

## Solatube Tubular Daylighting Device Visible Transmittance (VT) Summary 2016

**VT<sub>annual</sub>** and **VT** Data for Product Performance Tested and Reported per the NFRC 203 Standard

Product	Description	VT <sub>annual</sub>	VT <sub>max</sub> Solar Position	VT <sub>max</sub>	VT <sub>(SALT=60,SAZ=0)</sub>	VT <sub>normal</sub>	Test Report	Certified for CPD
160/290 DS-DA-L4-LN	Single Dome w/Vusion & Natural Effect Lens	<b>0.54</b>	SALT=20, SAZ=0	<b>0.586</b>	0.521	0.489	E1047.02-301-41	Yes
160/290 DS-DA-L1-LN	Single Dome w/Optiview & Natural Effect Lens	<b>0.51</b>	SALT=20, SAZ=0	<b>0.582</b>	0.466	0.467	E1047.01-301-41	Yes
160/290 DS-DA-L9-LN	Single Dome w/JustFrost & Natural Effect Lens	<b>0.52</b>	SALT=20, SAZ=0	<b>0.573</b>	0.492	0.461	E1047.03-301-41	Yes
160/290 DS-DA-L1-LS	Single Dome w/Optiview & Soft Effect Lens	<b>0.46</b>	SALT=20, SAZ=0	<b>0.548</b>	0.425	0.422	E1047.05-301-41	Yes
160/290 DSe-DA-L1-LN	Single Dome w/Optiview & Natural Effect Lens & TIP	<b>0.35</b>	SALT=20, SAZ=0	<b>0.433</b>	0.331	0.371	E1047.09-301-41	Yes

Product	Description	VT <sub>annual</sub>	VT <sub>max</sub> Solar Position	VT <sub>max</sub>	VT <sub>(SALT=60,SAZ=0)</sub>	VT <sub>normal</sub>	Test Report	Certified for CPD
Smart LED	Single Domew/JustFrost & Natural Effect Lens	<b>0.53</b>	SALT=20, SAZ=0	<b>0.626</b>	0.463	0.501	E1047.10-301-41	Yes

Product	Description	VT <sub>annual</sub>	VT <sub>max</sub> Solar Position	VT <sub>max</sub>	VT <sub>(SALT=60,SAZ=0)</sub>	VT <sub>normal</sub>	Test Report	Certified for CPD
330 DS-O-DA-L2-TIP	Single Dome w/TIP & Prismatic Diffuser	<b>0.50</b>	SALT=70, SAZ=30	<b>0.684</b>	0.661	0.670	G3705.01-301-41	Yes
330 DS-C-DA-L1---	Single Dome w/Optiview (No Effect Lens)	<b>0.41</b>	SALT=20, SAZ=30	<b>0.558</b>	0.495	0.625	E1047.06-301-41-R1	No
330 DS-C-DA-L1-LN	Single Dome w/Optiview (Natural Effect Lens)	<b>0.34</b>	SALT=20, SAZ=0	<b>0.416</b>	0.335	0.446	F0909.01-301-41	Yes
330 DS-C-DA-L1-LN-TIP	Single Dome w/ TIP & Optiview (Natural Effect Lens)	<b>0.38</b>	SALT=70, SAZ=60	<b>0.512</b>	0.454	0.582	G3705.03-301-41	Yes
750 DS-O-DA-L2---	Single Dome w/Prismatic Diffuser	<b>0.42</b>	SALT=20, SAZ=0	<b>0.469</b>	0.425	0.489	E2465.04-301-41	Yes
750 DS-O-DAI-L2-TIP	Dual Dome w/ TIP & Prismatic Diffuser	<b>0.47</b>	SALT=20, SAZ=0	<b>0.650</b>	0.369	0.379	G3705.02-301-41	Yes
750 DS-C-DA-L1---	Single Dome w/Optiview (No Effect Lens)	<b>0.47</b>	SALT=20, SAZ=0	<b>0.656</b>	0.377	0.404	E1047.07-307-41	No
750 DS-C-DAI-L1---	Dual Dome w/Optiview (No Effect Lens)	<b>0.43</b>	SALT=20, SAZ=30	<b>0.628</b>	0.335	0.353	E1047.08-307-41	No
750 DS-C-DA-L1-LN	Single Dome w/Optiview (Natural Effect Lens)	<b>0.40</b>	SALT=20, SAZ=30	<b>0.718</b>	0.238	0.249	F0909.02-301-41	Yes
750 DS-C-DAI-L1-LN	Double Dome w/ Optiview (Effect Lens)	<b>0.36</b>	SALT=20, SAZ=0	<b>0.645</b>	0.210	0.203	F0909.03-301-41	Yes
750 DS-C-DAI-L1-LN-TIP	Double Dome w/ TIP & Optiview (Effect Lens)	<b>0.37</b>	SALT=20, SAZ=0	<b>0.524</b>	0.281	0.300	G3705.04-301-41	Yes

Product	Description	VT <sub>annual</sub>	VT <sub>max</sub> Solar Position	VT <sub>max</sub>	VT <sub>(SALT=60,SAZ=0)</sub>	VT <sub>normal</sub>	Test Report	Certified for CPD
M74 DS-O---DP-----B-L2	Core Single Dome	<b>0.52</b>	SALT=70, SAZ=30	<b>0.715</b>	0.655	0.751	E1047.11-301-41	Yes
M74 DS-O---DP-TIP-B-L2	Core Single Dome with TIP	<b>0.37</b>	SALT=70, SAZ=0	<b>0.529</b>	0.496	0.573	F6776.01-301-41	Yes
M74 DS-O---DP-----A-L2	Single Dome w/Amplifier	<b>0.60</b>	SALT=20, SAZ=30	<b>0.684</b>	0.652	0.703	E2465.03-301-41	Yes
M74 DS-O---DP-TIP-A-L2	Single Dome w/ TIP & Amplifier	<b>0.47</b>	SALT=70, SAZ=0	<b>0.579</b>	0.552	0.620	F6776.02-301-41	Yes
M74 DS O-C-DP-----A-L2	Single Dome w/Amplifier & Collector	<b>1.03</b>	SALT=20, SAZ=0	<b>1.351</b>	0.839	0.685	E2465.01-301-41	Yes

**Notes:**

1. All reported Visible Transmittance Data were generated through Third-Party Testing of Solatube TDD Products in accordance with NFRC 203-2014: "Procedure for Determining Visible Transmittance of Tubular Daylighting Devices"
2. NFRC 203-2014 Testing yields the collection and reporting of 21 unique clear sky Visible Transmittance (VT) values for a range of Solar Positions representing a wide range of critical Solar Altitude and Solar Azimuth angle pairs that are encountered over the course of the Solar Year.
3. **VT<sub>annual</sub>** provides a product's yearly-average Visible Transmittance. **VT<sub>annual</sub>** accounts for the annual, clear sky sun path using 18 individual VT data points, and represents the **annual average** clear sky Visible Transmittance for a 9:00 AM to 5:00 PM Day for a "Middle America" site located at a 40 degree latitude.
4. **VT<sub>max</sub>** represents the Maximum Visible Transmittance measured for the range of Daytime Solar Positions tested under NFRC 203-2014 for Solar Altitude angles between 20 and 70 degrees. **VT<sub>normal</sub>** represents the direct-normal Visible Transmittance for a beam of light perpendicular to the TDD Dome Opening. **VT<sub>(SALT=60,AZ=0)</sub>** represents the Visible Transmittance occurring for the Solar Position used to test and rate TDDs for Solar Heat Gain Coefficient (SHGC).