



IES INDOOR REPORT

PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]

[TESTLAB]

[ISSUE DATE]

[MANUFAC] PRUDENTIAL

[_CONVERT] Photometric web converted from original test data

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	785
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	98
Total Luminaire Watts	8
Ballast Factor	1.00
CIE Type	Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Circular
Luminous Length (0-180)	2.08 ft (Diameter)
Luminous Width (90-270)	2.08 ft (Diameter)
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	0	0	0
55	0	0	0
65	0	0	0
75	0	0	0
85	0	0	0

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION

	<u>0.0</u>	<u>2.5</u>	<u>5.0</u>	<u>7.5</u>	<u>10.0</u>	<u>12.5</u>	<u>15.0</u>	<u>17.5</u>	<u>20.0</u>	<u>22.5</u>
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	11.780	13.015	14.155	15.390	16.625	17.765	19.000	20.235	21.375	22.610
95.0	17.670	18.525	19.475	20.330	21.280	22.135	23.085	23.940	24.890	25.745
97.5	24.700	25.365	26.030	26.695	27.360	28.120	28.785	29.450	30.115	30.780
100.0	32.775	33.250	33.725	34.200	34.675	35.245	35.720	36.195	36.670	37.145
102.5	40.850	41.230	41.610	41.990	42.370	42.750	43.130	43.510	43.890	44.270
105.0	50.920	51.015	51.015	51.110	51.205	51.205	51.300	51.395	51.395	51.490
107.5	57.760	57.950	58.140	58.235	58.425	58.615	58.805	58.900	59.090	59.280
110.0	67.450	67.450	67.450	67.545	67.545	67.545	67.545	67.640	67.640	67.640
112.5	78.375	78.185	77.995	77.805	77.615	77.330	77.140	76.950	76.760	76.570
115.0	82.555	83.030	83.505	83.980	84.455	84.930	85.405	85.880	86.355	86.830
117.5	96.045	95.855	95.760	95.570	95.475	95.285	95.190	95.000	94.905	94.715
120.0	108.775	108.205	107.730	107.160	106.590	106.115	105.545	104.975	104.500	103.930
122.5	112.290	112.385	112.575	112.670	112.765	112.955	113.050	113.145	113.335	113.430
125.0	120.365	120.840	121.315	121.790	122.265	122.835	123.310	123.785	124.260	124.735
127.5	133.190	133.475	133.760	134.140	134.425	134.710	134.995	135.375	135.660	135.945
130.0	145.065	144.685	144.400	144.020	143.640	143.355	142.975	142.595	142.310	141.930
132.5	151.810	151.810	151.715	151.715	151.715	151.620	151.620	151.620	151.525	151.525
135.0	164.255	163.875	163.495	163.115	162.735	162.355	161.975	161.595	161.215	160.835
137.5	170.335	170.335	170.335	170.335	170.335	170.430	170.430	170.430	170.430	170.430
140.0	177.650	178.220	178.885	179.455	180.120	180.690	181.355	181.925	182.590	183.160
142.5	191.045	191.330	191.710	191.995	192.280	192.660	192.945	193.230	193.610	193.895
145.0	202.445	202.445	202.350	202.350	202.350	202.255	202.255	202.255	202.160	202.160
147.5	211.185	210.710	210.330	209.855	209.475	209.000	208.620	208.145	207.765	207.290
150.0	216.505	215.935	215.365	214.795	214.225	213.750	213.180	212.610	212.040	211.470
152.5	219.640	219.450	219.355	219.165	218.975	218.880	218.690	218.500	218.405	218.215
155.0	226.480	226.290	226.195	226.005	225.910	225.720	225.625	225.435	225.340	225.150
157.5	233.320	233.130	232.940	232.750	232.560	232.465	232.275	232.085	231.895	231.705
160.0	239.780	239.495	239.305	239.020	238.830	238.545	238.355	238.070	237.880	237.595
162.5	245.385	245.100	244.815	244.625	244.340	244.055	243.770	243.580	243.295	243.010
165.0	250.420	250.135	249.850	249.565	249.280	248.900	248.615	248.330	248.045	247.760
167.5	254.790	254.410	254.125	253.745	253.460	253.080	252.795	252.415	252.130	251.750
170.0	258.210	257.830	257.545	257.165	256.880	256.500	256.215	255.835	255.550	255.170
172.5	261.250	260.870	260.490	260.110	259.730	259.255	258.875	258.495	258.115	257.735
175.0	263.055	262.675	262.295	261.915	261.535	261.250	260.870	260.490	260.110	259.730
177.5	264.670	264.290	263.815	263.435	263.055	262.580	262.200	261.820	261.345	260.965
180.0	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300

**Vert.
Angles**

Horizontal Angles

	<u>25.0</u>	<u>27.5</u>	<u>30.0</u>	<u>32.5</u>	<u>35.0</u>	<u>37.5</u>	<u>40.0</u>	<u>42.5</u>	<u>45.0</u>	<u>47.5</u>
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	24.130	25.745	27.265	28.880	30.400	32.015	33.535	35.150	36.670	37.525
95.0	27.455	29.165	30.875	32.585	34.390	36.100	37.810	39.520	41.230	42.465
97.5	32.585	34.295	36.100	37.810	39.615	41.325	43.130	44.840	46.645	47.975
100.0	38.855	40.660	42.370	44.175	45.885	47.690	49.400	51.205	52.915	54.245
102.5	45.980	47.595	49.305	51.015	52.630	54.340	56.050	57.665	59.375	60.800
105.0	53.105	54.720	56.335	57.950	59.660	61.275	62.890	64.505	66.120	67.640
107.5	60.800	62.320	63.935	65.455	66.975	68.495	70.110	71.630	73.150	74.670
110.0	69.065	70.490	72.010	73.435	74.860	76.285	77.805	79.230	80.655	82.080
112.5	77.900	79.325	80.655	82.080	83.410	84.835	86.165	87.590	88.920	90.250
115.0	87.970	89.015	90.155	91.295	92.340	93.480	94.620	95.665	96.805	98.135
117.5	95.950	97.090	98.325	99.465	100.700	101.840	103.075	104.215	105.450	106.780
120.0	105.070	106.210	107.445	108.585	109.725	110.865	112.100	113.240	114.380	115.615

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

122.5	114.570	115.710	116.850	117.990	119.035	120.175	121.315	122.455	123.595	124.830
125.0	125.590	126.540	127.395	128.250	129.200	130.055	130.910	131.860	132.715	133.855
127.5	136.610	137.275	138.035	138.700	139.365	140.030	140.790	141.455	142.120	143.165
130.0	143.165	144.400	145.540	146.775	148.010	149.245	150.385	151.620	152.855	153.710
132.5	153.045	154.660	156.180	157.700	159.315	160.835	162.355	163.970	165.490	165.870
135.0	162.450	164.065	165.680	167.295	168.910	170.525	172.140	173.755	175.370	175.655
137.5	171.760	173.090	174.325	175.655	176.985	178.315	179.550	180.880	182.210	182.590
140.0	183.635	184.110	184.585	185.060	185.535	186.010	186.485	186.960	187.435	188.100
142.5	193.895	193.895	193.990	193.990	193.990	193.990	194.085	194.085	194.085	194.845
145.0	202.065	201.970	201.875	201.780	201.590	201.495	201.400	201.305	201.210	201.970
147.5	207.385	207.575	207.670	207.765	207.955	208.050	208.145	208.335	208.430	209.095
150.0	211.945	212.325	212.800	213.275	213.655	214.130	214.605	214.985	215.460	216.030
152.5	218.690	219.070	219.545	219.925	220.400	220.780	221.255	221.635	222.110	222.585
155.0	225.530	225.815	226.195	226.575	226.860	227.240	227.620	227.905	228.285	228.760
157.5	231.990	232.180	232.465	232.750	232.940	233.225	233.510	233.700	233.985	234.365
160.0	237.785	237.975	238.165	238.355	238.450	238.640	238.830	239.020	239.210	239.495
162.5	243.105	243.200	243.295	243.390	243.485	243.580	243.675	243.770	243.865	244.055
165.0	247.760	247.760	247.760	247.760	247.760	247.760	247.760	247.760	247.760	247.950
167.5	251.750	251.655	251.655	251.655	251.560	251.560	251.560	251.465	251.465	251.560
170.0	255.075	254.980	254.885	254.790	254.695	254.600	254.505	254.410	254.315	254.410
172.5	257.640	257.450	257.355	257.260	257.070	256.975	256.880	256.690	256.595	256.595
175.0	259.540	259.350	259.160	258.970	258.875	258.685	258.495	258.305	258.115	258.115
177.5	260.775	260.585	260.395	260.205	259.920	259.730	259.540	259.350	259.160	259.160
180.0	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300

