

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: P935850

Luminaire Tested: SQ4-FA-150U-050D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

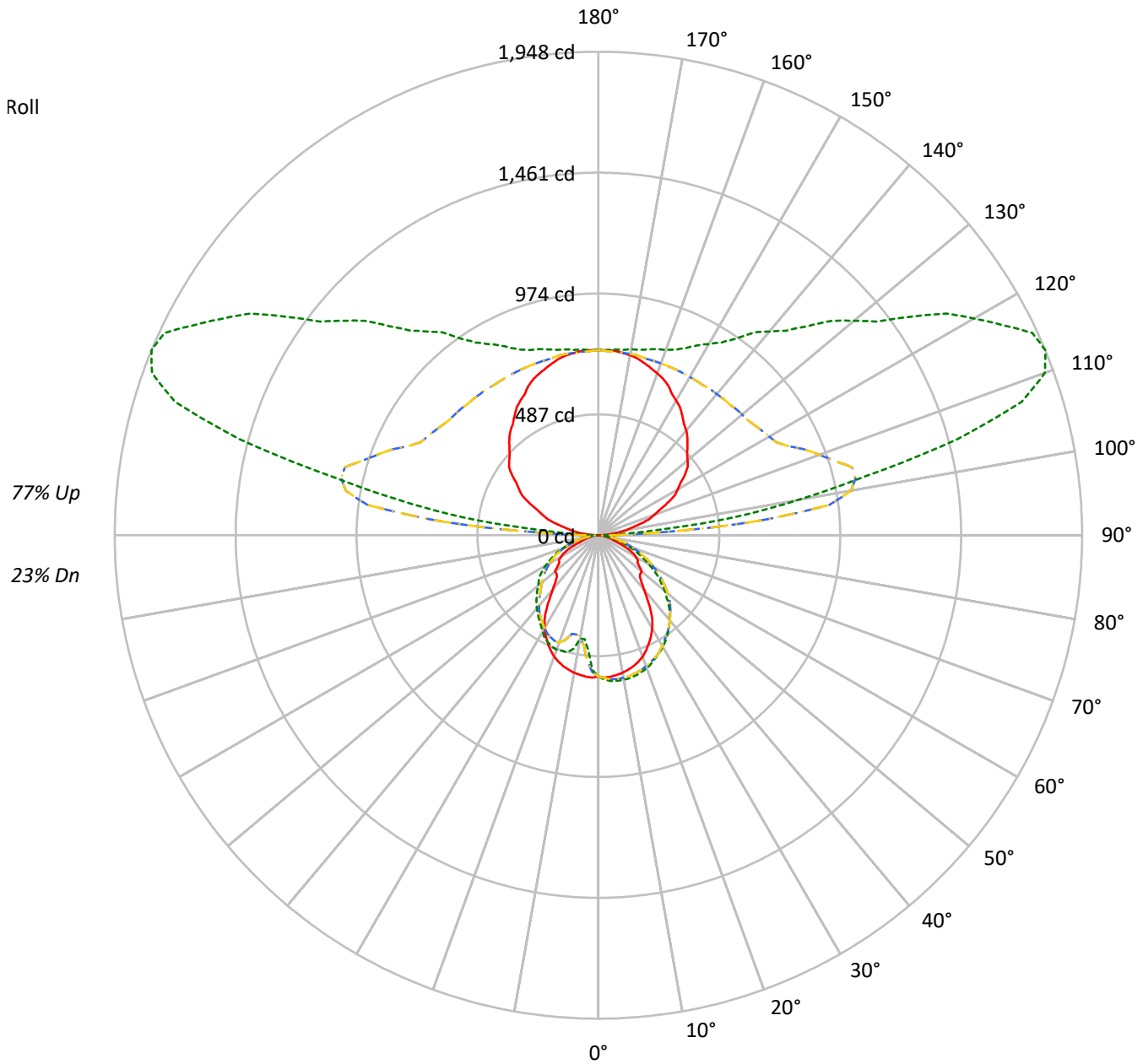
Test Method: LM-79-2019  
Report Number: P935850  
REPORT IS A COMBINATION OF REPORTS P933770 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-150U-050D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6316.4 lumens  
Efficiency: N/A  
Efficacy: 113.6 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): 55.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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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				
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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	32	32	32	23
1	92	88	84	81	81	78	75	72	60	58	56	43	42	41	28	27	27	27	27	27	20
2	84	77	71	66	74	68	63	59	52	49	46	38	36	34	25	24	23	23	23	23	17
3	76	67	60	55	67	60	54	49	46	42	39	34	31	29	22	20	19	19	19	19	14
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	19	18	16	16	16	16	12
5	64	53	45	39	56	47	40	36	36	32	28	27	24	21	17	16	14	14	14	14	10
6	59	47	39	34	52	42	35	31	33	28	24	24	21	18	16	14	12	12	12	12	9
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	14	12	11	11	11	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	10	10	10	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	9	9	9	6
10	43	32	25	20	38	28	22	18	22	18	15	17	14	11	11	9	8	8	8	8	6

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

	0°	90°	180°	270°
0°	5282	5282	5282	5282
5°	5315	5332	5315	4193
10°	5275	5252	5275	3755
15°	5210	5138	5210	4291
20°	5095	5004	5095	4300
25°	4867	4807	4867	4208
30°	4573	4644	4573	4009
35°	4071	4437	4071	3789
40°	3386	4195	3386	3623
45°	3019	3910	3019	3431
50°	3202	3571	3202	3239
55°	3002	3205	3002	3129
60°	3084	2721	3084	2866
65°	2782	2251	2782	2514
70°	1914	1793	1914	2109
75°	1659	1326	1659	1588
80°	1310	877	1310	955
85°	712	463	712	394

