

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P935910

Luminaire Tested: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935910
REPORT IS A COMBINATION OF REPORTS P933774 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

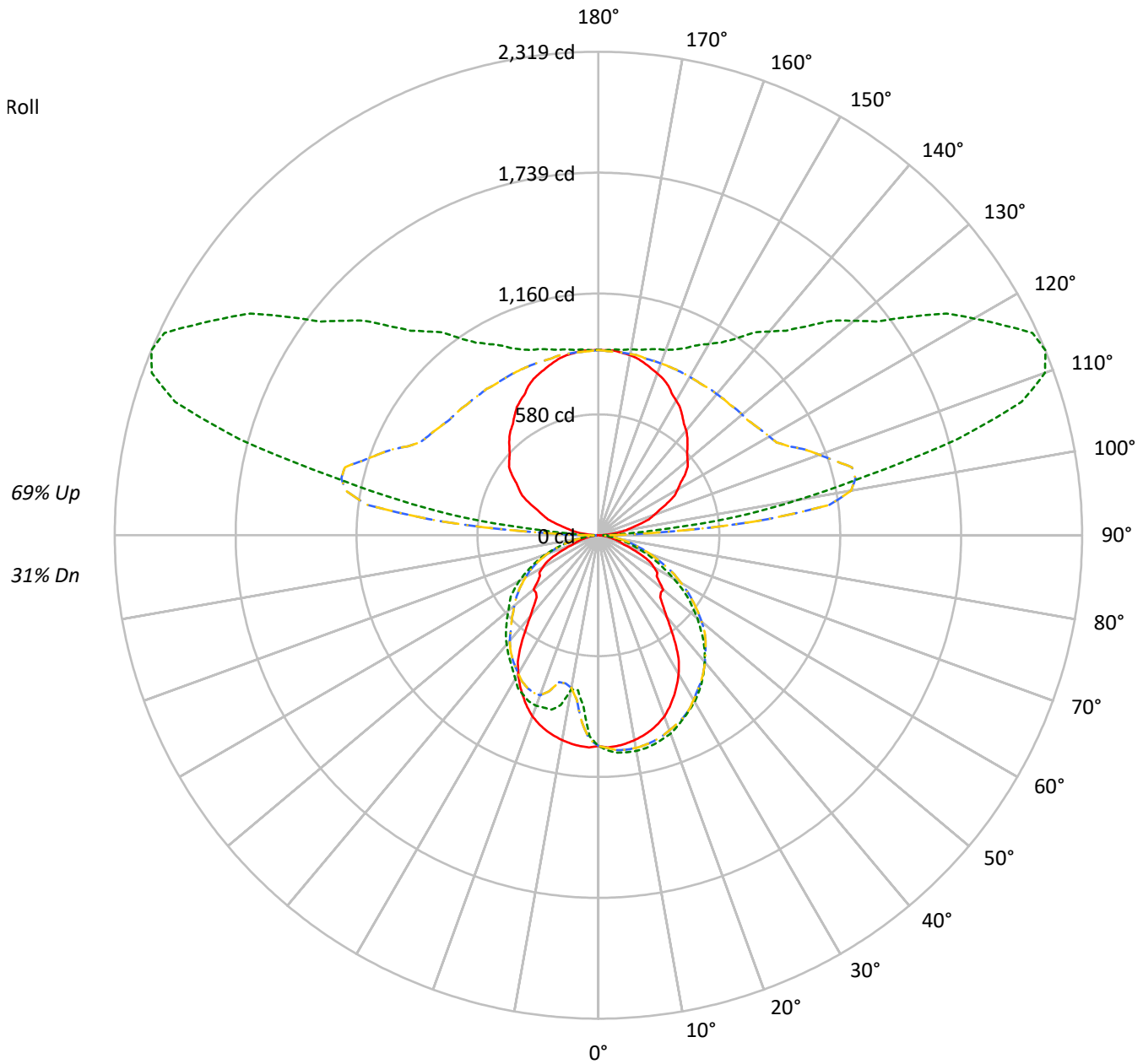
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8383.2 lumens
Efficiency: N/A
Efficacy: 131.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P935910
CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - · - 135°-315°



TEST NUMBER: P935910

CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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	50	30	10	0
RCR																					
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	39	39	39	31
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	34	34	33	33	33	33	26
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	30	29	28	28	28	28	22
3	78	69	61	56	70	62	56	51	49	45	42	38	35	32	27	25	24	24	24	24	19
4	71	61	53	47	64	55	48	43	44	39	35	33	30	28	24	22	20	20	20	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18	18	18	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	23	21	19	17	15	15	15	15	12
7	55	43	36	30	49	39	33	28	32	27	23	24	21	18	18	15	14	14	14	14	11
8	51	39	32	27	46	36	29	24	29	24	20	22	19	16	16	14	12	12	12	12	10
9	47	36	28	23	43	32	26	22	26	21	18	20	17	14	15	13	11	11	11	11	9
10	44	33	26	21	40	30	23	19	24	19	16	19	15	13	14	12	10	10	10	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9378	9378	9378	9378
5°	9437	9467	9437	7443
10°	9364	9326	9364	6667
15°	9252	9124	9252	7617
20°	9047	8883	9047	7634
25°	8641	8534	8641	7472
30°	8119	8244	8119	7116
35°	7228	7878	7228	6727
40°	6013	7446	6013	6432
45°	5362	6942	5362	6093
50°	5683	6339	5683	5752
55°	5333	5690	5333	5555
60°	5475	4833	5475	5088
65°	4941	3994	4941	4466
70°	3397	3183	3397	3742
75°	2948	2353	2948	2817
80°	2326	1555	2326	1694
85°	1267	823	1267	700

