

THEKAEKARA AND DRUMMOND NASA STANDARD ^{9/19/71}

WAVELENGTH	IRRADIANCE <i>for Gene Berson in units of</i>	TOTAL AREA	PERCENTAGE
.12000000	.100070005	.005999280	.000443406
.14000000	.030000005	.007299990	.000539541
.15000000	.070000005	.007800000	.000576497
.16000000	.230000005	.009300010	.000687362
.17000000	.630000005	.013600020	.001005175
.18000000	1.250000005	.023000030	.001699928
.19000000	2.710000005	.042800040	.003163344
.20000000	10.700000005	.109850050	.008118999
.21000000	22.900000005	.277850060	.020535851
.22000000	57.500000005	.679850070	.050247603
.22500000	64.900000006	.985850080	.072864012
.23000000	66.700000005	1.314850090	.097180347
.23500000	59.300000005	1.629850100	.120461944
.24000000	63.000000005	1.935600110	.143059875
.24500000	72.300000006	2.273850120	.168059876
.25000000	70.400000006	2.630600130	.194427208
.25500000	104.000000006	3.066600140	.226651895
.26000000	130.000000004	3.651600149	.269889146
.26500000	185.000000004	4.439100160	.328093138
.27000000	232.000000004	5.481600169	.405144137
.27500000	204.000000004	6.571600180	.485705852
.28000000	222.000000004	7.636600190	.564419822
.28500000	315.000000007	8.979100201	.663643769
.29000000	482.000000007	10.971600210	.810909106
.29500000	584.000000000	13.636600219	1.007878804
.30000000	514.000000000	16.381600231	1.210761288
.30500000	603.000000000	19.174100240	1.417154489
.31000000	689.000000000	22.404100248	1.655883241
.31500000	764.000000000	26.036600261	1.924360699
.32000000	830.000000000	30.021600269	2.218891372
.32500000	975.000000000	34.534100276	2.552409481
.33000000	1059.000000000	39.619100291	2.928240968
.33500000	1081.000000000	44.969100298	3.323658559
.34000000	1074.000000000	50.356600306	3.721847768
.34500000	1069.000000000	55.714100322	4.117819684
.35000000	1093.000000000	61.119100329	4.517302316
.35500000	1083.000000000	66.559100343	4.919371792
.36000000	1068.000000000	71.936600350	5.316821903
.36500000	1132.000000000	77.436600355	5.723325969
.37000000	1181.000000000	83.219100371	6.150709562
.37500000	1157.000000000	89.064100377	6.582712519
.38000000	1120.000000000	94.756600384	7.003444226
.38500000	1098.000000000	100.301600398	7.413274235
.39000000	1098.000000000	105.791600404	7.819039202
.39500000	1189.000000000	111.509100411	8.241618656
.40000000	1429.000000000	118.054100426	8.725358494
.40500000	1644.000000000	125.736600431	9.293170763
.41000000	1751.000000000	134.224100448	9.920480447
.41500000	1774.000000000	143.036600456	10.571810825
.42000000	1747.000000000	151.839100461	11.222402103
.42500000	1693.000000000	160.439100482	11.858026643
.43000000	1639.000000000	168.769100487	12.473695528
.43500000	1663.000000000	177.024100494	13.083821175
.44000000	1810.000000000	185.706600513	13.725543275

.445000000	1922.000000000	195.036600519	14.415121990
.450000000	2006.000000000	204.856600527	15.140916521
.455000000	2057.000000000	215.014100548	15.891655621
.460000000	2066.000000000	225.321600553	16.653481194
.465000000	2048.000000000	235.606600560	17.413643796
.470000000	2033.000000000	245.809100579	18.167708838
.475000000	2044.000000000	256.001600578	18.921034780
.480000000	2074.000000000	266.296600595	19.681936482
.485000000	1976.000000000	276.421600595	20.430273511
.490000000	1950.000000000	286.236600600	21.155698492
.495000000	1960.000000000	296.011600614	21.878167082
.500000000	1942.000000000	305.766600601	22.599157472
.505000000	1920.000000000	315.421600588	23.312756880
