

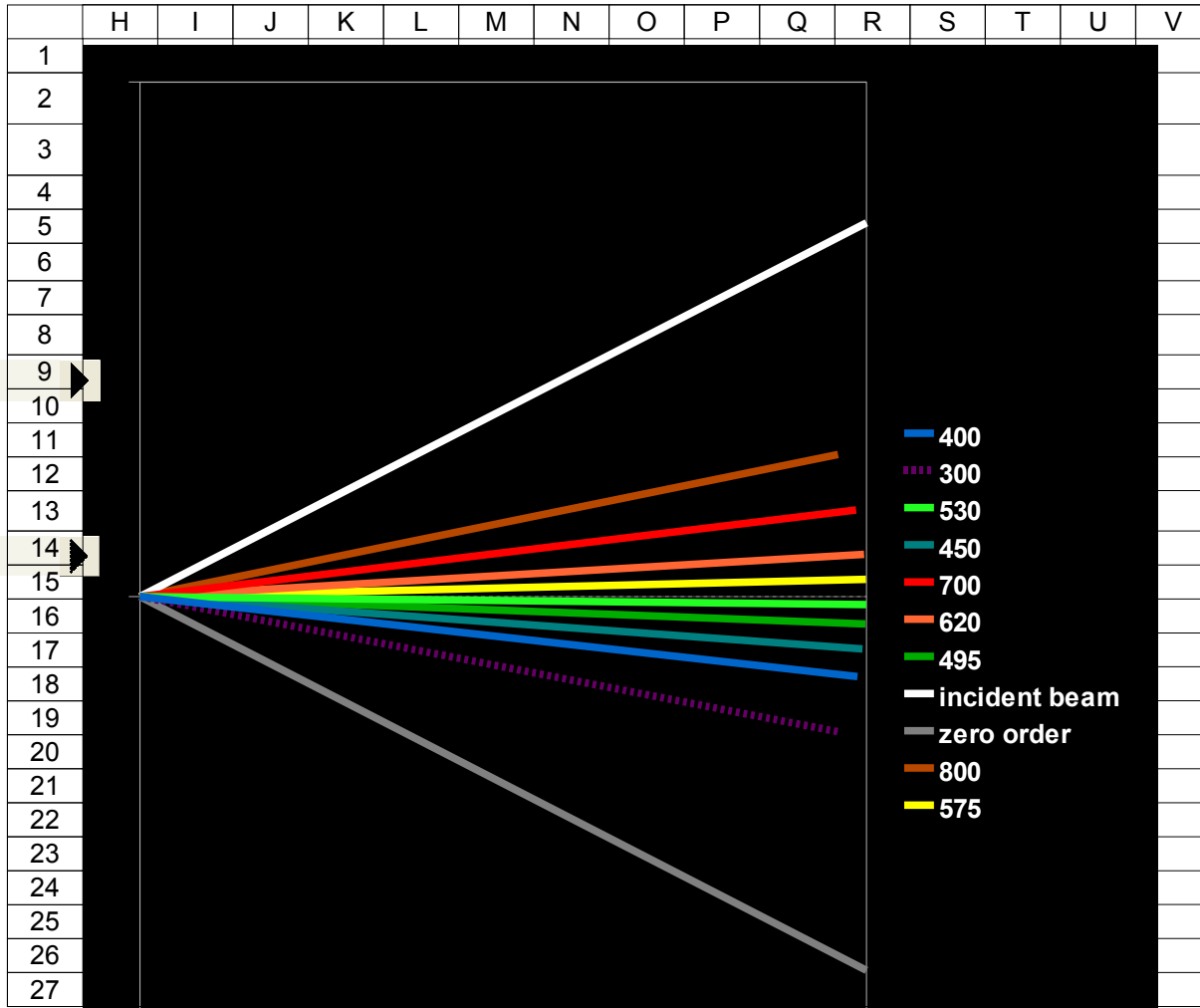
	A	B	C	D	E	F	G
1							
2		Animated Diffraction Grating					
3				with white light incident			
4	▲	Diffraction		Ruling density	Groove spacing	Incidence angle	
5	▼	Order		lines/mm	d, nm	alpha, degrees	
6		=E31		1080	=1000000/D6	36	
7							
8				Ruling density, 100 – 4800 lines/mm			
9	◀						▶
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13				Incidence angle, 0 - 90 degrees			
14	◀						▶
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Sheet1

	A	B	C	D	E	F	G
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29	radius	alphan (rad)x		y			
30	0.00	=(alpha)/(360/(2*PI()))			Order	Color	
31	Wavelength	400	0	0	1	blue	
32	2.00	=ASIN(E31*B31/d-SIN(alphan))	=A32*COS(B32)	=A32*SIN(B32)			
33	8	800	0	0	=E31	dark red	
34	2.00	=ASIN(E33*B33/d-SIN(alphan))	=A34*COS(B34)	=A34*SIN(B34)			
35	9	700	0	0	=E33	red	
36	2.00	=ASIN(E35*B35/d-SIN(alphan))	=A36*COS(B36)	=A36*SIN(B36)	=E34		
37	10	575	0	0	=E35	yellow	
38	2.00	=ASIN(E37*B37/d-SIN(alphan))	=A38*COS(B38)	=A38*SIN(B38)	=E36		
39	11	495	0	0	=E37	green	
40	2.00	=ASIN(E39*B39/d-SIN(alphan))	=A40*COS(B40)	=A40*SIN(B40)	=E38		
41	12	530	0	0	=E39	Yellow-green	
42	2.00	=ASIN(E41*B41/d-SIN(alphan))	=A42*COS(B42)	=A42*SIN(B42)	=E40		
43	13	450	0	0	=E41	blue-green	
44	2.00	=ASIN(E43*B43/d-SIN(alphan))	=A44*COS(B44)	=A44*SIN(B44)	=E42		
45	14	620	0	0	=E43	orange	
46	2.00	=ASIN(E45*B45/d-SIN(alphan))	=A46*COS(B46)	=A46*SIN(B46)	=E44		
47	15	300	0	0	=E45	Ultra-violet	
48	2.00	=ASIN(E47*B47/d-SIN(alphan))	=A48*COS(B48)	=A48*SIN(B48)			
49	16	zero order	0	0		Zero order (light gray)	
50	2.50	=ASIN(0/d-SIN(alphan))	=A50*COS(B50)	=A50*SIN(B50)			
51	17	incident beam	0	0		Incident beam (white)	
52	2.50	=ASIN((-SIN((-alphan))))	=A52*COS(B52)	=A52*SIN(B52)			
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Sheet1

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