



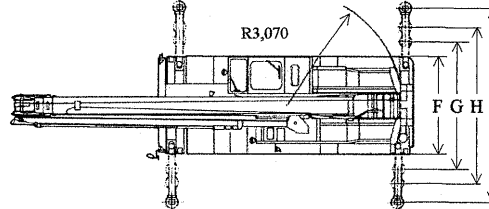
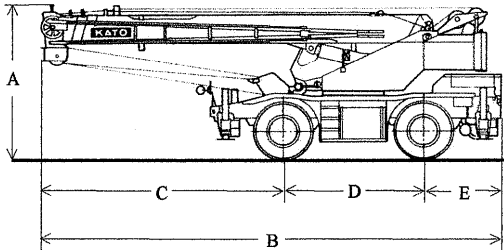
Kato KR-20H-III Rough Terrain Crane

Specification

CRANE SPECIFICATION

Name and Type

Kato KR-20H-III Rough Terrain Crane



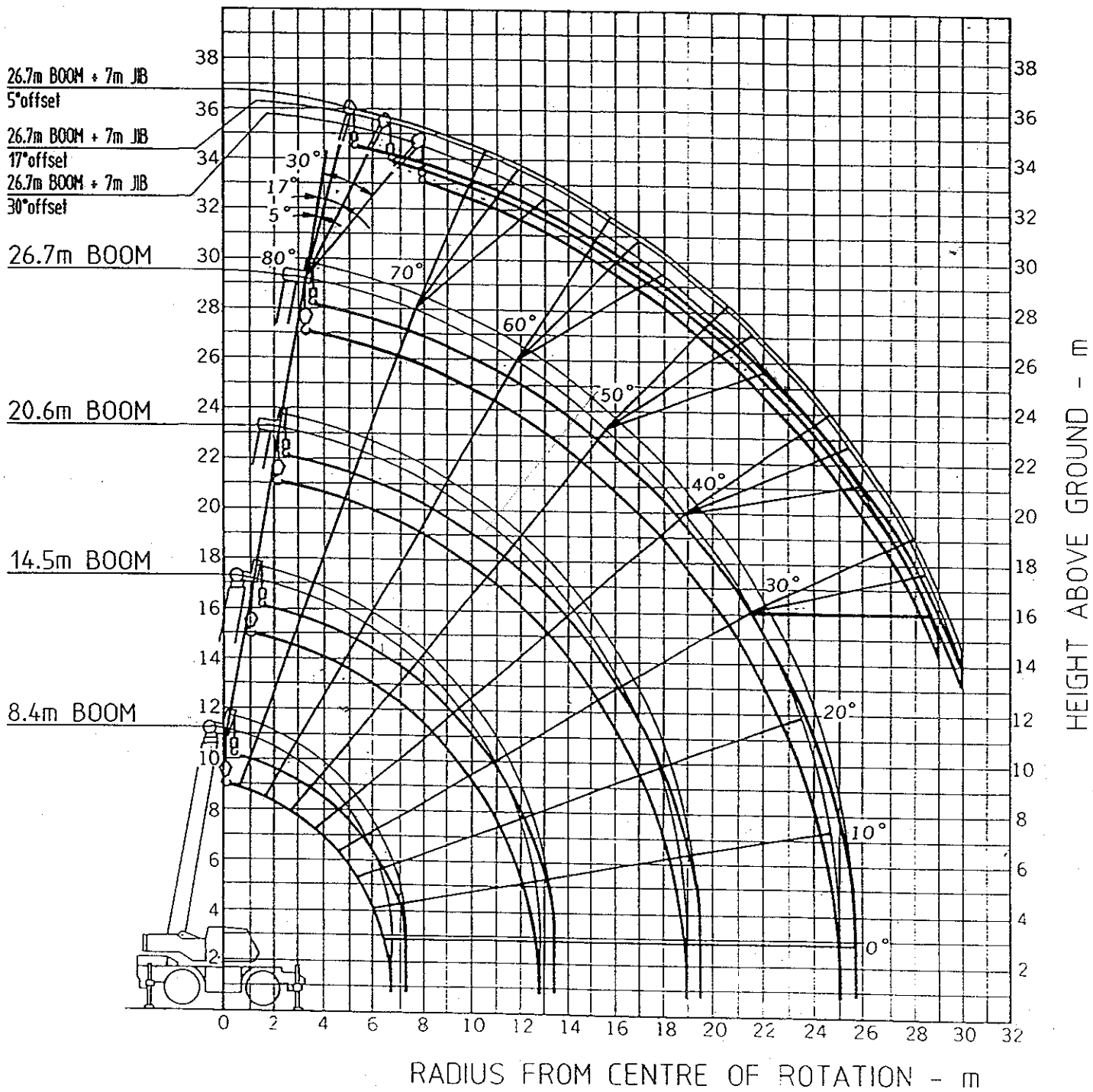
CARRIER	A	B	C	D	E	F	G	H	I
Kato KR-20H-III	3,470	10,330	5,370	3,200	1,760	2,490	3,600	4,700	5,800

