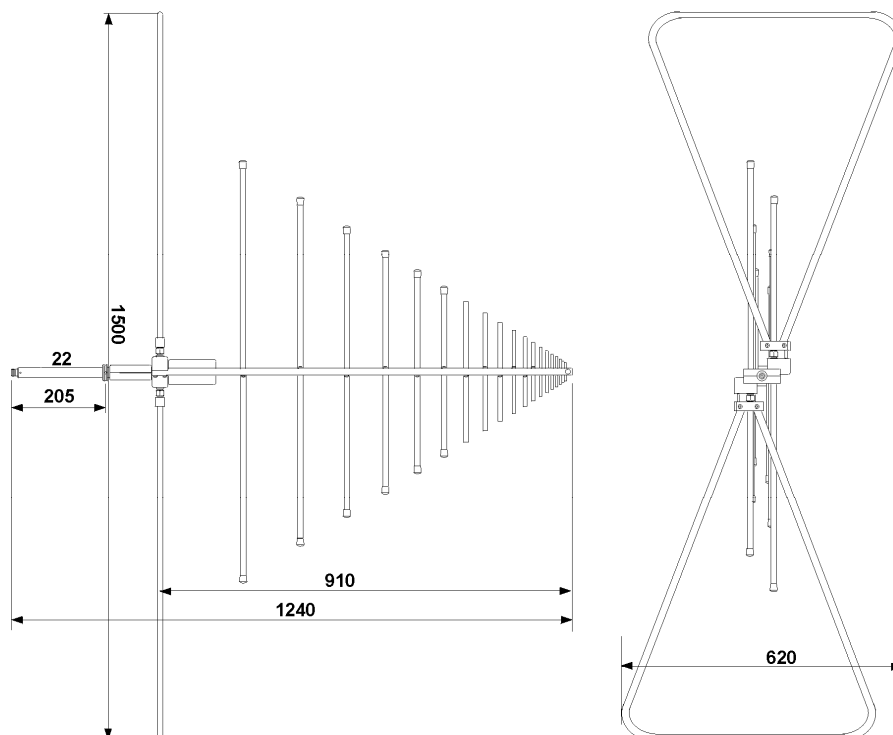


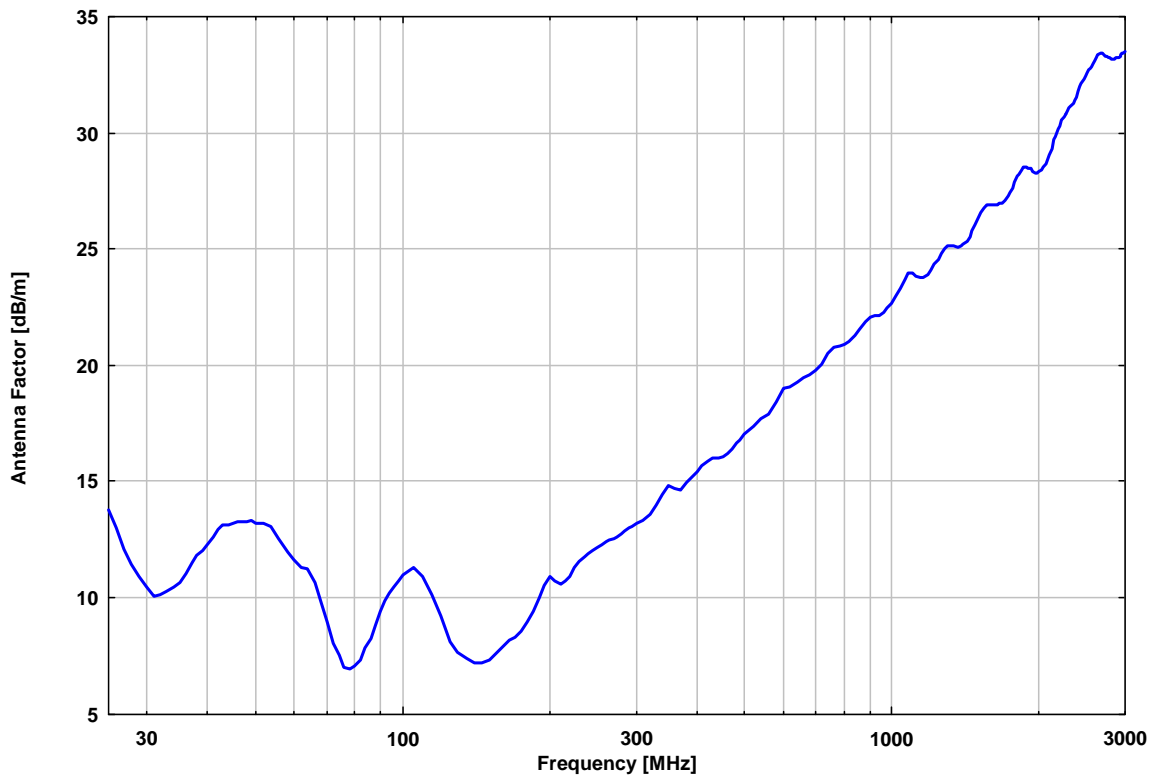
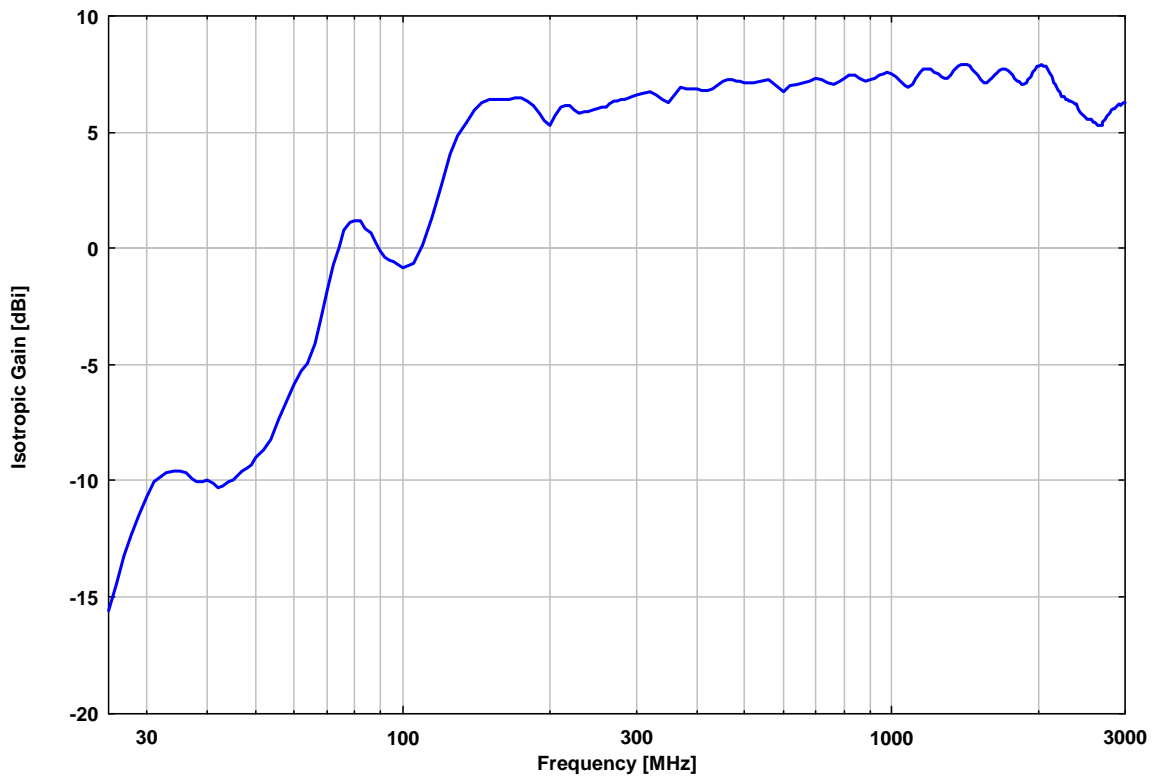
**VULB 9163 TRILOG Breitband Antenne 30 - 3000 MHz**  
**VULB 9163 TRILOG Broadband Antenna 30 - 3000 MHz**

**Bauart:**

Linear polarisierte Logarithmisch Periodische Breitbandantenne mit 4:1 Breitbanddipol in Aluminiumausführung für Empfangs- und Sendeanwendungen

**Type:**

Linear polarized Logarithmic Periodic Broadband Antenna combined with a 4:1 Broadband Dipole (Aluminium tubing) for Receive and Transmit Applications

