

# Liftcrane Boom

## Extended Upper Point Capacities

# MLC650 VPC-MAX SERIES 1

Boom No. B80:680-681-682  
with Mast No. M11:684 and  
24.9 ft Extended Upper Boom Point  
440,900 lb VPC (Variable Position Counterweight)  
Crawler Machine on a Barge  
0 Degree thru 2 Degree Static Machine List  
No Travel - 360 Degree Rating



**LIFTING CAPACITIES:** Lifting capacities are for a crawler machine when operating on a barge. Machine shall be positively secured to prevent shifting. Lifting capacities for various boom lengths and operating radii are for freely suspended loads and may be based on percent of static tipping or strength of structural components. Capacities shown are for boom point or extended upper boom point and their respective operating radii. Capacities must be reduced by applicable deducts.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath sheaves is considered part of load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

**OPERATING CONDITIONS:** Machine to operate on a firm and uniformly supporting surface with machine list not to exceed degrees noted. Refer to Boom Rigging No. 81022864, Mast Rigging No. 84050187, Wire Rope Specifications chart No. 9467-A, Counterweight Arrangements chart No. 9349-A, and Wind Conditions chart No. 9466-A. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to the Operator Manual for operating guidelines.



**EXTENDED UPPER BOOM POINT OPERATING RADIUS:** Extended upper boom point operating radius is horizontal distance from axis of rotation at barge deck to center of vertical hoist line or load block.



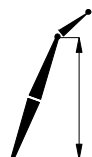
**BOOM POINT OPERATING RADIUS:** Boom point operating radius is horizontal distance from axis of rotation at barge deck to center of vertical hoist line or load block on boom point.



**BOOM ANGLE:** Boom angle in degrees (°) is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.



**EXTENDED UPPER BOOM POINT ELEVATION:** Extended upper boom point elevation is vertical distance from barge deck to centerline of extended upper boom point shaft.



**BOOM POINT ELEVATION:** Boom point elevation is vertical distance from barge deck to centerline of boom point shaft.

**MACHINE EQUIPMENT:** Machine equipped with VPC-MAX, 36 ft 6 in. crawlers, 60 in. or 80 in. treads, 36 ft 1 in. live mast, 118.1 ft mast, 16 part boom hoist reeving, boom support straps, and 440,900 lb VPC.

**Warning:** Luffing jib backstay straps must be removed before use of this chart. *Crane tipping or structural damage may occur.*

# MLC650 VPC-MAX S-1



<b>Upper Boom Point (upper sheave) Capacity for Liftcrane Service - Whip Line</b>	
Drum 1 or 3	
1 Part	2 Parts
30,000 lb	60,000 lb
In all cases upper boom point (upper sheave) capacities cannot exceed those listed for extended upper boom point.	

<b>Boom Point Capacity for Liftcrane Service - Whip Line</b>	
Drum 1	Drum 3
1 Part	
48,800 lb	30,000 lb
2 Parts	
97,600 lb	60,000 lb
3 Parts	
146,400 lb	90,000 lb
4 Parts	
195,200 lb	120,000 lb
In all cases boom point capacities cannot exceed those listed for extended upper boom point.	

REFERENCE ONLY!

# MLC650 VPC-MAX S-1



Refer to Tables 1 and 2 for raising ability with the maximum weight of all load blocks, hooks, weight ball, slings, and hoist lines beneath sheaves. For block weights shown with #, load blocks, hooks, weight ball, and slings must remain on ground until combined weights are within rated capacity of chart. Raising is not permitted in shaded areas of table.

Select counterweight position from Tables 1 or 2 that will allow raising and lowering of boom length. Counterweight position selection may be changed with boom on ground or while boom is within operating range of capacity chart.

Combined weight beneath sheaves must not exceed block weight shown.

**Table 1**

Over End or Side of Crawlers						
Boom Length (ft)	38.7 ft Counterweight Position			60.0 ft Counterweight Position		
	Machine List					
	0°	1°	2°	0°	1°	2°
	Block Weight (lb)					
301.8	17,500	9,400	9,400	21,500	21,500	21,500
321.5	9,400	9,400	#	21,500	21,500	21,500
341.2	#	#	#	21,500	21,500	21,500
360.9 - 370.7	Raising Not Permitted			9,400	9,400	9,400
380.6 - 390.4				#	#	#
400.3				#	#	
410.1						

REFERENCED

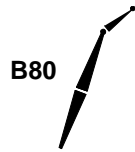
Table 2

Over End of Blocked Crawlers						
Boom Length (ft)	38.7 ft Counterweight Position			60.0 ft Counterweight Position		
	Machine List					
	0°	1°	2°	0°	1°	2°
	Block Weight (lb)					
301.8	17,500	9,400	9,400	21,500	21,500	21,500
321.5	9,400	9,400	#	21,500	21,500	21,500
341.2	#	#	#	21,500	21,500	21,500
360.9 - 370.7	<b>Raising Not Permitted</b>			9,400	9,400	9,400
380.6 - 390.4				#	#	#
400.3				#	#	#
410.1	<b>Raising Not Permitted</b>			#	#	#
				#	#	#

**Warning:** Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius is within 360 degree chart. *Crane tipping or structural damage can occur.*

REFERENCE ONLY

## Explanation of Symbols



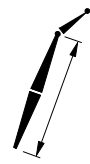
Boom No. B80:680-681-682



VPC (Variable Position Counterweight)



360 Degree Rating



Boom Length



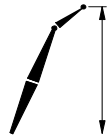
Extended Upper Boom Point  
Offset Angle



Extended Upper Boom Point Operating Radius  
(see page 1)

REFERENCE ONLY!

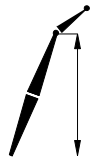
**Explanation of Symbols**  
(continued)



Extended Upper Boom Point Elevation  
(see page 1)



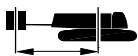
Boom Point Operating Radius  
(see page 1)



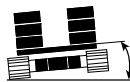
Boom Point Elevation  
(see page 1)



Boom Angle  
(see page 1)



Counterweight Position  
from Axis of Rotation



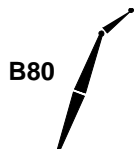
Machine List



Lifting Capacities  
(see page 1)

REFERENCE ONLY!

# MLC650 VPC-MAX S-1



440,900 lb



360°

ft	ft	ft	ft	°	0°	1°	2°	0°	1°	2°
					lb	lb	lb	lb	lb	lb
46	333.2	36.6	308.7	84.9	341,600			341,600		
48	333.0	38.5	308.5	84.5	341,600			341,600		
50	332.7	40.3	308.3	84.2	341,600			341,600		
55	332.0	44.9	307.7	83.3	341,600			341,600		
60	331.2	49.6	307.0	82.4	341,600			341,600		
65	330.3	54.2	306.3	81.5	341,600	321,200		341,600	321,200	
70	329.3	58.9	305.5	80.6	341,600	320,300	284,300	341,600	320,300	284,300
75	328.2	63.4	304.6	79.7	341,600	313,100	284,300	341,600	319,300	284,300
80	327.1	68.1	303.6	78.8	316,800	287,700	262,400	340,200	318,100	284,300
85	325.9	72.7	302.6	77.9	290,800	265,200	242,800	338,400	316,800	284,300
90	324.5	77.3	301.5	77.0	267,900	245,200	225,200	336,500	315,300	284,300
95	323.1	82.0	300.3	76.1	247,600	227,300	209,300	334,500	313,800	284,300
100	321.7	86.6	299.0	75.1	229,400	211,200	194,900	332,500	312,200	284,300
105	320.1	91.3	297.7	74.2	213,000	196,500	181,800	330,400	310,700	284,300
110	318.4	95.9	296.3	73.3	198,200	183,300	169,800	315,500	292,400	271,600
115	316.7	100.5	294.7	72.4	184,700	171,100	158,800	296,400	275,500	256,500
120	314.8	105.2	293.1	71.4	172,300	159,900	148,700	279,100	260,100	242,700
130	310.9	114.5	289.7	69.5	150,600	140,200	130,600	249,000	233,000	218,300
140	306.5	123.8	285.9	67.6	132,100	123,200	115,000	223,600	210,000	197,500
150	301.8	133.1	281.7	65.7	116,100	108,500	101,400	201,900	190,200	179,400
160	296.6	142.4	277.0	63.7	102,200	95,600	89,400	183,100	173,000	163,500
170	290.9	151.7	272.0	61.7	89,900	84,100	78,700	166,700	157,900	149,600
180	284.8	161.1	266.6	59.6	79,000	74,000	69,200	152,300	144,500	137,200
190	278.2	170.4	260.7	57.5	69,300	64,800	60,600	139,400	132,600	126,100
200	271.0	179.8	254.2	55.3	60,500	56,600	52,800	128,000	121,900	116,100
210	263.2	189.1	247.2	53.1	52,600	49,100	45,700	117,600	112,200	107,000
220	254.8	198.5	239.6	50.8	45,300	42,200	39,300	108,300	103,400	98,800
230	245.6	207.9	231.4	48.4	38,700	35,900	33,300	99,800	95,400	91,200
240	235.6	217.3	222.4	45.9	32,600	30,200	27,800	92,000	88,100	84,300
250	224.7	226.7	212.5	43.3	27,000	24,800	22,700	84,800	81,300	77,900
260	212.7	236.2	201.6	40.6	21,800	19,800	18,000	78,200	75,100	72,100
270	199.4	245.6	189.6	37.6	16,900	15,200	13,500	72,100	69,300	66,600
280	184.6	255.1	176.1	34.5	12,300			66,400	63,900	61,500
290	167.7	264.7	160.7	31.0				61,100	58,900	56,700

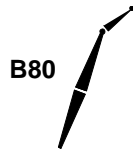
# MLC650 VPC-MAX S-1



301.8 ft 35°					38.7 ft			60.0 ft		
ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
46										
48	332.0	36.2	308.7	84.9	283,200			283,200		
50	331.7	38.1	308.5	84.6	283,200			283,200		
55	331.0	42.8	308.0	83.7	283,200			283,200		
60	330.1	47.4	307.4	82.8	283,200			283,200		
65	329.2	52.0	306.7	81.9	283,200	270,300		283,200	270,300	
70	328.3	56.7	305.9	81.0	283,200	270,300	257,400	283,200	270,300	257,400
75	327.2	61.3	305.0	80.1	283,200	270,300	257,400	283,200	270,300	257,400
80	326.1	66.0	304.1	79.2	283,200	270,300	257,400	283,200	270,300	257,400
85	324.8	70.7	303.1	78.3	283,200	267,800	245,300	283,200	270,300	257,400
90	323.5	75.3	302.0	77.4	270,500	247,700	227,500	283,200	270,200	257,400
95	322.1	80.0	300.8	76.5	250,000	229,600	211,500	283,200	269,900	257,400
100	320.6	84.6	299.6	75.5	231,600	213,300	197,000	283,200	269,500	257,200
105	319.0	89.3	298.3	74.6	215,100	198,600	183,700	282,800	269,100	256,900
110	317.4	93.9	296.9	73.7	200,100	185,200	171,600	282,200	268,600	256,700
115	315.6	98.6	295.4	72.7	186,500	172,900	160,500	281,400	268,100	256,400
120	313.8	103.3	293.8	71.8	174,100	161,700	150,300	280,500	261,400	244,100
130	309.8	112.7	290.4	69.9	152,200	141,700	132,100	250,200	234,200	219,500
140	305.4	122.0	286.6	68.0	133,500	124,600	116,400	224,700	211,100	198,500
150	300.7	131.4	282.5	66.0	117,400	109,700	102,600	202,900	191,200	180,300
160	295.4	140.7	277.9	64.0	103,400	96,700	90,500	184,000	173,900	164,400
170	289.8	150.1	272.9	62.0	91,000	85,200	79,700	167,500	158,700	150,400
180	283.6	159.5	267.5	59.9	80,000	74,900	70,100	153,000	145,200	137,900
190	277.0	169.0	261.6	57.8	70,100	65,600	61,400	140,100	133,200	126,700
200	269.7	178.4	255.2	55.6	61,300	57,300	53,500	128,500	122,500	116,700
210	261.9	187.8	248.2	53.4	53,300	49,700	46,400	118,200	112,700	107,500
220	253.4	197.3	240.6	51.1	45,900	42,800	39,800	108,700	103,900	99,200
230	244.2	206.8	232.4	48.7	39,300	36,500	33,800	100,200	95,800	91,700
240	234.2	216.3	223.4	46.2	33,100	30,600	28,300	92,300	88,400	84,700
250	223.2	225.8	213.5	43.6	27,400	25,200	23,100	85,100	81,600	78,300
260	211.1	235.4	202.6	40.8	22,100	20,200	18,300	78,500	75,400	72,300
270	197.7	245.0	190.4	37.8	17,200	15,500	13,800	72,300	69,500	66,800
280	182.7	254.6	176.8	34.7	12,500			66,600	64,100	61,600
290										



