

						
<b>Model</b>	<b>CRS-3555</b>	<b>CRIS-3525</b>	<b>CRV</b>	<b>CRTD-3523</b>	<b>CRC-3519</b>	<b>CRVB</b>
<b>Door Styles</b>	Overlapping	Inset	-	-	Overlapping	-
<b>Sizes</b>	1x4, 2x2, 2x4	1X1, 1x4, 2x2, 2x4	24", 48", 96"	24", 48", 96"	24", 48"	24", 48"
<b>Mounting: Surface, Flange or Grid</b>	Surface	Surface	Surface, Cable/Chain	Surface-Tbar	Corner (ceiling & wall)	Pendant & Surface
<b>Maximum Lumens</b>	15000	15000	10427	5200	10400	30000
<b>ISO 14644-1 Rating</b>	ISO5-8	ISO5-8	-	ISO3-8	ISO3-8	ISO3-8
<b>IEC60598 IP Certification</b>	IP65	IP65	IP67	-	IP65*	IP65*
<b>NSF Certified</b>	NSF2 FZ, SZ, NFZ	NSF2 FZ, SZ, NFZ	NSF2 FZ, SZ, NFZ	-	NSF2 FZ, SZ, NFZ	NSF2 FZ, SZ, NFZ
<b>ANSI/UL1598 Wet/Damp Listing</b>	Wet Location	Wet Location	Wet Location	Wet Location	Wet Location	Wet Location
<b>Biosafety Rating</b>	BSL1-4	BSL1-2	-	-	BSL1-3	-
<b>Hose-Down Tested PSI</b>	-	-	NEMA 4X	-	-	-
<b>Red LED (630nm)</b>	Yes	Yes	Yes	-	Yes	-
<b>Amber (600nm)</b>	Yes	Yes	-	Yes	Yes	-
<b>Tunable White</b>	-	-	-	-	-	-
<b>BIOS SkyBlue</b>	-	-	-	-	-	-
<b>Hazardous Location Listed ANSI/UL844</b>	Class I Zone 2, Groups IIC, IIB + H2, IIA, Zone 22 Groups IIA, IIB, Class I & II, Div 2, Groups F, G Class III.	-	Class I Zone 2, Groups IIC, IIB + H2, IIA, Zone 22 Groups IIA, IIB, Class I & II, Div 2, Groups F, G Class III.	-	-	Class I Zone 2 Groups IIC, IIB + H2, IIA, Zone 22 Groups IIB, IIA, (Class I Div 2 Groups A, B, C, D, Class II Div 2 Groups F, G, Class III) T3C or T4

### Cleanroom Classes

- Class 1(cleanest) -9 (least clean)
- Particle count per cubic meter determine class
- ISO 14644-1 Standard replaced Fed Std. 209
- Better fixtures limit particle migration and outgassing
- IEST governs standards
- Lower classes can create sterile atmosphere
- High dynamic air pressures stress seals
- Non-rigid fixtures "breath" particles
- Sealed fixtures wont harbor particles, bacteria

### Hazardous Locations Listings/Certification

- Class I involves liquid or gaseous fuels & is most common
- Class II involves dusts found in industry & agriculture
- Zone Classifications similar to IEC
- Zones 0, 1 & 2 are gasses, vapors or liquids
- Zones 20, 21, & 22 are dusts and fibers
- Haz locations exist in many industrial & institutional spaces
- Defined under two systems, Classes or Zones.

### NSF2 Certifications

- 3 zones based on use. Food, Splash & Non-Food zones
- Certification mark often required by local inspectors
- Performs factory inspections
- Inspects for toxicity, cleanability and durability

### Narrow Spectrum LEDs

- Amber w/o blue content is essential for Lithography
- Nanotechnology & Semiconductor use Amber
- Vivariums use 630-660nm low intensity, high purity red light
- 99% pure 630nm light is invisible to many lab specimens
- Pharmaceuticals can be photochemically reactive and protected by Amber

### Ingress Protection Certification

- NRTL (ETL/UL/CSA) Certified to IEC Standard 60529
- IP65 = Dust-tight and able to resist jets of water @ 12.5L/min
- IP66 = Dust-tight and able to resist strong jets of water @ 100L/min
- IP67 = Dust-tight and able to resist limited submersion
- 3rd party certification assures air-tight and liquid-tight construction

