

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: P935058

Luminaire Tested: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935058
REPORT IS A COMBINATION OF REPORTS P933738 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

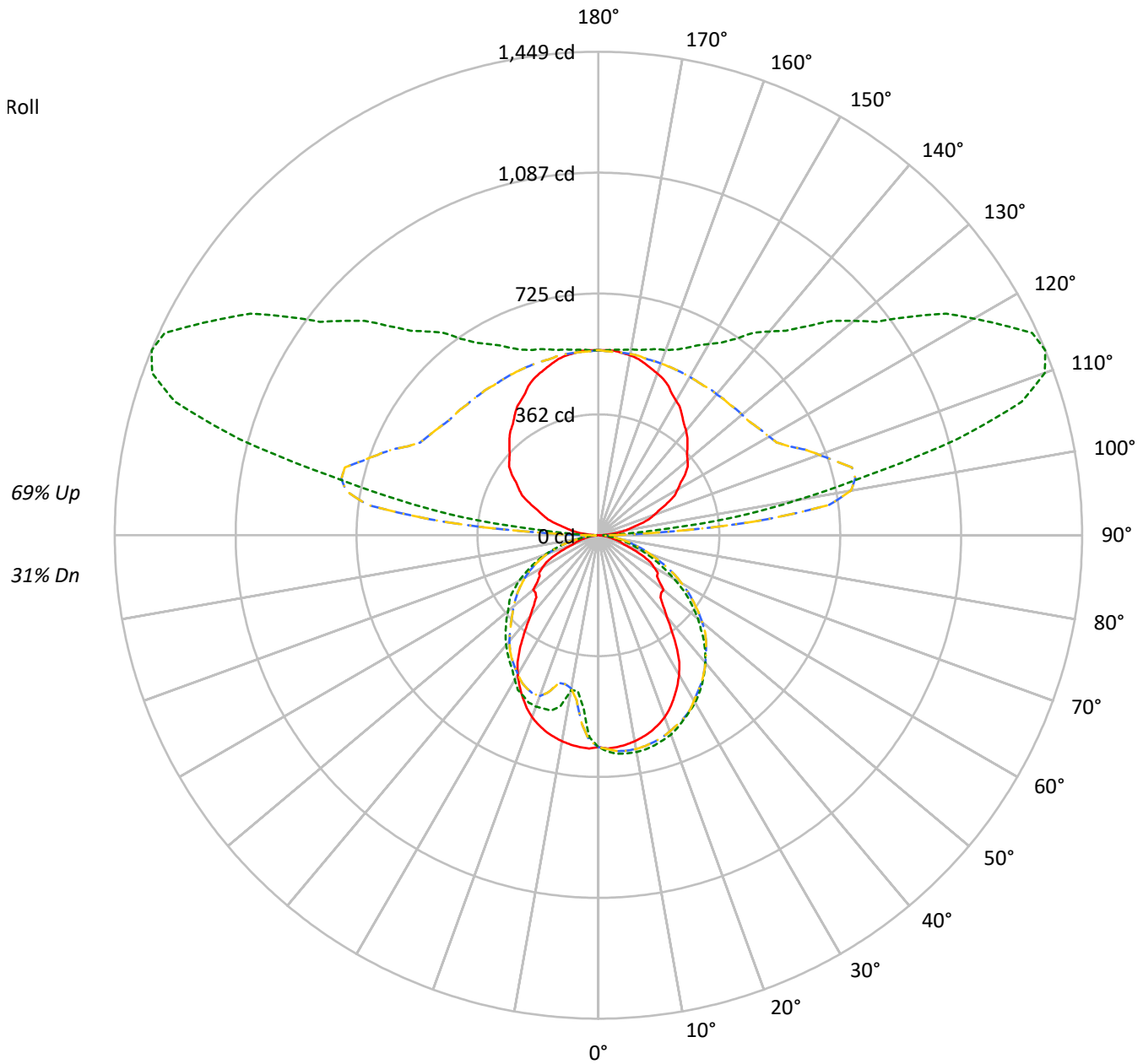
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5244.7 lumens
Efficiency: N/A
Efficacy: 127.3 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-Indirect

Input Watts (W): 41.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P935058
CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-3500K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5890	5890	5890	5890
5°	5926	5945	5926	4675
10°	5881	5856	5881	4187
15°	5810	5729	5810	4784
20°	5682	5579	5682	4794
25°	5427	5359	5427	4692
30°	5099	5177	5099	4470
35°	4539	4947	4539	4225
40°	3775	4677	3775	4039
45°	3367	4360	3367	3826
50°	3569	3981	3569	3612
55°	3347	3574	3347	3489
60°	3440	3035	3440	3195
65°	3103	2509	3103	2803
70°	2135	1999	2135	2352
75°	1850	1478	1850	1770
80°	1460	978	1460	1063
85°	795	517	795	440

