



IES INDOOR REPORT

PHOTOMETRIC FILENAME : P4020-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	909
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	91
Total Luminaire Watts	10
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 : P4020-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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	13.64	15.07	16.39	17.82	19.25	20.57	22.00	23.43	24.75	26.18
95.0	20.46	21.45	22.55	23.54	24.64	25.63	26.73	27.72	28.82	29.81
97.5	28.60	29.37	30.14	30.91	31.68	32.56	33.33	34.10	34.87	35.64
100.0	37.95	38.50	39.05	39.60	40.15	40.81	41.36	41.91	42.46	43.01
102.5	47.30	47.74	48.18	48.62	49.06	49.50	49.94	50.38	50.82	51.26
105.0	58.96	59.07	59.07	59.18	59.29	59.29	59.40	59.51	59.51	59.62
107.5	66.88	67.10	67.32	67.43	67.65	67.87	68.09	68.20	68.42	68.64
110.0	78.10	78.10	78.10	78.21	78.21	78.21	78.21	78.32	78.32	78.32
112.5	90.75	90.53	90.31	90.09	89.87	89.54	89.32	89.10	88.88	88.66
115.0	95.59	96.14	96.69	97.24	97.79	98.34	98.89	99.44	99.99	100.54
117.5	111.21	110.99	110.88	110.66	110.55	110.33	110.22	110.00	109.89	109.67
120.0	125.95	125.29	124.74	124.08	123.42	122.87	122.21	121.55	121.00	120.34
122.5	130.02	130.13	130.35	130.46	130.57	130.79	130.90	131.01	131.23	131.34
125.0	139.37	139.92	140.47	141.02	141.57	142.23	142.78	143.33	143.88	144.43
127.5	154.22	154.55	154.88	155.32	155.65	155.98	156.31	156.75	157.08	157.41
130.0	167.97	167.53	167.20	166.76	166.32	165.99	165.55	165.11	164.78	164.34
132.5	175.78	175.78	175.67	175.67	175.67	175.56	175.56	175.56	175.45	175.45
135.0	190.19	189.75	189.31	188.87	188.43	187.99	187.55	187.11	186.67	186.23
137.5	197.23	197.23	197.23	197.23	197.23	197.34	197.34	197.34	197.34	197.34
140.0	205.70	206.36	207.13	207.79	208.56	209.22	209.99	210.65	211.42	212.08
142.5	221.21	221.54	221.98	222.31	222.64	223.08	223.41	223.74	224.18	224.51
145.0	234.41	234.41	234.30	234.30	234.30	234.19	234.19	234.19	234.08	234.08
147.5	244.53	243.98	243.54	242.99	242.55	242.00	241.56	241.01	240.57	240.02
150.0	250.69	250.03	249.37	248.71	248.05	247.50	246.84	246.18	245.52	244.86
152.5	254.32	254.10	253.99	253.77	253.55	253.44	253.22	253.00	252.89	252.67
155.0	262.24	262.02	261.91	261.69	261.58	261.36	261.25	261.03	260.92	260.70
157.5	270.16	269.94	269.72	269.50	269.28	269.17	268.95	268.73	268.51	268.29
160.0	277.64	277.31	277.09	276.76	276.54	276.21	275.99	275.66	275.44	275.11
162.5	284.13	283.80	283.47	283.25	282.92	282.59	282.26	282.04	281.71	281.38
165.0	289.96	289.63	289.30	288.97	288.64	288.20	287.87	287.54	287.21	286.88
167.5	295.02	294.58	294.25	293.81	293.48	293.04	292.71	292.27	291.94	291.50
170.0	298.98	298.54	298.21	297.77	297.44	297.00	296.67	296.23	295.90	295.46
172.5	302.50	302.06	301.62	301.18	300.74	300.19	299.75	299.31	298.87	298.43
175.0	304.59	304.15	303.71	303.27	302.83	302.50	302.06	301.62	301.18	300.74
177.5	306.46	306.02	305.47	305.03	304.59	304.04	303.60	303.16	302.61	302.17
180.0	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	27.94	29.81	31.57	33.44	35.20	37.07	38.83	40.70	42.46	43.45
95.0	31.79	33.77	35.75	37.73	39.82	41.80	43.78	45.76	47.74	49.17
97.5	37.73	39.71	41.80	43.78	45.87	47.85	49.94	51.92	54.01	55.55
100.0	44.99	47.08	49.06	51.15	53.13	55.22	57.20	59.29	61.27	62.81
102.5	53.24	55.11	57.09	59.07	60.94	62.92	64.90	66.77	68.75	70.40
105.0	61.49	63.36	65.23	67.10	69.08	70.95	72.82	74.69	76.56	78.32
107.5	70.40	72.16	74.03	75.79	77.55	79.31	81.18	82.94	84.70	86.46
110.0	79.97	81.62	83.38	85.03	86.68	88.33	90.09	91.74	93.39	95.04
112.5	90.20	91.85	93.39	95.04	96.58	98.23	99.77	101.42	102.96	104.50
115.0	101.86	103.07	104.39	105.71	106.92	108.24	109.56	110.77	112.09	113.63
117.5	111.10	112.42	113.85	115.17	116.60	117.92	119.35	120.67	122.10	123.64
120.0	121.66	122.98	124.41	125.73	127.05	128.37	129.80	131.12	132.44	133.87

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4020-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

122.5	132.66	133.98	135.30	136.62	137.83	139.15	140.47	141.79	143.11	144.54
125.0	145.42	146.52	147.51	148.50	149.60	150.59	151.58	152.68	153.67	154.99
127.5	158.18	158.95	159.83	160.60	161.37	162.14	163.02	163.79	164.56	165.77
130.0	165.77	167.20	168.52	169.95	171.38	172.81	174.13	175.56	176.99	177.98
132.5	177.21	179.08	180.84	182.60	184.47	186.23	187.99	189.86	191.62	192.06
135.0	188.10	189.97	191.84	193.71	195.58	197.45	199.32	201.19	203.06	203.39
137.5	198.88	200.42	201.85	203.39	204.93	206.47	207.90	209.44	210.98	211.42
140.0	212.63	213.18	213.73	214.28	214.83	215.38	215.93	216.48	217.03	217.80
142.5	224.51	224.51	224.62	224.62	224.62	224.62	224.73	224.73	224.73	225.61
145.0	233.97	233.86	233.75	233.64	233.42	233.31	233.20	233.09	232.98	233.86
147.5	240.13	240.35	240.46	240.57	240.79	240.90	241.01	241.23	241.34	242.11
150.0	245.41	245.85	246.40	246.95	247.39	247.94	248.49	248.93	249.48	250.14
152.5	253.22	253.66	254.21	254.65	255.20	255.64	256.19	256.63	257.18	257.73
155.0	261.14	261.47	261.91	262.35	262.68	263.12	263.56	263.89	264.33	264.88
157.5	268.62	268.84	269.17	269.50	269.72	270.05	270.38	270.60	270.93	271.37
160.0	275.33	275.55	275.77	275.99	276.10	276.32	276.54	276.76	276.98	277.31
162.5	281.49	281.60	281.71	281.82	281.93	282.04	282.15	282.26	282.37	282.59
165.0	286.88	286.88	286.88	286.88	286.88	286.88	286.88	286.88	286.88	287.10
167.5	291.50	291.39	291.39	291.39	291.28	291.28	291.28	291.17	291.17	291.28
170.0	295.35	295.24	295.13	295.02	294.91	294.80	294.69	294.58	294.47	294.58
172.5	298.32	298.10	297.99	297.88	297.66	297.55	297.44	297.22	297.11	297.11
175.0	300.52	300.30	300.08	299.86	299.75	299.53	299.31	299.09	298.87	298.87
177.5	301.95	301.73	301.51	301.29	300.96	300.74	300.52	300.30	300.08	300.08
180.0	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40