<b>Technische Daten:</b>		<b>Specifications:</b>
Frequenzbereich, nominell:	30 MHz...3 GHz	Nominal Frequency Range:
Nutzbarer Frequenzbereich:	25 MHz ... 4 GHz	Usable Frequency Range:
Isotropgewinn im LP-Bereich:	6.4+/- 1.2 dBi	Isotropic Gain (LP-Section):
Antennenfaktor:	7 ... 34 dB/m	Antenna Factor:
Impedanz, nominell:	50 Ω	Nominal Impedance:
Stehwellenverhältnis SWR typisch:	<1.5	Standing Wave Ratio SWR typical:
Vor- Rückverhältnis:	20 dB (f > 150 MHz)	Front to Back Ratio:
Polarisationsentkopplung:	>20 dB (30 MHz...1 GHz)	Cross Polarisation:
3 dB Öffnungswinkel typ.(E-Ebene):	45°-65° (f > 150 MHz)	3 dB Beamwidth typ. (E-Plane):
3 dB Öffnungswinkel typ.(E-Ebene):	≈78° (f < 150 MHz)	3 dB Beamwidth typ. (E-Plane):
3 dB Öffnungswinkel typ.(H-Ebene):	90°-120° (f > 150 MHz)	3 dB Beamwidth typ. (H-Plane):
Max. Eingangsleistung:	200 W (intermitt.) 100 W (cont.)	Max. Input Power:
Anschlußart: N-Buchse		N-Connector female
Halterung: 22 mm Rohr, Rastring		Mount: 22 mm Tube, Indexing Ring
Breite x Länge x Dicke:	1500 x 910 (1240) x 620 mm	Width x Length x Thickness:
Gewicht:	3.1 kg	Weight:





Frequency MHz	Distance m	Wavelength m	Attenuation dB	Gain(Isotr.) dBi	Ant.-Factor dB/m
25.00	4.96	12.00	45.52	-15.60	13.78
26.00	4.96	11.54	43.56	-14.46	12.97
27.00	4.96	11.11	41.48	-13.25	12.10
28.00	4.96	10.71	39.92	-12.31	11.47
29.00	4.96	10.34	38.51	-11.45	10.92
30.00	4.96	10.00	37.26	-10.68	10.45
31.00	4.96	9.68	36.26	-10.04	10.09
32.00	4.96	9.38	36.07	-9.81	10.13
33.00	4.96	9.09	36.05	-9.66	10.25
34.00	4.96	8.82	36.15	-9.58	10.43
35.00	4.96	8.57	36.37	-9.57	10.67
36.00	4.96	8.33	36.82	-9.67	11.02
37.00	4.96	8.11	37.55	-9.92	11.50
38.00	4.96	7.89	38.04	-10.04	11.86
39.00	4.96	7.69	38.20	-10.02	12.06
40.00	4.96	7.50	38.39	-10.00	12.26
41.00	4.96	7.32	38.88	-10.13	12.61
42.00	4.96	7.14	39.37	-10.28	12.96
43.00	4.96	6.98	39.46	-10.22	13.11
44.00	4.96	6.82	39.32	-10.05	13.14
45.00	4.96	6.67	39.28	-9.93	13.22
46.00	4.96	6.52	39.17	-9.78	13.26
47.00	4.96	6.38	38.97	-9.59	13.25
48.00	4.96	6.25	38.85	-9.44	13.28
49.00	4.96	6.12	38.79	-9.32	13.34
50.00	4.96	6.00	38.35	-9.01	13.21
52.00	4.96	5.77	38.00	-8.66	13.20
54.00	4.96	5.56	37.38	-8.19	13.06
56.00	4.96	5.36	36.02	-7.35	12.54
58.00	4.96	5.17	34.51	-6.45	11.94
60.00	4.96	5.00	33.57	-5.83	11.61
62.00	4.96	4.84	32.69	-5.24	11.31
64.00	4.96	4.69	32.27	-4.90	11.24
66.00	4.96	4.55	30.86	-4.06	10.67
68.00	4.96	4.41	28.90	-2.95	9.82
70.00	4.96	4.29	26.91	-1.83	8.95
72.00	4.96	4.17	24.91	-0.71	8.07
74.00	4.96	4.05	23.53	0.11	7.50
76.00	4.96	3.95	22.34	0.82	7.02
78.00	4.96	3.85	22.00	1.10	6.96
80.00	4.96	3.75	21.98	1.22	7.07
82.00	4.96	3.66	22.24	1.19	7.30
84.00	4.96	3.57	23.06	0.89	7.82
86.00	4.96	3.49	23.74	0.65	8.26
88.00	4.96	3.41	24.71	0.26	8.85
90.00	4.96	3.33	25.65	-0.11	9.41
92.00	4.96	3.26	26.34	-0.35	9.85
94.00	4.96	3.19	26.80	-0.49	10.18
96.00	4.96	3.13	27.19	-0.60	10.46
98.00	4.96	3.06	27.59	-0.71	10.75
100.00	4.96	3.00	27.94	-0.79	11.01
105.00	4.96	2.86	28.07	-0.65	11.29
110.00	4.96	2.73	26.92	0.13	10.92



