

Stationary Mode (not feasible)		
Class 1		
AEL (pulse energy) 50 mm	fulfilled	11%
AEL (mean power) 50 mm	fulfilled	11%
AEL (pulse energy) 7 mm	fulfilled	3%
AEL (mean power) 7 mm	exceeded	14154%
Class 1M (7 mm aperture, 100 mm distance)		
AEL (pulse energy)	fulfilled	3%
AEL (mean power)	exceeded	14154%
Class 3R		
AEL (pulse energy) 50 mm	fulfilled	2%
AEL (mean power) 50 mm	exceeded	2141%
AEL (pulse energy) 7 mm	fulfilled	1%
AEL (mean power) 7 mm	exceeded	2760%
Class 3B		
AEL (pulse energy) 50 mm	fulfilled	0%
AEL (pulse energy) 7 mm	fulfilled	0%
AEL (mean power)	fulfilled	55%
If stationary operation of the VQ580 would be feasible it would have to be classified as according to IEC 60825-1:2001. Note that stationary operation is not accessible for an operator.		LASER CLASS 3B
Margin to the accessible emission limits of the specified laser class:		45%
NOHD:		377 m

Scanned Mode		
Class 1		
AEL (pulse energy) 7 mm	fulfilled	2%
AEL (mean power) 7 mm	exceeded	431%
AEL (single pulse train)	exceeded	
Class 3R		
AEL (pulse energy) 7 mm	fulfilled	0%
AEL (mean power) 7 mm	fulfilled	84%
AEL (single pulse train)	exceeded	6836%
Class 3B		
AEL (pulse energy) 7 mm	fulfilled	0%
AEL (mean power)	fulfilled	2%
AEL (single pulse train)	fulfilled	
Consequently, the VQ580 operated in scanning mode has to be classified as according to IEC 60825-1:2001.		LASER CLASS 3B
Margin to the accessible emission limits of the specified laser class:		43%
NOHD:		143 m

Conclusion
The VQ580 can only be operated in the scanned mode. In the case the scanner motor stops, the laser is switched off instantaneously. Therefore, the VQ580 has to be classified as
CLASS 3B LASER PRODUCT