

# **innovision<sup>®</sup>** **OPTICS**

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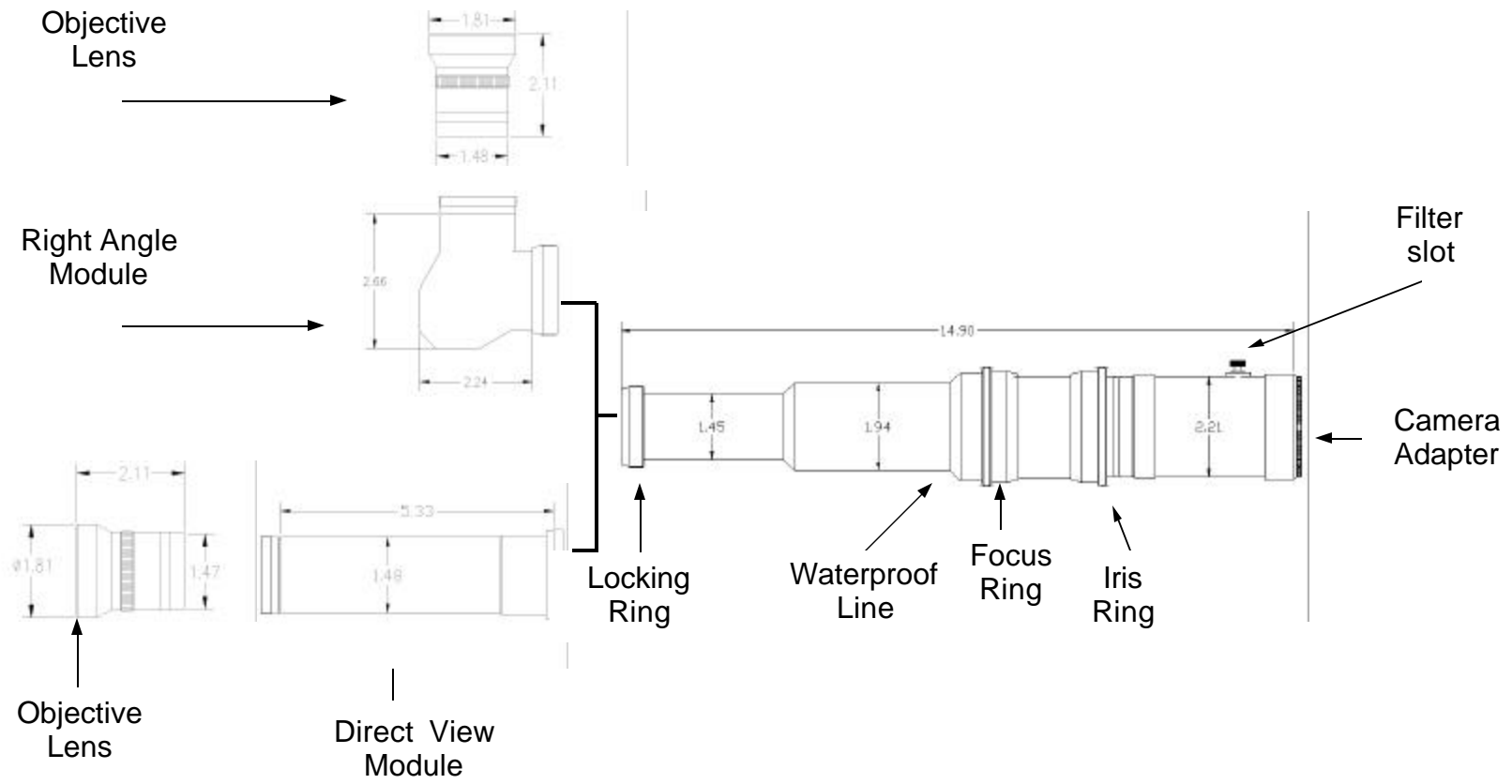
## 16mm Probe II Plus Lens System Manual & Depth of Field Charts

For additional technical support  
Please Call Innovision Optics at 310-453-4866

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# 16 Probe II Plus Dimensions



## 16mm Probe II Plus Minimum Focus Chart

Lens	Minimum Focus	Coverage	@ T-Stop
5mm	0.25 Inch	16mm only	@ T22
7mm	0.5 Inch	Super 16	@ T22
9.5mm	1.25 Inches	Super 16	@ T22
12.5mm	2 Inches	Super 16	@ T22
18mm	5 Inches	Super 16	@ T22
24mm	11 Inches	Super 16	@ T22