Measurement: mm

CRANE CAPACITY

20.0 Tonne @ 3.5m	8.4m Boom	With Outriggers
16.0 Tonne @ 3.5m	14.5m Boom	With Outriggers
9.0 Tonne @ 6.0m	20.6m Boom	With Outriggers
6.8 Tonne @ 7.0m	26.7m Boom	With Outriggers
3.0 Tonne @ 14.0m	8.4m Boom ~ 26.7m Boom	Rooster Sheave with Outriggers
3.0 Tonne @ 12.0m	26.7m Boom + 7.0m Jib	(5° Offset)
2.4 Tonne @ 13.0m	26.7m Boom + 7.0m Jib	(17° Offset)
2.0 Tonne @ 14.0m	26.7m Boom + 7.0m Jib	(30° Offset)

KATO KR-20H-III RANGE DIAGRAM



NOTE :

1. RADIUS DOES NOT INCLUDE EFFECT OF BOOM & JIB DEFLECTION.
2. DIAGRAM IS VALID ONLY WITH OUTRIGGERS FULLY EXTENDED.

KATO KR-20H-III SAFE WORKING LOAD CHART - No1

(UNITS - tonnes)

LOADS ON MAIN BOOM - CRANE SUPPORTED ON OUTRIGGERS

Working Radius (m)	Outriggers fully extended 360 degrees						Outriggers extended to 4.7m Over side						Outriggers extended to 3.6m Over side						Outriggers fully retracted Over side						Working Radius (m)			
	8.4m Boom		20.6m Boom		26.7m Boom		8.4m Boom		14.5m Boom		20.6m Boom		26.7m Boom		8.4m Boom		14.5m Boom		20.6m Boom		26.7m Boom							
	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle						
2.5	20.00	16.00					20.00	16.00						20.00	16.00								10.50	9.50				
3.0	20.00	16.00					20.00	16.00						20.00	16.00								10.50	9.50				
3.5	20.00	16.00	9.00				20.00	16.00	9.00					18.00	16.00	9.00							7.85	7.30				
4.0	18.50	15.50	9.00				18.50	15.50	9.00					13.90	13.00	9.00							6.25	5.85				
4.5	16.50	14.20	9.00	6.80			16.50	14.20	9.00	6.80				11.00	10.60	9.00	6.80						5.10	4.70				
5.0	15.00	13.10	9.00	6.80	6.80		15.00	13.10	9.00	6.80	6.80			9.10	8.75	9.00	6.80	6.80					4.25	3.90				
5.5	13.70	12.10	9.00	6.80	6.80	6.80	12.00	12.10	9.00	6.80	6.80	6.80		7.65	7.35	7.75	6.80	6.80	6.80				3.60	3.25				