.510000000	1882.000000000	324.926600605	24.015269815
.515000000	1833.000000000	334.214100622	24.701707363
.520000000	1833.000000000	343.379100613	25.379090955
.525000000	1852.000000000	352.591600627	26.059985264
.530000000	1842.000000000	361.826600641	26.742542545
.535000000	1818.000000000	370.976600654	27.418817491
.540000000	1783.000000000	379.979100645	28.084190735
.545000000	1754.000000000	388.821600661	28.737738408
.550000000	1725.000000000	397.519100673	29.380569155
.555000000	1720.000000000	406.131600663	30.017117565
.560000000	1695.000000000	414.669100679	30.648122740
.565000000	1705.000000000	423.169100694	31.276356297
.570000000	1712.000000000	431.711600713	31.907731021
.575000000	1719.000000000	440.289100707	32.541692587
.580000000	1715.000000000	448.874100722	33.176208478
.585000000	1712.000000000	457.441600740	33.809430948
.590000000	1700.000000000	465.971600734	34.439881798
.595000000	1682.000000000	474.426600747	35.064789412
.600000000	1666.000000000	482.796600759	35.683414690
.605000000	1647.000000000	491.079100750	36.295572856
.610000000	1635.000000000	499.284100763	36.902003013
.620000000	1602.000000000	515.469100758	38.098233611
.630000000	1570.000000000	531.329100788	39.270443517
.640000000	1544.000000000	546.899100795	40.421219571
.650000000	1511.000000000	562.174100801	41.550192225
.660000000	1486.000000000	577.159100831	42.657731029
.670000000	1456.000000000	591.869100839	43.744944629
.680000000	1427.000000000	606.284100845	44.810354830
.690000000	1402.000000000	620.429100871	45.855809377
.700000000	1369.000000000	634.284100875	46.879830072
.710000000	1344.000000000	647.849100888	47.882416917
.720000000	1314.000000000	661.139100909	48.864678559
.730000000	1290.000000000	674.159100920	49.826984547
.740000000	1260.000000000	686.909100950	50.769334882
.750000000	1235.000000000	699.384100959	51.691360012
.760000000	1211.000000000	711.614100963	52.595277233
.770000000	1185.000000000	723.594100967	53.480716997
.780000000	1159.000000000	735.314100996	54.346940206
.790000000	1134.000000000	746.779100999	55.194316408
.800000000	1109.000000000	757.994101018	56.023215152
.810000000	1085.500000000	768.966601029	56.834190764
.820000000	1060.000000000	779.694101036	57.627058465
.830000000	1036.000000000	790.174101055	58.401633485
.840000000	1013.000000000	800.419101059	59.158839694

.850000000	990.000000000	810.434101090	59.899046644
.860000000	968.000000000	820.224101096	60.622623879
.870000000	947.000000000	829.799101099	61.330310502
.880000000	926.000000000	839.164101124	62.022476062
.890000000	908.000000000	848.334101140	62.700229204
.900000000	891.000000000	857.329101145	63.365048126
.910000000	880.000000000	866.184101164	64.019519672
.920000000	869.000000000	874.929101169	64.665861135
.930000000	858.000000000	883.564101174	65.304072518
.940000000	847.000000000	892.089101195	65.934153819
.950000000	837.000000000	900.509101212	66.556474591
.960000000	820.000000000	908.794101238	67.168817533
.970000000	803.000000000	916.909101248	67.768595805
.980000000	785.000000000	924.849101260	68.355439857
.990000000	767.000000000	932.609101281	68.928980138
1.000000000	748.000000000	940.184101284	69.488847101
1.050000000	668.000000000	975.584101290	72.105255084
1.100000000	593.000000000	1007.109101310	74.435262477
1.150000000	535.000000000	1035.309101284	76.519519681
1.200000000	485.000000007	1060.809101284	78.404220346
1.250000000	438.000000007	1083.884101301	80.109689675
