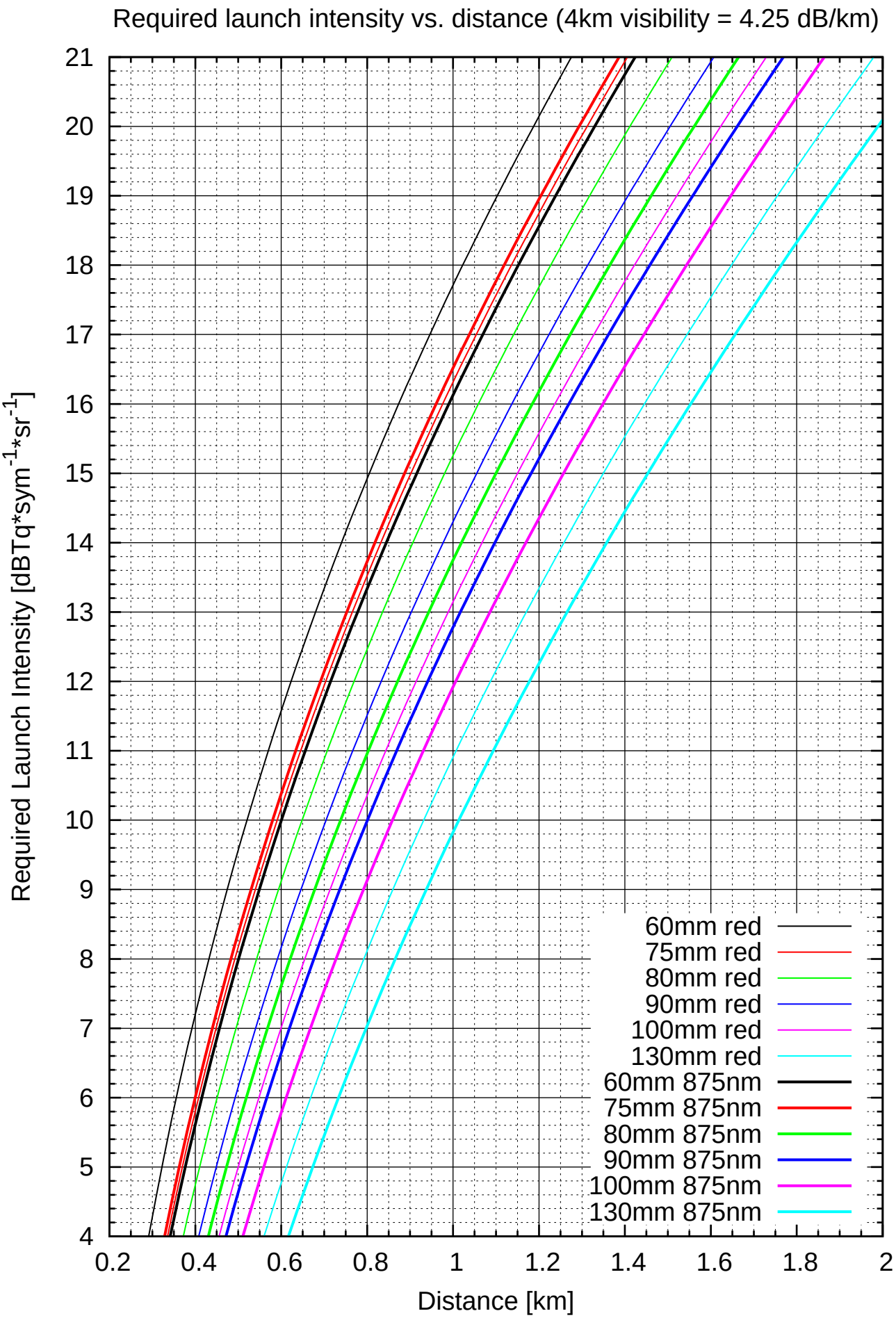
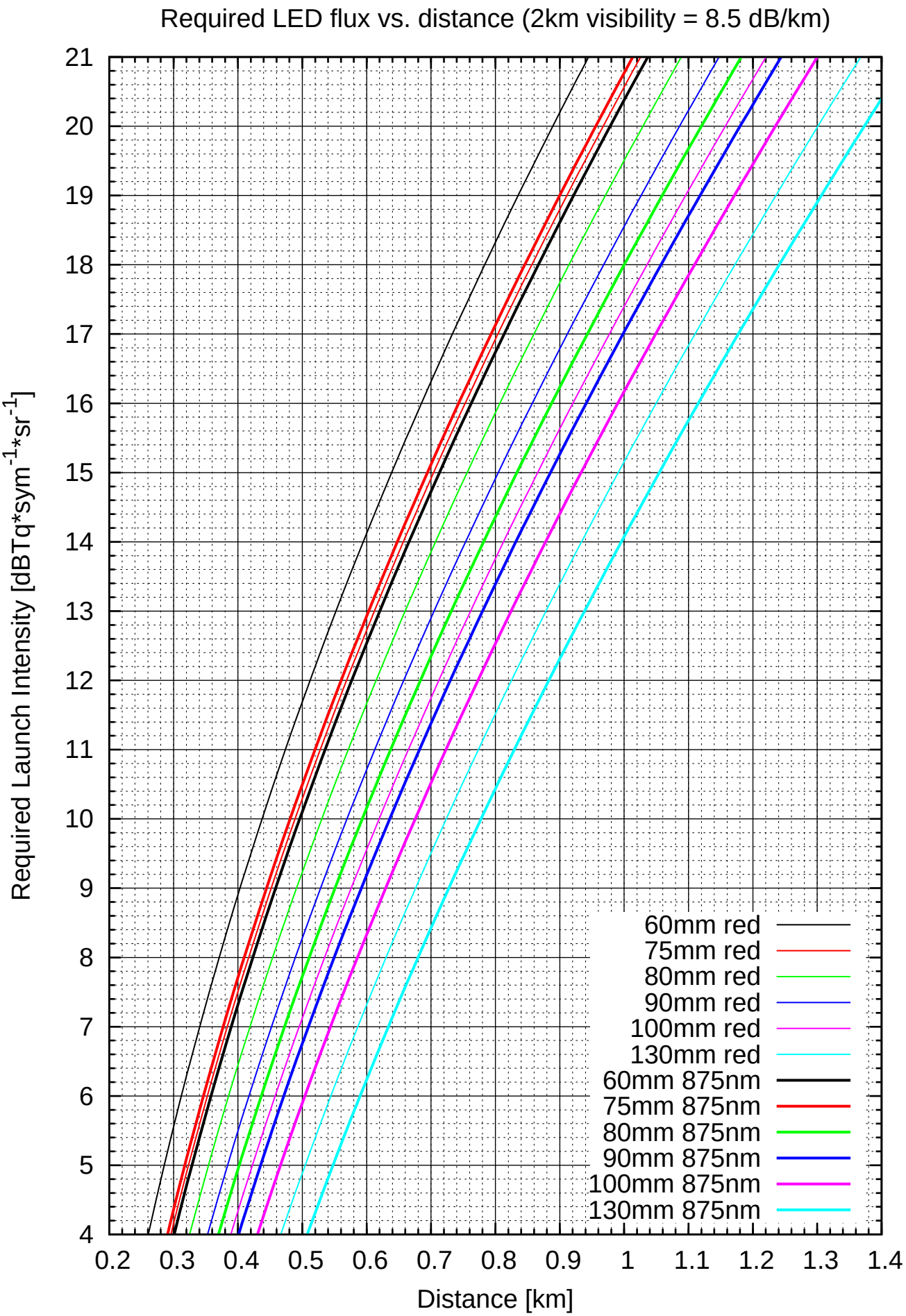
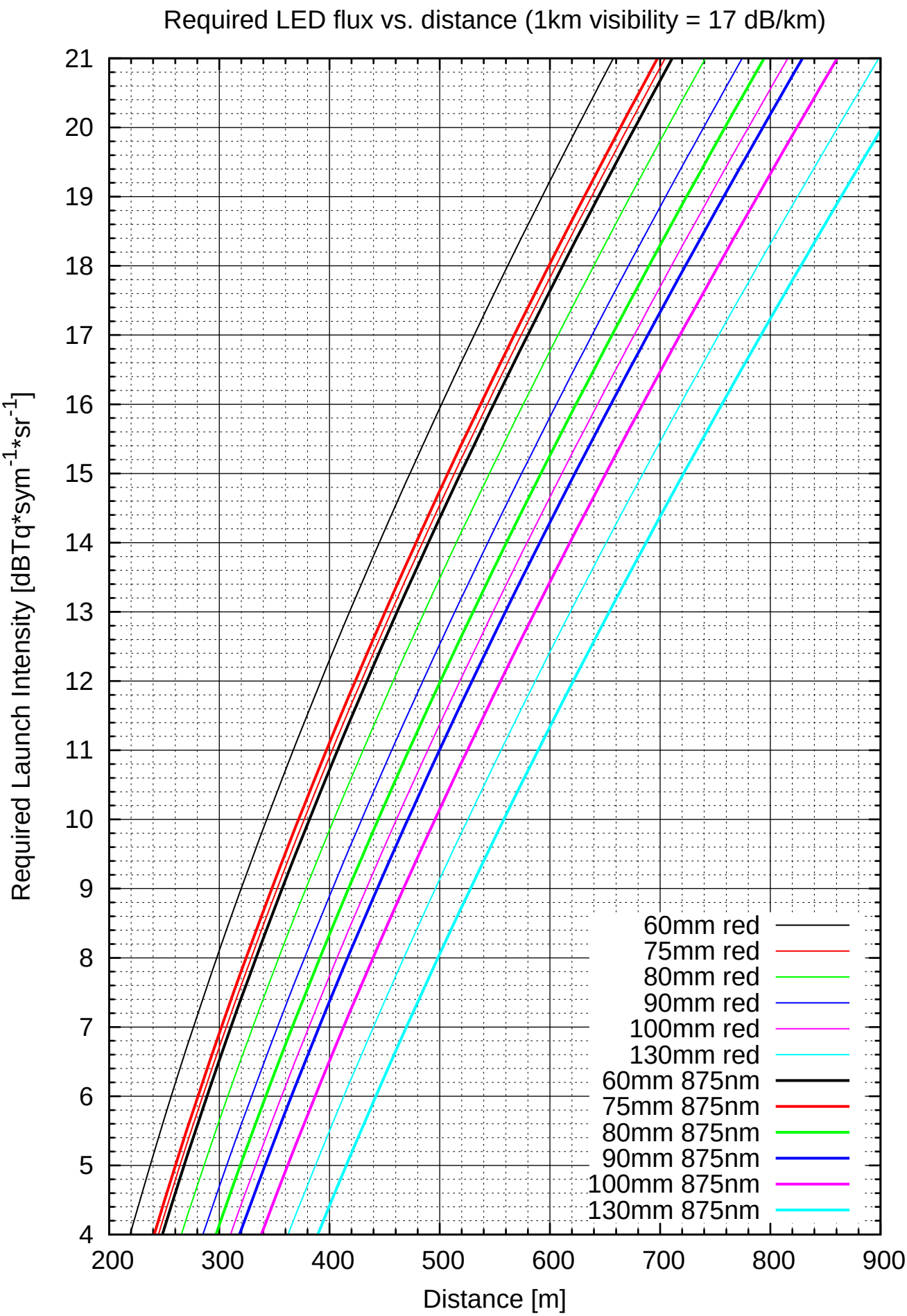
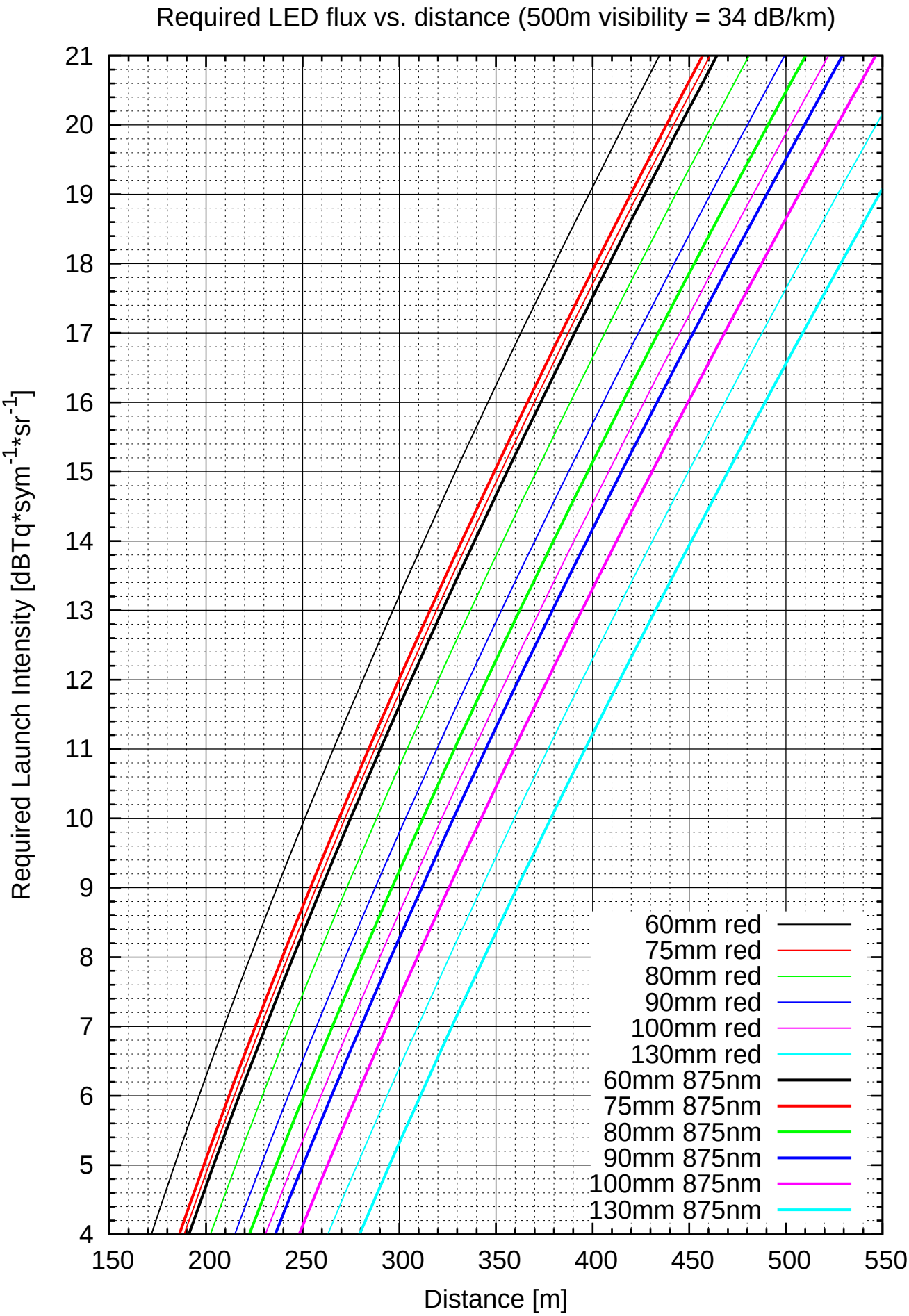
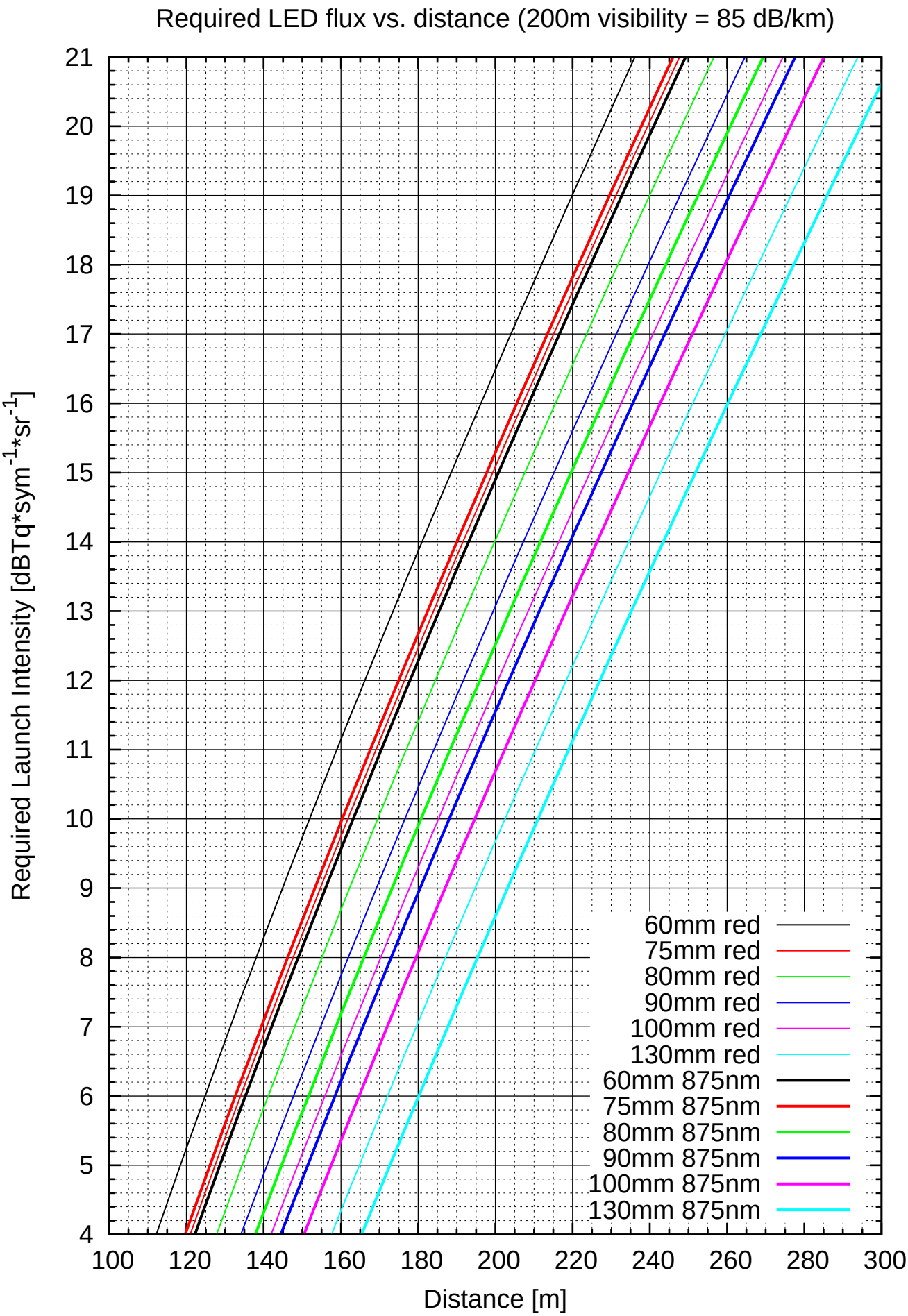
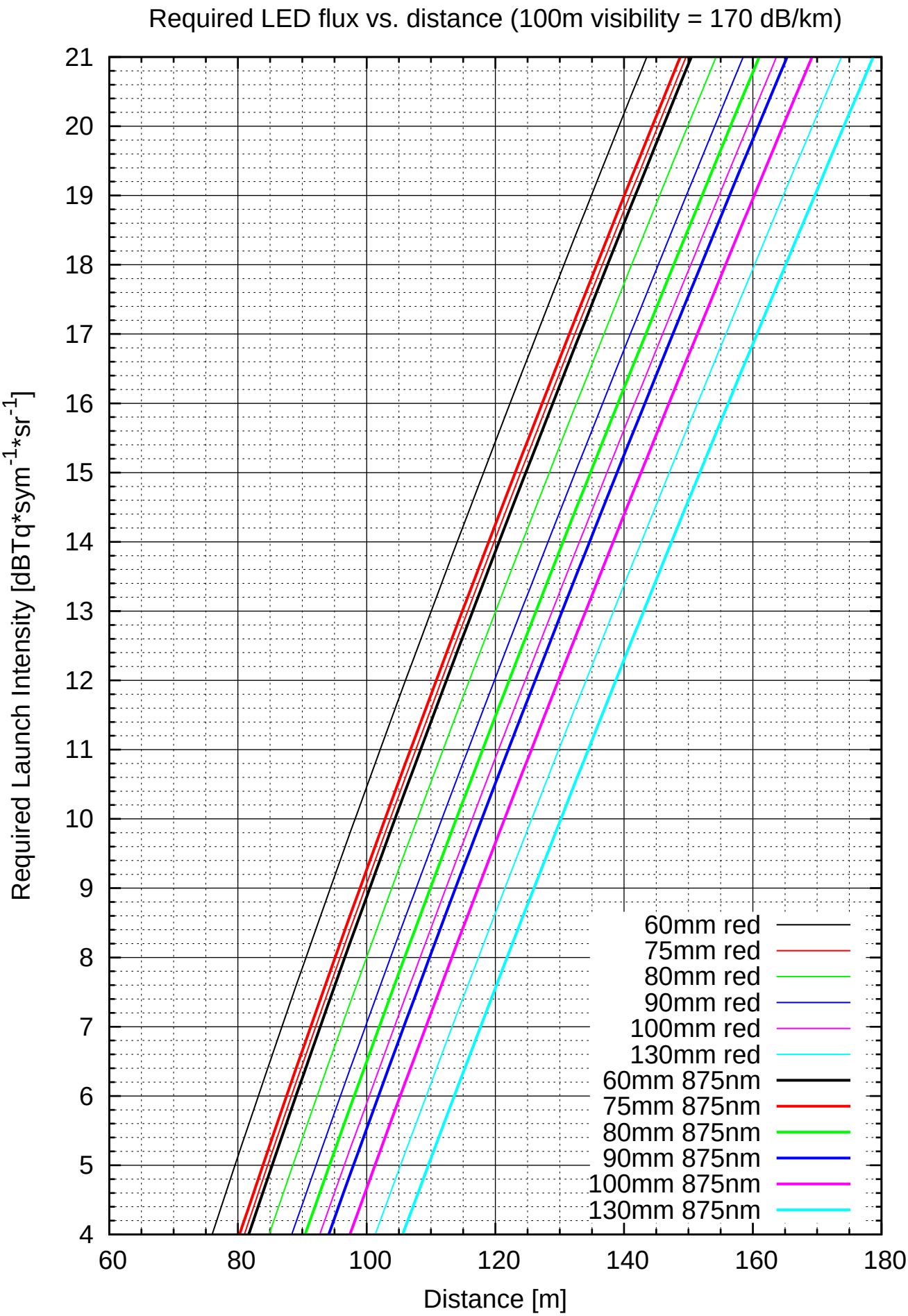

Required launch intensity vs. distance (4km visibility = 4.25 dB/km)
Required Launch Intensity [dBTq*sym-1*sr-1]
