

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: P934307

Luminaire Tested: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934307
REPORT IS A COMBINATION OF REPORTS P933691 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

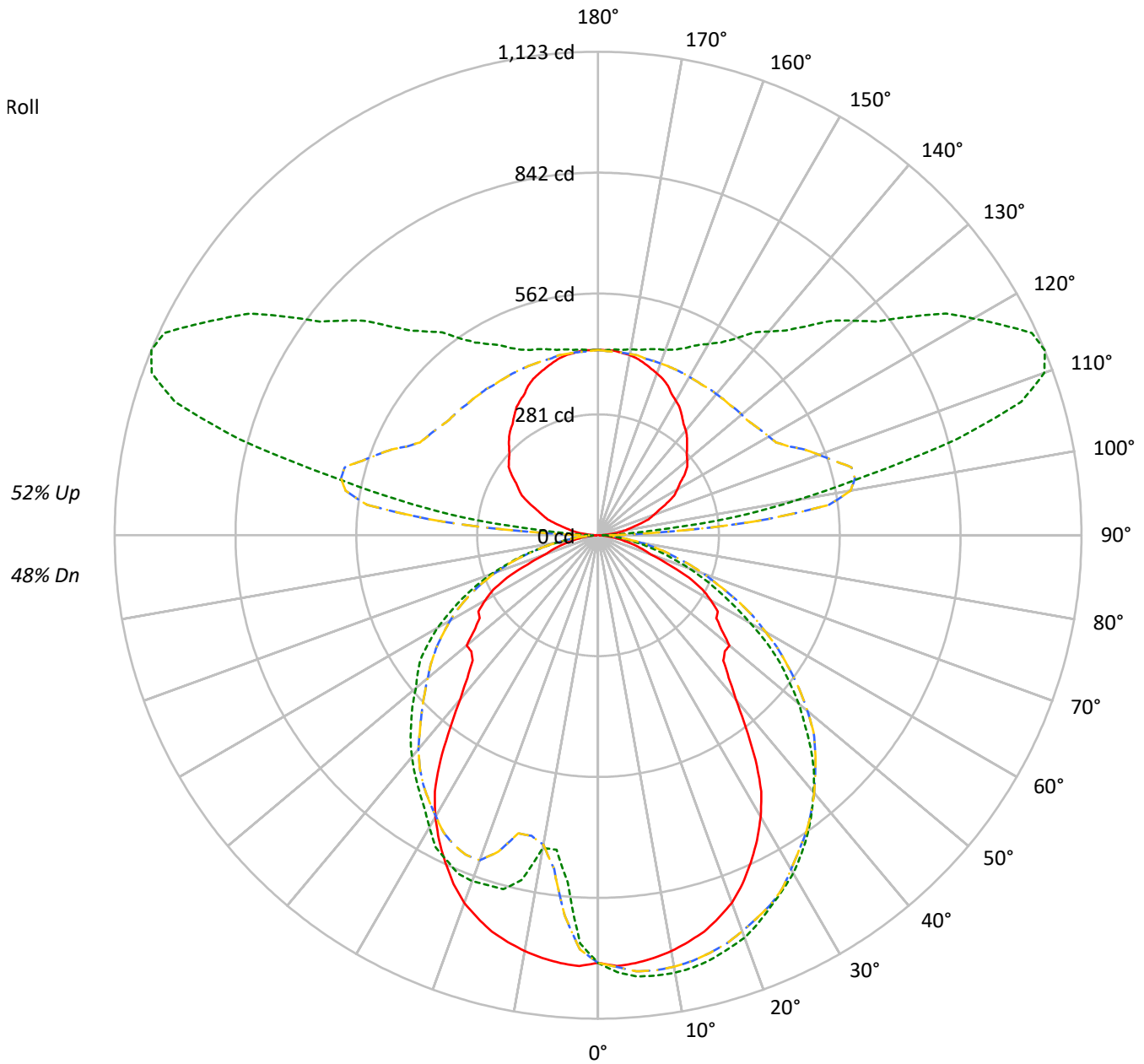
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5365.8 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 42.6
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

TEST NUMBER: P934307
CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



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



TEST NUMBER: P934307

CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48
1	97	93	89	86	89	86	83	80	72	70	68	60	58	56	48	47	46	41	41	41	41
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39	34	34	34	34
3	81	71	64	58	74	66	60	55	56	51	47	46	43	40	38	35	33	29	29	29	29
4	74	63	55	49	68	58	52	46	50	44	40	41	37	34	33	31	28	25	25	25	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	21	21	21	21
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	22	19	19	19	19
7	58	45	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19	17	17	17	17
8	54	41	34	28	49	38	31	27	33	27	23	28	23	20	23	20	17	15	15	15	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	16	13	13	13	13
10	47	34	27	22	43	32	26	21	28	22	19	23	19	16	20	16	14	12	12	12	12