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°  
 Vertical Angle: 45°  
 Luminance: 4637 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.4	0.8
10°-20°	145.9	2.3
20°-30°	225.5	3.6
30°-40°	269.2	4.3
40°-50°	270.8	4.3
50°-60°	235.6	3.7
60°-70°	167.1	2.6
70°-80°	88.4	1.4
80°-90°	24.9	0.4
90°-100°	363.8	5.8
100°-110°	956.4	15.1
110°-120°	991.6	15.7
120°-130°	795.4	12.6
130°-140°	624.1	9.9
140°-150°	479.0	7.6
150°-160°	345.0	5.5
160°-170°	211.1	3.3
170°-180°	71.3	1.1
0°-30°	422.8	6.7
0°-40°	692.0	11.0
0°-60°	1198.4	19.0
0°-90°	1478.8	23.4
90°-120°	2311.7	36.6
90°-150°	4210.3	66.7
90°-180°	4838.0	76.6
0°-180°	6316.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	569	569	569	569	569	
5°	572	590	572	464	572	54
15°	546	584	546	488	546	154
25°	481	545	481	477	481	221
35°	366	486	366	415	366	226
45°	236	401	236	352	236	189
55°	192	296	192	289	192	177
65°	134	178	134	199	134	128
75°	51	85	51	101	51	53
85°	9	22	9	18	9	12
90°	5	19	5	19	5	4
95°	48	220	48	220	48	53
105°	172	1498	172	1498	172	183
115°	306	1928	306	1928	306	302
125°	426	1536	426	1536	426	378
135°	507	1192	507	1192	507	393
145°	588	967	588	967	588	369
155°	665	832	665	832	665	306
165°	718	775	718	775	718	203
175°	746	751	746	751	746	71
180°	746	746	746	746	746	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2
2.5°	574.1	574.1	577.3	578.4	578.4	576.8	575.2	576.8	581.6	583.2	582.7
5°	571.9	576.2	582.2	583.2	584.3	583.8	582.7	583.8	589.2	590.2	590.8
7.5°	567.6	575.7	583.2	584.8	586.4	584.8	584.3	585.4	590.8	591.8	591.8
10°	562.3	573.5	582.2	583.2	584.8	583.2	583.2	585.4	590.8	591.8	592.4
12.5°	554.7	570.3	578.4	579.4	581.6	581.1	580.6	582.7	588.1	589.2	589.2
15°	546.0	564.3	571.9	573.0	576.8	575.7	575.7	577.8	583.8	585.4	584.8
17.5°	534.2	556.9	565.5	567.1	569.8	569.2	569.8	571.9	577.3	578.4	579.0
20°	520.7	546.6	556.9	558.5	561.1	561.1	561.1	563.9	569.2	571.4	571.4
22.5°	502.4	535.8	546.6	547.7	550.9	550.9	552.0	555.8	560.6	561.1	561.1
25°	480.9	524.0	533.1	536.4	539.6	541.2	542.8	545.0	546.6	546.0	546.6
27.5°	458.3	508.9	520.7	522.9	527.2	528.9	531.0	531.5	532.1	533.7	532.6
30°	433.0	487.9	505.6	507.8	514.8	515.9	513.8	514.8	517.5	518.6	519.7
32.5°	404.5	456.7	490.1	494.9	501.4	498.2	497.6	499.2	503.6	503.6	504.6
35°	365.7	432.4	475.5	479.9	484.7	480.9	483.1	483.6	486.3	487.9	487.3
37.5°	323.1	411.5	460.4	463.7	467.4	462.6	465.8	467.4	469.6	468.6	468.6
40°	285.4	378.6	442.7	444.9	448.1	444.3	447.5	448.6	449.7	448.6	448.1
42.5°	257.4	342.5	423.8	426.6	424.4	427.0	428.2	430.3	428.6	426.6	426.6
45°	235.8	332.8	403.3	406.6	403.3	407.7	409.3	409.3	404.5	403.3	402.8
47.5°	228.9	313.4	382.9	382.9	381.3	386.6	389.4	385.6	380.8	379.1	379.1
50°	228.4	291.9	354.9	352.8	360.3	366.7	364.1	360.3	356.5	350.6	350.6
52.5°	207.3	265.5	318.8	326.9	338.7	342.5	338.2	334.4	327.9	325.3	323.1
55°	192.2	238.0	285.9	302.1	314.5	319.4	311.2	307.5	297.8	296.2	295.1
57.5°	189.0	198.2	255.8	276.2	291.3	290.8	285.9	279.0	270.9	269.2	268.8
60°	173.4	143.3	223.5	247.7	263.3	261.7	257.4	250.9	243.4	242.3	241.3
62.5°	157.2	103.9	186.9	214.3	236.4	235.8	232.1	222.4	217.1	214.3	212.2
65°	133.5	87.2	133.1	178.3	210.1	211.1	203.0	196.0	190.1	186.9	186.3
67.5°	101.8	71.1	89.9	148.6	184.7	183.6	173.4	170.2	162.6	161.0	157.8
70°	75.4	47.4	62.5	120.6	160.0	157.2	149.2	145.4	138.4	134.7	132.5
72.5°	62.5	38.2	45.8	93.7	134.7	131.4	124.4	120.1	114.2	111.0	108.8
75°	50.6	40.4	35.0	69.5	109.3	107.2	100.7	96.4	91.5	87.2	87.8
77.5°	37.2	37.7	28.0	51.2	86.7	83.5	79.7	74.4	72.2	67.9	67.9
80°	28.0	29.6	21.0	35.0	62.5	62.5	59.3	55.5	51.7	49.5	49.5
82.5°	18.9	18.9	15.6	22.1	42.6	41.0	38.8	37.7	35.6	34.4	34.4
85°	8.6	10.8	9.7	13.5	23.1	24.3	24.3	23.1	22.6	21.5	22.1
87.5°	2.7	4.8	5.9	7.5	11.9	12.4	12.9	12.9	12.9	13.5	13.5
90°	5.0	9.0	13.0	14.1	22.1	32.8	38.1	33.8	25.4	19.0	19.0
92.5°	20.0	54.0	88.2	96.7	135.9	188.1	214.3	187.8	134.9	95.2	91.4
95°	48.1	110.4	172.7	188.3	334.4	529.2	626.6	559.1	424.2	323.0	311.6
97.5°	83.1	138.1	193.1	206.9	450.4	775.2	937.6	894.9	809.7	745.7	723.9
100°	110.2	160.0	209.9	222.4	492.6	853.0	1033.2	1036.4	1042.6	1047.3	1021.3
102.5°	133.2	179.8	226.3	237.9	512.1	877.5	1060.3	1114.6	1223.2	1304.7	1282.5
105°	172.3	211.8	251.1	261.0	526.4	880.2	1057.2	1179.0	1422.5	1605.2	1593.2
107.5°	212.4	249.1	285.9	295.0	529.1	841.1	997.2	1167.0	1506.7	1761.5	1764.4
110°	239.4	272.5	305.8	314.1	525.1	806.4	947.1	1137.0	1516.7	1801.5	1814.0