Frequency	Distance	Wavelength	Attenuation	Gain(Isotr.)	Ant.-Factor
MHz	m	m	dB	dBi	dB/m
115.00	4.96	2.61	24.94	1.31	10.12
120.00	4.96	2.50	22.72	2.61	9.20
125.00	4.96	2.40	20.17	4.06	8.10
130.00	4.96	2.31	18.97	4.83	7.67
135.00	4.96	2.22	18.04	5.46	7.37
140.00	4.96	2.14	17.39	5.94	7.20
145.00	4.90	2.07	16.92	6.27	7.17
150.00	4.84	2.00	16.89	6.38	7.36
155.00	4.78	1.94	17.01	6.41	7.61
160.00	4.73	1.88	17.21	6.40	7.90
165.00	4.68	1.82	17.38	6.41	8.16
170.00	4.63	1.76	17.37	6.49	8.34
175.00	4.59	1.71	17.48	6.52	8.56
180.00	4.54	1.67	17.96	6.37	8.96
185.00	4.50	1.62	18.53	6.17	9.40
190.00	4.47	1.58	19.40	5.81	9.99
195.00	4.43	1.54	20.22	5.48	10.54
200.00	4.40	1.50	20.67	5.33	10.91
205.00	4.37	1.46	20.01	5.73	10.72
210.00	4.34	1.43	19.42	6.10	10.56
215.00	4.31	1.40	19.45	6.16	10.71
220.00	4.28	1.36	19.64	6.14	10.93
225.00	4.25	1.33	20.09	5.98	11.28
230.00	4.23	1.30	20.47	5.86	11.59
235.00	4.20	1.28	20.60	5.87	11.78
240.00	4.18	1.25	20.68	5.89	11.93
245.00	4.16	1.22	20.69	5.96	12.05
250.00	4.14	1.20	20.70	6.02	12.16
255.00	4.12	1.18	20.73	6.07	12.29
260.00	4.10	1.15	20.74	6.12	12.40
265.00	4.08	1.13	20.68	6.22	12.47
270.00	4.06	1.11	20.58	6.33	12.52
275.00	4.04	1.09	20.63	6.37	12.64
280.00	4.02	1.07	20.69	6.40	12.77
285.00	4.01	1.05	20.78	6.41	12.91
290.00	3.99	1.03	20.79	6.46	13.01
295.00	3.98	1.02	20.77	6.53	13.09
300.00	3.96	1.00	20.77	6.59	13.18
310.00	3.93	0.97	20.81	6.68	13.37
320.00	3.91	0.94	20.95	6.72	13.61
330.00	3.88	0.91	21.39	6.60	13.99
340.00	3.86	0.88	22.05	6.38	14.47
350.00	3.84	0.86	22.46	6.27	14.83
360.00	3.82	0.83	21.89	6.65	14.69
370.00	3.80	0.81	21.54	6.93	14.66
380.00	3.78	0.79	21.86	6.86	14.96
390.00	3.76	0.77	22.03	6.87	15.17
400.00	3.74	0.75	22.27	6.84	15.42
410.00	3.73	0.73	22.53	6.80	15.68
420.00	3.71	0.71	22.68	6.81	15.87
430.00	3.70	0.70	22.68	6.89	16.00
440.00	3.68	0.68	22.54	7.05	16.04
450.00	3.67	0.67	22.39	7.20	16.08
460.00	3.66	0.65	22.45	7.26	16.22