**Vert.
Angles**

Horizontal Angles

	<u>50.0</u>	<u>52.5</u>	<u>55.0</u>	<u>57.5</u>	<u>60.0</u>	<u>62.5</u>	<u>65.0</u>	<u>67.5</u>	<u>70.0</u>	<u>72.5</u>
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	38.475	39.330	40.185	41.135	41.990	42.845	43.795	44.650	44.840	45.030
95.0	43.700	44.935	46.170	47.310	48.545	49.780	51.015	52.250	52.725	53.105
97.5	49.305	50.540	51.870	53.200	54.530	55.765	57.095	58.425	58.900	59.375
100.0	55.670	57.000	58.330	59.755	61.085	62.415	63.840	65.170	65.645	66.215
102.5	62.225	63.745	65.170	66.595	68.020	69.540	70.965	72.390	72.865	73.340
105.0	69.160	70.585	72.105	73.625	75.145	76.570	78.090	79.610	80.085	80.560
107.5	76.190	77.615	79.135	80.655	82.175	83.600	85.120	86.640	87.115	87.590
110.0	83.600	85.025	86.450	87.970	89.395	90.820	92.340	93.765	94.240	94.715
112.5	91.580	93.005	94.335	95.665	96.995	98.420	99.750	101.080	101.555	102.030
115.0	99.465	100.795	102.125	103.550	104.880	106.210	107.540	108.870	109.345	109.820
117.5	108.015	109.345	110.675	111.910	113.240	114.570	115.805	117.135	117.515	117.990
120.0	116.850	118.180	119.415	120.650	121.885	123.215	124.450	125.685	126.065	126.540
122.5	125.970	127.205	128.345	129.580	130.720	131.955	133.095	134.330	134.710	135.090
125.0	134.995	136.135	137.275	138.415	139.555	140.695	141.835	142.975	143.355	143.735
127.5	144.305	145.350	146.395	147.535	148.580	149.625	150.765	151.810	152.190	152.475
130.0	154.565	155.420	156.275	157.130	157.985	158.840	159.695	160.550	160.930	161.215
132.5	166.345	166.725	167.105	167.580	167.960	168.340	168.815	169.195	169.480	169.860
135.0	175.845	176.130	176.320	176.605	176.795	177.080	177.270	177.555	177.840	178.125
137.5	182.970	183.350	183.730	184.110	184.490	184.870	185.250	185.630	185.915	186.200
140.0	188.765	189.430	190.095	190.760	191.425	192.090	192.755	193.420	193.705	193.990
142.5	195.605	196.365	197.125	197.790	198.550	199.310	200.070	200.830	201.115	201.305
145.0	202.730	203.395	204.155	204.915	205.675	206.340	207.100	207.860	208.145	208.430
147.5	209.760	210.425	211.090	211.850	212.515	213.180	213.845	214.510	214.795	214.985
150.0	216.695	217.265	217.930	218.500	219.165	219.735	220.400	220.970	221.160	221.350
152.5	223.155	223.630	224.105	224.675	225.150	225.625	226.195	226.670	226.860	227.145
155.0	229.140	229.615	229.995	230.470	230.850	231.325	231.705	232.180	232.370	232.560
157.5	234.745	235.030	235.410	235.790	236.170	236.455	236.835	237.215	237.405	237.595

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

160.0	239.780	240.065	240.350	240.635	240.920	241.205	241.490	241.775	241.965	242.060
162.5	244.340	244.530	244.720	245.005	245.195	245.385	245.670	245.860	245.955	246.050
165.0	248.140	248.330	248.520	248.615	248.805	248.995	249.185	249.375	249.470	249.565
167.5	251.655	251.750	251.845	252.035	252.130	252.225	252.320	252.415	252.510	252.605
170.0	254.410	254.505	254.600	254.600	254.695	254.790	254.790	254.885	254.980	255.075
172.5	256.690	256.690	256.785	256.785	256.880	256.880	256.975	256.975	256.975	257.070
175.0	258.115	258.210	258.210	258.210	258.210	258.305	258.305	258.305	258.400	258.400
177.5	259.160	259.160	259.160	259.160	259.160	259.160	259.160	259.160	259.160	259.160
180.0	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300

Vert. Horizontal Angles
Angles

	<u>75.0</u>	<u>77.5</u>	<u>80.0</u>	<u>82.5</u>	<u>85.0</u>	<u>87.5</u>	<u>90.0</u>	<u>92.5</u>	<u>95.0</u>	<u>97.5</u>
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	45.125	45.315	45.505	45.695	45.790	45.980	46.170	45.980	45.790	45.695
95.0	53.580	54.055	54.435	54.910	55.385	55.765	56.240	55.765	55.385	54.910
97.5	59.850	60.325	60.895	61.370	61.845	62.320	62.795	62.320	61.845	61.370
100.0	66.690	67.165	67.735	68.210	68.685	69.255	69.730	69.255	68.685	68.210
102.5	73.910	74.385	74.860	75.335	75.905	76.380	76.855	76.380	75.905	75.335
105.0	81.035	81.510	81.985	82.460	82.935	83.410	83.885	83.410	82.935	82.460
107.5	88.065	88.540	88.920	89.395	89.870	90.345	90.820	90.345	89.870	89.395
110.0	95.095	95.570	96.045	96.520	96.900	97.375	97.850	97.375	96.900	96.520
112.5	102.410	102.885	103.360	103.835	104.215	104.690	105.165	104.690	104.215	103.835
115.0	110.295	110.770	111.150	111.625	112.100	112.575	113.050	112.575	112.100	111.625
117.5	118.370	118.845	119.225	119.700	120.080	120.555	120.935	120.555	120.080	119.700
120.0	126.920	127.300	127.775	128.155	128.535	129.010	129.390	129.010	128.535	128.155
122.5	135.470	135.850	136.325	136.705	137.085	137.465	137.845	137.465	137.085	136.705
125.0	144.115	144.495	144.780	145.160	145.540	145.920	146.300	145.920	145.540	145.160
127.5	152.855	153.140	153.520	153.805	154.185	154.470	154.850	154.470	154.185	153.805
130.0	161.595	161.880	162.260	162.545	162.925	163.210	163.590	163.210	162.925	162.545
132.5	170.145	170.430	170.810	171.095	171.380	171.760	172.045	171.760	171.380	171.095
135.0	178.410	178.695	178.980	179.265	179.550	179.835	180.120	179.835	179.550	179.265
137.5	186.485	186.770	186.960	187.245	187.530	187.815	188.100	187.815	187.530	187.245
140.0	194.275	194.560	194.750	195.035	195.320	195.605	195.890	195.605	195.320	195.035
142.5	201.590	201.875	202.065	202.350	202.635	202.825	203.110	202.825	202.635	202.350
145.0	208.620	208.905	209.190	209.475	209.665	209.950	210.235	209.950	209.665	209.475
147.5	215.270	215.460	215.745	215.935	216.220	216.410	216.695	216.410	216.220	215.935
150.0	221.540	221.730	222.015	222.205	222.395	222.585	222.775	222.585	222.395	222.205
152.5	227.335	227.620	227.810	228.095	228.285	228.570	228.760	228.570	228.285	228.095
155.0	232.750	232.940	233.225	233.415	233.605	233.795	233.985	233.795	233.605	233.415
157.5	237.785	237.975	238.070	238.260	238.450	238.640	238.830	238.640	238.450	238.260
160.0	242.250	242.345	242.535	242.630	242.820	242.915	243.105	242.915	242.820	242.630
162.5	246.145	246.240	246.430	246.525	246.620	246.715	246.810	246.715	246.620	246.525
165.0	249.660	249.755	249.850	249.945	250.040	250.135	250.230	250.135	250.040	249.945
167.5	252.700	252.795	252.795	252.890	252.985	253.080	253.175	253.080	252.985	252.890
170.0	255.170	255.265	255.360	255.455	255.550	255.645	255.740	255.645	255.550	255.455
172.5	257.070	257.165	257.165	257.260	257.260	257.355	257.355	257.355	257.260	257.260
175.0	258.495	258.495	258.590	258.590	258.685	258.685	258.780	258.685	258.685	258.590
177.5	259.255	259.255	259.255	259.255	259.350	259.350	259.350	259.350	259.350	259.255
180.0	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300

