

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: P934498

Luminaire Tested: SQ4-FA-050U-100D-B35-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934498
REPORT IS A COMBINATION OF REPORTS P933698 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-050U-100D-B35-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

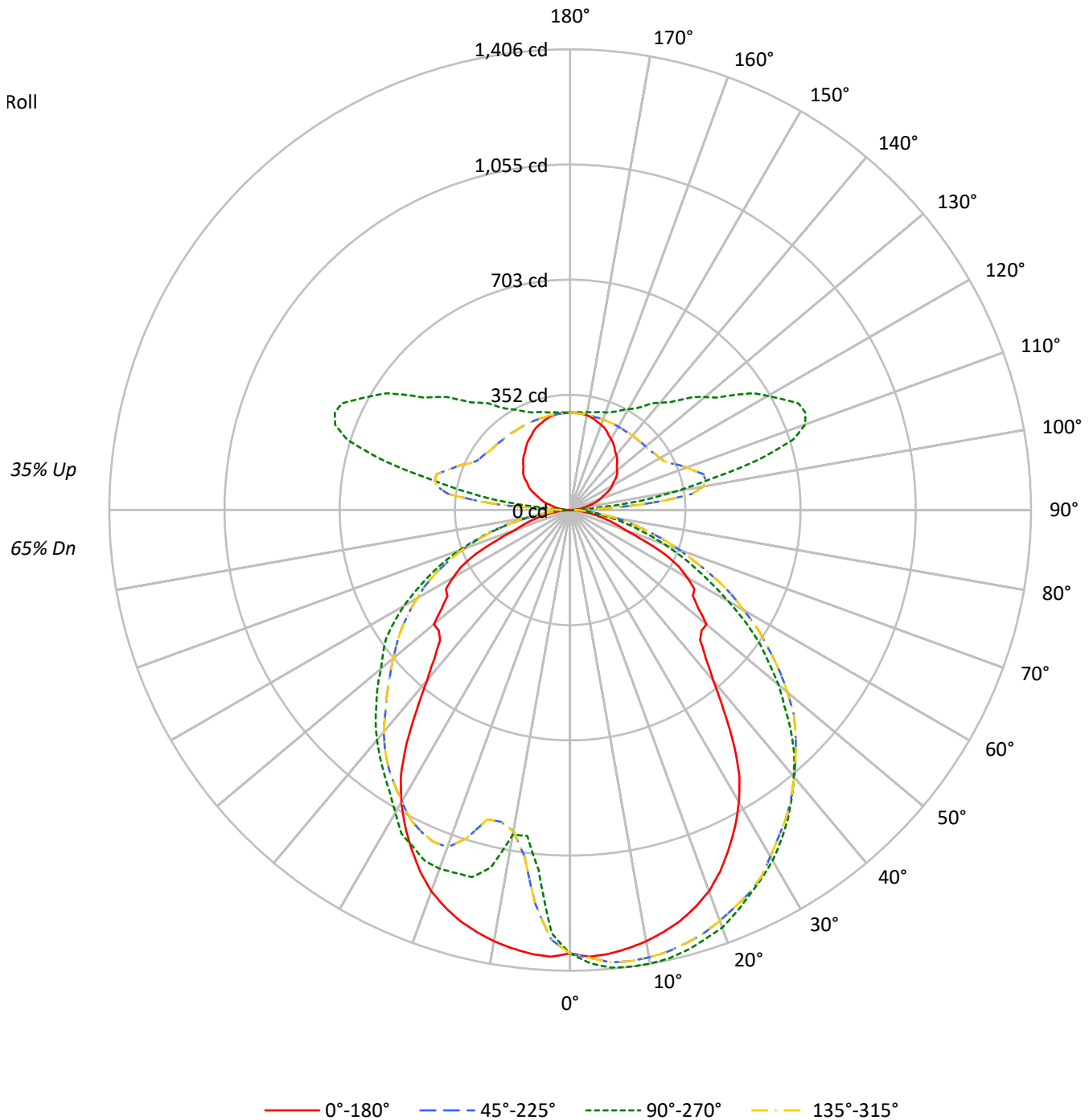
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5439.0 lumens
Efficiency: N/A
Efficacy: 120.3 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-Direct

Input Watts (W): 45.2
Input Voltage (V): NR
Input Current (A_{in}): 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

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Luminous Intensity Polar Plot





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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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	69	69	69	65
1	101	97	93	89	95	91	88	84	80	78	75	71	69	67	62	60	59	62	60	59	55
2	92	85	78	73	86	80	74	69	70	66	63	62	59	56	54	52	50	54	52	50	46
3	84	74	67	61	79	70	63	58	62	57	53	55	51	47	48	45	42	48	45	42	39
4	77	66	58	52	72	62	55	49	55	49	45	49	44	41	43	39	36	43	39	36	33
5	71	59	50	44	66	56	48	42	49	43	39	44	39	35	39	35	32	39	35	32	29
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	35	31	28	25
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25	32	28	25	22
8	56	43	35	30	52	41	34	29	37	31	27	33	28	24	29	25	22	29	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20	27	23	20	18
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12557	12557	12557	12557
5°	12638	12676	12638	9967
10°	12539	12486	12539	8927
15°	12388	12216	12388	10200
20°	12115	11895	12115	10221
25°	11571	11428	11571	10005
30°	10873	11040	10873	9530
35°	9678	10549	9678	9007
40°	8051	9971	8051	8612
45°	7180	9294	7180	8159
50°	7609	8489	7609	7702
55°	7140	7619	7140	7438
60°	7332	6471	7332	6812
65°	6616	5348	6616	5979
70°	4552	4263	4552	5013
75°	3945	3151	3945	3773
80°	3117	2083	3117	2269
85°	1689	1103	1689	937