# MLC650 VPC-MAX S-1



440,900 lb



360°

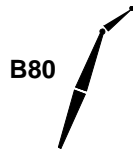
301.8 ft					41°					
					38.7 ft			60.0 ft		
ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
46										
48										
50	330.4	35.9	308.8	85.0	240,600			240,600		
55	329.6	40.6	308.2	84.1	240,600			240,600		
60	328.8	45.2	307.7	83.2	240,600			240,600		
65	327.9	49.9	307.0	82.3	240,600			240,600		
70	326.9	54.6	306.2	81.4	240,600	235,400		240,600	235,400	
75	325.8	59.3	305.4	80.5	240,600	235,400	226,900	240,600	235,400	226,900
80	324.7	63.9	304.5	79.6	240,600	235,400	226,900	240,600	235,400	226,900
85	323.4	68.6	303.5	78.7	240,600	235,400	226,900	240,600	235,400	226,900
90	322.1	73.3	302.5	77.8	240,600	235,400	226,900	240,600	235,400	226,900
95	320.7	78.0	301.3	76.8	240,600	231,800	213,600	240,600	235,400	226,900
100	319.2	82.7	300.1	75.9	233,800	215,400	199,000	240,600	235,400	226,900
105	317.6	87.4	298.8	75.0	217,100	200,500	185,600	240,600	235,400	226,900
110	316.0	92.1	297.4	74.1	202,000	187,000	173,400	240,600	235,400	226,900
115	314.2	96.8	296.0	73.1	188,300	174,600	162,200	240,600	235,400	226,900
120	312.4	101.5	294.4	72.2	175,800	163,300	151,900	240,600	235,400	226,900
130	308.4	110.9	291.1	70.3	153,700	143,200	133,500	240,600	235,400	220,700
140	304.0	120.3	287.3	68.3	134,900	125,900	117,600	225,700	212,100	199,500
150	299.2	129.7	283.2	66.4	118,600	110,900	103,700	203,800	192,100	181,200
160	293.9	139.2	278.7	64.4	104,400	97,700	91,500	184,800	174,700	165,200
170	288.2	148.7	273.7	62.3	91,900	86,100	80,600	168,300	159,400	151,100
180	282.0	158.2	268.3	60.2	80,800	75,700	70,900	153,700	145,900	138,500
190	275.3	167.7	262.4	58.1	70,900	66,400	62,100	140,700	133,800	127,300
200	268.1	177.2	256.0	55.9	61,900	58,000	54,200	129,100	123,000	117,200
210	260.2	186.8	249.1	53.7	53,800	50,300	47,000	118,600	113,200	108,000
220	251.6	196.3	241.5	51.3	46,500	43,300	40,300	109,100	104,300	99,600
230	242.4	205.9	233.2	48.9	39,700	36,900	34,200	100,500	96,200	92,000
240	232.2	215.5	224.1	46.4	33,500	31,000	28,600	92,600	88,700	85,000
250	221.1	225.2	214.2	43.7	27,700	25,500	23,400	85,400	81,900	78,500
260	208.9	234.9	203.2	40.9	22,300	20,400	18,500	78,700	75,500	72,500
270										
280										
290										

# MLC650 VPC-MAX S-1



ft	ft	ft	ft	ft	lb	lb	lb	lb	lb	lb	lb	lb	lb	lb
47	352.9	37.7	328.4	85.0	341,600				341,600					
50	352.6	40.5	328.1	84.5	341,600				341,600					
52	352.3	42.3	327.9	84.2	341,600				341,600					
55	351.9	45.1	327.5	83.7	341,600				341,600					
60	351.1	49.8	326.9	82.8	341,600				341,600					
65	350.3	54.4	326.2	82.0	341,600				341,600					
70	349.3	59.1	325.5	81.1	341,600	321,100			341,600	321,100				
75	348.3	63.7	324.6	80.3	341,600	309,700	242,600		341,600	321,100			242,600	
80	347.3	68.4	323.7	79.4	315,300	284,400	242,600		341,600	321,100			242,600	
85	346.1	73.0	322.7	78.6	289,300	262,100	238,400		341,600	321,100			242,600	
90	344.9	77.7	321.7	77.7	266,300	242,200	221,000		341,600	321,100			242,600	
95	343.6	82.3	320.6	76.9	245,900	224,300	205,300		341,600	321,100			242,600	
100	342.2	87.0	319.4	76.0	227,600	208,200	191,000		341,600	321,100			242,600	
105	340.7	91.6	318.1	75.2	211,200	193,700	178,100		335,400	308,200			242,600	
110	339.2	96.3	316.8	74.3	196,300	180,400	166,200		314,200	289,700			242,600	
115	337.5	101.0	315.3	73.4	182,800	168,300	155,300		295,100	272,900			242,600	
120	335.8	105.6	313.8	72.5	170,400	157,200	145,200		277,800	257,500			239,300	
130	332.1	114.9	310.6	70.8	148,600	137,500	127,300		247,600	230,600			215,100	
140	328.0	124.3	307.0	69.0	130,100	120,600	111,800		222,100	207,700			194,400	
150	323.6	133.6	303.0	67.2	114,100	105,900	98,300		200,400	187,900			176,500	
160	318.8	143.0	298.8	65.3	100,100	93,000	86,400		181,600	170,800			160,800	
170	313.5	152.4	294.1	63.4	87,800	81,600	75,800		165,100	155,700			146,900	
180	307.9	161.7	289.0	61.5	76,900	71,400	66,300		150,700	142,400			134,600	
190	301.8	171.1	283.5	59.6	67,100	62,300	57,700		137,800	130,500			123,600	
200	295.2	180.4	277.6	57.6	58,300	54,000	50,000		126,300	119,800			113,600	
210	288.1	189.8	271.2	55.6	50,400	46,600	42,900		116,000	110,200			104,600	
220	280.4	199.2	264.3	53.5	43,100	39,700	36,500		106,600	101,400			96,400	
230	272.1	208.6	256.8	51.3	36,500	33,500	30,600		98,100	93,400			88,900	
240	263.2	218.1	248.7	49.1	30,400	27,700	25,100		90,300	86,100			82,000	
250	253.5	227.5	239.9	46.8	24,800	22,400	20,100		83,200	79,400			75,700	
260	243.0	237.0	230.4	44.4	19,600	17,400	15,400		76,600	73,200			69,800	
270	231.6	246.4	220.0	41.9	14,800	12,800			70,500	67,400			64,400	
280	219.0	255.9	208.5	39.2					64,800	62,000			59,300	
290	205.2	265.4	195.9	36.4					59,600	57,000			54,600	
300	189.7	275.0	181.7	33.3					54,600	52,400			50,100	
310	172.1	284.6	165.6	29.9					50,000	47,900			46,000	

# MLC650 VPC-MAX S-1



440,900 lb



360°

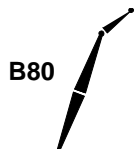
321.5 ft 35°					38.7 ft			60.0 ft		
ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
47										
50	351.5	38.3	328.3	84.9	288,900			288,900		
52	351.3	40.1	328.1	84.6	288,900			288,900		
55	350.9	42.9	327.8	84.1	288,900			288,900		
60	350.1	47.6	327.2	83.2	288,900			288,900		
65	349.2	52.2	326.6	82.4	288,900			288,900		
70	348.3	56.9	325.8	81.5	288,900	278,000		288,900	278,000	
75	347.3	61.6	325.0	80.7	288,900	278,000	238,100	288,900	278,000	238,100
80	346.2	66.2	324.1	79.8	288,900	278,000	238,100	288,900	278,000	238,100
85	345.1	70.9	323.2	79.0	288,900	264,800	238,100	288,900	278,000	238,100
90	343.8	75.6	322.2	78.1	269,000	244,700	223,400	288,900	278,000	238,100
95	342.5	80.3	321.1	77.3	248,400	226,700	207,600	288,900	278,000	238,100
100	341.1	84.9	319.9	76.4	230,000	210,500	193,200	288,900	278,000	238,100
105	339.7	89.6	318.7	75.5	213,400	195,800	180,100	288,900	278,000	238,100
110	338.1	94.3	317.3	74.7	198,400	182,400	168,100	288,900	278,000	238,100
115	336.5	99.0	315.9	73.8	184,700	170,200	157,100	288,900	274,400	238,100
120	334.7	103.7	314.4	72.9	172,200	159,000	146,900	279,200	258,900	238,100
130	331.0	113.0	311.3	71.1	150,300	139,100	128,900	248,800	231,800	216,400
140	326.9	122.4	307.7	69.3	131,600	122,000	113,200	223,300	208,800	195,500
150	322.5	131.8	303.8	67.5	115,400	107,200	99,600	201,400	189,000	177,500
160	317.6	141.2	299.6	65.7	101,300	94,100	87,500	182,500	171,700	161,700
170	312.4	150.7	295.0	63.8	88,900	82,600	76,800	166,000	156,600	147,700
180	306.7	160.1	289.9	61.9	77,900	72,400	67,200	151,500	143,200	135,300
190	300.6	169.6	284.5	59.9	68,000	63,200	58,600	138,500	131,200	124,200
200	294.0	179.0	278.6	57.9	59,200	54,800	50,800	127,000	120,400	114,200
210	286.8	188.5	272.2	55.9	51,100	47,300	43,700	116,600	110,700	105,200
220	279.1	197.9	265.3	53.8	43,800	40,400	37,100	107,200	101,900	96,900
230	270.8	207.4	257.8	51.6	37,100	34,100	31,200	98,600	93,900	89,400
240	261.8	217.0	249.7	49.4	31,000	28,200	25,600	90,800	86,500	82,400
250	252.1	226.5	241.0	47.0	25,300	22,900	20,500	83,600	79,700	76,100
260	241.5	236.0	231.4	44.6	20,100	17,900	15,800	76,900	73,500	70,100
270	230.0	245.6	220.9	42.1	15,200	13,200		70,800	67,700	64,700
280	217.4	255.2	209.4	39.4				65,100	62,300	59,500
290	203.4	264.9	196.7	36.5				59,800	57,200	54,800
300										
310										

# MLC650 VPC-MAX S-1



321.5 ft 41°					38.7 ft			60.0 ft		
ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
47										
50										
52	349.9	37.9	328.4	85.0	244,000			244,000		
55	349.5	40.7	328.1	84.5	244,000			244,000		
60	348.7	45.4	327.5	83.6	244,000			244,000		
65	347.9	50.1	326.9	82.8	244,000			244,000		
70	346.9	54.8	326.2	81.9	244,000	241,800		244,000	241,800	
75	345.9	59.4	325.4	81.1	244,000	241,800		244,000	241,800	
80	344.9	64.2	324.5	80.2	244,000	241,800	234,200	244,000	241,800	234,200
85	343.7	68.9	323.6	79.3	244,000	241,800	234,200	244,000	241,800	234,200
90	342.5	73.6	322.6	78.5	244,000	241,800	225,800	244,000	241,800	234,200
95	341.1	78.3	321.6	77.6	244,000	229,000	209,800	244,000	241,800	234,200
100	339.7	83.0	320.4	76.8	232,200	212,700	195,300	244,000	241,800	234,200
105	338.3	87.7	319.2	75.9	215,500	197,800	182,000	244,000	241,800	234,200
110	336.7	92.4	317.9	75.0	200,400	184,300	169,900	244,000	241,800	234,200
115	335.0	97.1	316.5	74.1	186,600	172,000	158,800	244,000	241,800	234,200
120	333.3	101.8	315.0	73.2	174,000	160,700	148,600	244,000	241,800	234,200
130	329.6	111.2	311.9	71.5	151,900	140,600	130,300	244,000	233,100	217,600
140	325.5	120.7	308.4	69.7	133,000	123,400	114,500	224,400	209,900	196,600
150	321.0	130.2	304.5	67.8	116,700	108,400	100,700	202,400	189,900	178,400
160	316.1	139.7	300.3	66.0	102,400	95,300	88,600	183,400	172,600	162,600
170	310.9	149.2	295.7	64.1	89,900	83,600	77,800	166,800	157,400	148,500
180	305.2	158.7	290.7	62.2	78,800	73,300	68,100	152,200	143,900	136,000
190	299.0	168.2	285.3	60.2	68,800	64,000	59,400	139,200	131,800	124,900
200	292.3	177.7	279.4	58.2	59,900	55,600	51,500	127,500	121,000	114,800
210	285.1	187.3	273.0	56.1	51,800	47,900	44,300	117,100	111,200	105,700
220	277.4	196.8	266.1	54.0	44,400	41,000	37,700	107,600	102,400	97,400
230	269.0	206.4	258.6	51.8	37,600	34,600	31,600	99,000	94,300	89,800
240	260.0	216.0	250.5	49.6	31,400	28,700	26,100	91,100	86,900	82,800
250	250.2	225.7	241.7	47.2	25,700	23,200	20,900	83,900	80,000	76,300
260	239.5	235.3	232.1	44.8	20,400	18,200	16,100	77,200	73,700	70,400
270	227.9	245.0	221.6	42.2	15,400	13,400		71,000	67,900	64,800
280										
290										
300										
310										

