

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: P936022

Luminaire Tested: SQ4-FA-150U-100D-927-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

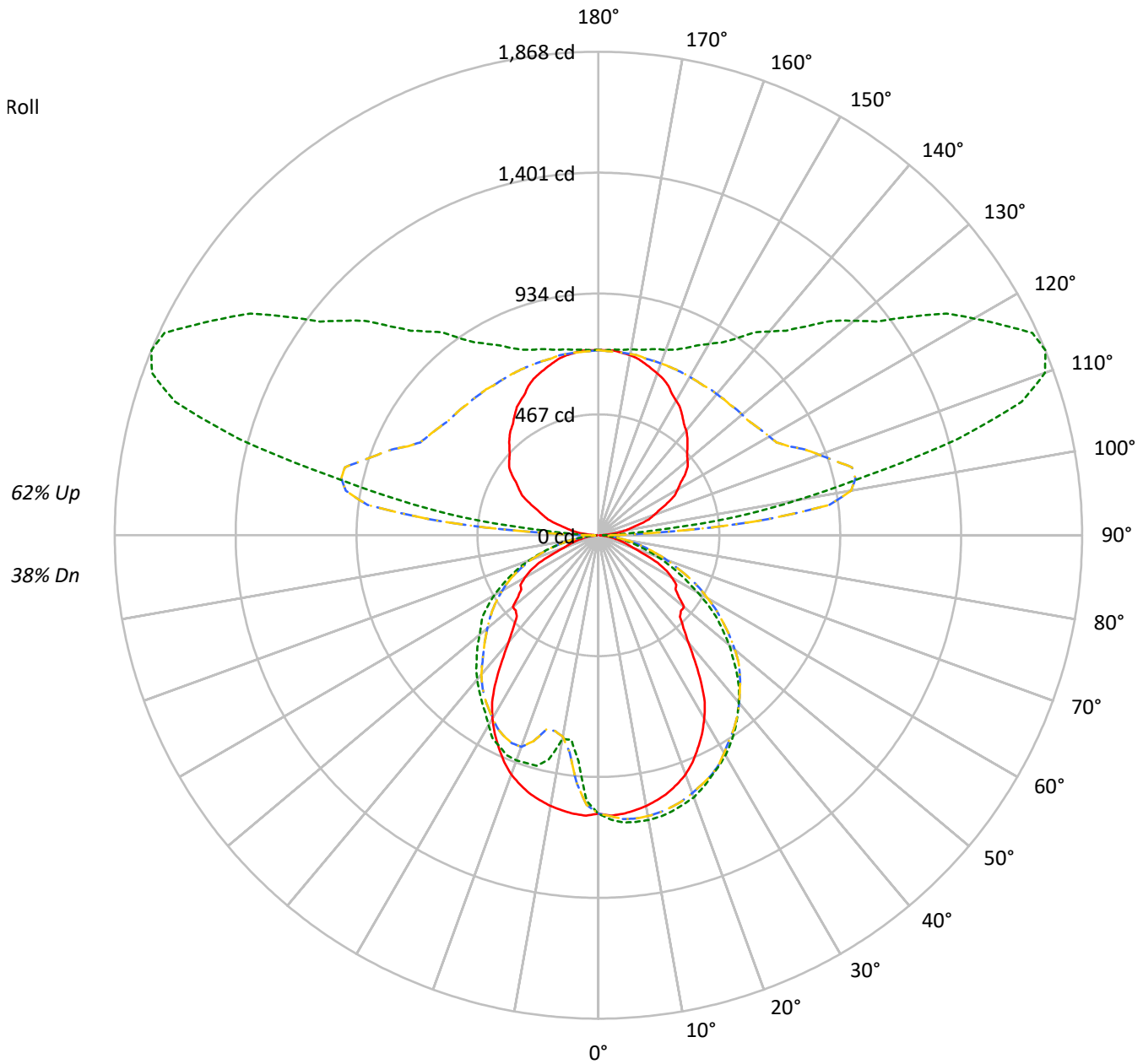
Test Method: LM-79-2019  
Report Number: P936022  
REPORT IS A COMBINATION OF REPORTS P933778 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-150U-100D-927-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7429.8 lumens  
Efficiency: N/A  
Efficacy: 102.6 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): 72.4  
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

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### Luminous Intensity Polar Plot



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



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**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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	38				38
1	95	91	87	84	86	83	79	76	67	65	63	53	51	50	40	39	38	32				32
2	87	79	73	68	78	72	67	63	59	55	52	46	44	42	35	33	32	27				27
3	79	70	62	57	71	63	57	52	52	47	44	41	38	35	31	29	27	23				23
4	72	62	54	48	65	56	49	44	46	41	37	36	33	30	28	25	23	19				19
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17				17
6	61	49	41	35	55	45	38	33	37	32	28	29	26	23	22	20	18	15				15
7	56	44	36	31	51	40	34	29	33	28	24	27	23	20	20	18	16	13				13
8	52	40	32	27	47	37	30	25	30	25	21	24	21	18	19	16	14	12				12
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	10				10
10	45	33	26	21	41	31	24	20	25	21	17	21	17	14	16	13	11	9				9

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	9978	9978	9978	9978
5°	10043	10073	10043	7921
10°	9964	9922	9964	7093
15°	9844	9707	9844	8105
20°	9627	9453	9627	8123
25°	9194	9081	9194	7951
30°	8640	8773	8640	7573
35°	7691	8383	7691	7157
40°	6397	7924	6397	6843
45°	5705	7386	5705	6483
50°	6047	6746	6047	6120
55°	5673	6055	5673	5911
60°	5827	5141	5827	5413
65°	5258	4250	5258	4752
70°	3618	3388	3618	3983
75°	3135	2504	3135	2999
80°	2476	1656	2476	1803
85°	1341	877	1341	745

