

## **Antenna Project**

### **COMMUNICATIONS TECHNOLOGIES 00304**

**TX station: *W275BO***

**Site Name: *CROWN REG. 1035359***

**Frequency: *102.90 MHz***

**Date: *18.09.2014***

18/09/2014 13:46:40

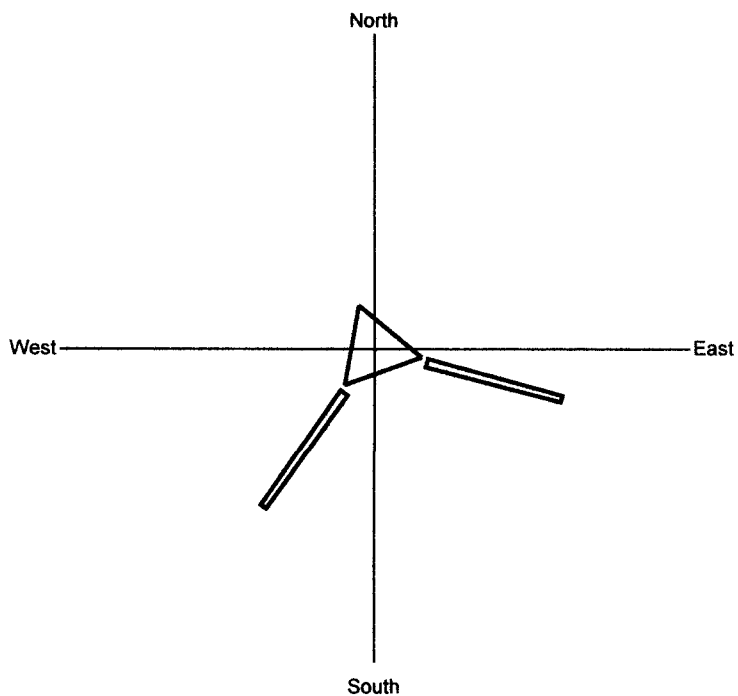
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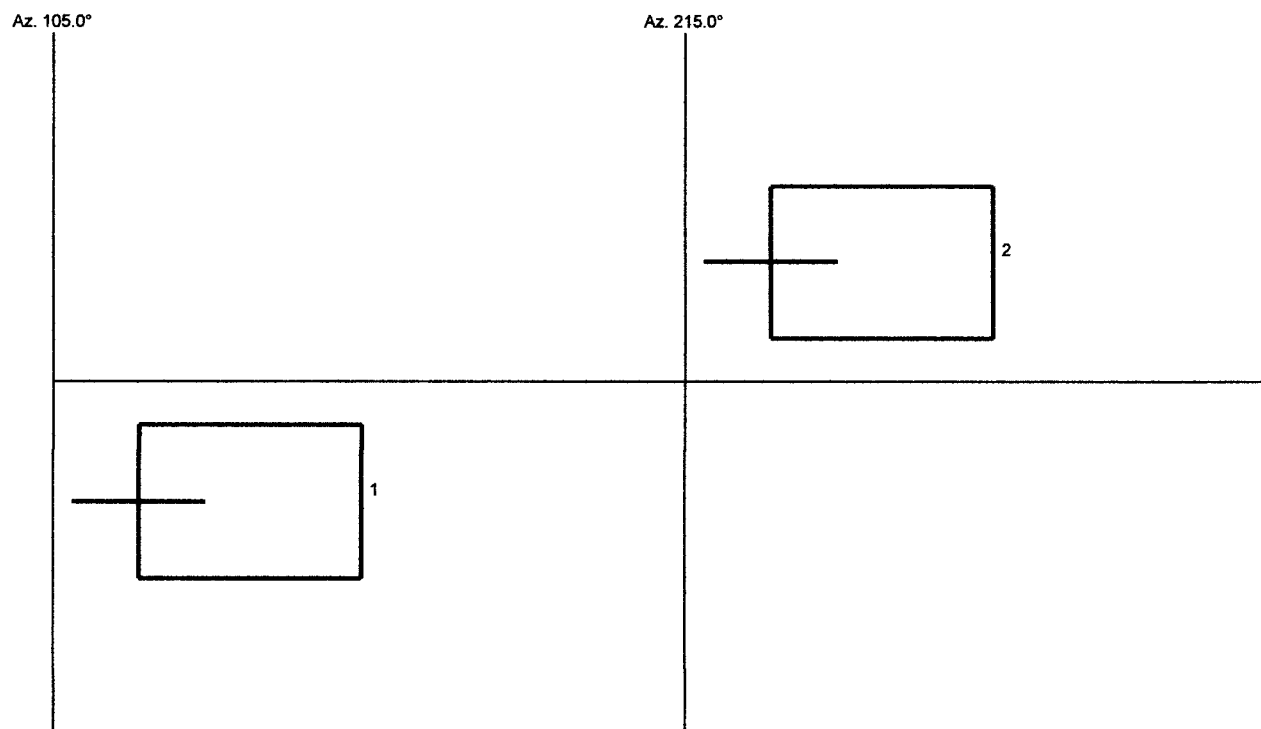
Gain solid integration : enabled