**16mm Probe II Plus LENS: 5 mm**

Circle of Confusion: 0.0006

T-Stop

Distance(in)	1	2	3	4	5	6	7	8	9	
4	Near	0.942	1.780	2.530	3.206	3.818	4.374	4.883	5.349	5.779
	Far	1.066	2.283	3.685	5.317	7.243	9.548	12.358	15.857	20.335
5.6	Near	0.920	1.704	2.381	2.970	3.488	3.947	4.356	4.723	5.055
	Far	1.095	2.420	4.055	6.124	8.827	12.507	17.810	26.116	40.981
8	Near	0.890	1.603	2.187	2.675	3.088	3.442	3.749	4.018	4.256
	Far	1.141	2.659	4.774	7.928	13.136	23.367	52.669	885.520	INFINITY
11	Near	0.854	1.492	1.985	2.379	2.700	2.967	3.193	3.386	3.553
	Far	1.205	3.033	6.135	12.551	33.695	INFINITY	INFINITY	INFINITY	INFINITY
16	Near	0.801	1.337	1.721	2.009	2.233	2.413	2.560	2.683	2.787
	Far	1.329	3.964	11.683	442.760	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY

T-Stop

Distance(in)	10	11	12	15	18	21	24	30	36	
4	Near	6.175	6.543	6.884	7.776	8.511	9.128	9.652	10.497	11.147
	Far	26.271	34.514	46.733	211.358	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY
5.6	Near	5.356	5.630	5.881	6.520	7.029	7.444	7.790	8.330	8.735
	Far	75.242	238.119	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY
8	Near	4.467	4.656	4.826	5.248	5.573	5.831	6.041	6.361	6.594
	Far	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY
11	Near	3.699	3.828	3.942	4.220	4.427	4.588	4.717	4.910	5.048
	Far	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY
16	Near	2.876	2.953	3.020	3.181	3.297	3.386	3.455	3.558	3.630
	Far	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY

**16mm Probe II Plus LENS: 7 mm**

Circle of Confusion: 0.0006

Distance(in)		1	2	3	4	5	6	7	8	9
T-Stop	4 Near	0.969	1.881	2.740	3.551	4.318	5.044	5.732	6.386	7.007
	Far	1.033	2.135	3.314	4.579	5.938	7.404	8.988	10.707	12.577
5.6	Near	0.958	1.837	2.648	3.399	4.094	4.741	5.345	5.909	6.437
	Far	1.046	2.194	3.459	4.860	6.420	8.168	10.140	12.382	14.954
8	Near	0.941	1.776	2.522	3.193	3.799	4.350	4.853	5.314	5.737
	Far	1.067	2.289	3.702	5.353	7.310	9.665	12.554	16.181	20.872
11	Near	0.920	1.704	2.380	2.968	3.486	3.944	4.352	4.719	5.050
	Far	1.095	2.421	4.058	6.131	8.842	12.536	17.871	26.246	41.302
16	Near	0.888	1.596	2.175	2.657	3.064	3.412	3.714	3.978	4.210
	Far	1.145	2.677	4.832	8.091	13.587	24.834	60.759	INFINITY	INFINITY

Distance(in)		10	11	12	15	18	21	24	30	36
T-Stop	4 Near	7.599	8.163	8.701	10.176	11.474	12.623	13.649	15.400	16.841
	Far	14.620	16.861	19.330	28.517	41.743	62.424	99.335	576.814	INFINITY
5.6	Near	6.933	7.399	7.839	9.017	10.021	10.886	11.641	12.891	13.886
	Far	17.934	21.427	25.580	44.589	88.370	295.901	INFINITY	INFINITY	INFINITY
8	Near	6.127	6.489	6.824	7.700	8.421	9.024	9.536	10.359	10.992
	Far	27.173	36.088	49.667	288.407	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY
11	Near	5.350	5.624	5.874	6.512	7.020	7.434	7.778	8.317	8.720
	Far	76.331	249.377	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY
16	Near	4.417	4.602	4.768	5.180	5.496	5.747	5.950	6.260	6.486
	Far	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY