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5170 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.3	1.1
10°-20°	162.7	3.1
20°-30°	251.4	4.8
30°-40°	300.2	5.7
40°-50°	301.9	5.8
50°-60°	262.7	5.0
60°-70°	186.3	3.6
70°-80°	98.5	1.9
80°-90°	26.7	0.5
90°-100°	270.5	5.2
100°-110°	711.1	13.6
110°-120°	737.3	14.1
120°-130°	591.4	11.3
130°-140°	464.0	8.8
140°-150°	356.2	6.8
150°-160°	256.5	4.9
160°-170°	156.9	3.0
170°-180°	53.0	1.0
0°-30°	471.4	9.0
0°-40°	771.6	14.7
0°-60°	1336.2	25.5
0°-90°	1647.7	31.4
90°-120°	1718.9	32.8
90°-150°	3130.5	59.7
90°-180°	3597.0	68.6
0°-180°	5244.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	635	635	635	635	635	
5°	638	658	638	517	638	60
15°	609	652	609	544	609	171
25°	536	608	536	532	536	246
35°	408	542	408	463	408	252
45°	263	447	263	392	263	211
55°	214	330	214	322	214	197
65°	149	199	149	222	149	142
75°	56	94	56	113	56	59
85°	10	24	10	20	10	13
90°	4	14	4	14	4	3
95°	36	164	36	164	36	40
105°	128	1114	128	1114	128	136
115°	228	1434	228	1434	228	225
125°	317	1142	317	1142	317	281
135°	377	886	377	886	377	292
145°	438	719	438	719	438	274
155°	495	619	495	619	495	227
165°	534	576	534	576	534	151
175°	555	559	555	559	555	53
180°	555	555	555	555	555	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7
2.5°	640.1	640.1	643.6	644.9	644.9	643.1	641.3	643.1	648.5	650.3	649.6
5°	637.6	642.5	649.1	650.3	651.5	650.9	649.6	650.9	656.9	658.1	658.7
7.5°	632.9	641.8	650.3	652.1	653.8	652.1	651.5	652.7	658.7	659.8	659.8
10°	626.9	639.4	649.1	650.3	652.1	650.3	650.3	652.7	658.7	659.8	660.5
12.5°	618.5	635.9	644.9	646.1	648.5	647.8	647.3	649.6	655.7	656.9	656.9
15°	608.8	629.2	637.6	638.9	643.1	641.8	641.8	644.3	650.9	652.7	652.1
17.5°	595.7	620.9	630.5	632.3	635.3	634.7	635.3	637.6	643.6	644.9	645.5
20°	580.6	609.4	620.9	622.7	625.6	625.6	625.6	628.7	634.7	637.1	637.1
22.5°	560.2	597.4	609.4	610.7	614.3	614.3	615.4	619.6	625.0	625.6	625.6
25°	536.2	584.2	594.4	598.1	601.6	603.4	605.2	607.6	609.4	608.8	609.4
27.5°	511.0	567.4	580.6	583.0	587.9	589.7	592.1	592.6	593.2	595.0	593.9
30°	482.8	544.0	563.8	566.2	574.0	575.2	572.8	574.0	577.0	578.2	579.4
32.5°	451.0	509.2	546.4	551.8	559.0	555.5	554.8	556.6	561.5	561.5	562.6
35°	407.7	482.1	530.2	535.0	540.4	536.2	538.6	539.2	542.2	544.0	543.4
37.5°	360.3	458.8	513.4	517.0	521.2	515.8	519.4	521.2	523.6	522.4	522.4
40°	318.2	422.1	493.6	496.0	499.6	495.4	499.0	500.2	501.4	500.2	499.6
42.5°	287.0	381.9	472.5	475.6	473.2	476.1	477.4	479.8	477.9	475.6	475.6
45°	263.0	371.1	449.7	453.3	449.7	454.5	456.3	456.3	451.0	449.7	449.1
47.5°	255.2	349.4	426.9	426.9	425.1	431.1	434.1	429.9	424.6	422.7	422.7
50°	254.6	325.4	395.7	393.3	401.7	408.9	405.9	401.7	397.5	390.9	390.9
52.5°	231.2	296.0	355.4	364.5	377.6	381.9	377.1	372.9	365.6	362.7	360.3
55°	214.3	265.4	318.8	336.8	350.7	356.1	347.0	342.8	332.1	330.3	329.0
57.5°	210.8	221.0	285.2	308.0	324.8	324.3	318.8	311.0	302.0	300.2	299.7
60°	193.4	159.7	249.2	276.2	293.6	291.8	287.0	279.8	271.4	270.2	269.0
62.5°	175.3	115.9	208.3	239.0	263.6	263.0	258.8	248.0	242.0	239.0	236.5
65°	148.9	97.2	148.4	198.8	234.2	235.4	226.3	218.5	211.9	208.3	207.7
67.5°	113.5	79.2	100.3	165.7	205.9	204.8	193.4	189.7	181.3	179.5	175.9
70°	84.1	52.8	69.7	134.5	178.3	175.3	166.3	162.1	154.4	150.1	147.7
72.5°	69.7	42.6	51.0	104.5	150.1	146.5	138.7	133.9	127.3	123.7	121.3
75°	56.4	45.0	39.0	77.4	121.9	119.5	112.3	107.4	102.1	97.2	97.9
77.5°	41.5	42.0	31.2	57.0	96.7	93.1	88.9	82.9	80.5	75.7	75.7
80°	31.2	33.0	23.5	39.0	69.7	69.7	66.1	61.9	57.7	55.2	55.2
82.5°	21.0	21.0	17.4	24.6	47.5	45.7	43.2	42.0	39.7	38.4	38.4
85°	9.6	12.0	10.8	15.0	25.8	27.0	27.0	25.8	25.2	24.0	24.6
87.5°	3.0	5.4	6.6	8.4	13.3	13.8	14.4	14.4	14.4	15.0	15.0
90°	3.8	6.7	9.7	10.4	16.4	24.4	28.3	25.2	18.9	14.1	14.1
92.5°	14.9	40.2	65.5	71.9	101.1	139.9	159.4	139.7	100.3	70.7	68.0
95°	35.7	82.1	128.5	140.0	248.6	393.4	465.8	415.7	315.4	240.2	231.7
97.5°	61.8	102.7	143.6	153.8	334.9	576.4	697.1	665.4	602.0	554.5	538.3
100°	81.9	119.0	156.1	165.4	366.4	634.3	768.3	770.6	775.2	778.7	759.3
102.5°	99.0	133.7	168.2	176.9	380.8	652.5	788.4	828.8	909.5	970.1	953.5
105°	128.1	157.4	186.7	194.0	391.4	654.6	786.2	876.7	1057.7	1193.5	1184.7
107.5°	157.9	185.2	212.5	219.4	393.4	625.4	741.4	867.7	1120.3	1309.8	1311.9
110°	178.0	202.7	227.3	233.5	390.4	599.6	704.2	845.4	1127.7	1339.5	1348.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	197.8	221.2	244.7	250.6	390.5	577.0	670.3	814.8	1103.7	1320.5	1334.7
115°	227.5	249.2	270.8	276.3	394.1	551.2	629.8	769.0	1047.3	1256.1	1275.8
117.5°	257.0	276.7	296.3	301.3	401.5	535.0	601.8	727.4	978.7	1167.1	1189.0
120°	274.1	292.6	311.1	315.8	407.4	529.6	590.6	705.4	935.0	1107.1	1128.5
122.5°	290.9	309.6	328.3	333.0	416.0	526.7	582.0	685.4	892.1	1047.2	1068.1
