

CULTIVAR	SAMPLE LOCATION	DATE	NUMBER OF FRUIT PER SAMPLE	TOTAL LENGTH PER SAMPLE (cm)	TOTAL WIDTH PER SAMPLE (cm)	LENGTH /WIDTH RATIO	TOTAL WT PER SAMPLE (grams)	MEAN WEIGHT PER FRUIT (grams)	EXTERNAL COLOR BASED ON COLOR CHART	TEXTURE BASED ON CHART	TOTAL RIND THICKNESS PER SAMPLE (mm)	TOTAL SEEDS PER SAMPLE	INTERIOR COLOR DESCRIPTION	TOTAL JUICE WT. PER SAMPLE (grams)	% JUICE	TSS (TOTAL SOLUBLE SOLIDS)	% ACID (BASED ON CITRIC ACID)	RATIO (TSS / % ACID)
USDA 88-2	Lindcove	12/2/1996	5	33.5	33.8	1.0	720.0	144.0	12.5	4.5	20	4	BR. ORANGE	369.6	51.3	12.6	1.0	12.7
USDA 88-2	Riverside	12/17/1996	10	63.3	65.4	1.0	1353.9	135.4	12.0	4.0	41.0	4	BR. ORANGE	681.1	50.3	14.1	0.7	19.4
USDA 88-2	Irvine	1/14/1997	5	30.7	33.8	0.9	713.7	142.7	12.0	3.5	25	1	BR. ORANGE	309.9	43.4	12.3	0.6	21.3
USDA 88-2	Riverside	11/3/1997	5	31.7	33.1	1.0	762.2	152.4	4.5	2.5	17	1	BR. ORANGE	420.5	55.2	10.2	0.7	14.8
USDA 88-2	Irvine	12/5/1997	8	48.5	55.4	0.9	1180.9	147.6	10.8	4.5	35	9	BR. ORANGE	590.0	50.0	12.1	0.9	13.6
USDA 88-2	Irvine	12/5/1997	10	54.7	65.3	0.8	1157.9	115.8	11.7	5.1	50	5	BR. ORANGE	525.9	45.4	15.6	1.7	9.0
USDA 88-2	Lindcove	12/12/1997	10	59.8	62.3	1.0	1230.9	123.1	12.0	3.5	30	2	MED. ORANGE	678.6	55.1	13.6	0.8	17.1
USDA 88-2	Lindcove	12/12/1997	10	67.2	67.7	1.0	1558.9	155.9	12.0	4.0	36	12	MED. ORANGE	850.7	54.6	12.2	0.8	15.3
USDA 88-2	Irvine	1/6/1998	10	52.3	64.2	0.8	1118.7	111.9	11.3	5.5	46	1	BR. ORANGE	525.2	46.9	17.7	1.5	11.7
USDA 88-2	Lindcove	11/2/1998	10	30	31.7	0.9	616.2	61.6	4.5	5	22	1	MED.-BR. OR.	286.6	46.5	10.2	1.0	10.0
USDA 88-2	Lindcove	11/2/1998	10	57.5	60.7	0.9	1091.5	109.2	4.7	5	36	3	BR. ORANGE	567.7	52.0	11.1	1.1	10.0
USDA 88-2	Irvine	11/6/1998	10	56	61.9	0.9	1101.9	110.2	4.0	3	34	0	LT.-BRT. OR.	537.5	48.8	8.8	1.1	8.1
USDA 88-2	Irvine	11/6/1998	10	52.7	57.9	0.9	934.3	93.4	3.7	3.5	31	1	BR. ORANGE	474.6	50.8	10.2	1.2	8.4
USDA 88-2	Riverside	11/9/1998	10	48.5	52.9	0.9	720.1	72.0	5.5	2	29	1	BR. ORANGE	331.0	46.0	9.8	0.7	15.0
USDA 88-2	Riverside	11/9/1998	10	49.2	52.7	0.9	732.3	73.2	5.3	2	29.5	2	BR. ORANGE	386.6	52.8	10.0	0.7	13.8
USDA 88-2	Riverside	11/30/1998	10	43.7	56.7	0.8	761.9	76.2	4.5	3	22	72	MED. ORANGE	360.3	47.3	9.1	1.7	5.3
USDA 88-2	Riverside	11/30/1998	10	44.4	55.8	0.8	744.1	74.4	4.5	2.7	26	80	MED. ORANGE	355.3	47.7	9.1	2.2	4.2
USDA 88-2	Lindcove	12/1/1998	10	29.5	31.3	0.9	553.5	55.4	11.5	3	18	3	BR. ORANGE	274.4	49.6	9.1	0.7	12.8