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	266.0	297.6	329.2	337.1	525.2	776.1	901.5	1095.9	1484.5	1776.0	1795.1
115°	306.0	335.2	364.3	371.6	530.1	741.3	846.9	1034.1	1408.5	1689.4	1715.9
117.5°	345.6	372.1	398.6	405.2	539.9	719.6	809.3	978.3	1316.2	1569.6	1599.1
120°	368.6	393.6	418.4	424.7	547.9	712.2	794.3	948.7	1257.4	1489.0	1517.6
122.5°	391.1	416.3	441.5	447.8	559.5	708.4	782.8	921.8	1199.8	1408.4	1436.6
125°	425.8	448.6	471.6	477.3	574.9	705.2	770.3	888.4	1124.5	1301.7	1327.7
127.5°	453.8	476.9	500.0	505.8	590.4	703.3	759.8	861.2	1064.0	1216.1	1238.0
130°	468.8	493.7	518.6	524.8	601.8	704.5	755.8	846.0	1026.6	1161.9	1182.2
132.5°	484.3	509.3	534.2	540.4	611.0	705.2	752.3	833.0	994.7	1115.8	1134.0
135°	507.3	530.1	552.7	558.4	621.0	704.5	746.2	813.9	949.2	1050.7	1066.4
137.5°	530.9	553.3	575.8	581.5	636.1	708.9	745.3	802.4	916.9	1002.7	1015.5
140°	550.5	571.2	591.9	597.0	645.3	709.6	741.7	791.1	890.0	964.1	976.0
142.5°	565.5	584.6	603.7	608.5	652.9	712.1	741.7	785.2	872.0	937.1	947.4
145°	588.5	605.2	621.8	626.0	663.0	712.2	736.8	772.2	843.2	896.5	904.3
147.5°	611.5	627.8	644.0	648.1	677.7	717.1	736.8	764.7	820.5	862.4	868.8
150°	626.6	641.3	655.9	659.6	685.3	719.6	736.8	760.4	807.5	842.9	848.1
152.5°	642.1	653.2	664.3	667.1	690.3	721.3	736.8	756.9	797.2	827.4	831.3
155°	665.1	673.4	681.6	683.7	701.3	724.9	736.8	752.8	784.9	808.9	811.5
157.5°	682.1	690.2	698.1	700.1	712.3	728.6	736.8	749.2	774.1	792.8	794.6
160°	693.6	699.9	706.2	707.7	717.4	730.3	736.8	747.4	768.8	784.8	785.8
162.5°	705.2	709.9	714.5	715.7	722.7	732.1	736.8	745.7	763.8	777.3	778.3
165°	717.7	721.9	726.2	727.2	730.4	734.7	736.8	743.2	756.1	765.7	766.8
167.5°	729.2	731.2	733.2	733.7	736.4	740.0	741.7	746.0	754.4	760.8	761.2
170°	736.8	738.8	740.8	741.2	741.4	741.7	741.7	746.0	754.4	760.8	760.8
172.5°	740.8	741.2	741.7	741.7	741.7	741.7	741.7	745.1	751.8	756.7	756.3
175°	746.2	746.2	746.2	746.2	744.7	742.7	741.7	743.8	748.1	751.3	751.3
177.5°	746.2	746.2	746.2	746.2	745.1	743.6	742.8	744.5	747.8	750.2	749.8
180°	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2
2.5°	583.8	582.2	583.8	582.7	583.2	581.6	576.8	575.2	576.8	578.4	578.4
5°	590.8	589.7	590.8	590.8	590.2	589.2	583.8	582.7	583.8	584.3	583.2
7.5°	592.9	591.3	592.9	591.8	591.8	590.8	585.4	584.3	584.8	586.4	584.8
10°	592.9	591.3	592.9	592.4	591.8	590.8	585.4	583.2	583.2	584.8	583.2
12.5°	590.2	589.2	590.2	589.2	589.2	588.1	582.7	580.6	581.1	581.6	579.4
15°	585.9	584.3	585.9	584.8	585.4	583.8	577.8	575.7	575.7	576.8	573.0
17.5°	579.4	577.3	579.4	579.0	578.4	577.3	571.9	569.8	569.2	569.8	567.1
20°	571.9	570.3	571.9	571.4	571.4	569.2	563.9	561.1	561.1	561.1	558.5
22.5°	560.1	558.5	560.1	561.1	561.1	560.6	555.8	552.0	550.9	550.9	547.7
25°	546.6	545.0	546.6	546.6	546.0	546.6	545.0	542.8	541.2	539.6	536.4
27.5°	533.7	532.6	533.7	532.6	533.7	532.1	531.5	531.0	528.9	527.2	522.9
30°	520.7	519.7	520.7	519.7	518.6	517.5	514.8	513.8	515.9	514.8	507.8
32.5°	504.6	503.6	504.6	504.6	503.6	503.6	499.2	497.6	498.2	501.4	494.9
35°	487.9	486.3	487.9	487.3	487.9	486.3	483.6	483.1	480.9	484.7	479.9
37.5°	468.6	466.9	468.6	468.6	468.6	469.6	467.4	465.8	462.6	467.4	463.7
40°	448.6	446.5	448.6	448.1	448.6	449.7	448.6	447.5	444.3	448.1	444.9
42.5°	426.0	425.4	426.0	426.6	426.6	428.6	430.3	428.2	427.0	424.4	426.6
45°	401.7	400.7	401.7	402.8	403.3	404.5	409.3	409.3	407.7	403.3	406.6
47.5°	375.9	373.2	375.9	379.1	379.1	380.8	385.6	389.4	386.6	381.3	382.9
50°	348.4	349.0	348.4	350.6	350.6	356.5	360.3	364.1	366.7	360.3	352.8
52.5°	321.5	321.0	321.5	323.1	325.3	327.9	334.4	338.2	342.5	338.7	326.9
55°	294.5	295.7	294.5	295.1	296.2	297.8	307.5	311.2	319.4	314.5	302.1
57.5°	267.6	266.0	267.6	268.8	269.2	270.9	279.0	285.9	290.8	291.3	276.2
60°	236.4	234.2	236.4	241.3	242.3	243.4	250.9	257.4	261.7	263.3	247.7
62.5°	208.9	205.2	208.9	212.2	214.3	217.1	222.4	232.1	235.8	236.4	214.3
65°	179.9	178.3	179.9	186.3	186.9	190.1	196.0	203.0	211.1	210.1	178.3
67.5°	153.5	153.5	153.5	157.8	161.0	162.6	170.2	173.4	183.6	184.7	148.6
70°	129.3	128.7	129.3	132.5	134.7	138.4	145.4	149.2	157.2	160.0	120.6
72.5°	106.1	105.5	106.1	108.8	111.0	114.2	120.1	124.4	131.4	134.7	93.7
75°	85.6	84.6	85.6	87.8	87.2	91.5	96.4	100.7	107.2	109.3	69.5
77.5°	65.7	65.7	65.7	67.9	67.9	72.2	74.4	79.7	83.5	86.7	51.2
80°	49.0	48.5	49.0	49.5	49.5	51.7	55.5	59.3	62.5	62.5	35.0
82.5°	34.4	33.4	34.4	34.4	34.4	35.6	37.7	38.8	41.0	42.6	22.1
85°	21.5	21.5	21.5	22.1	21.5	22.6	23.1	24.3	24.3	23.1	13.5
87.5°	14.0	13.5	14.0	13.5	13.5	12.9	12.9	12.9	12.4	11.9	7.5
90°	19.0	19.0	19.0	19.0	19.0	25.4	33.8	38.1	32.8	22.1	14.1
92.5°	76.2	61.1	76.2	91.4	95.2	134.9	187.8	214.3	188.1	135.9	96.7
95°	265.7	219.9	265.7	311.6	323.0	424.2	559.1	626.6	529.2	334.4	188.3
97.5°	636.7	549.4	636.7	723.9	745.7	809.7	894.9	937.6	775.2	450.4	206.9
100°	917.3	813.4	917.3	1021.3	1047.3	1042.6	1036.4	1033.2	853.0	492.6	222.4
102.5°	1193.4	1104.4	1193.4	1282.5	1304.7	1223.2	1114.6	1060.3	877.5	512.1	237.9
105°	1545.4	1497.5	1545.4	1593.2	1605.2	1422.5	1179.0	1057.2	880.2	526.4	261.0
107.5°	1775.9	1787.5	1775.9	1764.4	1761.5	1506.7	1167.0	997.2	841.1	529.1	295.0
110°	1863.8	1913.7	1863.8	1814.0	1801.5	1516.7	1137.0	947.1	806.4	525.1	314.1