125°	316.6	333.6	350.6	354.9	427.5	524.3	572.7	660.6	836.1	967.8	987.2
127.5°	337.4	354.5	371.8	376.1	439.1	523.0	564.9	640.3	791.1	904.2	920.5
130°	348.5	367.1	385.6	390.3	447.5	523.8	562.0	629.1	763.3	864.0	879.0
132.5°	360.1	378.6	397.2	401.8	454.3	524.3	559.3	619.4	739.5	829.7	843.2
135°	377.3	394.1	411.0	415.2	461.8	523.8	554.9	605.2	705.8	781.2	792.9
137.5°	394.7	411.5	428.1	432.3	472.9	527.1	554.1	596.6	681.7	745.5	755.0
140°	409.2	424.6	440.0	443.9	479.8	527.6	551.5	588.2	661.7	716.9	725.7
142.5°	420.4	434.7	448.9	452.5	485.5	529.5	551.5	583.7	648.3	696.7	704.4
145°	437.5	450.0	462.3	465.5	493.0	529.6	547.8	574.3	627.0	666.6	672.4
147.5°	454.7	466.8	478.8	481.9	503.9	533.2	547.8	568.6	610.2	641.3	646.1
150°	465.8	476.8	487.7	490.5	509.6	535.1	547.8	565.4	600.4	626.7	630.6
152.5°	477.4	485.6	493.9	496.0	513.3	536.3	547.8	562.8	592.7	615.2	618.1
155°	494.6	500.7	506.8	508.4	521.5	539.1	547.8	559.7	583.6	601.4	603.4
157.5°	507.2	513.2	519.1	520.6	529.7	541.8	547.8	557.1	575.6	589.5	590.8
160°	515.8	520.4	525.0	526.2	533.4	543.0	547.8	555.8	571.7	583.6	584.4
162.5°	524.3	527.8	531.3	532.2	537.4	544.3	547.8	554.6	567.9	577.9	578.6
165°	533.6	536.7	539.9	540.7	543.1	546.2	547.8	552.7	562.3	569.4	570.2
167.5°	542.2	543.7	545.2	545.6	547.6	550.2	551.5	554.6	560.9	565.7	566.0
170°	547.8	549.3	550.8	551.2	551.2	551.4	551.5	554.6	560.9	565.7	565.7
172.5°	550.8	551.2	551.4	551.5	551.5	551.5	551.5	554.0	558.9	562.7	562.4
175°	554.9	554.9	554.9	554.9	553.8	552.2	551.5	553.1	556.3	558.6	558.6
177.5°	554.9	554.9	554.9	554.9	554.0	552.9	552.2	553.5	556.0	557.9	557.5
180°	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7
2.5°	650.9	649.1	650.9	649.6	650.3	648.5	643.1	641.3	643.1	644.9	644.9
5°	658.7	657.5	658.7	658.7	658.1	656.9	650.9	649.6	650.9	651.5	650.3
7.5°	661.1	659.3	661.1	659.8	659.8	658.7	652.7	651.5	652.1	653.8	652.1
10°	661.1	659.3	661.1	660.5	659.8	658.7	652.7	650.3	650.3	652.1	650.3
12.5°	658.1	656.9	658.1	656.9	656.9	655.7	649.6	647.3	647.8	648.5	646.1
15°	653.3	651.5	653.3	652.1	652.7	650.9	644.3	641.8	641.8	643.1	638.9
17.5°	646.1	643.6	646.1	645.5	644.9	643.6	637.6	635.3	634.7	635.3	632.3
20°	637.6	635.9	637.6	637.1	637.1	634.7	628.7	625.6	625.6	625.6	622.7
22.5°	624.5	622.7	624.5	625.6	625.6	625.0	619.6	615.4	614.3	614.3	610.7
25°	609.4	607.6	609.4	609.4	608.8	609.4	607.6	605.2	603.4	601.6	598.1
27.5°	595.0	593.9	595.0	593.9	595.0	593.2	592.6	592.1	589.7	587.9	583.0
30°	580.6	579.4	580.6	579.4	578.2	577.0	574.0	572.8	575.2	574.0	566.2
32.5°	562.6	561.5	562.6	562.6	561.5	561.5	556.6	554.8	555.5	559.0	551.8
35°	544.0	542.2	544.0	543.4	544.0	542.2	539.2	538.6	536.2	540.4	535.0
37.5°	522.4	520.6	522.4	522.4	522.4	523.6	521.2	519.4	515.8	521.2	517.0
40°	500.2	497.8	500.2	499.6	500.2	501.4	500.2	499.0	495.4	499.6	496.0
42.5°	475.0	474.3	475.0	475.6	475.6	477.9	479.8	477.4	476.1	473.2	475.6
45°	447.9	446.8	447.9	449.1	449.7	451.0	456.3	456.3	454.5	449.7	453.3
47.5°	419.1	416.1	419.1	422.7	422.7	424.6	429.9	434.1	431.1	425.1	426.9
50°	388.5	389.1	388.5	390.9	390.9	397.5	401.7	405.9	408.9	401.7	393.3
52.5°	358.5	357.9	358.5	360.3	362.7	365.6	372.9	377.1	381.9	377.6	364.5
55°	328.4	329.7	328.4	329.0	330.3	332.1	342.8	347.0	356.1	350.7	336.8
57.5°	298.4	296.6	298.4	299.7	300.2	302.0	311.0	318.8	324.3	324.8	308.0
60°	263.6	261.2	263.6	269.0	270.2	271.4	279.8	287.0	291.8	293.6	276.2
62.5°	233.0	228.8	233.0	236.5	239.0	242.0	248.0	258.8	263.0	263.6	239.0
65°	200.5	198.8	200.5	207.7	208.3	211.9	218.5	226.3	235.4	234.2	198.8
67.5°	171.1	171.1	171.1	175.9	179.5	181.3	189.7	193.4	204.8	205.9	165.7
70°	144.1	143.5	144.1	147.7	150.1	154.4	162.1	166.3	175.3	178.3	134.5
72.5°	118.3	117.6	118.3	121.3	123.7	127.3	133.9	138.7	146.5	150.1	104.5
75°	95.4	94.3	95.4	97.9	97.2	102.1	107.4	112.3	119.5	121.9	77.4
77.5°	73.2	73.2	73.2	75.7	75.7	80.5	82.9	88.9	93.1	96.7	57.0
80°	54.6	54.1	54.6	55.2	55.2	57.7	61.9	66.1	69.7	69.7	39.0
82.5°	38.4	37.2	38.4	38.4	38.4	39.7	42.0	43.2	45.7	47.5	24.6
85°	24.0	24.0	24.0	24.6	24.0	25.2	25.8	27.0	27.0	25.8	15.0
87.5°	15.6	15.0	15.6	15.0	15.0	14.4	14.4	14.4	13.8	13.3	8.4
90°	14.1	14.1	14.1	14.1	14.1	18.9	25.2	28.3	24.4	16.4	10.4
92.5°	56.7	45.4	56.7	68.0	70.7	100.3	139.7	159.4	139.9	101.1	71.9
95°	197.6	163.5	197.6	231.7	240.2	315.4	415.7	465.8	393.4	248.6	140.0
97.5°	473.4	408.5	473.4	538.3	554.5	602.0	665.4	697.1	576.4	334.9	153.8
100°	682.0	604.8	682.0	759.3	778.7	775.2	770.6	768.3	634.3	366.4	165.4
102.5°	887.3	821.2	887.3	953.5	970.1	909.5	828.8	788.4	652.5	380.8	176.9
105°	1149.0	1113.5	1149.0	1184.7	1193.5	1057.7	876.7	786.2	654.6	391.4	194.0
107.5°	1320.5	1329.1	1320.5	1311.9	1309.8	1120.3	867.7	741.4	625.4	393.4	219.4
110°	1385.9	1422.9	1385.9	1348.8	1339.5	1127.7	845.4	704.2	599.6	390.4	233.5