Vert. Horizontal Angles
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	44.55	45.54	46.53	47.63	48.62	49.61	50.71	51.70	51.92	52.14
95.0	50.60	52.03	53.46	54.78	56.21	57.64	59.07	60.50	61.05	61.49
97.5	57.09	58.52	60.06	61.60	63.14	64.57	66.11	67.65	68.20	68.75
100.0	64.46	66.00	67.54	69.19	70.73	72.27	73.92	75.46	76.01	76.67
102.5	72.05	73.81	75.46	77.11	78.76	80.52	82.17	83.82	84.37	84.92
105.0	80.08	81.73	83.49	85.25	87.01	88.66	90.42	92.18	92.73	93.28
107.5	88.22	89.87	91.63	93.39	95.15	96.80	98.56	100.32	100.87	101.42
110.0	96.80	98.45	100.10	101.86	103.51	105.16	106.92	108.57	109.12	109.67
112.5	106.04	107.69	109.23	110.77	112.31	113.96	115.50	117.04	117.59	118.14
115.0	115.17	116.71	118.25	119.90	121.44	122.98	124.52	126.06	126.61	127.16
117.5	125.07	126.61	128.15	129.58	131.12	132.66	134.09	135.63	136.07	136.62
120.0	135.30	136.84	138.27	139.70	141.13	142.67	144.10	145.53	145.97	146.52
122.5	145.86	147.29	148.61	150.04	151.36	152.79	154.11	155.54	155.98	156.42
125.0	156.31	157.63	158.95	160.27	161.59	162.91	164.23	165.55	165.99	166.43
127.5	167.09	168.30	169.51	170.83	172.04	173.25	174.57	175.78	176.22	176.55
130.0	178.97	179.96	180.95	181.94	182.93	183.92	184.91	185.90	186.34	186.67
132.5	192.61	193.05	193.49	194.04	194.48	194.92	195.47	195.91	196.24	196.68
135.0	203.61	203.94	204.16	204.49	204.71	205.04	205.26	205.59	205.92	206.25
137.5	211.86	212.30	212.74	213.18	213.62	214.06	214.50	214.94	215.27	215.60
140.0	218.57	219.34	220.11	220.88	221.65	222.42	223.19	223.96	224.29	224.62
142.5	226.49	227.37	228.25	229.02	229.90	230.78	231.66	232.54	232.87	233.09
145.0	234.74	235.51	236.39	237.27	238.15	238.92	239.80	240.68	241.01	241.34
147.5	242.88	243.65	244.42	245.30	246.07	246.84	247.61	248.38	248.71	248.93
150.0	250.91	251.57	252.34	253.00	253.77	254.43	255.20	255.86	256.08	256.30
152.5	258.39	258.94	259.49	260.15	260.70	261.25	261.91	262.46	262.68	263.01
155.0	265.32	265.87	266.31	266.86	267.30	267.85	268.29	268.84	269.06	269.28
157.5	271.81	272.14	272.58	273.02	273.46	273.79	274.23	274.67	274.89	275.11

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4020-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

160.0	277.64	277.97	278.30	278.63	278.96	279.29	279.62	279.95	280.17	280.28
162.5	282.92	283.14	283.36	283.69	283.91	284.13	284.46	284.68	284.79	284.90
165.0	287.32	287.54	287.76	287.87	288.09	288.31	288.53	288.75	288.86	288.97
167.5	291.39	291.50	291.61	291.83	291.94	292.05	292.16	292.27	292.38	292.49
170.0	294.58	294.69	294.80	294.80	294.91	295.02	295.02	295.13	295.24	295.35
172.5	297.22	297.22	297.33	297.33	297.44	297.44	297.55	297.55	297.55	297.66
175.0	298.87	298.98	298.98	298.98	298.98	299.09	299.09	299.09	299.20	299.20
177.5	300.08	300.08	300.08	300.08	300.08	300.08	300.08	300.08	300.08	300.08
180.0	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40

Vert. Angles **Horizontal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	52.25	52.47	52.69	52.91	53.02	53.24	53.46	53.24	53.02	52.91
95.0	62.04	62.59	63.03	63.58	64.13	64.57	65.12	64.57	64.13	63.58
97.5	69.30	69.85	70.51	71.06	71.61	72.16	72.71	72.16	71.61	71.06
100.0	77.22	77.77	78.43	78.98	79.53	80.19	80.74	80.19	79.53	78.98
102.5	85.58	86.13	86.68	87.23	87.89	88.44	88.99	88.44	87.89	87.23
105.0	93.83	94.38	94.93	95.48	96.03	96.58	97.13	96.58	96.03	95.48
107.5	101.97	102.52	102.96	103.51	104.06	104.61	105.16	104.61	104.06	103.51
110.0	110.11	110.66	111.21	111.76	112.20	112.75	113.30	112.75	112.20	111.76
112.5	118.58	119.13	119.68	120.23	120.67	121.22	121.77	121.22	120.67	120.23
115.0	127.71	128.26	128.70	129.25	129.80	130.35	130.90	130.35	129.80	129.25
117.5	137.06	137.61	138.05	138.60	139.04	139.59	140.03	139.59	139.04	138.60
120.0	146.96	147.40	147.95	148.39	148.83	149.38	149.82	149.38	148.83	148.39
122.5	156.86	157.30	157.85	158.29	158.73	159.17	159.61	159.17	158.73	158.29
125.0	166.87	167.31	167.64	168.08	168.52	168.96	169.40	168.96	168.52	168.08
127.5	176.99	177.32	177.76	178.09	178.53	178.86	179.30	178.86	178.53	178.09
130.0	187.11	187.44	187.88	188.21	188.65	188.98	189.42	188.98	188.65	188.21
132.5	197.01	197.34	197.78	198.11	198.44	198.88	199.21	198.88	198.44	198.11
135.0	206.58	206.91	207.24	207.57	207.90	208.23	208.56	208.23	207.90	207.57
137.5	215.93	216.26	216.48	216.81	217.14	217.47	217.80	217.47	217.14	216.81
140.0	224.95	225.28	225.50	225.83	226.16	226.49	226.82	226.49	226.16	225.83
142.5	233.42	233.75	233.97	234.30	234.63	234.85	235.18	234.85	234.63	234.30
145.0	241.56	241.89	242.22	242.55	242.77	243.10	243.43	243.10	242.77	242.55
147.5	249.26	249.48	249.81	250.03	250.36	250.58	250.91	250.58	250.36	250.03
150.0	256.52	256.74	257.07	257.29	257.51	257.73	257.95	257.73	257.51	257.29
152.5	263.23	263.56	263.78	264.11	264.33	264.66	264.88	264.66	264.33	264.11
155.0	269.50	269.72	270.05	270.27	270.49	270.71	270.93	270.71	270.49	270.27
157.5	275.33	275.55	275.66	275.88	276.10	276.32	276.54	276.32	276.10	275.88
160.0	280.50	280.61	280.83	280.94	281.16	281.27	281.49	281.27	281.16	280.94
162.5	285.01	285.12	285.34	285.45	285.56	285.67	285.78	285.67	285.56	285.45
165.0	289.08	289.19	289.30	289.41	289.52	289.63	289.74	289.63	289.52	289.41
167.5	292.60	292.71	292.71	292.82	292.93	293.04	293.15	293.04	292.93	292.82
170.0	295.46	295.57	295.68	295.79	295.90	296.01	296.12	296.01	295.90	295.79
172.5	297.66	297.77	297.77	297.88	297.88	297.99	297.99	297.99	297.88	297.88
175.0	299.31	299.31	299.42	299.42	299.53	299.53	299.64	299.53	299.53	299.42
177.5	300.19	300.19	300.19	300.19	300.30	300.30	300.30	300.30	300.30	300.19
180.0	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40