TEST NUMBER: P935850

CATALOG NUMBER: SQ4-FA-150U-050D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	1871.7	1948.2	1871.7	1795.1	1776.0	1484.5	1095.9	901.5	776.1	525.2	337.1
115°	1822.1	1928.2	1822.1	1715.9	1689.4	1408.5	1034.1	846.9	741.3	530.1	371.6
117.5°	1716.8	1834.5	1716.8	1599.1	1569.6	1316.2	978.3	809.3	719.6	539.9	405.2
120°	1632.0	1746.4	1632.0	1517.6	1489.0	1257.4	948.7	794.3	712.2	547.9	424.7
122.5°	1549.5	1662.3	1549.5	1436.6	1408.4	1199.8	921.8	782.8	708.4	559.5	447.8
125°	1431.6	1535.6	1431.6	1327.7	1301.7	1124.5	888.4	770.3	705.2	574.9	477.3
127.5°	1325.7	1413.4	1325.7	1238.0	1216.1	1064.0	861.2	759.8	703.3	590.4	505.8
130°	1263.2	1344.2	1263.2	1182.2	1161.9	1026.6	846.0	755.8	704.5	601.8	524.8
132.5°	1206.5	1279.1	1206.5	1134.0	1115.8	994.7	833.0	752.3	705.2	611.0	540.4
135°	1128.9	1191.5	1128.9	1066.4	1050.7	949.2	813.9	746.2	704.5	621.0	558.4
137.5°	1066.7	1117.9	1066.7	1015.5	1002.7	916.9	802.4	745.3	708.9	636.1	581.5
140°	1023.9	1071.8	1023.9	976.0	964.1	890.0	791.1	741.7	709.6	645.3	597.0
142.5°	988.6	1029.7	988.6	947.4	937.1	872.0	785.2	741.7	712.1	652.9	608.5
145°	935.5	966.7	935.5	904.3	896.5	843.2	772.2	736.8	712.2	663.0	626.0
147.5°	894.7	920.6	894.7	868.8	862.4	820.5	764.7	736.8	717.1	677.7	648.1
150°	869.1	890.0	869.1	848.1	842.9	807.5	760.4	736.8	719.6	685.3	659.6
152.5°	847.2	862.9	847.2	831.3	827.4	797.2	756.9	736.8	721.3	690.3	667.1
155°	822.0	832.4	822.0	811.5	808.9	784.9	752.8	736.8	724.9	701.3	683.7
157.5°	802.0	809.3	802.0	794.6	792.8	774.1	749.2	736.8	728.6	712.3	700.1
160°	790.1	794.3	790.1	785.8	784.8	768.8	747.4	736.8	730.3	717.4	707.7
162.5°	782.3	786.3	782.3	778.3	777.3	763.8	745.7	736.8	732.1	722.7	715.7
165°	771.0	775.3	771.0	766.8	765.7	756.1	743.2	736.8	734.7	730.4	727.2
167.5°	763.0	764.8	763.0	761.2	760.8	754.4	746.0	741.7	740.0	736.4	733.7
170°	760.8	760.8	760.8	760.8	760.8	754.4	746.0	741.7	741.7	741.4	741.2
172.5°	754.8	753.3	754.8	756.3	756.7	751.8	745.1	741.7	741.7	741.7	741.7
175°	751.3	751.3	751.3	751.3	751.3	748.1	743.8	741.7	742.7	744.7	746.2
177.5°	748.0	746.2	748.0	749.8	750.2	747.8	744.5	742.8	743.6	745.1	746.2
180°	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2



