

Specific Charge of the Electron

Experiment Data

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Start 15⁰⁰

End 16³⁰

Diameters of the circular paths

$d_{1,2,3,4} = (40, 60, 80, 100, \pm 1) \text{ mm}$

Helmholtz Coils:

$u = 154,0 \pm 0,1$

$R = (200 \pm 1) \text{ mm}$

Multimeter UC 220

DC-voltage 1,0% + 5 Digits

DC-current 1,2% + 8 Digits (20 A)

U/V	I/A $r_1 = \frac{d_1}{2}$	I/A $r_2 = \frac{d_2}{2}$	I/A $r_3 = \frac{d_3}{2}$
300	1,62	2,05	2,80
290	1,61	2,03	2,76
280	1,58	1,98	2,68
270	1,54	1,94	2,62
260	1,50	1,90	2,58
250	1,47	1,84	2,53
240	1,45	1,82	2,47
230	1,41	1,78	2,44
220	1,38	1,75	2,38
210	1,37	1,71	2,31
200	1,33	1,66	2,30
190	1,29	1,62	2,21
180	1,26	1,57	2,14
170	1,23	1,55	2,11
160	1,19	1,49	2,06
150	1,15	1,45	1,97

WV	I/A r_1	I/A r_2	I/A r_3
140	1,10	1,38	1,91
130	1,07	1,34	1,84
120	1,00	1,31	1,77
110	0,94	1,24	1,68
100	0,90	1,15	1,60
90	0,82	1,08	1,48
80	(0,80)	(1,00)	(1,32)