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 ASTR 3600-01
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Shadow Measurements Data

Date: 11/01/20
Location: Backyard on concrete
Bucket D1: 8 inches
Bucket D2: 8 inches
D: 8 inches
H: 26^{1/4} inches
Smallest z1: 57.99
Smallest z2: 60.018
 $A=z2-z1$
 $A=2.028$
 $R=180*D/(A*pi)$
 $R=0$

Time	S	X1	L=S+X1-D	Tan(z)=L/H	z=ATAN(L/H)
1:30	38"	4"	42"	1.6	57.99
1:45	41.5"	4"	45.5"	1.73	60.018
2:00	47.25"	4"	51.25"	1.95	62.87
2:15	55.5"	4"	59.5"	2.26	65.99
2:30	65.5"	4"	69.5"	2.64	69.308
2:45	74.25"	4"	78.25"	2.98	71.455
3:00	80	4"	84"	3.2	72.6459
3:15	84.25"	4"	88.25"	3.36	73.434
3:30	86.5"	4"	90.5"	3.44	73.679
3:45	89.5"	4"	93.5"	3.56	74.3179