TEST NUMBER: P935850

CATALOG NUMBER: SQ4-FA-150U-050D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2
2.5°	577.3	574.1	574.1	568.7	566.5	564.9	562.3	554.2	552.0	549.8	553.1
5°	582.2	576.2	571.9	562.3	554.2	550.9	540.7	521.3	508.4	498.7	493.3
7.5°	583.2	575.7	567.6	552.5	533.1	524.5	493.3	457.8	448.1	439.5	434.0
10°	582.2	573.5	562.3	539.6	493.8	478.7	447.5	424.4	418.4	416.8	418.4
12.5°	578.4	570.3	554.7	517.0	452.9	442.7	424.4	410.9	409.9	412.5	427.0
15°	571.9	564.3	546.0	486.9	430.3	422.8	409.9	405.0	410.9	429.8	473.4
17.5°	565.5	556.9	534.2	457.2	413.1	407.7	398.5	408.2	441.6	466.9	481.5
20°	556.9	546.6	520.7	435.7	400.7	395.8	391.5	435.1	460.4	469.6	477.7
22.5°	546.6	535.8	502.4	420.6	387.8	384.0	386.6	450.2	460.4	466.9	473.9
25°	533.1	524.0	480.9	408.7	377.5	373.2	383.4	448.6	454.5	456.1	470.2
27.5°	520.7	508.9	458.3	398.0	365.1	363.5	386.2	441.6	445.9	447.5	462.6
30°	505.6	487.9	433.0	386.6	352.2	351.6	386.6	433.0	431.9	436.2	451.3
32.5°	490.1	456.7	404.5	372.7	339.8	339.3	382.9	420.0	419.0	424.9	436.2
35°	475.5	432.4	365.7	356.5	324.2	324.7	373.7	405.0	405.5	410.9	417.9
37.5°	460.4	411.5	323.1	338.7	309.2	309.2	361.4	391.0	389.9	391.5	401.2
40°	442.7	378.6	285.4	315.6	295.1	293.5	346.3	375.9	372.1	371.6	385.0
42.5°	423.8	342.5	257.4	284.9	279.0	276.8	327.9	357.6	350.6	352.2	369.5
45°	403.3	332.8	235.8	240.7	262.3	260.7	308.0	336.6	331.7	336.1	353.8
47.5°	382.9	313.4	228.9	199.8	244.5	244.0	285.9	316.1	313.4	317.7	336.6
50°	354.9	291.9	228.4	171.3	224.6	226.7	259.6	296.2	296.2	300.0	319.9
52.5°	318.8	265.5	207.3	155.1	201.4	207.9	236.4	279.0	280.0	283.8	301.6
55°	285.9	238.0	192.2	142.7	173.9	188.0	213.8	261.2	263.3	267.1	283.3
57.5°	255.8	198.2	189.0	128.2	148.6	162.1	193.8	244.0	245.0	248.3	263.9
60°	223.5	143.3	173.4	112.6	126.6	136.8	175.5	223.5	227.2	229.4	242.9
62.5°	186.9	103.9	157.2	101.8	115.8	118.0	160.5	204.1	208.9	210.5	218.7
65°	133.1	87.2	133.5	92.7	104.5	105.0	144.3	184.2	188.5	191.2	197.1
67.5°	89.9	71.1	101.8	84.0	95.9	96.4	128.7	161.0	166.9	169.1	172.9
70°	62.5	47.4	75.4	74.8	86.2	87.2	112.0	140.0	145.4	147.0	149.2
72.5°	45.8	38.2	62.5	67.3	76.0	77.0	94.8	116.4	121.7	123.3	124.4
75°	35.0	40.4	50.6	58.7	64.6	65.1	77.6	94.8	98.5	99.7	100.1
77.5°	28.0	37.7	37.2	47.4	52.8	51.7	60.9	73.2	76.4	76.4	76.4
80°	21.0	29.6	28.0	34.0	38.8	37.7	43.6	52.3	53.3	54.4	53.9
82.5°	15.6	18.9	18.9	21.5	25.9	24.8	29.1	34.0	34.0	34.0	35.0
85°	9.7	10.8	8.6	11.3	14.5	14.0	16.1	18.3	18.9	18.9	17.7
87.5°	5.9	4.8	2.7	4.3	6.4	6.4	7.5	8.1	7.5	7.5	7.5
90°	13.0	9.0	5.0	9.0	13.0	14.1	22.1	32.8	38.1	33.8	25.4
92.5°	88.2	54.0	20.0	54.0	88.2	96.7	135.9	188.1	214.3	187.8	134.9
95°	172.7	110.4	48.1	110.4	172.7	188.3	334.4	529.2	626.6	559.1	424.2
97.5°	193.1	138.1	83.1	138.1	193.1	206.9	450.4	775.2	937.6	894.9	809.7
100°	209.9	160.0	110.2	160.0	209.9	222.4	492.6	853.0	1033.2	1036.4	1042.6
102.5°	226.3	179.8	133.2	179.8	226.3	237.9	512.1	877.5	1060.3	1114.6	1223.2
105°	251.1	211.8	172.3	211.8	251.1	261.0	526.4	880.2	1057.2	1179.0	1422.5
107.5°	285.9	249.1	212.4	249.1	285.9	295.0	529.1	841.1	997.2	1167.0	1506.7
110°	305.8	272.5	239.4	272.5	305.8	314.1	525.1	806.4	947.1	1137.0	1516.7