**16mm Probe II Plus LENS: 9.5 mm**

Circle of Confusion: 0.0006

Distance(in)		1	2	3	4	5	6	7	8	9
T-Stop	4 Near	0.983	1.934	2.853	3.743	4.605	5.440	6.249	7.034	7.796
	4 Far	1.017	2.071	3.163	4.295	5.469	6.689	7.955	9.273	10.643
	5.6 Near	0.977	1.908	2.798	3.649	4.464	5.244	5.992	6.711	7.400
	5.6 Far	1.025	2.101	3.233	4.425	5.682	7.010	8.415	9.903	11.482
	8 Near	0.967	1.872	2.720	3.517	4.268	4.976	5.644	6.277	6.876
	8 Far	1.036	2.147	3.344	4.636	6.035	7.556	9.213	11.027	13.021
	11 Near	0.955	1.828	2.628	3.365	4.046	4.676	5.262	5.808	6.317
	11 Far	1.050	2.208	3.495	4.930	6.544	8.369	10.452	12.850	15.642
	16 Near	0.936	1.759	2.488	3.138	3.723	4.250	4.728	5.165	5.564
	16 Far	1.074	2.318	3.778	5.513	7.612	10.200	13.472	17.739	23.538
Distance(in)		10	11	12	15	18	21	24	30	36
T-Stop	4 Near	8.536	9.254	9.951	11.930	13.753	15.438	17.000	19.806	22.255
	4 Far	12.071	13.559	15.111	20.198	26.042	32.827	40.800	61.817	94.152
	5.6 Near	8.063	8.701	9.315	11.027	12.567	13.959	15.224	17.436	19.306
	5.6 Far	13.161	14.950	16.859	23.448	31.709	42.373	56.666	107.364	266.062
	8 Near	7.445	7.986	8.500	9.903	11.127	12.205	13.161	14.783	16.105
	8 Far	15.224	17.669	20.400	30.909	47.076	75.155	135.991	INFINITY	INFINITY
	11 Near	6.794	7.242	7.662	8.784	9.734	10.549	11.255	12.420	13.341
	11 Far	18.932	22.868	27.660	51.319	119.405	2281.169	INFINITY	INFINITY	INFINITY
	16 Near	5.930	6.268	6.581	7.391	8.053	8.602	9.067	9.808	10.373
	16 Far	31.874	44.878	67.995	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY

**16mm Probe II Plus LENS: 12.5 mm**

Circle of Confusion: 0.0006

Distance(in)		1	2	3	4	5	6	7	8	9
T-Stop	4 Near	0.990	1.961	2.913	3.847	4.764	5.663	6.546	7.412	8.263
	Far	1.010	2.040	3.092	4.165	5.261	6.379	7.522	8.689	9.881
	5.6 Near	0.986	1.946	2.880	3.790	4.676	5.539	6.380	7.201	8.001
	Far	1.014	2.057	3.130	4.235	5.373	6.545	7.753	8.999	10.284
	8 Near	0.981	1.924	2.832	3.706	4.549	5.362	6.147	6.905	7.638
	Far	1.020	2.083	3.190	4.344	5.550	6.810	8.128	9.507	10.954
	11 Near	0.973	1.897	2.773	3.607	4.400	5.157	5.879	6.568	7.227
	Far	1.028	2.115	3.267	4.489	5.789	7.173	8.650	10.230	11.925
	16 Near	0.962	1.853	2.681	3.453	4.173	4.847	5.480	6.074	6.634
	Far	1.041	2.172	3.405	4.754	6.236	7.872	9.688	11.715	13.991
Distance(in)		10	11	12	15	18	21	24	30	36
T-Stop	4 Near	9.098	9.919	10.725	13.059	15.275	17.383	19.389	23.125	26.534
	Far	11.100	12.346	13.620	17.619	21.908	26.519	31.489	42.692	55.966
	5.6 Near	8.782	9.544	10.287	12.416	14.403	16.262	18.005	21.183	24.009
	Far	11.611	12.981	14.397	18.942	23.991	29.634	35.980	51.388	71.920
	8 Near	8.346	9.031	9.694	11.563	13.267	14.828	16.264	18.814	21.010
	Far	12.472	14.067	15.745	21.346	27.983	35.972	45.772	73.997	125.652
	11 Near	7.858	8.463	9.043	10.648	12.076	13.356	14.510	16.506	18.172
	Far	13.746	15.709	17.831	25.371	35.331	49.098	69.372	164.426	1900.348
	16 Near	7.161	7.660	8.132	9.407	10.505	11.460	12.299	13.704	14.833
	Far	16.567	19.504	22.886	36.999	62.826	125.307	493.088	INFINITY	INFINITY

