



BARGE: HSM 3016

ULLAGE TRIM TABLE MMC

	1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.	
	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>
1 PORT	00-0/8	- 00-0/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/4	- 00-1/4	00-1/4	- 00-1/4
1 STBD	00-0/8	- 00-0/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/4	- 00-1/4	00-1/4	- 00-1/4
2 PORT	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8
2 STBD	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8
3 PORT	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8
3 STBD	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT = 2'-00"
 AFT DRAFT = 4'-00"
 DIFF. = 2'-00" (DOWN BY STERN)

THE CORRECTION FOR 2'-00" TRIM DOWN BY STERN FOR 1 PORT IS - 00-1/8"
 FOR A MEASURED ULLAGE GAUGE OF 4'-00" ON 1 PORT, THE TRIM CORRECTED ULLAGE IS 3'-11 7/8"

LENGTH BETWEEN DRAFT MARKS: 235'-06"

April 11, 2017



BARGE: HSM 3016
JEFFBOAT 16-2310

STBD SLOP
ULLAGE TABLE
8" HATCH

CAPACITIES GIVEN IN GALLONS

REFERENCE GAUGE HEIGHT: 6'-01 1/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.	IN	10 FT.	IN	11 FT.
0	0	0	0	0	4,720	0	3,570	0	2,420	0	1,270	0	120	0		0	0	0	0	0	0	0	0
1/4	1/4	1/4	1/4	1/4	4,696	1/4	3,546	1/4	2,396	1/4	1,246	1/4	96	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,672	1/2	3,522	1/2	2,372	1/2	1,222	1/2	72	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,648	3/4	3,498	3/4	2,348	3/4	1,198	3/4	48	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	1	1	1	1	4,624	1	3,474	1	2,324	1	1,174	1	24	1	1	1	1	1	1	1	1	1	1
1/4	1/4	1/4	1/4	1/4	4,600	1/4	3,450	1/4	2,300	1/4	1,150	1/4	0	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,576	1/2	3,426	1/2	2,276	1/2	1,126	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,552	3/4	3,402	3/4	2,252	3/4	1,102	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	2	2	2	2	4,528	2	3,378	2	2,228	2	1,078	2		2	2	2	2	2	2	2	2	2	2
1/4	1/4	1/4	1/4	1/4	4,505	1/4	3,354	1/4	2,204	1/4	1,054	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,481	1/2	3,330	1/2	2,180	1/2	1,030	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,457	3/4	3,307	3/4	2,156	3/4	1,006	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	3	3	3	3	4,433	3	3,283	3	2,132	3	982	3		3	3	3	3	3	3	3	3	3	3
1/4	1/4	1/4	1/4	1/4	4,409	1/4	3,259	1/4	2,108	1/4	958	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,385	1/2	3,235	1/2	2,085	1/2	934	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,361	3/4	3,211	3/4	2,061	3/4	910	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	4	4	4	4	4,337	4	3,187	4	2,037	4	887	4		4	4	4	4	4	4	4	4	4	4
1/4	1/4	1/4	1/4	1/4	4,313	1/4	3,163	1/4	2,013	1/4	863	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,289	1/2	3,139	1/2	1,989	1/2	839	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,265	3/4	3,115	3/4	1,965	3/4	815	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	5	5	5	5	4,241	5	3,091	5	1,941	5	791	5		5	5	5	5	5	5	5	5	5	5
1/4	1/4	1/4	1/4	1/4	4,217	1/4	3,067	1/4	1,917	1/4	767	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,193	1/2	3,043	1/2	1,893	1/2	743	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,169	3/4	3,019	3/4	1,869	3/4	719	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	6	6	6	6	4,145	6	2,995	6	1,845	6	695	6		6	6	6	6	6	6	6	6	6	6
1/4	1/4	1/4	1/4	1/4	4,121	1/4	2,971	1/4	1,821	1/4	671	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	5,247	1/2	4,097	1/2	2,947	1/2	1,797	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	5,223	3/4	4,073	3/4	2,923	3/4	1,773	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	7	7	7	7	5,199	7	4,049	7	2,899	7	1,749	7		7	7	7	7	7	7	7	7	7	7
1/4	1/4	1/4	1/4	1/4	5,175	1/4	4,025	1/4	2,875	1/4	1,725	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	5,151	1/2	4,001	1/2	2,851	1/2	1,701	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	5,127	3/4	3,977	3/4	2,827	3/4	1,677	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	8	8	8	8	5,104	8	3,953	8	2,803	8	1,653	8		8	8	8	8	8	8	8	8	8	8
1/4	1/4	1/4	1/4	1/4	5,080	1/4	3,929	1/4	2,779	1/4	1,629	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	5,056	1/2	3,906	1/2	2,755	1/2	1,605	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	5,032	3/4	3,882	3/4	2,731	3/4	1,581	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	9	9	9	9	5,008	9	3,858	9	2,708	9	1,557	9		9	9	9	9	9	9	9	9	9	9
1/4	1/4	1/4	1/4	1/4	4,984	1/4	3,834	1/4	2,684	1/4	1,533	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,960	1/2	3,810	1/2	2,660	1/2	1,509	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,936	3/4	3,786	3/4	2,636	3/4	1,486	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	10	10	10	10	4,912	10	3,762	10	2,612	10	1,462	10		10	10	10	10	10	10	10	10	10	10
1/4	1/4	1/4	1/4	1/4	4,888	1/4	3,738	1/4	2,588	1/4	1,438	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,864	1/2	3,714	1/2	2,564	1/2	1,414	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,840	3/4	3,690	3/4	2,540	3/4	1,390	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	11	11	11	11	4,816	11	3,666	11	2,516	11	1,366	11		11	11	11	11	11	11	11	11	11	11
1/4	1/4	1/4	1/4	1/4	4,792	1/4	3,642	1/4	2,492	1/4	1,342	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,768	1/2	3,618	1/2	2,468	1/2	1,318	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,744	3/4	3,594	3/4	2,444	3/4	1,294	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