TEST NUMBER: P935850

CATALOG NUMBER: SQ4-FA-150U-050D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	329.2	297.6	266.0	297.6	329.2	337.1	525.2	776.1	901.5	1095.9	1484.5
115°	364.3	335.2	306.0	335.2	364.3	371.6	530.1	741.3	846.9	1034.1	1408.5
117.5°	398.6	372.1	345.6	372.1	398.6	405.2	539.9	719.6	809.3	978.3	1316.2
120°	418.4	393.6	368.6	393.6	418.4	424.7	547.9	712.2	794.3	948.7	1257.4
122.5°	441.5	416.3	391.1	416.3	441.5	447.8	559.5	708.4	782.8	921.8	1199.8
125°	471.6	448.6	425.8	448.6	471.6	477.3	574.9	705.2	770.3	888.4	1124.5
127.5°	500.0	476.9	453.8	476.9	500.0	505.8	590.4	703.3	759.8	861.2	1064.0
130°	518.6	493.7	468.8	493.7	518.6	524.8	601.8	704.5	755.8	846.0	1026.6
132.5°	534.2	509.3	484.3	509.3	534.2	540.4	611.0	705.2	752.3	833.0	994.7
135°	552.7	530.1	507.3	530.1	552.7	558.4	621.0	704.5	746.2	813.9	949.2
137.5°	575.8	553.3	530.9	553.3	575.8	581.5	636.1	708.9	745.3	802.4	916.9
140°	591.9	571.2	550.5	571.2	591.9	597.0	645.3	709.6	741.7	791.1	890.0
142.5°	603.7	584.6	565.5	584.6	603.7	608.5	652.9	712.1	741.7	785.2	872.0
145°	621.8	605.2	588.5	605.2	621.8	626.0	663.0	712.2	736.8	772.2	843.2
147.5°	644.0	627.8	611.5	627.8	644.0	648.1	677.7	717.1	736.8	764.7	820.5
150°	655.9	641.3	626.6	641.3	655.9	659.6	685.3	719.6	736.8	760.4	807.5
152.5°	664.3	653.2	642.1	653.2	664.3	667.1	690.3	721.3	736.8	756.9	797.2
155°	681.6	673.4	665.1	673.4	681.6	683.7	701.3	724.9	736.8	752.8	784.9
157.5°	698.1	690.2	682.1	690.2	698.1	700.1	712.3	728.6	736.8	749.2	774.1
160°	706.2	699.9	693.6	699.9	706.2	707.7	717.4	730.3	736.8	747.4	768.8
162.5°	714.5	709.9	705.2	709.9	714.5	715.7	722.7	732.1	736.8	745.7	763.8
165°	726.2	721.9	717.7	721.9	726.2	727.2	730.4	734.7	736.8	743.2	756.1
167.5°	733.2	731.2	729.2	731.2	733.2	733.7	736.4	740.0	741.7	746.0	754.4
170°	740.8	738.8	736.8	738.8	740.8	741.2	741.4	741.7	741.7	746.0	754.4
172.5°	741.7	741.2	740.8	741.2	741.7	741.7	741.7	741.7	741.7	745.1	751.8
175°	746.2	746.2	746.2	746.2	746.2	746.2	744.7	742.7	741.7	743.8	748.1
177.5°	746.2	746.2	746.2	746.2	746.2	746.2	745.1	743.6	742.8	744.5	747.8
180°	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2



TEST NUMBER: P935850  
 CATALOG NUMBER: SQ4-FA-150U-050D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2	569.2
2.5°	549.3	547.7	549.8	544.0	549.8	547.7	549.3	553.1	549.8	552.0	554.2
5°	482.0	479.3	470.7	463.7	470.7	479.3	482.0	493.3	498.7	508.4	521.3
7.5°	430.8	428.6	426.6	422.2	426.6	428.6	430.8	434.0	439.5	448.1	457.8
10°	419.5	420.0	423.3	422.8	423.3	420.0	419.5	418.4	416.8	418.4	424.4
12.5°	448.6	453.5	471.2	470.2	471.2	453.5	448.6	427.0	412.5	409.9	410.9
15°	482.0	483.6	487.3	487.9	487.3	483.6	482.0	473.4	429.8	410.9	405.0
17.5°	485.3	485.7	488.5	488.5	488.5	485.7	485.3	481.5	466.9	441.6	408.2
20°	482.5	483.6	489.0	490.1	489.0	483.6	482.5	477.7	469.6	460.4	435.1
22.5°	481.5	483.6	487.9	487.3	487.9	483.6	481.5	473.9	466.9	460.4	450.2
25°	476.1	476.1	476.6	477.1	476.6	476.1	476.1	470.2	456.1	454.5	448.6
27.5°	464.8	465.8	469.0	468.6	469.0	465.8	464.8	462.6	447.5	445.9	441.6
30°	454.5	453.5	450.7	448.6	450.7	453.5	454.5	451.3	436.2	431.9	433.0
32.5°	437.3	434.6	431.9	430.3	431.9	434.6	437.3	436.2	424.9	419.0	420.0
35°	416.8	417.4	416.8	415.2	416.8	417.4	416.8	417.9	410.9	405.5	405.0
37.5°	402.3	403.3	402.8	400.7	402.8	403.3	402.3	401.2	391.5	389.9	391.0
40°	387.2	387.8	387.2	385.6	387.2	387.8	387.2	385.0	371.6	372.1	375.9
42.5°	372.7	372.1	370.5	369.5	370.5	372.1	372.7	369.5	352.2	350.6	357.6
45°	356.0	356.5	353.2	351.6	353.2	356.5	356.0	353.8	336.1	331.7	336.6
47.5°	339.3	339.3	336.6	334.9	336.6	339.3	339.3	336.6	317.7	313.4	316.1
50°	321.5	321.0	317.2	316.6	317.2	321.0	321.5	319.9	300.0	296.2	296.2
52.5°	301.0	301.0	301.6	302.7	301.6	301.0	301.0	301.6	283.8	280.0	279.0
55°	283.3	283.8	287.6	288.7	287.6	283.8	283.3	283.3	267.1	263.3	261.2
57.5°	265.0	265.0	267.6	267.6	267.6	265.0	265.0	263.9	248.3	245.0	244.0
60°	244.0	245.0	247.2	246.7	247.2	245.0	244.0	242.9	229.4	227.2	223.5
62.5°	221.9	223.0	223.5	222.4	223.5	223.0	221.9	218.7	210.5	208.9	204.1
65°	198.7	199.8	200.3	199.2	200.3	199.8	198.7	197.1	191.2	188.5	184.2
67.5°	175.1	174.5	173.9	176.1	173.9	174.5	175.1	172.9	169.1	166.9	161.0
70°	150.8	150.8	150.2	151.4	150.2	150.8	150.8	149.2	147.0	145.4	140.0
72.5°	124.9	124.4	126.6	124.9	126.6	124.4	124.9	124.4	123.3	121.7	116.4
75°	99.7	100.7	99.7	101.3	99.7	100.7	99.7	100.1	99.7	98.5	94.8
77.5°	76.0	77.0	76.0	76.0	76.0	77.0	76.0	76.4	76.4	76.4	73.2
80°	53.9	53.3	53.3	52.8	53.3	53.3	53.9	53.9	54.4	53.3	52.3
82.5°	34.4	34.0	34.0	35.0	34.0	34.0	34.4	35.0	34.0	34.0	34.0
85°	18.9	19.4	18.3	18.3	18.3	19.4	18.9	17.7	18.9	18.9	18.3
87.5°	7.0	6.4	6.4	6.4	6.4	6.4	7.0	7.5	7.5	7.5	8.1
90°	19.0	19.0	19.0	19.0	19.0	19.0	19.0	25.4	33.8	38.1	32.8
92.5°	95.2	91.4	76.2	61.1	76.2	91.4	95.2	134.9	187.8	214.3	188.1
95°	323.0	311.6	265.7	219.9	265.7	311.6	323.0	424.2	559.1	626.6	529.2
97.5°	745.7	723.9	636.7	549.4	636.7	723.9	745.7	809.7	894.9	937.6	775.2
100°	1047.3	1021.3	917.3	813.4	917.3	1021.3	1047.3	1042.6	1036.4	1033.2	853.0
102.5°	1304.7	1282.5	1193.4	1104.4	1193.4	1282.5	1304.7	1223.2	1114.6	1060.3	877.5
105°	1605.2	1593.2	1545.4	1497.5	1545.4	1593.2	1605.2	1422.5	1179.0	1057.2	880.2
107.5°	1761.5	1764.4	1775.9	1787.5	1775.9	1764.4	1761.5	1506.7	1167.0	997.2	841.1
110°	1801.5	1814.0	1863.8	1913.7	1863.8	1814.0	1801.5	1516.7	1137.0	947.1	806.4