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	6143	6143	6143	6143
5°	6187	6202	6187	4876
10°	6144	6109	6144	4368
15°	6075	5977	6075	4990
20°	5945	5820	5945	5001
25°	5683	5591	5683	4895
30°	5345	5401	5345	4663
35°	4763	5161	4763	4407
40°	3966	4879	3966	4214
45°	3541	4547	3541	3991
50°	3760	4153	3760	3769
55°	3533	3727	3533	3639
60°	3638	3166	3638	3333
65°	3293	2617	3293	2925
70°	2274	2085	2274	2452
75°	1989	1542	1989	1846
80°	1588	1018	1588	1110
85°	894	539	894	458

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5432 cd/sqm



TEST NUMBER: P934307

CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.6	1.7
10°-20°	254.5	4.7
20°-30°	393.5	7.3
30°-40°	469.7	8.8
40°-50°	472.5	8.8
50°-60°	411.1	7.7
60°-70°	291.5	5.4
70°-80°	154.2	2.9
80°-90°	40.0	0.7
90°-100°	209.7	3.9
100°-110°	551.4	10.3
110°-120°	571.7	10.7
120°-130°	458.6	8.5
130°-140°	359.8	6.7
140°-150°	276.2	5.1
150°-160°	198.9	3.7
160°-170°	121.7	2.3
170°-180°	41.1	0.8
0°-30°	737.7	13.7
0°-40°	1207.4	22.5
0°-60°	2090.9	39.0
0°-90°	2576.7	48.0
90°-120°	1332.8	24.8
90°-150°	2427.4	45.2
90°-180°	2789.0	52.0
0°-180°	5365.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	993	993	993	993	993	
5°	998	1029	998	809	998	95
15°	953	1020	953	851	953	268
25°	839	951	839	832	839	385
35°	638	848	638	724	638	395
45°	412	699	412	614	412	330
55°	335	516	335	504	335	308
65°	233	311	233	348	233	223
75°	88	148	88	177	88	93
85°	15	38	15	32	15	20
90°	3	11	3	11	3	3
95°	28	127	28	127	28	31
105°	99	863	99	863	99	105
115°	176	1112	176	1112	176	174
125°	246	885	246	885	246	218
135°	292	687	292	687	292	226
145°	339	557	339	557	339	213
155°	384	480	384	480	384	176
165°	414	447	414	447	414	117
175°	430	433	430	433	430	41
180°	430	430	430	430	430	