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 8233 cd/sqm



TEST NUMBER: P935910

CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.2	1.1
10°-20°	259.0	3.1
20°-30°	400.4	4.8
30°-40°	478.0	5.7
40°-50°	480.8	5.7
50°-60°	418.4	5.0
60°-70°	296.6	3.5
70°-80°	156.9	1.9
80°-90°	42.5	0.5
90°-100°	433.1	5.2
100°-110°	1138.6	13.6
110°-120°	1180.6	14.1
120°-130°	947.0	11.3
130°-140°	743.0	8.9
140°-150°	570.3	6.8
150°-160°	410.7	4.9
160°-170°	251.3	3.0
170°-180°	84.9	1.0
0°-30°	750.6	9.0
0°-40°	1228.6	14.7
0°-60°	2127.8	25.4
0°-90°	2623.8	31.3
90°-120°	2752.2	32.8
90°-150°	5012.5	59.8
90°-180°	5759.0	68.7
0°-180°	8383.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1011	1011	1011	1011	1011	
5°	1015	1047	1015	823	1015	96
15°	970	1038	970	866	970	273
25°	854	968	854	847	854	392
35°	649	863	649	737	649	402
45°	419	711	419	624	419	335
55°	341	525	341	512	341	314
65°	237	316	237	354	237	227
75°	90	150	90	180	90	94
85°	15	38	15	32	15	21
90°	6	23	6	23	6	6
95°	57	262	57	262	57	64
105°	205	1783	205	1783	205	217
115°	364	2296	364	2296	364	360
125°	507	1828	507	1828	507	450
135°	604	1418	604	1418	604	467
145°	701	1151	701	1151	701	439
155°	792	991	792	991	792	364
165°	854	923	854	923	854	241
175°	888	894	888	894	888	84
180°	888	888	888	888	888	



TEST NUMBER: P935910
 CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6
2.5°	1019.2	1019.2	1025.0	1026.9	1026.9	1024.1	1021.2	1024.1	1032.7	1035.5	1034.6
5°	1015.4	1023.1	1033.6	1035.5	1037.5	1036.5	1034.6	1036.5	1046.1	1048.0	1048.9
7.5°	1007.7	1022.2	1035.5	1038.4	1041.3	1038.4	1037.5	1039.4	1048.9	1050.8	1050.8
10°	998.2	1018.2	1033.6	1035.5	1038.4	1035.5	1035.5	1039.4	1048.9	1050.8	1051.8
12.5°	984.8	1012.5	1026.9	1028.8	1032.7	1031.7	1030.8	1034.6	1044.1	1046.1	1046.1
15°	969.5	1002.0	1015.4	1017.3	1024.1	1022.2	1022.2	1026.0	1036.5	1039.4	1038.4
17.5°	948.4	988.6	1003.9	1006.8	1011.5	1010.6	1011.5	1015.4	1025.0	1026.9	1027.9
20°	924.5	970.4	988.6	991.5	996.2	996.2	996.2	1001.0	1010.6	1014.4	1014.4
22.5°	892.0	951.3	970.4	972.3	978.1	978.1	980.0	986.7	995.3	996.2	996.2
25°	853.8	930.3	946.5	952.3	958.0	960.9	963.7	967.6	970.4	969.5	970.4
27.5°	813.7	903.5	924.5	928.4	936.0	938.9	942.7	943.7	944.6	947.5	945.6
30°	768.7	866.2	897.8	901.6	914.0	915.9	912.1	914.0	918.8	920.7	922.6
32.5°	718.1	810.8	870.1	878.7	890.1	884.4	883.4	886.3	894.0	894.0	895.9
35°	649.2	767.8	844.2	851.9	860.5	853.8	857.6	858.6	863.4	866.2	865.3
37.5°	573.7	730.5	817.5	823.2	829.9	821.3	827.0	829.9	833.7	831.8	831.8
40°	506.8	672.2	785.9	789.8	795.5	788.8	794.5	796.4	798.4	796.4	795.5
42.5°	457.1	608.1	752.5	757.2	753.4	758.2	760.1	763.9	761.1	757.2	757.2
45°	418.8	590.9	716.1	721.9	716.1	723.8	726.7	726.7	718.1	716.1	715.2
47.5°	406.4	556.5	679.8	679.8	676.9	686.5	691.3	684.6	676.0	673.1	673.1
50°	405.4	518.2	630.1	626.3	639.7	651.1	646.4	639.7	633.0	622.5	622.5
52.5°	368.2	471.4	566.0	580.4	601.4	608.1	600.5	593.8	582.3	577.5	573.7
55°	341.4	422.6	507.7	536.4	558.4	567.0	552.7	546.0	528.8	525.9	524.0
57.5°	335.6	351.9	454.2	490.5	517.3	516.3	507.7	495.3	481.0	478.1	477.1
60°	307.8	254.3	396.8	439.9	467.6	464.7	457.1	445.6	432.2	430.3	428.4
62.5°	279.2	184.5	331.7	380.6	419.8	418.8	412.1	394.9	385.4	380.6	376.8
65°	237.1	154.9	236.1	316.4	372.9	374.8	360.5	348.1	337.5	331.7	330.8
67.5°	180.7	126.2	159.7	263.9	327.9	326.0	307.8	302.1	288.7	285.8	280.1
70°	133.8	84.1	110.9	214.1	283.9	279.2	264.8	258.1	245.7	239.0	235.2
72.5°	110.9	67.9	81.3	166.3	239.0	233.3	220.8	213.2	202.7	196.9	193.1
75°	89.9	71.7	62.1	123.3	194.1	190.2	178.8	171.1	162.5	154.9	155.8
77.5°	66.0	66.9	49.7	90.8	153.9	148.2	141.5	131.9	128.1	120.5	120.5
80°	49.7	52.6	37.3	62.1	110.9	110.9	105.2	98.5	91.8	88.0	88.0
82.5°	33.5	33.5	27.7	39.2	75.5	72.7	68.8	66.9	63.1	61.2	61.2
85°	15.3	19.1	17.2	23.9	41.1	43.0	43.0	41.1	40.2	38.2	39.2
87.5°	4.8	8.6	10.5	13.4	21.0	22.0	22.9	22.9	22.9	23.9	23.9
90°	5.9	10.7	15.5	16.7	26.3	39.0	45.3	40.2	30.2	22.7	22.7
92.5°	23.8	64.3	105.0	115.1	161.8	224.0	255.2	223.6	160.6	113.3	108.8
95°	57.3	131.4	205.6	224.2	398.1	630.0	746.0	665.7	505.1	384.6	370.9
97.5°	98.9	164.4	229.9	246.3	536.2	922.9	1116.2	1065.5	963.9	887.8	861.8
100°	131.2	190.5	249.9	264.7	586.5	1015.6	1230.1	1233.8	1241.3	1246.8	1215.8
102.5°	158.6	214.0	269.4	283.3	609.6	1044.7	1262.3	1326.9	1456.3	1553.3	1526.8
105°	205.2	252.1	298.9	310.7	626.7	1048.0	1258.7	1403.6	1693.6	1911.0	1896.8
107.5°	252.9	296.6	340.3	351.2	629.9	1001.4	1187.2	1389.4	1793.7	2097.1	2100.5
110°	285.0	324.5	364.0	373.9	625.1	960.0	1127.5	1353.6	1805.7	2144.8	2159.6