USDA 88-2	Lindcove	12/2/1998	10	58.9	60.8	1.0	1108.3	110.8	11.5	3.5	38	3	BR. ORANGE	569.7	51.4	12.1	0.9	14.0
USDA 88-2	Irvine	12/3/1998	10	57.9	62.8	0.9	1158.5	115.9	5.5	2.5	37	3	MED. ORANGE	623.3	53.8	10.9	0.9	12.6
USDA 88-2	Irvine	12/3/1998	10	59.1	65.2	0.9	1254.1	125.4	5.5	3	40	0	BR. ORANGE	698.9	55.7	10.9	0.8	14.4
USDA 88-2	Lindcove	12/14/1998	10	64.6	66.1	1.0	1368.2	136.8	11.5	3.5	45	1	MED.-BR. OR.	692.9	50.6	11.5	0.8	15.0
USDA 88-2	Riverside	12/14/1998	10	45.4	59.1	0.8	893	89.3	4.8	3	26.5	85	ORANGE	453.0	50.7	8.6	1.6	5.3
USDA 88-2	Riverside	12/14/1998	10	45.9	60.2	0.8	916.6	91.7	5.0	2.7	25	98	ORANGE	494.7	54.0	9.2	1.9	4.8
USDA 88-2	Irvine	12/16/1998	10	56.3	62.1	0.9	1084.3	108.4	11.5	2.5	35	1	BR. ORANGE	619.6	57.1	11.0	0.8	14.1
USDA 88-2	Irvine	12/16/1998	10	57.5	64.3	0.9	1176.6	117.7	11.5	2.5	40	5	BR. ORANGE	683.9	58.1	12.0	0.7	16.7
USDA 88-2	Irvine	10/28/1999	10	46.1	50.0	0.9	623.6	62.4	4.0	2.0	31	4	LT. ORANGE	277.4	44.5	10.3	1.7	6.2
USDA 88-2	Irvine	10/28/1999	10	43.4	46.9	0.9	516.3	51.6	4.0	3.0	27	4	LT. ORANGE	237.6	46.0	10.6	1.9	5.7
USDA 88-2	Lindcove	11/1/1999	10	59.2	58.4	1.0	987.6	98.8	5.0	6	38	12	MED. ORANGE	462.0	46.8	14.0	1.9	7.2
USDA 88-2	Lindcove	11/1/1999	10	57.9	57.5	1.0	971.2	97.1	4.8	6	44	7	MED. ORANGE	435.7	44.9	14.4	2.1	7.0
USDA 88-2	Irvine	11/29/1999	10	50.6	57.2	0.9	874.1	87.4	5.0	2.0	31	3	BR. ORANGE	456.6	52.2	12.0	1.1	11.3
USDA 88-2	Irvine	11/29/1999	10	44.9	51.3	0.9	665.5	66.6	5.0	2.0	21	0	BR. ORANGE	345.1	51.9	11.6	1.2	9.6
USDA 88-2	Lindcove	12/2/1999	10	59.6	61.3	1.0	1176.9	117.7	12.0	5.5	36	6	MED.-BR. OR.	324.9	27.6	15.2	1.5	10.0
USDA 88-2	Lindcove	12/2/1999	10	57.6	62.7	0.9	1181	118.1	12.0	4	45	1	MED.-BR. OR.	609.8	51.6	13.1	1.4	9.4
USDA 88-2	Lindcove	12/13/1999	10	59.5	60.4	1.0	1083	108.3	11.5	4	38	0	MED. ORANGE	567.9	52.4	13.4	1.3	10.5
USDA 88-2	Lindcove	12/13/1999	10	55.1	56.5	1.0	887.9	88.8	11.5	3.7	37	7	MED. ORANGE	473.7	53.4	14.4	1.3	10.8
USDA 88-2	Irvine	12/15/1999	10	54.7	63.1	0.9	1114.8	111.5	10.0	2.0	40	0	MED. ORANGE	629.9	56.5	12.1	1.0	11.9
USDA 88-2	Irvine	12/15/1999	10	51.7	57.5	0.9	894.8	89.5	9.0	2.5	35	0	MED.-BR. OR.	525.2	58.7	12.6	1.1	11.6

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USDA 88-2	Riverside	10/31/2000	10	56.8	60	0.9	1129.2	112.9	5.0	2	24	3	BR. ORANGE	596.6	52.8	11.2	0.8	14.1
USDA 88-2	Riverside	10/31/2000	10	58.6	60.8	1.0	1171	117.1	6.5	2	26	5	BR. ORANGE	670.9	57.3	11.9	0.9	13.9
