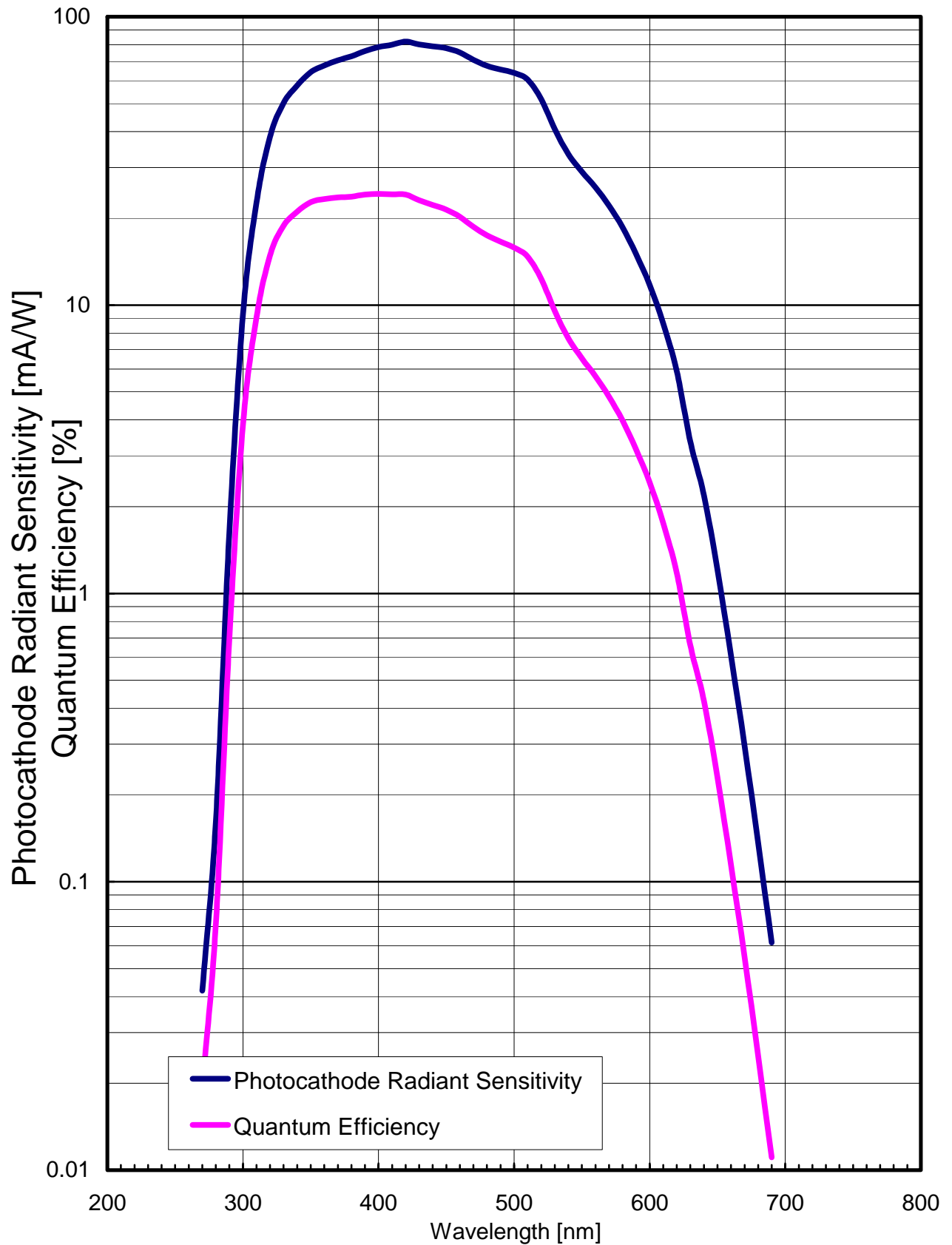


Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1038
Date Nov.30, 2004
Tested by M.SUZUKI
Note

Max. Q.E. 24.3 %
Wavelength of max. 420 nm



Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1038
Date Nov.30, 2004
Tested by M.SUZUKI
Note

Cathode Radiant Sensitivity [mA/W]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.04	0.16	1.61
300	9.34	22.71	38.37	50.14	57.83	64.25	67.74	70.58	72.89	76.03
400	78.44	80.06	81.94	80.12	79.00	77.71	75.13	70.88	67.65	65.57
500	63.89	60.57	51.66	40.73	33.42	29.02	25.58	22.10	18.63	15.05
600	11.72	8.63	5.89	3.37	2.19	1.21	0.61	0.29	0.14	0.06

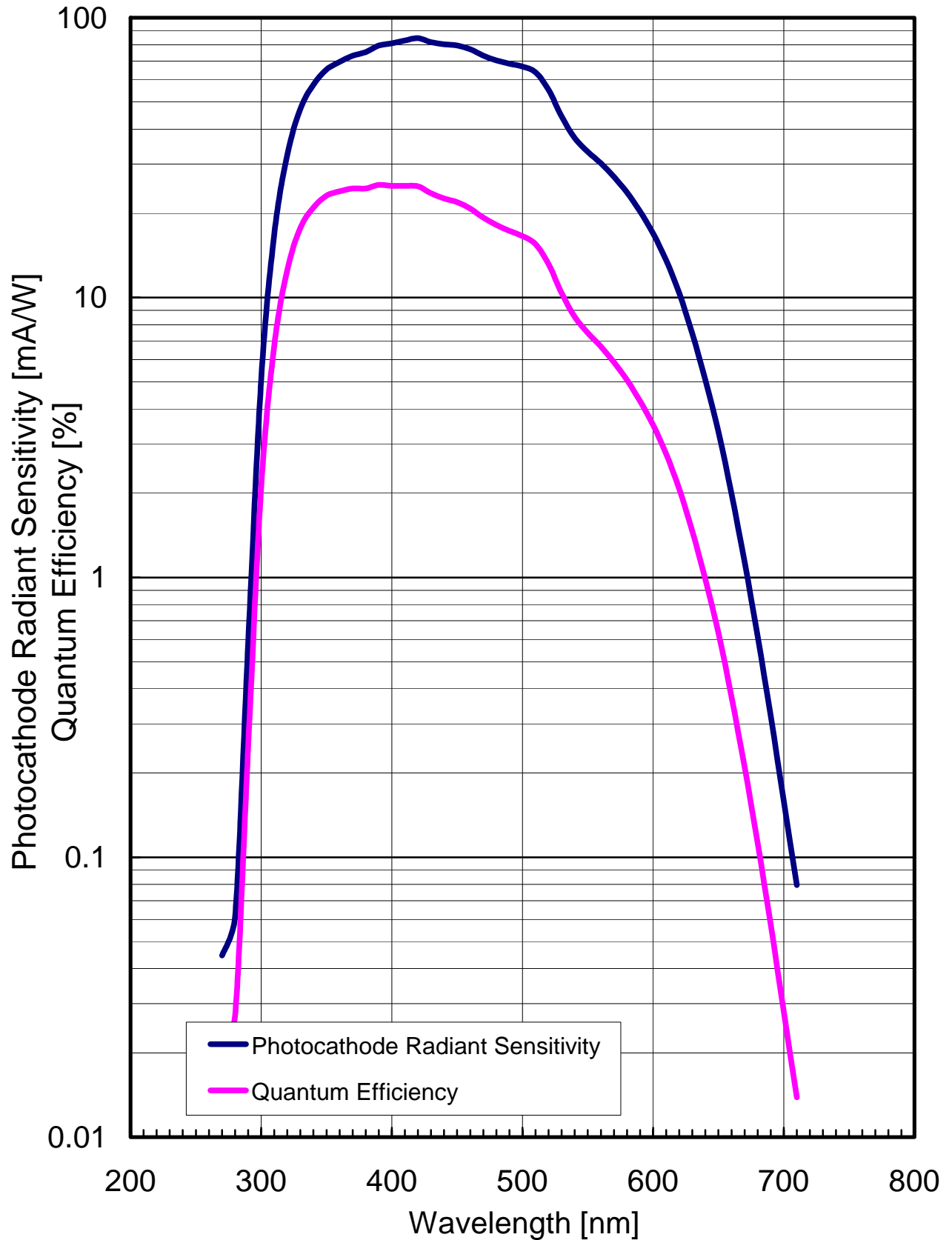
Quantum Efficiency [%]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.02	0.07	0.69
300	3.86	9.08	14.86	18.83	21.08	22.75	23.32	23.65	23.77	24.17
400	24.31	24.21	24.19	23.09	22.26	21.41	20.24	18.69	17.47	16.59
500	15.84	14.72	12.31	9.53	7.67	6.54	5.66	4.81	3.98	3.16
600	2.42	1.75	1.18	0.66	0.42	0.23	0.11	0.05	0.02	0.01

Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1052
Date Nov.30, 2004
Tested by M.SUZUKI
Note

Max. Q.E. 25.3 %
Wavelength of max. 420 nm



Spectral Response Characteristics

Tube Type R7081-02
 Serial No. TA1052
 Date Nov.30, 2004
 Tested by M.SUZUKI
 Note

Cathode Radiant Sensitivity [mA/W]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.04	0.06	0.58
300	5.07	16.78	32.33	47.22	57.53	65.31	69.58	73.25	75.31	79.53
400	80.95	82.96	84.56	81.82	80.31	79.57	77.10	73.14	70.32	68.47
500	66.84	63.85	55.29	44.39	37.21	33.11	30.20	27.02	23.76	20.31
600	16.95	13.59	10.38	7.44	5.08	3.30	1.98	1.13	0.62	0.32
700	0.16	0.08								

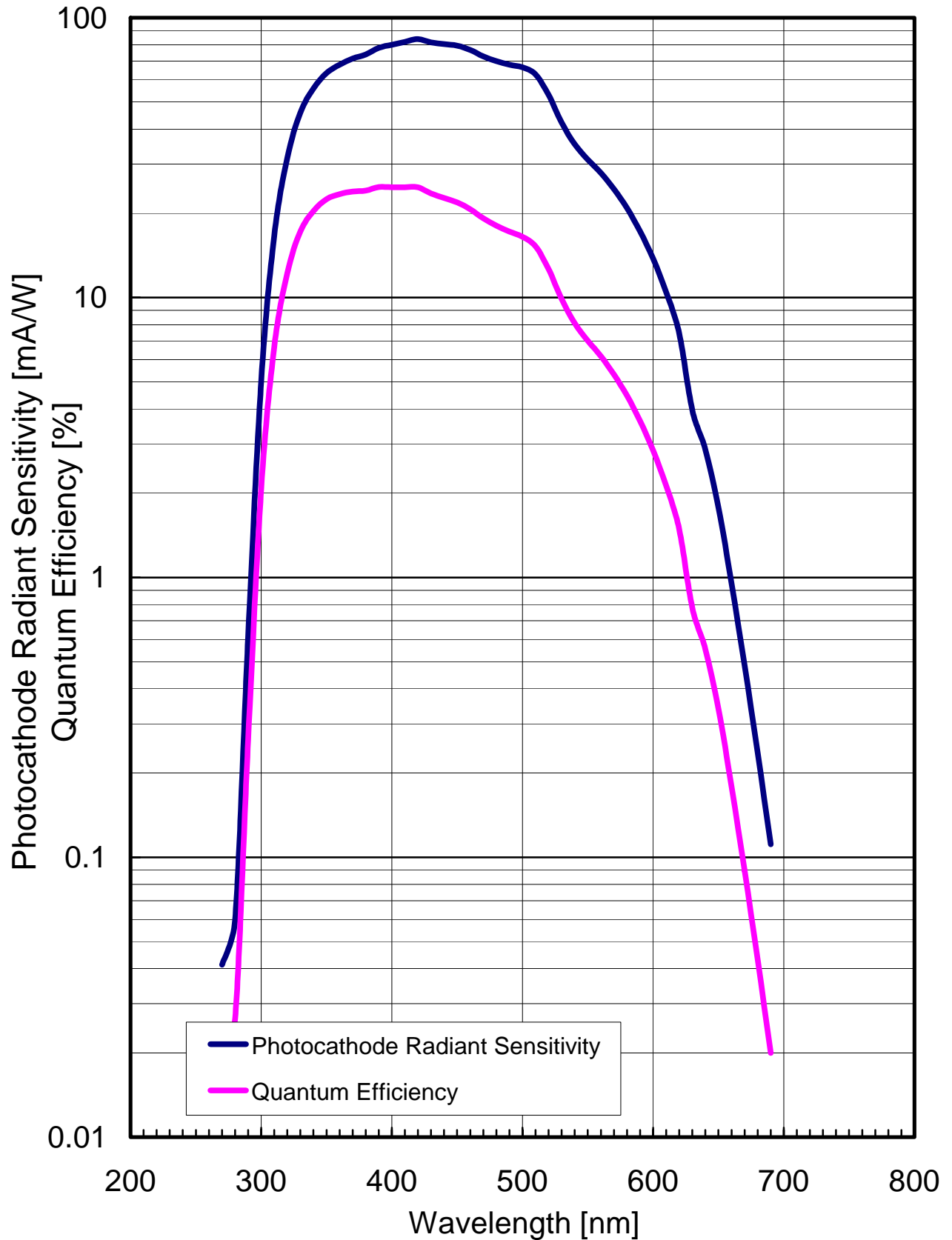
Quantum Efficiency [%]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.02	0.03	0.25
300	2.10	6.71	12.52	17.74	20.97	23.13	23.96	24.54	24.56	25.29
400	25.08	25.09	24.97	23.59	22.62	21.92	20.78	19.29	18.16	17.32
500	16.57	15.52	13.18	10.38	8.54	7.46	6.68	5.87	5.08	4.27
600	3.50	2.76	2.07	1.46	0.98	0.63	0.37	0.21	0.11	0.06
700	0.03	0.01								

Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1056
Date Nov.30, 2004
Tested by M.SUZUKI
Note

Max. Q.E. 24.8 %
Wavelength of max. 420 nm



Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1056
Date Nov.30, 2004
Tested by M.SUZUKI
Note

Cathode Radiant Sensitivity [mA/W]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.04	0.06	0.61
300	5.00	16.60	31.53	45.78	55.82	63.49	67.96	71.47	73.97	78.06
400	80.01	82.01	83.94	81.66	80.57	79.43	76.72	72.75	69.92	68.01
500	66.45	62.70	53.09	42.25	35.33	31.07	27.85	24.40	20.89	17.23
600	13.77	10.45	7.43	3.97	2.86	1.77	0.95	0.48	0.24	0.11