TEST NUMBER: P935910

CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	316.6	354.3	392.0	401.3	625.3	924.0	1073.3	1304.7	1767.4	2114.4	2137.1
115°	364.3	399.0	433.7	442.4	631.1	882.6	1008.3	1231.1	1676.9	2011.2	2042.9
117.5°	411.5	443.0	474.6	482.4	642.8	856.7	963.6	1164.7	1567.0	1868.7	1903.8
120°	438.8	468.5	498.2	505.6	652.3	847.9	945.7	1129.4	1497.0	1772.7	1806.7
122.5°	465.7	495.6	525.6	533.1	666.0	843.4	932.0	1097.5	1428.5	1676.7	1710.3
125°	506.9	534.1	561.5	568.2	684.5	839.6	917.1	1057.6	1338.8	1549.7	1580.7
127.5°	540.2	567.8	595.3	602.2	702.9	837.4	904.6	1025.3	1266.7	1447.8	1473.9
130°	558.1	587.7	617.4	624.8	716.5	838.7	899.8	1007.2	1222.2	1383.3	1407.4
132.5°	576.6	606.3	635.9	643.4	727.4	839.6	895.6	991.8	1184.2	1328.5	1350.1
135°	604.0	631.1	658.0	664.8	739.4	838.7	888.4	969.0	1130.1	1250.9	1269.6
137.5°	632.0	658.8	685.5	692.2	757.2	844.0	887.3	955.3	1091.6	1193.8	1209.0
140°	655.3	680.0	704.7	710.8	768.2	844.8	883.1	941.9	1059.5	1147.8	1162.0
142.5°	673.2	696.0	718.7	724.5	777.3	847.8	883.1	934.8	1038.1	1115.7	1127.9
145°	700.7	720.5	740.3	745.3	789.3	847.9	877.1	919.4	1003.9	1067.3	1076.6
147.5°	728.0	747.4	766.7	771.6	806.8	853.7	877.1	910.4	976.8	1026.7	1034.4
150°	746.0	763.5	780.9	785.3	815.9	856.7	877.1	905.2	961.4	1003.5	1009.7
152.5°	764.4	777.7	790.9	794.2	821.9	858.7	877.1	901.1	949.1	985.1	989.7
155°	791.9	801.7	811.5	813.9	835.0	863.1	877.1	896.2	934.4	963.0	966.1
157.5°	812.1	821.7	831.1	833.5	848.1	867.5	877.1	891.9	921.6	943.9	946.1
160°	825.8	833.2	840.7	842.5	854.1	869.5	877.1	889.8	915.3	934.3	935.5
162.5°	839.6	845.1	850.6	852.1	860.4	871.6	877.1	887.8	909.3	925.4	926.6
165°	854.5	859.4	864.5	865.8	869.6	874.6	877.1	884.8	900.2	911.6	912.9
167.5°	868.1	870.5	872.9	873.5	876.7	881.0	883.1	888.1	898.2	905.7	906.3
170°	877.1	879.5	881.9	882.5	882.7	883.0	883.1	888.1	898.2	905.7	905.7
172.5°	881.9	882.4	883.0	883.1	883.1	883.1	883.1	887.1	895.0	900.9	900.5
175°	888.4	888.4	888.4	888.4	886.6	884.2	883.1	885.5	890.6	894.4	894.4
177.5°	888.4	888.4	888.4	888.4	887.1	885.3	884.3	886.3	890.2	893.2	892.6
180°	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4



