

Irrigation Association - Smart Water Application Technology

Climatologically Based Controllers

Evaluation Protocol: 6th Draft (December 1, 2004)

International Center for Water Technology

Project Identification	Manufacturer	Alex Tronix
	Model Number	Smart Clock
	Serial Number	01002
	Evaluated By	JO, EN
	Date	August 19, 2005 - September 18, 2005
	Weather Station	CIMIS 80
	Reference No.	C001205
	Comments	

Parameter	Zone #1	Zone #2	Zone #3	Zone #4	Zone #5	Zone #6
Soil Type	Loam	Silty Clay	Loamy Sand	Sandy Loam	Clay Loam	Clay
Vegetation	Fescue - 75%	Bermuda - Full	Ground Cover	Woody Shrubs	Trees & GC	Bermuda - Full
Slope, %	6.0	10.0	8.0	12.0	2.0	20.0
Root Zone Stor., in.	0.85	0.55	0.90	2.00	2.25	0.55
Precip Rate, in./h	1.60	1.60	1.40	1.40	0.20	0.35
Efficiency, %	55	60	70	75	80	65
Area, SQ-Ft	1000	1200	800	500	650	1600
Soil Intake Rate, in./h	0.35	0.15	0.50	0.40	0.20	0.10
Kc	0.56	0.64	0.55	0.40	0.61	0.64
ASA, in.	0.25	0.16	0.26	0.24	0.26	0.10
Max. Run Time, min.	12.0	6.6	17.3	14.4	N/A	24.0

ET _c , in.	6.71	6.71	6.71	6.71	6.71	6.71
ET _c , in.	3.89	4.39	3.69	2.70	4.11	4.39
Gross Rainfall, in.	0.00	0.00	0.00	0.00	0.00	0.00
Net Rainfall, in.	0.00	0.00	0.00	0.00	0.00	0.00
Eff. Rainfall, in.	0.00	0.00	0.00	0.00	0.00	0.00
Gross Irr., in.	8.76	7.83	6.08	0.64	4.64	6.99
Direct Runoff, in.	0.00	0.00	0.00	0.00	0.00	0.00
Soak Runoff, in.	0.00	0.00	0.00	0.00	0.00	0.00
Effective Irr., in.	4.84	4.77	4.28	0.48	3.76	4.64
Deficit, in.	0.00	0.00	0.00	1.32	0.00	0.00
Surplus, in.	0.51	0.17	0.50	0.00	0.00	0.00
Irr. Adequacy, %	100.0	100.0	100.0	51.1	100.0	100.0
Sch. Eff., %	89.5	96.4	88.3	100.0	100.0	100.0
Overall Eff., %	49.2	57.9	61.8	75.0	80.0	65.0
Rainfall Eff., %	0.0	0.0	0.0	0.0	0.0	0.0
Cur. Moist. Bal., in.	0.85	0.54	0.50	0.13	0.77	0.47