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Shadow Measurement Data

Location: CSULA  
 Date: October 20, 2020  
 Bucket D1: **10.125 in.**  
 Bucket D2: **7.75 in.**  
 D: **1.1875 in.**  
 H: **45.5 in.**  
 smallest z1: **48.2271**  
 smallest z2:  
 $A = z2 - z1$   
 $R = 180 * D / (A * \pi)$

	A	B	C	D	E	F	G
1	Time	S (inches)	X1 (inches)	D= (D1-D2)/2	L=S+X1-D	tan(z)=L/H	z=arctan(L/H)
2	12:05	48.400	5.125	1.1875	52.3375	1.1502	48.9976
3	12:10	48.250	5.125	1.1875	52.1875	1.1250	48.3665
4	12:15	47.375	5.125	1.1875	51.3125	1.1277	48.4385
5	12:20	47.250	5.125	1.1875	51.1875	1.1250	48.3665
6	12:25	47.125	5.125	1.1875	51.0625	1.1222	48.2969
7	12:30	47.000	5.125	1.1875	50.9375	1.1195	48.2271
8	12:36	47.875	5.125	1.1875	51.8125	1.1387	48.7115
9	12:40	47.125	5.125	1.1875	51.0625	1.1214	48.2768
10	12:45	47.750	5.125	1.1875	51.6875	1.1359	48.6429
11	12:50	48.000	5.125	1.1875	51.9375	1.1414	48.7799
12	12:55	48.125	5.125	1.1875	52.0625	1.1442	48.8482
13	1:00	48.375	5.125	1.1875	52.3125	1.1497	48.9841
14	1:05	48.500	5.125	1.1875	52.4375	1.1524	49.0518