Vert. Horizontal Angles
Angles

	<u>100.0</u>	<u>102.5</u>	<u>105.0</u>	<u>107.5</u>	<u>110.0</u>	<u>112.5</u>	<u>115.0</u>	<u>117.5</u>	<u>120.0</u>	<u>122.5</u>
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	45.505	45.315	45.125	45.030	44.840	44.650	43.795	42.845	41.990	41.135

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

95.0	54.435	54.055	53.580	53.105	52.725	52.250	51.015	49.780	48.545	47.310
97.5	60.895	60.325	59.850	59.375	58.900	58.425	57.095	55.765	54.530	53.200
100.0	67.735	67.165	66.690	66.215	65.645	65.170	63.840	62.415	61.085	59.755
102.5	74.860	74.385	73.910	73.340	72.865	72.390	70.965	69.540	68.020	66.595
105.0	81.985	81.510	81.035	80.560	80.085	79.610	78.090	76.570	75.145	73.625
107.5	88.920	88.540	88.065	87.590	87.115	86.640	85.120	83.600	82.175	80.655
110.0	96.045	95.570	95.095	94.715	94.240	93.765	92.340	90.820	89.395	87.970
112.5	103.360	102.885	102.410	102.030	101.555	101.080	99.750	98.420	96.995	95.665
115.0	111.150	110.770	110.295	109.820	109.345	108.870	107.540	106.210	104.880	103.550
117.5	119.225	118.845	118.370	117.990	117.515	117.135	115.805	114.570	113.240	111.910
120.0	127.775	127.300	126.920	126.540	126.065	125.685	124.450	123.215	121.885	120.650
122.5	136.325	135.850	135.470	135.090	134.710	134.330	133.095	131.955	130.720	129.580
125.0	144.780	144.495	144.115	143.735	143.355	142.975	141.835	140.695	139.555	138.415
127.5	153.520	153.140	152.855	152.475	152.190	151.810	150.765	149.625	148.580	147.535
130.0	162.260	161.880	161.595	161.215	160.930	160.550	159.695	158.840	157.985	157.130
132.5	170.810	170.430	170.145	169.860	169.480	169.195	168.815	168.340	167.960	167.580
135.0	178.980	178.695	178.410	178.125	177.840	177.555	177.270	177.080	176.795	176.605
137.5	186.960	186.770	186.485	186.200	185.915	185.630	185.250	184.870	184.490	184.110
140.0	194.750	194.560	194.275	193.990	193.705	193.420	192.755	192.090	191.425	190.760
142.5	202.065	201.875	201.590	201.305	201.115	200.830	200.070	199.310	198.550	197.790
145.0	209.190	208.905	208.620	208.430	208.145	207.860	207.100	206.340	205.675	204.915
147.5	215.745	215.460	215.270	214.985	214.795	214.510	213.845	213.180	212.515	211.850
150.0	222.015	221.730	221.540	221.350	221.160	220.970	220.400	219.735	219.165	218.500
152.5	227.810	227.620	227.335	227.145	226.860	226.670	226.195	225.625	225.150	224.675
155.0	233.225	232.940	232.750	232.560	232.370	232.180	231.705	231.325	230.850	230.470
157.5	238.070	237.975	237.785	237.595	237.405	237.215	236.835	236.455	236.170	235.790
160.0	242.535	242.345	242.250	242.060	241.965	241.775	241.490	241.205	240.920	240.635
162.5	246.430	246.240	246.145	246.050	245.955	245.860	245.670	245.385	245.195	245.005
165.0	249.850	249.755	249.660	249.565	249.470	249.375	249.185	248.995	248.805	248.615
167.5	252.795	252.795	252.700	252.605	252.510	252.415	252.320	252.225	252.130	252.035
170.0	255.360	255.265	255.170	255.075	254.980	254.885	254.790	254.790	254.695	254.600
172.5	257.165	257.165	257.070	257.070	256.975	256.975	256.975	256.880	256.880	256.785
175.0	258.590	258.495	258.495	258.400	258.400	258.305	258.305	258.305	258.210	258.210
177.5	259.255	259.255	259.255	259.160	259.160	259.160	259.160	259.160	259.160	259.160
180.0	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300

Vert. Angles **Horizontal Angles**

	<u>125.0</u>	<u>127.5</u>	<u>130.0</u>	<u>132.5</u>	<u>135.0</u>	<u>137.5</u>	<u>140.0</u>	<u>142.5</u>	<u>145.0</u>	<u>147.5</u>
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	40.185	39.330	38.475	37.525	36.670	35.150	33.535	32.015	30.400	28.880
95.0	46.170	44.935	43.700	42.465	41.230	39.520	37.810	36.100	34.390	32.585
97.5	51.870	50.540	49.305	47.975	46.645	44.840	43.130	41.325	39.615	37.810
100.0	58.330	57.000	55.670	54.245	52.915	51.205	49.400	47.690	45.885	44.175
102.5	65.170	63.745	62.225	60.800	59.375	57.665	56.050	54.340	52.630	51.015
105.0	72.105	70.585	69.160	67.640	66.120	64.505	62.890	61.275	59.660	57.950
107.5	79.135	77.615	76.190	74.670	73.150	71.630	70.110	68.495	66.975	65.455
110.0	86.450	85.025	83.600	82.080	80.655	79.230	77.805	76.285	74.860	73.435
112.5	94.335	93.005	91.580	90.250	88.920	87.590	86.165	84.835	83.410	82.080
115.0	102.125	100.795	99.465	98.135	96.805	95.665	94.620	93.480	92.340	91.295
117.5	110.675	109.345	108.015	106.780	105.450	104.215	103.075	101.840	100.700	99.465
120.0	119.415	118.180	116.850	115.615	114.380	113.240	112.100	110.865	109.725	108.585
122.5	128.345	127.205	125.970	124.830	123.595	122.455	121.315	120.175	119.035	117.990
125.0	137.275	136.135	134.995	133.855	132.715	131.860	130.910	130.055	129.200	128.250
127.5	146.395	145.350	144.305	143.165	142.120	141.455	140.790	140.030	139.365	138.700
130.0	156.275	155.420	154.565	153.710	152.855	151.620	150.385	149.245	148.010	146.775

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

132.5	167.105	166.725	166.345	165.870	165.490	163.970	162.355	160.835	159.315	157.700
135.0	176.320	176.130	175.845	175.655	175.370	173.755	172.140	170.525	168.910	167.295
137.5	183.730	183.350	182.970	182.590	182.210	180.880	179.550	178.315	176.985	175.655
140.0	190.095	189.430	188.765	188.100	187.435	186.960	186.485	186.010	185.535	185.060
142.5	197.125	196.365	195.605	194.845	194.085	194.085	194.085	193.990	193.990	193.990
145.0	204.155	203.395	202.730	201.970	201.210	201.305	201.400	201.495	201.590	201.780
147.5	211.090	210.425	209.760	209.095	208.430	208.335	208.145	208.050	207.955	207.765
150.0	217.930	217.265	216.695	216.030	215.460	214.985	214.605	214.130	213.655	213.275
152.5	224.105	223.630	223.155	222.585	222.110	221.635	221.255	220.780	220.400	219.925
155.0	229.995	229.615	229.140	228.760	228.285	227.905	227.620	227.240	226.860	226.575
157.5	235.410	235.030	234.745	234.365	233.985	233.700	233.510	233.225	232.940	232.750
160.0	240.350	240.065	239.780	239.495	239.210	239.020	238.830	238.640	238.450	238.355
162.5	244.720	244.530	244.340	244.055	243.865	243.770	243.675	243.580	243.485	243.390
165.0	248.520	248.330	248.140	247.950	247.760	247.760	247.760	247.760	247.760	247.760
167.5	251.845	251.750	251.655	251.560	251.465	251.465	251.560	251.560	251.560	251.655
170.0	254.600	254.505	254.410	254.410	254.315	254.410	254.505	254.600	254.695	254.790
172.5	256.785	256.690	256.690	256.595	256.595	256.690	256.880	256.975	257.070	257.260
175.0	258.210	258.210	258.115	258.115	258.115	258.305	258.495	258.685	258.875	258.970
177.5	259.160	259.160	259.160	259.160	259.160	259.350	259.540	259.730	259.920	260.205
180.0	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300