USDA 88-2	Irvine	11/2/2000	10	44.8	46.4	1.0	509.8	51.0	5.0	1	25	6	MED. ORANGE	240.9	47.3	12.7	1.8	7.1
USDA 88-2	Irvine	11/2/2000	10	44.7	46	1.0	506.9	50.7	5.0	1	25	9	DK. ORANGE	237.7	46.9	12.9	1.4	9.0
USDA 88-2	Riverside	11/20/2000	10	59.3	62.7	0.9	1246.7	124.7	10.5	2	28	6	BR. ORANGE	709.0	56.9	12.8	0.6	23.4
USDA 88-2	Riverside	11/20/2000	10	58	61.1	0.9	1167.8	116.8	10.0	2	24	1	BR. ORANGE	710.7	60.9	12.6	0.6	21.4
USDA 88-2	Irvine	11/20/2000	10	48.5	50	1.0	654.7	65.5	11.0	1	21	6	MED. ORANGE	312.1	47.7	15.7	1.3	12.3
USDA 88-2	Irvine	11/20/2000	10	48	47.9	1.0	580.4	58.0	10.0	1	25	11	BR. ORANGE	286.0	49.3	14.2	1.2	11.8
USDA 88-2	Lindcove	11/21/2000	10	62.1	64.3	1.0	1274.3	127.4	12.0	6	39	2	MED. DK. OR.	615.0	48.3	NA	1.1	13.1
USDA 88-2	Lindcove	11/21/2000	10	63.9	66.9	1.0	1408.7	140.8	12.0	5.5	42	0	MED. DK. OR.	722.1	51.3	NA	0.9	15.2
USDA 88-2	Riverside	12/10/2000	10	67.2	64.6	1.0	1521.9	152.2	11.5	3	41	2	MED. BR. OR.	843.8	55.4	13.7	0.6	23.8
USDA 88-2	Riverside	12/10/2000	10	65.4	65.1	1.0	1440.8	144.1	11.5	3.5	44	3	MED. BR. OR.	820.2	56.9	13.3	0.6	24.1
USDA 88-2	Irvine	12/12/2000	10	42.7	43.5	1.0	534.2	53.4	12.0	1.5	21	9	BR. ORANGE	270.1	50.6	16.4	1.0	15.7
USDA 88-2	Irvine	12/12/2000	10	44.3	44.4	1.0	571.8	57.2	11.5	1	22	11	BR. ORANGE	300.2	52.5	15.8	1.0	15.3
USDA 88-2	Lindcove	12/14/2000	10	62.9	65.3	1.0	1315.9	131.6	12.0	4	36	6	BR. ORANGE	694.6	52.8	NA	NA	NA
USDA 88-2	Lindcove	12/14/2000	10	58.1	60	1.0	1051.3	105.1	12.0	4	29	3	BR. ORANGE	592.3	56.3	NA	NA	NA
USDA 88-2	Coachella	10/28/2001	8	56.0	51.0	1.1	1137.8	142.2	4.5	3.0	30	11	MED. ORANGE	609.6	53.6	12.1	0.7	17.0
USDA 88-2	Riverside	10/28/2001	10	52.9	55.2	1.0	852.5	85.3	4.5	2.0	27	7	MED. ORANGE	346.5	40.6	10.2	1.2	8.7
USDA 88-2	Riverside	10/28/2001	10	53.3	53.2	1.0	811.0	81.1	5.0	2.0	29	15	MED. ORANGE	368.4	45.4	10.1	1.0	10.3
USDA 88-2	Lindcove	10/30/2001	10	60.8	63.1	1.0	1282.4	128.2	5.5	4.0	33	13	BR. ORANGE	664.0	51.8	13.2	1.4	9.6
USDA 88-2	Lindcove	10/30/2001	10	63.7	64.6	1.0	1380.6	138.1	4.0	3.5	34	7	MED. BR. OR.	643.5	46.6	12.3	1.3	9.2
USDA 88-2	Irvine	11/16/2001	10	49.9	59.2	0.8	935.5	93.6	7.0	2.0	27	0	MED. ORANGE	470.1	50.3	11.4	1.0	11.9
USDA 88-2	Irvine	11/16/2001	10	46.8	54.7	0.9	790.5	79.1	6.0	2.0	24	3	MED. ORANGE	401.9	50.8	12.1	0.9	13.2
USDA 88-2	Riverside	11/19/2001	10	58.2	60.9	1.0	1160.5	116.1	6.0	2.0	29	7	BR. ORANGE	608.3	52.4	11.2	0.7	15.9