# MLC650 VPC-MAX S-1



440,900 lb



360°

341.2 ft 28°					38.7 ft			60.0 ft		
ft	ft	ft	ft	°	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
50	372.4	40.6	347.9	84.8	341,600			341,600		
51	372.3	41.5	347.8	84.6	341,600			341,600		
54	371.9	44.3	347.5	84.2	341,600			341,600		
55	371.7	45.3	347.4	84.0	341,600			341,600		
60	371.0	49.9	346.8	83.2	341,600			341,600		
65	370.2	54.6	346.1	82.4	341,600			341,600		
70	369.3	59.3	345.4	81.6	341,600	277,700		341,600	277,700	
75	368.4	63.9	344.6	80.8	341,600	277,700	208,300	341,600	277,700	208,300
80	367.4	68.6	343.7	80.0	315,300	277,700	208,300	341,600	277,700	208,300
85	366.3	73.3	342.8	79.2	289,200	260,400	208,300	341,600	277,700	208,300
90	365.1	77.9	341.8	78.4	266,200	240,600	208,300	341,600	277,700	208,300
95	363.9	82.6	340.8	77.6	245,700	222,900	202,900	341,600	277,700	208,300
100	362.6	87.3	339.6	76.8	227,400	206,900	188,800	341,600	277,700	208,300
105	361.2	92.0	338.4	76.0	210,900	192,400	175,900	335,200	277,700	208,300
110	359.7	96.7	337.1	75.2	196,000	179,200	164,200	314,000	277,700	208,300
115	358.2	101.3	335.8	74.3	182,400	167,100	153,400	294,900	271,400	208,300
120	356.6	106.0	334.4	73.5	170,100	156,000	143,400	277,500	256,200	208,300
130	353.1	115.4	331.3	71.8	148,200	136,400	125,600	247,300	229,400	208,300
140	349.3	124.7	327.9	70.2	129,600	119,500	110,300	221,800	206,500	192,600
150	345.1	134.1	324.2	68.5	113,600	104,900	96,800	200,000	186,900	174,800
160	340.6	143.5	320.2	66.7	99,600	92,000	85,000	181,200	169,800	159,300
170	335.8	152.9	315.8	65.0	87,300	80,600	74,500	164,800	154,800	145,500
180	330.5	162.3	311.1	63.2	76,400	70,500	65,000	150,300	141,500	133,300
190	324.8	171.6	306.0	61.4	66,600	61,400	56,500	137,500	129,700	122,300
200	318.7	181.1	300.5	59.6	57,800	53,200	48,900	126,000	119,000	112,400
210	312.2	190.5	294.6	57.7	49,900	45,700	41,900	115,600	109,400	103,500
220	305.1	199.9	288.2	55.8	42,600	38,900	35,500	106,300	100,700	95,300
230	297.6	209.4	281.4	53.8	36,000	32,700	29,600	97,800	92,700	87,900
240	289.5	218.8	274.0	51.8	30,000	27,000	24,200	90,000	85,400	81,000
250	280.7	228.2	266.0	49.7	24,400	21,700	19,100	82,800	78,700	74,700
260	271.3	237.7	257.5	47.6	19,200	16,800	14,500	76,300	72,500	68,900
270	261.2	247.2	248.2	45.3	14,400	12,200		70,200	66,800	63,500
280	250.2	256.7	238.1	43.0				64,500	61,500	58,500
290	238.2	266.2	227.2	40.5				59,300	56,500	53,800
300	225.1	275.7	215.1	37.9				54,400	51,800	49,300
310	210.6	285.3	201.8	35.2				49,800	47,500	45,200
320	194.5	294.8	187.1	32.2				45,400	43,300	41,300
330	176.3	304.5	170.2	28.9				41,300	39,500	37,600

# MLC650 VPC-MAX S-1



ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
50										
51	371.3	39.3	348.0	85.0	292,800			292,800		
54	370.9	42.1	347.7	84.5	292,800			292,800		
55	370.7	43.0	347.6	84.4	292,800			292,800		
60	370.0	47.7	347.1	83.6	292,800			292,800		
65	369.2	52.4	346.4	82.8	292,800			292,800		
70	368.3	57.1	345.7	82.0	292,800	273,300		292,800	273,300	
75	367.4	61.7	345.0	81.2	292,800	273,300		292,800	273,300	
80	366.4	66.5	344.1	80.4	292,800	273,300	205,300	292,800	273,300	205,300
85	365.3	71.1	343.3	79.6	292,100	263,200	205,300	292,800	273,300	205,300
90	364.1	75.8	342.3	78.8	268,900	243,200	205,300	292,800	273,300	205,300
95	362.9	80.5	341.2	78.0	248,200	225,300	205,200	292,800	273,300	205,300
100	361.6	85.2	340.1	77.1	229,800	209,100	190,900	292,800	273,300	205,300
105	360.2	89.9	339.0	76.3	213,200	194,500	178,000	292,800	273,300	205,300
110	358.7	94.6	337.7	75.5	198,100	181,200	166,100	292,800	273,300	205,300
115	357.1	99.3	336.4	74.7	184,400	169,000	155,200	292,800	273,000	205,300
120	355.5	104.1	335.0	73.9	171,900	157,800	145,100	279,000	257,600	205,300
130	352.0	113.4	332.0	72.2	149,900	138,000	127,200	248,600	230,600	205,300
140	348.2	122.9	328.6	70.5	131,200	121,000	111,700	223,000	207,700	193,800
150	344.0	132.3	325.0	68.8	115,000	106,200	98,100	201,100	188,000	175,900
160	339.5	141.7	321.0	67.1	100,900	93,200	86,200	182,200	170,800	160,200
170	334.6	151.1	316.7	65.3	88,400	81,800	75,500	165,700	155,700	146,400
180	329.3	160.6	312.0	63.5	77,400	71,500	66,000	151,100	142,300	134,000
190	323.6	170.1	306.9	61.7	67,600	62,300	57,500	138,200	130,400	123,000
200	317.5	179.5	301.5	59.9	58,700	54,000	49,700	126,600	119,700	113,100
210	310.9	189.0	295.5	58.0	50,700	46,500	42,600	116,200	110,000	104,100
220	303.9	198.5	289.2	56.1	43,400	39,700	36,100	106,800	101,200	95,900
230	296.3	208.0	282.4	54.1	36,700	33,400	30,200	98,300	93,200	88,400
240	288.1	217.5	275.0	52.1	30,600	27,600	24,700	90,400	85,900	81,500
250	279.4	227.1	267.0	50.0	24,900	22,200	19,600	83,300	79,100	75,100
260	269.9	236.6	258.5	47.8	19,700	17,200	14,900	76,600	72,900	69,300
270	259.7	246.2	249.2	45.6	14,800	12,600		70,500	67,100	63,800
280	248.6	255.8	239.1	43.2				64,800	61,700	58,700
290	236.6	265.4	228.1	40.7				59,500	56,700	54,000
300	223.4	275.0	216.0	38.1				54,600	52,000	49,500
310	208.8	284.7	202.6	35.3				49,900	47,600	45,400
320										
330										

# MLC650 VPC-MAX S-1



ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
50										
51										
54	369.5	39.9	348.0	84.9	244,000			244,000		
55	369.4	40.8	347.9	84.8	244,000			244,000		
60	368.6	45.5	347.3	84.0	244,000			244,000		
65	367.8	50.2	346.7	83.2	244,000			244,000		
70	367.0	55.0	346.1	82.4	244,000			244,000		
75	366.0	59.6	345.3	81.6	244,000	244,000		244,000	244,000	
80	365.0	64.4	344.5	80.7	244,000	244,000	202,500	244,000	244,000	202,500
85	363.9	69.1	343.7	79.9	244,000	244,000	202,500	244,000	244,000	202,500
90	362.7	73.8	342.7	79.1	244,000	244,000	202,500	244,000	244,000	202,500
95	361.5	78.5	341.7	78.3	244,000	227,600	202,500	244,000	244,000	202,500
100	360.2	83.2	340.6	77.5	232,100	211,400	193,100	244,000	244,000	202,500
105	358.8	88.0	339.5	76.7	215,300	196,600	180,000	244,000	244,000	202,500
110	357.3	92.7	338.2	75.9	200,100	183,200	168,000	244,000	244,000	202,500
115	355.7	97.4	336.9	75.0	186,300	170,900	157,000	244,000	244,000	202,500
120	354.1	102.1	335.6	74.2	173,700	159,600	146,800	244,000	244,000	202,500
130	350.6	111.6	332.6	72.5	151,600	139,600	128,700	244,000	231,900	202,500
140	346.8	121.1	329.3	70.8	132,600	122,400	113,100	224,100	208,800	194,900
150	342.6	130.6	325.7	69.1	116,300	107,500	99,400	202,100	189,000	176,800
160	338.0	140.1	321.7	67.4	102,100	94,400	87,300	183,100	171,700	161,100
170	333.1	149.6	317.4	65.6	89,500	82,800	76,500	166,500	156,500	147,200
180	327.8	159.1	312.8	63.8	78,400	72,500	66,900	151,900	143,000	134,800
190	322.1	168.6	307.7	62.0	68,400	63,200	58,300	138,900	131,000	123,700
200	315.9	178.2	302.3	60.2	59,500	54,800	50,400	127,200	120,300	113,700
210	309.3	187.7	296.4	58.3	51,400	47,200	43,300	116,800	110,500	104,600
220	302.2	197.3	290.0	56.3	44,000	40,300	36,700	107,300	101,700	96,400
230	294.6	206.9	283.2	54.3	37,300	33,900	30,700	98,700	93,600	88,800
240	286.4	216.5	275.8	52.3	31,100	28,100	25,200	90,800	86,300	81,900
250	277.5	226.2	267.8	50.2	25,400	22,600	20,100	83,600	79,500	75,500
260	268.0	235.8	259.2	48.0	20,100	17,600	15,300	76,900	73,200	69,600
270	257.7	245.5	249.9	45.7	15,100	12,900		70,800	67,400	64,100
280	246.6	255.2	239.8	43.4				65,000	61,900	58,900
290										
300										
310										
320										
330										