Vert. Angles	Horizontal Angles									
	150.0	152.5	155.0	157.5	160.0	162.5	165.0	167.5	170.0	172.5
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	27.265	25.745	24.130	22.610	21.375	20.235	19.000	17.765	16.625	15.390
95.0	30.875	29.165	27.455	25.745	24.890	23.940	23.085	22.135	21.280	20.330
97.5	36.100	34.295	32.585	30.780	30.115	29.450	28.785	28.120	27.360	26.695
100.0	42.370	40.660	38.855	37.145	36.670	36.195	35.720	35.245	34.675	34.200
102.5	49.305	47.595	45.980	44.270	43.890	43.510	43.130	42.750	42.370	41.990
105.0	56.335	54.720	53.105	51.490	51.395	51.395	51.300	51.205	51.205	51.110
107.5	63.935	62.320	60.800	59.280	59.090	58.900	58.805	58.615	58.425	58.235
110.0	72.010	70.490	69.065	67.640	67.640	67.640	67.545	67.545	67.545	67.545
112.5	80.655	79.325	77.900	76.570	76.760	76.950	77.140	77.330	77.615	77.805
115.0	90.155	89.015	87.970	86.830	86.355	85.880	85.405	84.930	84.455	83.980
117.5	98.325	97.090	95.950	94.715	94.905	95.000	95.190	95.285	95.475	95.570
120.0	107.445	106.210	105.070	103.930	104.500	104.975	105.545	106.115	106.590	107.160
122.5	116.850	115.710	114.570	113.430	113.335	113.145	113.050	112.955	112.765	112.670
125.0	127.395	126.540	125.590	124.735	124.260	123.785	123.310	122.835	122.265	121.790
127.5	138.035	137.275	136.610	135.945	135.660	135.375	134.995	134.710	134.425	134.140
130.0	145.540	144.400	143.165	141.930	142.310	142.595	142.975	143.355	143.640	144.020
132.5	156.180	154.660	153.045	151.525	151.525	151.620	151.620	151.620	151.715	151.715
135.0	165.680	164.065	162.450	160.835	161.215	161.595	161.975	162.355	162.735	163.115
137.5	174.325	173.090	171.760	170.430	170.430	170.430	170.430	170.430	170.335	170.335
140.0	184.585	184.110	183.635	183.160	182.590	181.925	181.355	180.690	180.120	179.455
142.5	193.990	193.895	193.895	193.895	193.610	193.230	192.945	192.660	192.280	191.995
145.0	201.875	201.970	202.065	202.160	202.160	202.255	202.255	202.255	202.350	202.350
147.5	207.670	207.575	207.385	207.290	207.765	208.145	208.620	209.000	209.475	209.855
150.0	212.800	212.325	211.945	211.470	212.040	212.610	213.180	213.750	214.225	214.795
152.5	219.545	219.070	218.690	218.215	218.405	218.500	218.690	218.880	218.975	219.165
155.0	226.195	225.815	225.530	225.150	225.340	225.435	225.625	225.720	225.910	226.005
157.5	232.465	232.180	231.990	231.705	231.895	232.085	232.275	232.465	232.560	232.750
160.0	238.165	237.975	237.785	237.595	237.880	238.070	238.355	238.545	238.830	239.020
162.5	243.295	243.200	243.105	243.010	243.295	243.580	243.770	244.055	244.340	244.625
165.0	247.760	247.760	247.760	247.760	248.045	248.330	248.615	248.900	249.280	249.565
167.5	251.655	251.655	251.750	251.750	252.130	252.415	252.795	253.080	253.460	253.745

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

170.0	254.885	254.980	255.075	255.170	255.550	255.835	256.215	256.500	256.880	257.165
172.5	257.355	257.450	257.640	257.735	258.115	258.495	258.875	259.255	259.730	260.110
175.0	259.160	259.350	259.540	259.730	260.110	260.490	260.870	261.250	261.535	261.915
177.5	260.395	260.585	260.775	260.965	261.345	261.820	262.200	262.580	263.055	263.435
180.0	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300

Vert. Angles	Horizontal Angles									
	175.0	177.5	180.0	182.5	185.0	187.5	190.0	192.5	195.0	197.5
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	14.155	13.015	11.780	13.015	14.155	15.390	16.625	17.765	19.000	20.235
95.0	19.475	18.525	17.670	18.525	19.475	20.330	21.280	22.135	23.085	23.940
97.5	26.030	25.365	24.700	25.365	26.030	26.695	27.360	28.120	28.785	29.450
100.0	33.725	33.250	32.775	33.250	33.725	34.200	34.675	35.245	35.720	36.195
102.5	41.610	41.230	40.850	41.230	41.610	41.990	42.370	42.750	43.130	43.510
105.0	51.015	51.015	50.920	51.015	51.015	51.110	51.205	51.205	51.300	51.395
107.5	58.140	57.950	57.760	57.950	58.140	58.235	58.425	58.615	58.805	58.900
110.0	67.450	67.450	67.450	67.450	67.450	67.545	67.545	67.545	67.545	67.640
112.5	77.995	78.185	78.375	78.185	77.995	77.805	77.615	77.330	77.140	76.950
115.0	83.505	83.030	82.555	83.030	83.505	83.980	84.455	84.930	85.405	85.880
117.5	95.760	95.855	96.045	95.855	95.760	95.570	95.475	95.285	95.190	95.000
120.0	107.730	108.205	108.775	108.205	107.730	107.160	106.590	106.115	105.545	104.975
122.5	112.575	112.385	112.290	112.385	112.575	112.670	112.765	112.955	113.050	113.145
125.0	121.315	120.840	120.365	120.840	121.315	121.790	122.265	122.835	123.310	123.785
127.5	133.760	133.475	133.190	133.475	133.760	134.140	134.425	134.710	134.995	135.375
130.0	144.400	144.685	145.065	144.685	144.400	144.020	143.640	143.355	142.975	142.595
132.5	151.715	151.810	151.810	151.810	151.715	151.715	151.715	151.620	151.620	151.620
135.0	163.495	163.875	164.255	163.875	163.495	163.115	162.735	162.355	161.975	161.595
137.5	170.335	170.335	170.335	170.335	170.335	170.335	170.335	170.430	170.430	170.430
140.0	178.885	178.220	177.650	178.220	178.885	179.455	180.120	180.690	181.355	181.925
142.5	191.710	191.330	191.045	191.330	191.710	191.995	192.280	192.660	192.945	193.230
145.0	202.350	202.445	202.445	202.445	202.350	202.350	202.350	202.255	202.255	202.255
147.5	210.330	210.710	211.185	210.710	210.330	209.855	209.475	209.000	208.620	208.145
150.0	215.365	215.935	216.505	215.935	215.365	214.795	214.225	213.750	213.180	212.610
152.5	219.355	219.450	219.640	219.450	219.355	219.165	218.975	218.880	218.690	218.500
155.0	226.195	226.290	226.480	226.290	226.195	226.005	225.910	225.720	225.625	225.435
157.5	232.940	233.130	233.320	233.130	232.940	232.750	232.560	232.465	232.275	232.085
160.0	239.305	239.495	239.780	239.495	239.305	239.020	238.830	238.545	238.355	238.070
162.5	244.815	245.100	245.385	245.100	244.815	244.625	244.340	244.055	243.770	243.580
165.0	249.850	250.135	250.420	250.135	249.850	249.565	249.280	248.900	248.615	248.330
167.5	254.125	254.410	254.790	254.410	254.125	253.745	253.460	253.080	252.795	252.415
170.0	257.545	257.830	258.210	257.830	257.545	257.165	256.880	256.500	256.215	255.835
172.5	260.490	260.870	261.250	260.870	260.490	260.110	259.730	259.255	258.875	258.495
175.0	262.295	262.675	263.055	262.675	262.295	261.915	261.535	261.250	260.870	260.490
177.5	263.815	264.290	264.670	264.290	263.815	263.435	263.055	262.580	262.200	261.820
180.0	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300