TEST NUMBER: P935058

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	1391.7	1448.6	1391.7	1334.7	1320.5	1103.7	814.8	670.3	577.0	390.5	250.6
115°	1354.8	1433.8	1354.8	1275.8	1256.1	1047.3	769.0	629.8	551.2	394.1	276.3
117.5°	1276.5	1364.1	1276.5	1189.0	1167.1	978.7	727.4	601.8	535.0	401.5	301.3
120°	1213.5	1298.6	1213.5	1128.5	1107.1	935.0	705.4	590.6	529.6	407.4	315.8
122.5°	1152.1	1236.0	1152.1	1068.1	1047.2	892.1	685.4	582.0	526.7	416.0	333.0
125°	1064.4	1141.8	1064.4	987.2	967.8	836.1	660.6	572.7	524.3	427.5	354.9
127.5°	985.7	1050.9	985.7	920.5	904.2	791.1	640.3	564.9	523.0	439.1	376.1
130°	939.3	999.5	939.3	879.0	864.0	763.3	629.1	562.0	523.8	447.5	390.3
132.5°	897.1	951.1	897.1	843.2	829.7	739.5	619.4	559.3	524.3	454.3	401.8
135°	839.4	885.9	839.4	792.9	781.2	705.8	605.2	554.9	523.8	461.8	415.2
137.5°	793.2	831.2	793.2	755.0	745.5	681.7	596.6	554.1	527.1	472.9	432.3
140°	761.4	796.9	761.4	725.7	716.9	661.7	588.2	551.5	527.6	479.8	443.9
142.5°	735.1	765.7	735.1	704.4	696.7	648.3	583.7	551.5	529.5	485.5	452.5
145°	695.6	718.8	695.6	672.4	666.6	627.0	574.3	547.8	529.6	493.0	465.5
147.5°	665.3	684.5	665.3	646.1	641.3	610.2	568.6	547.8	533.2	503.9	481.9
150°	646.1	661.7	646.1	630.6	626.7	600.4	565.4	547.8	535.1	509.6	490.5
152.5°	629.9	641.7	629.9	618.1	615.2	592.7	562.8	547.8	536.3	513.3	496.0
155°	611.1	618.9	611.1	603.4	601.4	583.6	559.7	547.8	539.1	521.5	508.4
157.5°	596.4	601.8	596.4	590.8	589.5	575.6	557.1	547.8	541.8	529.7	520.6
160°	587.5	590.6	587.5	584.4	583.6	571.7	555.8	547.8	543.0	533.4	526.2
162.5°	581.7	584.6	581.7	578.6	577.9	567.9	554.6	547.8	544.3	537.4	532.2
165°	573.4	576.5	573.4	570.2	569.4	562.3	552.7	547.8	546.2	543.1	540.7
167.5°	567.3	568.6	567.3	566.0	565.7	560.9	554.6	551.5	550.2	547.6	545.6
170°	565.7	565.7	565.7	565.7	565.7	560.9	554.6	551.5	551.4	551.2	551.2
172.5°	561.3	560.1	561.3	562.4	562.7	558.9	554.0	551.5	551.5	551.5	551.5
175°	558.6	558.6	558.6	558.6	558.6	556.3	553.1	551.5	552.2	553.8	554.9
177.5°	556.3	554.9	556.3	557.5	557.9	556.0	553.5	552.2	552.9	554.0	554.9
180°	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9