6.0	12.50	11.20	9.00	6.80	6.80	6.80	10.20	9.80	9.00	6.80	6.80	6.80	6.80	6.60	6.25	6.70	6.80	6.80	6.80				3.05	2.70				
6.5	11.50	10.40	8.50	6.80	6.80	6.80	8.65	8.40	8.50	6.80	6.80	6.80	6.80	5.75	5.35	5.90	6.05	6.05	6.05				2.60	2.30				
7.0		9.70	8.00	6.80	6.80	6.80		7.30	8.00	6.80	6.80	6.80	6.80	4.65	4.65	5.20	5.35	5.35	5.35				1.95	1.95				
8.0		8.45	7.10	6.10	6.10	6.10		5.55	6.20	6.10	6.10	6.10	6.10	3.60	3.60	4.05	4.30	4.30	4.30				1.35	1.35				
9.0		6.40	6.40	5.50	5.50	5.50		4.45	5.00	5.50	5.50	5.50	5.50	2.80	2.80	3.25	3.55	3.55	3.55				0.85	0.85				
10.0		5.20	5.80	5.00	5.00	5.00		3.65	4.10	4.35	4.35	4.35	4.35	2.25	2.25	2.65	2.90	2.90	2.90				0.50	0.50				
11.0		4.30	4.85	4.55	4.55	4.55		2.95	3.45	3.70	3.70	3.70	3.70	1.75	1.75	2.20	2.45	2.45	2.45									
12.0		3.65	4.10	4.20	4.20	4.20		2.45	2.90	3.15	3.15	3.15	3.15	1.40	1.40	1.80	2.05	2.05	2.05									
13.0			3.55	3.80	3.80	3.80			2.50	2.70	2.70	2.70	2.70			1.45	1.70	1.70	1.70									
14.0			3.05	3.45	3.45	3.45			2.10	2.30	2.30	2.30	2.30			1.25	1.40	1.40	1.40									
15.0			2.70	2.85	2.85	2.85			1.80	2.00	2.00	2.00	2.00			1.00	1.20	1.20	1.20									
16.0			2.30	2.55	2.55	2.55			1.50	1.70	1.70	1.70	1.70			0.80	1.00	1.00	1.00									
17.0			2.00	2.25	2.25	2.25			1.30	1.50	1.50	1.50	1.50			0.60	0.80	0.80	0.80									
18.0			1.75	2.00	2.00	2.00			1.10	1.30	1.30	1.30	1.30			0.45	0.65	0.65	0.65									
19.0				1.75	1.75	1.75				1.10	1.10	1.10	1.10				0.50	0.50	0.50	0.50								
20.0				1.50	1.50	1.50				0.95	0.95	0.95	0.95															
22.0				1.20	1.20	1.20				0.65	0.65	0.65	0.65															
24.0				0.90	0.90	0.90				0.45	0.45	0.45	0.45															
25.0				0.75	0.75	0.75																						
Minimum Boom Angle	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	35	degrees	--	--	--	33	degrees	50	degrees	58	degrees	Minimum Boom Angle