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 11024 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.2	2.2
10°-20°	346.8	6.4
20°-30°	536.1	9.9
30°-40°	640.0	11.8
40°-50°	643.8	11.8
50°-60°	560.2	10.3
60°-70°	397.2	7.3
70°-80°	210.1	3.9
80°-90°	53.5	1.0
90°-100°	145.0	2.7
100°-110°	381.4	7.0
110°-120°	395.4	7.3
120°-130°	317.2	5.8
130°-140°	248.9	4.6
140°-150°	191.0	3.5
150°-160°	137.6	2.5
160°-170°	84.2	1.5
170°-180°	28.4	0.5
0°-30°	1005.1	18.5
0°-40°	1645.2	30.2
0°-60°	2849.1	52.4
0°-90°	3509.9	64.5
90°-120°	921.8	16.9
90°-150°	1678.9	30.9
90°-180°	1929.0	35.5
0°-180°	5439.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1353	1353	1353	1353	1353	
5°	1360	1402	1360	1102	1360	129
15°	1298	1389	1298	1160	1298	365
25°	1143	1296	1143	1134	1143	525
35°	869	1156	869	987	869	538
45°	561	952	561	836	561	449
55°	457	703	457	686	457	420
65°	318	424	318	474	318	303
75°	120	201	120	241	120	127
85°	20	51	20	44	20	28
90°	2	8	2	8	2	3
95°	19	88	19	88	19	21
105°	69	597	69	597	69	73
115°	122	769	122	769	122	120
125°	170	612	170	612	170	151
135°	202	475	202	475	202	157
145°	235	386	235	386	235	147
155°	265	332	265	332	265	122
165°	286	309	286	309	286	81
175°	298	300	298	300	298	28
180°	298	298	298	298	298	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2
2.5°	1364.7	1364.7	1372.5	1375.0	1375.0	1371.1	1367.4	1371.1	1382.7	1386.5	1385.3
5°	1359.7	1369.9	1384.0	1386.5	1389.1	1387.8	1385.3	1387.8	1400.6	1403.2	1404.5
7.5°	1349.4	1368.6	1386.5	1390.4	1394.2	1390.4	1389.1	1391.7	1404.5	1407.0	1407.0
10°	1336.6	1363.5	1384.0	1386.5	1390.4	1386.5	1386.5	1391.7	1404.5	1407.0	1408.3
12.5°	1318.7	1355.8	1375.0	1377.6	1382.7	1381.4	1380.1	1385.3	1398.1	1400.6	1400.6
15°	1298.2	1341.8	1359.7	1362.2	1371.1	1368.6	1368.6	1373.8	1387.8	1391.7	1390.4
17.5°	1270.1	1323.8	1344.3	1348.2	1354.6	1353.2	1354.6	1359.7	1372.5	1375.0	1376.3
20°	1238.0	1299.5	1323.8	1327.6	1334.0	1334.0	1334.0	1340.4	1353.2	1358.3	1358.3
22.5°	1194.5	1273.8	1299.5	1302.0	1309.7	1309.7	1312.3	1321.2	1332.8	1334.0	1334.0
25°	1143.3	1245.7	1267.5	1275.2	1282.9	1286.6	1290.5	1295.6	1299.5	1298.2	1299.5
27.5°	1089.5	1209.9	1238.0	1243.1	1253.4	1257.3	1262.3	1263.7	1264.9	1268.7	1266.2
30°	1029.4	1159.9	1202.1	1207.3	1223.9	1226.5	1221.4	1223.9	1230.3	1233.0	1235.5
32.5°	961.4	1085.7	1165.0	1176.6	1192.0	1184.2	1183.0	1186.8	1197.1	1197.1	1199.6
35°	869.3	1028.1	1130.5	1140.7	1152.2	1143.3	1148.4	1149.7	1156.1	1159.9	1158.6
37.5°	768.1	978.1	1094.7	1102.3	1111.2	1099.7	1107.5	1111.2	1116.4	1113.9	1113.9
40°	678.6	900.0	1052.4	1057.5	1065.2	1056.2	1063.9	1066.5	1069.0	1066.5	1065.2
42.5°	612.0	814.3	1007.6	1014.0	1008.8	1015.2	1017.8	1023.0	1019.1	1014.0	1014.0
45°	560.8	791.2	958.9	966.6	958.9	969.2	973.0	973.0	961.4	958.9	957.7
47.5°	544.1	745.2	910.3	910.3	906.4	919.2	925.7	916.7	905.1	901.4	901.4
50°	542.8	693.9	843.7	838.6	856.5	871.9	865.5	856.5	847.6	833.4	833.4
52.5°	492.9	631.2	758.0	777.1	805.3	814.3	804.0	795.1	779.7	773.3	768.1
55°	457.1	565.9	679.9	718.2	747.7	759.2	740.0	731.0	708.0	704.2	701.6
57.5°	449.4	471.1	608.1	656.8	692.6	691.4	679.9	663.2	644.0	640.1	638.9
60°	412.2	340.5	531.3	589.0	626.1	622.2	612.0	596.6	578.7	576.2	573.6
62.5°	373.8	247.1	444.3	509.6	562.0	560.8	551.8	528.8	516.0	509.6	504.5
65°	317.5	207.4	316.2	423.7	499.3	501.8	482.7	466.0	451.9	444.3	442.9
67.5°	242.0	169.0	213.8	353.4	439.2	436.5	412.2	404.6	386.6	382.8	375.1
70°	179.3	112.7	148.5	286.8	380.2	373.8	354.7	345.6	329.1	320.1	314.9
72.5°	148.5	90.9	108.8	222.8	320.1	312.4	295.7	285.5	271.4	263.8	258.6
75°	120.3	96.0	83.2	165.1	259.9	254.8	239.4	229.2	217.6	207.4	208.7
77.5°	88.4	89.6	66.6	121.6	206.1	198.5	189.4	176.6	171.5	161.3	161.3
80°	66.6	70.4	49.9	83.2	148.5	148.5	140.8	131.9	122.9	117.8	117.8
82.5°	44.8	44.8	37.1	52.5	101.2	97.3	92.2	89.6	84.5	82.0	82.0
85°	20.4	25.6	23.1	32.0	55.0	57.7	57.7	55.0	53.8	51.2	52.5
87.5°	6.4	11.5	14.1	17.9	28.2	29.5	30.7	30.7	30.7	32.0	32.0
90°	2.0	3.6	5.2	5.6	8.8	13.1	15.2	13.5	10.1	7.6	7.6
92.5°	7.9	21.5	35.2	38.6	54.2	75.0	85.5	74.9	53.8	38.0	36.4
95°	19.2	44.0	68.9	75.1	133.3	211.0	249.8	222.9	169.1	128.8	124.2
97.5°	33.1	55.0	76.9	82.5	179.6	309.1	373.8	356.9	322.9	297.4	288.7
100°	43.9	63.8	83.7	88.7	196.4	340.1	412.0	413.3	415.8	417.6	407.3
102.5°	53.1	71.7	90.2	94.9	204.2	349.9	422.8	444.5	487.8	520.3	511.3
105°	68.7	84.4	100.1	104.1	209.9	351.1	421.6	470.2	567.3	640.1	635.4
107.5°	84.7	99.3	114.0	117.6	211.0	335.5	397.7	465.4	600.9	702.4	703.6
110°	95.4	108.6	121.9	125.2	209.4	321.6	377.7	453.4	604.8	718.4	723.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	106.0	118.6	131.2	134.4	209.4	309.5	359.5	437.0	592.0	708.2	715.9
115°	122.0	133.6	145.3	148.2	211.3	295.5	337.7	412.3	561.6	673.6	684.2
117.5°	137.8	148.4	158.9	161.5	215.3	286.9	322.8	390.1	524.8	625.9	637.6
120°	147.0	157.0	166.9	169.4	218.5	284.0	316.8	378.3	501.5	593.8	605.2
122.5°	156.0	166.1	176.1	178.6	223.1	282.5	312.1	367.5	478.5	561.6	572.9