Vert. Angles **Horizontal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	52.69	52.47	52.25	52.14	51.92	51.70	50.71	49.61	48.62	47.63

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4020-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

95.0	63.03	62.59	62.04	61.49	61.05	60.50	59.07	57.64	56.21	54.78
97.5	70.51	69.85	69.30	68.75	68.20	67.65	66.11	64.57	63.14	61.60
100.0	78.43	77.77	77.22	76.67	76.01	75.46	73.92	72.27	70.73	69.19
102.5	86.68	86.13	85.58	84.92	84.37	83.82	82.17	80.52	78.76	77.11
105.0	94.93	94.38	93.83	93.28	92.73	92.18	90.42	88.66	87.01	85.25
107.5	102.96	102.52	101.97	101.42	100.87	100.32	98.56	96.80	95.15	93.39
110.0	111.21	110.66	110.11	109.67	109.12	108.57	106.92	105.16	103.51	101.86
112.5	119.68	119.13	118.58	118.14	117.59	117.04	115.50	113.96	112.31	110.77
115.0	128.70	128.26	127.71	127.16	126.61	126.06	124.52	122.98	121.44	119.90
117.5	138.05	137.61	137.06	136.62	136.07	135.63	134.09	132.66	131.12	129.58
120.0	147.95	147.40	146.96	146.52	145.97	145.53	144.10	142.67	141.13	139.70
122.5	157.85	157.30	156.86	156.42	155.98	155.54	154.11	152.79	151.36	150.04
125.0	167.64	167.31	166.87	166.43	165.99	165.55	164.23	162.91	161.59	160.27
127.5	177.76	177.32	176.99	176.55	176.22	175.78	174.57	173.25	172.04	170.83
130.0	187.88	187.44	187.11	186.67	186.34	185.90	184.91	183.92	182.93	181.94
132.5	197.78	197.34	197.01	196.68	196.24	195.91	195.47	194.92	194.48	194.04
135.0	207.24	206.91	206.58	206.25	205.92	205.59	205.26	205.04	204.71	204.49
137.5	216.48	216.26	215.93	215.60	215.27	214.94	214.50	214.06	213.62	213.18
140.0	225.50	225.28	224.95	224.62	224.29	223.96	223.19	222.42	221.65	220.88
142.5	233.97	233.75	233.42	233.09	232.87	232.54	231.66	230.78	229.90	229.02
145.0	242.22	241.89	241.56	241.34	241.01	240.68	239.80	238.92	238.15	237.27
147.5	249.81	249.48	249.26	248.93	248.71	248.38	247.61	246.84	246.07	245.30
150.0	257.07	256.74	256.52	256.30	256.08	255.86	255.20	254.43	253.77	253.00
152.5	263.78	263.56	263.23	263.01	262.68	262.46	261.91	261.25	260.70	260.15
155.0	270.05	269.72	269.50	269.28	269.06	268.84	268.29	267.85	267.30	266.86
157.5	275.66	275.55	275.33	275.11	274.89	274.67	274.23	273.79	273.46	273.02
160.0	280.83	280.61	280.50	280.28	280.17	279.95	279.62	279.29	278.96	278.63
162.5	285.34	285.12	285.01	284.90	284.79	284.68	284.46	284.13	283.91	283.69
165.0	289.30	289.19	289.08	288.97	288.86	288.75	288.53	288.31	288.09	287.87
167.5	292.71	292.71	292.60	292.49	292.38	292.27	292.16	292.05	291.94	291.83
170.0	295.68	295.57	295.46	295.35	295.24	295.13	295.02	295.02	294.91	294.80
172.5	297.77	297.77	297.66	297.66	297.55	297.55	297.55	297.44	297.44	297.33
175.0	299.42	299.31	299.31	299.20	299.20	299.09	299.09	299.09	298.98	298.98
177.5	300.19	300.19	300.19	300.08	300.08	300.08	300.08	300.08	300.08	300.08
180.0	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	46.53	45.54	44.55	43.45	42.46	40.70	38.83	37.07	35.20	33.44
95.0	53.46	52.03	50.60	49.17	47.74	45.76	43.78	41.80	39.82	37.73
97.5	60.06	58.52	57.09	55.55	54.01	51.92	49.94	47.85	45.87	43.78
100.0	67.54	66.00	64.46	62.81	61.27	59.29	57.20	55.22	53.13	51.15
102.5	75.46	73.81	72.05	70.40	68.75	66.77	64.90	62.92	60.94	59.07
105.0	83.49	81.73	80.08	78.32	76.56	74.69	72.82	70.95	69.08	67.10
107.5	91.63	89.87	88.22	86.46	84.70	82.94	81.18	79.31	77.55	75.79
110.0	100.10	98.45	96.80	95.04	93.39	91.74	90.09	88.33	86.68	85.03
112.5	109.23	107.69	106.04	104.50	102.96	101.42	99.77	98.23	96.58	95.04
115.0	118.25	116.71	115.17	113.63	112.09	110.77	109.56	108.24	106.92	105.71
117.5	128.15	126.61	125.07	123.64	122.10	120.67	119.35	117.92	116.60	115.17
120.0	138.27	136.84	135.30	133.87	132.44	131.12	129.80	128.37	127.05	125.73
122.5	148.61	147.29	145.86	144.54	143.11	141.79	140.47	139.15	137.83	136.62
125.0	158.95	157.63	156.31	154.99	153.67	152.68	151.58	150.59	149.60	148.50
127.5	169.51	168.30	167.09	165.77	164.56	163.79	163.02	162.14	161.37	160.60
130.0	180.95	179.96	178.97	177.98	176.99	175.56	174.13	172.81	171.38	169.95

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4020-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

132.5	193.49	193.05	192.61	192.06	191.62	189.86	187.99	186.23	184.47	182.60
135.0	204.16	203.94	203.61	203.39	203.06	201.19	199.32	197.45	195.58	193.71
137.5	212.74	212.30	211.86	211.42	210.98	209.44	207.90	206.47	204.93	203.39
140.0	220.11	219.34	218.57	217.80	217.03	216.48	215.93	215.38	214.83	214.28
142.5	228.25	227.37	226.49	225.61	224.73	224.73	224.73	224.62	224.62	224.62
145.0	236.39	235.51	234.74	233.86	232.98	233.09	233.20	233.31	233.42	233.64
147.5	244.42	243.65	242.88	242.11	241.34	241.23	241.01	240.90	240.79	240.57
150.0	252.34	251.57	250.91	250.14	249.48	248.93	248.49	247.94	247.39	246.95
152.5	259.49	258.94	258.39	257.73	257.18	256.63	256.19	255.64	255.20	254.65
155.0	266.31	265.87	265.32	264.88	264.33	263.89	263.56	263.12	262.68	262.35
157.5	272.58	272.14	271.81	271.37	270.93	270.60	270.38	270.05	269.72	269.50
160.0	278.30	277.97	277.64	277.31	276.98	276.76	276.54	276.32	276.10	275.99
162.5	283.36	283.14	282.92	282.59	282.37	282.26	282.15	282.04	281.93	281.82
165.0	287.76	287.54	287.32	287.10	286.88	286.88	286.88	286.88	286.88	286.88
167.5	291.61	291.50	291.39	291.28	291.17	291.17	291.28	291.28	291.28	291.39
170.0	294.80	294.69	294.58	294.58	294.47	294.58	294.69	294.80	294.91	295.02
172.5	297.33	297.22	297.22	297.11	297.11	297.22	297.44	297.55	297.66	297.88
175.0	298.98	298.98	298.87	298.87	298.87	299.09	299.31	299.53	299.75	299.86
177.5	300.08	300.08	300.08	300.08	300.08	300.30	300.52	300.74	300.96	301.29
180.0	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40

