

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: P934314

Luminaire Tested: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934314
REPORT IS A COMBINATION OF REPORTS P933694 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

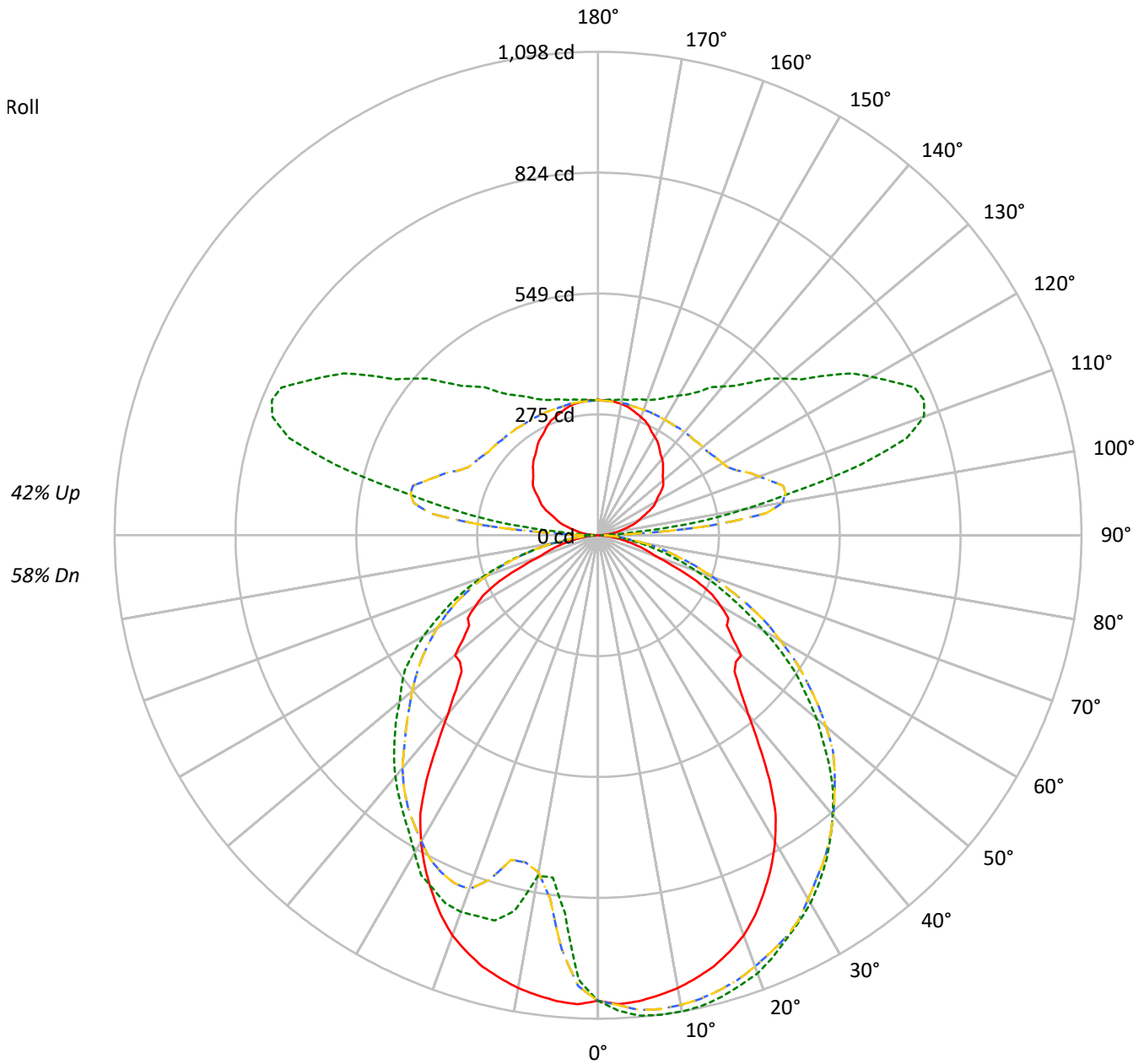
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4732.9 lumens
Efficiency: N/A
Efficacy: 130.0 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: General Diffuse

Input Watts (W): 36.4
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: P934314
CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



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



TEST NUMBER: P934314

CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58			58
1	100	95	91	88	93	89	86	83	77	75	72	66	64	63	56	55	54	49			49
2	91	83	77	72	84	78	72	68	68	63	60	58	55	52	49	47	45	41			41
3	83	73	66	60	77	68	62	57	60	55	50	51	48	44	44	41	39	35			35
4	76	65	57	51	70	61	54	48	53	47	43	46	41	38	39	36	33	30			30
5	70	58	49	43	65	54	47	41	47	42	37	41	37	33	35	32	29	26			26
6	64	52	44	38	60	49	41	36	43	37	32	37	32	29	32	28	25	23			23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	25	29	25	23	20			20
8	55	42	35	29	51	40	33	28	35	29	25	31	26	23	27	23	20	18			18
9	51	39	31	26	48	37	30	25	32	27	23	28	24	20	25	21	18	16			16
10	48	36	28	23	45	34	27	22	30	24	20	26	22	18	23	19	17	15			15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9809	9809	9809	9809
5°	9872	9903	9872	7786
10°	9795	9755	9795	6974
15°	9677	9543	9677	7968
20°	9464	9292	9464	7985
25°	9039	8927	9039	7816
30°	8493	8624	8493	7444
35°	7560	8241	7560	7036
40°	6289	7789	6289	6728
45°	5609	7261	5609	6373
50°	5945	6631	5945	6017
55°	5578	5952	5578	5811
60°	5728	5055	5728	5323
65°	5168	4178	5168	4672
70°	3554	3330	3554	3915
75°	3083	2461	3083	2947
80°	2434	1627	2434	1772
85°	1325	862	1325	733