125°	169.8	178.9	188.0	190.3	229.3	281.2	307.2	354.3	448.5	519.1	529.5
127.5°	180.9	190.2	199.4	201.7	235.5	280.5	303.0	343.4	424.2	484.9	493.6
130°	186.9	196.9	206.8	209.3	240.0	280.9	301.4	337.4	409.4	463.4	471.4
132.5°	193.1	203.1	213.0	215.5	243.7	281.2	300.0	332.2	396.6	445.0	452.2
135°	202.3	211.3	220.4	222.7	247.7	280.9	297.6	324.5	378.5	419.0	425.2
137.5°	211.7	220.6	229.7	231.9	253.7	282.7	297.2	320.0	365.6	399.8	404.9
140°	219.5	227.7	236.0	238.1	257.3	282.9	295.7	315.5	354.9	384.5	389.2
142.5°	225.5	233.1	240.7	242.6	260.4	283.9	295.7	313.1	347.7	373.6	377.7
145°	234.7	241.3	248.0	249.6	264.3	284.0	293.8	307.9	336.2	357.5	360.6
147.5°	243.9	250.4	256.8	258.4	270.3	286.0	293.8	304.9	327.2	343.9	346.5
150°	249.8	255.6	261.5	263.0	273.3	286.9	293.8	303.2	322.0	336.1	338.3
152.5°	256.0	260.5	264.9	266.0	275.3	287.6	293.8	301.8	317.9	329.9	331.5
155°	265.2	268.5	271.8	272.6	279.7	289.1	293.8	300.2	313.0	322.6	323.6
157.5°	272.0	275.2	278.4	279.2	284.0	290.5	293.8	298.7	308.7	316.2	317.0
160°	276.6	279.1	281.6	282.2	286.0	291.2	293.8	298.1	306.6	313.0	313.4
162.5°	281.2	283.0	284.9	285.4	288.2	292.0	293.8	297.4	304.6	310.0	310.4
165°	286.2	287.9	289.6	290.0	291.3	292.9	293.8	296.3	301.5	305.3	305.7
167.5°	290.8	291.6	292.3	292.5	293.6	295.1	295.7	297.5	300.9	303.4	303.6
170°	293.8	294.6	295.4	295.5	295.6	295.7	295.7	297.5	300.9	303.4	303.4
172.5°	295.4	295.5	295.7	295.7	295.7	295.7	295.7	297.1	299.7	301.7	301.6
175°	297.6	297.6	297.6	297.6	297.0	296.1	295.7	296.6	298.4	299.6	299.6
177.5°	297.6	297.6	297.6	297.6	297.1	296.5	296.2	296.9	298.3	299.2	299.0
180°	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2
2.5°	1387.8	1384.0	1387.8	1385.3	1386.5	1382.7	1371.1	1367.4	1371.1	1375.0	1375.0
5°	1404.5	1401.9	1404.5	1404.5	1403.2	1400.6	1387.8	1385.3	1387.8	1389.1	1386.5
7.5°	1409.6	1405.7	1409.6	1407.0	1407.0	1404.5	1391.7	1389.1	1390.4	1394.2	1390.4
10°	1409.6	1405.7	1409.6	1408.3	1407.0	1404.5	1391.7	1386.5	1386.5	1390.4	1386.5
12.5°	1403.2	1400.6	1403.2	1400.6	1400.6	1398.1	1385.3	1380.1	1381.4	1382.7	1377.6
15°	1392.9	1389.1	1392.9	1390.4	1391.7	1387.8	1373.8	1368.6	1368.6	1371.1	1362.2
17.5°	1377.6	1372.5	1377.6	1376.3	1375.0	1372.5	1359.7	1354.6	1353.2	1354.6	1348.2
20°	1359.7	1355.8	1359.7	1358.3	1358.3	1353.2	1340.4	1334.0	1334.0	1334.0	1327.6
22.5°	1331.5	1327.6	1331.5	1334.0	1334.0	1332.8	1321.2	1312.3	1309.7	1309.7	1302.0
25°	1299.5	1295.6	1299.5	1299.5	1298.2	1299.5	1295.6	1290.5	1286.6	1282.9	1275.2
27.5°	1268.7	1266.2	1268.7	1266.2	1268.7	1264.9	1263.7	1262.3	1257.3	1253.4	1243.1
30°	1238.0	1235.5	1238.0	1235.5	1233.0	1230.3	1223.9	1221.4	1226.5	1223.9	1207.3
32.5°	1199.6	1197.1	1199.6	1199.6	1197.1	1197.1	1186.8	1183.0	1184.2	1192.0	1176.6
35°	1159.9	1156.1	1159.9	1158.6	1159.9	1156.1	1149.7	1148.4	1143.3	1152.2	1140.7
37.5°	1113.9	1110.0	1113.9	1113.9	1113.9	1116.4	1111.2	1107.5	1099.7	1111.2	1102.3
40°	1066.5	1061.3	1066.5	1065.2	1066.5	1069.0	1066.5	1063.9	1056.2	1065.2	1057.5
42.5°	1012.7	1011.4	1012.7	1014.0	1014.0	1019.1	1023.0	1017.8	1015.2	1008.8	1014.0
45°	955.0	952.5	955.0	957.7	958.9	961.4	973.0	973.0	969.2	958.9	966.6
47.5°	893.6	887.2	893.6	901.4	901.4	905.1	916.7	925.7	919.2	906.4	910.3
50°	828.3	829.7	828.3	833.4	833.4	847.6	856.5	865.5	871.9	856.5	838.6
52.5°	764.3	763.1	764.3	768.1	773.3	779.7	795.1	804.0	814.3	805.3	777.1
55°	700.3	702.9	700.3	701.6	704.2	708.0	731.0	740.0	759.2	747.7	718.2
57.5°	636.3	632.5	636.3	638.9	640.1	644.0	663.2	679.9	691.4	692.6	656.8
60°	562.0	556.9	562.0	573.6	576.2	578.7	596.6	612.0	622.2	626.1	589.0
62.5°	496.7	487.8	496.7	504.5	509.6	516.0	528.8	551.8	560.8	562.0	509.6
65°	427.6	423.7	427.6	442.9	444.3	451.9	466.0	482.7	501.8	499.3	423.7
67.5°	364.9	364.9	364.9	375.1	382.8	386.6	404.6	412.2	436.5	439.2	353.4
70°	307.3	306.0	307.3	314.9	320.1	329.1	345.6	354.7	373.8	380.2	286.8
72.5°	252.2	251.0	252.2	258.6	263.8	271.4	285.5	295.7	312.4	320.1	222.8
75°	203.6	201.0	203.6	208.7	207.4	217.6	229.2	239.4	254.8	259.9	165.1
77.5°	156.2	156.2	156.2	161.3	161.3	171.5	176.6	189.4	198.5	206.1	121.6
80°	116.5	115.2	116.5	117.8	117.8	122.9	131.9	140.8	148.5	148.5	83.2
82.5°	82.0	79.4	82.0	82.0	82.0	84.5	89.6	92.2	97.3	101.2	52.5
85°	51.2	51.2	51.2	52.5	51.2	53.8	55.0	57.7	57.7	55.0	32.0
87.5°	33.3	32.0	33.3	32.0	32.0	30.7	30.7	30.7	29.5	28.2	17.9
90°	7.6	7.6	7.6	7.6	7.6	10.1	13.5	15.2	13.1	8.8	5.6
92.5°	30.4	24.3	30.4	36.4	38.0	53.8	74.9	85.5	75.0	54.2	38.6
95°	105.9	87.7	105.9	124.2	128.8	169.1	222.9	249.8	211.0	133.3	75.1
97.5°	253.9	219.1	253.9	288.7	297.4	322.9	356.9	373.8	309.1	179.6	82.5
100°	365.8	324.3	365.8	407.3	417.6	415.8	413.3	412.0	340.1	196.4	88.7
102.5°	475.9	440.4	475.9	511.3	520.3	487.8	444.5	422.8	349.9	204.2	94.9
105°	616.3	597.2	616.3	635.4	640.1	567.3	470.2	421.6	351.1	209.9	104.1
107.5°	708.1	712.8	708.1	703.6	702.4	600.9	465.4	397.7	335.5	211.0	117.6
110°	743.2	763.1	743.2	723.4	718.4	604.8	453.4	377.7	321.6	209.4	125.2