Vert. Angles	Horizontal Angles									
	<u>150.0</u>	<u>152.5</u>	<u>155.0</u>	<u>157.5</u>	<u>160.0</u>	<u>162.5</u>	<u>165.0</u>	<u>167.5</u>	<u>170.0</u>	<u>172.5</u>
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	31.57	29.81	27.94	26.18	24.75	23.43	22.00	20.57	19.25	17.82
95.0	35.75	33.77	31.79	29.81	28.82	27.72	26.73	25.63	24.64	23.54
97.5	41.80	39.71	37.73	35.64	34.87	34.10	33.33	32.56	31.68	30.91
100.0	49.06	47.08	44.99	43.01	42.46	41.91	41.36	40.81	40.15	39.60
102.5	57.09	55.11	53.24	51.26	50.82	50.38	49.94	49.50	49.06	48.62
105.0	65.23	63.36	61.49	59.62	59.51	59.51	59.40	59.29	59.29	59.18
107.5	74.03	72.16	70.40	68.64	68.42	68.20	68.09	67.87	67.65	67.43
110.0	83.38	81.62	79.97	78.32	78.32	78.32	78.21	78.21	78.21	78.21
112.5	93.39	91.85	90.20	88.66	88.88	89.10	89.32	89.54	89.87	90.09
115.0	104.39	103.07	101.86	100.54	99.99	99.44	98.89	98.34	97.79	97.24
117.5	113.85	112.42	111.10	109.67	109.89	110.00	110.22	110.33	110.55	110.66
120.0	124.41	122.98	121.66	120.34	121.00	121.55	122.21	122.87	123.42	124.08
122.5	135.30	133.98	132.66	131.34	131.23	131.01	130.90	130.79	130.57	130.46
125.0	147.51	146.52	145.42	144.43	143.88	143.33	142.78	142.23	141.57	141.02
127.5	159.83	158.95	158.18	157.41	157.08	156.75	156.31	155.98	155.65	155.32
130.0	168.52	167.20	165.77	164.34	164.78	165.11	165.55	165.99	166.32	166.76
132.5	180.84	179.08	177.21	175.45	175.45	175.56	175.56	175.56	175.67	175.67
135.0	191.84	189.97	188.10	186.23	186.67	187.11	187.55	187.99	188.43	188.87
137.5	201.85	200.42	198.88	197.34	197.34	197.34	197.34	197.34	197.23	197.23
140.0	213.73	213.18	212.63	212.08	211.42	210.65	209.99	209.22	208.56	207.79
142.5	224.62	224.51	224.51	224.51	224.18	223.74	223.41	223.08	222.64	222.31
145.0	233.75	233.86	233.97	234.08	234.08	234.19	234.19	234.19	234.30	234.30
147.5	240.46	240.35	240.13	240.02	240.57	241.01	241.56	242.00	242.55	242.99
150.0	246.40	245.85	245.41	244.86	245.52	246.18	246.84	247.50	248.05	248.71
152.5	254.21	253.66	253.22	252.67	252.89	253.00	253.22	253.44	253.55	253.77
155.0	261.91	261.47	261.14	260.70	260.92	261.03	261.25	261.36	261.58	261.69
157.5	269.17	268.84	268.62	268.29	268.51	268.73	268.95	269.17	269.28	269.50
160.0	275.77	275.55	275.33	275.11	275.44	275.66	275.99	276.21	276.54	276.76
162.5	281.71	281.60	281.49	281.38	281.71	282.04	282.26	282.59	282.92	283.25
165.0	286.88	286.88	286.88	286.88	287.21	287.54	287.87	288.20	288.64	288.97
167.5	291.39	291.39	291.50	291.50	291.94	292.27	292.71	293.04	293.48	293.81

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4020-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

170.0	295.13	295.24	295.35	295.46	295.90	296.23	296.67	297.00	297.44	297.77
172.5	297.99	298.10	298.32	298.43	298.87	299.31	299.75	300.19	300.74	301.18
175.0	300.08	300.30	300.52	300.74	301.18	301.62	302.06	302.50	302.83	303.27
177.5	301.51	301.73	301.95	302.17	302.61	303.16	303.60	304.04	304.59	305.03
180.0	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40

Vert. Angles	Horizontal Angles									
	<u>175.0</u>	<u>177.5</u>	<u>180.0</u>	<u>182.5</u>	<u>185.0</u>	<u>187.5</u>	<u>190.0</u>	<u>192.5</u>	<u>195.0</u>	<u>197.5</u>
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	16.39	15.07	13.64	15.07	16.39	17.82	19.25	20.57	22.00	23.43
95.0	22.55	21.45	20.46	21.45	22.55	23.54	24.64	25.63	26.73	27.72
97.5	30.14	29.37	28.60	29.37	30.14	30.91	31.68	32.56	33.33	34.10
100.0	39.05	38.50	37.95	38.50	39.05	39.60	40.15	40.81	41.36	41.91
102.5	48.18	47.74	47.30	47.74	48.18	48.62	49.06	49.50	49.94	50.38
105.0	59.07	59.07	58.96	59.07	59.07	59.18	59.29	59.29	59.40	59.51
107.5	67.32	67.10	66.88	67.10	67.32	67.43	67.65	67.87	68.09	68.20
110.0	78.10	78.10	78.10	78.10	78.10	78.21	78.21	78.21	78.21	78.32
112.5	90.31	90.53	90.75	90.53	90.31	90.09	89.87	89.54	89.32	89.10
115.0	96.69	96.14	95.59	96.14	96.69	97.24	97.79	98.34	98.89	99.44
117.5	110.88	110.99	111.21	110.99	110.88	110.66	110.55	110.33	110.22	110.00
120.0	124.74	125.29	125.95	125.29	124.74	124.08	123.42	122.87	122.21	121.55
122.5	130.35	130.13	130.02	130.13	130.35	130.46	130.57	130.79	130.90	131.01
125.0	140.47	139.92	139.37	139.92	140.47	141.02	141.57	142.23	142.78	143.33
127.5	154.88	154.55	154.22	154.55	154.88	155.32	155.65	155.98	156.31	156.75
130.0	167.20	167.53	167.97	167.53	167.20	166.76	166.32	165.99	165.55	165.11
132.5	175.67	175.78	175.78	175.78	175.67	175.67	175.67	175.56	175.56	175.56
135.0	189.31	189.75	190.19	189.75	189.31	188.87	188.43	187.99	187.55	187.11
137.5	197.23	197.23	197.23	197.23	197.23	197.23	197.23	197.34	197.34	197.34
140.0	207.13	206.36	205.70	206.36	207.13	207.79	208.56	209.22	209.99	210.65
142.5	221.98	221.54	221.21	221.54	221.98	222.31	222.64	223.08	223.41	223.74
145.0	234.30	234.41	234.41	234.41	234.30	234.30	234.30	234.19	234.19	234.19
147.5	243.54	243.98	244.53	243.98	243.54	242.99	242.55	242.00	241.56	241.01
150.0	249.37	250.03	250.69	250.03	249.37	248.71	248.05	247.50	246.84	246.18
152.5	253.99	254.10	254.32	254.10	253.99	253.77	253.55	253.44	253.22	253.00
155.0	261.91	262.02	262.24	262.02	261.91	261.69	261.58	261.36	261.25	261.03
157.5	269.72	269.94	270.16	269.94	269.72	269.50	269.28	269.17	268.95	268.73
160.0	277.09	277.31	277.64	277.31	277.09	276.76	276.54	276.21	275.99	275.66
162.5	283.47	283.80	284.13	283.80	283.47	283.25	282.92	282.59	282.26	282.04
165.0	289.30	289.63	289.96	289.63	289.30	288.97	288.64	288.20	287.87	287.54
167.5	294.25	294.58	295.02	294.58	294.25	293.81	293.48	293.04	292.71	292.27
170.0	298.21	298.54	298.98	298.54	298.21	297.77	297.44	297.00	296.67	296.23
172.5	301.62	302.06	302.50	302.06	301.62	301.18	300.74	300.19	299.75	299.31
175.0	303.71	304.15	304.59	304.15	303.71	303.27	302.83	302.50	302.06	301.62
177.5	305.47	306.02	306.46	306.02	305.47	305.03	304.59	304.04	303.60	303.16
180.0	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40