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### Plan of antenna system



### Side of antenna system



18/09/2014 13:46:40

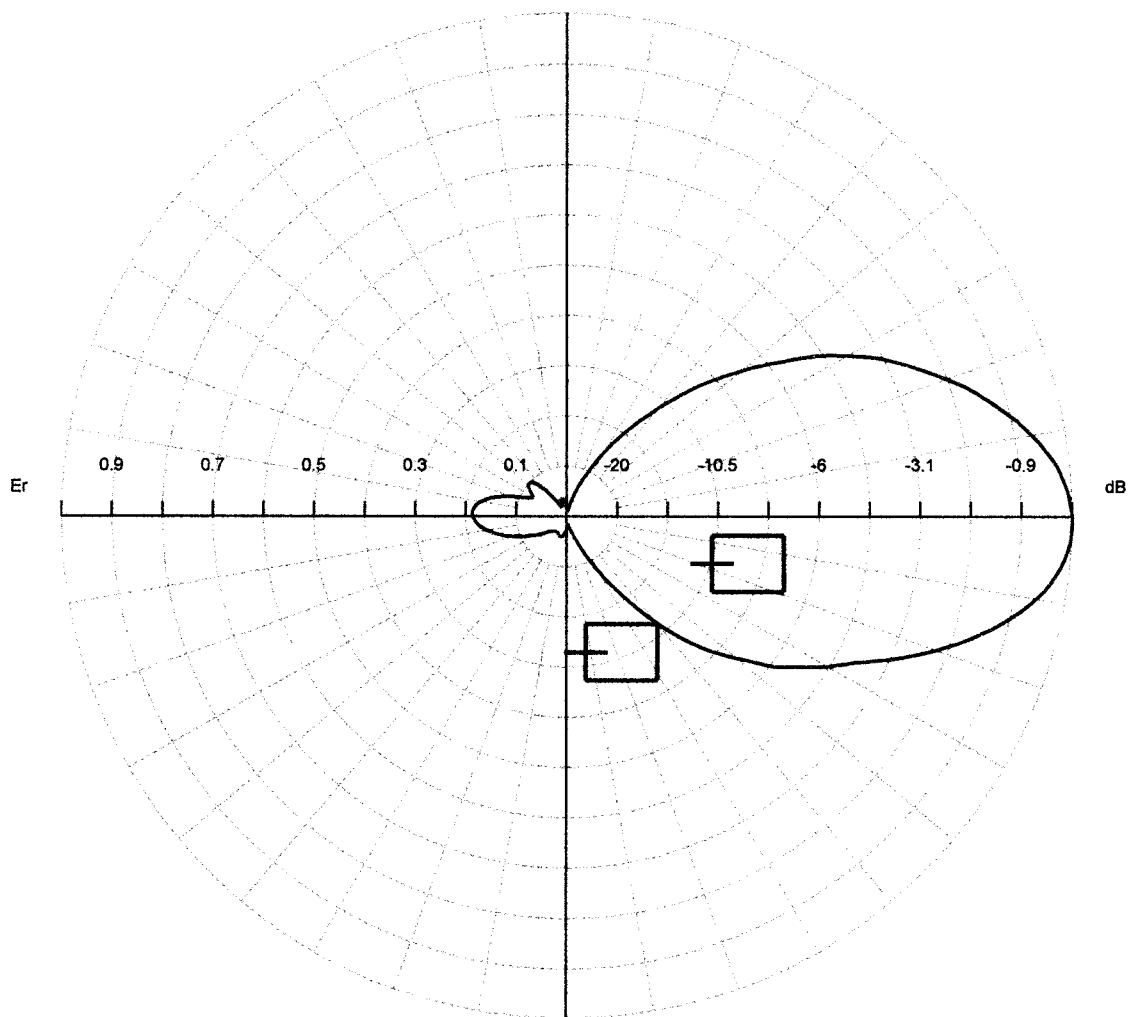
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### Vertical diagram at an azimuth of 215.0° degrees