Distance [km]
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
60mm red
75mm red
80mm red
90mm red
100mm red
130mm red
60mm 875nm
75mm 875nm
80mm 875nm
90mm 875nm
100mm 875nm
130mm 875nm

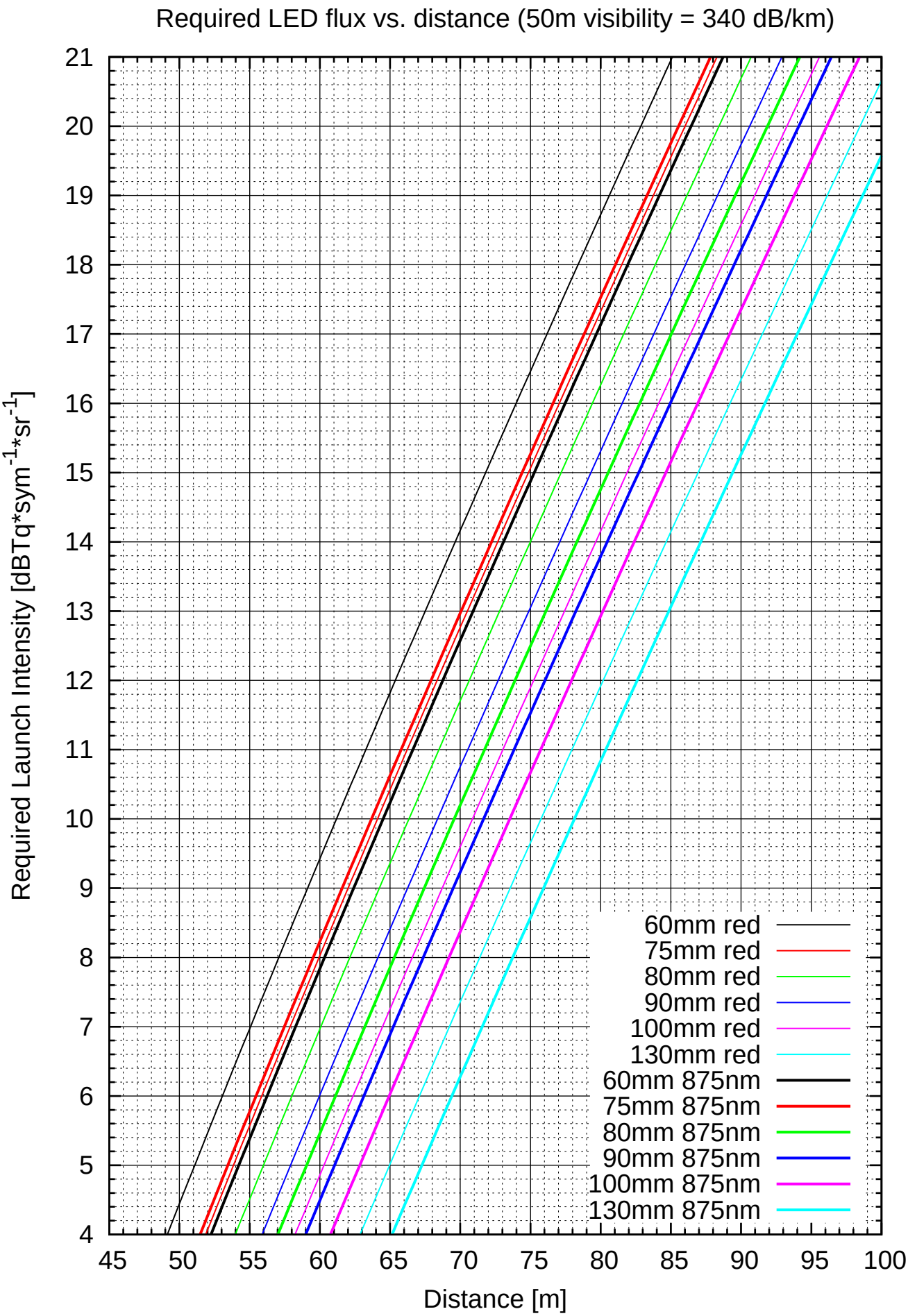

Required LED flux vs. distance (2km visibility = 8.5 dB/km)
Required Launch Intensity [dBTq*sym-1*sr-1]
Distance [km]