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°  
 Vertical Angle: 45°  
 Luminance: 8761 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.1	1.3
10°-20°	275.6	3.7
20°-30°	426.0	5.7
30°-40°	508.6	6.8
40°-50°	511.6	6.9
50°-60°	445.1	6.0
60°-70°	315.6	4.2
70°-80°	167.0	2.2
80°-90°	44.3	0.6
90°-100°	348.8	4.7
100°-110°	917.1	12.3
110°-120°	950.9	12.8
120°-130°	762.7	10.3
130°-140°	598.5	8.1
140°-150°	459.3	6.2
150°-160°	330.8	4.5
160°-170°	202.4	2.7
170°-180°	68.4	0.9
0°-30°	798.7	10.8
0°-40°	1307.3	17.6
0°-60°	2264.0	30.5
0°-90°	2790.9	37.6
90°-120°	2216.7	29.8
90°-150°	4037.3	54.3
90°-180°	4639.0	62.4
0°-180°	7429.8	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1075	1075	1075	1075	1075	
5°	1080	1114	1080	876	1080	102
15°	1032	1104	1032	922	1032	290
25°	908	1030	908	901	908	417
35°	691	919	691	784	691	427
45°	446	757	446	664	446	357
55°	363	559	363	545	363	334
65°	252	337	252	376	252	241
75°	96	160	96	191	96	101
85°	16	41	16	35	16	22
90°	5	18	5	18	5	5
95°	46	211	46	211	46	51
105°	165	1436	165	1436	165	175
115°	293	1849	293	1849	293	290
125°	408	1472	408	1472	408	362
135°	486	1142	486	1142	486	376
145°	564	927	564	927	564	354
155°	638	798	638	798	638	293
165°	688	743	688	743	688	194
175°	716	720	716	720	716	68
180°	716	716	716	716	716	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3
2.5°	1084.5	1084.5	1090.6	1092.6	1092.6	1089.6	1086.5	1089.6	1098.7	1101.8	1100.8
5°	1080.5	1088.5	1099.8	1101.8	1103.8	1102.8	1100.8	1102.8	1113.0	1115.0	1116.0
7.5°	1072.3	1087.5	1101.8	1104.9	1107.9	1104.9	1103.8	1105.9	1116.0	1118.0	1118.0
10°	1062.1	1083.5	1099.8	1101.8	1104.9	1101.8	1101.8	1105.9	1116.0	1118.0	1119.1
12.5°	1047.9	1077.4	1092.6	1094.7	1098.7	1097.7	1096.7	1100.8	1111.0	1113.0	1113.0
15°	1031.6	1066.2	1080.5	1082.5	1089.6	1087.5	1087.5	1091.6	1102.8	1105.9	1104.9
17.5°	1009.2	1052.0	1068.2	1071.3	1076.4	1075.3	1076.4	1080.5	1090.6	1092.6	1093.6
20°	983.8	1032.6	1052.0	1055.0	1060.1	1060.1	1060.1	1065.1	1075.3	1079.4	1079.4
22.5°	949.2	1012.2	1032.6	1034.6	1040.7	1040.7	1042.8	1049.9	1059.1	1060.1	1060.1
25°	908.5	989.9	1007.2	1013.3	1019.4	1022.4	1025.5	1029.6	1032.6	1031.6	1032.6
27.5°	865.8	961.4	983.8	987.8	996.0	999.1	1003.1	1004.2	1005.2	1008.2	1006.2
30°	818.0	921.7	955.3	959.3	972.6	974.6	970.6	972.6	977.7	979.7	981.8
32.5°	764.0	862.7	925.8	934.9	947.2	941.0	940.0	943.1	951.3	951.3	953.3
35°	690.8	817.0	898.4	906.4	915.6	908.5	912.5	913.6	918.7	921.7	920.7
37.5°	610.4	777.2	869.9	876.0	883.0	873.9	880.0	883.0	887.1	885.1	885.1
40°	539.2	715.2	836.3	840.3	846.5	839.3	845.4	847.5	849.5	847.5	846.5
42.5°	486.3	647.0	800.6	805.7	801.6	806.7	808.8	812.9	809.8	805.7	805.7
45°	445.6	628.7	762.0	768.1	762.0	770.2	773.2	773.2	764.0	762.0	761.0
47.5°	432.4	592.1	723.3	723.3	720.3	730.4	735.6	728.4	719.3	716.3	716.3
50°	431.4	551.4	670.4	666.4	680.6	692.8	687.8	680.6	673.5	662.3	662.3
52.5°	391.7	501.6	602.3	617.5	639.9	647.0	638.9	631.8	619.5	614.5	610.4
55°	363.2	449.7	540.2	570.7	594.1	603.3	588.0	580.9	562.6	559.6	557.5
57.5°	357.1	374.4	483.3	521.9	550.4	549.4	540.2	527.0	511.7	508.7	507.7
60°	327.6	270.6	422.2	468.0	497.5	494.4	486.3	474.1	459.8	457.8	455.8
62.5°	297.1	196.4	353.0	404.9	446.6	445.6	438.5	420.2	410.0	404.9	400.9
65°	252.3	164.8	251.3	336.7	396.8	398.8	383.5	370.3	359.1	353.0	352.0
67.5°	192.3	134.3	169.9	280.8	349.0	346.9	327.6	321.5	307.2	304.2	298.1
70°	142.5	89.6	118.0	227.9	302.1	297.1	281.8	274.7	261.5	254.3	250.2
72.5°	118.0	72.2	86.5	177.0	254.3	248.2	235.0	226.8	215.7	209.6	205.5
75°	95.6	76.3	66.1	131.2	206.5	202.4	190.3	182.1	172.9	164.8	165.9
77.5°	70.2	71.2	52.9	96.6	163.8	157.7	150.5	140.4	136.3	128.2	128.2
80°	52.9	56.0	39.7	66.1	118.0	118.0	111.9	104.8	97.6	93.6	93.6
82.5°	35.6	35.6	29.5	41.7	80.4	77.3	73.2	71.2	67.1	65.1	65.1
85°	16.2	20.3	18.3	25.4	43.7	45.8	45.8	43.7	42.7	40.7	41.7
87.5°	5.1	9.2	11.2	14.2	22.4	23.4	24.4	24.4	24.4	25.4	25.4
90°	4.8	8.6	12.5	13.5	21.2	31.4	36.5	32.4	24.3	18.2	18.2
92.5°	19.2	51.8	84.5	92.7	130.3	180.4	205.5	180.1	129.4	91.2	87.6
95°	46.1	105.9	165.6	180.6	320.6	507.4	600.8	536.2	406.8	309.8	298.8
97.5°	79.7	132.4	185.2	198.4	431.9	743.4	899.1	858.2	776.4	715.1	694.2
100°	105.6	153.5	201.3	213.2	472.4	818.0	990.8	993.8	999.8	1004.2	979.3
102.5°	127.7	172.4	217.0	228.2	491.0	841.5	1016.7	1068.8	1172.9	1251.1	1229.8
105°	165.2	203.0	240.8	250.2	504.7	844.1	1013.8	1130.5	1364.1	1539.2	1527.8
107.5°	203.7	238.9	274.1	282.9	507.4	806.6	956.2	1119.0	1444.8	1689.1	1691.8
110°	229.5	261.3	293.2	301.1	503.5	773.2	908.1	1090.2	1454.4	1727.5	1739.4