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 8612 cd/sqm



TEST NUMBER: P934314

CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.4	2.0
10°-20°	270.9	5.7
20°-30°	418.8	8.8
30°-40°	500.0	10.6
40°-50°	502.9	10.6
50°-60°	437.6	9.2
60°-70°	310.3	6.6
70°-80°	164.1	3.5
80°-90°	42.0	0.9
90°-100°	149.7	3.2
100°-110°	393.6	8.3
110°-120°	408.1	8.6
120°-130°	327.3	6.9
130°-140°	256.8	5.4
140°-150°	197.1	4.2
150°-160°	142.0	3.0
160°-170°	86.9	1.8
170°-180°	29.3	0.6
0°-30°	785.2	16.6
0°-40°	1285.2	27.2
0°-60°	2225.7	47.0
0°-90°	2742.1	57.9
90°-120°	951.3	20.1
90°-150°	1732.6	36.6
90°-180°	1991.0	42.1
0°-180°	4732.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1057	1057	1057	1057	1057	
5°	1062	1095	1062	861	1062	101
15°	1014	1085	1014	906	1014	285
25°	893	1012	893	886	893	410
35°	679	903	679	771	679	420
45°	438	744	438	653	438	351
55°	357	549	357	536	357	328
65°	248	331	248	370	248	237
75°	94	157	94	188	94	99
85°	16	40	16	34	16	22
90°	2	8	2	8	2	2
95°	20	90	20	90	20	22
105°	71	616	71	616	71	75
115°	126	794	126	794	126	124
125°	175	632	175	632	175	156
135°	209	490	209	490	209	162
145°	242	398	242	398	242	152
155°	274	343	274	343	274	126
165°	295	319	295	319	295	83
175°	307	309	307	309	307	29
180°	307	307	307	307	307	



TEST NUMBER: P934314

CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1
2.5°	1066.1	1066.1	1072.2	1074.2	1074.2	1071.2	1068.2	1071.2	1080.2	1083.2	1082.2
5°	1062.1	1070.2	1081.2	1083.2	1085.2	1084.2	1082.2	1084.2	1094.2	1096.2	1097.2
7.5°	1054.1	1069.2	1083.2	1086.2	1089.2	1086.2	1085.2	1087.2	1097.2	1099.2	1099.2
10°	1044.1	1065.1	1081.2	1083.2	1086.2	1083.2	1083.2	1087.2	1097.2	1099.2	1100.2
12.5°	1030.1	1059.1	1074.2	1076.2	1080.2	1079.2	1078.2	1082.2	1092.2	1094.2	1094.2
15°	1014.1	1048.1	1062.1	1064.1	1071.2	1069.2	1069.2	1073.2	1084.2	1087.2	1086.2
17.5°	992.1	1034.1	1050.1	1053.1	1058.1	1057.1	1058.1	1062.1	1072.2	1074.2	1075.2
20°	967.1	1015.1	1034.1	1037.1	1042.1	1042.1	1042.1	1047.1	1057.1	1061.1	1061.1
22.5°	933.1	995.1	1015.1	1017.1	1023.1	1023.1	1025.1	1032.1	1041.1	1042.1	1042.1
25°	893.1	973.1	990.1	996.1	1002.1	1005.1	1008.1	1012.1	1015.1	1014.1	1015.1
27.5°	851.1	945.1	967.1	971.1	979.1	982.1	986.1	987.1	988.1	991.1	989.1
30°	804.1	906.1	939.1	943.1	956.1	958.1	954.1	956.1	961.1	963.1	965.1
32.5°	751.1	848.1	910.1	919.1	931.1	925.1	924.1	927.1	935.1	935.1	937.1
35°	679.1	803.1	883.1	891.1	900.1	893.1	897.1	898.1	903.1	906.1	905.1
37.5°	600.1	764.1	855.1	861.1	868.1	859.1	865.1	868.1	872.1	870.1	870.1
40°	530.1	703.1	822.1	826.1	832.1	825.1	831.1	833.1	835.1	833.1	832.1
42.5°	478.1	636.1	787.1	792.1	788.1	793.1	795.1	799.1	796.1	792.1	792.1
45°	438.1	618.1	749.1	755.1	749.1	757.1	760.1	760.1	751.1	749.1	748.1
47.5°	425.1	582.1	711.1	711.1	708.1	718.1	723.1	716.1	707.1	704.1	704.1
50°	424.1	542.1	659.1	655.1	669.1	681.1	676.1	669.1	662.1	651.1	651.1
52.5°	385.1	493.1	592.1	607.1	629.1	636.1	628.1	621.1	609.1	604.1	600.1
55°	357.1	442.1	531.1	561.1	584.1	593.1	578.1	571.1	553.1	550.1	548.1
57.5°	351.0	368.1	475.1	513.1	541.1	540.1	531.1	518.1	503.1	500.1	499.1
60°	322.0	266.0	415.1	460.1	489.1	486.1	478.1	466.1	452.1	450.1	448.1
62.5°	292.0	193.0	347.0	398.1	439.1	438.1	431.1	413.1	403.1	398.1	394.1
65°	248.0	162.0	247.0	331.0	390.1	392.1	377.1	364.1	353.0	347.0	346.0
67.5°	189.0	132.0	167.0	276.0	343.0	341.0	322.0	316.0	302.0	299.0	293.0
70°	140.0	88.0	116.0	224.0	297.0	292.0	277.0	270.0	257.0	250.0	246.0
72.5°	116.0	71.0	85.0	174.0	250.0	244.0	231.0	223.0	212.0	206.0	202.0
75°	94.0	75.0	65.0	129.0	203.0	199.0	187.0	179.0	170.0	162.0	163.0
77.5°	69.0	70.0	52.0	95.0	161.0	155.0	148.0	138.0	134.0	126.0	126.0
80°	52.0	55.0	39.0	65.0	116.0	116.0	110.0	103.0	96.0	92.0	92.0
82.5°	35.0	35.0	29.0	41.0	79.0	76.0	72.0	70.0	66.0	64.0	64.0
85°	16.0	20.0	18.0	25.0	43.0	45.0	45.0	43.0	42.0	40.0	41.0
87.5°	5.0	9.0	11.0	14.0	22.0	23.0	24.0	24.0	24.0	25.0	25.0
90°	2.1	3.7	5.4	5.8	9.1	13.5	15.7	13.9	10.4	7.8	7.8
92.5°	8.2	22.2	36.3	39.8	55.9	77.4	88.2	77.3	55.5	39.2	37.6
95°	19.8	45.4	71.1	77.5	137.6	217.7	257.8	230.0	174.5	132.9	128.2
97.5°	34.2	56.8	79.4	85.1	185.3	319.0	385.8	368.3	333.2	306.9	297.9
100°	45.3	65.8	86.4	91.5	202.7	351.0	425.2	426.5	429.1	431.0	420.3
102.5°	54.8	74.0	93.1	97.9	210.7	361.1	436.3	458.7	503.4	536.9	527.7
105°	70.9	87.1	103.3	107.4	216.6	362.3	435.1	485.2	585.4	660.6	655.7
107.5°	87.4	102.5	117.6	121.4	217.7	346.2	410.4	480.3	620.1	724.9	726.1
110°	98.5	112.1	125.8	129.2	216.1	331.9	389.8	467.9	624.2	741.4	746.5