TEST NUMBER: P935850

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**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1776.0	1795.1	1871.7	1948.2	1871.7	1795.1	1776.0	1484.5	1095.9	901.5	776.1
115°	1689.4	1715.9	1822.1	1928.2	1822.1	1715.9	1689.4	1408.5	1034.1	846.9	741.3
117.5°	1569.6	1599.1	1716.8	1834.5	1716.8	1599.1	1569.6	1316.2	978.3	809.3	719.6
120°	1489.0	1517.6	1632.0	1746.4	1632.0	1517.6	1489.0	1257.4	948.7	794.3	712.2
122.5°	1408.4	1436.6	1549.5	1662.3	1549.5	1436.6	1408.4	1199.8	921.8	782.8	708.4
125°	1301.7	1327.7	1431.6	1535.6	1431.6	1327.7	1301.7	1124.5	888.4	770.3	705.2
127.5°	1216.1	1238.0	1325.7	1413.4	1325.7	1238.0	1216.1	1064.0	861.2	759.8	703.3
130°	1161.9	1182.2	1263.2	1344.2	1263.2	1182.2	1161.9	1026.6	846.0	755.8	704.5
132.5°	1115.8	1134.0	1206.5	1279.1	1206.5	1134.0	1115.8	994.7	833.0	752.3	705.2
135°	1050.7	1066.4	1128.9	1191.5	1128.9	1066.4	1050.7	949.2	813.9	746.2	704.5
137.5°	1002.7	1015.5	1066.7	1117.9	1066.7	1015.5	1002.7	916.9	802.4	745.3	708.9
140°	964.1	976.0	1023.9	1071.8	1023.9	976.0	964.1	890.0	791.1	741.7	709.6
142.5°	937.1	947.4	988.6	1029.7	988.6	947.4	937.1	872.0	785.2	741.7	712.1
145°	896.5	904.3	935.5	966.7	935.5	904.3	896.5	843.2	772.2	736.8	712.2
147.5°	862.4	868.8	894.7	920.6	894.7	868.8	862.4	820.5	764.7	736.8	717.1
150°	842.9	848.1	869.1	890.0	869.1	848.1	842.9	807.5	760.4	736.8	719.6
152.5°	827.4	831.3	847.2	862.9	847.2	831.3	827.4	797.2	756.9	736.8	721.3
155°	808.9	811.5	822.0	832.4	822.0	811.5	808.9	784.9	752.8	736.8	724.9
157.5°	792.8	794.6	802.0	809.3	802.0	794.6	792.8	774.1	749.2	736.8	728.6
160°	784.8	785.8	790.1	794.3	790.1	785.8	784.8	768.8	747.4	736.8	730.3
162.5°	777.3	778.3	782.3	786.3	782.3	778.3	777.3	763.8	745.7	736.8	732.1
165°	765.7	766.8	771.0	775.3	771.0	766.8	765.7	756.1	743.2	736.8	734.7
167.5°	760.8	761.2	763.0	764.8	763.0	761.2	760.8	754.4	746.0	741.7	740.0
170°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	754.4	746.0	741.7	741.7
172.5°	756.7	756.3	754.8	753.3	754.8	756.3	756.7	751.8	745.1	741.7	741.7
175°	751.3	751.3	751.3	751.3	751.3	751.3	751.3	748.1	743.8	741.7	742.7
177.5°	750.2	749.8	748.0	746.2	748.0	749.8	750.2	747.8	744.5	742.8	743.6
180°	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2



