4.781	69.2
-----	50%	-----	
XEHO1/A	0580	3.002	35.7
KRFE	0580	2.736	30.6
*KIDO	0580	2.486	26.6
KUBC	0580	2.446	25.3
-----	25%	-----	
XEFI/A	0580	2.445	24.5
OAX2E-A	0580	1.713	16.7
KJMJ	0580	1.640	15.7
XEAV/A	0580	1.576	14.9
XELRDA/A	0580	1.230	11.5
KNRS	0570	1.180	11.0

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
KMJ	0580	6.905	100.0
WIBW	0580	4.781	69.2
-----	50%	-----	
XEHO1/A	0580	3.002	35.7
KRFE	0580	2.736	30.6
KUBC	0580	2.446	26.2
XEFI/A	0580	2.445	25.3
-----	25%	-----	
*KIDO-PRO	0580	1.873	18.8
OAX2E-A	0580	1.713	16.9
KJMJ	0580	1.640	15.9
XEAV/A	0580	1.576	15.1
XELRDA/A	0580	1.230	11.6
KNRS	0570	1.180	11.1

 Protected Station: XE/O, 580 kHz - SAN FELIPE, BN, MX
 Coordinates: 31-03-48.30 N, 114-50-12.80 W
 Standard: Mexican [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
KSAZ	0580	4.881	100.0
KMJ	0580	4.156	85.1
-----	50%	-----	
XEHO1/A	0580	2.927	45.6
WIBW	0580	2.631	37.3
XEFI/A	0580	2.131	28.3
KRFE	0580	2.054	26.2
-----	25%	-----	
*KIDO	0580	1.801	22.2

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
KSAZ	0580	4.881	100.0
KMJ	0580	4.156	85.1
-----	50%	-----	
XEHO1/A	0580	2.927	45.6
WIBW	0580	2.631	37.3
XEFI/A	0580	2.131	28.3
KRFE	0580	2.054	26.2
-----	25%	-----	
*KIDO-PRO	0580	1.608	19.8

KUBC	0580	1.193	14.4	KUBC	0580	1.193	14.4
XEAV/A	0580	1.139	13.6	XEAV/A	0580	1.139	13.6
XELRDA/A	0580	0.956	11.3	XELRDA/A	0580	0.956	11.3

Protected Station: KNRS, 570 kHz - SALT LAKE CITY, UT, US
 Coordinates: 40-49-08.80 N, 111-55-58.80 W
 Standard: FCC Rules (1992 Skywave Propagation Model) [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
-----	-----	-----	-----
KVI	0570	4.230	100.0
WNAX	0570	3.832	90.5
KLAC	0570	3.161	55.3
-----	50%	-----	-----
-----	25%	-----	-----
KMJ	0580	1.036	15.8
KLIF	0570	0.933	14.1
*KIDO	0580	0.867	12.9
WWNC	0570	0.774	11.5
TISBJ-A	0570	0.773	11.4
XENZ/A	0570	0.698	10.2
CB 57-A	0570	0.694	10.1

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
-----	-----	-----	-----
KVI	0570	4.230	100.0
WNAX	0570	3.832	90.5
KLAC	0570	3.161	55.3
-----	50%	-----	-----
-----	25%	-----	-----
KMJ	0580	1.036	15.8
KLIF	0570	0.933	14.1
*KIDO-PRO	0580	0.866	12.9
WWNC	0570	0.774	11.5
TISBJ-A	0570	0.773	11.4
XENZ/A	0570	0.698	10.2
CB 57-A	0570	0.694	10.1

Protected Station: WKTY, 580 kHz - LA CROSSE, WI, US
 Coordinates: 43-44-24.90 N, 091-12-21.50 W
 Standard: FCC Rules (1992 Skywave Propagation Model) [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
-----	-----	-----	-----
CKPR/A	0580	4.446	100.0
WIBW	0580	3.180	71.5
-----	50%	-----	-----
WCHS	0580	1.830	33.4
CKY/A	0580	1.817	31.5
-----	25%	-----	-----
KXSP	0590	1.496	24.7
WTCM	0580	1.435	23.0
OAX2E-A	0580	1.336	20.9
KZMX	0580	1.095	16.7
KUBC	0580	0.986	14.8
*KIDO	0580	0.965	14.4
KMJ	0580	0.918	13.5
WNAX	0570	0.798	11.6
WKZO	0590	0.744	10.8
KJMJ	0580	0.710	10.2

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
-----	-----	-----	-----
CKPR/A	0580	4.446	100.0
WIBW	0580	3.180	71.5
-----	50%	-----	-----
WCHS	0580	1.830	33.4
CKY/A	0580	1.817	31.5
-----	25%	-----	-----
KXSP	0590	1.496	24.7
WTCM	0580	1.435	23.0
OAX2E-A	0580	1.336	20.9
KZMX	0580	1.095	16.7
KUBC	0580	0.986	14.8
*KIDO-PRO	0580	0.957	14.3
KMJ	0580	0.918	13.5
WNAX	0570	0.798	11.6
WKZO	0590	0.744	10.8
KJMJ	0580	0.710	10.2

Protected Station: KUGN, 590 kHz - EUGENE, OR, US
 Coordinates: 44-06-02.40 N, 123-03-10.30 W
 Standard: FCC Rules (1992 Skywave Propagation Model) [10%]