TEST NUMBER: P934314

CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	109.4	122.4	135.4	138.7	216.1	319.4	371.0	451.0	610.9	730.9	738.8
115°	125.9	137.9	149.9	152.9	218.1	305.0	348.5	425.5	579.6	695.2	706.1
117.5°	142.2	153.1	164.0	166.7	222.2	296.1	333.1	402.6	541.6	645.9	658.0
120°	151.7	162.0	172.2	174.8	225.5	293.1	326.9	390.4	517.5	612.8	624.6
122.5°	161.0	171.4	181.7	184.3	230.2	291.5	322.1	379.3	493.8	579.6	591.2
125°	175.2	184.6	194.0	196.4	236.6	290.2	317.0	365.6	462.8	535.7	546.4
127.5°	186.7	196.3	205.8	208.2	243.0	289.5	312.7	354.4	437.8	500.4	509.4
130°	192.9	203.2	213.4	216.0	247.7	289.9	311.0	348.2	422.5	478.2	486.5
132.5°	199.3	209.6	219.8	222.4	251.5	290.2	309.6	342.8	409.3	459.2	466.7
135°	208.8	218.1	227.5	229.8	255.6	289.9	307.1	334.9	390.6	432.4	438.8
137.5°	218.5	227.7	237.0	239.3	261.8	291.7	306.7	330.2	377.3	412.6	417.9
140°	226.5	235.0	243.6	245.7	265.5	292.0	305.2	325.6	366.3	396.8	401.7
142.5°	232.7	240.6	248.4	250.4	268.7	293.0	305.2	323.1	358.8	385.6	389.8
145°	242.2	249.0	255.9	257.6	272.8	293.1	303.2	317.8	347.0	368.9	372.1
147.5°	251.7	258.4	265.0	266.7	278.9	295.1	303.2	314.7	337.7	354.9	357.6
150°	257.8	263.8	269.9	271.4	282.0	296.1	303.2	312.9	332.3	346.9	349.1
152.5°	264.2	268.8	273.4	274.5	284.1	296.8	303.2	311.5	328.1	340.5	342.1
155°	273.7	277.1	280.5	281.3	288.6	298.3	303.2	309.8	323.0	332.9	334.0
157.5°	280.7	284.0	287.3	288.1	293.1	299.8	303.2	308.3	318.6	326.3	327.1
160°	285.5	288.0	290.6	291.2	295.2	300.5	303.2	307.6	316.4	323.0	323.4
162.5°	290.2	292.1	294.0	294.5	297.4	301.3	303.2	306.9	314.3	319.9	320.3
165°	295.4	297.1	298.9	299.3	300.6	302.3	303.2	305.8	311.1	315.1	315.5
167.5°	300.1	300.9	301.7	301.9	303.0	304.5	305.2	307.0	310.5	313.1	313.3
170°	303.2	304.0	304.8	305.0	305.1	305.2	305.2	307.0	310.5	313.1	313.1
172.5°	304.8	305.0	305.2	305.2	305.2	305.2	305.2	306.6	309.3	311.4	311.2
175°	307.1	307.1	307.1	307.1	306.5	305.6	305.2	306.1	307.9	309.2	309.2
177.5°	307.1	307.1	307.1	307.1	306.6	306.0	305.7	306.4	307.8	308.8	308.6
180°	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1