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	255.0	285.4	315.7	323.2	503.7	744.2	864.5	1050.8	1423.5	1703.0	1721.3
115°	293.4	321.4	349.3	356.4	508.3	710.9	812.1	991.6	1350.7	1619.9	1645.4
117.5°	331.4	356.8	382.2	388.5	517.7	690.0	776.1	938.1	1262.1	1505.1	1533.4
120°	353.4	377.4	401.2	407.3	525.4	682.9	761.7	909.7	1205.7	1427.8	1455.2
122.5°	375.1	399.2	423.3	429.4	536.5	679.3	750.7	884.0	1150.5	1350.5	1377.5
125°	408.3	430.2	452.2	457.7	551.3	676.2	738.7	851.9	1078.3	1248.2	1273.1
127.5°	435.1	457.3	479.5	485.0	566.2	674.4	728.6	825.8	1020.2	1166.1	1187.1
130°	449.5	473.4	497.3	503.3	577.1	675.5	724.7	811.3	984.4	1114.2	1133.6
132.5°	464.4	488.3	512.2	518.2	585.9	676.2	721.3	798.8	953.8	1070.0	1087.4
135°	486.5	508.3	530.0	535.5	595.5	675.5	715.6	780.5	910.2	1007.5	1022.6
137.5°	509.0	530.6	552.2	557.6	609.9	679.8	714.6	769.5	879.2	961.5	973.7
140°	527.8	547.7	567.6	572.5	618.8	680.4	711.2	758.6	853.4	924.5	935.9
142.5°	542.2	560.6	578.9	583.5	626.1	682.8	711.2	752.9	836.1	898.6	908.4
145°	564.3	580.3	596.3	600.3	635.7	682.9	706.5	740.5	808.6	859.6	867.1
147.5°	586.4	602.0	617.5	621.5	649.8	687.6	706.5	733.3	786.8	827.0	833.1
150°	600.8	614.9	628.9	632.5	657.1	690.0	706.5	729.1	774.3	808.3	813.3
152.5°	615.7	626.4	637.0	639.7	662.0	691.6	706.5	725.8	764.5	793.4	797.2
155°	637.8	645.7	653.6	655.6	672.5	695.2	706.5	721.9	752.6	775.6	778.2
157.5°	654.1	661.8	669.4	671.4	683.1	698.7	706.5	718.4	742.3	760.2	762.0
160°	665.1	671.1	677.1	678.6	687.9	700.3	706.5	716.7	737.2	752.5	753.5
162.5°	676.2	680.7	685.1	686.3	693.0	702.0	706.5	715.1	732.4	745.4	746.3
165°	688.2	692.2	696.3	697.3	700.4	704.5	706.5	712.6	725.0	734.3	735.3
167.5°	699.2	701.2	703.1	703.5	706.1	709.6	711.2	715.3	723.4	729.5	730.0
170°	706.5	708.4	710.3	710.8	710.9	711.2	711.2	715.3	723.4	729.5	729.5
172.5°	710.3	710.7	711.2	711.2	711.2	711.2	711.2	714.5	720.9	725.6	725.3
175°	715.6	715.6	715.6	715.6	714.1	712.2	711.2	713.3	717.3	720.4	720.4
177.5°	715.6	715.6	715.6	715.6	714.5	713.0	712.2	713.9	717.0	719.4	718.9
180°	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3
2.5°	1102.8	1099.8	1102.8	1100.8	1101.8	1098.7	1089.6	1086.5	1089.6	1092.6	1092.6
5°	1116.0	1114.0	1116.0	1116.0	1115.0	1113.0	1102.8	1100.8	1102.8	1103.8	1101.8
7.5°	1120.1	1117.0	1120.1	1118.0	1118.0	1116.0	1105.9	1103.8	1104.9	1107.9	1104.9
10°	1120.1	1117.0	1120.1	1119.1	1118.0	1116.0	1105.9	1101.8	1101.8	1104.9	1101.8
12.5°	1115.0	1113.0	1115.0	1113.0	1113.0	1111.0	1100.8	1096.7	1097.7	1098.7	1094.7
15°	1106.9	1103.8	1106.9	1104.9	1105.9	1102.8	1091.6	1087.5	1087.5	1089.6	1082.5
17.5°	1094.7	1090.6	1094.7	1093.6	1092.6	1090.6	1080.5	1076.4	1075.3	1076.4	1071.3
20°	1080.5	1077.4	1080.5	1079.4	1079.4	1075.3	1065.1	1060.1	1060.1	1060.1	1055.0
22.5°	1058.1	1055.0	1058.1	1060.1	1060.1	1059.1	1049.9	1042.8	1040.7	1040.7	1034.6
25°	1032.6	1029.6	1032.6	1032.6	1031.6	1032.6	1029.6	1025.5	1022.4	1019.4	1013.3
27.5°	1008.2	1006.2	1008.2	1006.2	1008.2	1005.2	1004.2	1003.1	999.1	996.0	987.8
30°	983.8	981.8	983.8	981.8	979.7	977.7	972.6	970.6	974.6	972.6	959.3
32.5°	953.3	951.3	953.3	953.3	951.3	951.3	943.1	940.0	941.0	947.2	934.9
35°	921.7	918.7	921.7	920.7	921.7	918.7	913.6	912.5	908.5	915.6	906.4
37.5°	885.1	882.0	885.1	885.1	885.1	887.1	883.0	880.0	873.9	883.0	876.0
40°	847.5	843.4	847.5	846.5	847.5	849.5	847.5	845.4	839.3	846.5	840.3
42.5°	804.7	803.7	804.7	805.7	805.7	809.8	812.9	808.8	806.7	801.6	805.7
45°	758.9	756.9	758.9	761.0	762.0	764.0	773.2	773.2	770.2	762.0	768.1
47.5°	710.1	705.0	710.1	716.3	716.3	719.3	728.4	735.6	730.4	720.3	723.3
50°	658.2	659.3	658.2	662.3	662.3	673.5	680.6	687.8	692.8	680.6	666.4
52.5°	607.4	606.4	607.4	610.4	614.5	619.5	631.8	638.9	647.0	639.9	617.5
55°	556.5	558.6	556.5	557.5	559.6	562.6	580.9	588.0	603.3	594.1	570.7
57.5°	505.7	502.6	505.7	507.7	508.7	511.7	527.0	540.2	549.4	550.4	521.9
60°	446.6	442.5	446.6	455.8	457.8	459.8	474.1	486.3	494.4	497.5	468.0
62.5°	394.7	387.6	394.7	400.9	404.9	410.0	420.2	438.5	445.6	446.6	404.9
65°	339.8	336.7	339.8	352.0	353.0	359.1	370.3	383.5	398.8	396.8	336.7
67.5°	290.0	290.0	290.0	298.1	304.2	307.2	321.5	327.6	346.9	349.0	280.8
70°	244.2	243.2	244.2	250.2	254.3	261.5	274.7	281.8	297.1	302.1	227.9
72.5°	200.4	199.4	200.4	205.5	209.6	215.7	226.8	235.0	248.2	254.3	177.0
75°	161.8	159.7	161.8	165.9	164.8	172.9	182.1	190.3	202.4	206.5	131.2
77.5°	124.1	124.1	124.1	128.2	128.2	136.3	140.4	150.5	157.7	163.8	96.6
80°	92.6	91.6	92.6	93.6	93.6	97.6	104.8	111.9	118.0	118.0	66.1
82.5°	65.1	63.1	65.1	65.1	65.1	67.1	71.2	73.2	77.3	80.4	41.7
85°	40.7	40.7	40.7	41.7	40.7	42.7	43.7	45.8	45.8	43.7	25.4
87.5°	26.5	25.4	26.5	25.4	25.4	24.4	24.4	24.4	23.4	22.4	14.2
90°	18.2	18.2	18.2	18.2	18.2	24.3	32.4	36.5	31.4	21.2	13.5
92.5°	73.1	58.6	73.1	87.6	91.2	129.4	180.1	205.5	180.4	130.3	92.7
95°	254.8	210.8	254.8	298.8	309.8	406.8	536.2	600.8	507.4	320.6	180.6
97.5°	610.5	526.8	610.5	694.2	715.1	776.4	858.2	899.1	743.4	431.9	198.4
100°	879.6	779.9	879.6	979.3	1004.2	999.8	993.8	990.8	818.0	472.4	213.2
102.5°	1144.4	1059.0	1144.4	1229.8	1251.1	1172.9	1068.8	1016.7	841.5	491.0	228.2
105°	1481.9	1436.0	1481.9	1527.8	1539.2	1364.1	1130.5	1013.8	844.1	504.7	250.2
107.5°	1702.9	1714.0	1702.9	1691.8	1689.1	1444.8	1119.0	956.2	806.6	507.4	282.9
110°	1787.2	1835.1	1787.2	1739.4	1727.5	1454.4	1090.2	908.1	773.2	503.5	301.1