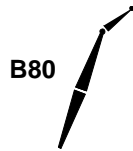
# MLC650 VPC-MAX S-1



ft	ft	ft	ft	°	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
51	392.1	41.6	367.6	84.9	341,600			341,600		
53	391.8	43.5	367.4	84.6	341,600			341,600		
55	391.6	45.4	367.2	84.3	341,600			341,600		
60	390.9	50.1	366.6	83.6	341,600			341,600		
65	390.1	54.8	366.0	82.8	341,600			341,600		
70	389.3	59.4	365.3	82.1	341,600			341,600		
75	388.4	64.1	364.6	81.3	336,900	240,800		341,600	240,800	
80	387.5	68.8	363.7	80.5	306,900	240,800	180,800	341,600	240,800	180,800
85	386.4	73.5	362.9	79.8	280,700	240,800	180,800	341,600	240,800	180,800
90	385.3	78.2	361.9	79.0	257,500	230,400	180,800	341,600	240,800	180,800
95	384.2	82.9	360.9	78.3	236,900	212,700	180,800	341,600	240,800	180,800
100	382.9	87.6	359.8	77.5	218,400	196,700	177,600	341,600	240,800	180,800
105	381.6	92.2	358.7	76.7	201,800	182,200	164,800	328,900	240,800	180,800
110	380.2	96.9	357.5	75.9	186,800	169,000	153,100	307,500	240,800	180,800
115	378.8	101.6	356.2	75.2	173,100	156,800	142,300	288,300	240,800	180,800
120	377.3	106.3	354.9	74.4	160,600	145,700	132,400	270,800	240,800	180,800
130	374.0	115.8	351.9	72.8	138,600	126,000	114,600	240,400	221,500	180,800
140	370.4	125.1	348.8	71.2	119,800	109,000	99,200	214,800	198,600	180,800
150	366.5	134.5	345.3	69.6	103,600	94,300	85,800	192,900	179,000	166,300
160	362.2	144.0	341.5	68.0	89,500	81,400	73,900	173,900	161,900	150,800
170	357.7	153.4	337.4	66.4	77,100	70,000	63,400	157,400	146,800	137,000
180	352.7	162.8	332.9	64.7	66,000	59,800	54,000	142,900	133,500	124,800
190	347.4	172.2	328.2	63.0	56,200	50,700	45,500	129,900	121,700	113,900
200	341.8	181.6	323.0	61.3	47,400	42,400	37,800	118,400	111,000	104,000
210	335.7	191.1	317.5	59.6	39,400	34,900	30,800	108,000	101,400	95,100
220	329.2	200.5	311.6	57.8	32,100	28,100	24,400	98,600	92,600	87,000
230	322.2	210.0	305.2	56.0	25,500	21,900	18,500	90,100	84,700	79,500
240	314.7	219.4	298.4	54.1	19,400	16,200	13,100	82,300	77,400	72,700
250	306.7	228.9	291.1	52.2	13,800			75,100	70,700	66,400
260	298.2	238.4	283.3	50.3				68,500	64,500	60,600
270	289.0	247.9	274.9	48.2				62,400	58,700	55,200
280	279.1	257.4	265.9	46.1				56,800	53,400	50,200
290	268.5	266.9	256.1	44.0				51,500	48,400	45,500
300	257.0	276.4	245.5	41.7				46,600	43,800	41,100
310	244.6	286.0	234.0	39.3				42,000	39,400	37,000
320	230.9	295.5	221.5	36.8				37,700	35,400	33,100
330	215.9	305.1	207.6	34.1				33,600	31,500	29,400
340	199.2	314.7	192.2	31.2				29,800	27,800	26,000
350	180.3	324.4	174.7	28.0				26,100	24,400	22,700



# MLC650 VPC-MAX S-1



440,900 lb



360°

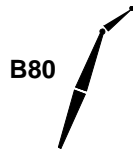
360.9 ft					35°					
					38.7 ft			60.0 ft		
ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
51										
53	390.8	41.3	367.6	85.0	292,800			292,800		
55	390.6	43.1	367.4	84.7	292,800			292,800		
60	389.9	47.8	366.9	83.9	292,800			292,800		
65	389.1	52.5	366.3	83.2	292,800			292,800		
70	388.3	57.3	365.6	82.4	292,800			292,800		
75	387.4	62.0	364.9	81.6	292,800	237,900		292,800	237,900	
80	386.4	66.7	364.1	80.9	292,800	237,900	178,600	292,800	237,900	178,600
85	385.4	71.4	363.3	80.1	283,900	237,900	178,600	292,800	237,900	178,600
90	384.3	76.0	362.4	79.4	260,500	233,300	178,600	292,800	237,900	178,600
95	383.1	80.8	361.4	78.6	239,700	215,400	178,600	292,800	237,900	178,600
100	381.9	85.5	360.3	77.8	221,100	199,200	178,600	292,800	237,900	178,600
105	380.6	90.2	359.2	77.1	204,300	184,500	167,100	292,800	237,900	178,600
110	379.2	94.9	358.0	76.3	189,200	171,200	155,300	292,800	237,900	178,600
115	377.7	99.6	356.8	75.5	175,400	159,000	144,400	290,100	237,900	178,600
120	376.2	104.4	355.4	74.7	162,700	147,700	134,300	272,500	237,900	178,600
130	372.9	113.8	352.6	73.1	140,500	127,800	116,400	241,900	222,900	178,600
140	369.3	123.2	349.4	71.6	121,500	110,700	100,800	216,100	200,000	178,600
150	365.4	132.7	346.0	70.0	105,200	95,800	87,200	194,100	180,200	167,400
160	361.1	142.1	342.3	68.3	90,900	82,800	75,300	175,100	163,000	151,800
170	356.5	151.6	338.2	66.7	78,400	71,200	64,600	158,400	147,800	138,000
180	351.6	161.1	333.8	65.0	67,200	60,900	55,100	143,800	134,400	125,700
190	346.3	170.5	329.0	63.3	57,300	51,700	46,500	130,800	122,500	114,700
200	340.6	180.0	323.9	61.6	48,400	43,400	38,700	119,200	111,800	104,800
210	334.5	189.5	318.4	59.9	40,300	35,800	31,700	108,700	102,100	95,800
220	327.9	199.1	312.5	58.1	33,000	29,000	25,200	99,300	93,300	87,600
230	320.9	208.6	306.2	56.3	26,300	22,700	19,200	90,700	85,300	80,100
240	313.4	218.1	299.4	54.4	20,100	16,900	13,800	82,800	77,900	73,200
250	305.4	227.6	292.1	52.5	14,400			75,600	71,100	66,900
260	296.8	237.2	284.3	50.5				69,000	64,900	61,000
270	287.6	246.8	275.9	48.5				62,800	59,100	55,600
280	277.7	256.4	266.8	46.4				57,100	53,800	50,500
290	267.0	266.0	257.1	44.2				51,800	48,800	45,800
300	255.5	275.6	246.5	41.9				46,900	44,100	41,300
310	242.9	285.2	235.0	39.5				42,200	39,700	37,200
320	229.2	294.9	222.3	37.0				37,900	35,500	33,300
330										
340										
350										

# MLC650 VPC-MAX S-1



ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
51										
53										
55	389.2	40.9	367.7	85.0	244,000			244,000		
60	388.5	45.6	367.1	84.3	244,000			244,000		
65	387.8	50.4	366.6	83.5	244,000			244,000		
70	386.9	55.1	365.9	82.8	244,000			244,000		
75	386.0	59.8	365.2	82.0	244,000	235,300		244,000	235,300	
80	385.1	64.5	364.5	81.2	244,000	235,300		244,000	235,300	
85	384.0	69.3	363.7	80.5	244,000	235,300	176,800	244,000	235,300	176,800
90	382.9	74.0	362.8	79.7	244,000	235,300	176,800	244,000	235,300	176,800
95	381.7	78.7	361.8	78.9	242,500	218,000	176,800	244,000	235,300	176,800
100	380.5	83.5	360.8	78.2	223,700	201,700	176,800	244,000	235,300	176,800
105	379.2	88.2	359.7	77.4	206,800	186,900	169,300	244,000	235,300	176,800
110	377.8	92.9	358.5	76.6	191,500	173,400	157,400	244,000	235,300	176,800
115	376.3	97.7	357.3	75.8	177,500	161,100	146,400	244,000	235,300	176,800
120	374.8	102.4	356.0	75.0	164,800	149,700	136,200	244,000	235,300	176,800
130	371.5	111.9	353.2	73.5	142,300	129,600	118,100	243,300	224,300	176,800
140	367.9	121.4	350.1	71.9	123,200	112,300	102,400	217,400	201,200	176,800
150	363.9	130.9	346.7	70.3	106,700	97,300	88,600	195,300	181,300	168,500
160	359.7	140.4	342.9	68.6	92,300	84,100	76,500	176,100	164,000	152,800
170	355.0	150.0	338.9	67.0	79,600	72,400	65,800	159,400	148,800	138,900
180	350.1	159.5	334.5	65.3	68,400	62,000	56,100	144,700	135,300	126,500
190	344.7	169.0	329.8	63.6	58,300	52,700	47,400	131,600	123,200	115,400
200	339.0	178.6	324.7	61.9	49,300	44,300	39,600	119,900	112,400	105,500
210	332.9	188.2	319.2	60.1	41,100	36,700	32,400	109,400	102,700	96,400
220	326.3	197.7	313.4	58.3	33,700	29,700	25,900	99,800	93,800	88,100
230	319.3	207.4	307.0	56.5	26,900	23,300	19,900	91,200	85,800	80,600
240	311.7	217.0	300.2	54.6	20,700	17,400	14,300	83,300	78,400	73,700
250	303.7	226.6	292.9	52.7	15,000	12,000		76,000	71,600	67,300
260	295.0	236.2	285.1	50.7				69,300	65,300	61,400
270	285.7	245.9	276.7	48.7				63,100	59,400	55,900
280	275.8	255.6	267.6	46.5				57,400	54,000	50,800
290	265.0	265.3	257.8	44.3				52,100	49,000	46,000
300	253.3	275.0	247.1	42.0				47,100	44,300	41,500
310										
320										
330										
340										
350										

# MLC650 VPC-MAX S-1



440,900 lb



360°

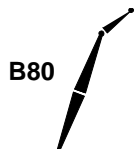
370.7 ft                  28°					38.7 ft			60.0 ft		
ft	ft	ft	ft	°	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
52	401.9	42.6	377.3	84.9	323,900			323,900		
54	401.6	44.5	377.1	84.6	323,900			323,900		
55	401.5	45.5	377.0	84.5	323,900			323,900		
56	401.4	46.4	376.9	84.3	323,900			323,900		
60	400.8	50.1	376.5	83.7	323,900			323,900		
65	400.1	54.9	375.9	83.0	323,900			323,900		
70	399.3	59.5	375.2	82.3	323,900			323,900		
75	398.4	64.2	374.5	81.5	323,900	223,500		323,900	223,500	
80	397.5	68.9	373.7	80.8	306,800	223,500	167,700	323,900	223,500	167,700
85	396.5	73.6	372.8	80.0	280,500	223,500	167,700	323,900	223,500	167,700
90	395.4	78.3	371.9	79.3	257,300	223,500	167,700	323,900	223,500	167,700
95	394.3	83.0	370.9	78.5	236,700	211,800	167,700	323,900	223,500	167,700
100	393.1	87.7	369.9	77.8	218,100	195,800	167,700	323,900	223,500	167,700
105	391.8	92.4	368.8	77.1	201,400	181,300	163,500	323,900	223,500	167,700
110	390.5	97.1	367.6	76.3	186,400	168,000	151,900	307,300	223,500	167,700
115	389.0	101.8	366.3	75.5	172,600	155,900	141,100	288,000	223,500	167,700
120	387.6	106.5	365.0	74.8	160,100	144,800	131,200	270,600	223,500	167,700
130	384.4	115.9	362.2	73.3	138,100	125,200	113,500	240,100	220,700	167,700
140	380.9	125.3	359.1	71.7	119,300	108,200	98,200	214,500	197,900	167,700
150	377.1	134.7	355.7	70.2	103,100	93,500	84,800	192,600	178,300	165,300
160	373.0	144.1	352.0	68.6	89,000	80,600	73,000	173,600	161,200	149,900
170	368.5	153.6	348.0	67.0	76,600	69,200	62,500	157,100	146,200	136,200
180	363.7	163.0	343.7	65.4	65,500	59,100	53,100	142,500	133,000	124,000
190	358.6	172.4	339.1	63.8	55,700	50,000	44,700	129,600	121,100	113,100
200	353.1	181.9	334.1	62.1	46,900	41,800	37,000	118,100	110,500	103,300
210	347.2	191.3	328.7	60.4	38,900	34,300	30,000	107,700	100,900	94,400
220	341.0	200.8	323.0	58.7	31,600	27,500	23,600	98,300	92,100	86,300
230	334.2	210.2	316.9	57.0	25,000	21,300	17,800	89,700	84,200	78,900
240	327.1	219.7	310.3	55.2	18,900	15,600	12,400	81,900	76,900	72,100
250	319.4	229.2	303.3	53.3	13,300			74,800	70,200	65,800
260	311.2	238.7	295.8	51.5				68,200	64,000	60,000
270	302.4	248.2	287.8	49.5				62,100	58,300	54,600
280	293.0	257.7	279.2	47.5				56,500	53,000	49,600
290	283.0	267.2	269.9	45.5				51,200	48,000	44,900
300	272.1	276.7	259.9	43.3				46,300	43,400	40,600
310	260.4	286.3	249.1	41.1				41,700	39,100	36,500
320	247.7	295.8	237.3	38.7				37,400	35,000	32,600
330	233.8	305.4	224.5	36.3				33,400	31,100	29,000
340	218.5	315.0	210.4	33.6				29,500	27,500	25,500
350	201.5	324.6	194.7	30.7				25,900	24,100	22,300