TEST NUMBER: P934307

CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1
2.5°	1001.6	1001.6	1007.2	1009.1	1009.1	1006.3	1003.5	1006.3	1014.8	1017.6	1016.7
5°	997.8	1005.4	1015.7	1017.6	1019.5	1018.5	1016.7	1018.5	1027.9	1029.8	1030.8
7.5°	990.3	1004.4	1017.6	1020.4	1023.2	1020.4	1019.5	1021.3	1030.8	1032.6	1032.6
10°	980.9	1000.7	1015.7	1017.6	1020.4	1017.6	1017.6	1021.3	1030.8	1032.6	1033.6
12.5°	967.8	995.0	1009.1	1011.0	1014.8	1013.9	1012.8	1016.7	1026.0	1027.9	1027.9
15°	952.8	984.7	997.8	999.8	1006.3	1004.4	1004.4	1008.2	1018.5	1021.3	1020.4
17.5°	932.0	971.5	986.6	989.4	994.1	993.1	994.1	997.8	1007.2	1009.1	1010.0
20°	908.6	953.7	971.5	974.3	979.0	979.0	979.0	983.8	993.1	996.9	996.9
22.5°	876.7	934.8	953.7	955.6	961.2	961.2	963.0	969.7	978.1	979.0	979.0
25°	839.0	914.2	930.2	935.9	941.5	944.3	947.1	950.9	953.7	952.8	953.7
27.5°	799.6	887.9	908.6	912.3	919.9	922.7	926.4	927.4	928.3	931.1	929.2
30°	755.4	851.2	882.3	886.0	898.2	900.1	896.4	898.2	902.9	904.9	906.7
32.5°	705.6	796.8	855.0	863.5	874.8	869.1	868.2	871.0	878.5	878.5	880.4
35°	638.0	754.5	829.7	837.1	845.6	839.0	842.8	843.8	848.4	851.2	850.3
37.5°	563.8	717.9	803.3	808.9	815.6	807.1	812.8	815.6	819.3	817.4	817.4
40°	498.0	660.5	772.3	776.1	781.8	775.1	780.8	782.7	784.6	782.7	781.8
42.5°	449.2	597.6	739.4	744.1	740.4	745.1	747.0	750.7	747.9	744.1	744.1
45°	411.5	580.7	703.8	709.4	703.8	711.2	714.0	714.0	705.6	703.8	702.8
47.5°	399.3	546.9	668.1	668.1	665.2	674.6	679.3	672.8	664.3	661.5	661.5
50°	398.4	509.2	619.1	615.4	628.6	639.9	635.1	628.6	622.0	611.7	611.7
52.5°	361.7	463.2	556.2	570.3	591.0	597.6	590.1	583.5	572.2	567.5	563.8
55°	335.4	415.3	498.9	527.1	548.7	557.1	543.1	536.5	519.6	516.8	514.9
57.5°	329.8	345.8	446.3	482.0	508.3	507.3	498.9	486.7	472.6	469.8	468.9
60°	302.5	249.9	389.9	432.3	459.4	456.6	449.2	437.9	424.7	422.8	421.0
62.5°	274.3	181.4	326.1	374.0	412.5	411.5	405.0	388.1	378.6	374.0	370.2
65°	233.0	152.2	232.1	311.0	366.4	368.3	354.3	342.0	331.7	326.1	325.1
67.5°	177.6	124.0	156.9	259.4	322.3	320.4	302.5	296.9	283.7	280.9	275.3
70°	131.5	82.7	109.0	210.4	279.1	274.3	260.3	253.7	241.4	234.9	231.2
72.5°	109.0	66.7	79.9	163.5	234.9	229.3	217.1	209.5	199.2	193.5	189.8
75°	88.4	70.4	61.1	121.2	190.7	187.0	175.7	168.2	159.7	152.2	153.2
77.5°	64.8	65.8	48.8	89.3	151.3	145.6	139.1	129.6	125.9	118.4	118.4
80°	48.8	51.7	36.6	61.1	109.0	109.0	103.4	96.8	90.2	86.5	86.5
82.5°	32.9	32.9	27.3	38.5	74.3	71.5	67.6	65.8	62.0	60.1	60.1
85°	15.0	18.8	16.9	23.4	40.4	42.3	42.3	40.4	39.5	37.5	38.5
87.5°	4.7	8.5	10.4	13.2	20.6	21.6	22.5	22.5	22.5	23.4	23.4
90°	2.9	5.2	7.6	8.1	12.7	18.9	21.9	19.5	14.6	10.9	10.9
92.5°	11.6	31.2	50.8	55.8	78.4	108.5	123.6	108.3	77.7	54.8	52.7
95°	27.7	63.6	99.6	108.5	192.8	305.1	361.3	322.4	244.6	186.2	179.6
97.5°	47.9	79.7	111.3	119.3	259.7	447.0	540.6	516.0	466.8	429.9	417.3
100°	63.5	92.3	121.0	128.2	284.0	491.8	595.7	597.5	601.1	603.8	588.9
102.5°	76.8	103.7	130.5	137.2	295.2	505.9	611.3	642.6	705.3	752.2	739.4
105°	99.4	122.1	144.8	150.5	303.5	507.5	609.5	679.8	820.1	925.5	918.6
107.5°	122.4	143.6	164.8	170.1	305.0	484.9	574.9	672.8	868.6	1015.5	1017.2
110°	138.0	157.1	176.2	181.0	302.7	464.9	546.0	655.5	874.5	1038.7	1045.9