TEST NUMBER: P936022

CATALOG NUMBER: SQ4-FA-150U-100D-927-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	1794.8	1868.2	1794.8	1721.3	1703.0	1423.5	1050.8	864.5	744.2	503.7	323.2
115°	1747.2	1849.0	1747.2	1645.4	1619.9	1350.7	991.6	812.1	710.9	508.3	356.4
117.5°	1646.3	1759.1	1646.3	1533.4	1505.1	1262.1	938.1	776.1	690.0	517.7	388.5
120°	1564.9	1674.7	1564.9	1455.2	1427.8	1205.7	909.7	761.7	682.9	525.4	407.3
122.5°	1485.8	1594.0	1485.8	1377.5	1350.5	1150.5	884.0	750.7	679.3	536.5	429.4
125°	1372.8	1472.5	1372.8	1273.1	1248.2	1078.3	851.9	738.7	676.2	551.3	457.7
127.5°	1271.2	1355.3	1271.2	1187.1	1166.1	1020.2	825.8	728.6	674.4	566.2	485.0
130°	1211.3	1289.0	1211.3	1133.6	1114.2	984.4	811.3	724.7	675.5	577.1	503.3
132.5°	1156.9	1226.5	1156.9	1087.4	1070.0	953.8	798.8	721.3	676.2	585.9	518.2
135°	1082.5	1142.5	1082.5	1022.6	1007.5	910.2	780.5	715.6	675.5	595.5	535.5
137.5°	1022.9	1071.9	1022.9	973.7	961.5	879.2	769.5	714.6	679.8	609.9	557.6
140°	981.8	1027.7	981.8	935.9	924.5	853.4	758.6	711.2	680.4	618.8	572.5
142.5°	947.9	987.4	947.9	908.4	898.6	836.1	752.9	711.2	682.8	626.1	583.5
145°	897.0	926.9	897.0	867.1	859.6	808.6	740.5	706.5	682.9	635.7	600.3
147.5°	857.9	882.7	857.9	833.1	827.0	786.8	733.3	706.5	687.6	649.8	621.5
150°	833.4	853.4	833.4	813.3	808.3	774.3	729.1	706.5	690.0	657.1	632.5
152.5°	812.4	827.4	812.4	797.2	793.4	764.5	725.8	706.5	691.6	662.0	639.7
155°	788.2	798.2	788.2	778.2	775.6	752.6	721.9	706.5	695.2	672.5	655.6
157.5°	769.0	776.1	769.0	762.0	760.2	742.3	718.4	706.5	698.7	683.1	671.4
160°	757.6	761.7	757.6	753.5	752.5	737.2	716.7	706.5	700.3	687.9	678.6
162.5°	750.1	754.0	750.1	746.3	745.4	732.4	715.1	706.5	702.0	693.0	686.3
165°	739.4	743.4	739.4	735.3	734.3	725.0	712.6	706.5	704.5	700.4	697.3
167.5°	731.7	733.3	731.7	730.0	729.5	723.4	715.3	711.2	709.6	706.1	703.5
170°	729.5	729.5	729.5	729.5	729.5	723.4	715.3	711.2	711.2	710.9	710.8
172.5°	723.8	722.3	723.8	725.3	725.6	720.9	714.5	711.2	711.2	711.2	711.2
175°	720.4	720.4	720.4	720.4	720.4	717.3	713.3	711.2	712.2	714.1	715.6
177.5°	717.3	715.6	717.3	718.9	719.4	717.0	713.9	712.2	713.0	714.5	715.6
180°	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6