# MLC650 VPC-MAX S-1



ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
52										
54	400.6	42.3	377.4	85.0	292,800			292,800		
55	400.5	43.2	377.3	84.8	292,800			292,800		
56	400.4	44.1	377.2	84.7	292,800			292,800		
60	399.8	47.9	376.8	84.1	292,800			292,800		
65	399.1	52.6	376.2	83.3	292,800			292,800		
70	398.3	57.3	375.5	82.6	292,800			292,800		
75	397.4	62.0	374.8	81.9	292,800	220,900		292,800	220,900	
80	396.5	66.7	374.1	81.1	292,800	220,900		292,800	220,900	
85	395.5	71.5	373.2	80.4	283,800	220,900	165,900	292,800	220,900	165,900
90	394.4	76.1	372.3	79.6	260,400	220,900	165,900	292,800	220,900	165,900
95	393.2	80.9	371.4	78.9	239,500	214,600	165,900	292,800	220,900	165,900
100	392.0	85.6	370.3	78.1	220,800	198,400	165,900	292,800	220,900	165,900
105	390.8	90.3	369.3	77.4	204,000	183,700	165,800	292,800	220,900	165,900
110	389.4	95.0	368.1	76.6	188,800	170,300	154,000	292,800	220,900	165,900
115	388.0	99.7	366.9	75.9	174,900	158,100	143,200	289,800	220,900	165,900
120	386.5	104.5	365.6	75.1	162,300	146,900	133,200	272,300	220,900	165,900
130	383.3	113.9	362.8	73.6	140,000	127,000	115,300	241,600	220,900	165,900
140	379.8	123.4	359.8	72.0	121,100	109,900	99,800	215,800	199,300	165,900
150	376.0	132.8	356.4	70.5	104,700	95,100	86,300	193,800	179,500	165,900
160	371.9	142.3	352.7	68.9	90,400	82,100	74,400	174,800	162,300	150,900
170	367.4	151.8	348.8	67.3	77,900	70,500	63,700	158,100	147,200	137,200
180	362.6	161.2	344.5	65.7	66,800	60,300	54,300	143,500	133,900	124,900
190	357.5	170.7	339.9	64.1	56,800	51,100	45,700	130,500	121,900	114,000
200	352.0	180.3	335.0	62.4	47,900	42,800	38,000	118,900	111,200	104,100
210	346.1	189.8	329.6	60.7	39,800	35,200	30,900	108,400	101,600	95,100
220	339.7	199.3	324.0	59.0	32,500	28,400	24,500	99,000	92,800	86,900
230	333.0	208.8	317.8	57.2	25,800	22,100	18,500	90,400	84,800	79,500
240	325.8	218.3	311.3	55.4	19,700	16,300	13,100	82,500	77,400	72,600
250	318.1	227.9	304.3	53.6	14,000			75,300	70,700	66,300
260	309.9	237.4	296.8	51.7				68,700	64,500	60,500
270	301.1	247.0	288.8	49.8				62,500	58,700	55,000
280	291.6	256.6	280.1	47.8				56,800	53,300	50,000
290	281.5	266.2	270.9	45.7				51,600	48,400	45,300
300	270.6	275.9	260.8	43.5				46,600	43,700	40,900
310	258.8	285.5	250.0	41.3				42,000	39,300	36,700
320	246.0	295.1	238.3	38.9				37,600	35,200	32,800
330	232.0	304.8	225.3	36.4				33,500	31,300	29,100
340										
350										

# MLC650 VPC-MAX S-1



440,900 lb



360°

ft	ft	ft	ft	ft	0°	1°	2°	0°	1°	2°
					lb	lb	lb	lb	lb	lb
52										
54										
55										
56	399.0	41.9	377.4	85.0	244,000			244,000		
60	398.4	45.7	377.0	84.4	244,000			244,000		
65	397.7	50.4	376.5	83.7	244,000			244,000		
70	396.9	55.1	375.8	82.9	244,000			244,000		
75	396.0	59.9	375.1	82.2	244,000			244,000		
80	395.1	64.6	374.4	81.5	244,000	218,900		244,000	218,900	
85	394.1	69.3	373.6	80.7	244,000	218,900	164,200	244,000	218,900	164,200
90	393.0	74.1	372.7	80.0	244,000	218,900	164,200	244,000	218,900	164,200
95	391.9	78.8	371.8	79.2	242,300	217,200	164,200	244,000	218,900	164,200
100	390.6	83.5	370.8	78.5	223,500	200,900	164,200	244,000	218,900	164,200
105	389.4	88.3	369.7	77.7	206,500	186,100	164,200	244,000	218,900	164,200
110	388.0	93.0	368.6	77.0	191,100	172,600	156,200	244,000	218,900	164,200
115	386.6	97.7	367.4	76.2	177,100	160,200	145,200	244,000	218,900	164,200
120	385.1	102.5	366.1	75.4	164,400	148,900	135,100	244,000	218,900	164,200
130	381.9	112.0	363.4	73.9	141,900	128,800	117,000	243,100	218,900	164,200
140	378.3	121.5	360.4	72.3	122,700	111,500	101,400	217,100	200,600	164,200
150	374.5	131.1	357.0	70.8	106,200	96,500	87,700	195,000	180,700	164,200
160	370.4	140.6	353.4	69.2	91,800	83,400	75,600	175,800	163,400	152,000
170	365.9	150.1	349.5	67.6	79,100	71,700	64,900	159,100	148,200	138,100
180	361.1	159.7	345.3	66.0	67,900	61,400	55,300	144,400	134,700	125,800
190	355.9	169.2	340.7	64.3	57,900	52,100	46,700	131,300	122,700	114,700
200	350.4	178.7	335.8	62.7	48,800	43,700	38,800	119,600	111,900	104,800
210	344.5	188.3	330.5	61.0	40,700	36,100	31,700	109,100	102,200	95,700
220	338.1	197.9	324.8	59.2	33,300	29,100	25,200	99,600	93,400	87,500
230	331.3	207.5	318.7	57.5	26,500	22,700	19,200	90,900	85,300	80,000
240	324.1	217.1	312.2	55.7	20,300	16,900	13,700	83,000	77,900	73,100
250	316.4	226.8	305.2	53.8	14,600			75,700	71,100	66,700
260	308.1	236.4	297.6	51.9				69,100	64,900	60,800
270	299.2	246.1	289.6	50.0				62,900	59,000	55,400
280	289.7	255.8	280.9	47.9				57,100	53,600	50,300
290	279.5	265.4	271.7	45.9				51,800	48,600	45,500
300	268.5	275.2	261.6	43.7				46,800	43,900	41,100
310	256.6	284.9	250.7	41.4				42,200	39,500	36,900
320										
330										
340										
350										

# MLC650 VPC-MAX S-1



ft	ft	ft	ft	°	 0° lb	 1° lb	 2° lb	 0° lb	 1° lb	 2° lb
52	411.8	42.7	387.3	85.0	303,400			303,400		
55	411.4	45.5	387.0	84.6	303,400			303,400		
57	411.2	47.4	386.8	84.3	303,400			303,400		
60	410.8	50.2	386.4	83.9	303,400			303,400		
65	410.1	54.9	385.9	83.2	303,400			303,400		
70	409.3	59.6	385.2	82.4	303,400			303,400		
75	408.4	64.3	384.5	81.7	303,400	206,300		303,400	206,300	
80	407.5	69.0	383.7	81.0	303,400	206,300	154,800	303,400	206,300	154,800
85	406.5	73.7	382.9	80.3	278,900	206,300	154,800	303,400	206,300	154,800
90	405.5	78.4	382.0	79.6	255,600	206,300	154,800	303,400	206,300	154,800
95	404.4	83.1	381.0	78.8	234,800	206,300	154,800	303,400	206,300	154,800
100	403.2	87.8	380.0	78.1	216,300	193,400	154,800	303,400	206,300	154,800
105	402.0	92.5	378.9	77.4	199,600	178,900	154,800	303,400	206,300	154,800
110	400.7	97.2	377.8	76.6	184,500	165,700	149,100	303,400	206,300	154,800
115	399.3	102.0	376.5	75.9	170,700	153,600	138,400	286,700	206,300	154,800
120	397.8	106.6	375.3	75.2	158,200	142,500	128,500	269,200	206,300	154,800
130	394.7	116.1	372.5	73.7	136,100	122,900	110,900	238,700	206,300	154,800
140	391.3	125.5	369.5	72.2	117,300	106,000	95,700	213,100	196,200	154,800
150	387.6	135.0	366.2	70.7	101,100	91,300	82,300	191,100	176,600	154,800
160	383.6	144.4	362.6	69.2	87,000	78,400	70,600	172,200	159,500	147,900
170	379.3	153.8	358.7	67.6	74,500	67,000	60,100	155,700	144,500	134,200
180	374.7	163.3	354.5	66.0	63,500	56,900	50,700	141,100	131,200	122,100
190	369.7	172.7	350.0	64.5	53,700	47,800	42,300	128,200	119,400	111,300
200	364.4	182.1	345.2	62.9	44,800	39,600	34,700	116,600	108,800	101,500
210	358.7	191.6	340.0	61.2	36,800	32,100	27,700	106,200	99,200	92,600
220	352.6	201.1	334.5	59.6	29,600	25,300	21,300	96,800	90,500	84,500
230	346.1	210.5	328.6	57.9	23,000	19,100	15,500	88,300	82,500	77,100
240	339.2	220.1	322.2	56.2	16,900	13,400		80,500	75,300	70,300
250	331.8	229.5	315.4	54.4				73,300	68,600	64,000
260	324.0	239.0	308.2	52.6				66,700	62,400	58,300
270	315.6	248.5	300.5	50.7				60,600	56,700	52,900
280	306.6	258.1	292.2	48.8				55,000	51,400	47,900
290	297.0	267.6	283.4	46.9				49,700	46,400	43,200
300	286.7	277.1	274.0	44.8				44,800	41,800	38,900
310	275.6	286.6	263.7	42.7				40,200	37,500	34,800
320	263.7	296.2	252.7	40.5				35,900	33,400	30,900
330	250.7	305.8	240.7	38.2				31,900	29,600	27,300
340	236.6	315.4	227.6	35.7				28,100	25,900	23,900
350	221.0	325.0	213.2	33.1				24,500	22,500	20,600
360	203.7	334.7	197.1	30.3				21,000	19,300	17,500