TEST NUMBER: P934307

CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	153.4	171.6	189.8	194.4	302.8	447.5	519.8	631.9	855.9	1023.9	1035.0
115°	176.4	193.2	210.1	214.3	305.6	427.4	488.3	596.3	812.1	974.0	989.3
117.5°	199.2	214.5	229.8	233.6	311.3	414.9	466.6	564.0	758.9	905.0	922.0
120°	212.5	226.9	241.3	244.9	315.9	410.6	457.9	547.0	725.0	858.4	875.0
122.5°	225.6	240.0	254.5	258.2	322.5	408.3	451.3	531.4	691.8	812.0	828.3
125°	245.5	258.6	271.9	275.2	331.5	406.6	444.1	512.2	648.4	750.5	765.4
127.5°	261.6	275.0	288.3	291.7	340.4	405.5	438.0	496.5	613.4	701.1	713.7
130°	270.3	284.7	299.1	302.6	347.0	406.1	435.7	487.7	591.9	670.0	681.6
132.5°	279.3	293.6	308.0	311.6	352.3	406.6	433.7	480.4	573.5	643.3	653.8
135°	292.5	305.6	318.7	321.9	358.1	406.2	430.3	469.3	547.3	605.8	614.9
137.5°	306.1	319.1	331.9	335.2	366.7	408.6	429.6	462.6	528.6	578.1	585.4
140°	317.4	329.3	341.2	344.2	372.0	409.1	427.7	456.2	513.1	555.8	562.7
142.5°	326.0	337.0	348.0	350.8	376.4	410.6	427.7	452.7	502.7	540.2	546.2
145°	339.3	348.9	358.6	361.0	382.3	410.6	424.8	445.2	486.1	516.9	521.4
147.5°	352.6	361.9	371.4	373.7	390.7	413.4	424.8	440.8	473.1	497.3	501.0
150°	361.3	369.8	378.2	380.3	395.2	414.9	424.8	438.4	465.6	486.0	488.9
152.5°	370.1	376.6	383.0	384.6	398.0	415.8	424.8	436.4	459.6	477.0	479.2
155°	383.5	388.3	392.9	394.1	404.3	418.0	424.8	434.0	452.5	466.3	467.8
157.5°	393.3	397.9	402.6	403.7	410.7	420.1	424.8	432.0	446.4	457.1	458.1
160°	399.9	403.5	407.0	408.0	413.6	421.0	424.8	430.9	443.3	452.5	453.1
162.5°	406.6	409.3	412.0	412.6	416.7	422.1	424.8	430.0	440.4	448.1	448.7
165°	413.8	416.2	418.6	419.3	421.1	423.6	424.8	428.5	435.9	441.5	442.2
167.5°	420.4	421.5	422.7	423.0	424.6	426.7	427.7	430.1	435.0	438.6	438.9
170°	424.8	425.9	427.1	427.4	427.5	427.6	427.7	430.1	435.0	438.6	438.6
172.5°	427.1	427.4	427.6	427.7	427.7	427.7	427.7	429.5	433.4	436.3	436.1
175°	430.3	430.3	430.3	430.3	429.5	428.2	427.7	428.9	431.3	433.1	433.1
177.5°	430.3	430.3	430.3	430.3	429.6	428.7	428.2	429.2	431.1	432.5	432.3
180°	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3



