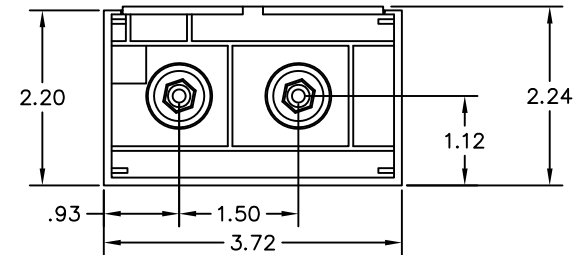
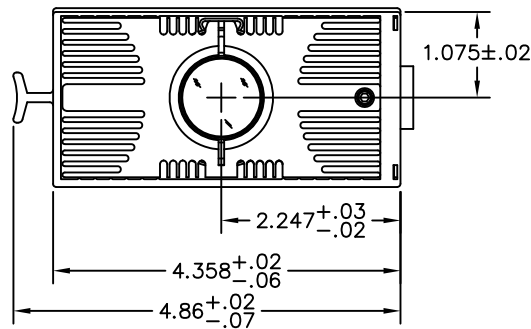
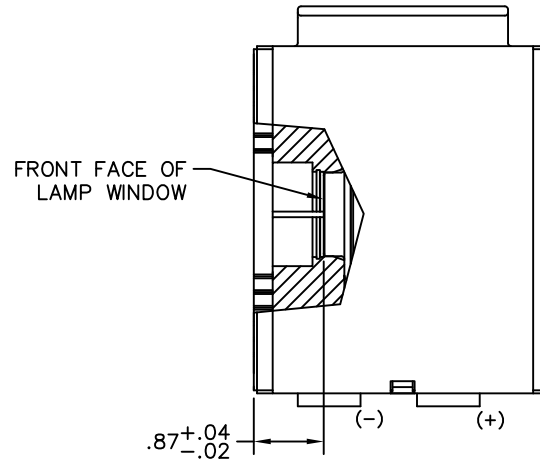
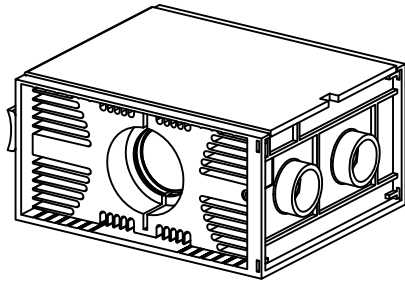


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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	REL/ECN 5204	03/07/19	K.TONG

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## INTERFACE CONTROL DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS ± 1/64    DECIMALS .XX ± .02    ANGLES ± 1.0' .xxx ± .005 SURFACE ROUGHNESS: 125 ✓ MATERIAL: FINISH:	CONTRACT NO.		<b>EXCELITAS TECHNOLOGIES</b> 44370 Christy Street Fremont, CA 94538			
	APPROVALS				DATE	
	DRAWN BY	M.IGUCHI	02/01/19	TITLE		
	CHECKED	N/A		J2030 CERMAX XENON LAMP MODULE (ICD)		
	ENGR.	N/A				
PROJ. ENGR.	M.IGUCHI	02/01/19	SIZE	CAGE CODE	DWG. NO.	REV.
QA	N/A		A	31573	233921	A
M & P	N/A		SCALE	DO NOT SCALE DRAWING	SHEET 1 OF 2	

**J2030**  
**300 Watt Cermax® Parabolic Lamp Module**



**Min      Nominal      Max      Comments**

**1. Ignition Requirements**

1.1	Peak Ignition Voltage at Lamp Terminals (kV)	23	30	36	Not to exceed 30kV for electrical safety
1.2	Ignition Pulse (@10%) at Lamp Terminals (ns)	40	65	100	
1.3	Recommended Boost Voltage at Lamp Terminals (Volts)	150	200	220	
1.4	Boost Current at Lamp Terminals (Amps)	80	120	150	
1.5	Boost Circuit RC discharge time (ms)	0.75	1	1.5	
1.6	Boost Energy (Joules)	1.75	2	2.5	
1.7	Recommended discharge energy in ignition transformer 0.1 to 0.2 Joules.				
1.8	Main DC power supply to deliver operating current within RC discharge time of boost circuit.				
1.9	Ignition requirements are applicable throughout lamp life.				

