

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	15190%
Class 1M (7 mm aperture, 100 mm distance)		
AEL (pulse energy)	fulfilled	3%
AEL (mean power)	exceeded	15190%
Class 3R		
AEL (pulse energy) 50 mm	fulfilled	2%
AEL (mean power) 50 mm	exceeded	2273%
AEL (pulse energy) 7 mm	fulfilled	1%
AEL (mean power) 7 mm	exceeded	2962%
Class 3B		
AEL (pulse energy) 50 mm	fulfilled	0%
AEL (pulse energy) 7 mm	fulfilled	0%
AEL (mean power)	fulfilled	59%
If stationary operation of the VQ-580 would be feasible it would have to be classified as LASER CLASS 3B according to IEC 60825-1:2001. Note that stationary operation is not accessible for an operator.		
Margin to the accessible emission limits of the specified laser class:		41%
NOHD:		389 m

Scanned Mode		
Class 1		
AEL (pulse energy) 7 mm	fulfilled	3%
AEL (mean power) 7 mm	exceeded	441%
Class 3R		
AEL (pulse energy) 7 mm	fulfilled	1%
AEL (mean power) 7 mm	fulfilled	86%
Class 3B		
AEL (pulse energy) 7 mm	fulfilled	0%
AEL (mean power)	fulfilled	2%
Consequently, the VQ-580 operated in scanning mode has to be classified as LASER CLASS 3R according to IEC 60825-1:2001.		
Margin to the accessible emission limits of the specified laser class:		14%
NOHD:		121 m

Conclusion
The VQ-580 can only be operated in the scanned mode. In the case the scanner motor stops, the laser is switched off instantaneously. Therefore, the VQ-580 has to be classified as
CLASS 3R LASER PRODUCT