Frequency	Distance	Wavelength	Attenuation	Gain(Isotr.)	Ant.-Factor
MHz	m	m	dB	dBi	dB/m
470.00	3.65	0.64	22.61	7.25	16.41
480.00	3.63	0.63	22.88	7.19	16.65
490.00	3.62	0.61	23.02	7.20	16.82
500.00	3.61	0.60	23.23	7.17	17.03
520.00	3.59	0.58	23.55	7.16	17.38
540.00	3.57	0.56	23.76	7.19	17.67
560.00	3.56	0.54	23.83	7.30	17.89
580.00	3.54	0.52	24.62	7.03	18.45
600.00	3.52	0.50	25.46	6.74	19.04
620.00	3.51	0.48	25.23	6.98	19.09
640.00	3.50	0.47	25.27	7.08	19.26
660.00	3.49	0.45	25.44	7.12	19.49
680.00	3.47	0.44	25.44	7.23	19.64
700.00	3.46	0.43	25.47	7.33	19.79
720.00	3.45	0.42	25.81	7.27	20.10
740.00	3.44	0.41	26.37	7.10	20.51
760.00	3.43	0.39	26.63	7.07	20.77
780.00	3.42	0.38	26.51	7.23	20.83
800.00	3.42	0.38	26.45	7.36	20.92
820.00	3.41	0.37	26.50	7.43	21.06
840.00	3.40	0.36	26.70	7.43	21.28
860.00	3.39	0.35	27.09	7.33	21.58
880.00	3.39	0.34	27.48	7.22	21.89
900.00	3.38	0.33	27.61	7.25	22.06
920.00	3.37	0.33	27.56	7.36	22.14
940.00	3.37	0.32	27.44	7.50	22.18
960.00	3.36	0.31	27.51	7.55	22.31
980.00	3.36	0.31	27.66	7.56	22.48
1000.00	3.35	0.30	27.86	7.54	22.68
1020.00	3.34	0.29	28.26	7.42	22.97
1040.00	3.34	0.29	28.80	7.23	23.33
1060.00	3.34	0.28	29.41	7.00	23.72
1080.00	3.33	0.28	29.73	6.92	23.97
1100.00	3.33	0.27	29.56	7.07	23.98
1120.00	3.32	0.27	29.13	7.36	23.84
1140.00	3.32	0.26	28.79	7.60	23.76
1160.00	3.31	0.26	28.70	7.72	23.79
1180.00	3.31	0.25	28.79	7.74	23.92
1200.00	3.31	0.25	29.04	7.69	24.12
1220.00	3.30	0.25	29.37	7.59	24.36
1240.00	3.30	0.24	29.62	7.53	24.56
1260.00	3.30	0.24	30.00	7.41	24.82
1280.00	3.29	0.23	30.29	7.32	25.04
1300.00	3.29	0.23	30.36	7.35	25.15
1320.00	3.29	0.23	30.23	7.48	25.15
1340.00	3.28	0.22	30.04	7.64	25.12
1360.00	3.28	0.22	29.80	7.82	25.07
1380.00	3.28	0.22	29.75	7.90	25.12
1400.00	3.28	0.21	29.84	7.92	25.23
1420.00	3.27	0.21	29.99	7.90	25.37
1440.00	3.27	0.21	30.17	7.86	25.52
1460.00	3.27	0.21	30.60	7.70	25.80
1480.00	3.26	0.20	30.96	7.58	26.04
1500.00	3.26	0.20	31.38	7.43	26.31