# MLC650 VPC-MAX S-1



380.6 ft 35°					38.7 ft			60.0 ft		
ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
52										
55	410.4	43.3	387.2	84.9	292,800			292,800		
57	410.1	45.2	387.0	84.6	292,800			292,800		
60	409.7	48.0	386.7	84.2	292,800			292,800		
65	409.0	52.7	386.1	83.5	292,800			292,800		
70	408.2	57.4	385.5	82.8	292,800			292,800		
75	407.4	62.1	384.8	82.1	292,800			292,800		
80	406.5	66.8	384.1	81.3	292,800	204,300		292,800	204,300	
85	405.5	71.6	383.3	80.6	282,300	204,300	153,300	292,800	204,300	153,300
90	404.5	76.2	382.4	79.9	258,700	204,300	153,300	292,800	204,300	153,300
95	403.3	81.0	381.5	79.2	237,800	204,300	153,300	292,800	204,300	153,300
100	402.2	85.7	380.5	78.4	219,100	196,000	153,300	292,800	204,300	153,300
105	400.9	90.4	379.4	77.7	202,200	181,400	153,300	292,800	204,300	153,300
110	399.6	95.2	378.3	77.0	186,900	168,000	151,300	292,800	204,300	153,300
115	398.2	99.9	377.1	76.2	173,100	155,800	140,500	288,500	204,300	153,300
120	396.8	104.6	375.8	75.5	160,400	144,600	130,600	271,000	204,300	153,300
130	393.7	114.1	373.1	74.0	138,100	124,800	112,800	240,300	204,300	153,300
140	390.2	123.5	370.1	72.5	119,100	107,700	97,300	214,500	197,500	153,300
150	386.5	133.0	366.9	71.0	102,700	92,900	83,800	192,400	177,800	153,300
160	382.5	142.5	363.3	69.5	88,500	79,900	72,000	173,400	160,600	149,000
170	378.2	152.0	359.5	67.9	75,900	68,300	61,400	156,700	145,600	135,300
180	373.6	161.5	355.3	66.3	64,800	58,100	51,900	142,100	132,200	123,000
190	368.6	171.0	350.9	64.8	54,800	48,900	43,400	129,000	120,300	112,100
200	363.2	180.5	346.1	63.1	45,900	40,600	35,700	117,400	109,600	102,200
210	357.5	190.0	340.9	61.5	37,800	33,100	28,600	107,000	99,900	93,300
220	351.4	199.5	335.4	59.8	30,500	26,200	22,200	97,500	91,100	85,200
230	344.9	209.1	329.5	58.1	23,800	19,900	16,300	88,900	83,100	77,700
240	338.0	218.6	323.2	56.4	17,600	14,100		81,000	75,800	70,900
250	330.6	228.2	316.4	54.6	12,000			73,800	69,100	64,600
260	322.7	237.8	309.2	52.8				67,200	62,900	58,700
270	314.2	247.4	301.5	51.0				61,100	57,100	53,300
280	305.2	256.9	293.3	49.1				55,400	51,800	48,300
290	295.6	266.5	284.4	47.1				50,100	46,800	43,600
300	285.2	276.2	274.9	45.0				45,100	42,100	39,200
310	274.1	285.8	264.7	42.9				40,500	37,700	35,000
320	262.1	295.5	253.6	40.7				36,200	33,600	31,200
330	249.0	305.1	241.6	38.4				32,100	29,800	27,500
340	234.8	314.8	228.4	35.9				28,200	26,100	24,000

# MLC650 VPC-MAX S-1



ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
52										
55										
57	408.8	42.9	387.3	85.0	244,000			244,000		
60	408.4	45.8	387.0	84.6	244,000			244,000		
65	407.7	50.5	386.4	83.8	244,000			244,000		
70	406.9	55.2	385.8	83.1	244,000			244,000		
75	406.0	59.9	385.1	82.4	244,000			244,000		
80	405.1	64.7	384.4	81.7	244,000	202,400		244,000	202,400	
85	404.1	69.4	383.6	80.9	244,000	202,400	151,900	244,000	202,400	151,900
90	403.1	74.2	382.8	80.2	244,000	202,400	151,900	244,000	202,400	151,900
95	401.9	78.9	381.9	79.5	240,700	202,400	151,900	244,000	202,400	151,900
100	400.8	83.6	380.9	78.8	221,800	198,600	151,900	244,000	202,400	151,900
105	399.5	88.4	379.9	78.0	204,700	183,800	151,900	244,000	202,400	151,900
110	398.2	93.2	378.7	77.3	189,300	170,300	151,900	244,000	202,400	151,900
115	396.8	97.9	377.6	76.5	175,300	158,000	142,600	244,000	202,400	151,900
120	395.4	102.7	376.3	75.8	162,500	146,700	132,500	244,000	202,400	151,900
130	392.2	112.2	373.7	74.3	140,000	126,600	114,500	241,800	202,400	151,900
140	388.8	121.7	370.7	72.8	120,900	109,300	98,900	215,800	198,800	151,900
150	385.1	131.2	367.5	71.3	104,300	94,400	85,300	193,600	179,000	151,900
160	381.1	140.8	364.0	69.7	89,900	81,200	73,300	174,500	161,700	150,000
170	376.7	150.3	360.2	68.2	77,200	69,600	62,600	157,700	146,500	136,200
180	372.1	159.8	356.1	66.6	66,000	59,200	53,000	143,000	133,100	123,900
190	367.1	169.4	351.6	65.0	55,900	49,900	44,400	129,900	121,100	112,900
200	361.7	179.0	346.8	63.4	46,900	41,500	36,600	118,200	110,300	103,000
210	355.9	188.6	341.7	61.8	38,700	33,900	29,500	107,600	100,600	93,900
220	349.8	198.2	336.2	60.1	31,300	27,000	23,000	98,100	91,800	85,700
230	343.3	207.8	330.3	58.4	24,500	20,600	17,000	89,500	83,700	78,200
240	336.3	217.4	324.0	56.6	18,300	14,800		81,500	76,300	71,400
250	328.9	227.0	317.3	54.9	12,600			74,300	69,500	65,000
260	320.9	236.7	310.1	53.0				67,600	63,300	59,100
270	312.4	246.3	302.3	51.2				61,400	57,500	53,700
280	303.4	256.0	294.1	49.3				55,700	52,100	48,600
290	293.6	265.7	285.2	47.3				50,400	47,000	43,800
300	283.2	275.4	275.7	45.2				45,400	42,300	39,400
310	272.0	285.1	265.4	43.1				40,700	37,900	35,200
320										
330										
340										
350										
360										



# MLC650 VPC-MAX S-1



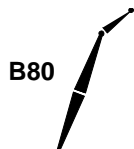
ft	ft	ft	ft	°	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
53	421.6	43.7	397.0	85.0	285,900			285,900		
55	421.3	45.5	396.8	84.7	285,900			285,900		
56	421.2	46.5	396.7	84.6	285,900			285,900		
58	421.0	48.4	396.5	84.3	285,900			285,900		
60	420.7	50.3	396.3	84.0	285,900			285,900		
65	420.0	55.0	395.7	83.3	285,900			285,900		
70	419.2	59.7	395.1	82.6	285,900			285,900		
75	418.4	64.4	394.4	81.9	285,900	193,100		285,900	193,100	
80	417.5	69.1	393.6	81.2	285,900	193,100		285,900	193,100	
85	416.6	73.8	392.8	80.5	280,200	193,100	144,900	285,900	193,100	144,900
90	415.6	78.5	391.9	79.8	256,900	193,100	144,900	285,900	193,100	144,900
95	414.5	83.2	391.0	79.1	236,100	193,100	144,900	285,900	193,100	144,900
100	413.3	87.9	390.0	78.4	217,600	193,100	144,900	285,900	193,100	144,900
105	412.1	92.6	388.9	77.7	200,900	179,700	144,900	285,900	193,100	144,900
110	410.8	97.4	387.8	77.0	185,800	166,600	144,900	285,900	193,100	144,900
115	409.5	102.1	386.6	76.3	172,100	154,500	139,000	285,800	193,100	144,900
120	408.1	106.8	385.4	75.5	159,500	143,500	129,200	270,300	193,100	144,900
130	405.1	116.2	382.7	74.1	137,500	123,900	111,700	239,800	193,100	144,900
140	401.7	125.6	379.8	72.6	118,700	107,000	96,500	214,100	193,100	144,900
150	398.2	135.1	376.5	71.2	102,500	92,400	83,200	192,200	177,300	144,900
160	394.3	144.6	373.0	69.7	88,300	79,600	71,500	173,300	160,300	144,800
170	390.1	154.0	369.3	68.2	75,900	68,200	61,100	156,700	145,300	134,800
180	385.6	163.5	365.2	66.7	64,900	58,100	51,800	142,200	132,100	122,800
190	380.8	172.9	360.8	65.1	55,100	49,000	43,400	129,200	120,300	111,900
200	375.6	182.4	356.1	63.6	46,200	40,800	35,800	117,700	109,700	102,200
210	370.1	191.9	351.1	62.0	38,300	33,400	28,900	107,300	100,100	93,300
220	364.2	201.3	345.7	60.4	31,000	26,600	22,500	97,900	91,400	85,300
230	357.9	210.8	340.0	58.7	24,400	20,400	16,700	89,400	83,500	77,900
240	351.2	220.3	333.9	57.1	18,300	14,700		81,600	76,200	71,100
250	344.1	229.8	327.3	55.4	12,700			74,400	69,500	64,900
260	336.6	239.3	320.4	53.7				67,800	63,400	59,100
270	328.5	248.8	313.0	51.9				61,700	57,700	53,800
280	319.9	258.3	305.0	50.0				56,100	52,400	48,800
290	310.7	267.8	296.6	48.2				50,900	47,400	44,200
300	300.9	277.4	287.6	46.2				46,000	42,800	39,800
310	290.4	286.9	277.8	44.2				41,400	38,500	35,700
320	279.1	296.5	267.4	42.1				37,100	34,500	31,900
330	266.9	306.1	256.1	40.0				33,100	30,700	28,300
340	253.7	315.7	243.9	37.7				29,300	27,000	24,900
350	239.3	325.3	230.5	35.2				25,700	23,600	21,600
360	223.5	334.9	215.8	32.7				22,300	20,400	18,600
370	205.9	344.5	199.5	29.9				19,000	17,300	15,700

# MLC650 VPC-MAX S-1



390.4 ft 35°					38.7 ft			60.0 ft		
ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
53										
55										
56	420.2	44.3	397.0	84.9	283,200			283,200		
58	419.9	46.2	396.8	84.6	283,200			283,200		
60	419.7	48.0	396.6	84.4	283,200			283,200		
65	419.0	52.8	396.0	83.7	283,200			283,200		
70	418.2	57.5	395.4	83.0	283,200			283,200		
75	417.4	62.2	394.7	82.3	283,200			283,200		
80	416.5	66.9	394.0	81.5	283,200	191,400		283,200	191,400	
85	415.5	71.6	393.2	80.8	283,200	191,400	143,600	283,200	191,400	143,600
90	414.5	76.4	392.3	80.1	260,000	191,400	143,600	283,200	191,400	143,600
95	413.4	81.1	391.4	79.4	239,100	191,400	143,600	283,200	191,400	143,600
100	412.3	85.8	390.5	78.7	220,300	191,400	143,600	283,200	191,400	143,600
105	411.1	90.5	389.4	78.0	203,500	182,200	143,600	283,200	191,400	143,600
110	409.8	95.3	388.3	77.3	188,200	168,900	143,600	283,200	191,400	143,600
115	408.4	100.0	387.2	76.6	174,400	156,700	141,100	283,200	191,400	143,600
120	407.0	104.7	385.9	75.8	161,700	145,600	131,200	272,000	191,400	143,600
130	404.0	114.2	383.3	74.4	139,400	125,800	113,500	241,300	191,400	143,600
140	400.7	123.7	380.4	72.9	120,500	108,800	98,200	215,500	191,400	143,600
150	397.1	133.2	377.2	71.5	104,100	94,000	84,700	193,500	178,500	143,600
160	393.2	142.7	373.8	70.0	89,800	81,000	72,900	174,400	161,400	143,600
170	389.0	152.2	370.0	68.5	77,300	69,500	62,400	157,800	146,300	135,800
180	384.5	161.7	366.0	66.9	66,200	59,300	53,000	143,100	133,000	123,700
190	379.6	171.2	361.6	65.4	56,200	50,100	44,500	130,100	121,100	112,800
200	374.4	180.7	357.0	63.8	47,300	41,900	36,800	118,500	110,500	102,900
210	368.9	190.2	352.0	62.3	39,200	34,400	29,800	108,000	100,800	94,000
220	363.0	199.8	346.6	60.6	31,900	27,500	23,400	98,600	92,100	85,900
230	356.7	209.3	340.9	59.0	25,200	21,200	17,500	90,000	84,100	78,500
240	350.0	218.8	334.8	57.3	19,100	15,500	12,100	82,100	76,800	71,700
250	342.9	228.4	328.3	55.6	13,400			74,900	70,100	65,400
260	335.3	238.0	321.4	53.9				68,300	63,900	59,600
270	327.2	247.6	314.0	52.1				62,200	58,100	54,200
280	318.5	257.2	306.1	50.3				56,500	52,800	49,200
290	309.3	266.7	297.6	48.4				51,200	47,800	44,500
300	299.4	276.4	288.5	46.4				46,300	43,200	40,100
310	288.9	286.0	278.8	44.4				41,700	38,800	36,000
320	277.5	295.7	268.3	42.3				37,400	34,700	32,100
330	265.3	305.3	257.0	40.1				33,300	30,900	28,500
340	252.0	315.0	244.7	37.8				29,500	27,200	25,100
350	237.5	324.7	231.3	35.4				25,800	23,800	21,800
360										
370										