TEST NUMBER: P935910

CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6
2.5°	1036.5	1033.6	1036.5	1034.6	1035.5	1032.7	1024.1	1021.2	1024.1	1026.9	1026.9
5°	1048.9	1047.0	1048.9	1048.9	1048.0	1046.1	1036.5	1034.6	1036.5	1037.5	1035.5
7.5°	1052.7	1049.9	1052.7	1050.8	1050.8	1048.9	1039.4	1037.5	1038.4	1041.3	1038.4
10°	1052.7	1049.9	1052.7	1051.8	1050.8	1048.9	1039.4	1035.5	1035.5	1038.4	1035.5
12.5°	1048.0	1046.1	1048.0	1046.1	1046.1	1044.1	1034.6	1030.8	1031.7	1032.7	1028.8
15°	1040.3	1037.5	1040.3	1038.4	1039.4	1036.5	1026.0	1022.2	1022.2	1024.1	1017.3
17.5°	1028.8	1025.0	1028.8	1027.9	1026.9	1025.0	1015.4	1011.5	1010.6	1011.5	1006.8
20°	1015.4	1012.5	1015.4	1014.4	1014.4	1010.6	1001.0	996.2	996.2	996.2	991.5
22.5°	994.3	991.5	994.3	996.2	996.2	995.3	986.7	980.0	978.1	978.1	972.3
25°	970.4	967.6	970.4	970.4	969.5	970.4	967.6	963.7	960.9	958.0	952.3
27.5°	947.5	945.6	947.5	945.6	947.5	944.6	943.7	942.7	938.9	936.0	928.4
30°	924.5	922.6	924.5	922.6	920.7	918.8	914.0	912.1	915.9	914.0	901.6
32.5°	895.9	894.0	895.9	895.9	894.0	894.0	886.3	883.4	884.4	890.1	878.7
35°	866.2	863.4	866.2	865.3	866.2	863.4	858.6	857.6	853.8	860.5	851.9
37.5°	831.8	828.9	831.8	831.8	831.8	833.7	829.9	827.0	821.3	829.9	823.2
40°	796.4	792.6	796.4	795.5	796.4	798.4	796.4	794.5	788.8	795.5	789.8
42.5°	756.3	755.3	756.3	757.2	757.2	761.1	763.9	760.1	758.2	753.4	757.2
45°	713.3	711.4	713.3	715.2	716.1	718.1	726.7	726.7	723.8	716.1	721.9
47.5°	667.4	662.6	667.4	673.1	673.1	676.0	684.6	691.3	686.5	676.9	679.8
50°	618.6	619.6	618.6	622.5	622.5	633.0	639.7	646.4	651.1	639.7	626.3
52.5°	570.8	569.9	570.8	573.7	577.5	582.3	593.8	600.5	608.1	601.4	580.4
55°	523.0	524.9	523.0	524.0	525.9	528.8	546.0	552.7	567.0	558.4	536.4
57.5°	475.2	472.4	475.2	477.1	478.1	481.0	495.3	507.7	516.3	517.3	490.5
60°	419.8	416.0	419.8	428.4	430.3	432.2	445.6	457.1	464.7	467.6	439.9
62.5°	371.0	364.3	371.0	376.8	380.6	385.4	394.9	412.1	418.8	419.8	380.6
65°	319.3	316.4	319.3	330.8	331.7	337.5	348.1	360.5	374.8	372.9	316.4
67.5°	272.5	272.5	272.5	280.1	285.8	288.7	302.1	307.8	326.0	327.9	263.9
70°	229.4	228.5	229.4	235.2	239.0	245.7	258.1	264.8	279.2	283.9	214.1
72.5°	188.3	187.4	188.3	193.1	196.9	202.7	213.2	220.8	233.3	239.0	166.3
75°	152.0	150.1	152.0	155.8	154.9	162.5	171.1	178.8	190.2	194.1	123.3
77.5°	116.6	116.6	116.6	120.5	120.5	128.1	131.9	141.5	148.2	153.9	90.8
80°	87.0	86.0	87.0	88.0	88.0	91.8	98.5	105.2	110.9	110.9	62.1
82.5°	61.2	59.3	61.2	61.2	61.2	63.1	66.9	68.8	72.7	75.5	39.2
85°	38.2	38.2	38.2	39.2	38.2	40.2	41.1	43.0	43.0	41.1	23.9
87.5°	24.9	23.9	24.9	23.9	23.9	22.9	22.9	22.9	22.0	21.0	13.4
90°	22.7	22.7	22.7	22.7	22.7	30.2	40.2	45.3	39.0	26.3	16.7
92.5°	90.7	72.8	90.7	108.8	113.3	160.6	223.6	255.2	224.0	161.8	115.1
95°	316.3	261.8	316.3	370.9	384.6	505.1	665.7	746.0	630.0	398.1	224.2
97.5°	758.0	654.1	758.0	861.8	887.8	963.9	1065.5	1116.2	922.9	536.2	246.3
100°	1092.1	968.3	1092.1	1215.8	1246.8	1241.3	1233.8	1230.1	1015.6	586.5	264.7
102.5°	1420.8	1314.8	1420.8	1526.8	1553.3	1456.3	1326.9	1262.3	1044.7	609.6	283.3
105°	1839.8	1782.8	1839.8	1896.8	1911.0	1693.6	1403.6	1258.7	1048.0	626.7	310.7
107.5°	2114.3	2128.1	2114.3	2100.5	2097.1	1793.7	1389.4	1187.2	1001.4	629.9	351.2
110°	2219.0	2278.3	2219.0	2159.6	2144.8	1805.7	1353.6	1127.5	960.0	625.1	373.9



TEST NUMBER: P935910

CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2228.3	2319.4	2228.3	2137.1	2114.4	1767.4	1304.7	1073.3	924.0	625.3	401.3
115°	2169.3	2295.6	2169.3	2042.9	2011.2	1676.9	1231.1	1008.3	882.6	631.1	442.4
117.5°	2043.9	2184.1	2043.9	1903.8	1868.7	1567.0	1164.7	963.6	856.7	642.8	482.4
120°	1943.0	2079.2	1943.0	1806.7	1772.7	1497.0	1129.4	945.7	847.9	652.3	505.6
122.5°	1844.7	1979.0	1844.7	1710.3	1676.7	1428.5	1097.5	932.0	843.4	666.0	533.1
125°	1704.4	1828.2	1704.4	1580.7	1549.7	1338.8	1057.6	917.1	839.6	684.5	568.2
127.5°	1578.3	1682.7	1578.3	1473.9	1447.8	1266.7	1025.3	904.6	837.4	702.9	602.2
130°	1503.9	1600.3	1503.9	1407.4	1383.3	1222.2	1007.2	899.8	838.7	716.5	624.8
132.5°	1436.4	1522.8	1436.4	1350.1	1328.5	1184.2	991.8	895.6	839.6	727.4	643.4
135°	1344.0	1418.5	1344.0	1269.6	1250.9	1130.1	969.0	888.4	838.7	739.4	664.8
137.5°	1270.0	1330.8	1270.0	1209.0	1193.8	1091.6	955.3	887.3	844.0	757.2	692.2
140°	1219.0	1276.0	1219.0	1162.0	1147.8	1059.5	941.9	883.1	844.8	768.2	710.8
142.5°	1176.9	1225.9	1176.9	1127.9	1115.7	1038.1	934.8	883.1	847.8	777.3	724.5
145°	1113.7	1150.8	1113.7	1076.6	1067.3	1003.9	919.4	877.1	847.9	789.3	745.3
147.5°	1065.2	1096.0	1065.2	1034.4	1026.7	976.8	910.4	877.1	853.7	806.8	771.6
150°	1034.7	1059.5	1034.7	1009.7	1003.5	961.4	905.2	877.1	856.7	815.9	785.3
152.5°	1008.6	1027.3	1008.6	989.7	985.1	949.1	901.1	877.1	858.7	821.9	794.2
155°	978.6	991.0	978.6	966.1	963.0	934.4	896.2	877.1	863.1	835.0	813.9
157.5°	954.8	963.6	954.8	946.1	943.9	921.6	891.9	877.1	867.5	848.1	833.5
160°	940.6	945.7	940.6	935.5	934.3	915.3	889.8	877.1	869.5	854.1	842.5
162.5°	931.3	936.1	931.3	926.6	925.4	909.3	887.8	877.1	871.6	860.4	852.1
165°	918.0	923.0	918.0	912.9	911.6	900.2	884.8	877.1	874.6	869.6	865.8
167.5°	908.4	910.5	908.4	906.3	905.7	898.2	888.1	883.1	881.0	876.7	873.5
170°	905.7	905.7	905.7	905.7	905.7	898.2	888.1	883.1	883.0	882.7	882.5
172.5°	898.6	896.8	898.6	900.5	900.9	895.0	887.1	883.1	883.1	883.1	883.1
175°	894.4	894.4	894.4	894.4	894.4	890.6	885.5	883.1	884.2	886.6	888.4
177.5°	890.5	888.4	890.5	892.6	893.2	890.2	886.3	884.3	885.3	887.1	888.4
180°	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4