LOADS WITHIN SHADED AREA OF CHART ARE LIMITED BY CRANE STRUCTURAL STRENGTH

ALL OTHER LOADS ARE LIMITED BY 75% OF TIPPING

KATO KR-20H-III SAFE WORKING LOAD CHART - No2

26.7m BOOM + 7m JIB

BOOM ANGLE (deg)	OUTRIGGERS FULLY EXTENDED - 360 SLEW						BOOM ANGLE (deg)	OUTRIGGER SPREAD 4.7m - OVER SIDE						BOOM ANGLE (deg)	OUTRIGGER SPREAD 3.6m - OVER SIDE					
	5 deg. offset		17 deg. offset		30 deg. offset			5 deg. offset		17 deg. offset		30 deg. offset			5 deg. offset		17 deg. offset		30 deg. offset	
	Radius (m)	Load (t)	Radius (m)	Load (t)	Radius (m)	Load (t)		Radius (m)	Load (t)	Radius (m)	Load (t)	Radius (m)	Load (t)		Radius (m)	Load (t)	Radius (m)	Load (t)	Radius (m)	Load (t)
80.0	6.2	3.00	7.5	2.40	8.8	2.00	6.2	3.00	7.5	2.40	8.8	2.00	80.0	6.2	3.00	7.5	2.40	8.8	2.00	
75.0	9.4	3.00	10.5	2.40	11.7	2.00	9.4	3.00	10.5	2.40	11.7	2.00	75.0	9.4	3.00	10.5	2.40	11.7	2.00	
73.0	10.6	3.00	11.5	2.40	12.8	2.00	12.0	3.00	13.0	2.40	14.0	2.00	73.5	10.4	3.00	11.3	2.40	12.5	2.00	
70.5	12.0	3.00	13.0	2.40	14.0	2.00	14.1	2.55	15.0	2.15	16.1	1.95	72.0	11.1	2.55	12.2	2.40	13.3	2.00	
65.0	14.9	2.40	15.8	2.05	16.8	1.80	15.5	2.00	16.5	1.95	17.6	1.75	71.0	11.6	2.35	12.7	2.10	13.8	2.00	
60.0	17.4	2.05	18.2	1.80	19.2	1.65	17.2	1.60	18.2	1.50	19.2	1.40	68.0	13.0	1.85	14.2	1.65	15.3	1.50	
55.0	19.8	1.80	20.5	1.60	21.3	1.55	19.6	1.15	20.5	1.10	21.2	1.05	65.0	14.6	1.45	15.6	1.35	16.7	1.25	
53.0	20.7	1.55	21.4	1.55	22.1	1.50	21.7	0.85	22.6	0.80	23.1	0.75	60.0	16.8	1.00	18.0	0.90	18.9	0.85	
50.0	21.9	1.40	22.7	1.35	23.2	1.30	23.6	0.60	24.5	0.55	24.9	0.50	55.0	19.3	0.60	20.2	0.55	21.1	0.50	
45.0	23.8	1.10	24.5	1.05	25.0	1.00	25.4	0.40	25.9	0.40	26.4	0.35	53.0	20.0	0.50	21.0	0.45	21.9	0.40	
40.0	25.6	0.85	26.2	0.80	26.6	0.80														
35.0	27.2	0.65	27.7	0.65	27.9	0.65														
30.0	28.6	0.50	29.0	0.50	29.0	0.50														
25.0	29.8	0.44	30.0	0.40																
23.6	30.0	0.40																		
Min. Boom Angle							Min. Boom Angle	30 degrees	30 degrees	30 degrees	30 degrees	30 degrees	Min. Boom Angle	48 degrees	48 degrees	48 degrees	48 degrees	48 degrees	48 degrees	

LOADS WITHIN SHADED AREA OF CHART ARE LIMITED BY CRANE STRUCTURAL STRENGTH
ALL OTHER LOADS ARE LIMITED BY 75% OF TIPPING

TUTTS P/N 634-0029.8

KATO KR-20H-III SAFE WORKING LOAD CHART - No3

(UNITS - tonnes)