TEST NUMBER: P934498

CATALOG NUMBER: SQ4-FA-050U-100D-B35-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	746.4	776.9	746.4	715.9	708.2	592.0	437.0	359.5	309.5	209.4	134.4
115°	726.6	768.9	726.6	684.2	673.6	561.6	412.3	337.7	295.5	211.3	148.2
117.5°	684.6	731.6	684.6	637.6	625.9	524.8	390.1	322.8	286.9	215.3	161.5
120°	650.8	696.4	650.8	605.2	593.8	501.5	378.3	316.8	284.0	218.5	169.4
122.5°	617.9	662.9	617.9	572.9	561.6	478.5	367.5	312.1	282.5	223.1	178.6
125°	570.8	612.3	570.8	529.5	519.1	448.5	354.3	307.2	281.2	229.3	190.3
127.5°	528.6	563.6	528.6	493.6	484.9	424.2	343.4	303.0	280.5	235.5	201.7
130°	503.8	536.1	503.8	471.4	463.4	409.4	337.4	301.4	280.9	240.0	209.3
132.5°	481.1	510.1	481.1	452.2	445.0	396.6	332.2	300.0	281.2	243.7	215.5
135°	450.2	475.1	450.2	425.2	419.0	378.5	324.5	297.6	280.9	247.7	222.7
137.5°	425.3	445.7	425.3	404.9	399.8	365.6	320.0	297.2	282.7	253.7	231.9
140°	408.3	427.4	408.3	389.2	384.5	354.9	315.5	295.7	282.9	257.3	238.1
142.5°	394.2	410.7	394.2	377.7	373.6	347.7	313.1	295.7	283.9	260.4	242.6
145°	373.1	385.5	373.1	360.6	357.5	336.2	307.9	293.8	284.0	264.3	249.6
147.5°	356.8	367.1	356.8	346.5	343.9	327.2	304.9	293.8	286.0	270.3	258.4
150°	346.6	354.9	346.6	338.3	336.1	322.0	303.2	293.8	286.9	273.3	263.0
152.5°	337.8	344.1	337.8	331.5	329.9	317.9	301.8	293.8	287.6	275.3	266.0
155°	327.8	332.0	327.8	323.6	322.6	313.0	300.2	293.8	289.1	279.7	272.6
157.5°	319.9	322.8	319.9	317.0	316.2	308.7	298.7	293.8	290.5	284.0	279.2
160°	315.1	316.8	315.1	313.4	313.0	306.6	298.1	293.8	291.2	286.0	282.2
162.5°	312.0	313.6	312.0	310.4	310.0	304.6	297.4	293.8	292.0	288.2	285.4
165°	307.5	309.2	307.5	305.7	305.3	301.5	296.3	293.8	292.9	291.3	290.0
167.5°	304.3	304.9	304.3	303.6	303.4	300.9	297.5	295.7	295.1	293.6	292.5
170°	303.4	303.4	303.4	303.4	303.4	300.9	297.5	295.7	295.7	295.6	295.5
172.5°	301.0	300.4	301.0	301.6	301.7	299.7	297.1	295.7	295.7	295.7	295.7
175°	299.6	299.6	299.6	299.6	299.6	298.4	296.6	295.7	296.1	297.0	297.6
177.5°	298.4	297.6	298.4	299.0	299.2	298.3	296.9	296.2	296.5	297.1	297.6
180°	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6