TEST NUMBER: P936022

CATALOG NUMBER: SQ4-FA-150U-100D-927-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3
2.5°	1090.6	1084.5	1084.5	1074.3	1070.2	1067.2	1062.1	1046.9	1042.8	1038.7	1044.8
5°	1099.8	1088.5	1080.5	1062.1	1046.9	1040.7	1021.4	984.8	960.3	942.1	931.9
7.5°	1101.8	1087.5	1072.3	1043.8	1007.2	990.9	931.9	864.8	846.5	830.1	820.0
10°	1099.8	1083.5	1062.1	1019.4	932.9	904.4	845.4	801.6	790.5	787.4	790.5
12.5°	1092.6	1077.4	1047.9	976.7	855.6	836.3	801.6	776.2	774.2	779.3	806.7
15°	1080.5	1066.2	1031.6	919.7	812.9	798.6	774.2	765.1	776.2	811.8	894.3
17.5°	1068.2	1052.0	1009.2	863.7	780.3	770.2	752.8	771.2	834.2	882.0	909.5
20°	1052.0	1032.6	983.8	823.1	756.9	747.7	739.6	822.1	869.9	887.1	902.4
22.5°	1032.6	1012.2	949.2	794.6	732.5	725.3	730.4	850.5	869.9	882.0	895.3
25°	1007.2	989.9	908.5	772.2	713.2	705.0	724.3	847.5	858.6	861.7	888.1
27.5°	983.8	961.4	865.8	751.8	689.8	686.7	729.4	834.2	842.4	845.4	873.9
30°	955.3	921.7	818.0	730.4	665.4	664.4	730.4	818.0	815.9	824.1	852.5
32.5°	925.8	862.7	764.0	704.0	641.9	640.9	723.3	793.6	791.5	802.7	824.1
35°	898.4	817.0	690.8	673.5	612.5	613.5	706.0	765.1	766.1	776.2	789.5
37.5°	869.9	777.2	610.4	639.9	584.0	584.0	682.6	738.6	736.6	739.6	757.9
40°	836.3	715.2	539.2	596.1	557.5	554.5	654.2	710.1	703.0	702.0	727.4
42.5°	800.6	647.0	486.3	538.2	527.0	522.9	619.5	675.5	662.3	665.4	697.9
45°	762.0	628.7	445.6	454.8	495.4	492.4	581.9	635.9	626.7	634.9	668.4
47.5°	723.3	592.1	432.4	377.5	461.8	460.8	540.2	597.2	592.1	600.2	635.9
50°	670.4	551.4	431.4	323.6	424.3	428.3	490.3	559.6	559.6	566.6	604.3
52.5°	602.3	501.6	391.7	293.0	380.5	392.7	446.6	527.0	529.0	536.2	569.7
55°	540.2	449.7	363.2	269.6	328.6	355.0	403.9	493.4	497.5	504.6	535.2
57.5°	483.3	374.4	357.1	242.2	280.8	306.2	366.2	460.8	462.9	469.0	498.5
60°	422.2	270.6	327.6	212.6	239.1	258.4	331.6	422.2	429.4	433.4	458.8
62.5°	353.0	196.4	297.1	192.3	218.8	222.8	303.1	385.5	394.7	397.8	413.0
65°	251.3	164.8	252.3	175.0	197.4	198.4	272.7	348.0	356.0	361.1	372.4
67.5°	169.9	134.3	192.3	158.7	181.1	182.1	243.2	304.2	315.4	319.5	326.6
70°	118.0	89.6	142.5	141.4	162.8	164.8	211.6	264.5	274.7	277.7	281.8
72.5°	86.5	72.2	118.0	127.2	143.5	145.5	179.0	219.8	229.9	233.0	235.0
75°	66.1	76.3	95.6	110.9	122.0	123.1	146.5	179.0	186.2	188.2	189.2
77.5°	52.9	71.2	70.2	89.6	99.7	97.6	115.0	138.4	144.5	144.5	144.5
80°	39.7	56.0	52.9	64.1	73.2	71.2	82.4	98.7	100.7	102.7	101.7
82.5°	29.5	35.6	35.6	40.7	48.8	46.8	54.9	64.1	64.1	64.1	66.1
85°	18.3	20.3	16.2	21.3	27.5	26.5	30.5	34.6	35.6	35.6	33.6
87.5°	11.2	9.2	5.1	8.2	12.2	12.2	14.2	15.2	14.2	14.2	14.2
90°	12.5	8.6	4.8	8.6	12.5	13.5	21.2	31.4	36.5	32.4	24.3
92.5°	84.5	51.8	19.2	51.8	84.5	92.7	130.3	180.4	205.5	180.1	129.4
95°	165.6	105.9	46.1	105.9	165.6	180.6	320.6	507.4	600.8	536.2	406.8
97.5°	185.2	132.4	79.7	132.4	185.2	198.4	431.9	743.4	899.1	858.2	776.4
100°	201.3	153.5	105.6	153.5	201.3	213.2	472.4	818.0	990.8	993.8	999.8
102.5°	217.0	172.4	127.7	172.4	217.0	228.2	491.0	841.5	1016.7	1068.8	1172.9
105°	240.8	203.0	165.2	203.0	240.8	250.2	504.7	844.1	1013.8	1130.5	1364.1
107.5°	274.1	238.9	203.7	238.9	274.1	282.9	507.4	806.6	956.2	1119.0	1444.8
110°	293.2	261.3	229.5	261.3	293.2	301.1	503.5	773.2	908.1	1090.2	1454.4



