

This chart shows the distance where a camera's viewpoint intersects the ground, given various camera "downangles" and various camera (lens) height above the ground. Distances are shown in mm

Downangle is defined as the angle by which the lens is pointed "down" from straight ahead, which is considered 0 degrees

The shading highlights distances in the range if 450-900 mm (18-36 inches) which seem useful for lane-following

cam height	Camera Downangle in degrees							
	5	10	12	15	17	20	25	30
110	1,262.11	633.46	529.07	425.01	376.23	321.62	260.28	220.00
115	1,319.48	662.26	553.12	444.33	393.33	336.24	272.11	230.00
120	1,376.85	691.05	577.17	463.64	410.44	350.86	283.94	240.00
125	1,434.21	719.85	601.22	482.96	427.54	365.48	295.78	250.00
130	1,491.58	748.64	625.27	502.28	444.64	380.09	307.61	260.00
135	1,548.95	777.43	649.31	521.60	461.74	394.71	319.44	270.00
140	1,606.32	806.23	673.36	540.92	478.84	409.33	331.27	280.00
145	1,663.69	835.02	697.41	560.24	495.94	423.95	343.10	290.00
150	1,721.06	863.82	721.46	579.56	513.05	438.57	354.93	300.00
155	1,778.43	892.61	745.51	598.87	530.15	453.19	366.76	310.00
160	1,835.79	921.40	769.56	618.19	547.25	467.81	378.59	320.00
165	1,893.16	950.20	793.61	637.51	564.35	482.43	390.42	330.00
170	1,950.53	978.99	817.65	656.83	581.45	497.05	402.25	340.00
175	2,007.90	1,007.78	841.70	676.15	598.55	511.67	414.09	350.00
180	2,065.27	1,036.58	865.75	695.47	615.65	526.28	425.92	360.00
185	2,122.64	1,065.37	889.80	714.79	632.76	540.90	437.75	370.00
190	2,180.01	1,094.17	913.85	734.10	649.86	555.52	449.58	380.00
195	2,237.37	1,122.96	937.90	753.42	666.96	570.14	461.41	390.00
200	2,294.74	1,151.75	961.95	772.74	684.06	584.76	473.24	400.00
205	2,352.11	1,180.55	986.00	792.06	701.16	599.38	485.07	410.00
210	2,409.48	1,209.34	1,010.04	811.38	718.26	614.00	496.90	420.00
215	2,466.85	1,238.14	1,034.09	830.70	735.37	628.62	508.73	430.00
220	2,524.22	1,266.93	1,058.14	850.01	752.47	643.24	520.56	440.00
225	2,581.59	1,295.72	1,082.19	869.33	769.57	657.86	532.40	450.00
230	2,638.95	1,324.52	1,106.24	888.65	786.67	672.48	544.23	460.00
235	2,696.32	1,353.31	1,130.29	907.97	803.77	687.09	556.06	470.00
240	2,753.69	1,382.10	1,154.34	927.29	820.87	701.71	567.89	480.00
245	2,811.06	1,410.90	1,178.38	946.61	837.97	716.33	579.72	490.00
250	2,868.43	1,439.69	1,202.43	965.93	855.08	730.95	591.55	500.00
255	2,925.80	1,468.49	1,226.48	985.24	872.18	745.57	603.38	510.00
260	2,983.17	1,497.28	1,250.53	1,004.56	889.28	760.19	615.21	520.00
265	3,040.53	1,526.07	1,274.58	1,023.88	906.38	774.81	627.04	530.00
270	3,097.90	1,554.87	1,298.63	1,043.20	923.48	789.43	638.87	540.00
275	3,155.27	1,583.66	1,322.68	1,062.52	940.58	804.05	650.71	550.00
280	3,212.64	1,612.46	1,346.73	1,081.84	957.69	818.67	662.54	560.00