TEST NUMBER: P934498
 CATALOG NUMBER: SQ4-FA-050U-100D-B35-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2
2.5°	1372.5	1364.7	1364.7	1351.9	1346.8	1343.0	1336.6	1317.5	1312.3	1307.2	1314.8
5°	1384.0	1369.9	1359.7	1336.6	1317.5	1309.7	1285.4	1239.4	1208.5	1185.6	1172.8
7.5°	1386.5	1368.6	1349.4	1313.6	1267.5	1247.0	1172.8	1088.3	1065.2	1044.7	1031.9
10°	1384.0	1363.5	1336.6	1282.9	1174.0	1138.2	1063.9	1008.8	994.8	990.9	994.8
12.5°	1375.0	1355.8	1318.7	1229.1	1076.8	1052.4	1008.8	976.8	974.3	980.7	1015.2
15°	1359.7	1341.8	1298.2	1157.4	1023.0	1005.0	974.3	962.8	976.8	1021.6	1125.4
17.5°	1344.3	1323.8	1270.1	1086.9	982.0	969.2	947.4	970.5	1049.8	1110.0	1144.6
20°	1323.8	1299.5	1238.0	1035.8	952.5	941.0	930.7	1034.5	1094.7	1116.4	1135.6
22.5°	1299.5	1273.8	1194.5	999.9	921.8	912.8	919.2	1070.4	1094.7	1110.0	1126.7
25°	1267.5	1245.7	1143.3	971.7	897.5	887.2	911.5	1066.5	1080.5	1084.4	1117.6
27.5°	1238.0	1209.9	1089.5	946.1	868.0	864.2	917.9	1049.8	1060.1	1063.9	1099.7
30°	1202.1	1159.9	1029.4	919.2	837.3	836.1	919.2	1029.4	1026.8	1037.0	1072.9
32.5°	1165.0	1085.7	961.4	886.0	807.9	806.6	910.3	998.7	996.0	1010.2	1037.0
35°	1130.5	1028.1	869.3	847.6	770.7	772.0	888.5	962.8	964.1	976.8	993.5
37.5°	1094.7	978.1	768.1	805.3	734.9	734.9	859.0	929.5	926.9	930.7	953.8
40°	1052.4	900.0	678.6	750.2	701.6	697.8	823.3	893.6	884.7	883.4	915.4
42.5°	1007.6	814.3	612.0	677.2	663.2	658.0	779.7	850.1	833.4	837.3	878.3
45°	958.9	791.2	560.8	572.3	623.5	619.7	732.3	800.2	788.7	798.9	841.2
47.5°	910.3	745.2	544.1	475.0	581.2	579.9	679.9	751.6	745.2	755.3	800.2
50°	843.7	693.9	542.8	407.2	533.9	539.0	617.1	704.2	704.2	713.1	760.5
52.5°	758.0	631.2	492.9	368.7	478.8	494.2	562.0	663.2	665.7	674.7	717.0
55°	679.9	565.9	457.1	339.2	413.6	446.8	508.2	620.9	626.1	635.0	673.5
57.5°	608.1	471.1	449.4	304.8	353.4	385.4	460.9	579.9	582.6	590.2	627.3
60°	531.3	340.5	412.2	267.5	300.9	325.2	417.3	531.3	540.3	545.4	577.4
62.5°	444.3	247.1	373.8	242.0	275.3	280.4	381.5	485.2	496.7	500.6	519.8
65°	316.2	207.4	317.5	220.3	248.4	249.6	343.1	437.9	448.1	454.5	468.6
67.5°	213.8	169.0	242.0	199.7	227.9	229.2	306.0	382.8	396.9	402.0	411.0
70°	148.5	112.7	179.3	178.0	204.8	207.4	266.3	332.9	345.6	349.5	354.7
72.5°	108.8	90.9	148.5	160.1	180.5	183.0	225.3	276.6	289.3	293.2	295.7
75°	83.2	96.0	120.3	139.5	153.6	154.9	184.4	225.3	234.3	236.8	238.1
77.5°	66.6	89.6	88.4	112.7	125.5	122.9	144.7	174.1	181.8	181.8	181.8
80°	49.9	70.4	66.6	80.6	92.2	89.6	103.7	124.2	126.7	129.3	128.0
82.5°	37.1	44.8	44.8	51.2	61.4	58.9	69.1	80.6	80.6	80.6	83.2
85°	23.1	25.6	20.4	26.8	34.6	33.3	38.4	43.5	44.8	44.8	42.2
87.5°	14.1	11.5	6.4	10.3	15.4	15.4	17.9	19.2	17.9	17.9	17.9
90°	5.2	3.6	2.0	3.6	5.2	5.6	8.8	13.1	15.2	13.5	10.1
92.5°	35.2	21.5	7.9	21.5	35.2	38.6	54.2	75.0	85.5	74.9	53.8
95°	68.9	44.0	19.2	44.0	68.9	75.1	133.3	211.0	249.8	222.9	169.1
97.5°	76.9	55.0	33.1	55.0	76.9	82.5	179.6	309.1	373.8	356.9	322.9
100°	83.7	63.8	43.9	63.8	83.7	88.7	196.4	340.1	412.0	413.3	415.8
102.5°	90.2	71.7	53.1	71.7	90.2	94.9	204.2	349.9	422.8	444.5	487.8
105°	100.1	84.4	68.7	84.4	100.1	104.1	209.9	351.1	421.6	470.2	567.3
107.5°	114.0	99.3	84.7	99.3	114.0	117.6	211.0	335.5	397.7	465.4	600.9
110°	121.9	108.6	95.4	108.6	121.9	125.2	209.4	321.6	377.7	453.4	604.8