Vert. Angles	Horizontal Angles									
	200.0	202.5	205.0	207.5	210.0	212.5	215.0	217.5	220.0	222.5
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	21.375	22.610	24.130	25.745	27.265	28.880	30.400	32.015	33.535	35.150
95.0	24.890	25.745	27.455	29.165	30.875	32.585	34.390	36.100	37.810	39.520
97.5	30.115	30.780	32.585	34.295	36.100	37.810	39.615	41.325	43.130	44.840
100.0	36.670	37.145	38.855	40.660	42.370	44.175	45.885	47.690	49.400	51.205
102.5	43.890	44.270	45.980	47.595	49.305	51.015	52.630	54.340	56.050	57.665

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

105.0	51.395	51.490	53.105	54.720	56.335	57.950	59.660	61.275	62.890	64.505
107.5	59.090	59.280	60.800	62.320	63.935	65.455	66.975	68.495	70.110	71.630
110.0	67.640	67.640	69.065	70.490	72.010	73.435	74.860	76.285	77.805	79.230
112.5	76.760	76.570	77.900	79.325	80.655	82.080	83.410	84.835	86.165	87.590
115.0	86.355	86.830	87.970	89.015	90.155	91.295	92.340	93.480	94.620	95.665
117.5	94.905	94.715	95.950	97.090	98.325	99.465	100.700	101.840	103.075	104.215
120.0	104.500	103.930	105.070	106.210	107.445	108.585	109.725	110.865	112.100	113.240
122.5	113.335	113.430	114.570	115.710	116.850	117.990	119.035	120.175	121.315	122.455
125.0	124.260	124.735	125.590	126.540	127.395	128.250	129.200	130.055	130.910	131.860
127.5	135.660	135.945	136.610	137.275	138.035	138.700	139.365	140.030	140.790	141.455
130.0	142.310	141.930	143.165	144.400	145.540	146.775	148.010	149.245	150.385	151.620
132.5	151.525	151.525	153.045	154.660	156.180	157.700	159.315	160.835	162.355	163.970
135.0	161.215	160.835	162.450	164.065	165.680	167.295	168.910	170.525	172.140	173.755
137.5	170.430	170.430	171.760	173.090	174.325	175.655	176.985	178.315	179.550	180.880
140.0	182.590	183.160	183.635	184.110	184.585	185.060	185.535	186.010	186.485	186.960
142.5	193.610	193.895	193.895	193.895	193.990	193.990	193.990	193.990	194.085	194.085
145.0	202.160	202.160	202.065	201.970	201.875	201.780	201.590	201.495	201.400	201.305
147.5	207.765	207.290	207.385	207.575	207.670	207.765	207.955	208.050	208.145	208.335
150.0	212.040	211.470	211.945	212.325	212.800	213.275	213.655	214.130	214.605	214.985
152.5	218.405	218.215	218.690	219.070	219.545	219.925	220.400	220.780	221.255	221.635
155.0	225.340	225.150	225.530	225.815	226.195	226.575	226.860	227.240	227.620	227.905
157.5	231.895	231.705	231.990	232.180	232.465	232.750	232.940	233.225	233.510	233.700
160.0	237.880	237.595	237.785	237.975	238.165	238.355	238.450	238.640	238.830	239.020
162.5	243.295	243.010	243.105	243.200	243.295	243.390	243.485	243.580	243.675	243.770
165.0	248.045	247.760	247.760	247.760	247.760	247.760	247.760	247.760	247.760	247.760
167.5	252.130	251.750	251.750	251.655	251.655	251.655	251.560	251.560	251.560	251.465
170.0	255.550	255.170	255.075	254.980	254.885	254.790	254.695	254.600	254.505	254.410
172.5	258.115	257.735	257.640	257.450	257.355	257.260	257.070	256.975	256.880	256.690
175.0	260.110	259.730	259.540	259.350	259.160	258.970	258.875	258.685	258.495	258.305
177.5	261.345	260.965	260.775	260.585	260.395	260.205	259.920	259.730	259.540	259.350
180.0	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300

**Vert.
Angles**

Horizontal Angles

	<u>225.0</u>	<u>227.5</u>	<u>230.0</u>	<u>232.5</u>	<u>235.0</u>	<u>237.5</u>	<u>240.0</u>	<u>242.5</u>	<u>245.0</u>	<u>247.5</u>
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	36.670	37.525	38.475	39.330	40.185	41.135	41.990	42.845	43.795	44.650
95.0	41.230	42.465	43.700	44.935	46.170	47.310	48.545	49.780	51.015	52.250
97.5	46.645	47.975	49.305	50.540	51.870	53.200	54.530	55.765	57.095	58.425
100.0	52.915	54.245	55.670	57.000	58.330	59.755	61.085	62.415	63.840	65.170
102.5	59.375	60.800	62.225	63.745	65.170	66.595	68.020	69.540	70.965	72.390
105.0	66.120	67.640	69.160	70.585	72.105	73.625	75.145	76.570	78.090	79.610
107.5	73.150	74.670	76.190	77.615	79.135	80.655	82.175	83.600	85.120	86.640
110.0	80.655	82.080	83.600	85.025	86.450	87.970	89.395	90.820	92.340	93.765
112.5	88.920	90.250	91.580	93.005	94.335	95.665	96.995	98.420	99.750	101.080
115.0	96.805	98.135	99.465	100.795	102.125	103.550	104.880	106.210	107.540	108.870
117.5	105.450	106.780	108.015	109.345	110.675	111.910	113.240	114.570	115.805	117.135
120.0	114.380	115.615	116.850	118.180	119.415	120.650	121.885	123.215	124.450	125.685
122.5	123.595	124.830	125.970	127.205	128.345	129.580	130.720	131.955	133.095	134.330
125.0	132.715	133.855	134.995	136.135	137.275	138.415	139.555	140.695	141.835	142.975
127.5	142.120	143.165	144.305	145.350	146.395	147.535	148.580	149.625	150.765	151.810
130.0	152.855	153.710	154.565	155.420	156.275	157.130	157.985	158.840	159.695	160.550
132.5	165.490	165.870	166.345	166.725	167.105	167.580	167.960	168.340	168.815	169.195
135.0	175.370	175.655	175.845	176.130	176.320	176.605	176.795	177.080	177.270	177.555
137.5	182.210	182.590	182.970	183.350	183.730	184.110	184.490	184.870	185.250	185.630
140.0	187.435	188.100	188.765	189.430	190.095	190.760	191.425	192.090	192.755	193.420

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

142.5	194.085	194.845	195.605	196.365	197.125	197.790	198.550	199.310	200.070	200.830
145.0	201.210	201.970	202.730	203.395	204.155	204.915	205.675	206.340	207.100	207.860
147.5	208.430	209.095	209.760	210.425	211.090	211.850	212.515	213.180	213.845	214.510
150.0	215.460	216.030	216.695	217.265	217.930	218.500	219.165	219.735	220.400	220.970
152.5	222.110	222.585	223.155	223.630	224.105	224.675	225.150	225.625	226.195	226.670
155.0	228.285	228.760	229.140	229.615	229.995	230.470	230.850	231.325	231.705	232.180
157.5	233.985	234.365	234.745	235.030	235.410	235.790	236.170	236.455	236.835	237.215
160.0	239.210	239.495	239.780	240.065	240.350	240.635	240.920	241.205	241.490	241.775
162.5	243.865	244.055	244.340	244.530	244.720	245.005	245.195	245.385	245.670	245.860
165.0	247.760	247.950	248.140	248.330	248.520	248.615	248.805	248.995	249.185	249.375
167.5	251.465	251.560	251.655	251.750	251.845	252.035	252.130	252.225	252.320	252.415
170.0	254.315	254.410	254.410	254.505	254.600	254.600	254.695	254.790	254.790	254.885
172.5	256.595	256.595	256.690	256.690	256.785	256.785	256.880	256.880	256.975	256.975
175.0	258.115	258.115	258.115	258.210	258.210	258.210	258.210	258.305	258.305	258.305
177.5	259.160	259.160	259.160	259.160	259.160	259.160	259.160	259.160	259.160	259.160
180.0	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300