TEST NUMBER: P935850

CATALOG NUMBER: SQ4-FA-150U-050D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
0°	569.2	569.2	569.2	569.2	569.2
2.5°	562.3	564.9	566.5	568.7	574.1
5°	540.7	550.9	554.2	562.3	571.9
7.5°	493.3	524.5	533.1	552.5	567.6
10°	447.5	478.7	493.8	539.6	562.3
12.5°	424.4	442.7	452.9	517.0	554.7
15°	409.9	422.8	430.3	486.9	546.0
17.5°	398.5	407.7	413.1	457.2	534.2
20°	391.5	395.8	400.7	435.7	520.7
22.5°	386.6	384.0	387.8	420.6	502.4
25°	383.4	373.2	377.5	408.7	480.9
27.5°	386.2	363.5	365.1	398.0	458.3
30°	386.6	351.6	352.2	386.6	433.0
32.5°	382.9	339.3	339.8	372.7	404.5
35°	373.7	324.7	324.2	356.5	365.7
37.5°	361.4	309.2	309.2	338.7	323.1
40°	346.3	293.5	295.1	315.6	285.4
42.5°	327.9	276.8	279.0	284.9	257.4
45°	308.0	260.7	262.3	240.7	235.8
47.5°	285.9	244.0	244.5	199.8	228.9
50°	259.6	226.7	224.6	171.3	228.4
52.5°	236.4	207.9	201.4	155.1	207.3
55°	213.8	188.0	173.9	142.7	192.2
57.5°	193.8	162.1	148.6	128.2	189.0
60°	175.5	136.8	126.6	112.6	173.4
62.5°	160.5	118.0	115.8	101.8	157.2
65°	144.3	105.0	104.5	92.7	133.5
67.5°	128.7	96.4	95.9	84.0	101.8
70°	112.0	87.2	86.2	74.8	75.4
72.5°	94.8	77.0	76.0	67.3	62.5
75°	77.6	65.1	64.6	58.7	50.6
77.5°	60.9	51.7	52.8	47.4	37.2
80°	43.6	37.7	38.8	34.0	28.0
82.5°	29.1	24.8	25.9	21.5	18.9
85°	16.1	14.0	14.5	11.3	8.6
87.5°	7.5	6.4	6.4	4.3	2.7
90°	22.1	14.1	13.0	9.0	5.0
92.5°	135.9	96.7	88.2	54.0	20.0
95°	334.4	188.3	172.7	110.4	48.1
97.5°	450.4	206.9	193.1	138.1	83.1
100°	492.6	222.4	209.9	160.0	110.2
102.5°	512.1	237.9	226.3	179.8	133.2
105°	526.4	261.0	251.1	211.8	172.3
107.5°	529.1	295.0	285.9	249.1	212.4
110°	525.1	314.1	305.8	272.5	239.4



TEST NUMBER: P935850

CATALOG NUMBER: SQ4-FA-150U-050D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
112.5°	525.2	337.1	329.2	297.6	266.0
115°	530.1	371.6	364.3	335.2	306.0
117.5°	539.9	405.2	398.6	372.1	345.6
120°	547.9	424.7	418.4	393.6	368.6
122.5°	559.5	447.8	441.5	416.3	391.1
125°	574.9	477.3	471.6	448.6	425.8
127.5°	590.4	505.8	500.0	476.9	453.8
130°	601.8	524.8	518.6	493.7	468.8
132.5°	611.0	540.4	534.2	509.3	484.3
135°	621.0	558.4	552.7	530.1	507.3
137.5°	636.1	581.5	575.8	553.3	530.9
140°	645.3	597.0	591.9	571.2	550.5
142.5°	652.9	608.5	603.7	584.6	565.5
145°	663.0	626.0	621.8	605.2	588.5
147.5°	677.7	648.1	644.0	627.8	611.5
150°	685.3	659.6	655.9	641.3	626.6
152.5°	690.3	667.1	664.3	653.2	642.1
155°	701.3	683.7	681.6	673.4	665.1
157.5°	712.3	700.1	698.1	690.2	682.1
160°	717.4	707.7	706.2	699.9	693.6
162.5°	722.7	715.7	714.5	709.9	705.2
165°	730.4	727.2	726.2	721.9	717.7
167.5°	736.4	733.7	733.2	731.2	729.2
170°	741.4	741.2	740.8	738.8	736.8
172.5°	741.7	741.7	741.7	741.2	740.8
175°	744.7	746.2	746.2	746.2	746.2
177.5°	745.1	746.2	746.2	746.2	746.2
180°	746.2	746.2	746.2	746.2	746.2



TEST NUMBER: P935850  
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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	7.37	8.03	8.52	9.17	10.78	10.16	10.83	11.32	11.97	13.58
	3H	7.83	8.42	8.99	9.57	11.19	11.49	12.08	12.65	13.23	14.85
	4H	8.01	8.57	9.18	9.73	11.35	11.91	12.48	13.09	13.63	15.25
	6H	8.12	8.64	9.30	9.79	11.43	12.18	12.70	13.36	13.85	15.49
	8H	8.11	8.61	9.30	9.78	11.41	12.24	12.74	13.43	13.91	15.54
	12H	8.08	8.55	9.26	9.71	11.36	12.27	12.74	13.46	13.90	15.55
4H	2H	8.37	8.93	9.55	10.08	11.71	10.55	11.12	11.73	12.27	13.89
	3H	9.37	9.84	10.56	11.02	12.66	12.03	12.50	13.21	13.68	15.31
	4H	9.64	10.08	10.83	11.24	12.90	12.54	12.97	13.73	14.14	15.80
	6H	9.76	10.13	10.95	11.31	12.96	12.89	13.26	14.08	14.44	16.09
	8H	9.76	10.10	10.95	11.28	12.94	12.98	13.33	14.17	14.51	16.17
	12H	9.72	10.03	10.92	11.22	12.89	13.03	13.34	14.23	14.53	16.20
8H	4H	10.07	10.42	11.26	11.60	13.26	12.65	13.00	13.84	14.17	15.84
	6H	10.33	10.61	11.54	11.83	13.49	13.07	13.36	14.28	14.58	16.24
	8H	10.37	10.62	11.58	11.81	13.49	13.21	13.46	14.43	14.66	16.34
	12H	10.34	10.56	11.56	11.76	13.47	13.30	13.52	14.51	14.71	16.42
12H	4H	10.07	10.38	11.27	11.57	13.24	12.60	12.92	13.81	14.11	15.78
	6H	10.39	10.63	11.60	11.83	13.51	13.07	13.31	14.28	14.51	16.19
	8H	10.44	10.66	11.66	11.86	13.57	13.21	13.43	14.43	14.63	16.34