Source	Id	m_R	z	$S_{4.9}^{VLA}$ mJy	$S_{5.0}^{VLBA}$ mJy	$S_{8.4}^{VLA}$ mJy	$S_{8.4}^{VLBA}$ mJy	LAS mas	LLS kpc h^{-1}
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0039+373	g		1.006	261.0	232.6	120.3	–	120	0.50
0147+400	E			293.2	231.8	195.8	175.8	80	~0.33
0703+468	E			630.7	574.3	400.1	346.7	70	~0.28
0822+394	g		1.180	338.9	309.3	191.9	144.2	60	0.26
0840+424A	E			576.7	506.9	379.2	331.9	120	~0.53
1008+423	E			236.2	205.6	153.0	–	80	~0.35
1049+384	g	20.9	1.018	200.6	177.6	104.9	–	200	0.90
1133+432	E			499.1	464.7	286.3	242.4	35	~0.15
1136+383	E			177.5	160.5	117.0	–	55	~0.25
1159+395	g	23.4	2.370	252.0	225.9	165.9	–	60	0.25
1242+410	Q	19.7	0.811	663.1	565.2	473.9	407.3	45	0.17
1343+386	Q	17.5	1.844	380.3	348.8	278.2	209.1	110	0.50
1432+428B	E			386.3	326.2	251.1	198.7	40	~0.20
1441+409	E			347.6	294.6	212.5	–	120	~0.50
2304+377	G	19.7	0.40 R	569.6	481.0	324.9	–	120	0.40
2330+402	E			328.6	259.4	190.6	164.7	100	~0.36
2348+450	G		0.978	233.4	206.2	123.3	–	310	1.30
2358+406	E			577.0	521.9	365.0	321.4	100	~0.37

Table 1. The VLBA sample. Column 1: source name (B1950); Column 2: optical identification (Id) from Paper I; G = galaxy on the *POSS* prints, g = galaxy fainter than the *POSS* limit, Q = quasar, E = unknown optical counterpart (Vigotti et al. **?**); Column 3: R magnitude; Column 4: redshift; "R" indicates a photometric redshift from R (from *POSS* prints) magnitude (see Paper I for details); Column 5: VLA 4.9 GHz flux density, from Paper I; Column 6: total VLBA 5.0 GHz flux density, measured on the images presented here; Column 7, 8: as for column 5, 6 but at 8.4 GHz; Column 9: VLBA Largest Angular Size, measured on the most suitable images at the different resolution and frequency, presented here; Column 10: Largest Linear Size from VLBA data; for E sources z = 1.00 was assumed and LLS is given with a leading "$\sim$".

Source		$S_{5.0}$	$S_{8.4}$	$\alpha_{1.67}^{5.0}$	$\alpha_{5.0}^{8.4}$	θ_1	θ_2	p.a.
		mJy	mJy			mas	mas	deg
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0039+373	N∼	124.0		1.04		19	12	80
	S∼	108.6		1.17		24	11	30
0147+400	E	157.1	121.6	0.26	0.49	2.4	2.2	126
	C	14.5	18.5		−0.47	1.5	0.3	176
	W∼	76.6	23.6	1.05	2.27	11	6	120
0703+468	E	218.2	131.7	0.82	0.97	4.3	2.4	57
	W	353.8	212.8	0.76	0.98	4.9	2.9	51
0822+394	E∼	238.2	120.0	0.97	1.32	33	12	60
	W∼	67.0	25.4	1.20	1.87	26	10	75
0840+424	N	409.8	252.4	0.78	0.93	6.9	2.9	176
	C	30.7	31.2		−0.03	5.0	2.6	161
	S∼	67.8	35.6	1.02	1.24	26	14	160
1008+423	E_1 ∼	9.2		<1.40		12	7	120
	E_2 ∼	13.6				22	8	120
	Ce∼	5.4		0.86		14	5	75
	W∼	175.4		0.75		27	18	40
1049+384	W_1 ∼	74.6		1.08		17	13	140
	W_2 ∼	83.8		0.82		19	10	130
	E_1 ∼	15.1		0.30		10	6	115
	E_2 ∼	4.2		1.66		6	5	0
1133+432	N	307.2	160.1	0.87	1.26	2.1	2.0	43
	S	151.7	78.2	1.01	1.28	3.5	2.1	20
1136+383	N∼	112.0		0.64		20	8	170
	C∼	10.8		0.69		10	5	170
	S∼	42.0		0.99		10	10	0
1159+395	N∼	153.0		0.70		32	12	145
	S∼	71.7		0.76		13	12	0
1242+410	N∼	127.5	73.7	0.45	1.06	10	9	20
	C	39.0	46.0		−0.32	2.6	0.5	20
	J∼	193.5	128.0		0.80	12	4	20
	S∼	188.9	136.8	<0.61	0.62	15	9	20
1343+386	C	73.9	50.3	0.14	0.74	4.9	2.0	0
	S	238.1	134.4	0.86	1.10	4.4	3.3	56
1432+428	E	296.7	191.4	0.63	0.85	4.5	2.7	97
	W∼	29.6	8.3	1.15	2.45	19	12	95
1441+409	E∼	43.3		1.06		16	9	65
	C	29.9		0.31		2.1	1.2	63
	Ce∼	54.0		0.87		14	9	60
	W∼	177.9		0.83		11	9	65
2304+377	W∼	403.1		0.83		40	11	100
	E_1 ∼	43.2		0.20		7	7	0
	E_2 ∼	22.4		0.55		9	6	70
	E_3 ∼	12.4		2.10		11	9	90
2330+402	W	214.9	147.6	0.40	0.73	1.3	1.1	66
	Ce∼	20.0	10.6	1.03	1.22	6	4	110
	E∼	8.7	5.7	2.23	0.81	8	7	115
	E*	15.0	4.9					
2348+450	N∼	62.4		0.79		24	10	150
	S∼	143.7		0.86		98	16	150
2358+406	N_1 ∼	29.8	15.1	1.06	1.31	7	4	150
	N_2 ∼	54.9	26.8	1.23	1.38	15	8	110
	C	21.4	23.6		−0.19	4.0	1.4	149
	S∼	359.2	224.1	0.58	0.91	14	9	150
	S*	21.0	10.0					

Table 2. Observational parameters of source components. Columns 1 and 2: Source name (B1950) and sub-component label; "∼" indicates that the component is extended: its flux density is measured using TVSTAT and the angular sizes of major and minor axis are measured on the image contour plot (see text); Columns 3 and 4: VLBA flux density at 5.0 and 8.4 GHz respectively; Columns 5 and 6: spectral indices $\alpha_{1.67}^{5.0}$ and $\alpha_{5.0}^{8.4}$ obtained from the data of Paper II and those presented here; Columns 7, 8 and 9: deconvolved angular sizes of major and minor axis of the best-fitting Gaussian component and position angle of the major axis as estimated on the most suitable images at the different resolution and frequency, using JMFIT.