TEST NUMBER: P935058

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7
2.5°	643.6	640.1	640.1	634.1	631.6	629.9	626.9	617.9	615.4	613.0	616.7
5°	649.1	642.5	637.6	626.9	617.9	614.3	602.8	581.2	566.8	556.0	550.0
7.5°	650.3	641.8	632.9	616.1	594.4	584.8	550.0	510.4	499.6	490.0	483.9
10°	649.1	639.4	626.9	601.6	550.6	533.8	499.0	473.2	466.5	464.8	466.5
12.5°	644.9	635.9	618.5	576.4	505.0	493.6	473.2	458.1	457.0	459.9	476.1
15°	637.6	629.2	608.8	542.8	479.8	471.4	457.0	451.5	458.1	479.2	527.8
17.5°	630.5	620.9	595.7	509.8	460.5	454.5	444.3	455.2	492.3	520.6	536.8
20°	620.9	609.4	580.6	485.8	446.8	441.3	436.6	485.2	513.4	523.6	532.6
22.5°	609.4	597.4	560.2	469.0	432.3	428.1	431.1	502.0	513.4	520.6	528.4
25°	594.4	584.2	536.2	455.7	420.9	416.1	427.5	500.2	506.7	508.5	524.2
27.5°	580.6	567.4	511.0	443.7	407.1	405.3	430.6	492.3	497.2	499.0	515.8
30°	563.8	544.0	482.8	431.1	392.7	392.1	431.1	482.8	481.6	486.3	503.2
32.5°	546.4	509.2	451.0	415.5	378.9	378.3	426.9	468.3	467.2	473.7	486.3
35°	530.2	482.1	407.7	397.5	361.4	362.1	416.7	451.5	452.1	458.1	465.9
37.5°	513.4	458.8	360.3	377.6	344.7	344.7	402.9	435.9	434.8	436.6	447.3
40°	493.6	422.1	318.2	351.9	329.0	327.2	386.1	419.1	414.9	414.4	429.3
42.5°	472.5	381.9	287.0	317.7	311.0	308.6	365.6	398.7	390.9	392.7	411.9
45°	449.7	371.1	263.0	268.4	292.4	290.6	343.4	375.3	369.9	374.7	394.5
47.5°	426.9	349.4	255.2	222.8	272.6	272.0	318.8	352.5	349.4	354.3	375.3
50°	395.7	325.4	254.6	191.0	250.4	252.7	289.5	330.3	330.3	334.5	356.7
52.5°	355.4	296.0	231.2	172.9	224.5	231.8	263.6	311.0	312.2	316.4	336.3
55°	318.8	265.4	214.3	159.1	193.9	209.6	238.3	291.2	293.6	297.8	315.9
57.5°	285.2	221.0	210.8	142.9	165.7	180.8	216.1	272.0	273.2	276.8	294.2
60°	249.2	159.7	193.4	125.5	141.1	152.5	195.7	249.2	253.4	255.8	270.8
62.5°	208.3	115.9	175.3	113.5	129.1	131.5	179.0	227.6	233.0	234.8	243.8
65°	148.4	97.2	148.9	103.3	116.5	117.1	160.9	205.4	210.1	213.2	219.8
67.5°	100.3	79.2	113.5	93.6	106.9	107.4	143.5	179.5	186.1	188.6	192.8
70°	69.7	52.8	84.1	83.4	96.1	97.2	124.9	156.1	162.1	163.9	166.3
72.5°	51.0	42.6	69.7	75.0	84.7	85.9	105.6	129.7	135.7	137.5	138.7
75°	39.0	45.0	56.4	65.4	72.1	72.6	86.5	105.6	109.9	111.1	111.6
77.5°	31.2	42.0	41.5	52.8	58.8	57.7	67.9	81.7	85.2	85.2	85.2
80°	23.5	33.0	31.2	37.9	43.2	42.0	48.6	58.3	59.4	60.6	60.1
82.5°	17.4	21.0	21.0	24.0	28.8	27.7	32.4	37.9	37.9	37.9	39.0
85°	10.8	12.0	9.6	12.6	16.2	15.6	18.0	20.4	21.0	21.0	19.8
87.5°	6.6	5.4	3.0	4.8	7.2	7.2	8.4	9.0	8.4	8.4	8.4
90°	9.7	6.7	3.8	6.7	9.7	10.4	16.4	24.4	28.3	25.2	18.9
92.5°	65.5	40.2	14.9	40.2	65.5	71.9	101.1	139.9	159.4	139.7	100.3
95°	128.5	82.1	35.7	82.1	128.5	140.0	248.6	393.4	465.8	415.7	315.4
97.5°	143.6	102.7	61.8	102.7	143.6	153.8	334.9	576.4	697.1	665.4	602.0
100°	156.1	119.0	81.9	119.0	156.1	165.4	366.4	634.3	768.3	770.6	775.2
102.5°	168.2	133.7	99.0	133.7	168.2	176.9	380.8	652.5	788.4	828.8	909.5
105°	186.7	157.4	128.1	157.4	186.7	194.0	391.4	654.6	786.2	876.7	1057.7
107.5°	212.5	185.2	157.9	185.2	212.5	219.4	393.4	625.4	741.4	867.7	1120.3
110°	227.3	202.7	178.0	202.7	227.3	233.5	390.4	599.6	704.2	845.4	1127.7