# MLC650 VPC-MAX S-1



440,900 lb



360°

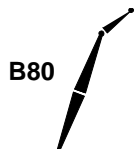
ft	ft	ft	ft	ft	0°	1°	2°	0°	1°	2°
					lb	lb	lb	lb	lb	lb
53										
55										
56										
58	418.6	43.9	397.0	85.0	244,000			244,000		
60	418.3	45.8	396.8	84.7	244,000			244,000		
65	417.6	50.5	396.3	84.0	244,000			244,000		
70	416.8	55.3	395.7	83.3	244,000			244,000		
75	416.0	60.0	395.0	82.6	244,000			244,000		
80	415.1	64.8	394.3	81.9	244,000	189,800		244,000	189,800	
85	414.1	69.5	393.6	81.2	244,000	189,800		244,000	189,800	
90	413.1	74.2	392.7	80.5	244,000	189,800	142,500	244,000	189,800	142,500
95	412.0	79.0	391.8	79.7	241,900	189,800	142,500	244,000	189,800	142,500
100	410.9	83.7	390.9	79.0	223,000	189,800	142,500	244,000	189,800	142,500
105	409.7	88.5	389.9	78.3	206,000	184,600	142,500	244,000	189,800	142,500
110	408.4	93.2	388.8	77.6	190,600	171,100	142,500	244,000	189,800	142,500
115	407.0	98.0	387.7	76.9	176,600	158,900	142,500	244,000	189,800	142,500
120	405.6	102.8	386.4	76.1	163,800	147,600	133,100	244,000	189,800	142,500
130	402.6	112.3	383.9	74.7	141,300	127,600	115,200	242,800	189,800	142,500
140	399.2	121.8	381.0	73.2	122,200	110,400	99,700	216,900	189,800	142,500
150	395.6	131.4	377.8	71.7	105,700	95,500	86,200	194,700	179,700	142,500
160	391.7	140.9	374.4	70.3	91,200	82,400	74,200	175,500	162,500	142,500
170	387.5	150.4	370.7	68.7	78,600	70,800	63,600	158,800	147,300	136,800
180	383.0	160.0	366.7	67.2	67,300	60,400	54,000	144,000	133,900	124,500
190	378.1	169.6	362.4	65.7	57,300	51,200	45,500	130,900	121,900	113,600
200	372.9	179.2	357.7	64.1	48,300	42,800	37,700	119,300	111,200	103,700
210	367.3	188.8	352.8	62.5	40,100	35,200	30,600	108,700	101,500	94,700
220	361.4	198.4	347.4	60.9	32,700	28,300	24,100	99,200	92,700	86,500
230	355.1	207.9	341.8	59.2	26,000	22,000	18,200	90,600	84,700	79,100
240	348.3	217.6	335.7	57.6	19,800	16,100	12,700	82,700	77,300	72,200
250	341.2	227.2	329.2	55.9	14,100			75,400	70,500	65,900
260	333.5	236.8	322.2	54.1				68,700	64,300	60,000
270	325.4	246.5	314.8	52.3				62,600	58,500	54,600
280	316.7	256.2	306.9	50.5				56,900	53,100	49,500
290	307.4	265.9	298.4	48.6				51,500	48,100	44,800
300	297.5	275.6	289.3	46.6				46,600	43,400	40,400
310	286.9	285.3	279.5	44.6				41,900	39,000	36,200
320	275.4	295.1	269.0	42.5				37,600	34,900	32,300
330										
340										
350										
360										
370										

# MLC650 VPC-MAX S-1



					 38.7 ft			 60.0 ft		
ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
54	431.4	44.7	406.9	85.0	267,900			267,900		
55	431.2	45.6	406.8	84.8	267,900			267,900		
57	431.0	47.5	406.6	84.6	267,900			267,900		
59	430.8	49.4	406.4	84.3	267,900			267,900		
60	430.6	50.3	406.3	84.2	267,900			267,900		
65	429.9	55.0	405.7	83.5	267,900			267,900		
70	429.2	59.8	405.1	82.8	267,900			267,900		
75	428.4	64.5	404.4	82.1	267,900			267,900		
80	427.5	69.2	403.6	81.4	267,900	177,900		267,900	177,900	
85	426.6	73.9	402.9	80.7	267,800	177,900		267,800	177,900	132,400
90	425.6	78.6	402.0	80.1	255,000	177,900	132,400	267,700	177,900	132,400
95	424.5	83.3	401.1	79.4	234,200	177,900	132,400	267,700	177,900	132,400
100	423.4	88.1	400.1	78.7	215,600	177,900	132,400	267,600	177,900	132,400
105	422.2	92.8	399.1	78.0	198,900	177,200	132,400	267,500	177,900	132,400
110	421.0	97.5	398.0	77.3	183,800	164,100	132,400	267,400	177,900	132,400
115	419.7	102.2	396.8	76.6	170,000	152,100	132,400	267,300	177,900	132,400
120	418.3	107.0	395.6	75.9	157,500	141,000	126,500	267,200	177,900	132,400
130	415.4	116.4	393.0	74.5	135,400	121,500	109,000	238,400	177,900	132,400
140	412.1	125.8	390.1	73.1	116,600	104,700	93,900	212,700	177,900	132,400
150	408.6	135.3	386.9	71.6	100,400	90,000	80,700	190,700	175,400	132,400
160	404.9	144.7	383.5	70.2	86,200	77,200	69,000	171,700	158,400	132,200
170	400.8	154.2	379.9	68.7	73,800	65,900	58,600	155,200	143,500	132,100
180	396.4	163.7	375.9	67.2	62,800	55,800	49,300	140,600	130,300	120,800
190	391.7	173.2	371.6	65.7	52,900	46,700	40,900	127,700	118,500	110,000
200	386.7	182.6	367.1	64.2	44,100	38,500	33,300	116,100	107,900	100,200
210	381.4	192.1	362.2	62.7	36,100	31,100	26,400	105,700	98,300	91,400
220	375.7	201.6	357.0	61.1	28,800	24,300	20,100	96,300	89,600	83,400
230	369.6	211.1	351.4	59.6	22,200	18,100	14,300	87,800	81,700	76,000
240	363.1	220.6	345.5	58.0	16,200	12,500		80,000	74,500	69,300
250	356.3	230.1	339.2	56.3				72,800	67,800	63,000
260	349.0	239.6	332.5	54.6				66,200	61,700	57,300
270	341.2	249.1	325.3	52.9				60,200	56,000	51,900
280	332.9	258.6	317.7	51.2				54,500	50,700	47,000
290	324.1	268.2	309.6	49.4				49,300	45,700	42,300
300	314.8	277.8	300.9	47.5				44,400	41,100	38,000
310	304.7	287.3	291.7	45.6				39,800	36,800	33,900
320	294.0	296.8	281.7	43.6				35,500	32,800	30,100
330	282.5	306.4	271.1	41.6				31,500	29,000	26,500
340	270.1	316.0	259.6	39.4				27,700	25,400	23,100
350	256.7	325.6	247.1	37.2				24,100	22,000	19,900
360	242.0	335.2	233.5	34.8				20,700	18,800	16,800
370	226.0	344.9	218.5	32.2				16,900	15,700	13,900
380	208.1	354.5	201.8	29.4				13,100	12,800	

# MLC650 VPC-MAX S-1



440,900 lb



360°

400.3 ft					35°					
					38.7 ft			60.0 ft		
					0°	1°	2°	0°	1°	2°
ft					lb					
54										
55										
57	430.0	45.2	406.8	84.9	265,600			265,600		
59	429.7	47.1	406.6	84.6	265,600			265,600		
60	429.6	48.0	406.5	84.5	265,600			265,600		
65	428.9	52.8	406.0	83.8	265,600			265,600		
70	428.2	57.5	405.4	83.1	265,600			265,600		
75	427.4	62.3	404.7	82.4	265,600			265,600		
80	426.5	67.0	404.0	81.7	265,600	176,400		265,600	176,400	
85	425.5	71.8	403.2	81.1	265,600	176,400		265,600	176,400	
90	424.6	76.5	402.4	80.4	258,200	176,400	131,400	265,600	176,400	131,400
95	423.5	81.2	401.5	79.7	237,200	176,400	131,400	265,600	176,400	131,400
100	422.4	85.9	400.6	79.0	218,400	176,400	131,400	265,600	176,400	131,400
105	421.2	90.7	399.5	78.3	201,600	176,400	131,400	265,600	176,400	131,400
110	419.9	95.4	398.5	77.6	186,300	166,500	131,400	265,600	176,400	131,400
115	418.6	100.2	397.3	76.9	172,400	154,300	131,400	265,600	176,400	131,400
120	417.3	104.9	396.1	76.2	159,700	143,200	128,500	265,500	176,400	131,400
130	414.3	114.3	393.6	74.8	137,400	123,400	110,900	239,900	176,400	131,400
140	411.1	123.9	390.7	73.3	118,400	106,400	95,600	214,100	176,400	131,400
150	407.6	133.3	387.6	71.9	102,000	91,600	82,200	192,000	176,400	131,400
160	403.8	142.9	384.3	70.5	87,800	78,700	70,400	172,900	159,600	131,300
170	399.7	152.3	380.6	69.0	75,200	67,200	59,900	156,300	144,600	131,200
180	395.3	161.9	376.7	67.5	64,100	57,000	50,500	141,600	131,300	121,700
190	390.6	171.4	372.5	66.0	54,100	47,900	42,000	128,600	119,400	110,800
200	385.6	180.9	367.9	64.5	45,200	39,600	34,400	117,000	108,700	101,000
210	380.2	190.4	363.1	63.0	37,100	32,100	27,400	106,500	99,100	92,100
220	374.5	200.0	357.9	61.4	29,800	25,200	21,000	97,000	90,300	84,100
230	368.4	209.6	352.4	59.8	23,100	19,000	15,100	88,400	82,400	76,600
240	361.9	219.1	346.5	58.2	17,000	13,200		80,600	75,100	69,800
250	355.0	228.7	340.2	56.6				73,400	68,400	63,600
260	347.7	238.3	333.5	54.9				66,800	62,200	57,800
270	339.9	247.9	326.3	53.2				60,600	56,400	52,400
280	331.6	257.5	318.7	51.4				55,000	51,100	47,400
290	322.8	267.0	310.6	49.6				49,700	46,100	42,700
300	313.3	276.7	301.9	47.7				44,800	41,500	38,300
310	303.3	286.3	292.6	45.8				40,100	37,100	34,200
320	292.5	295.9	282.7	43.8				35,800	33,100	30,400
330	280.9	305.6	272.0	41.8				31,800	29,200	26,800
340	268.4	315.3	260.4	39.6				27,900	25,600	23,300
350	254.9	325.0	247.9	37.3				24,300	22,200	20,100
360	240.2	334.7	234.2	34.9				20,900	18,900	17,000
370										
380										