Vert. Horizontal Angles

	<u>250.0</u>	<u>252.5</u>	<u>255.0</u>	<u>257.5</u>	<u>260.0</u>	<u>262.5</u>	<u>265.0</u>	<u>267.5</u>	<u>270.0</u>	<u>272.5</u>
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	44.840	45.030	45.125	45.315	45.505	45.695	45.790	45.980	46.170	45.980
95.0	52.725	53.105	53.580	54.055	54.435	54.910	55.385	55.765	56.240	55.765
97.5	58.900	59.375	59.850	60.325	60.895	61.370	61.845	62.320	62.795	62.320
100.0	65.645	66.215	66.690	67.165	67.735	68.210	68.685	69.255	69.730	69.255
102.5	72.865	73.340	73.910	74.385	74.860	75.335	75.905	76.380	76.855	76.380
105.0	80.085	80.560	81.035	81.510	81.985	82.460	82.935	83.410	83.885	83.410
107.5	87.115	87.590	88.065	88.540	88.920	89.395	89.870	90.345	90.820	90.345
110.0	94.240	94.715	95.095	95.570	96.045	96.520	96.900	97.375	97.850	97.375
112.5	101.555	102.030	102.410	102.885	103.360	103.835	104.215	104.690	105.165	104.690
115.0	109.345	109.820	110.295	110.770	111.150	111.625	112.100	112.575	113.050	112.575
117.5	117.515	117.990	118.370	118.845	119.225	119.700	120.080	120.555	120.935	120.555
120.0	126.065	126.540	126.920	127.300	127.775	128.155	128.535	129.010	129.390	129.010
122.5	134.710	135.090	135.470	135.850	136.325	136.705	137.085	137.465	137.845	137.465
125.0	143.355	143.735	144.115	144.495	144.780	145.160	145.540	145.920	146.300	145.920
127.5	152.190	152.475	152.855	153.140	153.520	153.805	154.185	154.470	154.850	154.470
130.0	160.930	161.215	161.595	161.880	162.260	162.545	162.925	163.210	163.590	163.210
132.5	169.480	169.860	170.145	170.430	170.810	171.095	171.380	171.760	172.045	171.760
135.0	177.840	178.125	178.410	178.695	178.980	179.265	179.550	179.835	180.120	179.835
137.5	185.915	186.200	186.485	186.770	186.960	187.245	187.530	187.815	188.100	187.815
140.0	193.705	193.990	194.275	194.560	194.750	195.035	195.320	195.605	195.890	195.605
142.5	201.115	201.305	201.590	201.875	202.065	202.350	202.635	202.825	203.110	202.825
145.0	208.145	208.430	208.620	208.905	209.190	209.475	209.665	209.950	210.235	209.950
147.5	214.795	214.985	215.270	215.460	215.745	215.935	216.220	216.410	216.695	216.410
150.0	221.160	221.350	221.540	221.730	222.015	222.205	222.395	222.585	222.775	222.585
152.5	226.860	227.145	227.335	227.620	227.810	228.095	228.285	228.570	228.760	228.570
155.0	232.370	232.560	232.750	232.940	233.225	233.415	233.605	233.795	233.985	233.795
157.5	237.405	237.595	237.785	237.975	238.070	238.260	238.450	238.640	238.830	238.640
160.0	241.965	242.060	242.250	242.345	242.535	242.630	242.820	242.915	243.105	242.915
162.5	245.955	246.050	246.145	246.240	246.430	246.525	246.620	246.715	246.810	246.715
165.0	249.470	249.565	249.660	249.755	249.850	249.945	250.040	250.135	250.230	250.135
167.5	252.510	252.605	252.700	252.795	252.795	252.890	252.985	253.080	253.175	253.080
170.0	254.980	255.075	255.170	255.265	255.360	255.455	255.550	255.645	255.740	255.645
172.5	256.975	257.070	257.070	257.165	257.165	257.260	257.260	257.355	257.355	257.355
175.0	258.400	258.400	258.495	258.495	258.590	258.590	258.685	258.685	258.780	258.685
177.5	259.160	259.160	259.255	259.255	259.255	259.255	259.350	259.350	259.350	259.350

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

180.0 260.300 260.300 260.300 260.300 260.300 260.300 260.300 260.300 260.300 260.300

Vert. Angles **Horizontal Angles**

	<u>275.0</u>	<u>277.5</u>	<u>280.0</u>	<u>282.5</u>	<u>285.0</u>	<u>287.5</u>	<u>290.0</u>	<u>292.5</u>	<u>295.0</u>	<u>297.5</u>
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	45.790	45.695	45.505	45.315	45.125	45.030	44.840	44.650	43.795	42.845
95.0	55.385	54.910	54.435	54.055	53.580	53.105	52.725	52.250	51.015	49.780
97.5	61.845	61.370	60.895	60.325	59.850	59.375	58.900	58.425	57.095	55.765
100.0	68.685	68.210	67.735	67.165	66.690	66.215	65.645	65.170	63.840	62.415
102.5	75.905	75.335	74.860	74.385	73.910	73.340	72.865	72.390	70.965	69.540
105.0	82.935	82.460	81.985	81.510	81.035	80.560	80.085	79.610	78.090	76.570
107.5	89.870	89.395	88.920	88.540	88.065	87.590	87.115	86.640	85.120	83.600
110.0	96.900	96.520	96.045	95.570	95.095	94.715	94.240	93.765	92.340	90.820
112.5	104.215	103.835	103.360	102.885	102.410	102.030	101.555	101.080	99.750	98.420
115.0	112.100	111.625	111.150	110.770	110.295	109.820	109.345	108.870	107.540	106.210
117.5	120.080	119.700	119.225	118.845	118.370	117.990	117.515	117.135	115.805	114.570
120.0	128.535	128.155	127.775	127.300	126.920	126.540	126.065	125.685	124.450	123.215
122.5	137.085	136.705	136.325	135.850	135.470	135.090	134.710	134.330	133.095	131.955
125.0	145.540	145.160	144.780	144.495	144.115	143.735	143.355	142.975	141.835	140.695
127.5	154.185	153.805	153.520	153.140	152.855	152.475	152.190	151.810	150.765	149.625
130.0	162.925	162.545	162.260	161.880	161.595	161.215	160.930	160.550	159.695	158.840
132.5	171.380	171.095	170.810	170.430	170.145	169.860	169.480	169.195	168.815	168.340
135.0	179.550	179.265	178.980	178.695	178.410	178.125	177.840	177.555	177.270	177.080
137.5	187.530	187.245	186.960	186.770	186.485	186.200	185.915	185.630	185.250	184.870
140.0	195.320	195.035	194.750	194.560	194.275	193.990	193.705	193.420	192.755	192.090
142.5	202.635	202.350	202.065	201.875	201.590	201.305	201.115	200.830	200.070	199.310
145.0	209.665	209.475	209.190	208.905	208.620	208.430	208.145	207.860	207.100	206.340
147.5	216.220	215.935	215.745	215.460	215.270	214.985	214.795	214.510	213.845	213.180
150.0	222.395	222.205	222.015	221.730	221.540	221.350	221.160	220.970	220.400	219.735
152.5	228.285	228.095	227.810	227.620	227.335	227.145	226.860	226.670	226.195	225.625
155.0	233.605	233.415	233.225	232.940	232.750	232.560	232.370	232.180	231.705	231.325
157.5	238.450	238.260	238.070	237.975	237.785	237.595	237.405	237.215	236.835	236.455
160.0	242.820	242.630	242.535	242.345	242.250	242.060	241.965	241.775	241.490	241.205
162.5	246.620	246.525	246.430	246.240	246.145	246.050	245.955	245.860	245.670	245.385
165.0	250.040	249.945	249.850	249.755	249.660	249.565	249.470	249.375	249.185	248.995
167.5	252.985	252.890	252.795	252.795	252.700	252.605	252.510	252.415	252.320	252.225
170.0	255.550	255.455	255.360	255.265	255.170	255.075	254.980	254.885	254.790	254.790
172.5	257.260	257.260	257.165	257.165	257.070	257.070	256.975	256.975	256.975	256.880
175.0	258.685	258.590	258.590	258.495	258.495	258.400	258.400	258.305	258.305	258.305
177.5	259.350	259.255	259.255	259.255	259.255	259.160	259.160	259.160	259.160	259.160
180.0	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300