TEST NUMBER: P935910

CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6
2.5°	1025.0	1019.2	1019.2	1009.6	1005.8	1002.9	998.2	983.8	980.0	976.2	981.9
5°	1033.6	1023.1	1015.4	998.2	983.8	978.1	959.9	925.5	902.6	885.4	875.8
7.5°	1035.5	1022.2	1007.7	981.0	946.5	931.2	875.8	812.7	795.5	780.2	770.6
10°	1033.6	1018.2	998.2	958.0	876.7	850.0	794.5	753.4	742.9	740.0	742.9
12.5°	1026.9	1012.5	984.8	917.9	804.1	785.9	753.4	729.5	727.6	732.4	758.2
15°	1015.4	1002.0	969.5	864.3	763.9	750.6	727.6	719.0	729.5	763.0	840.4
17.5°	1003.9	988.6	948.4	811.7	733.3	723.8	707.5	724.7	784.0	828.9	854.8
20°	988.6	970.4	924.5	773.5	711.4	702.8	695.1	772.5	817.5	833.7	848.1
22.5°	970.4	951.3	892.0	746.7	688.4	681.7	686.5	799.3	817.5	828.9	841.4
25°	946.5	930.3	853.8	725.7	670.3	662.6	680.8	796.4	807.0	809.8	834.7
27.5°	924.5	903.5	813.7	706.6	648.3	645.4	685.5	784.0	791.7	794.5	821.3
30°	897.8	866.2	768.7	686.5	625.3	624.4	686.5	768.7	766.8	774.5	801.2
32.5°	870.1	810.8	718.1	661.6	603.3	602.4	679.8	745.8	743.9	754.4	774.5
35°	844.2	767.8	649.2	633.0	575.6	576.6	663.6	719.0	720.0	729.5	742.0
37.5°	817.5	730.5	573.7	601.4	548.8	548.8	641.6	694.2	692.2	695.1	712.3
40°	785.9	672.2	506.8	560.3	524.0	521.1	614.8	667.4	660.7	659.7	683.6
42.5°	752.5	608.1	457.1	505.8	495.3	491.5	582.3	634.9	622.5	625.3	655.9
45°	716.1	590.9	418.8	427.4	465.7	462.8	546.9	597.6	589.0	596.6	628.2
47.5°	679.8	556.5	406.4	354.8	434.1	433.2	507.7	561.3	556.5	564.1	597.6
50°	630.1	518.2	405.4	304.0	398.7	402.6	460.9	525.9	525.9	532.6	568.0
52.5°	566.0	471.4	368.2	275.3	357.6	369.1	419.8	495.3	497.2	503.9	535.5
55°	507.7	422.6	341.4	253.3	308.8	333.6	379.6	463.8	467.6	474.3	503.0
57.5°	454.2	351.9	335.6	227.5	263.9	287.8	344.3	433.2	435.1	440.8	468.5
60°	396.8	254.3	307.8	199.8	224.7	242.8	311.7	396.8	403.5	407.4	431.3
62.5°	331.7	184.5	279.2	180.7	205.5	209.4	284.9	362.4	371.0	373.9	388.2
65°	236.1	154.9	237.1	164.4	185.5	186.4	256.2	327.0	334.6	339.4	350.0
67.5°	159.7	126.2	180.7	149.1	170.2	171.1	228.5	285.8	296.4	300.2	306.9
70°	110.9	84.1	133.8	132.9	153.0	154.9	198.8	248.6	258.1	261.0	264.8
72.5°	81.3	67.9	110.9	119.5	134.8	136.7	168.3	206.5	216.1	218.9	220.8
75°	62.1	71.7	89.9	104.2	114.7	115.7	137.7	168.3	174.9	176.9	177.8
77.5°	49.7	66.9	66.0	84.1	93.7	91.8	108.0	130.0	135.8	135.8	135.8
80°	37.3	52.6	49.7	60.2	68.8	66.9	77.4	92.7	94.6	96.6	95.6
82.5°	27.7	33.5	33.5	38.2	45.9	44.0	51.6	60.2	60.2	60.2	62.1
85°	17.2	19.1	15.3	20.1	25.8	24.9	28.7	32.5	33.5	33.5	31.5
87.5°	10.5	8.6	4.8	7.6	11.5	11.5	13.4	14.3	13.4	13.4	13.4
90°	15.5	10.7	5.9	10.7	15.5	16.7	26.3	39.0	45.3	40.2	30.2
92.5°	105.0	64.3	23.8	64.3	105.0	115.1	161.8	224.0	255.2	223.6	160.6
95°	205.6	131.4	57.3	131.4	205.6	224.2	398.1	630.0	746.0	665.7	505.1
97.5°	229.9	164.4	98.9	164.4	229.9	246.3	536.2	922.9	1116.2	1065.5	963.9
100°	249.9	190.5	131.2	190.5	249.9	264.7	586.5	1015.6	1230.1	1233.8	1241.3
102.5°	269.4	214.0	158.6	214.0	269.4	283.3	609.6	1044.7	1262.3	1326.9	1456.3
105°	298.9	252.1	205.2	252.1	298.9	310.7	626.7	1048.0	1258.7	1403.6	1693.6
107.5°	340.3	296.6	252.9	296.6	340.3	351.2	629.9	1001.4	1187.2	1389.4	1793.7
110°	364.0	324.5	285.0	324.5	364.0	373.9	625.1	960.0	1127.5	1353.6	1805.7