NOTE: GAUGE POINT: TO TOP LIP OF 8" HATCH.
NOTE: GAUGE POINT LOCATED NEAR GEOMETRIC CENTER OF TANK
NOTE: FOR GREATER ACCURACY, BARGE SHOULD BE UPRIGHT AND ON EVEN KEEL
NOTE: MEASURED AND COMPUTED IN ACCORDANCE WITH API MPMS 2.7

DATE STRAPPED: 03/02/2017 BY: JM
DATE COMPUTED: 04/11/2017 BY: CL
DATE ISSUED: 04/11/2017

THIS CHART IS CERTIFIED FOR THE ABOVE NAMED TANK ONLY. NO CHANGES
OF ANY KIND CAN BE MADE WITHOUT THE WRITTEN CONSENT OF OUR COMPANY.



BARGE: HSM 3016
JEFFBOAT 16-2310

PORT SLOP
ULLAGE TABLE
8" HATCH

CAPACITIES GIVEN IN GALLONS

REFERENCE GAUGE HEIGHT: 6'-01 3/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.	IN	10 FT.	IN	11 FT.
0	0	0	0	0	5,002	0	3,796	0	2,589	0	1,383	0	176	0	0	0	0	0	0	0	0	0	0
1/4	1/4	1/4	1/4	1/4	4,977	1/4	3,770	1/4	2,564	1/4	1,357	1/4	151	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,952	1/2	3,745	1/2	2,539	1/2	1,332	1/2	126	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,927	3/4	3,720	3/4	2,514	3/4	1,307	3/4	101	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	1	1	1	1	4,902	1	3,695	1	2,489	1	1,282	1	75	1	1	1	1	1	1	1	1	1	1
1/4	1/4	1/4	1/4	1/4	4,876	1/4	3,670	1/4	2,463	1/4	1,257	1/4	50	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,851	1/2	3,645	1/2	2,438	1/2	1,232	1/2	25	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,826	3/4	3,620	3/4	2,413	3/4	1,207	3/4	0	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	2	2	2	2	4,801	2	3,595	2	2,388	2	1,181	2	0	2	2	2	2	2	2	2	2	2	2
1/4	1/4	1/4	1/4	1/4	4,776	1/4	3,569	1/4	2,363	1/4	1,156	1/4	0	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,751	1/2	3,544	1/2	2,338	1/2	1,131	1/2	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,726	3/4	3,519	3/4	2,313	3/4	1,106	3/4	0	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	3	3	3	3	4,701	3	3,494	3	2,287	3	1,081	3	0	3	3	3	3	3	3	3	3	3	3
1/4	1/4	1/4	1/4	1/4	4,675	1/4	3,469	1/4	2,262	1/4	1,056	1/4	0	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,650	1/2	3,444	1/2	2,237	1/2	1,031	1/2	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,625	3/4	3,419	3/4	2,212	3/4	1,005	3/4	0	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	4	4	4	4	4,600	4	3,393	4	2,187	4	980	4	0	4	4	4	4	4	4	4	4	4	4
1/4	1/4	1/4	1/4	1/4	4,575	1/4	3,368	1/4	2,162	1/4	955	1/4	0	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,550	1/2	3,343	1/2	2,137	1/2	930	1/2	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,525	3/4	3,318	3/4	2,111	3/4	905	3/4	0	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	5	5	5	5	4,499	5	3,293	5	2,086	5	880	5	0	5	5	5	5	5	5	5	5	5	5
1/4	1/4	1/4	1/4	1/4	4,474	1/4	3,268	1/4	2,061	1/4	855	1/4	0	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,449	1/2	3,243	1/2	2,036	1/2	830	1/2	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,424	3/4	3,217	3/4	2,011	3/4	804	3/4	0	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	6	6	6	6	4,399	6	3,192	6	1,986	6	779	6	0	6	6	6	6	6	6	6	6	6	6
