TCP PRO — TruDim™ Dimmable Covered CFL Specification

TCP TruDim Covered Lamps	12,000 Hours average rated life, 120 V

Catalog Number	
Notes	Type

TruDim™
Technology by TCP

Applications:

Perfect for most dimmable applications: Use where a standard incandescent is used.

- Table Lamps
- Wall Sconces
- Recessed Cans
- Chandeliers
- Ceiling Fixtures

Features and Benefits

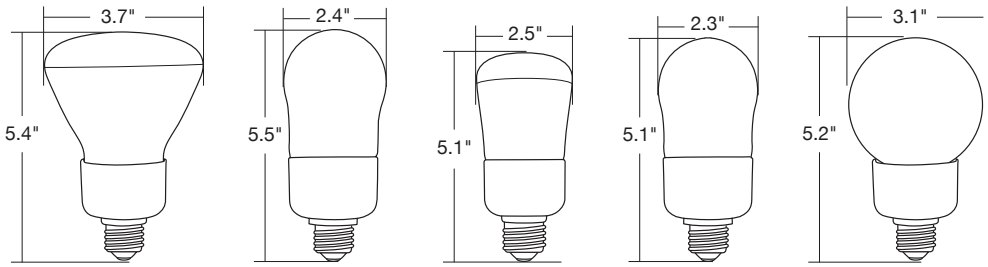
- Multi-level adaptive circuitry provides stable linear dimming from 100 to 2%
- Features a dimming curve that closely matches the human eye response of incandescent dimming
- Overdrive technology provides faster run-up time
- Superior circuitry design controls low dim level starting capability
- Zero low end flicker
- Unique NanoTi pre-phosphor coating improves Lumen Maintenance over the life of the lamp

Specifications (at full brightness)

End of Life Protection	Yes
Ballast type	Electronic
Starting method	Programmed Rapid Start
Voltage	120VAC
Frequency	50/60 HZ
CRI	82
FCC Compliance	47 CFR Part 18
Power Factor	> .70 at full power
Rated Life	12,000 Hours

Special Application Notes

- UL approved for wet location in base up position.
- 2 hour burn-in time at full power recommended.



4R3016TD 41316TD 4R2014TD 41315TD 4G2515TD

Suggested Dimmer:

Designed specifically for use with standard non-illuminated 600watt incandescent slide or rotary dimmer. Consult TCP Technical Support or dimmer manufacturer for compatibility with other dimmer types.

TCP reserves the right to void the warranty for any misapplication of these products.

Warranties and Certifications:	Item #	Description	Wattage	Incandescent Wattage Comparison	Initial Lumens	M.O.L. (inches)	Diameter (inches)	Input Line Current	Lamp Shape	Availability
24 MONTH WARRANTY	4R3016TD	16 WATT R30 Dimmable	16	65W	650	5.4	3.7	.19A	R30	Available Now
	41316TD	16 WATT A-Lamp Dimmable	16	60W	850	5.5	2.4	.19A	A-21	Coming Soon
	4R2014TD	14 WATT R20 Dimmable	14	50W	410	5.1	2.5	.17A	R20	Coming Soon
	41315TD	15 WATT A-Lamp Dimmable	15	60W	750	5.1	2.3	.18A	A-19	Coming Soon
c UL us	4G2515TD	15 WATT G25 Globe Dimmable	15	60W	750	5.2	3.1	.18A	G25	Coming Soon

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TruDim™ Dimmable Covered CFL Specification