Vert. Angles	Horizontal Angles									
	<u>200.0</u>	<u>202.5</u>	<u>205.0</u>	<u>207.5</u>	<u>210.0</u>	<u>212.5</u>	<u>215.0</u>	<u>217.5</u>	<u>220.0</u>	<u>222.5</u>
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	24.75	26.18	27.94	29.81	31.57	33.44	35.20	37.07	38.83	40.70
95.0	28.82	29.81	31.79	33.77	35.75	37.73	39.82	41.80	43.78	45.76
97.5	34.87	35.64	37.73	39.71	41.80	43.78	45.87	47.85	49.94	51.92
100.0	42.46	43.01	44.99	47.08	49.06	51.15	53.13	55.22	57.20	59.29
102.5	50.82	51.26	53.24	55.11	57.09	59.07	60.94	62.92	64.90	66.77

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4020-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

105.0	59.51	59.62	61.49	63.36	65.23	67.10	69.08	70.95	72.82	74.69
107.5	68.42	68.64	70.40	72.16	74.03	75.79	77.55	79.31	81.18	82.94
110.0	78.32	78.32	79.97	81.62	83.38	85.03	86.68	88.33	90.09	91.74
112.5	88.88	88.66	90.20	91.85	93.39	95.04	96.58	98.23	99.77	101.42
115.0	99.99	100.54	101.86	103.07	104.39	105.71	106.92	108.24	109.56	110.77
117.5	109.89	109.67	111.10	112.42	113.85	115.17	116.60	117.92	119.35	120.67
120.0	121.00	120.34	121.66	122.98	124.41	125.73	127.05	128.37	129.80	131.12
122.5	131.23	131.34	132.66	133.98	135.30	136.62	137.83	139.15	140.47	141.79
125.0	143.88	144.43	145.42	146.52	147.51	148.50	149.60	150.59	151.58	152.68
127.5	157.08	157.41	158.18	158.95	159.83	160.60	161.37	162.14	163.02	163.79
130.0	164.78	164.34	165.77	167.20	168.52	169.95	171.38	172.81	174.13	175.56
132.5	175.45	175.45	177.21	179.08	180.84	182.60	184.47	186.23	187.99	189.86
135.0	186.67	186.23	188.10	189.97	191.84	193.71	195.58	197.45	199.32	201.19
137.5	197.34	197.34	198.88	200.42	201.85	203.39	204.93	206.47	207.90	209.44
140.0	211.42	212.08	212.63	213.18	213.73	214.28	214.83	215.38	215.93	216.48
142.5	224.18	224.51	224.51	224.51	224.62	224.62	224.62	224.62	224.73	224.73
145.0	234.08	234.08	233.97	233.86	233.75	233.64	233.42	233.31	233.20	233.09
147.5	240.57	240.02	240.13	240.35	240.46	240.57	240.79	240.90	241.01	241.23
150.0	245.52	244.86	245.41	245.85	246.40	246.95	247.39	247.94	248.49	248.93
152.5	252.89	252.67	253.22	253.66	254.21	254.65	255.20	255.64	256.19	256.63
155.0	260.92	260.70	261.14	261.47	261.91	262.35	262.68	263.12	263.56	263.89
157.5	268.51	268.29	268.62	268.84	269.17	269.50	269.72	270.05	270.38	270.60
160.0	275.44	275.11	275.33	275.55	275.77	275.99	276.10	276.32	276.54	276.76
162.5	281.71	281.38	281.49	281.60	281.71	281.82	281.93	282.04	282.15	282.26
165.0	287.21	286.88	286.88	286.88	286.88	286.88	286.88	286.88	286.88	286.88
167.5	291.94	291.50	291.50	291.39	291.39	291.39	291.28	291.28	291.28	291.17
170.0	295.90	295.46	295.35	295.24	295.13	295.02	294.91	294.80	294.69	294.58
172.5	298.87	298.43	298.32	298.10	297.99	297.88	297.66	297.55	297.44	297.22
175.0	301.18	300.74	300.52	300.30	300.08	299.86	299.75	299.53	299.31	299.09
177.5	302.61	302.17	301.95	301.73	301.51	301.29	300.96	300.74	300.52	300.30
180.0	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	42.46	43.45	44.55	45.54	46.53	47.63	48.62	49.61	50.71	51.70
95.0	47.74	49.17	50.60	52.03	53.46	54.78	56.21	57.64	59.07	60.50
97.5	54.01	55.55	57.09	58.52	60.06	61.60	63.14	64.57	66.11	67.65
100.0	61.27	62.81	64.46	66.00	67.54	69.19	70.73	72.27	73.92	75.46
102.5	68.75	70.40	72.05	73.81	75.46	77.11	78.76	80.52	82.17	83.82
105.0	76.56	78.32	80.08	81.73	83.49	85.25	87.01	88.66	90.42	92.18
107.5	84.70	86.46	88.22	89.87	91.63	93.39	95.15	96.80	98.56	100.32
110.0	93.39	95.04	96.80	98.45	100.10	101.86	103.51	105.16	106.92	108.57
112.5	102.96	104.50	106.04	107.69	109.23	110.77	112.31	113.96	115.50	117.04
115.0	112.09	113.63	115.17	116.71	118.25	119.90	121.44	122.98	124.52	126.06
117.5	122.10	123.64	125.07	126.61	128.15	129.58	131.12	132.66	134.09	135.63
120.0	132.44	133.87	135.30	136.84	138.27	139.70	141.13	142.67	144.10	145.53
122.5	143.11	144.54	145.86	147.29	148.61	150.04	151.36	152.79	154.11	155.54
125.0	153.67	154.99	156.31	157.63	158.95	160.27	161.59	162.91	164.23	165.55
127.5	164.56	165.77	167.09	168.30	169.51	170.83	172.04	173.25	174.57	175.78
130.0	176.99	177.98	178.97	179.96	180.95	181.94	182.93	183.92	184.91	185.90
132.5	191.62	192.06	192.61	193.05	193.49	194.04	194.48	194.92	195.47	195.91
135.0	203.06	203.39	203.61	203.94	204.16	204.49	204.71	205.04	205.26	205.59
137.5	210.98	211.42	211.86	212.30	212.74	213.18	213.62	214.06	214.50	214.94
140.0	217.03	217.80	218.57	219.34	220.11	220.88	221.65	222.42	223.19	223.96

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4020-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