TEST NUMBER: P935058

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	244.7	221.2	197.8	221.2	244.7	250.6	390.5	577.0	670.3	814.8	1103.7
115°	270.8	249.2	227.5	249.2	270.8	276.3	394.1	551.2	629.8	769.0	1047.3
117.5°	296.3	276.7	257.0	276.7	296.3	301.3	401.5	535.0	601.8	727.4	978.7
120°	311.1	292.6	274.1	292.6	311.1	315.8	407.4	529.6	590.6	705.4	935.0
122.5°	328.3	309.6	290.9	309.6	328.3	333.0	416.0	526.7	582.0	685.4	892.1
125°	350.6	333.6	316.6	333.6	350.6	354.9	427.5	524.3	572.7	660.6	836.1
127.5°	371.8	354.5	337.4	354.5	371.8	376.1	439.1	523.0	564.9	640.3	791.1
130°	385.6	367.1	348.5	367.1	385.6	390.3	447.5	523.8	562.0	629.1	763.3
132.5°	397.2	378.6	360.1	378.6	397.2	401.8	454.3	524.3	559.3	619.4	739.5
135°	411.0	394.1	377.3	394.1	411.0	415.2	461.8	523.8	554.9	605.2	705.8
137.5°	428.1	411.5	394.7	411.5	428.1	432.3	472.9	527.1	554.1	596.6	681.7
140°	440.0	424.6	409.2	424.6	440.0	443.9	479.8	527.6	551.5	588.2	661.7
142.5°	448.9	434.7	420.4	434.7	448.9	452.5	485.5	529.5	551.5	583.7	648.3
145°	462.3	450.0	437.5	450.0	462.3	465.5	493.0	529.6	547.8	574.3	627.0
147.5°	478.8	466.8	454.7	466.8	478.8	481.9	503.9	533.2	547.8	568.6	610.2
150°	487.7	476.8	465.8	476.8	487.7	490.5	509.6	535.1	547.8	565.4	600.4
152.5°	493.9	485.6	477.4	485.6	493.9	496.0	513.3	536.3	547.8	562.8	592.7
155°	506.8	500.7	494.6	500.7	506.8	508.4	521.5	539.1	547.8	559.7	583.6
157.5°	519.1	513.2	507.2	513.2	519.1	520.6	529.7	541.8	547.8	557.1	575.6
160°	525.0	520.4	515.8	520.4	525.0	526.2	533.4	543.0	547.8	555.8	571.7
162.5°	531.3	527.8	524.3	527.8	531.3	532.2	537.4	544.3	547.8	554.6	567.9
165°	539.9	536.7	533.6	536.7	539.9	540.7	543.1	546.2	547.8	552.7	562.3
167.5°	545.2	543.7	542.2	543.7	545.2	545.6	547.6	550.2	551.5	554.6	560.9
170°	550.8	549.3	547.8	549.3	550.8	551.2	551.2	551.4	551.5	554.6	560.9
172.5°	551.4	551.2	550.8	551.2	551.4	551.5	551.5	551.5	551.5	554.0	558.9
175°	554.9	554.9	554.9	554.9	554.9	554.9	553.8	552.2	551.5	553.1	556.3
177.5°	554.9	554.9	554.9	554.9	554.9	554.9	554.0	552.9	552.2	553.5	556.0
180°	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9



TEST NUMBER: P935058

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7
2.5°	612.5	610.7	613.0	606.5	613.0	610.7	612.5	616.7	613.0	615.4	617.9
5°	537.4	534.4	524.8	517.0	524.8	534.4	537.4	550.0	556.0	566.8	581.2
7.5°	480.3	477.9	475.6	470.8	475.6	477.9	480.3	483.9	490.0	499.6	510.4
10°	467.7	468.3	471.9	471.4	471.9	468.3	467.7	466.5	464.8	466.5	473.2
12.5°	500.2	505.6	525.4	524.2	525.4	505.6	500.2	476.1	459.9	457.0	458.1
15°	537.4	539.2	543.4	544.0	543.4	539.2	537.4	527.8	479.2	458.1	451.5
17.5°	541.0	541.6	544.6	544.6	544.6	541.6	541.0	536.8	520.6	492.3	455.2
20°	538.0	539.2	545.2	546.4	545.2	539.2	538.0	532.6	523.6	513.4	485.2
22.5°	536.8	539.2	544.0	543.4	544.0	539.2	536.8	528.4	520.6	513.4	502.0
25°	530.8	530.8	531.4	532.0	531.4	530.8	530.8	524.2	508.5	506.7	500.2
27.5°	518.2	519.4	523.0	522.4	523.0	519.4	518.2	515.8	499.0	497.2	492.3
30°	506.7	505.6	502.5	500.2	502.5	505.6	506.7	503.2	486.3	481.6	482.8
32.5°	487.6	484.5	481.6	479.8	481.6	484.5	487.6	486.3	473.7	467.2	468.3
35°	464.8	465.4	464.8	463.0	464.8	465.4	464.8	465.9	458.1	452.1	451.5
37.5°	448.6	449.7	449.1	446.8	449.1	449.7	448.6	447.3	436.6	434.8	435.9
40°	431.7	432.3	431.7	429.9	431.7	432.3	431.7	429.3	414.4	414.9	419.1
42.5°	415.5	414.9	413.1	411.9	413.1	414.9	415.5	411.9	392.7	390.9	398.7
45°	396.9	397.5	393.8	392.1	393.8	397.5	396.9	394.5	374.7	369.9	375.3
47.5°	378.3	378.3	375.3	373.4	375.3	378.3	378.3	375.3	354.3	349.4	352.5
50°	358.5	357.9	353.6	353.0	353.6	357.9	358.5	356.7	334.5	330.3	330.3
52.5°	335.7	335.7	336.3	337.4	336.3	335.7	335.7	336.3	316.4	312.2	311.0
55°	315.9	316.4	320.6	321.9	320.6	316.4	315.9	315.9	297.8	293.6	291.2
57.5°	295.5	295.5	298.4	298.4	298.4	295.5	295.5	294.2	276.8	273.2	272.0
60°	272.0	273.2	275.6	275.0	275.6	273.2	272.0	270.8	255.8	253.4	249.2
62.5°	247.4	248.6	249.2	248.0	249.2	248.6	247.4	243.8	234.8	233.0	227.6
65°	221.6	222.8	223.4	222.1	223.4	222.8	221.6	219.8	213.2	210.1	205.4
67.5°	195.2	194.6	193.9	196.3	193.9	194.6	195.2	192.8	188.6	186.1	179.5
70°	168.1	168.1	167.5	168.8	167.5	168.1	168.1	166.3	163.9	162.1	156.1
72.5°	139.3	138.7	141.1	139.3	141.1	138.7	139.3	138.7	137.5	135.7	129.7
75°	111.1	112.3	111.1	112.9	111.1	112.3	111.1	111.6	111.1	109.9	105.6
77.5°	84.7	85.9	84.7	84.7	84.7	85.9	84.7	85.2	85.2	85.2	81.7
80°	60.1	59.4	59.4	58.8	59.4	59.4	60.1	60.1	60.6	59.4	58.3
82.5°	38.4	37.9	37.9	39.0	37.9	37.9	38.4	39.0	37.9	37.9	37.9
85°	21.0	21.6	20.4	20.4	20.4	21.6	21.0	19.8	21.0	21.0	20.4
87.5°	7.8	7.2	7.2	7.2	7.2	7.2	7.8	8.4	8.4	8.4	9.0
90°	14.1	14.1	14.1	14.1	14.1	14.1	14.1	18.9	25.2	28.3	24.4
92.5°	70.7	68.0	56.7	45.4	56.7	68.0	70.7	100.3	139.7	159.4	139.9
95°	240.2	231.7	197.6	163.5	197.6	231.7	240.2	315.4	415.7	465.8	393.4
97.5°	554.5	538.3	473.4	408.5	473.4	538.3	554.5	602.0	665.4	697.1	576.4
100°	778.7	759.3	682.0	604.8	682.0	759.3	778.7	775.2	770.6	768.3	634.3
102.5°	970.1	953.5	887.3	821.2	887.3	953.5	970.1	909.5	828.8	788.4	652.5
105°	1193.5	1184.7	1149.0	1113.5	1149.0	1184.7	1193.5	1057.7	876.7	786.2	654.6
107.5°	1309.8	1311.9	1320.5	1329.1	1320.5	1311.9	1309.8	1120.3	867.7	741.4	625.4
110°	1339.5	1348.8	1385.9	1422.9	1385.9	1348.8	1339.5	1127.7	845.4	704.2	599.6