**16mm Probe II Plus LENS: 18 mm**

Circle of Confusion: 0.0006

Distance(in)		1	2	3	4	5	6	7	8	9
T-Stop	4 Near	0.995	1.981	2.958	3.925	4.883	5.833	6.773	7.705	8.629
	Far	1.005	2.019	3.044	4.078	5.122	6.177	7.242	8.318	9.404
5.6	Near	0.993	1.974	2.941	3.896	4.838	5.768	6.687	7.594	8.489
	Far	1.007	2.027	3.061	4.110	5.173	6.251	7.344	8.452	9.577
8	Near	0.991	1.962	2.916	3.853	4.772	5.675	6.561	7.432	8.287
	Far	1.010	2.039	3.089	4.159	5.251	6.365	7.502	8.662	9.847
11	Near	0.987	1.949	2.886	3.800	4.692	5.561	6.410	7.239	8.048
	Far	1.013	2.054	3.123	4.222	5.352	6.514	7.709	8.940	10.207
16	Near	0.981	1.926	2.837	3.716	4.564	5.383	6.174	6.939	7.679
	Far	1.019	2.080	3.183	4.331	5.528	6.777	8.081	9.444	10.870

Distance(in)		10	11	12	15	18	21	24	30	36
T-Stop	4 Near	9.544	10.451	11.349	13.997	16.574	19.085	21.531	26.238	30.716
	Far	10.502	11.610	12.730	16.158	19.694	23.343	27.109	35.021	43.481
5.6	Near	9.373	10.246	11.108	13.632	16.065	18.413	20.679	24.985	29.012
	Far	10.717	11.874	13.048	16.673	20.465	24.433	28.591	37.534	47.422
8	Near	9.128	9.954	10.765	13.119	15.358	17.490	19.522	23.315	26.784
	Far	11.057	12.292	13.555	17.510	21.740	26.274	31.144	42.060	54.885
11	Near	8.838	9.611	10.365	12.530	14.557	16.458	18.245	21.517	24.438
	Far	11.513	12.859	14.247	18.683	23.577	29.005	35.058	49.527	68.326
16	Near	8.395	9.089	9.761	11.657	13.392	14.985	16.452	19.066	21.325
	Far	12.363	13.929	15.572	21.030	27.443	35.084	44.344	70.336	115.448



**16mm Probe II Plus LENS: 24 mm**

Circle of Confusion: 0.0006

Distance(in)		1	2	3	4	5	6	7	8	9
T-Stop	4 Near	0.997	1.989	2.976	3.957	4.934	5.905	6.871	7.832	8.787
	Far	1.003	2.011	3.024	4.043	5.068	6.098	7.134	8.176	9.223
5.6	Near	0.996	1.985	2.967	3.941	4.908	5.868	6.820	7.766	8.705
	Far	1.004	2.015	3.034	4.061	5.096	6.139	7.189	8.248	9.316
8	Near	0.995	1.979	2.952	3.916	4.869	5.813	6.746	7.670	8.585
	Far	1.005	2.022	3.049	4.088	5.138	6.200	7.274	8.360	9.458
11	Near	0.993	1.971	2.935	3.885	4.822	5.745	6.656	7.553	8.439
	Far	1.007	2.030	3.068	4.122	5.192	6.278	7.382	8.503	9.641
16	Near	0.989	1.958	2.906	3.835	4.745	5.636	6.510	7.366	8.206
	Far	1.011	2.044	3.100	4.180	5.284	6.414	7.570	8.753	9.964

Distance(in)		10	11	12	15	18	21	24	30	36
T-Stop	4 Near	9.738	10.684	11.625	14.419	17.169	19.878	22.545	27.761	32.824
	Far	10.276	11.335	12.400	15.630	18.915	22.256	25.655	32.632	39.857
5.6	Near	9.637	10.563	11.481	14.198	16.858	19.462	22.012	26.957	31.705
	Far	10.391	11.475	12.568	15.897	19.308	22.802	26.383	33.818	41.642
8	Near	9.490	10.386	11.273	13.881	16.412	18.870	21.257	25.833	30.162
	Far	10.568	11.691	12.828	16.316	19.929	23.673	27.556	35.769	44.640
11	Near	9.312	10.173	11.022	13.503	15.886	18.178	20.384	24.554	28.433
	Far	10.798	11.974	13.168	16.871	20.763	24.859	29.176	38.549	49.055
16	Near	9.029	9.837	10.629	12.917	15.081	17.132	19.077	22.683	25.954
	Far	11.205	12.476	13.778	17.885	22.320	27.125	32.348	44.286	58.737