142.5	224.73	225.61	226.49	227.37	228.25	229.02	229.90	230.78	231.66	232.54
145.0	232.98	233.86	234.74	235.51	236.39	237.27	238.15	238.92	239.80	240.68
147.5	241.34	242.11	242.88	243.65	244.42	245.30	246.07	246.84	247.61	248.38
150.0	249.48	250.14	250.91	251.57	252.34	253.00	253.77	254.43	255.20	255.86
152.5	257.18	257.73	258.39	258.94	259.49	260.15	260.70	261.25	261.91	262.46
155.0	264.33	264.88	265.32	265.87	266.31	266.86	267.30	267.85	268.29	268.84
157.5	270.93	271.37	271.81	272.14	272.58	273.02	273.46	273.79	274.23	274.67
160.0	276.98	277.31	277.64	277.97	278.30	278.63	278.96	279.29	279.62	279.95
162.5	282.37	282.59	282.92	283.14	283.36	283.69	283.91	284.13	284.46	284.68
165.0	286.88	287.10	287.32	287.54	287.76	287.87	288.09	288.31	288.53	288.75
167.5	291.17	291.28	291.39	291.50	291.61	291.83	291.94	292.05	292.16	292.27
170.0	294.47	294.58	294.58	294.69	294.80	294.80	294.91	295.02	295.02	295.13
172.5	297.11	297.11	297.22	297.22	297.33	297.33	297.44	297.44	297.55	297.55
175.0	298.87	298.87	298.87	298.98	298.98	298.98	298.98	299.09	299.09	299.09
177.5	300.08	300.08	300.08	300.08	300.08	300.08	300.08	300.08	300.08	300.08
180.0	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40

Vert. Angles	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	51.92	52.14	52.25	52.47	52.69	52.91	53.02	53.24	53.46	53.24
95.0	61.05	61.49	62.04	62.59	63.03	63.58	64.13	64.57	65.12	64.57
97.5	68.20	68.75	69.30	69.85	70.51	71.06	71.61	72.16	72.71	72.16
100.0	76.01	76.67	77.22	77.77	78.43	78.98	79.53	80.19	80.74	80.19
102.5	84.37	84.92	85.58	86.13	86.68	87.23	87.89	88.44	88.99	88.44
105.0	92.73	93.28	93.83	94.38	94.93	95.48	96.03	96.58	97.13	96.58
107.5	100.87	101.42	101.97	102.52	102.96	103.51	104.06	104.61	105.16	104.61
110.0	109.12	109.67	110.11	110.66	111.21	111.76	112.20	112.75	113.30	112.75
112.5	117.59	118.14	118.58	119.13	119.68	120.23	120.67	121.22	121.77	121.22
115.0	126.61	127.16	127.71	128.26	128.70	129.25	129.80	130.35	130.90	130.35
117.5	136.07	136.62	137.06	137.61	138.05	138.60	139.04	139.59	140.03	139.59
120.0	145.97	146.52	146.96	147.40	147.95	148.39	148.83	149.38	149.82	149.38
122.5	155.98	156.42	156.86	157.30	157.85	158.29	158.73	159.17	159.61	159.17
125.0	165.99	166.43	166.87	167.31	167.64	168.08	168.52	168.96	169.40	168.96
127.5	176.22	176.55	176.99	177.32	177.76	178.09	178.53	178.86	179.30	178.86
130.0	186.34	186.67	187.11	187.44	187.88	188.21	188.65	188.98	189.42	188.98
132.5	196.24	196.68	197.01	197.34	197.78	198.11	198.44	198.88	199.21	198.88
135.0	205.92	206.25	206.58	206.91	207.24	207.57	207.90	208.23	208.56	208.23
137.5	215.27	215.60	215.93	216.26	216.48	216.81	217.14	217.47	217.80	217.47
140.0	224.29	224.62	224.95	225.28	225.50	225.83	226.16	226.49	226.82	226.49
142.5	232.87	233.09	233.42	233.75	233.97	234.30	234.63	234.85	235.18	234.85
145.0	241.01	241.34	241.56	241.89	242.22	242.55	242.77	243.10	243.43	243.10
147.5	248.71	248.93	249.26	249.48	249.81	250.03	250.36	250.58	250.91	250.58
150.0	256.08	256.30	256.52	256.74	257.07	257.29	257.51	257.73	257.95	257.73
152.5	262.68	263.01	263.23	263.56	263.78	264.11	264.33	264.66	264.88	264.66
155.0	269.06	269.28	269.50	269.72	270.05	270.27	270.49	270.71	270.93	270.71
157.5	274.89	275.11	275.33	275.55	275.66	275.88	276.10	276.32	276.54	276.32
160.0	280.17	280.28	280.50	280.61	280.83	280.94	281.16	281.27	281.49	281.27
162.5	284.79	284.90	285.01	285.12	285.34	285.45	285.56	285.67	285.78	285.67
165.0	288.86	288.97	289.08	289.19	289.30	289.41	289.52	289.63	289.74	289.63
167.5	292.38	292.49	292.60	292.71	292.71	292.82	292.93	293.04	293.15	293.04
170.0	295.24	295.35	295.46	295.57	295.68	295.79	295.90	296.01	296.12	296.01
172.5	297.55	297.66	297.66	297.77	297.77	297.88	297.88	297.99	297.99	297.99
175.0	299.20	299.20	299.31	299.31	299.42	299.42	299.53	299.53	299.64	299.53
177.5	300.08	300.08	300.19	300.19	300.19	300.19	300.30	300.30	300.30	300.30

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4020-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

180.0 301.40 301.40 301.40 301.40 301.40 301.40 301.40 301.40 301.40 301.40

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	53.02	52.91	52.69	52.47	52.25	52.14	51.92	51.70	50.71	49.61
95.0	64.13	63.58	63.03	62.59	62.04	61.49	61.05	60.50	59.07	57.64
97.5	71.61	71.06	70.51	69.85	69.30	68.75	68.20	67.65	66.11	64.57
100.0	79.53	78.98	78.43	77.77	77.22	76.67	76.01	75.46	73.92	72.27
102.5	87.89	87.23	86.68	86.13	85.58	84.92	84.37	83.82	82.17	80.52
105.0	96.03	95.48	94.93	94.38	93.83	93.28	92.73	92.18	90.42	88.66
107.5	104.06	103.51	102.96	102.52	101.97	101.42	100.87	100.32	98.56	96.80
110.0	112.20	111.76	111.21	110.66	110.11	109.67	109.12	108.57	106.92	105.16
112.5	120.67	120.23	119.68	119.13	118.58	118.14	117.59	117.04	115.50	113.96
115.0	129.80	129.25	128.70	128.26	127.71	127.16	126.61	126.06	124.52	122.98
117.5	139.04	138.60	138.05	137.61	137.06	136.62	136.07	135.63	134.09	132.66
120.0	148.83	148.39	147.95	147.40	146.96	146.52	145.97	145.53	144.10	142.67
122.5	158.73	158.29	157.85	157.30	156.86	156.42	155.98	155.54	154.11	152.79
125.0	168.52	168.08	167.64	167.31	166.87	166.43	165.99	165.55	164.23	162.91
127.5	178.53	178.09	177.76	177.32	176.99	176.55	176.22	175.78	174.57	173.25
130.0	188.65	188.21	187.88	187.44	187.11	186.67	186.34	185.90	184.91	183.92
132.5	198.44	198.11	197.78	197.34	197.01	196.68	196.24	195.91	195.47	194.92
135.0	207.90	207.57	207.24	206.91	206.58	206.25	205.92	205.59	205.26	205.04
137.5	217.14	216.81	216.48	216.26	215.93	215.60	215.27	214.94	214.50	214.06
140.0	226.16	225.83	225.50	225.28	224.95	224.62	224.29	223.96	223.19	222.42
142.5	234.63	234.30	233.97	233.75	233.42	233.09	232.87	232.54	231.66	230.78
145.0	242.77	242.55	242.22	241.89	241.56	241.34	241.01	240.68	239.80	238.92
147.5	250.36	250.03	249.81	249.48	249.26	248.93	248.71	248.38	247.61	246.84
150.0	257.51	257.29	257.07	256.74	256.52	256.30	256.08	255.86	255.20	254.43
152.5	264.33	264.11	263.78	263.56	263.23	263.01	262.68	262.46	261.91	261.25
155.0	270.49	270.27	270.05	269.72	269.50	269.28	269.06	268.84	268.29	267.85
157.5	276.10	275.88	275.66	275.55	275.33	275.11	274.89	274.67	274.23	273.79
160.0	281.16	280.94	280.83	280.61	280.50	280.28	280.17	279.95	279.62	279.29
162.5	285.56	285.45	285.34	285.12	285.01	284.90	284.79	284.68	284.46	284.13
165.0	289.52	289.41	289.30	289.19	289.08	288.97	288.86	288.75	288.53	288.31
167.5	292.93	292.82	292.71	292.71	292.60	292.49	292.38	292.27	292.16	292.05
170.0	295.90	295.79	295.68	295.57	295.46	295.35	295.24	295.13	295.02	295.02
172.5	297.88	297.88	297.77	297.77	297.66	297.66	297.55	297.55	297.55	297.44
175.0	299.53	299.42	299.42	299.31	299.31	299.20	299.20	299.09	299.09	299.09
177.5	300.30	300.19	300.19	300.19	300.19	300.08	300.08	300.08	300.08	300.08
180.0	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	48.62	47.63	46.53	45.54	44.55	43.45	42.46	40.70	38.83	37.07
95.0	56.21	54.78	53.46	52.03	50.60	49.17	47.74	45.76	43.78	41.80
97.5	63.14	61.60	60.06	58.52	57.09	55.55	54.01	51.92	49.94	47.85
100.0	70.73	69.19	67.54	66.00	64.46	62.81	61.27	59.29	57.20	55.22
102.5	78.76	77.11	75.46	73.81	72.05	70.40	68.75	66.77	64.90	62.92
105.0	87.01	85.25	83.49	81.73	80.08	78.32	76.56	74.69	72.82	70.95
107.5	95.15	93.39	91.63	89.87	88.22	86.46	84.70	82.94	81.18	79.31
110.0	103.51	101.86	100.10	98.45	96.80	95.04	93.39	91.74	90.09	88.33
112.5	112.31	110.77	109.23	107.69	106.04	104.50	102.96	101.42	99.77	98.23

