

Transformer Tap Chart for #8-2 Wire

<i>Watts</i>	40	80	120	160	200	240	280	300	340	384
<i>Amps</i>	3.3	6.7	10.0	13.3	16.7	20.0	23.3	25.0	28.3	32.0
DISTANCE*										
25	12	12	12	12	13	13	13	13		
50	12	12	13	13	13	13	13	14		
75	12	13	13	13	14	14	14	14		
100	12	13	13	14	14	15	15	15		
125	13	13	14	14	15	15	16	16		
150	13	13	14	15	15	16	16	17		
175	13	13	14	15	16	16	17	18		
200	13	14	15	15	16	17	18	18		
225	13	14	15	16	17	18	19	19		
250	13	14	15	16	17	18	19	20		
275	13	14	16	17	18	19	20	21		
300	13	15	16	17	18	20	21	22		
325	13	15	16	18	19	20	22			
350	13	15	17	18	19	21				
375	14	15	17	18	20	22				
400	14	15	17	19	21	22				
425	14	16	18	19	21					
450	14	16	18	20	22					
475	14	16	18	20	22					
500	14	16	19	21						
525	14	16	19	21						
550	14	17	19	21						
575	14	17	20	22						
600	15	17	20	22						
625	15	17	20							
650	15	18	21							
675	15	18	21							
700	15	18	21							
725	15	18	22							
750	15	18	22							
775	15	19	22							
800	15	19								
825	16	19								
850	16	19								
875	16	19								
900	16	20								
925	16	20								
950	16	20								
975	16	20								
1000	16	21								

The NEC (National Electrical Code) limits all secondary wire runs to a maximum of 20 amps.

Note: #8-2 wire is rated for maximum of 40 amps and 480 watts. Always use no more than 80% (according to the National Electrical Code) thus a total of 384 watts of total lamp load.

Formula used:
 $Amps \times Distance \times 2 \times Resistance/foot \times Amps = Watts / Volts$
 Resistance per foot for #8-2 wire = .00064

* Distance of wire is calculated from the transformer to the first connection point ONLY.