TEST NUMBER: P935910

CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	392.0	354.3	316.6	354.3	392.0	401.3	625.3	924.0	1073.3	1304.7	1767.4
115°	433.7	399.0	364.3	399.0	433.7	442.4	631.1	882.6	1008.3	1231.1	1676.9
117.5°	474.6	443.0	411.5	443.0	474.6	482.4	642.8	856.7	963.6	1164.7	1567.0
120°	498.2	468.5	438.8	468.5	498.2	505.6	652.3	847.9	945.7	1129.4	1497.0
122.5°	525.6	495.6	465.7	495.6	525.6	533.1	666.0	843.4	932.0	1097.5	1428.5
125°	561.5	534.1	506.9	534.1	561.5	568.2	684.5	839.6	917.1	1057.6	1338.8
127.5°	595.3	567.8	540.2	567.8	595.3	602.2	702.9	837.4	904.6	1025.3	1266.7
130°	617.4	587.7	558.1	587.7	617.4	624.8	716.5	838.7	899.8	1007.2	1222.2
132.5°	635.9	606.3	576.6	606.3	635.9	643.4	727.4	839.6	895.6	991.8	1184.2
135°	658.0	631.1	604.0	631.1	658.0	664.8	739.4	838.7	888.4	969.0	1130.1
137.5°	685.5	658.8	632.0	658.8	685.5	692.2	757.2	844.0	887.3	955.3	1091.6
140°	704.7	680.0	655.3	680.0	704.7	710.8	768.2	844.8	883.1	941.9	1059.5
142.5°	718.7	696.0	673.2	696.0	718.7	724.5	777.3	847.8	883.1	934.8	1038.1
145°	740.3	720.5	700.7	720.5	740.3	745.3	789.3	847.9	877.1	919.4	1003.9
147.5°	766.7	747.4	728.0	747.4	766.7	771.6	806.8	853.7	877.1	910.4	976.8
150°	780.9	763.5	746.0	763.5	780.9	785.3	815.9	856.7	877.1	905.2	961.4
152.5°	790.9	777.7	764.4	777.7	790.9	794.2	821.9	858.7	877.1	901.1	949.1
155°	811.5	801.7	791.9	801.7	811.5	813.9	835.0	863.1	877.1	896.2	934.4
157.5°	831.1	821.7	812.1	821.7	831.1	833.5	848.1	867.5	877.1	891.9	921.6
160°	840.7	833.2	825.8	833.2	840.7	842.5	854.1	869.5	877.1	889.8	915.3
162.5°	850.6	845.1	839.6	845.1	850.6	852.1	860.4	871.6	877.1	887.8	909.3
165°	864.5	859.4	854.5	859.4	864.5	865.8	869.6	874.6	877.1	884.8	900.2
167.5°	872.9	870.5	868.1	870.5	872.9	873.5	876.7	881.0	883.1	888.1	898.2
170°	881.9	879.5	877.1	879.5	881.9	882.5	882.7	883.0	883.1	888.1	898.2
172.5°	883.0	882.4	881.9	882.4	883.0	883.1	883.1	883.1	883.1	887.1	895.0
175°	888.4	888.4	888.4	888.4	888.4	888.4	886.6	884.2	883.1	885.5	890.6
177.5°	888.4	888.4	888.4	888.4	888.4	888.4	887.1	885.3	884.3	886.3	890.2
180°	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4



TEST NUMBER: P935910
 CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6	1010.6
2.5°	975.2	972.3	976.2	965.7	976.2	972.3	975.2	981.9	976.2	980.0	983.8
5°	855.7	850.9	835.6	823.2	835.6	850.9	855.7	875.8	885.4	902.6	925.5
7.5°	764.9	761.1	757.2	749.6	757.2	761.1	764.9	770.6	780.2	795.5	812.7
10°	744.8	745.8	751.5	750.6	751.5	745.8	744.8	742.9	740.0	742.9	753.4
12.5°	796.4	805.0	836.6	834.7	836.6	805.0	796.4	758.2	732.4	727.6	729.5
15°	855.7	858.6	865.3	866.2	865.3	858.6	855.7	840.4	763.0	729.5	719.0
17.5°	861.5	862.4	867.2	867.2	867.2	862.4	861.5	854.8	828.9	784.0	724.7
20°	856.7	858.6	868.1	870.1	868.1	858.6	856.7	848.1	833.7	817.5	772.5
22.5°	854.8	858.6	866.2	865.3	866.2	858.6	854.8	841.4	828.9	817.5	799.3
25°	845.2	845.2	846.2	847.1	846.2	845.2	845.2	834.7	809.8	807.0	796.4
27.5°	825.1	827.0	832.8	831.8	832.8	827.0	825.1	821.3	794.5	791.7	784.0
30°	807.0	805.0	800.3	796.4	800.3	805.0	807.0	801.2	774.5	766.8	768.7
32.5°	776.4	771.6	766.8	763.9	766.8	771.6	776.4	774.5	754.4	743.9	745.8
35°	740.0	741.0	740.0	737.2	740.0	741.0	740.0	742.0	729.5	720.0	719.0
37.5°	714.2	716.1	715.2	711.4	715.2	716.1	714.2	712.3	695.1	692.2	694.2
40°	687.5	688.4	687.5	684.6	687.5	688.4	687.5	683.6	659.7	660.7	667.4
42.5°	661.6	660.7	657.8	655.9	657.8	660.7	661.6	655.9	625.3	622.5	634.9
45°	632.0	633.0	627.2	624.4	627.2	633.0	632.0	628.2	596.6	589.0	597.6
47.5°	602.4	602.4	597.6	594.7	597.6	602.4	602.4	597.6	564.1	556.5	561.3
50°	570.8	569.9	563.2	562.2	563.2	569.9	570.8	568.0	532.6	525.9	525.9
52.5°	534.5	534.5	535.5	537.4	535.5	534.5	534.5	535.5	503.9	497.2	495.3
55°	503.0	503.9	510.6	512.5	510.6	503.9	503.0	503.0	474.3	467.6	463.8
57.5°	470.4	470.4	475.2	475.2	475.2	470.4	470.4	468.5	440.8	435.1	433.2
60°	433.2	435.1	438.9	437.9	438.9	435.1	433.2	431.3	407.4	403.5	396.8
62.5°	394.0	395.9	396.8	394.9	396.8	395.9	394.0	388.2	373.9	371.0	362.4
65°	352.9	354.8	355.7	353.8	355.7	354.8	352.9	350.0	339.4	334.6	327.0
67.5°	310.7	309.7	308.8	312.6	308.8	309.7	310.7	306.9	300.2	296.4	285.8
70°	267.7	267.7	266.7	268.6	266.7	267.7	267.7	264.8	261.0	258.1	248.6
72.5°	221.8	220.8	224.7	221.8	224.7	220.8	221.8	220.8	218.9	216.1	206.5
75°	176.9	178.8	176.9	179.7	176.9	178.8	176.9	177.8	176.9	174.9	168.3
77.5°	134.8	136.7	134.8	134.8	134.8	136.7	134.8	135.8	135.8	135.8	130.0
80°	95.6	94.6	94.6	93.7	94.6	94.6	95.6	95.6	96.6	94.6	92.7
82.5°	61.2	60.2	60.2	62.1	60.2	60.2	61.2	62.1	60.2	60.2	60.2
85°	33.5	34.4	32.5	32.5	32.5	34.4	33.5	31.5	33.5	33.5	32.5
87.5°	12.4	11.5	11.5	11.5	11.5	11.5	12.4	13.4	13.4	13.4	14.3
90°	22.7	22.7	22.7	22.7	22.7	22.7	22.7	30.2	40.2	45.3	39.0
92.5°	113.3	108.8	90.7	72.8	90.7	108.8	113.3	160.6	223.6	255.2	224.0
95°	384.6	370.9	316.3	261.8	316.3	370.9	384.6	505.1	665.7	746.0	630.0
97.5°	887.8	861.8	758.0	654.1	758.0	861.8	887.8	963.9	1065.5	1116.2	922.9
100°	1246.8	1215.8	1092.1	968.3	1092.1	1215.8	1246.8	1241.3	1233.8	1230.1	1015.6
102.5°	1553.3	1526.8	1420.8	1314.8	1420.8	1526.8	1553.3	1456.3	1326.9	1262.3	1044.7
105°	1911.0	1896.8	1839.8	1782.8	1839.8	1896.8	1911.0	1693.6	1403.6	1258.7	1048.0
107.5°	2097.1	2100.5	2114.3	2128.1	2114.3	2100.5	2097.1	1793.7	1389.4	1187.2	1001.4
110°	2144.8	2159.6	2219.0	2278.3	2219.0	2159.6	2144.8	1805.7	1353.6	1127.5	960.0