TEST NUMBER: P936022

CATALOG NUMBER: SQ4-FA-150U-100D-927-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	315.7	285.4	255.0	285.4	315.7	323.2	503.7	744.2	864.5	1050.8	1423.5
115°	349.3	321.4	293.4	321.4	349.3	356.4	508.3	710.9	812.1	991.6	1350.7
117.5°	382.2	356.8	331.4	356.8	382.2	388.5	517.7	690.0	776.1	938.1	1262.1
120°	401.2	377.4	353.4	377.4	401.2	407.3	525.4	682.9	761.7	909.7	1205.7
122.5°	423.3	399.2	375.1	399.2	423.3	429.4	536.5	679.3	750.7	884.0	1150.5
125°	452.2	430.2	408.3	430.2	452.2	457.7	551.3	676.2	738.7	851.9	1078.3
127.5°	479.5	457.3	435.1	457.3	479.5	485.0	566.2	674.4	728.6	825.8	1020.2
130°	497.3	473.4	449.5	473.4	497.3	503.3	577.1	675.5	724.7	811.3	984.4
132.5°	512.2	488.3	464.4	488.3	512.2	518.2	585.9	676.2	721.3	798.8	953.8
135°	530.0	508.3	486.5	508.3	530.0	535.5	595.5	675.5	715.6	780.5	910.2
137.5°	552.2	530.6	509.0	530.6	552.2	557.6	609.9	679.8	714.6	769.5	879.2
140°	567.6	547.7	527.8	547.7	567.6	572.5	618.8	680.4	711.2	758.6	853.4
142.5°	578.9	560.6	542.2	560.6	578.9	583.5	626.1	682.8	711.2	752.9	836.1
145°	596.3	580.3	564.3	580.3	596.3	600.3	635.7	682.9	706.5	740.5	808.6
147.5°	617.5	602.0	586.4	602.0	617.5	621.5	649.8	687.6	706.5	733.3	786.8
150°	628.9	614.9	600.8	614.9	628.9	632.5	657.1	690.0	706.5	729.1	774.3
152.5°	637.0	626.4	615.7	626.4	637.0	639.7	662.0	691.6	706.5	725.8	764.5
155°	653.6	645.7	637.8	645.7	653.6	655.6	672.5	695.2	706.5	721.9	752.6
157.5°	669.4	661.8	654.1	661.8	669.4	671.4	683.1	698.7	706.5	718.4	742.3
160°	677.1	671.1	665.1	671.1	677.1	678.6	687.9	700.3	706.5	716.7	737.2
162.5°	685.1	680.7	676.2	680.7	685.1	686.3	693.0	702.0	706.5	715.1	732.4
165°	696.3	692.2	688.2	692.2	696.3	697.3	700.4	704.5	706.5	712.6	725.0
167.5°	703.1	701.2	699.2	701.2	703.1	703.5	706.1	709.6	711.2	715.3	723.4
170°	710.3	708.4	706.5	708.4	710.3	710.8	710.9	711.2	711.2	715.3	723.4
172.5°	711.2	710.7	710.3	710.7	711.2	711.2	711.2	711.2	711.2	714.5	720.9
175°	715.6	715.6	715.6	715.6	715.6	715.6	714.1	712.2	711.2	713.3	717.3
177.5°	715.6	715.6	715.6	715.6	715.6	715.6	714.5	713.0	712.2	713.9	717.0
180°	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6



TEST NUMBER: P936022

CATALOG NUMBER: SQ4-FA-150U-100D-927-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3	1075.3
2.5°	1037.7	1034.6	1038.7	1027.5	1038.7	1034.6	1037.7	1044.8	1038.7	1042.8	1046.9
5°	910.5	905.4	889.2	876.0	889.2	905.4	910.5	931.9	942.1	960.3	984.8
7.5°	813.9	809.8	805.7	797.6	805.7	809.8	813.9	820.0	830.1	846.5	864.8
10°	792.5	793.6	799.6	798.6	799.6	793.6	792.5	790.5	787.4	790.5	801.6
12.5°	847.5	856.6	890.2	888.1	890.2	856.6	847.5	806.7	779.3	774.2	776.2
15°	910.5	913.6	920.7	921.7	920.7	913.6	910.5	894.3	811.8	776.2	765.1
17.5°	916.6	917.7	922.8	922.8	922.8	917.7	916.6	909.5	882.0	834.2	771.2
20°	911.5	913.6	923.8	925.8	923.8	913.6	911.5	902.4	887.1	869.9	822.1
22.5°	909.5	913.6	921.7	920.7	921.7	913.6	909.5	895.3	882.0	869.9	850.5
25°	899.4	899.4	900.4	901.4	900.4	899.4	899.4	888.1	861.7	858.6	847.5
27.5°	878.0	880.0	886.1	885.1	886.1	880.0	878.0	873.9	845.4	842.4	834.2
30°	858.6	856.6	851.5	847.5	851.5	856.6	858.6	852.5	824.1	815.9	818.0
32.5°	826.1	821.0	815.9	812.9	815.9	821.0	826.1	824.1	802.7	791.5	793.6
35°	787.4	788.5	787.4	784.4	787.4	788.5	787.4	789.5	776.2	766.1	765.1
37.5°	760.0	762.0	761.0	756.9	761.0	762.0	760.0	757.9	739.6	736.6	738.6
40°	731.5	732.5	731.5	728.4	731.5	732.5	731.5	727.4	702.0	703.0	710.1
42.5°	704.0	703.0	699.9	697.9	699.9	703.0	704.0	697.9	665.4	662.3	675.5
45°	672.4	673.5	667.4	664.4	667.4	673.5	672.4	668.4	634.9	626.7	635.9
47.5°	640.9	640.9	635.9	632.8	635.9	640.9	640.9	635.9	600.2	592.1	597.2
50°	607.4	606.4	599.2	598.2	599.2	606.4	607.4	604.3	566.6	559.6	559.6
52.5°	568.7	568.7	569.7	571.7	569.7	568.7	568.7	569.7	536.2	529.0	527.0
55°	535.2	536.2	543.2	545.3	543.2	536.2	535.2	535.2	504.6	497.5	493.4
57.5°	500.5	500.5	505.7	505.7	505.7	500.5	500.5	498.5	469.0	462.9	460.8
60°	460.8	462.9	466.9	465.9	466.9	462.9	460.8	458.8	433.4	429.4	422.2
62.5°	419.1	421.2	422.2	420.2	422.2	421.2	419.1	413.0	397.8	394.7	385.5
65°	375.4	377.5	378.5	376.5	378.5	377.5	375.4	372.4	361.1	356.0	348.0
67.5°	330.6	329.6	328.6	332.6	328.6	329.6	330.6	326.6	319.5	315.4	304.2
70°	284.8	284.8	283.8	285.9	283.8	284.8	284.8	281.8	277.7	274.7	264.5
72.5°	236.0	235.0	239.1	236.0	239.1	235.0	236.0	235.0	233.0	229.9	219.8
75°	188.2	190.3	188.2	191.3	188.2	190.3	188.2	189.2	188.2	186.2	179.0
77.5°	143.5	145.5	143.5	143.5	143.5	145.5	143.5	144.5	144.5	144.5	138.4
80°	101.7	100.7	100.7	99.7	100.7	100.7	101.7	101.7	102.7	100.7	98.7
82.5°	65.1	64.1	64.1	66.1	64.1	64.1	65.1	66.1	64.1	64.1	64.1
85°	35.6	36.7	34.6	34.6	34.6	36.7	35.6	33.6	35.6	35.6	34.6
87.5°	13.2	12.2	12.2	12.2	12.2	12.2	13.2	14.2	14.2	14.2	15.2
90°	18.2	18.2	18.2	18.2	18.2	18.2	18.2	24.3	32.4	36.5	31.4
92.5°	91.2	87.6	73.1	58.6	73.1	87.6	91.2	129.4	180.1	205.5	180.4
95°	309.8	298.8	254.8	210.8	254.8	298.8	309.8	406.8	536.2	600.8	507.4
97.5°	715.1	694.2	610.5	526.8	610.5	694.2	715.1	776.4	858.2	899.1	743.4
100°	1004.2	979.3	879.6	779.9	879.6	979.3	1004.2	999.8	993.8	990.8	818.0
102.5°	1251.1	1229.8	1144.4	1059.0	1144.4	1229.8	1251.1	1172.9	1068.8	1016.7	841.5
105°	1539.2	1527.8	1481.9	1436.0	1481.9	1527.8	1539.2	1364.1	1130.5	1013.8	844.1
107.5°	1689.1	1691.8	1702.9	1714.0	1702.9	1691.8	1689.1	1444.8	1119.0	956.2	806.6
110°	1727.5	1739.4	1787.2	1835.1	1787.2	1739.4	1727.5	1454.4	1090.2	908.1	773.2