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4020-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

115.0	121.44	119.90	118.25	116.71	115.17	113.63	112.09	110.77	109.56	108.24
117.5	131.12	129.58	128.15	126.61	125.07	123.64	122.10	120.67	119.35	117.92
120.0	141.13	139.70	138.27	136.84	135.30	133.87	132.44	131.12	129.80	128.37
122.5	151.36	150.04	148.61	147.29	145.86	144.54	143.11	141.79	140.47	139.15
125.0	161.59	160.27	158.95	157.63	156.31	154.99	153.67	152.68	151.58	150.59
127.5	172.04	170.83	169.51	168.30	167.09	165.77	164.56	163.79	163.02	162.14
130.0	182.93	181.94	180.95	179.96	178.97	177.98	176.99	175.56	174.13	172.81
132.5	194.48	194.04	193.49	193.05	192.61	192.06	191.62	189.86	187.99	186.23
135.0	204.71	204.49	204.16	203.94	203.61	203.39	203.06	201.19	199.32	197.45
137.5	213.62	213.18	212.74	212.30	211.86	211.42	210.98	209.44	207.90	206.47
140.0	221.65	220.88	220.11	219.34	218.57	217.80	217.03	216.48	215.93	215.38
142.5	229.90	229.02	228.25	227.37	226.49	225.61	224.73	224.73	224.73	224.62
145.0	238.15	237.27	236.39	235.51	234.74	233.86	232.98	233.09	233.20	233.31
147.5	246.07	245.30	244.42	243.65	242.88	242.11	241.34	241.23	241.01	240.90
150.0	253.77	253.00	252.34	251.57	250.91	250.14	249.48	248.93	248.49	247.94
152.5	260.70	260.15	259.49	258.94	258.39	257.73	257.18	256.63	256.19	255.64
155.0	267.30	266.86	266.31	265.87	265.32	264.88	264.33	263.89	263.56	263.12
157.5	273.46	273.02	272.58	272.14	271.81	271.37	270.93	270.60	270.38	270.05
160.0	278.96	278.63	278.30	277.97	277.64	277.31	276.98	276.76	276.54	276.32
162.5	283.91	283.69	283.36	283.14	282.92	282.59	282.37	282.26	282.15	282.04
165.0	288.09	287.87	287.76	287.54	287.32	287.10	286.88	286.88	286.88	286.88
167.5	291.94	291.83	291.61	291.50	291.39	291.28	291.17	291.17	291.28	291.28
170.0	294.91	294.80	294.80	294.69	294.58	294.58	294.47	294.58	294.69	294.80
172.5	297.44	297.33	297.33	297.22	297.22	297.11	297.11	297.22	297.44	297.55
175.0	298.98	298.98	298.98	298.98	298.87	298.87	298.87	299.09	299.31	299.53
177.5	300.08	300.08	300.08	300.08	300.08	300.08	300.08	300.30	300.52	300.74
180.0	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	35.20	33.44	31.57	29.81	27.94	26.18	24.75	23.43	22.00	20.57
95.0	39.82	37.73	35.75	33.77	31.79	29.81	28.82	27.72	26.73	25.63
97.5	45.87	43.78	41.80	39.71	37.73	35.64	34.87	34.10	33.33	32.56
100.0	53.13	51.15	49.06	47.08	44.99	43.01	42.46	41.91	41.36	40.81
102.5	60.94	59.07	57.09	55.11	53.24	51.26	50.82	50.38	49.94	49.50
105.0	69.08	67.10	65.23	63.36	61.49	59.62	59.51	59.51	59.40	59.29
107.5	77.55	75.79	74.03	72.16	70.40	68.64	68.42	68.20	68.09	67.87
110.0	86.68	85.03	83.38	81.62	79.97	78.32	78.32	78.32	78.21	78.21
112.5	96.58	95.04	93.39	91.85	90.20	88.66	88.88	89.10	89.32	89.54
115.0	106.92	105.71	104.39	103.07	101.86	100.54	99.99	99.44	98.89	98.34
117.5	116.60	115.17	113.85	112.42	111.10	109.67	109.89	110.00	110.22	110.33
120.0	127.05	125.73	124.41	122.98	121.66	120.34	121.00	121.55	122.21	122.87
122.5	137.83	136.62	135.30	133.98	132.66	131.34	131.23	131.01	130.90	130.79
125.0	149.60	148.50	147.51	146.52	145.42	144.43	143.88	143.33	142.78	142.23
127.5	161.37	160.60	159.83	158.95	158.18	157.41	157.08	156.75	156.31	155.98
130.0	171.38	169.95	168.52	167.20	165.77	164.34	164.78	165.11	165.55	165.99
132.5	184.47	182.60	180.84	179.08	177.21	175.45	175.45	175.56	175.56	175.56
135.0	195.58	193.71	191.84	189.97	188.10	186.23	186.67	187.11	187.55	187.99
137.5	204.93	203.39	201.85	200.42	198.88	197.34	197.34	197.34	197.34	197.34
140.0	214.83	214.28	213.73	213.18	212.63	212.08	211.42	210.65	209.99	209.22
142.5	224.62	224.62	224.62	224.51	224.51	224.51	224.18	223.74	223.41	223.08
145.0	233.42	233.64	233.75	233.86	233.97	234.08	234.08	234.19	234.19	234.19
147.5	240.79	240.57	240.46	240.35	240.13	240.02	240.57	241.01	241.56	242.00
150.0	247.39	246.95	246.40	245.85	245.41	244.86	245.52	246.18	246.84	247.50

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4020-TU-SO-FWA-D9 ONLY.IES

CANDELA TABULATION - (Cont.)