Vert. Angles **Horizontal Angles**

	<u>300.0</u>	<u>302.5</u>	<u>305.0</u>	<u>307.5</u>	<u>310.0</u>	<u>312.5</u>	<u>315.0</u>	<u>317.5</u>	<u>320.0</u>	<u>322.5</u>
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	41.990	41.135	40.185	39.330	38.475	37.525	36.670	35.150	33.535	32.015
95.0	48.545	47.310	46.170	44.935	43.700	42.465	41.230	39.520	37.810	36.100
97.5	54.530	53.200	51.870	50.540	49.305	47.975	46.645	44.840	43.130	41.325
100.0	61.085	59.755	58.330	57.000	55.670	54.245	52.915	51.205	49.400	47.690
102.5	68.020	66.595	65.170	63.745	62.225	60.800	59.375	57.665	56.050	54.340
105.0	75.145	73.625	72.105	70.585	69.160	67.640	66.120	64.505	62.890	61.275
107.5	82.175	80.655	79.135	77.615	76.190	74.670	73.150	71.630	70.110	68.495
110.0	89.395	87.970	86.450	85.025	83.600	82.080	80.655	79.230	77.805	76.285
112.5	96.995	95.665	94.335	93.005	91.580	90.250	88.920	87.590	86.165	84.835

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

115.0	104.880	103.550	102.125	100.795	99.465	98.135	96.805	95.665	94.620	93.480
117.5	113.240	111.910	110.675	109.345	108.015	106.780	105.450	104.215	103.075	101.840
120.0	121.885	120.650	119.415	118.180	116.850	115.615	114.380	113.240	112.100	110.865
122.5	130.720	129.580	128.345	127.205	125.970	124.830	123.595	122.455	121.315	120.175
125.0	139.555	138.415	137.275	136.135	134.995	133.855	132.715	131.860	130.910	130.055
127.5	148.580	147.535	146.395	145.350	144.305	143.165	142.120	141.455	140.790	140.030
130.0	157.985	157.130	156.275	155.420	154.565	153.710	152.855	151.620	150.385	149.245
132.5	167.960	167.580	167.105	166.725	166.345	165.870	165.490	163.970	162.355	160.835
135.0	176.795	176.605	176.320	176.130	175.845	175.655	175.370	173.755	172.140	170.525
137.5	184.490	184.110	183.730	183.350	182.970	182.590	182.210	180.880	179.550	178.315
140.0	191.425	190.760	190.095	189.430	188.765	188.100	187.435	186.960	186.485	186.010
142.5	198.550	197.790	197.125	196.365	195.605	194.845	194.085	194.085	194.085	193.990
145.0	205.675	204.915	204.155	203.395	202.730	201.970	201.210	201.305	201.400	201.495
147.5	212.515	211.850	211.090	210.425	209.760	209.095	208.430	208.335	208.145	208.050
150.0	219.165	218.500	217.930	217.265	216.695	216.030	215.460	214.985	214.605	214.130
152.5	225.150	224.675	224.105	223.630	223.155	222.585	222.110	221.635	221.255	220.780
155.0	230.850	230.470	229.995	229.615	229.140	228.760	228.285	227.905	227.620	227.240
157.5	236.170	235.790	235.410	235.030	234.745	234.365	233.985	233.700	233.510	233.225
160.0	240.920	240.635	240.350	240.065	239.780	239.495	239.210	239.020	238.830	238.640
162.5	245.195	245.005	244.720	244.530	244.340	244.055	243.865	243.770	243.675	243.580
165.0	248.805	248.615	248.520	248.330	248.140	247.950	247.760	247.760	247.760	247.760
167.5	252.130	252.035	251.845	251.750	251.655	251.560	251.465	251.465	251.560	251.560
170.0	254.695	254.600	254.600	254.505	254.410	254.410	254.315	254.410	254.505	254.600
172.5	256.880	256.785	256.785	256.690	256.690	256.595	256.595	256.690	256.880	256.975
175.0	258.210	258.210	258.210	258.210	258.115	258.115	258.115	258.305	258.495	258.685
177.5	259.160	259.160	259.160	259.160	259.160	259.160	259.160	259.350	259.540	259.730
180.0	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300

Vert. Angles **Horizontal Angles**

	<u>325.0</u>	<u>327.5</u>	<u>330.0</u>	<u>332.5</u>	<u>335.0</u>	<u>337.5</u>	<u>340.0</u>	<u>342.5</u>	<u>345.0</u>	<u>347.5</u>
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	30.400	28.880	27.265	25.745	24.130	22.610	21.375	20.235	19.000	17.765
95.0	34.390	32.585	30.875	29.165	27.455	25.745	24.890	23.940	23.085	22.135
97.5	39.615	37.810	36.100	34.295	32.585	30.780	30.115	29.450	28.785	28.120
100.0	45.885	44.175	42.370	40.660	38.855	37.145	36.670	36.195	35.720	35.245
102.5	52.630	51.015	49.305	47.595	45.980	44.270	43.890	43.510	43.130	42.750
105.0	59.660	57.950	56.335	54.720	53.105	51.490	51.395	51.395	51.300	51.205
107.5	66.975	65.455	63.935	62.320	60.800	59.280	59.090	58.900	58.805	58.615
110.0	74.860	73.435	72.010	70.490	69.065	67.640	67.640	67.640	67.545	67.545
112.5	83.410	82.080	80.655	79.325	77.900	76.570	76.760	76.950	77.140	77.330
115.0	92.340	91.295	90.155	89.015	87.970	86.830	86.355	85.880	85.405	84.930
117.5	100.700	99.465	98.325	97.090	95.950	94.715	94.905	95.000	95.190	95.285
120.0	109.725	108.585	107.445	106.210	105.070	103.930	104.500	104.975	105.545	106.115
122.5	119.035	117.990	116.850	115.710	114.570	113.430	113.335	113.145	113.050	112.955
125.0	129.200	128.250	127.395	126.540	125.590	124.735	124.260	123.785	123.310	122.835
127.5	139.365	138.700	138.035	137.275	136.610	135.945	135.660	135.375	134.995	134.710
130.0	148.010	146.775	145.540	144.400	143.165	141.930	142.310	142.595	142.975	143.355
132.5	159.315	157.700	156.180	154.660	153.045	151.525	151.525	151.620	151.620	151.620
135.0	168.910	167.295	165.680	164.065	162.450	160.835	161.215	161.595	161.975	162.355
137.5	176.985	175.655	174.325	173.090	171.760	170.430	170.430	170.430	170.430	170.430
140.0	185.535	185.060	184.585	184.110	183.635	183.160	182.590	181.925	181.355	180.690
142.5	193.990	193.990	193.990	193.895	193.895	193.895	193.610	193.230	192.945	192.660
145.0	201.590	201.780	201.875	201.970	202.065	202.160	202.160	202.255	202.255	202.255
147.5	207.955	207.765	207.670	207.575	207.385	207.290	207.765	208.145	208.620	209.000
150.0	213.655	213.275	212.800	212.325	211.945	211.470	212.040	212.610	213.180	213.750

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

152.5	220.400	219.925	219.545	219.070	218.690	218.215	218.405	218.500	218.690	218.880
155.0	226.860	226.575	226.195	225.815	225.530	225.150	225.340	225.435	225.625	225.720
157.5	232.940	232.750	232.465	232.180	231.990	231.705	231.895	232.085	232.275	232.465
160.0	238.450	238.355	238.165	237.975	237.785	237.595	237.880	238.070	238.355	238.545
162.5	243.485	243.390	243.295	243.200	243.105	243.010	243.295	243.580	243.770	244.055
165.0	247.760	247.760	247.760	247.760	247.760	247.760	248.045	248.330	248.615	248.900
167.5	251.560	251.655	251.655	251.655	251.750	251.750	252.130	252.415	252.795	253.080
170.0	254.695	254.790	254.885	254.980	255.075	255.170	255.550	255.835	256.215	256.500
172.5	257.070	257.260	257.355	257.450	257.640	257.735	258.115	258.495	258.875	259.255
175.0	258.875	258.970	259.160	259.350	259.540	259.730	260.110	260.490	260.870	261.250
177.5	259.920	260.205	260.395	260.585	260.775	260.965	261.345	261.820	262.200	262.580
180.0	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300	260.300