TEST NUMBER: P934314

CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1
2.5°	1084.2	1081.2	1084.2	1082.2	1083.2	1080.2	1071.2	1068.2	1071.2	1074.2	1074.2
5°	1097.2	1095.2	1097.2	1097.2	1096.2	1094.2	1084.2	1082.2	1084.2	1085.2	1083.2
7.5°	1101.2	1098.2	1101.2	1099.2	1099.2	1097.2	1087.2	1085.2	1086.2	1089.2	1086.2
10°	1101.2	1098.2	1101.2	1100.2	1099.2	1097.2	1087.2	1083.2	1083.2	1086.2	1083.2
12.5°	1096.2	1094.2	1096.2	1094.2	1094.2	1092.2	1082.2	1078.2	1079.2	1080.2	1076.2
15°	1088.2	1085.2	1088.2	1086.2	1087.2	1084.2	1073.2	1069.2	1069.2	1071.2	1064.1
17.5°	1076.2	1072.2	1076.2	1075.2	1074.2	1072.2	1062.1	1058.1	1057.1	1058.1	1053.1
20°	1062.1	1059.1	1062.1	1061.1	1061.1	1057.1	1047.1	1042.1	1042.1	1042.1	1037.1
22.5°	1040.1	1037.1	1040.1	1042.1	1042.1	1041.1	1032.1	1025.1	1023.1	1023.1	1017.1
25°	1015.1	1012.1	1015.1	1015.1	1014.1	1015.1	1012.1	1008.1	1005.1	1002.1	996.1
27.5°	991.1	989.1	991.1	989.1	991.1	988.1	987.1	986.1	982.1	979.1	971.1
30°	967.1	965.1	967.1	965.1	963.1	961.1	956.1	954.1	958.1	956.1	943.1
32.5°	937.1	935.1	937.1	937.1	935.1	935.1	927.1	924.1	925.1	931.1	919.1
35°	906.1	903.1	906.1	905.1	906.1	903.1	898.1	897.1	893.1	900.1	891.1
37.5°	870.1	867.1	870.1	870.1	870.1	872.1	868.1	865.1	859.1	868.1	861.1
40°	833.1	829.1	833.1	832.1	833.1	835.1	833.1	831.1	825.1	832.1	826.1
42.5°	791.1	790.1	791.1	792.1	792.1	796.1	799.1	795.1	793.1	788.1	792.1
45°	746.1	744.1	746.1	748.1	749.1	751.1	760.1	760.1	757.1	749.1	755.1
47.5°	698.1	693.1	698.1	704.1	704.1	707.1	716.1	723.1	718.1	708.1	711.1
50°	647.1	648.1	647.1	651.1	651.1	662.1	669.1	676.1	681.1	669.1	655.1
52.5°	597.1	596.1	597.1	600.1	604.1	609.1	621.1	628.1	636.1	629.1	607.1
55°	547.1	549.1	547.1	548.1	550.1	553.1	571.1	578.1	593.1	584.1	561.1
57.5°	497.1	494.1	497.1	499.1	500.1	503.1	518.1	531.1	540.1	541.1	513.1
60°	439.1	435.1	439.1	448.1	450.1	452.1	466.1	478.1	486.1	489.1	460.1
62.5°	388.1	381.1	388.1	394.1	398.1	403.1	413.1	431.1	438.1	439.1	398.1
65°	334.0	331.0	334.0	346.0	347.0	353.0	364.1	377.1	392.1	390.1	331.0
67.5°	285.0	285.0	285.0	293.0	299.0	302.0	316.0	322.0	341.0	343.0	276.0
70°	240.0	239.0	240.0	246.0	250.0	257.0	270.0	277.0	292.0	297.0	224.0
72.5°	197.0	196.0	197.0	202.0	206.0	212.0	223.0	231.0	244.0	250.0	174.0
75°	159.0	157.0	159.0	163.0	162.0	170.0	179.0	187.0	199.0	203.0	129.0
77.5°	122.0	122.0	122.0	126.0	126.0	134.0	138.0	148.0	155.0	161.0	95.0
80°	91.0	90.0	91.0	92.0	92.0	96.0	103.0	110.0	116.0	116.0	65.0
82.5°	64.0	62.0	64.0	64.0	64.0	66.0	70.0	72.0	76.0	79.0	41.0
85°	40.0	40.0	40.0	41.0	40.0	42.0	43.0	45.0	45.0	43.0	25.0
87.5°	26.0	25.0	26.0	25.0	25.0	24.0	24.0	24.0	23.0	22.0	14.0
90°	7.8	7.8	7.8	7.8	7.8	10.4	13.9	15.7	13.5	9.1	5.8
92.5°	31.4	25.1	31.4	37.6	39.2	55.5	77.3	88.2	77.4	55.9	39.8
95°	109.3	90.5	109.3	128.2	132.9	174.5	230.0	257.8	217.7	137.6	77.5
97.5°	262.0	226.1	262.0	297.9	306.9	333.2	368.3	385.8	319.0	185.3	85.1
100°	377.5	334.7	377.5	420.3	431.0	429.1	426.5	425.2	351.0	202.7	91.5
102.5°	491.1	454.5	491.1	527.7	536.9	503.4	458.7	436.3	361.1	210.7	97.9
105°	636.0	616.3	636.0	655.7	660.6	585.4	485.2	435.1	362.3	216.6	107.4
107.5°	730.8	735.6	730.8	726.1	724.9	620.1	480.3	410.4	346.2	217.7	121.4
110°	767.0	787.5	767.0	746.5	741.4	624.2	467.9	389.8	331.9	216.1	129.2



TEST NUMBER: P934314

CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	770.3	801.8	770.3	738.8	730.9	610.9	451.0	371.0	319.4	216.1	138.7
115°	749.8	793.5	749.8	706.1	695.2	579.6	425.5	348.5	305.0	218.1	152.9
117.5°	706.5	755.0	706.5	658.0	645.9	541.6	402.6	333.1	296.1	222.2	166.7
120°	671.6	718.7	671.6	624.6	612.8	517.5	390.4	326.9	293.1	225.5	174.8
122.5°	637.7	684.1	637.7	591.2	579.6	493.8	379.3	322.1	291.5	230.2	184.3
125°	589.1	631.9	589.1	546.4	535.7	462.8	365.6	317.0	290.2	236.6	196.4
127.5°	545.5	581.6	545.5	509.4	500.4	437.8	354.4	312.7	289.5	243.0	208.2
130°	519.9	553.2	519.9	486.5	478.2	422.5	348.2	311.0	289.9	247.7	216.0
132.5°	496.5	526.4	496.5	466.7	459.2	409.3	342.8	309.6	290.2	251.5	222.4
135°	464.6	490.3	464.6	438.8	432.4	390.6	334.9	307.1	289.9	255.6	229.8
137.5°	438.9	460.0	438.9	417.9	412.6	377.3	330.2	306.7	291.7	261.8	239.3
140°	421.4	441.1	421.4	401.7	396.8	366.3	325.6	305.2	292.0	265.5	245.7
142.5°	406.8	423.8	406.8	389.8	385.6	358.8	323.1	305.2	293.0	268.7	250.4
145°	385.0	397.8	385.0	372.1	368.9	347.0	317.8	303.2	293.1	272.8	257.6
147.5°	368.2	378.8	368.2	357.6	354.9	337.7	314.7	303.2	295.1	278.9	266.7
150°	357.7	366.3	357.7	349.1	346.9	332.3	312.9	303.2	296.1	282.0	271.4
152.5°	348.6	355.1	348.6	342.1	340.5	328.1	311.5	303.2	296.8	284.1	274.5
155°	338.3	342.6	338.3	334.0	332.9	323.0	309.8	303.2	298.3	288.6	281.3
157.5°	330.1	333.1	330.1	327.1	326.3	318.6	308.3	303.2	299.8	293.1	288.1
160°	325.2	326.9	325.2	323.4	323.0	316.4	307.6	303.2	300.5	295.2	291.2
162.5°	322.0	323.6	322.0	320.3	319.9	314.3	306.9	303.2	301.3	297.4	294.5
165°	317.3	319.1	317.3	315.5	315.1	311.1	305.8	303.2	302.3	300.6	299.3
167.5°	314.0	314.7	314.0	313.3	313.1	310.5	307.0	305.2	304.5	303.0	301.9
170°	313.1	313.1	313.1	313.1	313.1	310.5	307.0	305.2	305.2	305.1	305.0
172.5°	310.6	310.0	310.6	311.2	311.4	309.3	306.6	305.2	305.2	305.2	305.2
175°	309.2	309.2	309.2	309.2	309.2	307.9	306.1	305.2	305.6	306.5	307.1
177.5°	307.9	307.1	307.9	308.6	308.8	307.8	306.4	305.7	306.0	306.6	307.1
180°	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1