152.5	255.20	254.65	254.21	253.66	253.22	252.67	252.89	253.00	253.22	253.44
155.0	262.68	262.35	261.91	261.47	261.14	260.70	260.92	261.03	261.25	261.36
157.5	269.72	269.50	269.17	268.84	268.62	268.29	268.51	268.73	268.95	269.17
160.0	276.10	275.99	275.77	275.55	275.33	275.11	275.44	275.66	275.99	276.21
162.5	281.93	281.82	281.71	281.60	281.49	281.38	281.71	282.04	282.26	282.59
165.0	286.88	286.88	286.88	286.88	286.88	286.88	287.21	287.54	287.87	288.20
167.5	291.28	291.39	291.39	291.39	291.50	291.50	291.94	292.27	292.71	293.04
170.0	294.91	295.02	295.13	295.24	295.35	295.46	295.90	296.23	296.67	297.00
172.5	297.66	297.88	297.99	298.10	298.32	298.43	298.87	299.31	299.75	300.19
175.0	299.75	299.86	300.08	300.30	300.52	300.74	301.18	301.62	302.06	302.50
177.5	300.96	301.29	301.51	301.73	301.95	302.17	302.61	303.16	303.60	304.04
180.0	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40	301.40

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	0.00	0.00	0.00	0.00	0.00
92.5	19.25	17.82	16.39	15.07	13.64
95.0	24.64	23.54	22.55	21.45	20.46
97.5	31.68	30.91	30.14	29.37	28.60
100.0	40.15	39.60	39.05	38.50	37.95
102.5	49.06	48.62	48.18	47.74	47.30
105.0	59.29	59.18	59.07	59.07	58.96
107.5	67.65	67.43	67.32	67.10	66.88
110.0	78.21	78.21	78.10	78.10	78.10
112.5	89.87	90.09	90.31	90.53	90.75
115.0	97.79	97.24	96.69	96.14	95.59
117.5	110.55	110.66	110.88	110.99	111.21
120.0	123.42	124.08	124.74	125.29	125.95
122.5	130.57	130.46	130.35	130.13	130.02
125.0	141.57	141.02	140.47	139.92	139.37
127.5	155.65	155.32	154.88	154.55	154.22
130.0	166.32	166.76	167.20	167.53	167.97
132.5	175.67	175.67	175.67	175.78	175.78
135.0	188.43	188.87	189.31	189.75	190.19
137.5	197.23	197.23	197.23	197.23	197.23
140.0	208.56	207.79	207.13	206.36	205.70
142.5	222.64	222.31	221.98	221.54	221.21
145.0	234.30	234.30	234.30	234.41	234.41
147.5	242.55	242.99	243.54	243.98	244.53
150.0	248.05	248.71	249.37	250.03	250.69
152.5	253.55	253.77	253.99	254.10	254.32
155.0	261.58	261.69	261.91	262.02	262.24
157.5	269.28	269.50	269.72	269.94	270.16
160.0	276.54	276.76	277.09	277.31	277.64
162.5	282.92	283.25	283.47	283.80	284.13
165.0	288.64	288.97	289.30	289.63	289.96
167.5	293.48	293.81	294.25	294.58	295.02
170.0	297.44	297.77	298.21	298.54	298.98
172.5	300.74	301.18	301.62	302.06	302.50
175.0	302.83	303.27	303.71	304.15	304.59
177.5	304.59	305.03	305.47	306.02	306.46
180.0	301.40	301.40	301.40	301.40	301.40

IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4020-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	126.01	N.A.	13.90
90-120	238.41	N.A.	26.20
90-130	377.01	N.A.	41.50
90-150	677.34	N.A.	74.50
90-180	909.35	N.A.	100.00
110-180	783.34	N.A.	86.10
0-180	909.35	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	45.10
100-110	80.90
110-120	112.41
120-130	138.60
130-140	152.68
140-150	147.65
150-160	122.22
160-170	81.27
170-180	28.51

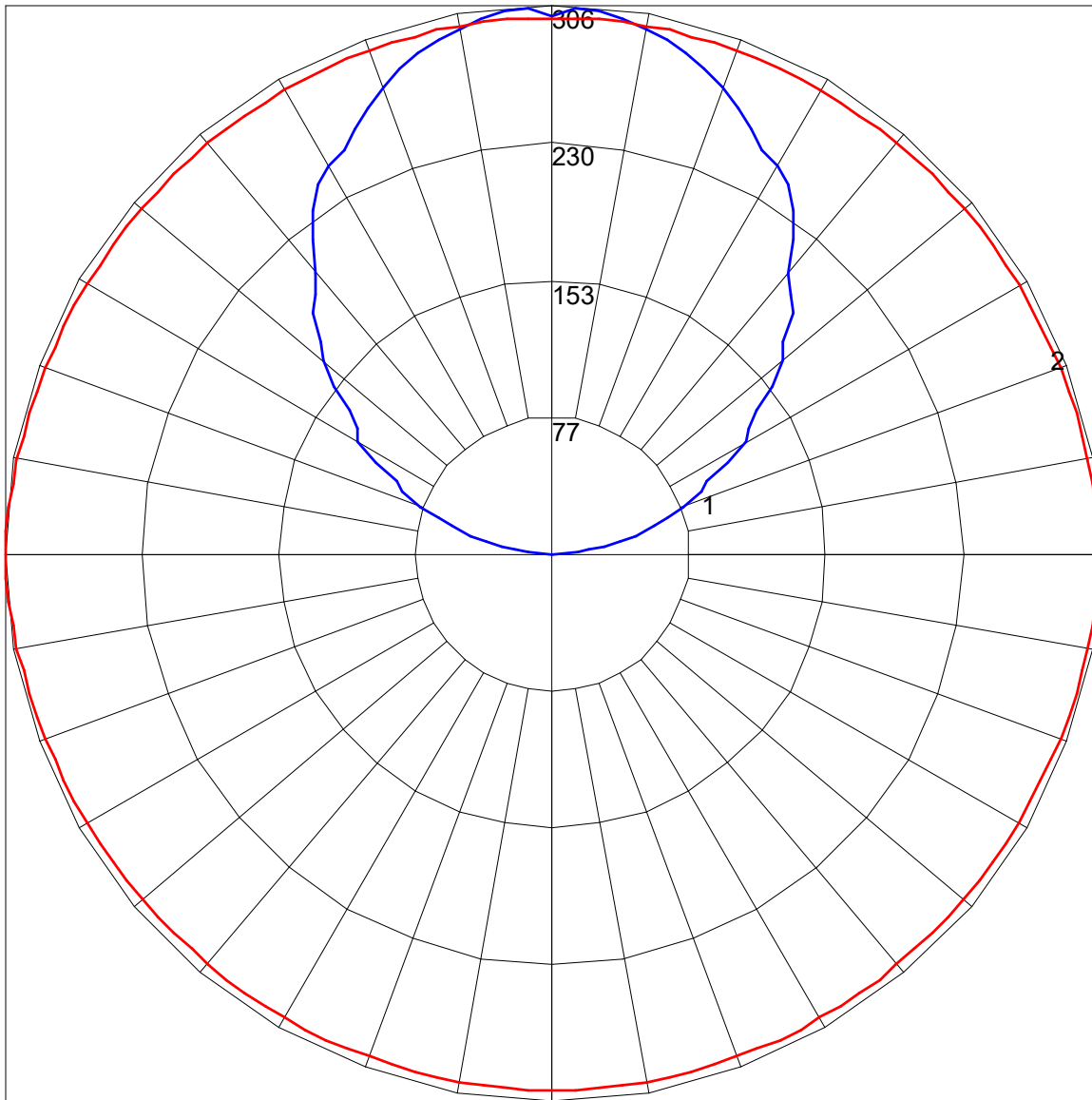
IES INDOOR REPORT
PHOTOMETRIC FILENAME : P4020-TU-SO-FWA-D9 ONLY.IES

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 = 306.46 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.)