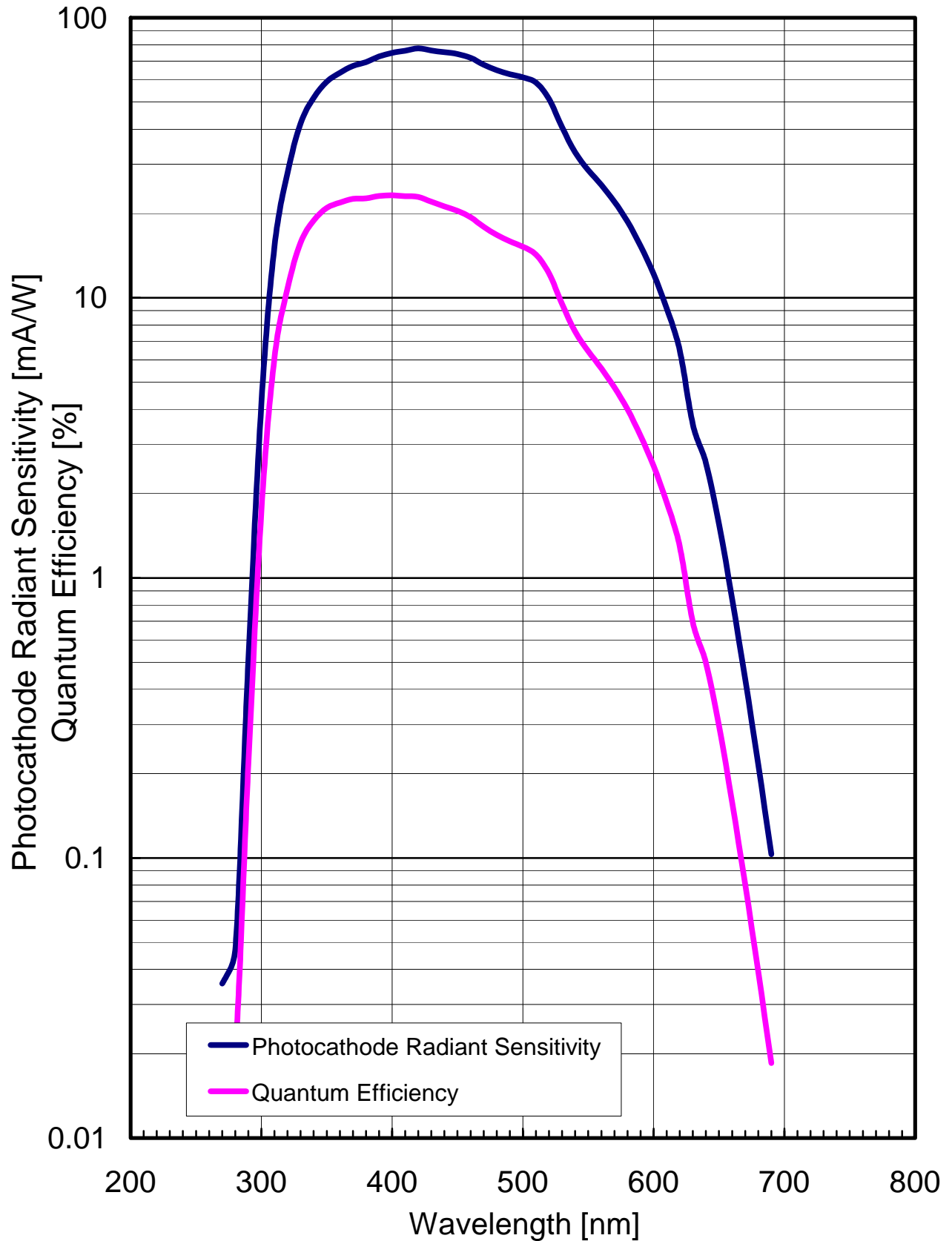
Quantum Efficiency [%]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.02	0.03	0.26
300	2.07	6.64	12.21	17.19	20.35	22.48	23.40	23.94	24.13	24.82
400	24.79	24.80	24.78	23.54	22.70	21.88	20.67	19.19	18.06	17.20
500	16.47	15.24	12.65	9.88	8.11	7.00	6.16	5.31	4.46	3.62
600	2.84	2.12	1.49	0.78	0.55	0.34	0.18	0.09	0.04	0.02

Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1059
Date Nov.30, 2004
Tested by M.SUZUKI
Note

Max. Q.E. 23.2 %
Wavelength of max. 420 nm



Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1059
Date Nov.30, 2004
Tested by M.SUZUKI
Note

Cathode Radiant Sensitivity [mA/W]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.04	0.05	0.51
300	4.19	15.23	27.85	41.89	51.75	59.21	63.55	67.31	69.48	72.73
400	74.98	76.30	77.69	76.44	75.32	74.18	71.96	67.95	65.00	62.89
500	61.33	58.69	51.27	40.68	33.05	28.54	25.27	21.99	18.71	15.30
600	12.15	9.16	6.48	3.53	2.57	1.55	0.84	0.43	0.21	0.10

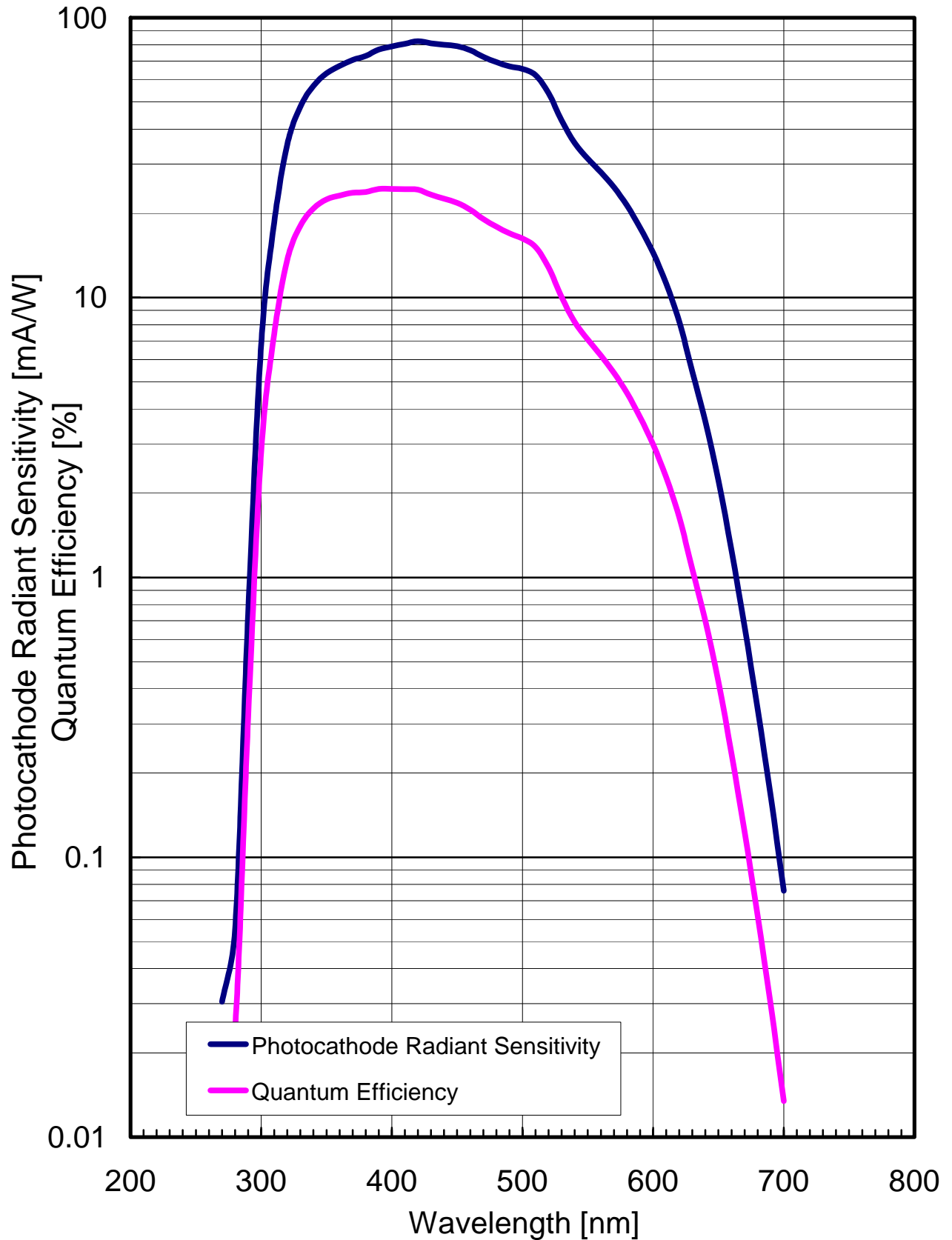
Quantum Efficiency [%]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.02	0.02	0.22
300	1.73	6.09	10.79	15.73	18.86	20.97	21.88	22.55	22.66	23.13
400	23.23	23.08	22.94	22.03	21.22	20.43	19.39	17.92	16.79	15.91
500	15.20	14.26	12.22	9.51	7.59	6.43	5.59	4.78	4.00	3.21
600	2.51	1.86	1.30	0.70	0.50	0.29	0.16	0.08	0.04	0.02

Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1062
Date Nov.30, 2004
Tested by M.SUZUKI
Note

Max. Q.E. 24.5 %
Wavelength of max. 420 nm



Spectral Response Characteristics

Tube Type R7081-02
 Serial No. TA1062
 Date Nov.30, 2004
 Tested by M.SUZUKI
 Note

Cathode Radiant Sensitivity [mA/W]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.03	0.06	0.74
300	6.80	18.54	35.23	48.04	57.07	63.37	67.24	70.69	73.10	76.94
400	78.90	80.70	82.38	80.96	80.11	79.16	76.49	72.42	69.44	67.09
500	65.57	62.37	53.75	42.95	35.67	31.34	28.03	24.76	21.32	17.77
600	14.46	11.22	8.21	5.44	3.62	2.21	1.24	0.66	0.34	0.16
700	0.08									

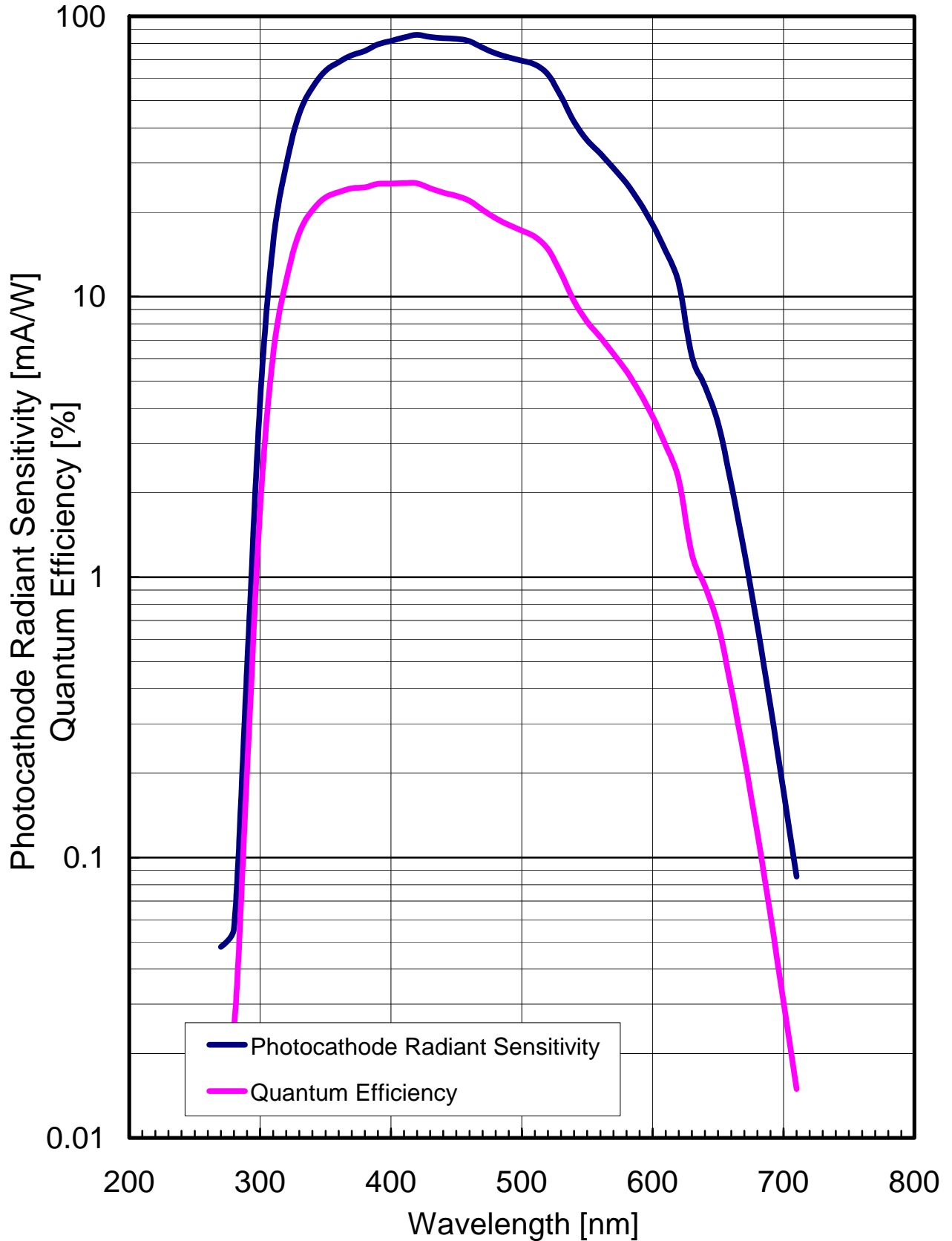
Quantum Efficiency [%]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.01	0.02	0.32
300	2.81	7.41	13.64	18.04	20.80	22.44	23.15	23.68	23.84	24.46
400	24.45	24.41	24.32	23.34	22.57	21.80	20.61	19.10	17.93	16.97
500	16.26	15.16	12.81	10.04	8.19	7.06	6.20	5.39	4.56	3.73
600	2.99	2.28	1.64	1.07	0.70	0.42	0.23	0.12	0.06	0.03
700	0.01									

Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1069
Date Nov.30, 2004
Tested by M.SUZUKI
Note

Max. Q.E. 25.4 %
Wavelength of max. 420 nm



Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1069
Date Nov.30, 2004
Tested by M.SUZUKI
Note

Cathode Radiant Sensitivity [mA/W]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.05	0.06	0.47
300	4.22	15.58	29.48	44.95	55.70	63.92	68.60	72.65	75.19	79.49
400	81.70	83.99	85.97	84.44	83.51	83.01	81.44	77.37	73.82	71.33
500	69.40	67.35	62.03	51.78	42.02	36.02	32.35	28.76	25.39	21.69
600	18.08	14.52	11.13	6.13	4.80	3.52	2.14	1.23	0.67	0.35
700	0.17	0.09								