LOADS ON MAIN BOOM - CRANE ON WHEELS

Working Radius (m)	STATIONARY												PICK & CARRY - MAX. SPEED 4 km/hr						Working Radius (m)
	8.4m Boom		14.5m Boom		20.6m Boom		26.7m Boom		8.4m Boom		14.5m Boom		20.6m Boom		26.7m Boom				
	Front Area	360 Degrees	Front Area	360 Degrees	Front Area	360 Degrees	Front Area	360 Degrees	Front Area	360 Degrees	Front Area	360 Degrees	Front Area	360 Degrees	Front Area	360 Degrees			
3.0	12.20	8.20	8.70	7.20					8.50	6.00	6.60	5.00					3.0		
3.5	10.70	6.90	8.70	7.00					8.25	5.00	6.60	4.80					3.5		
4.0	10.00	5.65	8.70	5.35	6.20	4.50			8.00	4.30	6.60	4.10	5.00	3.20			4.0		
4.5	8.80	4.60	7.70	4.30	6.20	4.50			6.80	3.60	6.00	3.40	5.00	3.20			4.5		
5.0	7.45	3.75	6.90	3.55	6.20	4.10	4.00	2.70	5.80	3.00	5.30	2.80	5.00	3.20	2.80	1.85	5.0		
5.5	6.60	3.15	6.15	3.00	5.45	3.35	4.00	2.70	5.00	2.50	4.75	2.30	4.70	2.70	2.80	1.85	5.5		
6.0	5.85	2.70	5.40	2.50	5.10	2.85	4.00	2.70	4.50	2.05	4.30	1.90	4.30	2.30	2.80	1.85	6.0		
6.5	5.00	2.30	4.70	2.05	4.65	2.50	3.85	2.60	4.00	1.70	3.80	1.60	3.90	2.00	2.80	1.85	6.5		
7.0			4.10	1.70	4.30	2.15	3.65	2.30			3.40	1.30	3.60	1.70	2.70	1.70	7.0		
8.0			3.15	1.25	3.60	1.60	3.20	1.70			2.65	0.85	3.00	1.25	2.35	1.35	8.0		
9.0			2.45	0.85	2.85	1.20	2.80	1.30			2.10		2.45	0.90	2.15	1.05	9.0		
10.0			1.95	0.50	2.35	0.85	2.40	1.00			1.65		2.00	0.65	2.00	0.75	10.0		
11.0			1.50		1.90	0.60	2.05	0.75			1.30		1.65		1.70		11.0		
12.0			1.20		1.50		1.75				1.00		1.35		1.45		12.0		
13.0					1.25		1.50						1.10		1.20		13.0		
14.0					1.05		1.25						0.90		1.05		14.0		
15.0					0.85		1.05						0.70		0.90		15.0		
16.0					0.70		0.85						0.55		0.75		16.0		
17.0					0.55		0.70										17.0		
18.0							0.55										18.0		
19.0							0.45										19.0		
Minimum Boom Angle	--	--	--	33 degrees	--	50 degrees	35 degrees	60 degrees	--	--	--	45 degrees	25 degrees	53 degrees	45 degrees	62 degrees	Minimum Boom Angle		

LOADS WITHIN SHADED AREA OF CHART ARE LIMITED BY CRANE STRUCTURAL STRENGTH

ALL OTHER LOADS ARE LIMITED BY STABILITY (STATIONARY - 75% OF TIPPING, PICK & CARRY - 66.7% OF TIPPING)

TUTTS P/N 634-0029.9

KR-250 OUTRIGGER REACTION FORCE

KR-250 Outrigger reaction force

WR stands for Working Radius (m).

LD stands for lifting load includes hook weight and sling etc., which are lifted.

SA stands for Slew Angle.(Deg.) view from above crane, the value goes by clockwise.

FR stands for Front Right Outrigger reaction (t).

RR stands for Rear Right Outrigger reaction (t).

RL stands for Rear Left Outrigger reaction (t).

FL stands for Front Left Outrigger reaction (t).

* For your safety, We recommend to add the tolerance of 400kg onto the below data.

Condition (1)

Boom Length 8.4m , 20t Hook , Horizontal beam length 5.8m (Maximum length)

WR	LD	SA	FR	RR	RL	FL
2.5	25	46	20.6	10.2	6.2	10.7
3.0	25	46	22.8	9.7	5.1	10.1
3.5	20	46	20.9	8.6	4.3	8.9
4.0	18.5	46	21.5	7.9	3.6	8.2
4.5	16.5	46	21.3	7.3	3.1	7.5
5.0	15.0	46	21.3	6.8	2.7	7.0
5.5	13.7	46	21.3	6.3	2.3	6.5
6.0	12.5	46	21.2	5.9	2.1	6.0
6.5	11.5	46	21.2	5.5	1.8	5.7

KR-250 OVERTIGGER REACTION FORCE

Condition (2)

Boom Length 14.5m , 20t Hook , Horizontal beam length 5.8m (Maximum length)