Vert. Angles **Horizontal Angles**

	<u>350.0</u>	<u>352.5</u>	<u>355.0</u>	<u>357.5</u>	<u>360.0</u>
90.0	0.000	0.000	0.000	0.000	0.000
92.5	16.625	15.390	14.155	13.015	11.780
95.0	21.280	20.330	19.475	18.525	17.670
97.5	27.360	26.695	26.030	25.365	24.700
100.0	34.675	34.200	33.725	33.250	32.775
102.5	42.370	41.990	41.610	41.230	40.850
105.0	51.205	51.110	51.015	51.015	50.920
107.5	58.425	58.235	58.140	57.950	57.760
110.0	67.545	67.545	67.450	67.450	67.450
112.5	77.615	77.805	77.995	78.185	78.375
115.0	84.455	83.980	83.505	83.030	82.555
117.5	95.475	95.570	95.760	95.855	96.045
120.0	106.590	107.160	107.730	108.205	108.775
122.5	112.765	112.670	112.575	112.385	112.290
125.0	122.265	121.790	121.315	120.840	120.365
127.5	134.425	134.140	133.760	133.475	133.190
130.0	143.640	144.020	144.400	144.685	145.065
132.5	151.715	151.715	151.715	151.810	151.810
135.0	162.735	163.115	163.495	163.875	164.255
137.5	170.335	170.335	170.335	170.335	170.335
140.0	180.120	179.455	178.885	178.220	177.650
142.5	192.280	191.995	191.710	191.330	191.045
145.0	202.350	202.350	202.350	202.445	202.445
147.5	209.475	209.855	210.330	210.710	211.185
150.0	214.225	214.795	215.365	215.935	216.505
152.5	218.975	219.165	219.355	219.450	219.640
155.0	225.910	226.005	226.195	226.290	226.480
157.5	232.560	232.750	232.940	233.130	233.320
160.0	238.830	239.020	239.305	239.495	239.780
162.5	244.340	244.625	244.815	245.100	245.385
165.0	249.280	249.565	249.850	250.135	250.420
167.5	253.460	253.745	254.125	254.410	254.790
170.0	256.880	257.165	257.545	257.830	258.210
172.5	259.730	260.110	260.490	260.870	261.250
175.0	261.535	261.915	262.295	262.675	263.055
177.5	263.055	263.435	263.815	264.290	264.670
180.0	260.300	260.300	260.300	260.300	260.300

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	0.00	N.A.	0.00
0-30	0.00	N.A.	0.00
0-40	0.00	N.A.	0.00
0-60	0.00	N.A.	0.00
0-80	0.00	N.A.	0.00
0-90	0.00	N.A.	0.00
10-90	0.00	N.A.	0.00
20-40	0.00	N.A.	0.00
20-50	0.00	N.A.	0.00
40-70	0.00	N.A.	0.00
60-80	0.00	N.A.	0.00
70-80	0.00	N.A.	0.00
80-90	0.00	N.A.	0.00
90-110	108.82	N.A.	13.90
90-120	205.90	N.A.	26.20
90-130	325.60	N.A.	41.50
90-150	584.97	N.A.	74.50
90-180	785.34	N.A.	100.00
110-180	676.52	N.A.	86.10
0-180	785.34	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	0.00
10-20	0.00
20-30	0.00
30-40	0.00
40-50	0.00
50-60	0.00
60-70	0.00
70-80	0.00
80-90	0.00
90-100	38.95
100-110	69.87
110-120	97.08
120-130	119.70
130-140	131.86
140-150	127.51
150-160	105.56
160-170	70.19
170-180	24.62

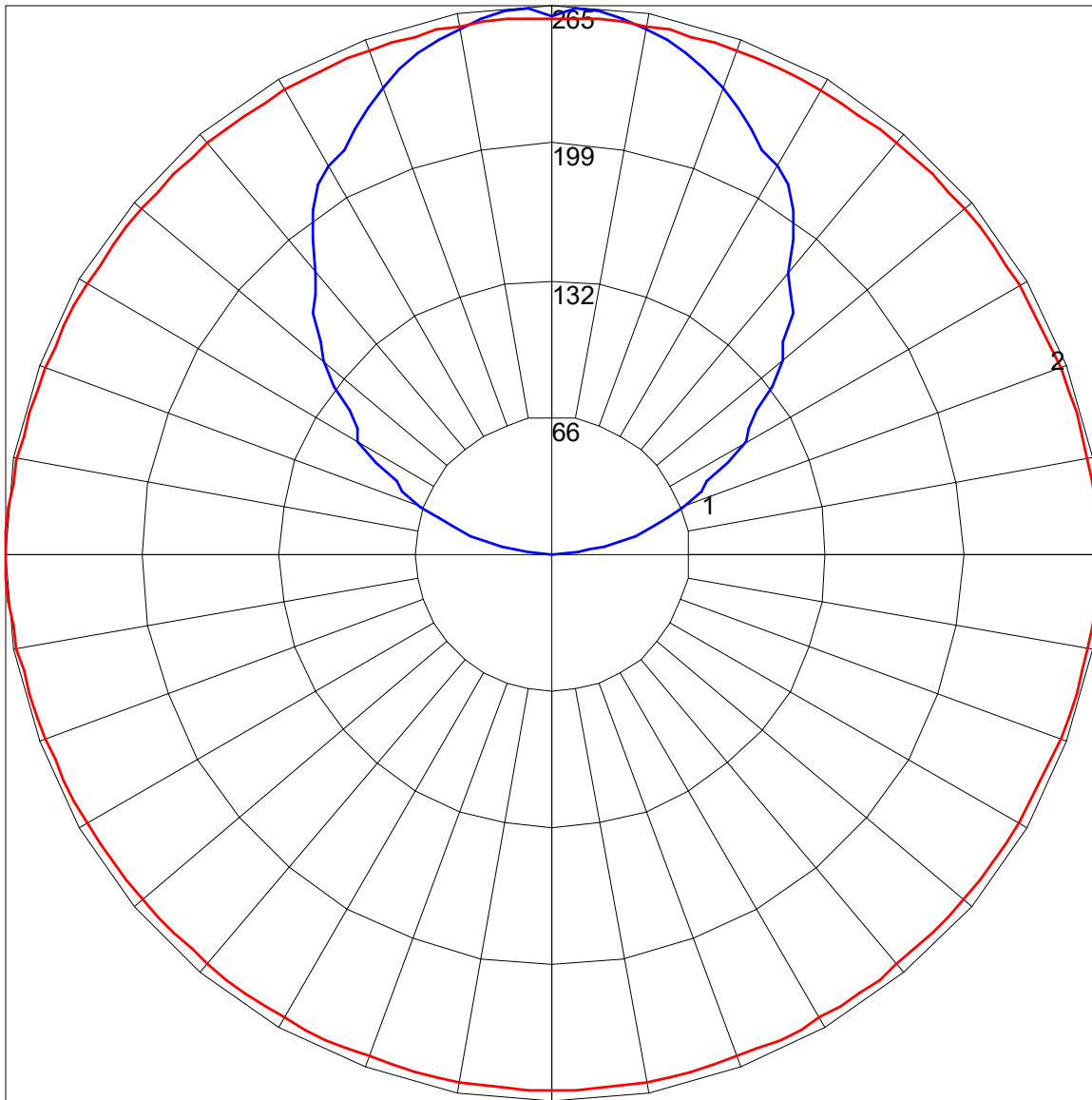
IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4018-TU-SO-FWA-D9 ONLY.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8	0
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7	0
3	72	63	57	51	61	54	49	44	37	34	31	21	20	18	7	6	6	0
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4	0
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	37	28	22	18	19	15	13	11	9	8	4	3	3	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

POLAR GRAPH



Maximum Candela = 264.67 Located At Horizontal Angle = 0, Vertical Angle = 177.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (177.5) (Through Max. Cd.)