TEST NUMBER: P934307
 CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1
2.5°	1018.5	1015.7	1018.5	1016.7	1017.6	1014.8	1006.3	1003.5	1006.3	1009.1	1009.1
5°	1030.8	1028.8	1030.8	1030.8	1029.8	1027.9	1018.5	1016.7	1018.5	1019.5	1017.6
7.5°	1034.5	1031.7	1034.5	1032.6	1032.6	1030.8	1021.3	1019.5	1020.4	1023.2	1020.4
10°	1034.5	1031.7	1034.5	1033.6	1032.6	1030.8	1021.3	1017.6	1017.6	1020.4	1017.6
12.5°	1029.8	1027.9	1029.8	1027.9	1027.9	1026.0	1016.7	1012.8	1013.9	1014.8	1011.0
15°	1022.3	1019.5	1022.3	1020.4	1021.3	1018.5	1008.2	1004.4	1004.4	1006.3	999.8
17.5°	1011.0	1007.2	1011.0	1010.0	1009.1	1007.2	997.8	994.1	993.1	994.1	989.4
20°	997.8	995.0	997.8	996.9	996.9	993.1	983.8	979.0	979.0	979.0	974.3
22.5°	977.2	974.3	977.2	979.0	979.0	978.1	969.7	963.0	961.2	961.2	955.6
25°	953.7	950.9	953.7	953.7	952.8	953.7	950.9	947.1	944.3	941.5	935.9
27.5°	931.1	929.2	931.1	929.2	931.1	928.3	927.4	926.4	922.7	919.9	912.3
30°	908.6	906.7	908.6	906.7	904.9	902.9	898.2	896.4	900.1	898.2	886.0
32.5°	880.4	878.5	880.4	880.4	878.5	878.5	871.0	868.2	869.1	874.8	863.5
35°	851.2	848.4	851.2	850.3	851.2	848.4	843.8	842.8	839.0	845.6	837.1
37.5°	817.4	814.6	817.4	817.4	817.4	819.3	815.6	812.8	807.1	815.6	808.9
40°	782.7	779.0	782.7	781.8	782.7	784.6	782.7	780.8	775.1	781.8	776.1
42.5°	743.2	742.2	743.2	744.1	744.1	747.9	750.7	747.0	745.1	740.4	744.1
45°	701.0	699.0	701.0	702.8	703.8	705.6	714.0	714.0	711.2	703.8	709.4
47.5°	655.9	651.1	655.9	661.5	661.5	664.3	672.8	679.3	674.6	665.2	668.1
50°	607.9	608.9	607.9	611.7	611.7	622.0	628.6	635.1	639.9	628.6	615.4
52.5°	561.0	560.0	561.0	563.8	567.5	572.2	583.5	590.1	597.6	591.0	570.3
55°	514.0	515.8	514.0	514.9	516.8	519.6	536.5	543.1	557.1	548.7	527.1
57.5°	467.0	464.2	467.0	468.9	469.8	472.6	486.7	498.9	507.3	508.3	482.0
60°	412.5	408.7	412.5	421.0	422.8	424.7	437.9	449.2	456.6	459.4	432.3
62.5°	364.5	358.0	364.5	370.2	374.0	378.6	388.1	405.0	411.5	412.5	374.0
65°	313.8	311.0	313.8	325.1	326.1	331.7	342.0	354.3	368.3	366.4	311.0
67.5°	267.8	267.8	267.8	275.3	280.9	283.7	296.9	302.5	320.4	322.3	259.4
70°	225.5	224.5	225.5	231.2	234.9	241.4	253.7	260.3	274.3	279.1	210.4
72.5°	185.1	184.2	185.1	189.8	193.5	199.2	209.5	217.1	229.3	234.9	163.5
75°	149.4	147.5	149.4	153.2	152.2	159.7	168.2	175.7	187.0	190.7	121.2
77.5°	114.6	114.6	114.6	118.4	118.4	125.9	129.6	139.1	145.6	151.3	89.3
80°	85.5	84.5	85.5	86.5	86.5	90.2	96.8	103.4	109.0	109.0	61.1
82.5°	60.1	58.3	60.1	60.1	60.1	62.0	65.8	67.6	71.5	74.3	38.5
85°	37.5	37.5	37.5	38.5	37.5	39.5	40.4	42.3	42.3	40.4	23.4
87.5°	24.5	23.4	24.5	23.4	23.4	22.5	22.5	22.5	21.6	20.6	13.2
90°	10.9	10.9	10.9	10.9	10.9	14.6	19.5	21.9	18.9	12.7	8.1
92.5°	43.9	35.2	43.9	52.7	54.8	77.7	108.3	123.6	108.5	78.4	55.8
95°	153.2	126.7	153.2	179.6	186.2	244.6	322.4	361.3	305.1	192.8	108.5
97.5°	367.1	316.8	367.1	417.3	429.9	466.8	516.0	540.6	447.0	259.7	119.3
100°	528.9	469.0	528.9	588.9	603.8	601.1	597.5	595.7	491.8	284.0	128.2
102.5°	688.1	636.7	688.1	739.4	752.2	705.3	642.6	611.3	505.9	295.2	137.2
105°	891.0	863.4	891.0	918.6	925.5	820.1	679.8	609.5	507.5	303.5	150.5
107.5°	1023.9	1030.6	1023.9	1017.2	1015.5	868.6	672.8	574.9	484.9	305.0	170.1
110°	1074.6	1103.3	1074.6	1045.9	1038.7	874.5	655.5	546.0	464.9	302.7	181.0