# MLC650 VPC-MAX S-1



ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
54										
55										
57										
59	428.4	44.9	406.9	85.0	244,000			244,000		
60	428.2	45.8	406.8	84.8	244,000			244,000		
65	427.5	50.6	406.2	84.1	244,000			244,000		
70	426.8	55.3	405.7	83.4	244,000			244,000		
75	426.0	60.1	405.0	82.8	244,000			244,000		
80	425.1	64.8	404.3	82.1	244,000			244,000		
85	424.2	69.6	403.6	81.4	244,000	175,100		244,000	175,100	
90	423.2	74.4	402.8	80.7	244,000	175,100	130,400	244,000	175,100	130,400
95	422.1	79.1	401.9	80.0	240,100	175,100	130,400	244,000	175,100	130,400
100	421.0	83.9	401.0	79.3	221,200	175,100	130,400	244,000	175,100	130,400
105	419.8	88.6	400.0	78.6	204,200	175,100	130,400	244,000	175,100	130,400
110	418.5	93.4	398.9	77.9	188,700	168,800	130,400	244,000	175,100	130,400
115	417.2	98.1	397.8	77.2	174,700	156,500	130,400	244,000	175,100	130,400
120	415.8	102.9	396.6	76.5	161,900	145,300	130,400	244,000	175,100	130,400
130	412.9	112.4	394.1	75.1	139,400	125,300	112,600	241,500	175,100	130,400
140	409.6	122.0	391.3	73.6	120,200	108,100	97,200	215,500	175,100	130,400
150	406.1	131.5	388.2	72.2	103,600	93,200	83,700	193,300	175,100	130,400
160	402.3	141.1	384.9	70.7	89,200	80,100	71,700	174,100	160,700	130,400
170	398.2	150.6	381.3	69.3	76,500	68,500	61,100	157,300	145,600	130,400
180	393.8	160.2	377.4	67.8	65,300	58,200	51,600	142,600	132,200	122,600
190	389.1	169.8	373.2	66.3	55,200	48,900	43,100	129,500	120,200	111,600
200	384.0	179.4	368.7	64.8	46,200	40,600	35,300	117,700	109,500	101,800
210	378.6	189.0	363.9	63.2	38,100	33,000	28,300	107,200	99,800	92,800
220	372.9	198.6	358.7	61.6	30,600	26,100	21,800	97,700	91,000	84,700
230	366.8	208.2	353.2	60.1	23,900	19,700	15,900	89,000	83,000	77,200
240	360.3	217.8	347.3	58.4	17,700	13,900		81,100	75,600	70,400
250	353.3	227.4	341.0	56.8	12,000			73,900	68,800	64,100
260	346.0	237.1	334.3	55.1				67,200	62,600	58,200
270	338.1	246.8	327.2	53.4				61,000	56,800	52,800
280	329.8	256.4	319.5	51.6				55,300	51,500	47,700
290	320.9	266.1	311.4	49.8				50,000	46,400	43,000
300	311.4	275.8	302.7	47.9				45,000	41,800	38,600
310	301.3	285.5	293.4	46.0				40,400	37,400	34,500
320	290.4	295.3	283.4	44.0				36,000	33,300	30,600
330	278.8	305.0	272.6	41.9				31,900	29,400	26,900
340										
350										
360										
370										
380										

# MLC650 VPC-MAX S-1



ft	ft	ft	ft	°	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
55	441.2	45.7	416.6	85.0	251,400			251,400		
57	440.9	47.6	416.4	84.7	251,400			251,400		
60	440.5	50.4	416.1	84.3	251,400			251,400		
65	439.9	55.1	415.6	83.6	251,400			251,400		
70	439.1	59.8	415.0	83.0	251,300			251,300		
75	438.4	64.5	414.3	82.3	251,200			251,200		
80	437.5	69.3	413.6	81.6	251,200	164,600		251,200	164,600	
85	436.6	74.0	412.8	81.0	251,100	164,600	121,300	251,100	164,600	121,300
90	435.6	78.7	411.9	80.3	251,000	164,600	121,300	251,000	164,600	121,300
95	434.6	83.4	411.0	79.6	233,600	164,600	121,300	250,900	164,600	121,300
100	433.5	88.1	410.1	78.9	215,100	164,600	121,300	250,800	164,600	121,300
105	432.4	92.9	409.1	78.3	198,300	164,600	121,300	250,700	164,600	121,300
110	431.1	97.6	408.0	77.6	183,200	163,100	121,300	250,600	164,600	121,300
115	429.9	102.3	406.9	76.9	169,400	151,100	121,300	250,400	164,600	121,300
120	428.5	107.1	405.7	76.2	156,900	140,100	121,300	250,300	164,600	121,300
130	425.6	116.5	403.1	74.8	134,800	120,500	107,800	238,000	164,600	121,300
140	422.5	125.9	400.3	73.5	116,000	103,700	92,800	212,300	164,500	121,300
150	419.1	135.4	397.3	72.1	99,700	89,200	79,600	190,300	164,400	121,200
160	415.4	144.9	393.9	70.6	85,600	76,400	67,900	171,300	157,700	121,100
170	411.4	154.4	390.3	69.2	73,200	65,000	57,600	154,800	142,800	121,000
180	407.2	163.8	386.5	67.8	62,100	54,900	48,300	140,200	129,600	119,900
190	402.6	173.4	382.3	66.3	52,300	45,900	40,000	127,200	117,800	109,100
200	397.8	182.8	377.9	64.9	43,400	37,700	32,400	115,700	107,300	99,400
210	392.6	192.3	373.2	63.4	35,500	30,300	25,500	105,300	97,700	90,600
220	387.0	201.8	368.1	61.9	28,200	23,600	19,200	95,900	89,000	82,600
230	381.1	211.3	362.7	60.3	21,600	17,400	13,500	87,300	81,100	75,300
240	374.9	220.8	357.0	58.8	15,500			79,500	73,900	68,500
250	368.2	230.3	350.8	57.2				72,400	67,200	62,300
260	361.2	239.8	344.4	55.6				65,800	61,100	56,600
270	353.7	249.4	337.5	53.9				59,700	55,400	51,300
280	345.8	258.9	330.1	52.2				54,100	50,100	46,300
290	337.3	268.4	322.3	50.5				48,800	45,200	41,700
300	328.3	278.0	314.0	48.7				44,000	40,600	37,400
310	318.7	287.6	305.1	46.9				39,400	36,300	33,300
320	308.5	297.1	295.7	45.0				35,100	32,300	29,500
330	297.6	306.7	285.5	43.1				31,100	28,500	25,900
340	285.9	316.3	274.6	41.0				27,300	24,900	22,500
350	273.2	325.9	262.9	38.9				23,700	21,500	19,300
360	259.6	335.5	250.2	36.7				20,300	18,300	16,300
370	244.7	345.1	236.3	34.3				16,300	15,200	13,400
380	228.4	354.8	221.1	31.8				12,600	12,300	

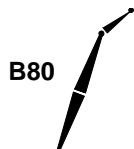
# MLC650 VPC-MAX S-1



ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
55										
57	439.9	45.3	416.7	85.0	249,400			249,400		
60	439.5	48.1	416.4	84.6	249,400			249,400		
65	438.8	52.9	415.8	83.9	249,400			249,400		
70	438.1	57.6	415.3	83.3	249,400			249,400		
75	437.3	62.3	414.6	82.6	249,400			249,400		
80	436.5	67.1	413.9	81.9	249,300	163,400		249,300	163,400	
85	435.6	71.8	413.1	81.3	249,300	163,400		249,300	163,400	
90	434.6	76.5	412.3	80.6	249,200	163,400	120,400	249,200	163,400	120,400
95	433.6	81.3	411.5	79.9	236,700	163,400	120,400	249,200	163,400	120,400
100	432.5	86.0	410.5	79.2	217,900	163,400	120,400	249,100	163,400	120,400
105	431.3	90.8	409.5	78.6	201,000	163,400	120,400	249,000	163,400	120,400
110	430.1	95.5	408.5	77.9	185,700	163,400	120,400	249,000	163,400	120,400
115	428.8	100.2	407.4	77.2	171,900	153,300	120,400	248,900	163,400	120,400
120	427.5	105.0	406.2	76.5	159,200	142,200	120,400	248,800	163,400	120,400
130	424.6	114.5	403.7	75.1	136,900	122,500	109,700	239,600	163,400	120,400
140	421.4	124.0	400.9	73.7	117,800	105,500	94,500	213,700	163,400	120,400
150	418.0	133.5	397.9	72.3	101,400	90,800	81,100	191,600	163,300	120,400
160	414.3	143.0	394.6	70.9	87,100	77,900	69,400	172,500	158,900	120,300
170	410.3	152.5	391.1	69.5	74,600	66,400	58,900	155,900	143,900	120,200
180	406.1	162.1	387.2	68.1	63,400	56,200	49,500	141,200	130,600	120,100
190	401.5	171.5	383.1	66.6	53,500	47,100	41,100	128,200	118,700	110,000
200	396.6	181.1	378.7	65.1	44,600	38,800	33,500	116,500	108,100	100,200
210	391.4	190.6	374.0	63.6	36,500	31,300	26,500	106,100	98,500	91,400
220	385.8	200.2	369.0	62.1	29,200	24,500	20,100	96,600	89,800	83,300
230	379.9	209.7	363.6	60.6	22,500	18,300	14,300	88,000	81,800	75,900
240	373.7	219.3	357.9	59.0	16,300	12,500		80,200	74,500	69,100
250	367.0	228.9	351.8	57.4				73,000	67,800	62,900
260	359.9	238.5	345.3	55.8				66,300	61,600	57,100
270	352.4	248.0	338.5	54.2				60,200	55,900	51,700
280	344.4	257.7	331.1	52.5				54,500	50,600	46,800
290	335.9	267.2	323.3	50.7				49,300	45,600	42,100
300	326.9	276.9	315.0	48.9				44,300	41,000	37,700
310	317.3	286.5	306.1	47.1				39,700	36,600	33,600
320	307.0	296.2	296.6	45.2				35,400	32,600	29,800
330	296.0	305.8	286.5	43.2				31,400	28,700	26,200
340	284.3	315.5	275.6	41.2				27,600	25,100	22,800
350	271.6	325.2	263.8	39.1				23,900	21,700	19,500
360	257.8	334.9	251.0	36.8				20,500	18,500	16,400
370	242.8	344.6	237.1	34.4				16,500	15,400	13,500
380										



# MLC650 VPC-MAX S-1



440,900 lb



360°

ft	ft	ft	ft	ft	0° lb	1° lb	2° lb	0° lb	1° lb	2° lb
55										
57										
60	438.1	45.9	416.6	84.9	244,000			244,000		
65	437.5	50.6	416.1	84.3	244,000			244,000		
70	436.7	55.4	415.5	83.6	244,000			244,000		
75	435.9	60.2	414.9	82.9	244,000			244,000		
80	435.1	64.9	414.2	82.2	244,000			244,000		
85	434.2	69.6	413.5	81.6	244,000	162,300		244,000	162,300	
90	433.2	74.4	412.7	80.9	244,000	162,300	119,600	244,000	162,300	119,600
95	432.2	79.2	411.9	80.2	239,700	162,300	119,600	244,000	162,300	119,600
100	431.1	83.9	410.9	79.5	220,700	162,300	119,600	244,000	162,300	119,600
105	429.9	88.7	410.0	78.9	203,600	162,300	119,600	244,000	162,300	119,600
110	428.7	93.4	409.0	78.2	188,200	162,300	119,600	244,000	162,300	119,600
115	427.4	98.2	407.9	77.5	174,200	155,600	119,600	244,000	162,300	119,600
120	426.0	103.0	406.7	76.8	161,400	144,300	119,600	244,000	162,300	119,600
130	423.2	112.5	404.2	75.4	138,800	124,400	111,500	237,900	162,300	119,600
140	420.0	122.1	401.5	74.0	119,600	107,200	96,100	215,100	162,300	119,600
150	416.6	131.6	398.5	72.6	103,100	92,300	82,600	192,900	162,300	119,600
160	412.9	141.2	395.3	71.2	88,600	79,300	70,700	173,700	160,000	119,600
170	408.9	150.7	391.8	69.8	75,900	67,700	60,200	156,900	144,900	119,500
180	404.6	160.3	387.9	68.3	64,700	57,400	50,700	142,200	131,500	119,500
190	400.0	169.9	383.9	66.9	54,600	48,200	42,200	129,100	119,600	110,800
200	395.1	179.5	379.5	65.4	45,600	39,800	34,400	117,300	108,900	101,000
210	389.8	189.1	374.8	63.9	37,500	32,200	27,400	106,800	99,200	92,100
220	384.3	198.7	369.8	62.4	30,000	25,300	21,000	97,300	90,400	83,900
230	378.3	208.3	364.4	60.8	23,300	19,000	15,000	88,600	82,400	76,500
240	372.0	218.0	358.7	59.3	17,100	13,200		80,700	75,100	69,700
250	365.3	227.6	352.6	57.7				73,500	68,300	63,400
260	358.2	237.3	346.2	56.0				66,800	62,100	57,600
270	350.7	246.9	339.3	54.4				60,600	56,300	52,200
280	342.7	256.6	331.9	52.7				54,900	50,900	47,100
290	334.1	266.3	324.1	50.9				49,600	45,900	42,400
300	325.0	276.0	315.8	49.1				44,600	41,300	38,000
310	315.4	285.7	306.9	47.3				40,000	36,900	33,900
320	305.0	295.4	297.4	45.4				35,700	32,800	30,000
330	294.0	305.2	287.2	43.4				31,600	28,900	26,400
340	282.1	315.0	276.2	41.3				27,700	25,300	22,900
350										
360										
370										
380										