TEST NUMBER: P934314

CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1
2.5°	1072.2	1066.1	1066.1	1056.1	1052.1	1049.1	1044.1	1029.1	1025.1	1021.1	1027.1
5°	1081.2	1070.2	1062.1	1044.1	1029.1	1023.1	1004.1	968.1	944.1	926.1	916.1
7.5°	1083.2	1069.2	1054.1	1026.1	990.1	974.1	916.1	850.1	832.1	816.1	806.1
10°	1081.2	1065.1	1044.1	1002.1	917.1	889.1	831.1	788.1	777.1	774.1	777.1
12.5°	1074.2	1059.1	1030.1	960.1	841.1	822.1	788.1	763.1	761.1	766.1	793.1
15°	1062.1	1048.1	1014.1	904.1	799.1	785.1	761.1	752.1	763.1	798.1	879.1
17.5°	1050.1	1034.1	992.1	849.1	767.1	757.1	740.1	758.1	820.1	867.1	894.1
20°	1034.1	1015.1	967.1	809.1	744.1	735.1	727.1	808.1	855.1	872.1	887.1
22.5°	1015.1	995.1	933.1	781.1	720.1	713.1	718.1	836.1	855.1	867.1	880.1
25°	990.1	973.1	893.1	759.1	701.1	693.1	712.1	833.1	844.1	847.1	873.1
27.5°	967.1	945.1	851.1	739.1	678.1	675.1	717.1	820.1	828.1	831.1	859.1
30°	939.1	906.1	804.1	718.1	654.1	653.1	718.1	804.1	802.1	810.1	838.1
32.5°	910.1	848.1	751.1	692.1	631.1	630.1	711.1	780.1	778.1	789.1	810.1
35°	883.1	803.1	679.1	662.1	602.1	603.1	694.1	752.1	753.1	763.1	776.1
37.5°	855.1	764.1	600.1	629.1	574.1	574.1	671.1	726.1	724.1	727.1	745.1
40°	822.1	703.1	530.1	586.1	548.1	545.1	643.1	698.1	691.1	690.1	715.1
42.5°	787.1	636.1	478.1	529.1	518.1	514.1	609.1	664.1	651.1	654.1	686.1
45°	749.1	618.1	438.1	447.1	487.1	484.1	572.1	625.1	616.1	624.1	657.1
47.5°	711.1	582.1	425.1	371.1	454.1	453.1	531.1	587.1	582.1	590.1	625.1
50°	659.1	542.1	424.1	318.0	417.1	421.1	482.1	550.1	550.1	557.1	594.1
52.5°	592.1	493.1	385.1	288.0	374.1	386.1	439.1	518.1	520.1	527.1	560.1
55°	531.1	442.1	357.1	265.0	323.0	349.0	397.1	485.1	489.1	496.1	526.1
57.5°	475.1	368.1	351.0	238.0	276.0	301.0	360.1	453.1	455.1	461.1	490.1
60°	415.1	266.0	322.0	209.0	235.0	254.0	326.0	415.1	422.1	426.1	451.1
62.5°	347.0	193.0	292.0	189.0	215.0	219.0	298.0	379.1	388.1	391.1	406.1
65°	247.0	162.0	248.0	172.0	194.0	195.0	268.0	342.0	350.0	355.0	366.1
67.5°	167.0	132.0	189.0	156.0	178.0	179.0	239.0	299.0	310.0	314.0	321.0
70°	116.0	88.0	140.0	139.0	160.0	162.0	208.0	260.0	270.0	273.0	277.0
72.5°	85.0	71.0	116.0	125.0	141.0	143.0	176.0	216.0	226.0	229.0	231.0
75°	65.0	75.0	94.0	109.0	120.0	121.0	144.0	176.0	183.0	185.0	186.0
77.5°	52.0	70.0	69.0	88.0	98.0	96.0	113.0	136.0	142.0	142.0	142.0
80°	39.0	55.0	52.0	63.0	72.0	70.0	81.0	97.0	99.0	101.0	100.0
82.5°	29.0	35.0	35.0	40.0	48.0	46.0	54.0	63.0	63.0	63.0	65.0
85°	18.0	20.0	16.0	21.0	27.0	26.0	30.0	34.0	35.0	35.0	33.0
87.5°	11.0	9.0	5.0	8.0	12.0	12.0	14.0	15.0	14.0	14.0	14.0
90°	5.4	3.7	2.1	3.7	5.4	5.8	9.1	13.5	15.7	13.9	10.4
92.5°	36.3	22.2	8.2	22.2	36.3	39.8	55.9	77.4	88.2	77.3	55.5
95°	71.1	45.4	19.8	45.4	71.1	77.5	137.6	217.7	257.8	230.0	174.5
97.5°	79.4	56.8	34.2	56.8	79.4	85.1	185.3	319.0	385.8	368.3	333.2
100°	86.4	65.8	45.3	65.8	86.4	91.5	202.7	351.0	425.2	426.5	429.1
102.5°	93.1	74.0	54.8	74.0	93.1	97.9	210.7	361.1	436.3	458.7	503.4
105°	103.3	87.1	70.9	87.1	103.3	107.4	216.6	362.3	435.1	485.2	585.4
107.5°	117.6	102.5	87.4	102.5	117.6	121.4	217.7	346.2	410.4	480.3	620.1
110°	125.8	112.1	98.5	112.1	125.8	129.2	216.1	331.9	389.8	467.9	624.2