TEST NUMBER: P934307

CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	1079.1	1123.2	1079.1	1035.0	1023.9	855.9	631.9	519.8	447.5	302.8	194.4
115°	1050.5	1111.7	1050.5	989.3	974.0	812.1	596.3	488.3	427.4	305.6	214.3
117.5°	989.9	1057.8	989.9	922.0	905.0	758.9	564.0	466.6	414.9	311.3	233.6
120°	940.9	1006.9	940.9	875.0	858.4	725.0	547.0	457.9	410.6	315.9	244.9
122.5°	893.4	958.4	893.4	828.3	812.0	691.8	531.4	451.3	408.3	322.5	258.2
125°	825.4	885.3	825.4	765.4	750.5	648.4	512.2	444.1	406.6	331.5	275.2
127.5°	764.3	814.9	764.3	713.7	701.1	613.4	496.5	438.0	405.5	340.4	291.7
130°	728.3	775.0	728.3	681.6	670.0	591.9	487.7	435.7	406.1	347.0	302.6
132.5°	695.6	737.5	695.6	653.8	643.3	573.5	480.4	433.7	406.6	352.3	311.6
135°	650.9	687.0	650.9	614.9	605.8	547.3	469.3	430.3	406.2	358.1	321.9
137.5°	615.0	644.6	615.0	585.4	578.1	528.6	462.6	429.6	408.6	366.7	335.2
140°	590.3	617.9	590.3	562.7	555.8	513.1	456.2	427.7	409.1	372.0	344.2
142.5°	569.9	593.7	569.9	546.2	540.2	502.7	452.7	427.7	410.6	376.4	350.8
145°	539.4	557.3	539.4	521.4	516.9	486.1	445.2	424.8	410.6	382.3	361.0
147.5°	515.8	530.7	515.8	501.0	497.3	473.1	440.8	424.8	413.4	390.7	373.7
150°	501.1	513.1	501.1	488.9	486.0	465.6	438.4	424.8	414.9	395.2	380.3
152.5°	488.4	497.5	488.4	479.2	477.0	459.6	436.4	424.8	415.8	398.0	384.6
155°	473.9	479.9	473.9	467.8	466.3	452.5	434.0	424.8	418.0	404.3	394.1
157.5°	462.4	466.6	462.4	458.1	457.1	446.4	432.0	424.8	420.1	410.7	403.7
160°	455.5	457.9	455.5	453.1	452.5	443.3	430.9	424.8	421.0	413.6	408.0
162.5°	451.0	453.4	451.0	448.7	448.1	440.4	430.0	424.8	422.1	416.7	412.6
165°	444.6	447.0	444.6	442.2	441.5	435.9	428.5	424.8	423.6	421.1	419.3
167.5°	439.9	440.9	439.9	438.9	438.6	435.0	430.1	427.7	426.7	424.6	423.0
170°	438.6	438.6	438.6	438.6	438.6	435.0	430.1	427.7	427.6	427.5	427.4
172.5°	435.2	434.3	435.2	436.1	436.3	433.4	429.5	427.7	427.7	427.7	427.7
175°	433.1	433.1	433.1	433.1	433.1	431.3	428.9	427.7	428.2	429.5	430.3
177.5°	431.3	430.3	431.3	432.3	432.5	431.1	429.2	428.2	428.7	429.6	430.3
180°	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3



TEST NUMBER: P934307

CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1
2.5°	1007.2	1001.6	1001.6	992.2	988.5	985.7	980.9	966.9	963.0	959.3	964.9
5°	1015.7	1005.4	997.8	980.9	966.9	961.2	943.3	909.5	886.9	870.0	860.7
7.5°	1017.6	1004.4	990.3	964.0	930.2	915.1	860.7	798.7	781.8	766.7	757.3
10°	1015.7	1000.7	980.9	941.5	861.6	835.3	780.8	740.4	730.0	727.2	730.0
12.5°	1009.1	995.0	967.8	902.0	790.2	772.3	740.4	716.9	715.0	719.7	745.1
15°	997.8	984.7	952.8	849.4	750.7	737.6	715.0	706.6	716.9	749.8	825.9
17.5°	986.6	971.5	932.0	797.7	720.7	711.2	695.3	712.2	770.5	814.6	839.9
20°	971.5	953.7	908.6	760.1	699.0	690.6	683.0	759.2	803.3	819.3	833.4
22.5°	953.7	934.8	876.7	733.8	676.5	670.0	674.6	785.5	803.3	814.6	826.9
25°	930.2	914.2	839.0	713.1	658.7	651.1	669.0	782.7	793.0	795.9	820.2
27.5°	908.6	887.9	799.6	694.3	637.1	634.2	673.7	770.5	778.0	780.8	807.1
30°	882.3	851.2	755.4	674.6	614.5	613.5	674.6	755.4	753.6	761.0	787.4
32.5°	855.0	796.8	705.6	650.2	592.9	592.0	668.1	732.9	731.0	741.3	761.0
35°	829.7	754.5	638.0	622.0	565.6	566.6	652.0	706.6	707.5	716.9	729.1
37.5°	803.3	717.9	563.8	591.0	539.3	539.3	630.4	682.1	680.2	683.0	700.0
40°	772.3	660.5	498.0	550.6	514.9	512.1	604.1	655.9	649.2	648.3	671.8
42.5°	739.4	597.6	449.2	497.1	486.7	483.0	572.2	623.9	611.7	614.5	644.6
45°	703.8	580.7	411.5	420.0	457.6	454.8	537.4	587.2	578.8	586.3	617.3
47.5°	668.1	546.9	399.3	348.6	426.6	425.6	498.9	551.5	546.9	554.3	587.2
50°	619.1	509.2	398.4	298.8	391.8	395.5	452.9	516.8	516.8	523.3	558.2
52.5°	556.2	463.2	361.7	270.6	351.4	362.7	412.5	486.7	488.6	495.2	526.1
55°	498.9	415.3	335.4	249.0	303.5	327.9	373.0	455.7	459.4	466.1	494.2
57.5°	446.3	345.8	329.8	223.6	259.4	282.8	338.3	425.6	427.5	433.2	460.4
60°	389.9	249.9	302.5	196.3	220.8	238.6	306.3	389.9	396.5	400.2	423.8
62.5°	326.1	181.4	274.3	177.6	202.0	205.8	280.0	356.1	364.5	367.3	381.4
65°	232.1	152.2	233.0	161.6	182.3	183.3	251.8	321.3	328.9	333.5	343.9
67.5°	156.9	124.0	177.6	146.5	167.3	168.2	224.5	280.9	291.3	295.1	301.6
70°	109.0	82.7	131.5	130.6	150.4	152.2	195.4	244.3	253.7	256.5	260.3
72.5°	79.9	66.7	109.0	117.4	132.4	134.4	165.4	203.0	212.4	215.2	217.1
75°	61.1	70.4	88.4	102.5	112.7	113.7	135.3	165.4	171.9	173.8	174.8
77.5°	48.8	65.8	64.8	82.7	92.1	90.2	106.2	127.8	133.4	133.4	133.4
80°	36.6	51.7	48.8	59.2	67.6	65.8	76.1	91.2	93.0	94.9	94.0
82.5°	27.3	32.9	32.9	37.5	45.1	43.2	50.7	59.2	59.2	59.2	61.1
85°	16.9	18.8	15.0	19.7	25.4	24.5	28.2	31.9	32.9	32.9	31.0
87.5°	10.4	8.5	4.7	7.5	11.3	11.3	13.2	14.1	13.2	13.2	13.2
90°	7.6	5.2	2.9	5.2	7.6	8.1	12.7	18.9	21.9	19.5	14.6
92.5°	50.8	31.2	11.6	31.2	50.8	55.8	78.4	108.5	123.6	108.3	77.7
95°	99.6	63.6	27.7	63.6	99.6	108.5	192.8	305.1	361.3	322.4	244.6
97.5°	111.3	79.7	47.9	79.7	111.3	119.3	259.7	447.0	540.6	516.0	466.8
100°	121.0	92.3	63.5	92.3	121.0	128.2	284.0	491.8	595.7	597.5	601.1
102.5°	130.5	103.7	76.8	103.7	130.5	137.2	295.2	505.9	611.3	642.6	705.3
105°	144.8	122.1	99.4	122.1	144.8	150.5	303.5	507.5	609.5	679.8	820.1
107.5°	164.8	143.6	122.4	143.6	164.8	170.1	305.0	484.9	574.9	672.8	868.6
110°	176.2	157.1	138.0	157.1	176.2	181.0	302.7	464.9	546.0	655.5	874.5