USDA 88-2	Riverside	11/19/2001	10	62.3	64.2	1.0	1345.7	134.6	6.5	3.0	32	5	BR. ORANGE	778.7	57.9	12.1	0.7	16.4
USDA 88-2	Lindcove	11/20/2001	10	72.6	73.7	1.0	1960.6	196.1	8.0	6.5	35	18	BR. ORANGE	1031.1	52.6	13.5	1.0	13.6
USDA 88-2	Lindcove	11/20/2001	10	71.7	71.1	1.0	1773.5	177.4	10.0	6.5	41	4	BR. ORANGE	941.3	53.1	13.2	1.0	13.9
USDA 88-2	Irvine	12/7/2001	10	52.6	63.1	0.8	1145.7	114.6	12.0	2.0	26	4	BR. ORANGE	596.4	52.1	11.6	0.7	15.6
USDA 88-2	Irvine	12/7/2001	10	60.0	66.5	0.9	1377.8	137.8	11.5	2.5	32	2	BR. ORANGE	762.9	55.4	12.3	0.8	15.6
USDA 88-2	Riverside	12/12/2001	10	61.8	63.4	1.0	1292.2	129.2	10.0	2.0	29	2	V. BR. OR.	694.1	53.7	12.7	0.7	19.0
USDA 88-2	Riverside	12/12/2001	10	61.4	63.3	1.0	1279.2	127.9	10.0	2.0	30	2	V. BR. OR.	733.4	57.3	13.0	0.6	20.3
USDA 88-2	Lindcove	12/13/2001	10	69.8	71.8	1.0	1815.7	181.6	11.5	3.0	37	9	BR. ORANGE	1029.6	56.7	13.6	0.9	15.8
USDA 88-2	Lindcove	12/13/2001	10	69.9	72.4	1.0	1841.4	184.1	11.5	4.0	38	5	BR. ORANGE	1047.3	56.9	13.6	0.78	17.48

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USDA 88-2	Lindcove	10/24/2002	10	56.4	56.9	1.0	979.4	97.9	5.5	3.5	34	6	MED.-BR. OR.	358.3	36.6	13.0	1.3	10.0
USDA 88-2	Lindcove	10/24/2002	10	56.2	58.4	1.0	1020.1	102.0	5.5	4.0	29	3	BR. ORANGE	403.3	39.5	12.4	1.4	9.2
USDA 88-2	Riverside	10/24/2002	10	50.0	51.0	1.0	707.9	70.8	5.0	2.0	25	5	MED. ORANGE	337.0	47.6	11.1	1.3	8.3
USDA 88-2	Riverside	10/24/2002	10	54.4	53.9	1.0	836.3	83.6	4.5	2.5	24	6	MED. ORANGE	419.1	50.1	10.4	1.4	7.4
USDA 88-2	Irvine	10/24/2002	10	45.9	49.8	0.9	628.6	62.9	4.5	2.5	25	0	MED. ORANGE	314.6	50.0	9.3	1.7	5.3
USDA 88-2	Irvine	10/24/2002	10	47.9	52.7	0.9	726.3	72.6	4.5	2.0	22	7	MED. ORANGE	361.4	49.8	9.3	1.7	5.6
USDA 88-2	Coachella	10/31/2002	10	57.2	60.2	1.0	1121.2	112.1	6.0	3.0	31	8	MED. ORANGE	575.3	51.3	11.7	0.6	20.7
USDA 88-2	Lindcove	11/21/2002	10	59.1	62.3	0.9	1215.8	121.6	11.0	3.5	29	5	BR. ORANGE	642.5	52.8	14.5	1.0	14.7
USDA 88-2	Lindcove	11/21/2002	10	59.7	62.4	1.0	1202.8	120.3	10.5	3.5	40	7	BR. ORANGE	617.5	51.3	13.5	0.9	15.8
USDA 88-2	Riverside	11/21/2002	10	52.4	54.9	1.0	844.9	84.5	11.1	2.0	38	10	BR. ORANGE	357.7	42.3	13.2	0.9	14.4
USDA 88-2	Riverside	11/21/2002	10	55.5	57.2	1.0	986.8	98.7	7.5	2.0	36	11	BR. ORANGE	394.5	40.0	12.4	0.9	13.5
USDA 88-2	Irvine	11/21/2002	10	53.8	58.8	0.9	1010.0	101.0	6.0	1.0	29	15	ORANGE	488.3	48.3	10.7	0.8	13.8