1.300000000	397.000000007	1104.759101301	81.652557377
1.350000000	358.000000007	1123.634101301	83.047605418
1.400000000	337.000000007	1141.009101301	84.331788713
1.450000000	312.000000007	1157.234101295	85.530975705
1.500000000	288.000000007	1172.234101295	86.639623156
1.550000000	267.000000007	1186.109101295	87.665122047
1.600000000	245.000000004	1198.909101307	88.611167872
1.650000000	223.000000004	1210.609101295	89.475912882
1.700000000	202.000000004	1221.234101295	90.261204826
1.750000000	180.000000004	1230.784101307	90.967043703
1.800000000	159.000000004	1239.259101301	91.593429511
1.850000000	142.000000004	1246.784101307	92.149600983
1.900000000	126.000000006	1253.484101295	92.644796843
1.950000000	114.000000006	1259.484101295	93.088255823
2.000000000	103.000000006	1264.909101307	93.489216652
2.100000000	90.000000006	1274.559101313	94.202446513
2.200000000	79.000000006	1283.009101301	94.826984575
2.300000000	69.000000006	1290.409101307	95.373917317
2.400000000	62.000000005	1296.959101319	95.858026706
2.500000000	55.000000005	1302.809101313	96.290399211
2.600000000	48.000000005	1307.959101319	96.671034835
2.700000000	43.000000005	1312.509101331	97.007324561
2.800000000	39.000000005	1316.609101325	97.310354864
2.900000000	35.000000005	1320.309101313	97.583821235
3.000000000	31.000000005	1323.609101325	97.827723674
3.100000000	26.000000005	1326.459101319	98.038366690
3.200000000	22.600000005	1328.889101326	98.217967577
3.300000000	19.200000005	1330.979101330	98.372439122
3.400000000	16.600000005	1332.769101322	98.504737718
3.500000000	14.600000005	1334.329101324	98.620037053
3.600000000	13.500000005	1335.734101325	98.723880364
3.700000000	12.300000005	1337.024101317	98.819224045
3.800000000	11.100000005	1338.194101304	98.905698543
3.900000000	10.300000005	1339.264101297	98.984782062
4.000000000	9.500000005	1340.254101306	99.057952793
4.100000000	8.700000005	1341.164101303	99.125210740
4.200000000	7.800000005	1341.989101291	99.186186347

4.300000000	7.100000005	1342.734101295	99.241249172
4.400000000	6.500000005	1343.414101303	99.291507857
4.500000000	5.900000005	1344.034101307	99.337331951
4.600000000	5.300000005	1344.594101310	99.378721457
4.700000000	4.800000005	1345.099101305	99.416045921
4.800000000	4.500000005	1345.564101309	99.450413991
4.900000000	4.100000005	1345.994101316	99.482195219
5.000000000	3.830000005	1346.390601307	99.511500467
6.000000000	1.750000005	1349.180601299	99.717708891
7.000000000	.990000005	1350.550601304	99.818965359
8.000000000	.600000005	1351.345601290	99.877723671
9.000000000	.380000005	1351.835601300	99.913939489
10.000000000	.250000005	1352.150601298	99.937221086
11.000000000	.170000005	1352.360601306	99.952742152
12.000000000	.120000005	1352.505601317	99.963459076
13.000000000	.087000005	1352.609101325	99.971108746
14.000000000	.055000005	1352.680101335	99.976356344
15.000000000	.049000005	1352.732101321	99.980199654
16.000000000	.038000005	1352.775601327	99.983414732
17.000000000	.031000005	1352.810101330	99.985964620
18.000000000	.024000005	1352.837601334	99.987997143
19.000000000	.020000005	1352.859601349	99.989623159
20.000000000	.016000005	1352.877601355	99.990953537
25.000000000	.006100005	1352.932851344	99.995037055
30.000000000	.003000005	1352.955601335	99.996718502
35.000000000	.001600005	1352.967101336	99.997568466
40.000000000	.000940005	1352.973451346	99.998037793