TEST NUMBER: P934314

CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	135.4	122.4	109.4	122.4	135.4	138.7	216.1	319.4	371.0	451.0	610.9
115°	149.9	137.9	125.9	137.9	149.9	152.9	218.1	305.0	348.5	425.5	579.6
117.5°	164.0	153.1	142.2	153.1	164.0	166.7	222.2	296.1	333.1	402.6	541.6
120°	172.2	162.0	151.7	162.0	172.2	174.8	225.5	293.1	326.9	390.4	517.5
122.5°	181.7	171.4	161.0	171.4	181.7	184.3	230.2	291.5	322.1	379.3	493.8
125°	194.0	184.6	175.2	184.6	194.0	196.4	236.6	290.2	317.0	365.6	462.8
127.5°	205.8	196.3	186.7	196.3	205.8	208.2	243.0	289.5	312.7	354.4	437.8
130°	213.4	203.2	192.9	203.2	213.4	216.0	247.7	289.9	311.0	348.2	422.5
132.5°	219.8	209.6	199.3	209.6	219.8	222.4	251.5	290.2	309.6	342.8	409.3
135°	227.5	218.1	208.8	218.1	227.5	229.8	255.6	289.9	307.1	334.9	390.6
137.5°	237.0	227.7	218.5	227.7	237.0	239.3	261.8	291.7	306.7	330.2	377.3
140°	243.6	235.0	226.5	235.0	243.6	245.7	265.5	292.0	305.2	325.6	366.3
142.5°	248.4	240.6	232.7	240.6	248.4	250.4	268.7	293.0	305.2	323.1	358.8
145°	255.9	249.0	242.2	249.0	255.9	257.6	272.8	293.1	303.2	317.8	347.0
147.5°	265.0	258.4	251.7	258.4	265.0	266.7	278.9	295.1	303.2	314.7	337.7
150°	269.9	263.8	257.8	263.8	269.9	271.4	282.0	296.1	303.2	312.9	332.3
152.5°	273.4	268.8	264.2	268.8	273.4	274.5	284.1	296.8	303.2	311.5	328.1
155°	280.5	277.1	273.7	277.1	280.5	281.3	288.6	298.3	303.2	309.8	323.0
157.5°	287.3	284.0	280.7	284.0	287.3	288.1	293.1	299.8	303.2	308.3	318.6
160°	290.6	288.0	285.5	288.0	290.6	291.2	295.2	300.5	303.2	307.6	316.4
162.5°	294.0	292.1	290.2	292.1	294.0	294.5	297.4	301.3	303.2	306.9	314.3
165°	298.9	297.1	295.4	297.1	298.9	299.3	300.6	302.3	303.2	305.8	311.1
167.5°	301.7	300.9	300.1	300.9	301.7	301.9	303.0	304.5	305.2	307.0	310.5
170°	304.8	304.0	303.2	304.0	304.8	305.0	305.1	305.2	305.2	307.0	310.5
172.5°	305.2	305.0	304.8	305.0	305.2	305.2	305.2	305.2	305.2	306.6	309.3
175°	307.1	307.1	307.1	307.1	307.1	307.1	306.5	305.6	305.2	306.1	307.9
177.5°	307.1	307.1	307.1	307.1	307.1	307.1	306.6	306.0	305.7	306.4	307.8
180°	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1



TEST NUMBER: P934314

CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1	1057.1
2.5°	1020.1	1017.1	1021.1	1010.1	1021.1	1017.1	1020.1	1027.1	1021.1	1025.1	1029.1
5°	895.1	890.1	874.1	861.1	874.1	890.1	895.1	916.1	926.1	944.1	968.1
7.5°	800.1	796.1	792.1	784.1	792.1	796.1	800.1	806.1	816.1	832.1	850.1
10°	779.1	780.1	786.1	785.1	786.1	780.1	779.1	777.1	774.1	777.1	788.1
12.5°	833.1	842.1	875.1	873.1	875.1	842.1	833.1	793.1	766.1	761.1	763.1
15°	895.1	898.1	905.1	906.1	905.1	898.1	895.1	879.1	798.1	763.1	752.1
17.5°	901.1	902.1	907.1	907.1	907.1	902.1	901.1	894.1	867.1	820.1	758.1
20°	896.1	898.1	908.1	910.1	908.1	898.1	896.1	887.1	872.1	855.1	808.1
22.5°	894.1	898.1	906.1	905.1	906.1	898.1	894.1	880.1	867.1	855.1	836.1
25°	884.1	884.1	885.1	886.1	885.1	884.1	884.1	873.1	847.1	844.1	833.1
27.5°	863.1	865.1	871.1	870.1	871.1	865.1	863.1	859.1	831.1	828.1	820.1
30°	844.1	842.1	837.1	833.1	837.1	842.1	844.1	838.1	810.1	802.1	804.1
32.5°	812.1	807.1	802.1	799.1	802.1	807.1	812.1	810.1	789.1	778.1	780.1
35°	774.1	775.1	774.1	771.1	774.1	775.1	774.1	776.1	763.1	753.1	752.1
37.5°	747.1	749.1	748.1	744.1	748.1	749.1	747.1	745.1	727.1	724.1	726.1
40°	719.1	720.1	719.1	716.1	719.1	720.1	719.1	715.1	690.1	691.1	698.1
42.5°	692.1	691.1	688.1	686.1	688.1	691.1	692.1	686.1	654.1	651.1	664.1
45°	661.1	662.1	656.1	653.1	656.1	662.1	661.1	657.1	624.1	616.1	625.1
47.5°	630.1	630.1	625.1	622.1	625.1	630.1	630.1	625.1	590.1	582.1	587.1
50°	597.1	596.1	589.1	588.1	589.1	596.1	597.1	594.1	557.1	550.1	550.1
52.5°	559.1	559.1	560.1	562.1	560.1	559.1	559.1	560.1	527.1	520.1	518.1
55°	526.1	527.1	534.1	536.1	534.1	527.1	526.1	526.1	496.1	489.1	485.1
57.5°	492.1	492.1	497.1	497.1	497.1	492.1	492.1	490.1	461.1	455.1	453.1
60°	453.1	455.1	459.1	458.1	459.1	455.1	453.1	451.1	426.1	422.1	415.1
62.5°	412.1	414.1	415.1	413.1	415.1	414.1	412.1	406.1	391.1	388.1	379.1
65°	369.1	371.1	372.1	370.1	372.1	371.1	369.1	366.1	355.0	350.0	342.0
67.5°	325.0	324.0	323.0	327.0	323.0	324.0	325.0	321.0	314.0	310.0	299.0
70°	280.0	280.0	279.0	281.0	279.0	280.0	280.0	277.0	273.0	270.0	260.0
72.5°	232.0	231.0	235.0	232.0	235.0	231.0	232.0	231.0	229.0	226.0	216.0
75°	185.0	187.0	185.0	188.0	185.0	187.0	185.0	186.0	185.0	183.0	176.0
77.5°	141.0	143.0	141.0	141.0	141.0	143.0	141.0	142.0	142.0	142.0	136.0
80°	100.0	99.0	99.0	98.0	99.0	99.0	100.0	100.0	101.0	99.0	97.0
82.5°	64.0	63.0	63.0	65.0	63.0	63.0	64.0	65.0	63.0	63.0	63.0
85°	35.0	36.0	34.0	34.0	34.0	36.0	35.0	33.0	35.0	35.0	34.0
87.5°	13.0	12.0	12.0	12.0	12.0	12.0	13.0	14.0	14.0	14.0	15.0
90°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	10.4	13.9	15.7	13.5
92.5°	39.2	37.6	31.4	25.1	31.4	37.6	39.2	55.5	77.3	88.2	77.4
95°	132.9	128.2	109.3	90.5	109.3	128.2	132.9	174.5	230.0	257.8	217.7
97.5°	306.9	297.9	262.0	226.1	262.0	297.9	306.9	333.2	368.3	385.8	319.0
100°	431.0	420.3	377.5	334.7	377.5	420.3	431.0	429.1	426.5	425.2	351.0
102.5°	536.9	527.7	491.1	454.5	491.1	527.7	536.9	503.4	458.7	436.3	361.1
105°	660.6	655.7	636.0	616.3	636.0	655.7	660.6	585.4	485.2	435.1	362.3
107.5°	724.9	726.1	730.8	735.6	730.8	726.1	724.9	620.1	480.3	410.4	346.2
110°	741.4	746.5	767.0	787.5	767.0	746.5	741.4	624.2	467.9	389.8	331.9