Color Temperature	Item #	Description	Wattage	Incandescent Wattage Comparison	Initial Lumens	M.O.L. (inches)	Diameter (inches)	Input Line Current	Lamp Shape	Availability
2700°K	4R3016TD	16 WATT R30 Dimmable	16	65W	650	5.4	3.7	.19A	R30	Available Now
	41316TD	16 WATT A-Lamp Dimmable	16	60W	850	5.5	2.4	.19A	A-21	Coming Soon
	4R2014TD	14 WATT R20 Dimmable	14	50W	410	5.1	2.5	.17A	R20	Coming Soon
	41315TD	15 WATT A-Lamp Dimmable	15	60W	750	5.1	2.3	.18A	A-19	Coming Soon
	4G2515TD	15 WATT G25 Globe Dimmable	15	60W	750	5.2	3.1	.18A	G25	Coming Soon
3000°K ordering suffix 30K	4R3016TD30K	16 WATT R30 Dimmable 3000K	16	65W	650	5.4	3.7	.19A	R30	Available Now
	41316TD30K	16 WATT A-Lamp Dimmable 3000K	16	60W	850	5.5	2.4	.19A	A-21	Coming Soon
	4R2014TD30K	14 WATT R20 Dimmable 3000K	14	50W	410	5.1	2.5	.17A	R20	Coming Soon
	41315TD30K	15 WATT A-Lamp Dimmable 3000K	15	60W	750	5.1	2.3	.18A	A-19	Coming Soon
	4G2515TD30K	15 WATT G25 Globe Dimmable 3000K	15	60W	750	5.2	3.1	.18A	G25	Coming Soon
3500°K ordering suffix 35K	4R3016TD35K	16 WATT R30 Dimmable 3500K	16	65W	600	5.4	3.7	.19A	R30	Available Now
	41316TD35K	16 WATT A-Lamp Dimmable 3500K	16	60W	800	5.5	2.4	.19A	A-21	Coming Soon
	4R2014TD35K	14 WATT R20 Dimmable 3500K	14	50W	380	5.1	2.5	.17A	R20	Coming Soon
	41315TD35K	15 WATT A-Lamp Dimmable 3500K	15	60W	700	5.1	2.3	.18A	A-19	Coming Soon
	4G2515TD35K	15 WATT G25 Globe Dimmable 3500K	15	60W	700	5.2	3.1	.18A	G25	Coming Soon
4100°K ordering suffix 41K	4R3016TD41K	16 WATT R30 Dimmable 4100K	16	65W	600	5.4	3.7	.19A	R30	Available Now
	41316TD41K	16 WATT A-Lamp Dimmable 4100K	16	60W	800	5.5	2.4	.19A	A-21	Coming Soon
	4R2014TD41K	14 WATT R20 Dimmable 4100K	14	50W	380	5.1	2.5	.17A	R20	Coming Soon
	41315TD41K	15 WATT A-Lamp Dimmable 4100K	15	60W	700	5.1	2.3	.18A	A-19	Coming Soon
	4G2515TD41K	15 WATT G25 Globe Dimmable 4100K	15	60W	700	5.2	3.1	.18A	G25	Coming Soon
5000°K ordering suffix 50K	4R3016TD50K	16 WATT R30 Dimmable 5000K	16	65W	600	5.4	3.7	.19A	R30	Available Now
	41316TD50K	16 WATT A-Lamp Dimmable 5000K	16	60W	775	5.5	2.4	.19A	A-21	Coming Soon
	4R2014TD50K	14 WATT R20 Dimmable 5000K	14	50W	380	5.1	2.5	.17A	R20	Coming Soon
	41315TD50K	15 WATT A-Lamp Dimmable 5000K	15	60W	675	5.1	2.3	.18A	A-19	Coming Soon
	4G2515TD50K	15 WATT G25 Globe Dimmable 5000K	15	60W	675	5.2	3.1	.18A	G25	Coming Soon
6500°K ordering suffix 65K	4R3016TD65K	16 WATT R30 Dimmable 6500K	16	65W	600	5.4	3.7	.19A	R30	Available Now
	41316TD65K	16 WATT A-Lamp Dimmable 6500K	16	60W	775	5.5	2.4	.19A	A-21	Coming Soon
	4R2014TD65K	14 WATT R20 Dimmable 6500K	14	50W	380	5.1	2.5	.17A	R20	Coming Soon
	41315TD65K	15 WATT A-Lamp Dimmable 6500K	15	60W	675	5.1	2.3	.18A	A-19	Coming Soon
	4G2515TD65K	15 WATT G25 Globe Dimmable 6500K	15	60W	675	5.2	3.1	.18A	G25	Coming Soon