**2. Electrical**

2.1	Operating Power (Watts)	275	300	325	
2.2	Operating Current (Amps)	16	19	23	
2.3	Initial Lamp Voltage (Volts)	12	13.5	15	Voltage may change over lamp life
2.4	Ripple Current 0 - 1kHz (pk-pk %)	-	-	2	

**3. Typical Light Output / Performance at Nominal Rated Power (Initial only unless otherwise specified)**

3.1	Peak Intensity (Candelas)	-	6.0 x 10 <sup>4</sup> 5	-	
3.2	Radiant Output (Watts)	-	75	-	
3.3	UV Output < 390nm (Watts)	-	4	-	
3.4	IR Output > 770nm (Watts)	-	37	-	
3.5	Total Visible Output 390 - 770nm when new (Lumens)	-	4500	-	
3.6	Total Visible Output 390 - 770nm @ 1000 hours (Lumens)	-	3000	-	
3.7	Color Temperature (Kelvin)	-	5900	-	May decrease ~5-10% over lamp life
3.8	Beam Divergence when new - half angle @ 10% points (Degrees)	-	6	-	
3.9	Beam Divergence @ 500 hours - half angle @ 10% points (Degrees)	-	8	-	
3.10	Beam Divergence @ 1000 hours - half angle @ 10% points (Degrees)	-	9	-	
3.11	Focused Output with F/1 lens into 3mm aperture when new (Lumens)	-	1500	-	
3.12	Focused Output with F/1 lens into 6mm aperture when new (Lumens)	3000	3400	-	
3.13	Focused Output with F/1 lens into 6mm aperture @ 500 hours (Lumens)	1500	2200	-	
3.14	Peak instabilities 0 - 100Hz, integrated light when new (%)	-	2	4	As per Excelitas test method and equipment
3.15	Peak instabilities 0 - 100Hz, integrated light @ 500 hours (%)	-	-	5	As per Excelitas test method and equipment
3.16	Peak instabilities 0 - 100Hz, integrated light @ 1000 hours (%)	-	-	7	As per Excelitas test method and equipment

**4. Mechanical & Environmental**

4.1	Window Diameter (millimeters)	-	25.4	-	
4.2	Recommended Exit Air Flow (CFM)	10	-	-	
4.3	Operating Temperature at appropriate measurement point (Celsius)	80	110	150	Max is at end of life
4.4	Storage Temperature (Celsius)	-40	-	85	
4.5	Ambient starting Temperature (Celsius)	0	-	-	
4.6	Operating Humidity (% non-condensing)	-	-	85	
4.7	Weight (Grams)	-	730	-	
4.8	Recommended Environmental Operating Pressure (hPa)	700	1010	1050	hPa = hectopascals (Pascals x 100) = millibar
4.9	Operating Orientation (Degrees from horizontal)	-45	0	45	

- 4.10 Material composition for lamp module housing 20% glass filled nylon (UL 94 V-0). Maximum recommended temperature 100°C.
- 4.11 Optical components used with lamp or lamp module should not impede air flow, nor should they reflect radiated energy back towards the lamp.
- 4.12 Air flow and air inlet temperature should always ensure lamp temperature is kept within specification throughout lamp life.
- 4.13 EMI characteristics may vary with operating hours and power. Adequate system precautions should be taken.
- 4.14 Additional EMI may result when operated outside the recommended power range.
- 4.15 Non-operating Shock & Vibration per ISTA 1A.
- 4.16 RoHS Compliant.

**5. Notes**

- 5.1 Where no minimum or maximum value is specified, the value is nominal only and may vary.
- 5.2 Excelitas Technologies assumes no responsibility for the suitability of this product for any particular application or any consequential damages associated with the use of this product.
- 5.3 Specifications subject to change without notice.