TEST NUMBER: P935910

CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	2114.4	2137.1	2228.3	2319.4	2228.3	2137.1	2114.4	1767.4	1304.7	1073.3	924.0
115°	2011.2	2042.9	2169.3	2295.6	2169.3	2042.9	2011.2	1676.9	1231.1	1008.3	882.6
117.5°	1868.7	1903.8	2043.9	2184.1	2043.9	1903.8	1868.7	1567.0	1164.7	963.6	856.7
120°	1772.7	1806.7	1943.0	2079.2	1943.0	1806.7	1772.7	1497.0	1129.4	945.7	847.9
122.5°	1676.7	1710.3	1844.7	1979.0	1844.7	1710.3	1676.7	1428.5	1097.5	932.0	843.4
125°	1549.7	1580.7	1704.4	1828.2	1704.4	1580.7	1549.7	1338.8	1057.6	917.1	839.6
127.5°	1447.8	1473.9	1578.3	1682.7	1578.3	1473.9	1447.8	1266.7	1025.3	904.6	837.4
130°	1383.3	1407.4	1503.9	1600.3	1503.9	1407.4	1383.3	1222.2	1007.2	899.8	838.7
132.5°	1328.5	1350.1	1436.4	1522.8	1436.4	1350.1	1328.5	1184.2	991.8	895.6	839.6
135°	1250.9	1269.6	1344.0	1418.5	1344.0	1269.6	1250.9	1130.1	969.0	888.4	838.7
137.5°	1193.8	1209.0	1270.0	1330.8	1270.0	1209.0	1193.8	1091.6	955.3	887.3	844.0
140°	1147.8	1162.0	1219.0	1276.0	1219.0	1162.0	1147.8	1059.5	941.9	883.1	844.8
142.5°	1115.7	1127.9	1176.9	1225.9	1176.9	1127.9	1115.7	1038.1	934.8	883.1	847.8
145°	1067.3	1076.6	1113.7	1150.8	1113.7	1076.6	1067.3	1003.9	919.4	877.1	847.9
147.5°	1026.7	1034.4	1065.2	1096.0	1065.2	1034.4	1026.7	976.8	910.4	877.1	853.7
150°	1003.5	1009.7	1034.7	1059.5	1034.7	1009.7	1003.5	961.4	905.2	877.1	856.7
152.5°	985.1	989.7	1008.6	1027.3	1008.6	989.7	985.1	949.1	901.1	877.1	858.7
155°	963.0	966.1	978.6	991.0	978.6	966.1	963.0	934.4	896.2	877.1	863.1
157.5°	943.9	946.1	954.8	963.6	954.8	946.1	943.9	921.6	891.9	877.1	867.5
160°	934.3	935.5	940.6	945.7	940.6	935.5	934.3	915.3	889.8	877.1	869.5
162.5°	925.4	926.6	931.3	936.1	931.3	926.6	925.4	909.3	887.8	877.1	871.6
165°	911.6	912.9	918.0	923.0	918.0	912.9	911.6	900.2	884.8	877.1	874.6
167.5°	905.7	906.3	908.4	910.5	908.4	906.3	905.7	898.2	888.1	883.1	881.0
170°	905.7	905.7	905.7	905.7	905.7	905.7	905.7	898.2	888.1	883.1	883.0
172.5°	900.9	900.5	898.6	896.8	898.6	900.5	900.9	895.0	887.1	883.1	883.1
175°	894.4	894.4	894.4	894.4	894.4	894.4	894.4	890.6	885.5	883.1	884.2
177.5°	893.2	892.6	890.5	888.4	890.5	892.6	893.2	890.2	886.3	884.3	885.3
180°	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4