TEST NUMBER: P935058

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1320.5	1334.7	1391.7	1448.6	1391.7	1334.7	1320.5	1103.7	814.8	670.3	577.0
115°	1256.1	1275.8	1354.8	1433.8	1354.8	1275.8	1256.1	1047.3	769.0	629.8	551.2
117.5°	1167.1	1189.0	1276.5	1364.1	1276.5	1189.0	1167.1	978.7	727.4	601.8	535.0
120°	1107.1	1128.5	1213.5	1298.6	1213.5	1128.5	1107.1	935.0	705.4	590.6	529.6
122.5°	1047.2	1068.1	1152.1	1236.0	1152.1	1068.1	1047.2	892.1	685.4	582.0	526.7
125°	967.8	987.2	1064.4	1141.8	1064.4	987.2	967.8	836.1	660.6	572.7	524.3
127.5°	904.2	920.5	985.7	1050.9	985.7	920.5	904.2	791.1	640.3	564.9	523.0
130°	864.0	879.0	939.3	999.5	939.3	879.0	864.0	763.3	629.1	562.0	523.8
132.5°	829.7	843.2	897.1	951.1	897.1	843.2	829.7	739.5	619.4	559.3	524.3
135°	781.2	792.9	839.4	885.9	839.4	792.9	781.2	705.8	605.2	554.9	523.8
137.5°	745.5	755.0	793.2	831.2	793.2	755.0	745.5	681.7	596.6	554.1	527.1
140°	716.9	725.7	761.4	796.9	761.4	725.7	716.9	661.7	588.2	551.5	527.6
142.5°	696.7	704.4	735.1	765.7	735.1	704.4	696.7	648.3	583.7	551.5	529.5
145°	666.6	672.4	695.6	718.8	695.6	672.4	666.6	627.0	574.3	547.8	529.6
147.5°	641.3	646.1	665.3	684.5	665.3	646.1	641.3	610.2	568.6	547.8	533.2
150°	626.7	630.6	646.1	661.7	646.1	630.6	626.7	600.4	565.4	547.8	535.1
152.5°	615.2	618.1	629.9	641.7	629.9	618.1	615.2	592.7	562.8	547.8	536.3
155°	601.4	603.4	611.1	618.9	611.1	603.4	601.4	583.6	559.7	547.8	539.1
157.5°	589.5	590.8	596.4	601.8	596.4	590.8	589.5	575.6	557.1	547.8	541.8
160°	583.6	584.4	587.5	590.6	587.5	584.4	583.6	571.7	555.8	547.8	543.0
162.5°	577.9	578.6	581.7	584.6	581.7	578.6	577.9	567.9	554.6	547.8	544.3
165°	569.4	570.2	573.4	576.5	573.4	570.2	569.4	562.3	552.7	547.8	546.2
167.5°	565.7	566.0	567.3	568.6	567.3	566.0	565.7	560.9	554.6	551.5	550.2
170°	565.7	565.7	565.7	565.7	565.7	565.7	565.7	560.9	554.6	551.5	551.4
172.5°	562.7	562.4	561.3	560.1	561.3	562.4	562.7	558.9	554.0	551.5	551.5
175°	558.6	558.6	558.6	558.6	558.6	558.6	558.6	556.3	553.1	551.5	552.2
177.5°	557.9	557.5	556.3	554.9	556.3	557.5	557.9	556.0	553.5	552.2	552.9
180°	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9	554.9