1/4	1/4	1/4	1/4	1/4	4,374	1/4	3,167	1/4	1,961	1/4	754	1/4	0	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	4,349	1/2	3,142	1/2	1,936	1/2	729	1/2	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	4,323	3/4	3,117	3/4	1,910	3/4	704	3/4	0	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	7	7	7	7	4,298	7	3,092	7	1,885	7	679	7	0	7	7	7	7	7	7	7	7	7	7
1/4	1/4	5,480	1/4	4,273	1/4	3,067	1/4	1,860	1/4	654	1/4	0	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	5,455	1/2	4,248	1/2	3,042	1/2	1,835	1/2	628	1/2	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	5,429	3/4	4,223	3/4	3,016	3/4	1,810	3/4	603	3/4	0	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	8	5,404	8	4,198	8	2,991	8	1,785	8	578	8	0	8	8	8	8	8	8	8	8	8	8	8
1/4	1/4	5,379	1/4	4,173	1/4	2,966	1/4	1,760	1/4	553	1/4	0	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	5,354	1/2	4,148	1/2	2,941	1/2	1,734	1/2	528	1/2	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	5,329	3/4	4,122	3/4	2,916	3/4	1,709	3/4	503	3/4	0	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	9	5,304	9	4,097	9	2,891	9	1,684	9	478	9	0	9	9	9	9	9	9	9	9	9	9	9
1/4	1/4	5,279	1/4	4,072	1/4	2,866	1/4	1,659	1/4	452	1/4	0	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	5,254	1/2	4,047	1/2	2,840	1/2	1,634	1/2	427	1/2	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	5,228	3/4	4,022	3/4	2,815	3/4	1,609	3/4	402	3/4	0	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	10	5,203	10	3,997	10	2,790	10	1,584	10	377	10	0	10	10	10	10	10	10	10	10	10	10	10
1/4	1/4	5,178	1/4	3,972	1/4	2,765	1/4	1,558	1/4	352	1/4	0	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	5,153	1/2	3,946	1/2	2,740	1/2	1,533	1/2	327	1/2	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	5,128	3/4	3,921	3/4	2,715	3/4	1,508	3/4	302	3/4	0	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	11	5,103	11	3,896	11	2,690	11	1,483	11	277	11	0	11	11	11	11	11	11	11	11	11	11	11
1/4	1/4	5,078	1/4	3,871	1/4	2,664	1/4	1,458	1/4	251	1/4	0	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	5,052	1/2	3,846	1/2	2,639	1/2	1,433	1/2	226	1/2	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	5,027	3/4	3,821	3/4	2,614	3/4	1,408	3/4	201	3/4	0	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

NOTE: GAUGE POINT: TO TOP LIP OF 8" HATCH.
NOTE: GAUGE POINT LOCATED NEAR GEOMETRIC CENTER OF TANK
NOTE: FOR GREATER ACCURACY, BARGE SHOULD BE UPRIGHT AND ON EVEN KEEL
NOTE: MEASURED AND COMPUTED IN ACCORDANCE WITH API MPMS 2.7

DATE STRAPPED: 03/02/2017 BY: JM
DATE COMPUTED: 04/11/2017 BY: CL
DATE ISSUED: 04/11/2017

THIS CHART IS CERTIFIED FOR THE ABOVE NAMED TANK ONLY. NO CHANGES OF ANY KIND CAN BE MADE WITHOUT THE WRITTEN CONSENT OF OUR COMPANY.