Frequency	Distance	Wavelength	Attenuation	Gain(Isotr.)	Ant.-Factor
MHz	m	m	dB	dBi	dB/m
1520.00	3.26	0.20	31.75	7.30	26.56
1540.00	3.26	0.19	32.12	7.17	26.80
1560.00	3.26	0.19	32.22	7.17	26.91
1580.00	3.25	0.19	32.17	7.25	26.95
1600.00	3.25	0.19	32.03	7.37	26.93
1620.00	3.25	0.19	31.89	7.49	26.92
1640.00	3.25	0.18	31.81	7.58	26.94
1660.00	3.25	0.18	31.75	7.66	26.96
1680.00	3.24	0.18	31.75	7.71	27.01
1700.00	3.24	0.18	31.87	7.70	27.13
1720.00	3.24	0.17	32.06	7.65	27.28
1740.00	3.24	0.17	32.30	7.58	27.45
1760.00	3.24	0.17	32.64	7.46	27.67
1780.00	3.24	0.17	33.02	7.31	27.91
1800.00	3.23	0.17	33.33	7.21	28.12
1820.00	3.23	0.16	33.47	7.18	28.24
1840.00	3.23	0.16	33.74	7.09	28.42
1860.00	3.23	0.16	33.89	7.06	28.55
1880.00	3.23	0.16	33.80	7.15	28.55
1900.00	3.23	0.16	33.61	7.29	28.51
1920.00	3.22	0.16	33.50	7.39	28.50
1940.00	3.22	0.15	33.18	7.59	28.39
1960.00	3.22	0.15	32.94	7.76	28.31
1980.00	3.22	0.15	32.86	7.84	28.32
2000.00	3.22	0.15	32.85	7.89	28.36
2020.00	3.22	0.15	32.87	7.92	28.41
2040.00	3.22	0.15	33.05	7.86	28.55
2060.00	3.22	0.15	33.20	7.83	28.66
2080.00	3.21	0.14	33.56	7.69	28.89
2100.00	3.21	0.14	33.78	7.62	29.04
2120.00	3.21	0.14	34.35	7.38	29.37
2140.00	3.21	0.14	34.91	7.14	29.69
2160.00	3.21	0.14	35.15	7.05	29.86
2180.00	3.21	0.14	35.67	6.83	30.16
2200.00	3.21	0.14	35.91	6.75	30.32
2220.00	3.21	0.14	36.32	6.58	30.56
2240.00	3.20	0.13	36.47	6.55	30.68
2260.00	3.20	0.13	36.74	6.45	30.85
2280.00	3.20	0.13	36.86	6.42	30.95
2300.00	3.20	0.13	37.08	6.35	31.10
2320.00	3.20	0.13	37.18	6.34	31.19
2340.00	3.20	0.13	37.28	6.32	31.28
2360.00	3.20	0.13	37.50	6.25	31.43
2380.00	3.20	0.13	37.67	6.20	31.55
2400.00	3.20	0.13	38.13	6.00	31.82
2420.00	3.20	0.12	38.37	5.92	31.98
2440.00	3.20	0.12	38.57	5.86	32.11
2460.00	3.19	0.12	38.98	5.69	32.35
2480.00	3.19	0.12	39.16	5.63	32.48
2500.00	3.19	0.12	39.37	5.56	32.62
2520.00	3.19	0.12	39.44	5.56	32.69
2540.00	3.19	0.12	39.51	5.55	32.77
2560.00	3.19	0.12	39.59	5.55	32.84

Frequency MHz	Distance m	Wavelength m	Attenuation dB	Gain(Isotr.) dBi	Ant.-Factor dB/m
2580.00	3.19	0.12	39.83	5.46	32.99
2600.00	3.19	0.12	39.99	5.41	33.11
2620.00	3.19	0.11	40.16	5.36	33.23
2640.00	3.19	0.11	40.39	5.28	33.37
2660.00	3.19	0.11	40.42	5.29	33.42
2680.00	3.19	0.11	40.38	5.34	33.44
2700.00	3.18	0.11	40.31	5.41	33.44
2720.00	3.18	0.11	40.02	5.59	33.33
2740.00	3.18	0.11	39.89	5.68	33.29
2760.00	3.18	0.11	39.76	5.78	33.26
2780.00	3.18	0.11	39.65	5.86	33.24
2800.00	3.18	0.11	39.54	5.95	33.21
2820.00	3.18	0.11	39.46	6.02	33.21
2840.00	3.18	0.11	39.43	6.06	33.22
2860.00	3.18	0.10	39.42	6.10	33.25
2880.00	3.18	0.10	39.38	6.15	33.26
2900.00	3.18	0.10	39.34	6.20	33.27
2920.00	3.18	0.10	39.40	6.19	33.33
2940.00	3.18	0.10	39.46	6.19	33.39
2960.00	3.18	0.10	39.44	6.23	33.42
2980.00	3.18	0.10	39.44	6.26	33.44
3000.00	3.18	0.10	39.48	6.27	33.49

SWR-Plot VULB 9163