TEST NUMBER: P935058

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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	634.7	634.7	634.7	634.7	634.7
2.5°	626.9	629.9	631.6	634.1	640.1
5°	602.8	614.3	617.9	626.9	637.6
7.5°	550.0	584.8	594.4	616.1	632.9
10°	499.0	533.8	550.6	601.6	626.9
12.5°	473.2	493.6	505.0	576.4	618.5
15°	457.0	471.4	479.8	542.8	608.8
17.5°	444.3	454.5	460.5	509.8	595.7
20°	436.6	441.3	446.8	485.8	580.6
22.5°	431.1	428.1	432.3	469.0	560.2
25°	427.5	416.1	420.9	455.7	536.2
27.5°	430.6	405.3	407.1	443.7	511.0
30°	431.1	392.1	392.7	431.1	482.8
32.5°	426.9	378.3	378.9	415.5	451.0
35°	416.7	362.1	361.4	397.5	407.7
37.5°	402.9	344.7	344.7	377.6	360.3
40°	386.1	327.2	329.0	351.9	318.2
42.5°	365.6	308.6	311.0	317.7	287.0
45°	343.4	290.6	292.4	268.4	263.0
47.5°	318.8	272.0	272.6	222.8	255.2
50°	289.5	252.7	250.4	191.0	254.6
52.5°	263.6	231.8	224.5	172.9	231.2
55°	238.3	209.6	193.9	159.1	214.3
57.5°	216.1	180.8	165.7	142.9	210.8
60°	195.7	152.5	141.1	125.5	193.4
62.5°	179.0	131.5	129.1	113.5	175.3
65°	160.9	117.1	116.5	103.3	148.9
67.5°	143.5	107.4	106.9	93.6	113.5
70°	124.9	97.2	96.1	83.4	84.1
72.5°	105.6	85.9	84.7	75.0	69.7
75°	86.5	72.6	72.1	65.4	56.4
77.5°	67.9	57.7	58.8	52.8	41.5
80°	48.6	42.0	43.2	37.9	31.2
82.5°	32.4	27.7	28.8	24.0	21.0
85°	18.0	15.6	16.2	12.6	9.6
87.5°	8.4	7.2	7.2	4.8	3.0
90°	16.4	10.4	9.7	6.7	3.8
92.5°	101.1	71.9	65.5	40.2	14.9
95°	248.6	140.0	128.5	82.1	35.7
97.5°	334.9	153.8	143.6	102.7	61.8
100°	366.4	165.4	156.1	119.0	81.9
102.5°	380.8	176.9	168.2	133.7	99.0
105°	391.4	194.0	186.7	157.4	128.1
107.5°	393.4	219.4	212.5	185.2	157.9
110°	390.4	233.5	227.3	202.7	178.0



TEST NUMBER: P935058

CATALOG NUMBER: SQ4-FA-100U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	390.5	250.6	244.7	221.2	197.8
115°	394.1	276.3	270.8	249.2	227.5
117.5°	401.5	301.3	296.3	276.7	257.0
120°	407.4	315.8	311.1	292.6	274.1
122.5°	416.0	333.0	328.3	309.6	290.9
125°	427.5	354.9	350.6	333.6	316.6
127.5°	439.1	376.1	371.8	354.5	337.4
130°	447.5	390.3	385.6	367.1	348.5
132.5°	454.3	401.8	397.2	378.6	360.1
135°	461.8	415.2	411.0	394.1	377.3
137.5°	472.9	432.3	428.1	411.5	394.7
140°	479.8	443.9	440.0	424.6	409.2
142.5°	485.5	452.5	448.9	434.7	420.4
145°	493.0	465.5	462.3	450.0	437.5
147.5°	503.9	481.9	478.8	466.8	454.7
150°	509.6	490.5	487.7	476.8	465.8
152.5°	513.3	496.0	493.9	485.6	477.4
155°	521.5	508.4	506.8	500.7	494.6
157.5°	529.7	520.6	519.1	513.2	507.2
160°	533.4	526.2	525.0	520.4	515.8
162.5°	537.4	532.2	531.3	527.8	524.3
165°	543.1	540.7	539.9	536.7	533.6
167.5°	547.6	545.6	545.2	543.7	542.2
170°	551.2	551.2	550.8	549.3	547.8
172.5°	551.5	551.5	551.4	551.2	550.8
175°	553.8	554.9	554.9	554.9	554.9
177.5°	554.0	554.9	554.9	554.9	554.9
180°	554.9	554.9	554.9	554.9	554.9



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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	8.93	9.65	10.03	10.74	12.26	11.73	12.44	12.83	13.54	15.06
	3H	9.40	10.04	10.51	11.14	12.67	13.05	13.69	14.16	14.80	16.33
	4H	9.58	10.19	10.70	11.30	12.83	13.48	14.09	14.60	15.20	16.74
	6H	9.69	10.25	10.82	11.36	12.91	13.75	14.31	14.88	15.42	16.97
	8H	9.69	10.22	10.82	11.35	12.89	13.82	14.35	14.95	15.48	17.02
	12H	9.65	10.16	10.79	11.28	12.84	13.85	14.35	14.98	15.47	17.04
4H	2H	9.94	10.54	11.06	11.65	13.19	12.12	12.73	13.25	13.84	15.37
	3H	10.95	11.46	12.08	12.59	14.14	13.60	14.11	14.74	15.24	16.79
	4H	11.22	11.68	12.36	12.81	14.38	14.12	14.58	15.26	15.71	17.28
	6H	11.34	11.73	12.48	12.88	14.44	14.47	14.87	15.61	16.01	17.57
	8H	11.34	11.71	12.48	12.85	14.43	14.56	14.94	15.71	16.08	17.65
	12H	11.30	11.64	12.46	12.79	14.37	14.61	14.95	15.77	16.10	17.68
8H	4H	11.66	12.03	12.80	13.17	14.74	14.23	14.60	15.37	15.74	17.32
	6H	11.91	12.22	13.08	13.40	14.97	14.65	14.96	15.82	16.14	17.71
	8H	11.95	12.22	13.12	13.38	14.97	14.80	15.07	15.97	16.23	17.82
	12H	11.93	12.17	13.10	13.32	14.95	14.88	15.12	16.06	16.28	17.90
12H	4H	11.65	11.99	12.81	13.14	14.72	14.19	14.53	15.35	15.68	17.26
	6H	11.97	12.24	13.14	13.40	14.99	14.65	14.92	15.82	16.08	17.67
	8H	12.03	12.26	13.20	13.42	15.05	14.80	15.03	15.97	16.19	17.82