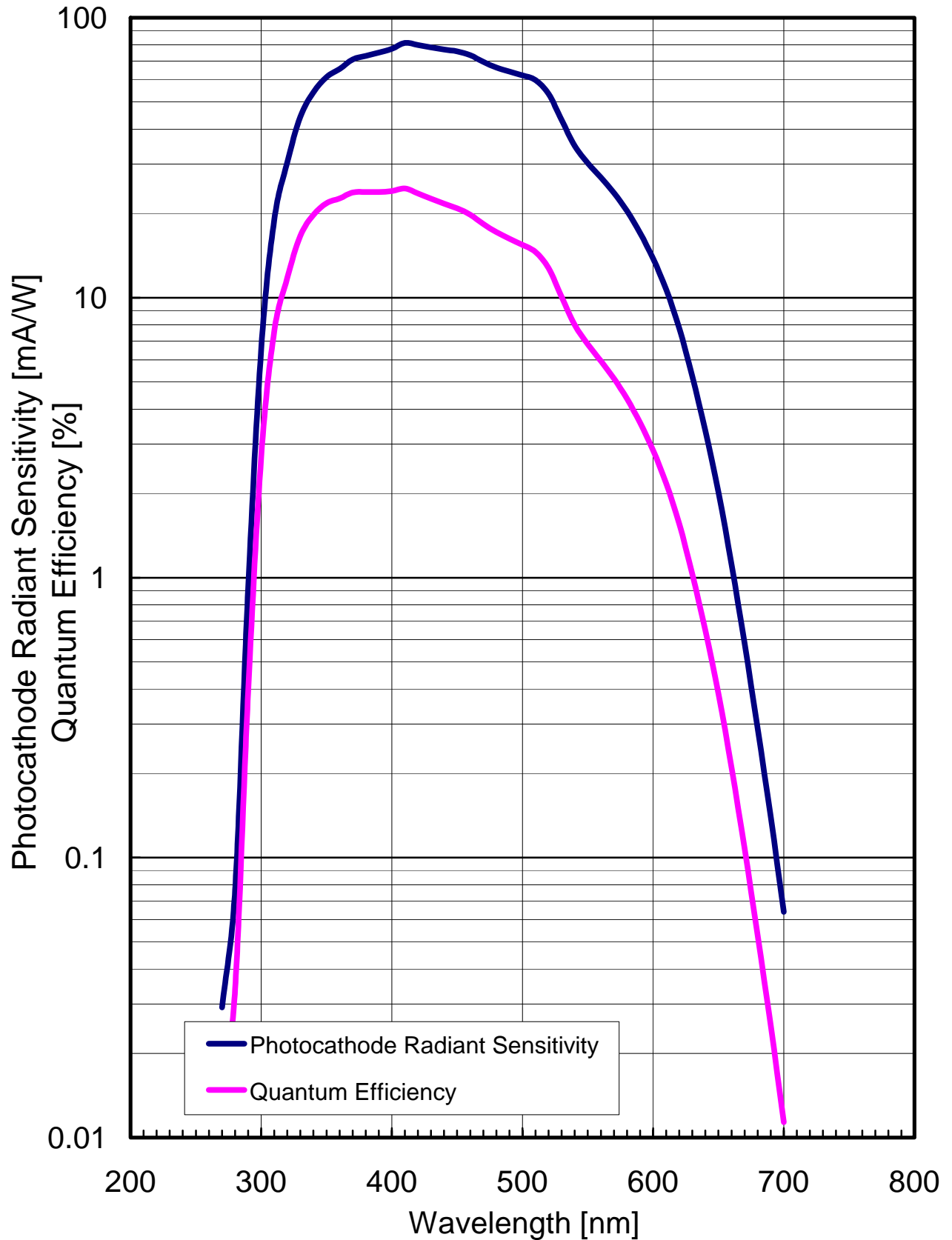
Quantum Efficiency [%]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.02	0.02	0.20
300	1.74	6.23	11.42	16.88	20.30	22.64	23.62	24.34	24.53	25.27
400	25.32	25.40	25.38	24.34	23.53	22.87	21.95	20.40	19.06	18.04
500	17.20	16.37	14.78	12.11	9.65	8.12	7.16	6.25	5.43	4.56
600	3.73	2.95	2.23	1.21	0.93	0.67	0.40	0.23	0.12	0.06
700	0.03	0.01								

Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1128
Date Dec.24, 2004
Tested by M.SUZUKI
Note

Max. Q.E. 24.6 %
Wavelength of max. 420 nm



Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1128
Date Dec.24, 2004
Tested by M.SUZUKI
Note

Cathode Radiant Sensitivity [mA/W]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.03	0.08	0.91
300	6.53	18.96	30.42	44.23	54.11	61.45	65.68	70.98	73.09	75.07
400	77.50	81.30	79.84	78.34	76.98	75.76	73.45	69.51	66.39	64.18
500	62.28	59.87	53.49	43.11	34.89	30.20	26.85	23.65	20.39	17.02
600	13.79	10.69	7.79	5.24	3.35	2.01	1.11	0.58	0.29	0.14
700	0.06									

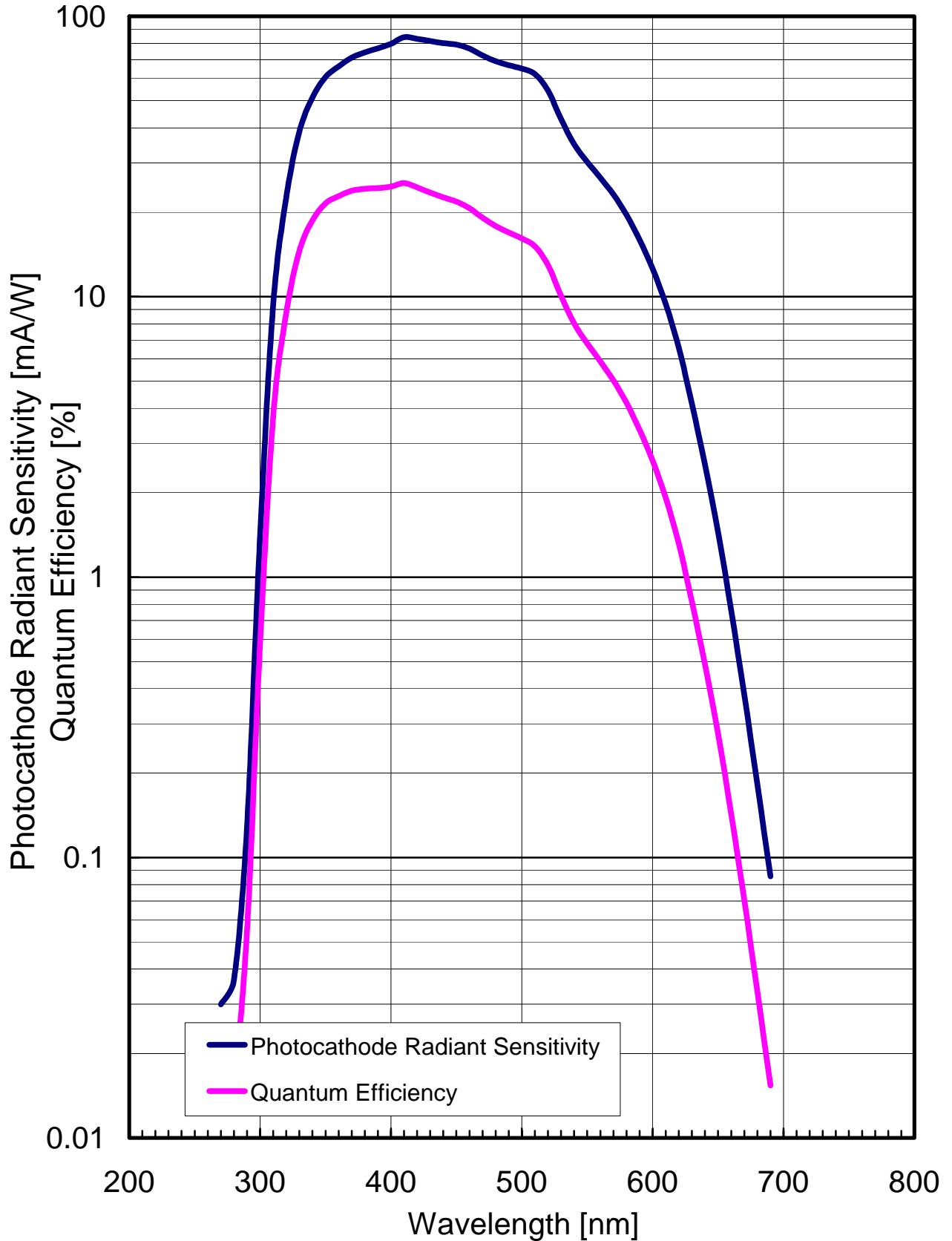
Quantum Efficiency [%]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.01	0.03	0.39
300	2.70	7.58	11.78	16.61	19.73	21.76	22.61	23.78	23.84	23.87
400	24.02	24.58	23.57	22.58	21.69	20.87	19.79	18.33	17.14	16.24
500	15.44	14.55	12.75	10.08	8.01	6.81	5.94	5.14	4.36	3.57
600	2.85	2.17	1.56	1.03	0.65	0.38	0.21	0.11	0.05	0.03
700	0.01									

Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1163
Date Dec.24, 2004
Tested by M.SUZUKI
Note

Max. Q.E. 25.4 %
Wavelength of max. 420 nm



Spectral Response Characteristics

Tube Type R7081-02
 Serial No. TA1163
 Date Dec.24, 2004
 Tested by M.SUZUKI
 Note

Cathode Radiant Sensitivity [mA/W]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.03	0.04	0.13
300	1.41	9.34	22.54	38.69	51.19	60.82	66.29	71.25	74.34	76.81
400	79.72	84.15	83.11	81.59	80.29	79.23	76.75	72.48	69.11	66.92
500	65.15	62.26	54.37	43.08	35.04	30.20	26.53	23.13	19.57	15.94
600	12.57	9.43	6.58	4.16	2.53	1.44	0.76	0.38	0.18	0.09

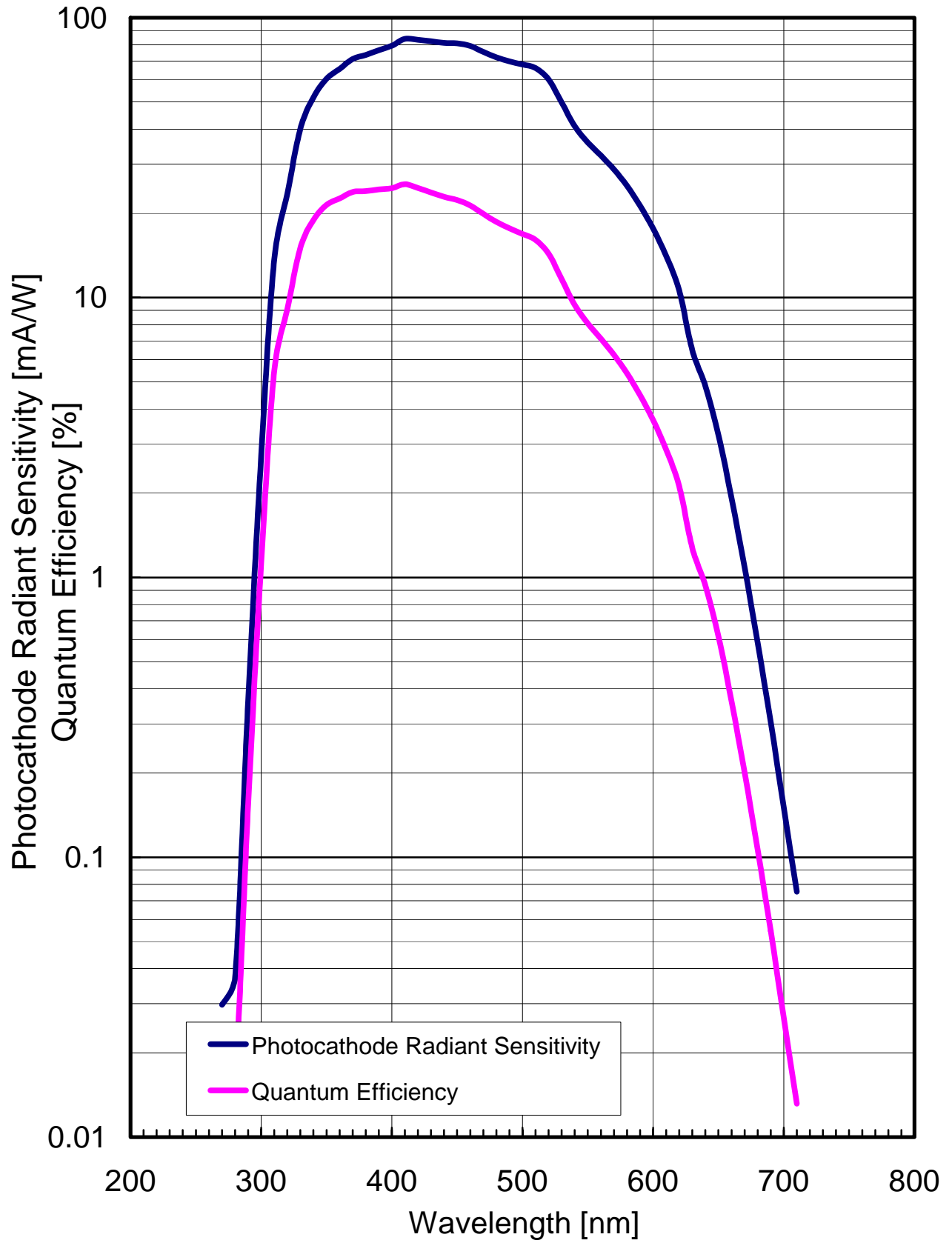
Quantum Efficiency [%]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.01	0.02	0.06
300	0.58	3.73	8.73	14.53	18.66	21.54	22.82	23.87	24.25	24.42
400	24.70	25.44	24.54	23.52	22.62	21.82	20.68	19.11	17.85	16.93
500	16.15	15.13	12.96	10.08	8.04	6.80	5.87	5.03	4.18	3.35
600	2.60	1.92	1.31	0.82	0.49	0.27	0.14	0.07	0.03	0.02

Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1167
Date Dec.24, 2004
Tested by M.SUZUKI
Note

Max. Q.E. 25.4 %
Wavelength of max. 420 nm



Spectral Response Characteristics

Tube Type R7081-02
 Serial No. TA1167
 Date Dec.24, 2004
 Tested by M.SUZUKI
 Note

Cathode Radiant Sensitivity [mA/W]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.03	0.04	0.36
300	2.73	13.66	23.43	40.07	51.82	60.61	65.65	71.22	73.59	76.54
400	79.42	84.13	83.42	82.42	81.37	80.97	79.22	75.50	72.19	69.89
500	68.12	66.11	60.17	49.79	41.03	35.80	32.20	28.68	25.10	21.30
600	17.67	14.07	10.60	6.48	4.84	3.21	1.91	1.08	0.58	0.30
700	0.15	0.08								

