

ANGLE & PHOTOMETRIC CONVERSION CHARTS



ANGLE CONVERSIONS							
	DEGREE	MIN	SEC	RAD	MRAD	CIRCUMFERENCE	QUADRANT
1 Degree (°)	= 1	60	3600	1.7453×10^{-2}	1.7453×10^{-5}	2.7778×10^{-3}	1.11112×10^{-2}
1 Minute (')	= 1.66667×10^{-2}	1	60	2.9089×10^{-4}	2.9089×10^{-7}	4.6296×10^{-5}	1.8518×10^{-4}
1 Second (")	= 2.77778×10^{-4}	1.66667×10^{-2}	1	4.8481×10^{-6}	4.8481×10^{-9}	7.71605×10^{-6}	3.0864×10^{-5}
1 Radian (rad)	= 5.72958×101	3.43775×103	2.06265×105	1	10 3	1.59155×10^{-1}	6.3662×10^{-1}
1 Milliradian (mrad)	= 5.72958×10^{-2}	3.43775	2.06265×102	10 3	1	1.59155×10^{-4}	6.3662×10^{-4}
1 Circumference	= 360	21,600	1,296,000	6.28319	6.28319×10^{-3}	1	4
1 Quadrant	= 90	5,400	324,000	1.5708	1.5708×103	0.25000	1

LINEAR TO ANGULAR			
LINEAR TO MEASURE	PER INCH	PER 10 INCHES	PER FOOT
.000001"	0.206 sec	0.021 sec	0.017 sec.
.000025"	5.157 sec	0.516 sec	0.430 sec.
.00005"	10.3 sec	1.03 sec	0.86 sec.
.0001"	3 min. 26 sec.	2.06 sec	1.72 sec.
.001"	3 mm. 26 sec.	20.6 sec	17.2 sec.
.005"	17 min. 11 sec.	1 min. 43 sec.	1 min. 26 sec.

ANGULAR TO LINEAR			
ANGLES	PER INCH	PER 10 INCHES	PER FOOT
1 second	.000005"	.000048"	.000058"
5 seconds	.000024"	.000242"	.000291"
10 seconds	.000048"	.0000485"	.000582"
20 seconds	.000097"	.000970"	.001163"
30 seconds	.000145"	.001454"	.001745"
1 minute	.000291"	.002909"	.003491"

PHOTOMETRIC UNITS		
1 Foot Candle	=	1 Lumen/Ft ²
1 Foot Candle	=	10.764 Meter Candles
1 Candle	=	1 Lumen/Steradian
1 Candle/M ²	=	3.142×10^{-4} Lambert
1 Lambert	=	2.054 Candle/In ²
1 Lux	=	1 Meter Candle
1 Lux	=	0.0929 Ft. Candle
1 Meter Candle	=	1 Lumen/M ²

SOURCE: ZYGO CORP. AND DYNASIL CORP.