50.000000000	.000380005	1352.980051339	99.998525597
60.000000000	.000190005	1352.982901335	99.998736240
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THEKAEKARA AND DRUMMOND NASA STANDARD

9110172

WAVELENGTH	IRRADIANCE	TOTAL AREA	PERCENTAGE
.120000000	.100070005	.005999280	.000443406
.140000000	.030000005	.007299990	.000539541
.150000000	.070000005	.007800000	.000576497
.160000000	.230000005	.009300010	.000687362
.170000000	.630000005	.013600020	.001005175
.180000000	1.250000005	.023000030	.001699928
.190000000	2.710000005	.042800040	.003163344
.200000000	10.700000005	.109850050	.008118999
.210000000	22.900000005	.277850060	.020535851
.220000000	57.500000005	.679850070	.050247603
.225000000	64.900000006	.985850080	.072864012
.230000000	66.700000005	1.314850090	.097180347
.235000000	59.300000005	1.629850100	.120461944
.240000000	63.000000005	1.935600110	.143059875
.245000000	72.300000006	2.273850120	.168059876
.250000000	70.400000006	2.630600130	.194427208
.255000000	104.000000006	3.066600140	.226651895
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.280000000	222.000000004	7.636600190	.564419822
.285000000	315.000000007	8.979100201	.663643769
.290000000	482.000000007	10.971600210	.810909106
.295000000	584.000000000	13.636600219	1.007878804
.300000000	514.000000000	16.381600231	1.210761288
.305000000	603.000000000	19.174100240	1.417154489
.310000000	689.000000000	22.404100248	1.655883241
.315000000	764.000000000	26.036600261	1.924360699
.320000000	830.000000000	30.021600269	2.218891372
.325000000	975.000000000	34.534100276	2.552409481
.330000000	1059.000000000	39.619100291	2.928240968
.335000000	1081.000000000	44.969100298	3.323658559
.340000000	1074.000000000	50.356600306	3.721847768
.345000000	1069.000000000	55.714100322	4.117819684
.350000000	1093.000000000	61.119100329	4.517302316
.355000000	1083.000000000	66.559100343	4.919371792
.360000000	1068.000000000	71.936600350	5.316821903
.365000000	1132.000000000	77.436600355	5.723325969
.370000000	1181.000000000	83.219100371	6.150709562
.375000000	1157.000000000	89.064100377	6.582712519
.380000000	1120.000000000	94.756600384	7.003444226
.385000000	1098.000000000	100.301600398	7.413274235
.390000000	1098.000000000	105.791600404	7.819039202
.395000000	1189.000000000	111.509100411	8.241618656
.400000000	1429.000000000	118.054100426	8.725358494
.405000000	1644.000000000	125.736600431	9.293170763
.410000000	1751.000000000	134.224100448	9.920480447
.415000000	1774.000000000	143.036600456	10.571810825
.420000000	1747.000000000	151.839100461	11.222402103
.425000000	1693.000000000	160.439100482	11.858026643
.430000000	1639.000000000	168.769100487	12.473695528
.435000000	1663.000000000	177.024100494	13.083821175
.440000000	1810.000000000	185.706600513	13.725543275
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.465000000	2048.000000000	235.606600560	17.413643796
.470000000	2033.000000000	245.809100579	18.167708838
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.495000000	1960.000000000	296.011600614	21.878167082
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.510000000	1882.000000000	324.926600605	24.015269815
.515000000	1833.000000000	334.214100622	24.701707363
.520000000	1833.000000000	343.379100613	25.379090955
.525000000	1852.000000000	352.591600627	26.059985264
.530000000	1842.000000000	361.826600641	26.742542545
.535000000	1818.000000000	370.976600654	27.418817491
.540000000	1783.000000000	379.979100645	28.084190735