—— 215.0° Az. (Total Antenna), Gain (dBd): 6.73

ERP T.Max(KW): 0.2472    ERP E.Max(KW): 0.2472

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## Vertical diagram at an azimuth of 215.0° degrees

Dep (°)	Er (%)	ERP (W)	Dep (°)	Er (%)	ERP (W)	Dep (°)	Er (%)	ERP (W)
0.0	100.0	247.2	60.0	12.9	4.1	120.0	3.6	0.3
1.0	100.0	247.0	61.0	11.9	3.5	121.0	3.6	0.3
2.0	99.9	246.5	62.0	10.8	2.9	122.0	3.5	0.3
3.0	99.7	245.9	63.0	9.8	2.4	123.0	3.5	0.3
4.0	99.3	243.8	64.0	8.9	2.0	124.0	3.6	0.3
5.0	98.8	241.3	65.0	8.1	1.6	125.0	3.7	0.3
6.0	98.2	238.6	66.0	7.3	1.3	126.0	3.8	0.3
7.0	97.4	234.6	67.0	6.7	1.1	127.0	3.8	0.4
8.0	96.5	230.3	68.0	6.0	0.9	128.0	3.8	0.4
9.0	95.6	225.9	69.0	5.4	0.7	129.0	3.8	0.4
10.0	94.3	219.9	70.0	4.9	0.6	130.0	3.8	0.4
11.0	93.0	213.8	71.0	4.4	0.5	131.0	3.9	0.4
12.0	91.6	207.6	72.0	4.0	0.4	132.0	3.9	0.4
13.0	90.1	200.6	73.0	3.6	0.3	133.0	4.1	0.4
14.0	88.5	193.7	74.0	3.3	0.3	134.0	4.2	0.4
15.0	86.9	186.8	75.0	2.9	0.2	135.0	4.3	0.5
16.0	85.1	179.2	76.0	2.7	0.2	136.0	4.3	0.5
17.0	83.3	171.7	77.0	2.5	0.1	137.0	4.4	0.5
18.0	81.6	164.4	78.0	2.2	0.1	138.0	4.4	0.5
19.0	79.6	156.8	79.0	2.1	0.1	139.0	4.6	0.5
20.0	77.8	149.5	80.0	2.0	0.1	140.0	4.8	0.6
21.0	75.9	142.4	81.0	1.7	0.1	141.0	4.9	0.6
22.0	73.9	135.0	82.0	1.6	0.1	142.0	5.2	0.7
23.0	71.9	127.9	83.0	1.5	0.1	143.0	5.6	0.8
24.0	70.0	121.3	84.0	1.4	0.0	144.0	5.9	0.9
25.0	68.0	114.2	85.0	1.5	0.1	145.0	6.2	0.9
26.0	66.0	107.6	86.0	1.6	0.1	146.0	6.4	1.0