Current:

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
KQNT	0590	11.017	100.0
-----	50%	-----	
-----	25%	-----	
KSUB	0590	2.444	22.1
*KIDO	0580	2.350	20.8
KTMT	0580	1.866	16.1
KTIE	0590	1.324	11.3

Call	Freq (kHz)	Limit (mV/m)	(%)
KQNT	0590	11.017	100.0
-----	50%	-----	
-----	25%	-----	
KSUB	0590	2.444	22.1
*KIDO-PRO	0580	1.976	17.5
KTMT	0580	1.866	16.2
KTIE	0590	1.324	11.4

Protected Station: CKY/A, 580 kHz - WINNIPEG, MB, CA
 Coordinates: 49-36-09 N, 097-09-01.10 W
 Standard: Canadian (Figure 4) [10%]

Current:

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
WKTY	0580	9.152	100.0
CKPR/A	0580	6.107	66.7
-----	50%	-----	
CKUA/A	0580	3.770	34.2
*KIDO	0580	3.605	31.0
CFRA/A	0580	3.495	28.7
WIBW	0580	3.274	25.8
-----	25%	-----	
KUBC	0580	2.780	21.2
KZMX	0580	2.589	19.3
C580/A	0580	1.624	11.9

Call	Freq (kHz)	Limit (mV/m)	(%)
WKTY	0580	9.152	100.0
CKPR/A	0580	6.107	66.7
-----	50%	-----	
CKUA/A	0580	3.770	34.2
*KIDO-PRO	0580	3.701	31.8
CFRA/A	0580	3.495	28.6
WIBW	0580	3.274	25.7
-----	25%	-----	
KUBC	0580	2.780	21.2
KZMX	0580	2.589	19.3
C580/A	0580	1.624	11.8

Protected Station: CKY/A, 580 kHz - WINNIPEG, MB, CA
 Coordinates: 49-36-09 N, 097-09-01.10 W
 Standard: Canadian (Figure 4) [10%]

Current:

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
WKTY	0580	9.152	100.0
CKPR/A	0580	6.107	66.7
-----	50%	-----	
CKUA/A	0580	3.770	34.2
*KIDO	0580	3.605	31.0
CFRA/A	0580	3.495	28.7
WIBW	0580	3.274	25.8
-----	25%	-----	
KUBC	0580	2.780	21.2
KZMX	0580	2.589	19.3
C580/A	0580	1.624	11.9

Call	Freq (kHz)	Limit (mV/m)	(%)
WKTY	0580	9.152	100.0
CKPR/A	0580	6.107	66.7
-----	50%	-----	
CKUA/A	0580	3.770	34.2
*KIDO-PRO	0580	3.701	31.8
CFRA/A	0580	3.495	28.6
WIBW	0580	3.274	25.7
-----	25%	-----	
KUBC	0580	2.780	21.2
KZMX	0580	2.589	19.3
C580/A	0580	1.624	11.8

Protected Station: C58T/ , 580 kHz - THUNDER BAY, ON, CA
 Coordinates: 48-26-07.60 N, 089-20-41.30 W
 Standard: Canadian (Figure 4) [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
CFRA/A	0580	10.058	100.0
-----	50%	-----	
-----	25%	-----	
CKY/A	0580	2.315	23.0
WIBW	0580	1.851	17.9
CHLC/	0580	1.839	17.5
CKUA/A	0580	1.549	14.5
WCHS	0580	1.485	13.8
*KIDO	0580	1.433	13.1
KZMX	0580	1.409	12.8
WHP	0580	1.242	11.2

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
CFRA/A	0580	10.058	100.0
-----	50%	-----	
-----	25%	-----	
CKY/A	0580	2.315	23.0
WIBW	0580	1.851	17.9
CHLC/	0580	1.839	17.5
CKUA/A	0580	1.549	14.5
WCHS	0580	1.485	13.8
KZMX	0580	1.409	12.9
*KIDO-PRO	0580	1.393	12.7
WHP	0580	1.242	11.2

Protected Station: CKPR/A, 580 kHz - THUNDER BAY, ON, CA
 Coordinates: 48-26-07.60 N, 089-20-41.30 W
 Standard: Canadian (Figure 4) [10%]

Current:

Call	Freq (kHz)	Limit (mV/m)	(%)
CFRA/A	0580	10.058	100.0
-----	50%	-----	
-----	25%	-----	
CKY/A	0580	2.315	23.0
WIBW	0580	1.851	17.9
CHLC/	0580	1.839	17.5
CKUA/A	0580	1.549	14.5
WCHS	0580	1.485	13.8
*KIDO	0580	1.433	13.1
KZMX	0580	1.409	12.8
WHP	0580	1.242	11.2

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
CFRA/A	0580	10.058	100.0
-----	50%	-----	
-----	25%	-----	
CKY/A	0580	2.315	23.0
WIBW	0580	1.851	17.9
CHLC/	0580	1.839	17.5
CKUA/A	0580	1.549	14.5
WCHS	0580	1.485	13.8
KZMX	0580	1.409	12.9
*KIDO-PRO	0580	1.393	12.7
WHP	0580	1.242	11.2