.545000000	1754.000000000	388.821600661	28.737738408
.550000000	1725.000000000	397.519100673	29.380569155
.555000000	1720.000000000	406.131600663	30.017117565
.560000000	1695.000000000	414.669100679	30.648122740
.565000000	1705.000000000	423.169100694	31.276356297
.570000000	1712.000000000	431.711600713	31.907731021
.575000000	1719.000000000	440.289100707	32.541692587
.580000000	1715.000000000	448.874100722	33.176208478
.585000000	1712.000000000	457.441600740	33.809430948
.590000000	1700.000000000	465.971600734	34.439881798
.595000000	1682.000000000	474.426600747	35.064789412
.600000000	1666.000000000	482.796600759	35.683414690
.605000000	1647.000000000	491.079100750	36.295572856
.610000000	1635.000000000	499.284100763	36.902003013
.620000000	1602.000000000	515.469100758	38.098233611
.630000000	1570.000000000	531.329100788	39.270443517
.640000000	1544.000000000	546.899100795	40.421219571
.650000000	1511.000000000	562.174100801	41.550192225
.660000000	1486.000000000	577.159100831	42.657731029
.670000000	1456.000000000	591.869100839	43.744944629
.680000000	1427.000000000	606.284100845	44.810354830
.690000000	1402.000000000	620.429100871	45.855809377
.700000000	1369.000000000	634.284100875	46.879830072
.710000000	1344.000000000	647.849100888	47.882416917
.720000000	1314.000000000	661.139100909	48.864678559
.730000000	1290.000000000	674.159100920	49.826984547
.740000000	1260.000000000	686.909100950	50.769334882
.750000000	1235.000000000	699.384100959	51.691360012
.760000000	1211.000000000	711.614100963	52.595277233
.770000000	1185.000000000	723.594100967	53.480716997
.780000000	1159.000000000	735.314100996	54.346940206
.790000000	1134.000000000	746.779100999	55.194316408
.800000000	1109.000000000	757.994101018	56.023215152
.810000000	1085.500000000	768.966601029	56.834190764
.820000000	1060.000000000	779.694101036	57.627058465
.830000000	1036.000000000	790.174101055	58.401633485
.840000000	1013.000000000	800.419101059	59.158839694
.850000000	990.000000000	810.434101090	59.899046644
.860000000	968.000000000	820.224101096	60.622623879

.8700000000	947.0000000000	829.799101099	61.330310502
.8800000000	926.0000000000	839.164101124	62.022476062
.8900000000	908.0000000000	848.334101140	62.700229204
.9000000000	891.0000000000	857.329101145	63.365048126
.9100000000	880.0000000000	866.184101164	64.019519672
.9200000000	869.0000000000	874.929101169	64.665861135
.9300000000	858.0000000000	883.564101174	65.304072518
.9400000000	847.0000000000	892.089101195	65.934153819
.9500000000	837.0000000000	900.509101212	66.556474591
.9600000000	820.0000000000	908.794101238	67.168817533
.9700000000	803.0000000000	916.909101248	67.768595805
.9800000000	785.0000000000	924.849101260	68.355439857
.9900000000	767.0000000000	932.609101281	68.928980138
1.0000000000	748.0000000000	940.184101284	69.488847101
1.0500000000	668.0000000000	975.584101290	72.105255084
1.1000000000	593.0000000000	1007.109101310	74.435262477
1.1500000000	535.0000000000	1035.309101284	76.519519681
1.2000000000	485.0000000007	1060.809101284	78.404220346
1.2500000000	438.0000000007	1083.884101301	80.109689675
1.3000000000	397.0000000007	1104.759101301	81.652557377
1.3500000000	358.0000000007	1123.634101301	83.047605418
1.4000000000	337.0000000007	1141.009101301	84.331788713
1.4500000000	312.0000000007	1157.234101295	85.530975705
1.5000000000	288.0000000007	1172.234101295	86.639623156