TEST NUMBER: P935910
 CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	1010.6	1010.6	1010.6	1010.6	1010.6
2.5°	998.2	1002.9	1005.8	1009.6	1019.2
5°	959.9	978.1	983.8	998.2	1015.4
7.5°	875.8	931.2	946.5	981.0	1007.7
10°	794.5	850.0	876.7	958.0	998.2
12.5°	753.4	785.9	804.1	917.9	984.8
15°	727.6	750.6	763.9	864.3	969.5
17.5°	707.5	723.8	733.3	811.7	948.4
20°	695.1	702.8	711.4	773.5	924.5
22.5°	686.5	681.7	688.4	746.7	892.0
25°	680.8	662.6	670.3	725.7	853.8
27.5°	685.5	645.4	648.3	706.6	813.7
30°	686.5	624.4	625.3	686.5	768.7
32.5°	679.8	602.4	603.3	661.6	718.1
35°	663.6	576.6	575.6	633.0	649.2
37.5°	641.6	548.8	548.8	601.4	573.7
40°	614.8	521.1	524.0	560.3	506.8
42.5°	582.3	491.5	495.3	505.8	457.1
45°	546.9	462.8	465.7	427.4	418.8
47.5°	507.7	433.2	434.1	354.8	406.4
50°	460.9	402.6	398.7	304.0	405.4
52.5°	419.8	369.1	357.6	275.3	368.2
55°	379.6	333.6	308.8	253.3	341.4
57.5°	344.3	287.8	263.9	227.5	335.6
60°	311.7	242.8	224.7	199.8	307.8
62.5°	284.9	209.4	205.5	180.7	279.2
65°	256.2	186.4	185.5	164.4	237.1
67.5°	228.5	171.1	170.2	149.1	180.7
70°	198.8	154.9	153.0	132.9	133.8
72.5°	168.3	136.7	134.8	119.5	110.9
75°	137.7	115.7	114.7	104.2	89.9
77.5°	108.0	91.8	93.7	84.1	66.0
80°	77.4	66.9	68.8	60.2	49.7
82.5°	51.6	44.0	45.9	38.2	33.5
85°	28.7	24.9	25.8	20.1	15.3
87.5°	13.4	11.5	11.5	7.6	4.8
90°	26.3	16.7	15.5	10.7	5.9
92.5°	161.8	115.1	105.0	64.3	23.8
95°	398.1	224.2	205.6	131.4	57.3
97.5°	536.2	246.3	229.9	164.4	98.9
100°	586.5	264.7	249.9	190.5	131.2
102.5°	609.6	283.3	269.4	214.0	158.6
105°	626.7	310.7	298.9	252.1	205.2
107.5°	629.9	351.2	340.3	296.6	252.9
110°	625.1	373.9	364.0	324.5	285.0



TEST NUMBER: P935910

CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	625.3	401.3	392.0	354.3	316.6
115°	631.1	442.4	433.7	399.0	364.3
117.5°	642.8	482.4	474.6	443.0	411.5
120°	652.3	505.6	498.2	468.5	438.8
122.5°	666.0	533.1	525.6	495.6	465.7
125°	684.5	568.2	561.5	534.1	506.9
127.5°	702.9	602.2	595.3	567.8	540.2
130°	716.5	624.8	617.4	587.7	558.1
132.5°	727.4	643.4	635.9	606.3	576.6
135°	739.4	664.8	658.0	631.1	604.0
137.5°	757.2	692.2	685.5	658.8	632.0
140°	768.2	710.8	704.7	680.0	655.3
142.5°	777.3	724.5	718.7	696.0	673.2
145°	789.3	745.3	740.3	720.5	700.7
147.5°	806.8	771.6	766.7	747.4	728.0
150°	815.9	785.3	780.9	763.5	746.0
152.5°	821.9	794.2	790.9	777.7	764.4
155°	835.0	813.9	811.5	801.7	791.9
157.5°	848.1	833.5	831.1	821.7	812.1
160°	854.1	842.5	840.7	833.2	825.8
162.5°	860.4	852.1	850.6	845.1	839.6
165°	869.6	865.8	864.5	859.4	854.5
167.5°	876.7	873.5	872.9	870.5	868.1
170°	882.7	882.5	881.9	879.5	877.1
172.5°	883.1	883.1	883.0	882.4	881.9
175°	886.6	888.4	888.4	888.4	888.4
177.5°	887.1	888.4	888.4	888.4	888.4
180°	888.4	888.4	888.4	888.4	888.4



TEST NUMBER: P935910
 CATALOG NUMBER: SQ4-FA-150U-075D-830-1D-UNV-STD-W-4

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	10.53	11.25	11.63	12.35	13.86	13.33	14.04	14.43	15.14	16.66
	3H	11.00	11.64	12.11	12.74	14.28	14.65	15.29	15.76	16.40	17.93
	4H	11.18	11.79	12.30	12.90	14.44	15.08	15.69	16.20	16.80	18.34
	6H	11.29	11.85	12.42	12.96	14.51	15.35	15.91	16.48	17.02	18.57
	8H	11.29	11.82	12.42	12.95	14.49	15.42	15.95	16.55	17.08	18.62
	12H	11.26	11.76	12.39	12.88	14.45	15.45	15.95	16.58	17.07	18.64
4H	2H	11.54	12.15	12.67	13.25	14.79	13.72	14.33	14.85	15.44	16.97
	3H	12.55	13.06	13.68	14.19	15.74	15.20	15.71	16.34	16.84	18.39
	4H	12.82	13.29	13.96	14.41	15.98	15.72	16.18	16.86	17.31	18.88
	6H	12.94	13.34	14.08	14.48	16.04	16.07	16.47	17.21	17.61	19.17
	8H	12.94	13.31	14.08	14.45	16.03	16.17	16.54	17.31	17.68	19.25
	12H	12.90	13.24	14.06	14.39	15.97	16.21	16.55	17.37	17.70	19.28
8H	4H	13.26	13.63	14.40	14.77	16.35	15.83	16.20	16.98	17.34	18.92
	6H	13.51	13.82	14.68	15.00	16.57	16.25	16.56	17.42	17.74	19.32
	8H	13.55	13.82	14.72	14.98	16.58	16.40	16.67	17.57	17.83	19.42
	12H	13.53	13.77	14.70	14.92	16.55	16.48	16.72	17.66	17.88	19.51
12H	4H	13.25	13.59	14.42	14.74	16.33	15.79	16.13	16.95	17.28	18.86
	6H	13.57	13.84	14.74	15.00	16.59	16.25	16.52	17.42	17.68	19.27
	8H	13.63	13.87	14.80	15.02	16.65	16.40	16.63	17.57	17.79	19.42