TEST NUMBER: P934314

CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	730.9	738.8	770.3	801.8	770.3	738.8	730.9	610.9	451.0	371.0	319.4
115°	695.2	706.1	749.8	793.5	749.8	706.1	695.2	579.6	425.5	348.5	305.0
117.5°	645.9	658.0	706.5	755.0	706.5	658.0	645.9	541.6	402.6	333.1	296.1
120°	612.8	624.6	671.6	718.7	671.6	624.6	612.8	517.5	390.4	326.9	293.1
122.5°	579.6	591.2	637.7	684.1	637.7	591.2	579.6	493.8	379.3	322.1	291.5
125°	535.7	546.4	589.1	631.9	589.1	546.4	535.7	462.8	365.6	317.0	290.2
127.5°	500.4	509.4	545.5	581.6	545.5	509.4	500.4	437.8	354.4	312.7	289.5
130°	478.2	486.5	519.9	553.2	519.9	486.5	478.2	422.5	348.2	311.0	289.9
132.5°	459.2	466.7	496.5	526.4	496.5	466.7	459.2	409.3	342.8	309.6	290.2
135°	432.4	438.8	464.6	490.3	464.6	438.8	432.4	390.6	334.9	307.1	289.9
137.5°	412.6	417.9	438.9	460.0	438.9	417.9	412.6	377.3	330.2	306.7	291.7
140°	396.8	401.7	421.4	441.1	421.4	401.7	396.8	366.3	325.6	305.2	292.0
142.5°	385.6	389.8	406.8	423.8	406.8	389.8	385.6	358.8	323.1	305.2	293.0
145°	368.9	372.1	385.0	397.8	385.0	372.1	368.9	347.0	317.8	303.2	293.1
147.5°	354.9	357.6	368.2	378.8	368.2	357.6	354.9	337.7	314.7	303.2	295.1
150°	346.9	349.1	357.7	366.3	357.7	349.1	346.9	332.3	312.9	303.2	296.1
152.5°	340.5	342.1	348.6	355.1	348.6	342.1	340.5	328.1	311.5	303.2	296.8
155°	332.9	334.0	338.3	342.6	338.3	334.0	332.9	323.0	309.8	303.2	298.3
157.5°	326.3	327.1	330.1	333.1	330.1	327.1	326.3	318.6	308.3	303.2	299.8
160°	323.0	323.4	325.2	326.9	325.2	323.4	323.0	316.4	307.6	303.2	300.5
162.5°	319.9	320.3	322.0	323.6	322.0	320.3	319.9	314.3	306.9	303.2	301.3
165°	315.1	315.5	317.3	319.1	317.3	315.5	315.1	311.1	305.8	303.2	302.3
167.5°	313.1	313.3	314.0	314.7	314.0	313.3	313.1	310.5	307.0	305.2	304.5
170°	313.1	313.1	313.1	313.1	313.1	313.1	313.1	310.5	307.0	305.2	305.2
172.5°	311.4	311.2	310.6	310.0	310.6	311.2	311.4	309.3	306.6	305.2	305.2
175°	309.2	309.2	309.2	309.2	309.2	309.2	309.2	307.9	306.1	305.2	305.6
177.5°	308.8	308.6	307.9	307.1	307.9	308.6	308.8	307.8	306.4	305.7	306.0
180°	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1	307.1