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
1.1
1.2
1.3
1.4
60mm red
75mm red
80mm red
90mm red
100mm red
130mm red
60mm 875nm
75mm 875nm
80mm 875nm
90mm 875nm
100mm 875nm
130mm 875nm


Required LED flux vs. distance (1km visibility = 17 dB/km)
Required Launch Intensity [dBTq*sym-1*sr-1]
Distance [m]
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
200
300
400
500
600
700
800
900
60mm red
75mm red
80mm red
90mm red
100mm red
130mm red
60mm 875nm
75mm 875nm
80mm 875nm
90mm 875nm
100mm 875nm
130mm 875nm


Required LED flux vs. distance (500m visibility = 34 dB/km)
Required Launch Intensity [dBTq*sym-1*sr-1]
Distance [m]
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
150
200
250
300
350
400
450
500
550
60mm red
75mm red
80mm red
90mm red
100mm red
130mm red
60mm 875nm
75mm 875nm
80mm 875nm
90mm 875nm
100mm 875nm
130mm 875nm


Required LED flux vs. distance (200m visibility = 85 dB/km)
Required Launch Intensity [dBTq*sym-1*sr-1]
Distance [m]
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
100
120
140
160
180
200
220
240
260
280
300
60mm red
75mm red
80mm red
90mm red
100mm red
130mm red
60mm 875nm
75mm 875nm
80mm 875nm
90mm 875nm
100mm 875nm
130mm 875nm


Required LED flux vs. distance (100m visibility = 170 dB/km)
Required Launch Intensity [dBTq*sym-1*sr-1]
Distance [m]
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
60
80
100
120
140
160
180
60mm red
75mm red
80mm red
90mm red
100mm red
130mm red
60mm 875nm
75mm 875nm
80mm 875nm
90mm 875nm
100mm 875nm
130mm 875nm


Required LED flux vs. distance (50m visibility = 340 dB/km)
Required Launch Intensity [dBTq*sym-1*sr-1]
Distance [m]
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
45
50
55
60
65
70
75
80
85
90
95
100
60mm red
75mm red
80mm red
90mm red
100mm red
130mm red
60mm 875nm
75mm 875nm
80mm 875nm
90mm 875nm
100mm 875nm
130mm 875nm