TEST NUMBER: P934498

CATALOG NUMBER: SQ4-FA-050U-100D-B35-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	131.2	118.6	106.0	118.6	131.2	134.4	209.4	309.5	359.5	437.0	592.0
115°	145.3	133.6	122.0	133.6	145.3	148.2	211.3	295.5	337.7	412.3	561.6
117.5°	158.9	148.4	137.8	148.4	158.9	161.5	215.3	286.9	322.8	390.1	524.8
120°	166.9	157.0	147.0	157.0	166.9	169.4	218.5	284.0	316.8	378.3	501.5
122.5°	176.1	166.1	156.0	166.1	176.1	178.6	223.1	282.5	312.1	367.5	478.5
125°	188.0	178.9	169.8	178.9	188.0	190.3	229.3	281.2	307.2	354.3	448.5
127.5°	199.4	190.2	180.9	190.2	199.4	201.7	235.5	280.5	303.0	343.4	424.2
130°	206.8	196.9	186.9	196.9	206.8	209.3	240.0	280.9	301.4	337.4	409.4
132.5°	213.0	203.1	193.1	203.1	213.0	215.5	243.7	281.2	300.0	332.2	396.6
135°	220.4	211.3	202.3	211.3	220.4	222.7	247.7	280.9	297.6	324.5	378.5
137.5°	229.7	220.6	211.7	220.6	229.7	231.9	253.7	282.7	297.2	320.0	365.6
140°	236.0	227.7	219.5	227.7	236.0	238.1	257.3	282.9	295.7	315.5	354.9
142.5°	240.7	233.1	225.5	233.1	240.7	242.6	260.4	283.9	295.7	313.1	347.7
145°	248.0	241.3	234.7	241.3	248.0	249.6	264.3	284.0	293.8	307.9	336.2
147.5°	256.8	250.4	243.9	250.4	256.8	258.4	270.3	286.0	293.8	304.9	327.2
150°	261.5	255.6	249.8	255.6	261.5	263.0	273.3	286.9	293.8	303.2	322.0
152.5°	264.9	260.5	256.0	260.5	264.9	266.0	275.3	287.6	293.8	301.8	317.9
155°	271.8	268.5	265.2	268.5	271.8	272.6	279.7	289.1	293.8	300.2	313.0
157.5°	278.4	275.2	272.0	275.2	278.4	279.2	284.0	290.5	293.8	298.7	308.7
160°	281.6	279.1	276.6	279.1	281.6	282.2	286.0	291.2	293.8	298.1	306.6
162.5°	284.9	283.0	281.2	283.0	284.9	285.4	288.2	292.0	293.8	297.4	304.6
165°	289.6	287.9	286.2	287.9	289.6	290.0	291.3	292.9	293.8	296.3	301.5
167.5°	292.3	291.6	290.8	291.6	292.3	292.5	293.6	295.1	295.7	297.5	300.9
170°	295.4	294.6	293.8	294.6	295.4	295.5	295.6	295.7	295.7	297.5	300.9
172.5°	295.7	295.5	295.4	295.5	295.7	295.7	295.7	295.7	295.7	297.1	299.7
175°	297.6	297.6	297.6	297.6	297.6	297.6	297.0	296.1	295.7	296.6	298.4
177.5°	297.6	297.6	297.6	297.6	297.6	297.6	297.1	296.5	296.2	296.9	298.3
180°	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6



TEST NUMBER: P934498
 CATALOG NUMBER: SQ4-FA-050U-100D-B35-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2	1353.2
2.5°	1305.9	1302.0	1307.2	1293.0	1307.2	1302.0	1305.9	1314.8	1307.2	1312.3	1317.5
5°	1145.8	1139.4	1119.0	1102.3	1119.0	1139.4	1145.8	1172.8	1185.6	1208.5	1239.4
7.5°	1024.2	1019.1	1014.0	1003.7	1014.0	1019.1	1024.2	1031.9	1044.7	1065.2	1088.3
10°	997.3	998.7	1006.3	1005.0	1006.3	998.7	997.3	994.8	990.9	994.8	1008.8
12.5°	1066.5	1078.0	1120.3	1117.6	1120.3	1078.0	1066.5	1015.2	980.7	974.3	976.8
15°	1145.8	1149.7	1158.6	1159.9	1158.6	1149.7	1145.8	1125.4	1021.6	976.8	962.8
17.5°	1153.5	1154.9	1161.2	1161.2	1161.2	1154.9	1153.5	1144.6	1110.0	1049.8	970.5
20°	1147.1	1149.7	1162.5	1165.0	1162.5	1149.7	1147.1	1135.6	1116.4	1094.7	1034.5
22.5°	1144.6	1149.7	1159.9	1158.6	1159.9	1149.7	1144.6	1126.7	1110.0	1094.7	1070.4
25°	1131.8	1131.8	1133.1	1134.3	1133.1	1131.8	1131.8	1117.6	1084.4	1080.5	1066.5
27.5°	1104.9	1107.5	1115.1	1113.9	1115.1	1107.5	1104.9	1099.7	1063.9	1060.1	1049.8
30°	1080.5	1078.0	1071.6	1066.5	1071.6	1078.0	1080.5	1072.9	1037.0	1026.8	1029.4
32.5°	1039.5	1033.1	1026.8	1023.0	1026.8	1033.1	1039.5	1037.0	1010.2	996.0	998.7
35°	990.9	992.3	990.9	987.1	990.9	992.3	990.9	993.5	976.8	964.1	962.8
37.5°	956.4	958.9	957.7	952.5	957.7	958.9	956.4	953.8	930.7	926.9	929.5
40°	920.6	921.8	920.6	916.7	920.6	921.8	920.6	915.4	883.4	884.7	893.6
42.5°	886.0	884.7	880.8	878.3	880.8	884.7	886.0	878.3	837.3	833.4	850.1
45°	846.2	847.6	839.8	836.1	839.8	847.6	846.2	841.2	798.9	788.7	800.2
47.5°	806.6	806.6	800.2	796.3	800.2	806.6	806.6	800.2	755.3	745.2	751.6
50°	764.3	763.1	754.1	752.8	754.1	763.1	764.3	760.5	713.1	704.2	704.2
52.5°	715.7	715.7	717.0	719.5	717.0	715.7	715.7	717.0	674.7	665.7	663.2
55°	673.5	674.7	683.6	686.2	683.6	674.7	673.5	673.5	635.0	626.1	620.9
57.5°	629.8	629.8	636.3	636.3	636.3	629.8	629.8	627.3	590.2	582.6	579.9
60°	579.9	582.6	587.6	586.3	587.6	582.6	579.9	577.4	545.4	540.3	531.3
62.5°	527.4	530.0	531.3	528.8	531.3	530.0	527.4	519.8	500.6	496.7	485.2
65°	472.4	475.0	476.3	473.7	476.3	475.0	472.4	468.6	454.5	448.1	437.9
67.5°	416.1	414.8	413.6	418.6	413.6	414.8	416.1	411.0	402.0	396.9	382.8
70°	358.4	358.4	357.2	359.8	357.2	358.4	358.4	354.7	349.5	345.6	332.9
72.5°	297.0	295.7	300.9	297.0	300.9	295.7	297.0	295.7	293.2	289.3	276.6
75°	236.8	239.4	236.8	240.7	236.8	239.4	236.8	238.1	236.8	234.3	225.3
77.5°	180.5	183.0	180.5	180.5	180.5	183.0	180.5	181.8	181.8	181.8	174.1
80°	128.0	126.7	126.7	125.5	126.7	126.7	128.0	128.0	129.3	126.7	124.2
82.5°	82.0	80.6	80.6	83.2	80.6	80.6	82.0	83.2	80.6	80.6	80.6
85°	44.8	46.1	43.5	43.5	43.5	46.1	44.8	42.2	44.8	44.8	43.5
87.5°	16.7	15.4	15.4	15.4	15.4	15.4	16.7	17.9	17.9	17.9	19.2
90°	7.6	7.6	7.6	7.6	7.6	7.6	7.6	10.1	13.5	15.2	13.1
92.5°	38.0	36.4	30.4	24.3	30.4	36.4	38.0	53.8	74.9	85.5	75.0
95°	128.8	124.2	105.9	87.7	105.9	124.2	128.8	169.1	222.9	249.8	211.0
97.5°	297.4	288.7	253.9	219.1	253.9	288.7	297.4	322.9	356.9	373.8	309.1
100°	417.6	407.3	365.8	324.3	365.8	407.3	417.6	415.8	413.3	412.0	340.1
102.5°	520.3	511.3	475.9	440.4	475.9	511.3	520.3	487.8	444.5	422.8	349.9
105°	640.1	635.4	616.3	597.2	616.3	635.4	640.1	567.3	470.2	421.6	351.1
107.5°	702.4	703.6	708.1	712.8	708.1	703.6	702.4	600.9	465.4	397.7	335.5
110°	718.4	723.4	743.2	763.1	743.2	723.4	718.4	604.8	453.4	377.7	321.6