TEST NUMBER: P934314

CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	1057.1	1057.1	1057.1	1057.1	1057.1
2.5°	1044.1	1049.1	1052.1	1056.1	1066.1
5°	1004.1	1023.1	1029.1	1044.1	1062.1
7.5°	916.1	974.1	990.1	1026.1	1054.1
10°	831.1	889.1	917.1	1002.1	1044.1
12.5°	788.1	822.1	841.1	960.1	1030.1
15°	761.1	785.1	799.1	904.1	1014.1
17.5°	740.1	757.1	767.1	849.1	992.1
20°	727.1	735.1	744.1	809.1	967.1
22.5°	718.1	713.1	720.1	781.1	933.1
25°	712.1	693.1	701.1	759.1	893.1
27.5°	717.1	675.1	678.1	739.1	851.1
30°	718.1	653.1	654.1	718.1	804.1
32.5°	711.1	630.1	631.1	692.1	751.1
35°	694.1	603.1	602.1	662.1	679.1
37.5°	671.1	574.1	574.1	629.1	600.1
40°	643.1	545.1	548.1	586.1	530.1
42.5°	609.1	514.1	518.1	529.1	478.1
45°	572.1	484.1	487.1	447.1	438.1
47.5°	531.1	453.1	454.1	371.1	425.1
50°	482.1	421.1	417.1	318.0	424.1
52.5°	439.1	386.1	374.1	288.0	385.1
55°	397.1	349.0	323.0	265.0	357.1
57.5°	360.1	301.0	276.0	238.0	351.0
60°	326.0	254.0	235.0	209.0	322.0
62.5°	298.0	219.0	215.0	189.0	292.0
65°	268.0	195.0	194.0	172.0	248.0
67.5°	239.0	179.0	178.0	156.0	189.0
70°	208.0	162.0	160.0	139.0	140.0
72.5°	176.0	143.0	141.0	125.0	116.0
75°	144.0	121.0	120.0	109.0	94.0
77.5°	113.0	96.0	98.0	88.0	69.0
80°	81.0	70.0	72.0	63.0	52.0
82.5°	54.0	46.0	48.0	40.0	35.0
85°	30.0	26.0	27.0	21.0	16.0
87.5°	14.0	12.0	12.0	8.0	5.0
90°	9.1	5.8	5.4	3.7	2.1
92.5°	55.9	39.8	36.3	22.2	8.2
95°	137.6	77.5	71.1	45.4	19.8
97.5°	185.3	85.1	79.4	56.8	34.2
100°	202.7	91.5	86.4	65.8	45.3
102.5°	210.7	97.9	93.1	74.0	54.8
105°	216.6	107.4	103.3	87.1	70.9
107.5°	217.7	121.4	117.6	102.5	87.4
110°	216.1	129.2	125.8	112.1	98.5



TEST NUMBER: P934314

CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	216.1	138.7	135.4	122.4	109.4
115°	218.1	152.9	149.9	137.9	125.9
117.5°	222.2	166.7	164.0	153.1	142.2
120°	225.5	174.8	172.2	162.0	151.7
122.5°	230.2	184.3	181.7	171.4	161.0
125°	236.6	196.4	194.0	184.6	175.2
127.5°	243.0	208.2	205.8	196.3	186.7
130°	247.7	216.0	213.4	203.2	192.9
132.5°	251.5	222.4	219.8	209.6	199.3
135°	255.6	229.8	227.5	218.1	208.8
137.5°	261.8	239.3	237.0	227.7	218.5
140°	265.5	245.7	243.6	235.0	226.5
142.5°	268.7	250.4	248.4	240.6	232.7
145°	272.8	257.6	255.9	249.0	242.2
147.5°	278.9	266.7	265.0	258.4	251.7
150°	282.0	271.4	269.9	263.8	257.8
152.5°	284.1	274.5	273.4	268.8	264.2
155°	288.6	281.3	280.5	277.1	273.7
157.5°	293.1	288.1	287.3	284.0	280.7
160°	295.2	291.2	290.6	288.0	285.5
162.5°	297.4	294.5	294.0	292.1	290.2
165°	300.6	299.3	298.9	297.1	295.4
167.5°	303.0	301.9	301.7	300.9	300.1
170°	305.1	305.0	304.8	304.0	303.2
172.5°	305.2	305.2	305.2	305.0	304.8
175°	306.5	307.1	307.1	307.1	307.1
177.5°	306.6	307.1	307.1	307.1	307.1
180°	307.1	307.1	307.1	307.1	307.1



TEST NUMBER: P934314
 CATALOG NUMBER: SQ4-FA-050U-075D-835-1D-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	13.43	14.37	14.31	15.27	16.43	16.23	17.16	17.11	18.07	19.22
	3H	13.91	14.75	14.81	15.67	16.85	17.57	18.41	18.47	19.32	20.50
	4H	14.11	14.90	15.02	15.82	17.01	18.01	18.80	18.92	19.72	20.91
	6H	14.23	14.96	15.16	15.89	17.09	18.29	19.02	19.22	19.95	21.15
	8H	14.23	14.93	15.17	15.88	17.08	18.36	19.06	19.30	20.00	21.20
	12H	14.21	14.87	15.15	15.81	17.03	18.40	19.06	19.34	20.00	21.23
4H	2H	14.46	15.26	15.38	16.18	17.37	16.65	17.44	17.57	18.36	19.55
	3H	15.50	16.16	16.43	17.11	18.31	18.15	18.81	19.08	19.76	20.97
	4H	15.78	16.38	16.72	17.33	18.56	18.67	19.28	19.61	20.23	21.45
	6H	15.91	16.43	16.86	17.40	18.63	19.04	19.56	19.99	20.53	21.76
	8H	15.91	16.40	16.87	17.36	18.61	19.14	19.63	20.10	20.59	21.83
	12H	15.88	16.32	16.86	17.30	18.55	19.19	19.63	20.17	20.62	21.86
8H	4H	16.23	16.72	17.19	17.68	18.92	18.81	19.29	19.76	20.26	21.50
	6H	16.50	16.90	17.48	17.90	19.14	19.24	19.64	20.22	20.65	21.89
	8H	16.54	16.89	17.53	17.89	19.15	19.38	19.74	20.38	20.74	21.99
	12H	16.53	16.84	17.52	17.83	19.13	19.48	19.79	20.47	20.78	22.09
12H	4H	16.24	16.68	17.21	17.66	18.91	18.77	19.21	19.75	20.19	21.44
	6H	16.56	16.91	17.55	17.91	19.16	19.23	19.59	20.23	20.59	21.84
	8H	16.63	16.94	17.62	17.93	19.23	19.39	19.71	20.39	20.70	22.00