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TCP Tru Dim

Answers To Your Most Frequent Questions

QUESTIONS	ANSWERS
1Q: Do TCP Tru Dim Series products dim exactly like an incandescent lamp?	**A:** TCP Tru Dim Series products have slightly different dimming characteristics due to the electronics of a CFL vs. an incandescent filament however they are very close in performance 1) They will dim down to 2% of light output vs. zero for incandescents. 2) Electronic components do not respond in the same manner as a heated incandescent filament therefore there will be a slight difference in visual operational characteristics
2Q: Do TCP's Tru Dim Series products work on ordinary incandescent dimmers?"	**A:** YES! Designed specifically for use with standard non-illuminated 600watt incandescent slide or rotary dimmers that are currently available in the market. They will also work with CFL dimmers that are available in the market. Consult TCP Customer Care or the dimmer manufacturer for compatibility with other dimmer types.
3Q: Will TCP's Tru Dim Series products work on every incandescent dimmer ever made?"	**A:** NO! Although TCP's Tru Dim Series product has been approved for use with 600w incandescent dimmers, there are certain types of dimmers that have proven to be incompatible due to certain dimmer features or outdated dimmer technology.
4Q: How can I tell if a dimmer is not compatible with a TCP Tru Dim lamp?	**A:** Generally speaking, certain programmable electronic and/or remote control dimmers are not compatible. Additionally, high wattage dimmers (1000w+) are typically incompatible because of different voltage/current regulations, manufacturing regulations, and manufacturing tolerances. Illuminated (glow-in-the-dark) dimmers are usually incompatible with dimmable CFLs.
5Q: Can TCP recommend a compatible dimmer?	**A:** Although TCP is not at liberty to recommend one manufacturer or brand over another, basic lab testing and real-world experience has shown that 600 Watt max, mid-grade, non-illuminated slide and rotary dimmers function well. Also the new CFL-LED dimmers now available also function well. Follow these links to obtain more compatibility information about Lutron and Leviton dimmers: http://www.lutron.com.service-support/technical/pages/technicalfaq.aspx http://wwwcommunities.leviton.com.docs/doc-2542
6Q: Will TCP's Tru Dim Series products flicker at the low level as other CFL Dimmable product does?	**A:** No! TCP's Dimmable series product contains a low end shut off which turns the lamp off at 2% of the light level. This stops the flickering at the low end and enhances lamp life.
7Q: Why is it important to control the low end dim level for TCP's Tru Dim Series products?	**A:** There are two reasons: 1) Lamp performance instability in the form of flickering is displeasing to the human eye 2) Continuous flickering will significantly shorten lamp life
8Q: Does the performance of TCP's Tru Dim Series products rely on the quality of a dimmer?	**A:** YES! Consideration must be given to the age and quality of a dimmer if it is to be used with a TCP Tru Dim Series product. Because of the recent push to save energy, newer dimmers are more likely to be CFL compatible. Older dimmers are not as capable of withstanding voltage spikes, which, if used, would ultimately damage the circuitry in the TCP Tru Dim Series product.
9Q: Can 1000 watt or larger commercial grade dimmers be used with TCP's Tru Dim Series products?	**A:** No! Most commercial grade dimmers are manufactured to be used with incandescent lamps which have a large resistive load when energized. Since TCP Tru Dim products are electronic, they do not have the same resistive load as an incandescent, and as such , the dimmer will not be able to maintain the proper power balance needed to perform as intended.
10Q: How do you properly use TCP's Tru Dim Series products?	**A:** TCP recommends a burn-in period of 2 hours at full power to stabilize the lamp before dimming. If lamps have been idle for an extended period of time burn at full power for 30 minutes before dimming. When dimming to the off position lamps may pulse at the low end briefly then turn off. This is a safe mode for the lamps and will not hurt the lamp or dimmer.
11Q: Will it damage the lamps if they are turned on at too low a level and they don't come on?	**A:** No! TCP Tru Dim lamps are designed to be turned off and on at a low level with an on/off switch located on the dimmer. If the lamps do not turn on simply move the dimming level up till the lamps turn on then dim down to desired level. With some dimmer models the lamps can be turned off just by using the slider or rotary switch, you may need to raise the slider or rotary switch to a higher level to turn the lamps back on.
12Q: What is the warranty and average life of TCP's Tru Dim Series products?	**A:** TCP's Tru Dim Series product is warranted for 24 months. Using accepted industry standards, the average life is rated at 12,000 hours.
13Q: Can TCP Tru Dim be used in 3-way lamp sockets?	**A:** No! TCP's Tru Dim Series product will not perform like a 3way bulb in a 3way socket they will only have 1 light level at full power.
14Q: Will frequent dimming significantly shorten the life of a TCP Tru Dim Series products?	**A:** NO! Frequent dimming will not significantly reduce the life of the TCP Tru Dim Series product.

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15Q: Can the TCP Tru Dim be used with a touch lamp?"	**A:** NO! Touch lamps are actually controlled by a 3-way switch, so the same rules as the 3-way switch apply in this case.
16Q: How many TCP Tru Dim lamps can be used on the same dimmer?	**A:** To compensate for "inrush current" (timed in milliseconds, the initial flow of electrical current that is needed to start the CFL), TCP recommends dividing the dimmer's rated wattage in half and then using that wattage number to outfit the fixture. For example: **600Watt Dimmer ÷ 2 = 300Watts** TCP's 14W Dimmable CFL: 300 ÷ 14 = 21 lamps TCP's 16W Dimmable CFL: 300 ÷ 16 = 18 lamps **NOTE:** Since every dimmer is manufactured differently there may be some variance in these numbers. ***The above examples are a rough estimate only.***
17Q: Will Tru Dim product all turn off simultaneously when dimmed down to 2% or below?	**No if you have a series of Tru Dim product on a circuit as you dim down to 2% or below the lamps will turn off at different times. Eventually all will turn off but you may have a situation (extremely small range on your dimmer control) with a portion of the lamps still on and the rest off.**
18Q: Why do some of the lamps strobe at the very low end before turning off?	**This is due to the low dim level turn-on capability. When the lamps are dimmed to below 2% some of the lamps may pulse or strobe 4-6 times then turn off. This does not affect the life or performance of the lamps.**
19Q: Can Tru Dim lamps be used with other dimming CFL's or lamps?	**No it is recommended to use 100% Tru Dim lamps on a circuit do not use any other Dimming CFL lamps in combination with Tru Dim. This may affect the performance of the lamps during dimming mode.**