Namen: Alex Oster, Jonathan Signist Gruppe: 11M1

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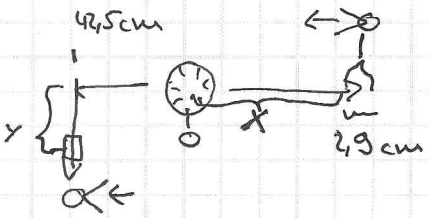
2) 

"x + 42,5cm + $\frac{2,9cm}{2}$ "

x = 77 cm

	y/cm	U/V
y_0	56,5	1,07
	50,0	1,03
	45,0	0,76
	40,0	0,50
	35,0	0,27
	30,0	0,18
	25,0	0,09
y_0	8,0	1,07
	15,0	0,94
	20,0	0,69
	25,0	0,45
	30,0	0,35
	35,0	0,16

x = 55cm

y_0	8,0	2,07
	15,0	1,70
	17,5	1,38
	20,0	1,03
	22,5	0,73
	25,0	0,55
y_0	54,0	2,07
	50,0	1,97
	46,0	1,63
	42,0	1,09
	38,0	0,60
	34,0	0,36

x = 35 cm

y_0	54,0	4,50
	50,0	4,12
	47,0	3,18
	44,0	2,15
	41,0	1,28
	40,0	1,06
	35,0	0,37
y_0	8,0	4,50
	12,0	4,02
	15,0	3,05
	18,0	2,13
	20,0	1,61
	23,0	0,84
	25,0	0,58

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$x = 15\,cm$

y_0	8,0	11,88
	10,0	11,15
	12,0	9,29
	14,0	6,89
	16,0	4,43
	18,0	2,64
	23,0	0,48
y_0	53,0	11,89
	51,0	11,08
	49,0	8,81
	47,0	6,49
	45,0	4,28
	43,0	2,38
	38,0	0,40

frustr. Total

position $x - x_0 = \Delta x = d$

Intensität

	x (cm)	U (V)
x_0	24,5	1,524
	25,0	0,992
	25,5	0,391
	26,0	0,163
	26,5	0,045
	27,0	0,013
	27,5	0,003
	28,0	0,001

stehende Welle

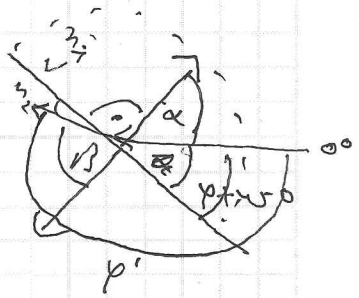
1. Minimum : 16,4 cm ,
2. Minimum : 17,9 cm
3. Minimum : 19,6 cm
4. Minimum : 21,1 cm

$\alpha = \cancel{\varphi}\ \cancel{90°}\ 45° - \varphi$

$n_1 \sin\alpha = n_2 \sin\beta$

$n_2 = 1$ (= Luft)

φ	φ'
0°	234°
10°	213°
20°	201°
30°	194°
15°	209°

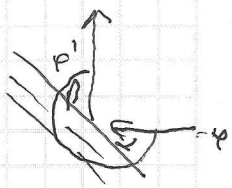


$\varphi' = \beta + 90° + \varphi + 45°$

$\Rightarrow \beta = \varphi' - 135° - \varphi$

Schaumstoff

Kugelabstand : 3,8 cm



$\alpha = \beta$
$= 45° - \varphi$

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y	U – I Intensität				
345	05,7	220	20,3	288	123,7
340	12,8	215	5,2		
335	01,8	210	99,8		
330	03,5	205	6,8		
325	1,4	200	43,1		
320	32,8				
315	19,3				
310	18,6				
305	11,5				
300	2,1				
295	50,6				
290	67,1				
285	95,9				
280	40,0				
275	3,5				
270	1,3				
265	7,9				
260	0,5				
255	0,8				
250	7,8				
245	0,4				
240	15,3				
235	59,3				
230	1,2				
225	15,9				