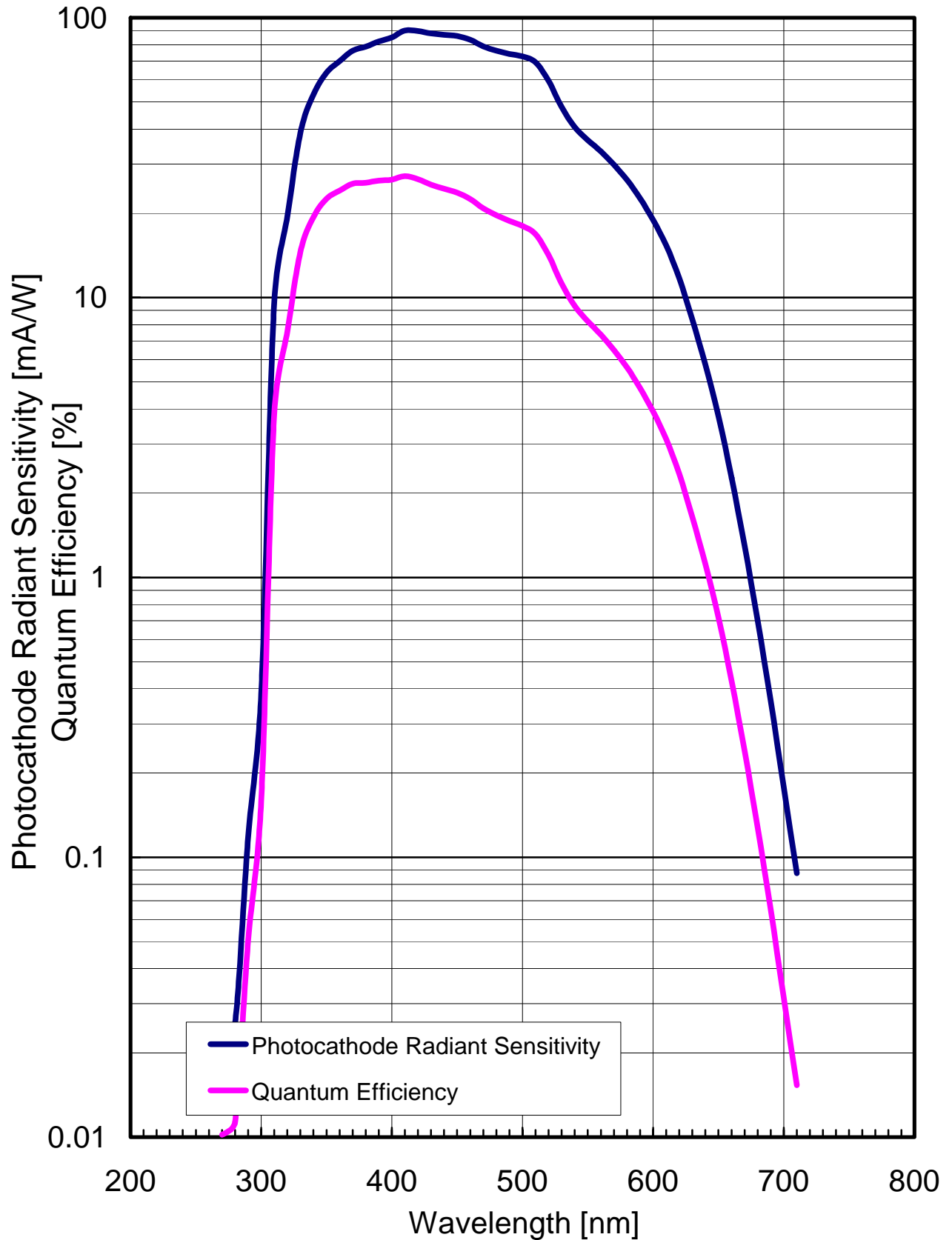
Quantum Efficiency [%]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.01	0.02	0.15
300	1.13	5.46	9.08	15.05	18.89	21.47	22.60	23.86	24.00	24.34
400	24.61	25.43	24.63	23.76	22.92	22.30	21.35	19.91	18.64	17.68
500	16.89	16.07	14.34	11.64	9.42	8.07	7.13	6.24	5.36	4.48
600	3.65	2.86	2.12	1.28	0.94	0.61	0.36	0.20	0.11	0.05
700	0.03	0.01								

Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1176
Date Dec.24, 2004
Tested by M.SUZUKI
Note

Max. Q.E. 27.2 %
Wavelength of max. 420 nm



Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1176
Date Dec.24, 2004
Tested by M.SUZUKI
Note

Cathode Radiant Sensitivity [mA/W]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.02	0.03	0.12
300	0.38	9.60	19.41	38.69	53.05	63.71	70.00	76.24	78.83	82.29
400	85.08	89.93	89.66	87.93	86.95	86.05	83.36	79.03	76.23	74.24
500	72.81	69.28	59.51	48.00	40.70	36.48	33.27	29.82	26.35	22.62
600	18.95	15.36	11.75	8.37	5.77	3.75	2.27	1.30	0.70	0.36
700	0.18	0.09								

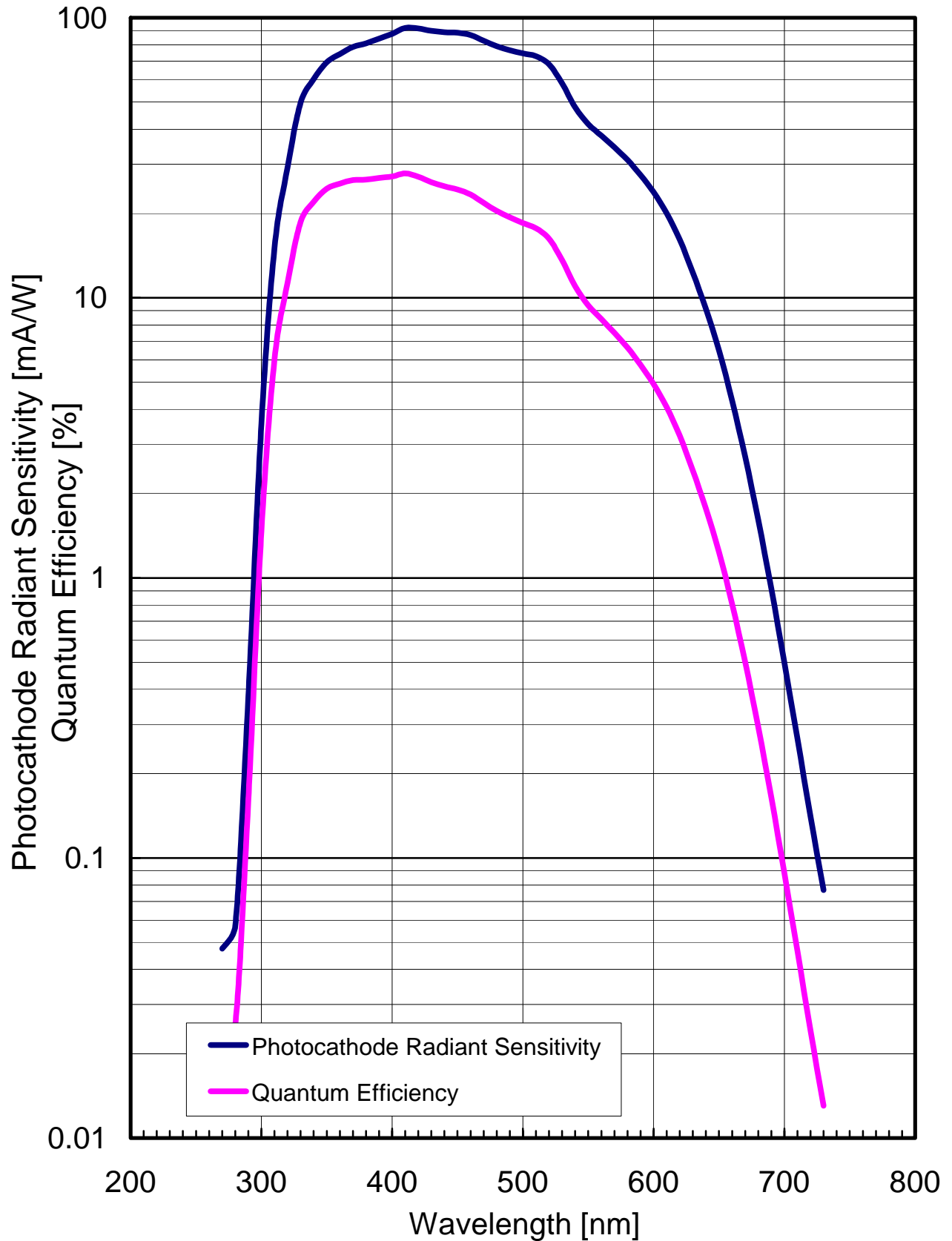
Quantum Efficiency [%]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.01	0.01	0.05
300	0.16	3.84	7.52	14.53	19.34	22.56	24.10	25.54	25.71	26.17
400	26.36	27.19	26.47	25.35	24.49	23.70	22.46	20.84	19.69	18.78
500	18.05	16.84	14.18	11.23	9.34	8.22	7.36	6.48	5.63	4.75
600	3.91	3.12	2.35	1.65	1.12	0.72	0.43	0.24	0.13	0.06
700	0.03	0.02								

Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1178
Date Dec.24, 2004
Tested by M.SUZUKI
Note

Max. Q.E. 27.8 %
Wavelength of max. 420 nm



Spectral Response Characteristics

Tube Type R7081-02
 Serial No. TA1178
 Date Dec.24, 2004
 Tested by M.SUZUKI
 Note

Cathode Radiant Sensitivity [mA/W]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.05	0.06	0.38
300	3.54	15.01	29.14	49.63	60.30	69.37	74.26	78.67	81.06	84.28
400	87.57	91.93	91.68	89.81	88.81	88.37	86.72	82.80	79.19	76.58
500	74.63	72.88	68.22	58.34	47.95	41.66	37.92	34.44	31.08	27.43
600	23.82	20.04	16.12	12.29	9.14	6.46	4.28	2.70	1.61	0.91
700	0.50	0.27	0.14	0.08						

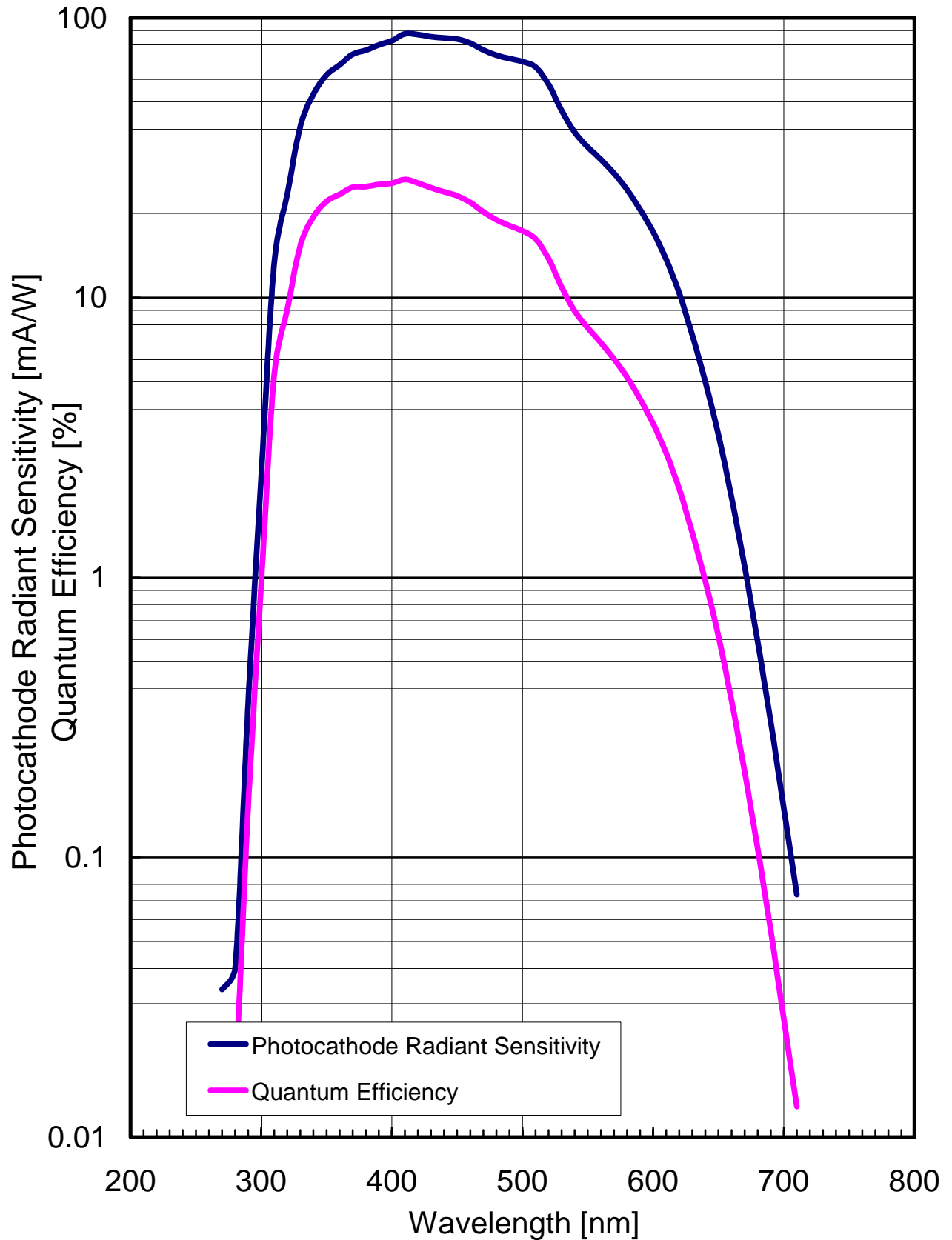
Quantum Efficiency [%]

Wavelength [nm]	0	10	20	30	40	50	60	70	80	90
200								0.02	0.03	0.16
300	1.46	6.00	11.29	18.64	21.98	24.57	25.57	26.35	26.44	26.80
400	27.13	27.79	27.07	25.89	25.02	24.34	23.37	21.84	20.45	19.37
500	18.50	17.71	16.26	13.64	11.01	9.39	8.39	7.49	6.64	5.76
600	4.92	4.07	3.22	2.42	1.77	1.23	0.80	0.50	0.29	0.16
700	0.09	0.05	0.02	0.01						

Spectral Response Characteristics

Tube Type R7081-02
Serial No. TA1181
Date Dec.24, 2004
Tested by M.SUZUKI
Note

Max. Q.E. 26.5 %
Wavelength of max. 420 nm



Spectral Response Characteristics

Tube Type R7081-02
 Serial No. TA1181
 Date Dec.24, 2004
 Tested by M.SUZUKI
 Note

Cathode Radiant Sensitivity [mA/W]

Wavelength [nm]	Cathode Radiant Sensitivity [mA/W]									
	0	10	20	30	40	50	60	70	80	90
200								0.03	0.04	0.35
300	2.28	13.27	23.37	40.83	53.22	62.43	67.84	74.03	76.48	79.83
400	82.72	87.49	87.02	85.63	84.74	83.91	81.18	76.76	73.46	71.45
500	69.76	66.61	57.82	46.61	38.97	34.49	31.16	27.78	24.30	20.65
600	17.16	13.69	10.37	7.34	5.00	3.21	1.93	1.09	0.59	0.30
700	0.15	0.07								

Quantum Efficiency [%]

Wavelength [nm]	Quantum Efficiency [%]									
	0	10	20	30	40	50	60	70	80	90
200								0.02	0.02	0.15
300	0.94	5.31	9.05	15.34	19.40	22.11	23.36	24.80	24.95	25.38
400	25.63	26.45	25.69	24.68	23.87	23.11	21.87	20.24	18.97	18.07
500	17.29	16.19	13.78	10.90	8.95	7.77	6.90	6.04	5.19	4.34
600	3.55	2.78	2.07	1.45	0.97	0.61	0.36	0.20	0.11	0.05
700	0.03	0.01								