BARGE: HSM 3016
JEFFBOAT 16-2310

1 PORT
ULLAGE TABLE
MMC

CAPACITIES GIVEN IN WHOLE GALLONS

FOR MANUAL GAUGING AT 2" BALL VALVE LOCATED NEAR GEOMETRIC CENTER OF TANK

REFERENCE GAUGE HEIGHT: 15'-11 1/8"

IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.	IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.
0		0	197,629	0	183,221	0	168,812	0	154,404	0	139,996	0	125,587	0	111,179	0	96,770	0	82,362	0	67,954	0	53,549	0	39,144	0	24,736	0	10,848	0	
1/4	1/4	197,329	182,921	168,512	154,104	139,695	125,287	110,879	96,470	82,062	67,654	53,249	38,844	24,436	10,581																
1/2	1/2	197,029	182,620	168,212	153,804	139,395	124,987	110,578	96,170	81,762	67,354	52,949	38,544	24,135	10,317																
3/4	3/4	196,729	182,320	167,912	153,503	139,095	124,687	110,278	95,870	81,461	67,053	52,649	38,244	23,835	10,052																
1	1	196,428	182,020	167,612	153,203	138,795	124,386	109,978	95,570	81,161	66,753	52,349	37,944	23,535	9,788																
1/4	1/4	196,128	181,720	167,312	152,903	138,495	124,086	109,678	95,270	80,861	66,453	52,049	37,643	23,235	9,525																
1/2	1/2	195,828	181,420	167,012	152,603	138,195	123,786	109,378	94,969	80,561	66,153	51,749	37,343	22,935	9,265																
3/4	3/4	195,528	181,120	166,711	152,303	137,894	123,486	109,078	94,669	80,261	65,853	51,449	37,043	22,635	9,004																
2	2	195,228	180,819	166,411	152,003	137,594	123,186	108,777	94,369	79,961	65,553	51,149	36,743	22,334	8,744																
1/4	1/4	194,928	180,519	166,111	151,702	137,294	122,886	108,477	94,069	79,660	65,252	50,849	36,443	22,034	8,486																
1/2	1/2	194,627	180,219	165,811	151,402	136,994	122,585	108,177	93,769	79,360	64,952	50,549	36,142	21,734	8,230																
3/4	3/4	194,327	179,919	165,510	151,102	136,694	122,285	107,877	93,468	79,060	64,652	50,250	35,842	21,434	7,973																
3	3	194,027	179,619	165,210	150,802	136,393	121,985	107,577	93,168	78,760	64,352	49,950	35,542	21,134	7,717																
1/4	1/4	193,727	179,319	164,910	150,502	136,093	121,685	107,277	92,868	78,460	64,052	49,650	35,242	20,834	7,463																
1/2	1/2	193,427	179,018	164,610	150,202	135,793	121,385	106,976	92,568	78,160	63,752	49,350	34,942	20,533	7,211																
3/4	3/4	193,127	178,718	164,310	149,901	135,493	121,085	106,676	92,268	77,859	63,451	49,050	34,642	20,233	6,959																
4	4	192,826	178,418	164,010	149,601	135,193	120,784	106,376	91,968	77,559	63,151	48,750	34,341	19,933	6,707																
1/4	1/4	192,526	178,118	163,709	149,301	134,893	120,484	106,076	91,667	77,259	62,851	48,450	34,041	19,634	6,457																
1/2	1/2	192,226	177,818	163,409	149,001	134,592	120,184	105,776	91,367	76,959	62,551	48,149	33,741	19,336	6,210																
3/4	3/4	191,926	177,517	163,109	148,701	134,292	119,884	105,475	91,067	76,659	62,251	47,849	33,441	19,038	5,962																
5	5	191,626	177,217	162,809	148,400	133,992	119,584	105,175	90,767	76,359	61,951	47,549	33,141	18,740	5,715																
1/4	1/4	191,326	176,917	162,509	148,100	133,692	119,284	104,875	90,467	76,058	61,650	47,249	32,841	18,444	5,469																
1/2	1/2	191,025	176,617	162,209	147,800	133,392	118,983	104,575	90,167	75,758	61,350	46,949	32,540	18,150	5,226																