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**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1703.0	1721.3	1794.8	1868.2	1794.8	1721.3	1703.0	1423.5	1050.8	864.5	744.2
115°	1619.9	1645.4	1747.2	1849.0	1747.2	1645.4	1619.9	1350.7	991.6	812.1	710.9
117.5°	1505.1	1533.4	1646.3	1759.1	1646.3	1533.4	1505.1	1262.1	938.1	776.1	690.0
120°	1427.8	1455.2	1564.9	1674.7	1564.9	1455.2	1427.8	1205.7	909.7	761.7	682.9
122.5°	1350.5	1377.5	1485.8	1594.0	1485.8	1377.5	1350.5	1150.5	884.0	750.7	679.3
125°	1248.2	1273.1	1372.8	1472.5	1372.8	1273.1	1248.2	1078.3	851.9	738.7	676.2
127.5°	1166.1	1187.1	1271.2	1355.3	1271.2	1187.1	1166.1	1020.2	825.8	728.6	674.4
130°	1114.2	1133.6	1211.3	1289.0	1211.3	1133.6	1114.2	984.4	811.3	724.7	675.5
132.5°	1070.0	1087.4	1156.9	1226.5	1156.9	1087.4	1070.0	953.8	798.8	721.3	676.2
135°	1007.5	1022.6	1082.5	1142.5	1082.5	1022.6	1007.5	910.2	780.5	715.6	675.5
137.5°	961.5	973.7	1022.9	1071.9	1022.9	973.7	961.5	879.2	769.5	714.6	679.8
140°	924.5	935.9	981.8	1027.7	981.8	935.9	924.5	853.4	758.6	711.2	680.4
142.5°	898.6	908.4	947.9	987.4	947.9	908.4	898.6	836.1	752.9	711.2	682.8
145°	859.6	867.1	897.0	926.9	897.0	867.1	859.6	808.6	740.5	706.5	682.9
147.5°	827.0	833.1	857.9	882.7	857.9	833.1	827.0	786.8	733.3	706.5	687.6
150°	808.3	813.3	833.4	853.4	833.4	813.3	808.3	774.3	729.1	706.5	690.0
152.5°	793.4	797.2	812.4	827.4	812.4	797.2	793.4	764.5	725.8	706.5	691.6
155°	775.6	778.2	788.2	798.2	788.2	778.2	775.6	752.6	721.9	706.5	695.2
157.5°	760.2	762.0	769.0	776.1	769.0	762.0	760.2	742.3	718.4	706.5	698.7
160°	752.5	753.5	757.6	761.7	757.6	753.5	752.5	737.2	716.7	706.5	700.3
162.5°	745.4	746.3	750.1	754.0	750.1	746.3	745.4	732.4	715.1	706.5	702.0
165°	734.3	735.3	739.4	743.4	739.4	735.3	734.3	725.0	712.6	706.5	704.5
167.5°	729.5	730.0	731.7	733.3	731.7	730.0	729.5	723.4	715.3	711.2	709.6
170°	729.5	729.5	729.5	729.5	729.5	729.5	729.5	723.4	715.3	711.2	711.2
172.5°	725.6	725.3	723.8	722.3	723.8	725.3	725.6	720.9	714.5	711.2	711.2
175°	720.4	720.4	720.4	720.4	720.4	720.4	720.4	717.3	713.3	711.2	712.2
177.5°	719.4	718.9	717.3	715.6	717.3	718.9	719.4	717.0	713.9	712.2	713.0
180°	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6