WR	LD	SA	FR	RR	RL	FL
2.5	16	46	15.0	8.7	6.1	9.0
3.0	16	46	16.4	8.6	5.2	8.6
3.5	16	46	17.9	8.2	4.4	8.3
4.0	15.5	46	19.0	7.6	3.7	7.9
4.5	14.2	46	19.3	7.1	3.2	7.3
5.0	13.1	46	19.5	6.7	2.8	6.8
5.5	12.1	46	19.8	6.3	2.4	6.4
6.0	11.2	46	19.9	5.9	2.1	6.0
6.5	10.4	46	20.1	5.5	1.9	5.6
7.0	9.7	46	20.3	5.2	1.7	5.3
8.0	8.15	46	19.9	4.8	1.4	4.8
9.0	6.45	46	18.7	4.5	1.4	4.5
10.0	5.25	46	17.9	4.4	1.3	4.4
10.0	5.25	226	1.3	4.4	17.9	4.4
12.0	3.65	46	17.0	4.1	1.2	4.1
12.0	3.65	226	1.2	4.1	17.0	4.1

KR-250 OURTIGGER REACTION FORCE

Condition (3)

Boom Length 20.6m , 20t Hook , Horizontal beam length 5.8m (Maximum length)

WR	LD	SA	FR	RR	RL	FL
3.5	9.0	46	11.9	7.3	5.2	7.4
4.0	9.0	46	12.8	7.1	4.7	7.2
4.5	9.0	46	13.7	6.9	4.2	7.0
5.0	9.0	46	14.6	6.7	3.7	6.8
5.5	9.0	46	15.5	6.5	3.2	6.5
6.0	9.0	46	16.5	6.2	2.8	6.3
6.5	8.5	46	16.8	5.9	2.5	6.0
7.0	8.0	46	17.0	5.7	2.3	5.7
8.0	7.1	46	17.4	5.3	1.9	5.3
9.0	6.4	46	17.8	4.9	1.6	4.9
10.0	5.8	46	18.2	4.5	1.4	4.5
12.0	4.15	46	17.2	4.3	1.3	4.2
12.0	4.15	226	1.3	4.2	17.2	4.2
14.0	3.05	45	16.4	4.0	1.3	4.2
14.0	3.05	226	1.2	4.1	16.5	4.0
16.0	2.3	45	16.0	3.9	1.2	4.0
16.0	2.3	226	1.2	3.9	16.1	3.9
18.0	1.75	45	15.7	3.7	1.2	3.9
18.0	1.75	226	1.1	3.8	15.9	3.7

KR-250 OVERTIGGER REACTION FORCE

Condition (4)

Boom Length 26.7m , 20t Hook , Horizontal beam length 5.8m (Maximum length)

WR	LD	SA	FR	RR	RL	FL
4.5	6.8	46	11.3	6.8	4.7	6.8
5.0	6.8	46	12.0	6.6	4.3	6.7
5.5	6.8	46	12.7	6.5	3.9	6.5
6.0	6.8	46	13.4	6.3	3.5	6.3
6.5	6.8	46	14.2	6.1	3.2	6.2
7.0	6.8	46	14.9	5.9	2.8	6.0
8.0	6.1	46	15.3	5.6	2.4	5.6
9.0	5.5	46	15.7	5.3	2.1	5.3
10.0	5.0	46	16.0	5.0	1.9	5.0
10.0	5.0	226	1.9	5.0	16.0	5.0
12.0	4.2	46	16.7	4.5	1.5	4.4
12.0	4.2	226	1.4	4.4	16.7	4.4
14.0	3.3	46	16.5	4.2	1.3	4.1
14.0	3.3	226	1.3	4.2	16.5	4.1
16.0	2.55	45	16.0	3.9	1.3	4.1
16.0	2.55	226	1.2	4.0	16.1	4.0
18.0	1.95	45	15.6	3.9	1.2	4.0
18.0	1.95	226	1.2	3.9	15.7	3.9
20.0	1.5	45	15.3	3.8	1.2	4.0
20.0	1.5	226	1.2	3.9	15.4	3.8
22.0	1.2	45	15.3	3.7	1.1	3.8
22.0	1.2	226	1.1	3.7	15.5	3.7
24.0	0.9	45	15.1	3.7	1.1	3.8
24.0	0.9	226	1.1	3.7	15.3	3.6
25.0	0.8	45	15.2	3.6	1.1	3.7
25.0	0.8	226	1.1	3.6	15.3	3.6