27.0	64.0	101.4	87.0	1.8	0.1	147.0	6.7	1.1
28.0	62.6	96.8	88.0	2.0	0.1	148.0	7.0	1.2
29.0	61.2	92.5	89.0	2.2	0.1	149.0	7.3	1.3
30.0	59.8	88.5	90.0	2.4	0.1	150.0	7.5	1.4
31.0	58.1	83.6	91.0	2.6	0.2	151.0	7.9	1.5
32.0	56.5	79.0	92.0	2.7	0.2	152.0	8.3	1.7
33.0	55.0	74.8	93.0	2.8	0.2	153.0	8.6	1.8
34.0	53.6	71.0	94.0	2.9	0.2	154.0	9.1	2.0
35.0	52.2	67.4	95.0	3.0	0.2	155.0	9.5	2.2
36.0	50.8	63.9	96.0	3.1	0.2	156.0	10.0	2.5
37.0	49.1	59.5	97.0	3.2	0.3	157.0	10.4	2.7
38.0	47.2	55.2	98.0	3.4	0.3	158.0	10.8	2.9
39.0	45.4	50.9	99.0	3.6	0.3	159.0	11.2	3.1
40.0	44.0	47.8	100.0	3.7	0.3	160.0	11.7	3.4
41.0	42.5	44.6	101.0	3.9	0.4	161.0	12.2	3.7
42.0	40.9	41.4	102.0	4.1	0.4	162.0	12.6	3.9
43.0	39.5	38.5	103.0	4.1	0.4	163.0	13.1	4.2
44.0	37.9	35.6	104.0	4.2	0.4	164.0	13.5	4.5
45.0	36.3	32.6	105.0	4.2	0.4	165.0	13.9	4.8
46.0	34.6	29.6	106.0	4.3	0.4	166.0	14.4	5.1
47.0	32.9	26.7	107.0	4.3	0.5	167.0	14.8	5.4
48.0	31.1	23.9	108.0	4.3	0.4	168.0	15.2	5.7
49.0	29.4	21.4	109.0	4.2	0.4	169.0	15.7	6.1
50.0	27.7	19.0	110.0	4.2	0.4	170.0	16.1	6.4
51.0	26.0	16.8	111.0	4.2	0.4	171.0	16.5	6.7
52.0	24.4	14.7	112.0	4.1	0.4	172.0	16.8	7.0
53.0	22.7	12.7	113.0	4.0	0.4	173.0	17.2	7.3
54.0	21.0	10.9	114.0	4.0	0.4	174.0	17.5	7.6
55.0	19.5	9.4	115.0	3.9	0.4	175.0	17.8	7.8
56.0	18.1	8.1	116.0	3.8	0.4	176.0	18.0	8.0
57.0	16.7	6.9	117.0	3.8	0.4	177.0	18.2	8.2
58.0	15.4	5.9	118.0	3.7	0.3	178.0	18.4	8.4
59.0	14.2	5.0	119.0	3.6	0.3			