3/4	3/4	190,725	176,317	161,908	147,500	133,092	118,683	104,275	89,866	75,458	61,050	46,649	32,240	17,856	4,983																
6	6	190,425	176,017	161,608	147,200	132,791	118,383	103,975	89,566	75,158	60,750	46,348	31,940	17,562	4,740																
1/4	1/4	190,125	175,716	161,308	146,900	132,491	118,083	103,674	89,266	74,858	60,450	46,048	31,640	17,270	4,499																
1/2	1/2	189,825	175,416	161,008	146,599	132,191	117,783	103,374	88,966	74,558	60,150	45,748	31,340	16,980	4,261																
3/4	3/4	189,524	175,116	160,708	146,299	131,891	117,482	103,074	88,666	74,257	59,849	45,448	31,039	16,691	4,023																
1/8	202,574	7	189,224	7	174,816	7	160,407	7	145,999	7	131,591	7	117,182	7	102,774	7	88,366	7	73,957	7	59,549	7	45,148	7	30,739	7	16,401	7	3,785	7	
1/4	202,487	1/4	188,924	1/4	174,516	1/4	160,107	1/4	145,699	1/4	131,291	1/4	116,882	1/4	102,474	1/4	88,065	1/4	73,657	1/4	59,249	1/4	44,848	1/4	30,439	1/4	16,113	1/4	3,549	1/4	
1/2	202,312	1/2	188,624	1/2	174,216	1/2	159,807	1/2	145,399	1/2	130,990	1/2	116,582	1/2	102,174	1/2	87,765	1/2	73,357	1/2	58,949	1/2	44,547	1/2	30,139	1/2	15,828	1/2	3,316	1/2	
3/4	202,136	3/4	188,324	3/4	173,915	3/4	159,507	3/4	145,099	3/4	130,690	3/4	116,282	3/4	101,873	3/4	87,465	3/4	73,057	3/4	58,649	3/4	44,247	3/4	29,839	3/4	15,542	3/4	3,083	3/4	
8	201,961	8	188,024	8	173,615	8	159,207	8	144,798	8	130,390	8	115,982	8	101,573	8	87,165	8	72,757	8	58,349	8	43,947	8	29,539	8	15,257	8	2,849	8	
1/4	201,761	1/4	187,723	1/4	173,315	1/4	158,907	1/4	144,498	1/4	130,090	1/4	115,681	1/4	101,273	1/4	86,865	1/4	72,456	1/4	58,049	1/4	43,647	1/4	29,238	1/4	14,974	1/4	2,619	1/4	
1/2	201,536	1/2	187,423	1/2	173,015	1/2	158,606	1/2	144,198	1/2	129,790	1/2	115,381	1/2	100,973	1/2	86,564	1/2	72,156	1/2	57,749	1/2	43,347	1/2	28,938	1/2	14,692	1/2	2,392	1/2	
3/4	201,311	3/4	187,123	3/4	172,715	3/4	158,306	3/4	143,898	3/4	129,489	3/4	115,081	3/4	100,673	3/4	86,264	3/4	71,856	3/4	57,449	3/4	43,046	3/4	28,638	3/4	14,411	3/4	2,165	3/4	
9	201,086	9	186,823	9	172,414	9	158,006	9	143,598	9	129,189	9	114,781	9	100,373	9	85,964	9	71,556	9	57,149	9	42,746	9	28,338	9	14,130	9	1,937	9	
1/4	200,836	1/4	186,523	1/4	172,114	1/4	157,706	1/4	143,298	1/4	128,889	1/4	114,481	1/4	100,072	1/4	85,664	1/4	71,256	1/4	56,849	1/4	42,446	1/4	28,038	1/4	13,850	1/4	1,729	1/4	
1/2	200,561	1/2	186,223	1/2	171,814	1/2	157,406	1/2	142,997	1/2	128,589	1/2	114,181	1/2	99,772	1/2	85,364	1/2	70,956	1/2	56,549	1/2	42,146	1/2	27,738	1/2	13,573	1/2	1,540	1/2	
3/4	200,286	3/4	185,922	3/4	171,514	3/4	157,106	3/4	142,697	3/4	128,289	3/4	113,880	3/4	99,472	3/4	85,064	3/4	70,655	3/4	56,249	3/4	41,846	3/4	27,437	3/4	13,296	3/4	1,351	3/4	
10	200,010	10	185,622	10	171,214	10	156,805	10	142,397	10	127,989	10	113,580	10	99,172	10	84,763	10	70,355	10	55,949	10	41,546	10	27,137	10	13,019	10	1,162	10	
1/4	199,724	1/4	185,322	1/4	170,914	1/4	156,505	1/4	142,097	1/4	127,688	1/4	113,280	1/4	98,872	1/4	84,463	1/4	70,055	1/4	55,649	1/4	41,245	1/4	26,837	1/4	12,744	1/4	1,012	1/4	
1/2	199,425	1/2	185,022	1/2	170,613	1/2	156,205	1/2	141,797	1/2	127,388	1/2	112,980	1/2	98,571	1/2	84,163	1/2	69,755	1/2	55,349	1/2	40,945	1/2	26,537	1/2	12,471	1/2	902	1/2	
3/4	199,126	3/4	184,722	3/4	170,313	3/4	155,905	3/4	141,496	3/4	127,088	3/4	112,680	3/4	98,271	3/4	83,863	3/4	69,455	3/4	55,049	3/4	40,645	3/4	26,237	3/4	12,198	3/4			