TEST NUMBER: P934307

CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	189.8	171.6	153.4	171.6	189.8	194.4	302.8	447.5	519.8	631.9	855.9
115°	210.1	193.2	176.4	193.2	210.1	214.3	305.6	427.4	488.3	596.3	812.1
117.5°	229.8	214.5	199.2	214.5	229.8	233.6	311.3	414.9	466.6	564.0	758.9
120°	241.3	226.9	212.5	226.9	241.3	244.9	315.9	410.6	457.9	547.0	725.0
122.5°	254.5	240.0	225.6	240.0	254.5	258.2	322.5	408.3	451.3	531.4	691.8
125°	271.9	258.6	245.5	258.6	271.9	275.2	331.5	406.6	444.1	512.2	648.4
127.5°	288.3	275.0	261.6	275.0	288.3	291.7	340.4	405.5	438.0	496.5	613.4
130°	299.1	284.7	270.3	284.7	299.1	302.6	347.0	406.1	435.7	487.7	591.9
132.5°	308.0	293.6	279.3	293.6	308.0	311.6	352.3	406.6	433.7	480.4	573.5
135°	318.7	305.6	292.5	305.6	318.7	321.9	358.1	406.2	430.3	469.3	547.3
137.5°	331.9	319.1	306.1	319.1	331.9	335.2	366.7	408.6	429.6	462.6	528.6
140°	341.2	329.3	317.4	329.3	341.2	344.2	372.0	409.1	427.7	456.2	513.1
142.5°	348.0	337.0	326.0	337.0	348.0	350.8	376.4	410.6	427.7	452.7	502.7
145°	358.6	348.9	339.3	348.9	358.6	361.0	382.3	410.6	424.8	445.2	486.1
147.5°	371.4	361.9	352.6	361.9	371.4	373.7	390.7	413.4	424.8	440.8	473.1
150°	378.2	369.8	361.3	369.8	378.2	380.3	395.2	414.9	424.8	438.4	465.6
152.5°	383.0	376.6	370.1	376.6	383.0	384.6	398.0	415.8	424.8	436.4	459.6
155°	392.9	388.3	383.5	388.3	392.9	394.1	404.3	418.0	424.8	434.0	452.5
157.5°	402.6	397.9	393.3	397.9	402.6	403.7	410.7	420.1	424.8	432.0	446.4
160°	407.0	403.5	399.9	403.5	407.0	408.0	413.6	421.0	424.8	430.9	443.3
162.5°	412.0	409.3	406.6	409.3	412.0	412.6	416.7	422.1	424.8	430.0	440.4
165°	418.6	416.2	413.8	416.2	418.6	419.3	421.1	423.6	424.8	428.5	435.9
167.5°	422.7	421.5	420.4	421.5	422.7	423.0	424.6	426.7	427.7	430.1	435.0
170°	427.1	425.9	424.8	425.9	427.1	427.4	427.5	427.6	427.7	430.1	435.0
172.5°	427.6	427.4	427.1	427.4	427.6	427.7	427.7	427.7	427.7	429.5	433.4
175°	430.3	430.3	430.3	430.3	430.3	430.3	429.5	428.2	427.7	428.9	431.3
177.5°	430.3	430.3	430.3	430.3	430.3	430.3	429.6	428.7	428.2	429.2	431.1
180°	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3