USDA 88-2	Irvine	11/21/2002	10	51.4	57.0	0.9	931.3	93.1	6.5	1.5	24	5	BR. ORANGE	430.4	46.2	10.6	0.8	13.4
USDA 88-2	Coachella	11/24/2002	10	59.3	61.7	1.0	1204.2	120.4	9.0	2.0	30	12	BR. ORANGE	614.6	51.0	12.4	0.5	27.0
USDA 88-2	Irvine	12/7/2002	10	55.8	60.0	0.9	1047.8	104.8	10.0	1.5	25	7	BR. ORANGE	593.2	56.6	11.6	0.7	15.9
USDA 88-2	Irvine	12/7/2002	10	55.6	62.0	0.9	1202.6	120.3	10.0	1.5	28	10	BR. ORANGE	693.4	57.7	12.6	0.7	17.2
USDA 88-2	Riverside	12/9/2002	10	54.2	58.2	0.9	980.0	98.0	12.0	2.0	29	7	BR. ORANGE	555.6	56.7	13.9	0.7	20.1
USDA 88-2	Riverside	12/9/2002	10	62.8	63.6	1.0	1335.5	133.6	12.0	2.0	32	5	BR. ORANGE	759.8	56.9	13.2	0.7	19.8
USDA 88-2	Lindcove	12/11/2002	10	59.7	64.0	0.9	1240.2	124.0	12.0	3.5	37	1	BR. ORANGE	664.5	53.6	14.4	0.9	15.7
USDA 88-2	Lindcove	12/11/2002	10	62.9	65.6	1.0	1349.4	134.9	12.0	3.5	39	3	BR. ORANGE	763.6	56.6	13.5	0.8	17.5
USDA 88-2	Coachella	10/9/2003	10	64.6	61.2	1.1	1198.2	119.8	4.5	3.5	40	21	YEL. ORANGE	426.0	35.6	9.3	1.0	9.9
USDA 88-2	Coachella	10/9/2003	10	64.2	62.8	1.0	1226.9	122.7	5.5	3.5	38	6	YELLOW	547.9	44.7	10.1	1.0	10.3
USDA 88-2	Coachella	10/9/2003	10	67.5	63.9	1.1	1291.7	129.2	4.5	4.0	49	20	YELLOW	813.6	63.0	10.1	1.0	10.3
USDA 88-2	Coachella	10/9/2003	10	84.8	63.4	1.3	1349.4	134.9	4.5	3.5	39	12	YELLOW	NA		7.6	0.5	14.4
USDA 88-2	Coachella	10/9/2003	10	65.9	61.7	1.1	1220.3	122.0	4.5	4.0	34	11	YEL. ORANGE	619.3	50.7	10.8	0.8	13.3
USDA 88-2	Coachella	10/9/2003	10	67.5	63.9	1.1	1291.7	129.2	4.5	4.0	49	20	YELLOW	813.6	63.0	10.1	1.0	10.3
USDA 88-2	Coachella	10/9/2003	10	64.6	61.2	1.1	1198.2	119.8	4.5	3.5	40	21	YEL. ORANGE	426.0	35.6	9.3	1.0	9.9
USDA 88-2	Coachella	11/21/2003	5	35.6	34.6	1.0	795.3	159.1	9.0	4.0	23	7	BR. ORANGE	398.7	50.1	11.7	1.3	8.4
USDA 88-2	Coachella	11/21/2003	6	41.3	39.0	1.1	845.3	140.9	9.0	3.5	28	12	ORANGE	419.8	49.7	12.3	1.5	8.4
USDA 88-2	Coachella	11/21/2003	10	64.6	66.4	1.0	1410.8	141.1	8.5	3.5	34	14	BR. ORANGE	787.6	55.8	11.5	1.6	7.0
USDA 88-2	Coachella	11/21/2003	10	69.9	67.7	1.0	1508.3	150.8	9.5	3.0	40	19	BR. ORANGE	800.9	53.1	9.4	1.2	7.6
USDA 88-2	Coachella	10/28/2004	10	66.5	61.6	1.1	1293	129.3	5.5	3	36	9	ORANGE	641.0	49.6	10.4	0.7	15.9
USDA 88-2	Coachella	10/28/2004	10	66.8	64.9	1.0	1442.5	144.3	5.5	3	39	18	LT. ORANGE	743.5	51.5	11.3	0.9	13.1
USDA 88-2	Coachella	10/28/2004	10	67.2	65.7	1.0	1412	141.2	6.0	3	44	22	LT. ORANGE	793.4	56.2	10.8	0.8	12.8