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Dep (°)	Er (%)	ERP (W)	Dep (°)	Er (%)	ERP (W)	Dep (°)	Er (%)	ERP (W)
180.0	18.7	8.6	240.0	2.4	0.1	300.0	14.9	5.5
181.0	18.7	8.7	241.0	2.1	0.1	301.0	16.1	6.4
182.0	18.8	8.7	242.0	2.0	0.1	302.0	17.3	7.4
183.0	18.8	8.7	243.0	2.1	0.1	303.0	18.4	8.4
184.0	18.7	8.6	244.0	2.2	0.1	304.0	19.8	9.7
185.0	18.6	8.5	245.0	2.4	0.1	305.0	21.2	11.1
186.0	18.4	8.4	246.0	2.7	0.2	306.0	22.5	12.5
187.0	18.2	8.2	247.0	2.9	0.2	307.0	23.9	14.1
188.0	17.9	7.9	248.0	3.2	0.3	308.0	25.2	15.7
189.0	17.6	7.7	249.0	3.4	0.3	309.0	26.6	17.4
190.0	17.3	7.4	250.0	3.5	0.3	310.0	28.2	19.6
191.0	16.9	7.0	251.0	3.6	0.3	311.0	29.7	21.9
192.0	16.4	6.7	252.0	3.7	0.3	312.0	31.3	24.3
193.0	15.9	6.3	253.0	3.8	0.4	313.0	33.0	27.0
194.0	15.4	5.9	254.0	3.8	0.4	314.0	34.7	29.8
195.0	14.9	5.5	255.0	3.8	0.4	315.0	36.4	32.8
196.0	14.3	5.0	256.0	3.7	0.3	316.0	38.1	35.9
197.0	13.6	4.6	257.0	3.6	0.3	317.0	39.8	39.1
198.0	13.0	4.2	258.0	3.5	0.3	318.0	41.4	42.4
199.0	12.4	3.8	259.0	3.4	0.3	319.0	43.3	46.2
200.0	11.7	3.4	260.0	3.2	0.3	320.0	45.1	50.2
201.0	11.1	3.0	261.0	3.1	0.2	321.0	46.9	54.4
202.0	10.5	2.7	262.0	2.8	0.2	322.0	48.7	58.6
203.0	9.9	2.4	263.0	2.5	0.2	323.0	50.5	63.0
204.0	9.4	2.2	264.0	2.3	0.1	324.0	52.3	67.6
205.0	8.9	2.0	265.0	2.2	0.1	325.0	54.4	73.2
206.0	8.5	1.8	266.0	2.1	0.1	326.0	56.5	78.9
207.0	8.2	1.7	267.0	2.0	0.1	327.0	58.6	85.0
208.0	8.0	1.6	268.0	1.9	0.1	328.0	60.4	90.2
209.0	7.8	1.5	269.0	1.8	0.1	329.0	62.2	95.7
210.0	7.7	1.5	270.0	1.8	0.1	330.0	64.0	101.3
211.0	7.8	1.5	271.0	1.6	0.1	331.0	65.8	106.9
212.0	8.1	1.6	272.0	1.5	0.1	332.0	67.5	112.7
213.0	8.4	1.7	273.0	1.4	0.0	333.0	69.3	118.7
214.0	8.6	1.8	274.0	1.2	0.0	334.0	70.8	123.8
215.0	8.9	2.0	275.0	1.0	0.0	335.0	72.3	129.1
216.0	9.2	2.1	276.0	0.9	0.0	336.0	73.8	134.6
217.0	9.4	2.2	277.0	0.9	0.0	337.0	75.3	140.0
218.0	9.7	2.3	278.0	0.9	0.0	338.0	76.7	145.6
219.0	9.9	2.4	279.0	1.0	0.0	339.0	78.3	151.4
220.0	10.0	2.5	280.0	1.3	0.0	340.0	79.8	157.4
221.0	10.1	2.5	281.0	1.6	0.1	341.0	81.4	163.6
222.0	10.1	2.5	282.0	1.8	0.1	342.0	82.9	170.0
223.0	10.0	2.5	283.0	2.2	0.1	343.0	84.3	175.6
224.0	9.9	2.4	284.0	2.6	0.2	344.0	85.7	181.4
225.0	9.6	2.3	285.0	3.0	0.2	345.0	87.0	187.3
226.0	9.3	2.1	286.0	3.5	0.3	346.0	88.4	193.0
227.0	8.9	2.0	287.0	4.1	0.4	347.0	89.7	198.9
228.0	8.5	1.8	288.0	4.6	0.5	348.0	91.0	204.9
229.0	8.0	1.6	289.0	5.3	0.7	349.0	92.2	210.1
230.0	7.5	1.4	290.0	6.0	0.9	350.0	93.3	215.3
231.0	6.9	1.2	291.0	6.7	1.1	351.0	94.5	220.7
232.0	6.3	1.0	292.0	7.5	1.4	352.0	95.4	225.2
233.0	5.7	0.8	293.0	8.3	1.7	353.0	96.4	229.8
234.0	5.1	0.6	294.0	9.0	2.0	354.0	97.4	234.3
235.0	4.6	0.5	295.0	9.9	2.4	355.0	98.0	237.2
236.0	4.1	0.4	296.0	10.8	2.9	356.0	98.5	240.1
237.0	3.6	0.3	297.0	11.7	3.4	357.0	99.1	242.9
238.0	3.1	0.2	298.0	12.7	4.0	358.0	99.5	244.5
239.0	2.7	0.2	299.0	13.8	4.7			