1.5500000000	267.0000000007	1186.109101295	87.665122047
1.6000000000	245.0000000004	1198.909101307	88.611167872
1.6500000000	223.0000000004	1210.609101295	89.475912882
1.7000000000	202.0000000004	1221.234101295	90.261204826
1.7500000000	180.0000000004	1230.784101307	90.967043703
1.8000000000	159.0000000004	1239.259101301	91.593429511
1.8500000000	142.0000000004	1246.784101307	92.149600983
1.9000000000	126.0000000006	1253.484101295	92.644796843
1.9500000000	114.0000000006	1259.484101295	93.088255823
2.0000000000	103.0000000006	1264.909101307	93.489216652
2.1000000000	90.0000000006	1274.559101313	94.202446513
2.2000000000	79.0000000006	1283.009101301	94.826984575
2.3000000000	69.0000000006	1290.409101307	95.373917317
2.4000000000	62.0000000005	1296.959101319	95.858026706
2.5000000000	55.0000000005	1302.809101313	96.290399211
2.6000000000	48.0000000005	1307.959101319	96.671034835
2.7000000000	43.0000000005	1312.509101331	97.007324561
2.8000000000	39.0000000005	1316.609101325	97.310354864
2.9000000000	35.0000000005	1320.309101313	97.583821235
3.0000000000	31.0000000005	1323.609101325	97.827723674
3.1000000000	26.0000000005	1326.459101319	98.038366690
3.2000000000	22.6000000005	1328.889101326	98.217967577
3.3000000000	19.2000000005	1330.979101330	98.372439122
3.4000000000	16.6000000005	1332.769101322	98.504737718
3.5000000000	14.6000000005	1334.329101324	98.620037053
3.6000000000	13.5000000005	1335.734101325	98.723880364
3.7000000000	12.3000000005	1337.024101317	98.819224045
3.8000000000	11.1000000005	1338.194101304	98.905698543
3.9000000000	10.3000000005	1339.264101297	98.984782062
4.0000000000	9.5000000005	1340.254101306	99.057952793
4.1000000000	8.7000000005	1341.164101303	99.125210740
4.2000000000	7.8000000005	1341.989101291	99.186186347
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4.4000000000	6.5000000005	1343.414101303	99.291507857

4.500000000	5.900000005	1344.034101307	99.337331951
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4.700000000	4.800000005	1345.099101305	99.416045921
4.800000000	4.500000005	1345.564101309	99.450413991
4.900000000	4.100000005	1345.994101316	99.482195219
5.000000000	3.830000005	1346.390601307	99.511500467
6.000000000	1.750000005	1349.180601299	99.717708891
7.000000000	.990000005	1350.550601304	99.818965359
8.000000000	.600000005	1351.345601290	99.877723671
9.000000000	.380000005	1351.835601300	99.913939489
10.000000000	.250000005	1352.150601298	99.937221086
11.000000000	.170000005	1352.360601306	99.952742152
12.000000000	.120000005	1352.505601317	99.963459076
13.000000000	.087000005	1352.609101325	99.971108746
14.000000000	.055000005	1352.680101335	99.976356344
15.000000000	.049000005	1352.732101321	99.980199654
16.000000000	.038000005	1352.775601327	99.983414732
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18.000000000	.024000005	1352.837601334	99.987997143
19.000000000	.020000005	1352.859601349	99.989623159
20.000000000	.016000005	1352.877601355	99.990953537
25.000000000	.006100005	1352.932851344	99.995037055
30.000000000	.003000005	1352.955601335	99.996718502
35.000000000	.001600005	1352.967101336	99.997568466
40.000000000	.000940005	1352.973451346	99.998037793
50.000000000	.000380005	1352.980051339	99.998525597
60.000000000	.000190005	1352.982901335	99.998736240
80.000000000	.000070005	1352.985501349	99.998928407
100.000000000	.000030005	1352.986501336	99.999002315
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