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**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
0°	1075.3	1075.3	1075.3	1075.3	1075.3
2.5°	1062.1	1067.2	1070.2	1074.3	1084.5
5°	1021.4	1040.7	1046.9	1062.1	1080.5
7.5°	931.9	990.9	1007.2	1043.8	1072.3
10°	845.4	904.4	932.9	1019.4	1062.1
12.5°	801.6	836.3	855.6	976.7	1047.9
15°	774.2	798.6	812.9	919.7	1031.6
17.5°	752.8	770.2	780.3	863.7	1009.2
20°	739.6	747.7	756.9	823.1	983.8
22.5°	730.4	725.3	732.5	794.6	949.2
25°	724.3	705.0	713.2	772.2	908.5
27.5°	729.4	686.7	689.8	751.8	865.8
30°	730.4	664.4	665.4	730.4	818.0
32.5°	723.3	640.9	641.9	704.0	764.0
35°	706.0	613.5	612.5	673.5	690.8
37.5°	682.6	584.0	584.0	639.9	610.4
40°	654.2	554.5	557.5	596.1	539.2
42.5°	619.5	522.9	527.0	538.2	486.3
45°	581.9	492.4	495.4	454.8	445.6
47.5°	540.2	460.8	461.8	377.5	432.4
50°	490.3	428.3	424.3	323.6	431.4
52.5°	446.6	392.7	380.5	293.0	391.7
55°	403.9	355.0	328.6	269.6	363.2
57.5°	366.2	306.2	280.8	242.2	357.1
60°	331.6	258.4	239.1	212.6	327.6
62.5°	303.1	222.8	218.8	192.3	297.1
65°	272.7	198.4	197.4	175.0	252.3
67.5°	243.2	182.1	181.1	158.7	192.3
70°	211.6	164.8	162.8	141.4	142.5
72.5°	179.0	145.5	143.5	127.2	118.0
75°	146.5	123.1	122.0	110.9	95.6
77.5°	115.0	97.6	99.7	89.6	70.2
80°	82.4	71.2	73.2	64.1	52.9
82.5°	54.9	46.8	48.8	40.7	35.6
85°	30.5	26.5	27.5	21.3	16.2
87.5°	14.2	12.2	12.2	8.2	5.1
90°	21.2	13.5	12.5	8.6	4.8
92.5°	130.3	92.7	84.5	51.8	19.2
95°	320.6	180.6	165.6	105.9	46.1
97.5°	431.9	198.4	185.2	132.4	79.7
100°	472.4	213.2	201.3	153.5	105.6
102.5°	491.0	228.2	217.0	172.4	127.7
105°	504.7	250.2	240.8	203.0	165.2
107.5°	507.4	282.9	274.1	238.9	203.7
110°	503.5	301.1	293.2	261.3	229.5



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CATALOG NUMBER: SQ4-FA-150U-100D-927-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
112.5°	503.7	323.2	315.7	285.4	255.0
115°	508.3	356.4	349.3	321.4	293.4
117.5°	517.7	388.5	382.2	356.8	331.4
120°	525.4	407.3	401.2	377.4	353.4
122.5°	536.5	429.4	423.3	399.2	375.1
125°	551.3	457.7	452.2	430.2	408.3
127.5°	566.2	485.0	479.5	457.3	435.1
130°	577.1	503.3	497.3	473.4	449.5
132.5°	585.9	518.2	512.2	488.3	464.4
135°	595.5	535.5	530.0	508.3	486.5
137.5°	609.9	557.6	552.2	530.6	509.0
140°	618.8	572.5	567.6	547.7	527.8
142.5°	626.1	583.5	578.9	560.6	542.2
145°	635.7	600.3	596.3	580.3	564.3
147.5°	649.8	621.5	617.5	602.0	586.4
150°	657.1	632.5	628.9	614.9	600.8
152.5°	662.0	639.7	637.0	626.4	615.7
155°	672.5	655.6	653.6	645.7	637.8
157.5°	683.1	671.4	669.4	661.8	654.1
160°	687.9	678.6	677.1	671.1	665.1
162.5°	693.0	686.3	685.1	680.7	676.2
165°	700.4	697.3	696.3	692.2	688.2
167.5°	706.1	703.5	703.1	701.2	699.2
170°	710.9	710.8	710.3	708.4	706.5
172.5°	711.2	711.2	711.2	710.7	710.3
175°	714.1	715.6	715.6	715.6	715.6
177.5°	714.5	715.6	715.6	715.6	715.6
180°	715.6	715.6	715.6	715.6	715.6



TEST NUMBER: P936022  
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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	11.51	12.27	12.57	13.33	14.77	14.31	15.07	15.37	16.13	17.57
	3H	11.98	12.66	13.05	13.73	15.19	15.64	16.32	16.71	17.39	18.85
	4H	12.17	12.81	13.25	13.89	15.35	16.07	16.72	17.15	17.79	19.25
	6H	12.28	12.88	13.37	13.95	15.43	16.34	16.94	17.43	18.01	19.49
	8H	12.28	12.85	13.37	13.94	15.41	16.41	16.98	17.50	18.07	19.54
	12H	12.25	12.79	13.35	13.87	15.36	16.44	16.98	17.54	18.06	19.56
4H	2H	12.53	13.17	13.61	14.24	15.71	14.71	15.35	15.79	16.43	17.89
	3H	13.54	14.08	14.63	15.18	16.65	16.20	16.73	17.29	17.83	19.31
	4H	13.81	14.31	14.91	15.40	16.89	16.71	17.21	17.81	18.29	19.79
	6H	13.93	14.36	15.04	15.47	16.96	17.06	17.49	18.17	18.60	20.09
	8H	13.94	14.33	15.04	15.44	16.94	17.16	17.56	18.27	18.66	20.17
	12H	13.90	14.26	15.02	15.37	16.89	17.21	17.57	18.33	18.69	20.20
8H	4H	14.26	14.65	15.36	15.75	17.26	16.83	17.23	17.94	18.33	19.84
	6H	14.51	14.84	15.64	15.98	17.49	17.25	17.58	18.38	18.73	20.23
	8H	14.55	14.84	15.69	15.97	17.49	17.40	17.69	18.53	18.81	20.34
	12H	14.53	14.78	15.67	15.91	17.47	17.49	17.74	18.63	18.86	20.42
12H	4H	14.26	14.61	15.38	15.73	17.24	16.79	17.15	17.91	18.26	19.78
	6H	14.57	14.86	15.70	15.98	17.51	17.25	17.54	18.38	18.66	20.19
	8H	14.63	14.88	15.77	16.01	17.57	17.40	17.65	18.54	18.78	20.34