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CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	708.2	715.9	746.4	776.9	746.4	715.9	708.2	592.0	437.0	359.5	309.5
115°	673.6	684.2	726.6	768.9	726.6	684.2	673.6	561.6	412.3	337.7	295.5
117.5°	625.9	637.6	684.6	731.6	684.6	637.6	625.9	524.8	390.1	322.8	286.9
120°	593.8	605.2	650.8	696.4	650.8	605.2	593.8	501.5	378.3	316.8	284.0
122.5°	561.6	572.9	617.9	662.9	617.9	572.9	561.6	478.5	367.5	312.1	282.5
125°	519.1	529.5	570.8	612.3	570.8	529.5	519.1	448.5	354.3	307.2	281.2
127.5°	484.9	493.6	528.6	563.6	528.6	493.6	484.9	424.2	343.4	303.0	280.5
130°	463.4	471.4	503.8	536.1	503.8	471.4	463.4	409.4	337.4	301.4	280.9
132.5°	445.0	452.2	481.1	510.1	481.1	452.2	445.0	396.6	332.2	300.0	281.2
135°	419.0	425.2	450.2	475.1	450.2	425.2	419.0	378.5	324.5	297.6	280.9
137.5°	399.8	404.9	425.3	445.7	425.3	404.9	399.8	365.6	320.0	297.2	282.7
140°	384.5	389.2	408.3	427.4	408.3	389.2	384.5	354.9	315.5	295.7	282.9
142.5°	373.6	377.7	394.2	410.7	394.2	377.7	373.6	347.7	313.1	295.7	283.9
145°	357.5	360.6	373.1	385.5	373.1	360.6	357.5	336.2	307.9	293.8	284.0
147.5°	343.9	346.5	356.8	367.1	356.8	346.5	343.9	327.2	304.9	293.8	286.0
150°	336.1	338.3	346.6	354.9	346.6	338.3	336.1	322.0	303.2	293.8	286.9
152.5°	329.9	331.5	337.8	344.1	337.8	331.5	329.9	317.9	301.8	293.8	287.6
155°	322.6	323.6	327.8	332.0	327.8	323.6	322.6	313.0	300.2	293.8	289.1
157.5°	316.2	317.0	319.9	322.8	319.9	317.0	316.2	308.7	298.7	293.8	290.5
160°	313.0	313.4	315.1	316.8	315.1	313.4	313.0	306.6	298.1	293.8	291.2
162.5°	310.0	310.4	312.0	313.6	312.0	310.4	310.0	304.6	297.4	293.8	292.0
165°	305.3	305.7	307.5	309.2	307.5	305.7	305.3	301.5	296.3	293.8	292.9
167.5°	303.4	303.6	304.3	304.9	304.3	303.6	303.4	300.9	297.5	295.7	295.1
170°	303.4	303.4	303.4	303.4	303.4	303.4	303.4	300.9	297.5	295.7	295.7
172.5°	301.7	301.6	301.0	300.4	301.0	301.6	301.7	299.7	297.1	295.7	295.7
175°	299.6	299.6	299.6	299.6	299.6	299.6	299.6	298.4	296.6	295.7	296.1
177.5°	299.2	299.0	298.4	297.6	298.4	299.0	299.2	298.3	296.9	296.2	296.5
180°	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	1353.2	1353.2	1353.2	1353.2	1353.2
2.5°	1336.6	1343.0	1346.8	1351.9	1364.7
5°	1285.4	1309.7	1317.5	1336.6	1359.7
7.5°	1172.8	1247.0	1267.5	1313.6	1349.4
10°	1063.9	1138.2	1174.0	1282.9	1336.6
12.5°	1008.8	1052.4	1076.8	1229.1	1318.7
15°	974.3	1005.0	1023.0	1157.4	1298.2
17.5°	947.4	969.2	982.0	1086.9	1270.1
20°	930.7	941.0	952.5	1035.8	1238.0
22.5°	919.2	912.8	921.8	999.9	1194.5
25°	911.5	887.2	897.5	971.7	1143.3
27.5°	917.9	864.2	868.0	946.1	1089.5
30°	919.2	836.1	837.3	919.2	1029.4
32.5°	910.3	806.6	807.9	886.0	961.4
35°	888.5	772.0	770.7	847.6	869.3
37.5°	859.0	734.9	734.9	805.3	768.1
40°	823.3	697.8	701.6	750.2	678.6
42.5°	779.7	658.0	663.2	677.2	612.0
45°	732.3	619.7	623.5	572.3	560.8
47.5°	679.9	579.9	581.2	475.0	544.1
50°	617.1	539.0	533.9	407.2	542.8
52.5°	562.0	494.2	478.8	368.7	492.9
55°	508.2	446.8	413.6	339.2	457.1
57.5°	460.9	385.4	353.4	304.8	449.4
60°	417.3	325.2	300.9	267.5	412.2
62.5°	381.5	280.4	275.3	242.0	373.8
65°	343.1	249.6	248.4	220.3	317.5
67.5°	306.0	229.2	227.9	199.7	242.0
70°	266.3	207.4	204.8	178.0	179.3
72.5°	225.3	183.0	180.5	160.1	148.5
75°	184.4	154.9	153.6	139.5	120.3
77.5°	144.7	122.9	125.5	112.7	88.4
80°	103.7	89.6	92.2	80.6	66.6
82.5°	69.1	58.9	61.4	51.2	44.8
85°	38.4	33.3	34.6	26.8	20.4
87.5°	17.9	15.4	15.4	10.3	6.4
90°	8.8	5.6	5.2	3.6	2.0
92.5°	54.2	38.6	35.2	21.5	7.9
95°	133.3	75.1	68.9	44.0	19.2
97.5°	179.6	82.5	76.9	55.0	33.1
100°	196.4	88.7	83.7	63.8	43.9
102.5°	204.2	94.9	90.2	71.7	53.1
105°	209.9	104.1	100.1	84.4	68.7
107.5°	211.0	117.6	114.0	99.3	84.7
110°	209.4	125.2	121.9	108.6	95.4



TEST NUMBER: P934498
 CATALOG NUMBER: SQ4-FA-050U-100D-B35-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	209.4	134.4	131.2	118.6	106.0
115°	211.3	148.2	145.3	133.6	122.0
117.5°	215.3	161.5	158.9	148.4	137.8
120°	218.5	169.4	166.9	157.0	147.0
122.5°	223.1	178.6	176.1	166.1	156.0
125°	229.3	190.3	188.0	178.9	169.8
127.5°	235.5	201.7	199.4	190.2	180.9
130°	240.0	209.3	206.8	196.9	186.9
132.5°	243.7	215.5	213.0	203.1	193.1
135°	247.7	222.7	220.4	211.3	202.3
137.5°	253.7	231.9	229.7	220.6	211.7
140°	257.3	238.1	236.0	227.7	219.5
142.5°	260.4	242.6	240.7	233.1	225.5
145°	264.3	249.6	248.0	241.3	234.7
147.5°	270.3	258.4	256.8	250.4	243.9
150°	273.3	263.0	261.5	255.6	249.8
152.5°	275.3	266.0	264.9	260.5	256.0
155°	279.7	272.6	271.8	268.5	265.2
157.5°	284.0	279.2	278.4	275.2	272.0
160°	286.0	282.2	281.6	279.1	276.6
162.5°	288.2	285.4	284.9	283.0	281.2
165°	291.3	290.0	289.6	287.9	286.2
167.5°	293.6	292.5	292.3	291.6	290.8
170°	295.6	295.5	295.4	294.6	293.8
172.5°	295.7	295.7	295.7	295.5	295.4
175°	297.0	297.6	297.6	297.6	297.6
177.5°	297.1	297.6	297.6	297.6	297.6
180°	297.6	297.6	297.6	297.6	297.6



TEST NUMBER: P934498
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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	14.83	15.84	15.65	16.68	17.73	17.62	18.63	18.45	19.48	20.53
	3H	15.32	16.22	16.15	17.07	18.15	18.97	19.88	19.81	20.73	21.81
	4H	15.51	16.37	16.37	17.23	18.32	19.42	20.27	20.27	21.13	22.22
	6H	15.64	16.43	16.50	17.30	18.40	19.70	20.49	20.56	21.36	22.46
	8H	15.65	16.40	16.52	17.28	18.38	19.78	20.53	20.65	21.41	22.51
	12H	15.62	16.34	16.50	17.22	18.34	19.82	20.53	20.69	21.41	22.54
4H	2H	15.87	16.73	16.73	17.59	18.67	18.05	18.91	18.91	19.77	20.86
	3H	16.91	17.62	17.78	18.52	19.62	19.56	20.28	20.43	21.17	22.27
	4H	17.19	17.84	18.07	18.73	19.86	20.09	20.74	20.97	21.63	22.76
	6H	17.33	17.89	18.22	18.80	19.93	20.46	21.02	21.35	21.93	23.06
	8H	17.34	17.86	18.23	18.77	19.91	20.56	21.09	21.46	21.99	23.14
	12H	17.31	17.78	18.23	18.71	19.86	20.62	21.09	21.54	22.02	23.17
8H	4H	17.65	18.18	18.55	19.09	20.23	20.23	20.75	21.13	21.66	22.80
	6H	17.92	18.35	18.85	19.30	20.45	20.66	21.10	21.59	22.05	23.19
	8H	17.97	18.35	18.90	19.29	20.45	20.81	21.20	21.75	22.14	23.30
	12H	17.96	18.29	18.89	19.23	20.44	20.91	21.25	21.85	22.18	23.40
12H	4H	17.67	18.14	18.58	19.06	20.21	20.20	20.67	21.12	21.60	22.75
	6H	17.98	18.37	18.92	19.31	20.47	20.66	21.05	21.60	21.99	23.15
	8H	18.06	18.39	18.99	19.33	20.54	20.83	21.16	21.76	22.10	23.31