TEST NUMBER: P934307
 CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1	993.1
2.5°	958.4	955.6	959.3	948.9	959.3	955.6	958.4	964.9	959.3	963.0	966.9
5°	841.0	836.2	821.2	808.9	821.2	836.2	841.0	860.7	870.0	886.9	909.5
7.5°	751.7	747.9	744.1	736.6	744.1	747.9	751.7	757.3	766.7	781.8	798.7
10°	732.0	732.9	738.5	737.6	738.5	732.9	732.0	730.0	727.2	730.0	740.4
12.5°	782.7	791.1	822.1	820.2	822.1	791.1	782.7	745.1	719.7	715.0	716.9
15°	841.0	843.8	850.3	851.2	850.3	843.8	841.0	825.9	749.8	716.9	706.6
17.5°	846.6	847.5	852.2	852.2	852.2	847.5	846.6	839.9	814.6	770.5	712.2
20°	841.9	843.8	853.1	855.0	853.1	843.8	841.9	833.4	819.3	803.3	759.2
22.5°	839.9	843.8	851.2	850.3	851.2	843.8	839.9	826.9	814.6	803.3	785.5
25°	830.6	830.6	831.5	832.5	831.5	830.6	830.6	820.2	795.9	793.0	782.7
27.5°	810.9	812.8	818.4	817.4	818.4	812.8	810.9	807.1	780.8	778.0	770.5
30°	793.0	791.1	786.4	782.7	786.4	791.1	793.0	787.4	761.0	753.6	755.4
32.5°	763.0	758.2	753.6	750.7	753.6	758.2	763.0	761.0	741.3	731.0	732.9
35°	727.2	728.1	727.2	724.4	727.2	728.1	727.2	729.1	716.9	707.5	706.6
37.5°	701.9	703.8	702.8	699.0	702.8	703.8	701.9	700.0	683.0	680.2	682.1
40°	675.6	676.5	675.6	672.8	675.6	676.5	675.6	671.8	648.3	649.2	655.9
42.5°	650.2	649.2	646.4	644.6	646.4	649.2	650.2	644.6	614.5	611.7	623.9
45°	621.1	622.0	616.3	613.5	616.3	622.0	621.1	617.3	586.3	578.8	587.2
47.5°	592.0	592.0	587.2	584.4	587.2	592.0	592.0	587.2	554.3	546.9	551.5
50°	561.0	560.0	553.4	552.5	553.4	560.0	561.0	558.2	523.3	516.8	516.8
52.5°	525.2	525.2	526.1	528.1	526.1	525.2	525.2	526.1	495.2	488.6	486.7
55°	494.2	495.2	501.7	503.6	501.7	495.2	494.2	494.2	466.1	459.4	455.7
57.5°	462.2	462.2	467.0	467.0	467.0	462.2	462.2	460.4	433.2	427.5	425.6
60°	425.6	427.5	431.2	430.3	431.2	427.5	425.6	423.8	400.2	396.5	389.9
62.5°	387.1	389.0	389.9	388.1	389.9	389.0	387.1	381.4	367.3	364.5	356.1
65°	346.7	348.6	349.5	347.6	349.5	348.6	346.7	343.9	333.5	328.9	321.3
67.5°	305.3	304.4	303.5	307.3	303.5	304.4	305.3	301.6	295.1	291.3	280.9
70°	263.1	263.1	262.2	264.0	262.2	263.1	263.1	260.3	256.5	253.7	244.3
72.5°	218.0	217.1	220.8	218.0	220.8	217.1	218.0	217.1	215.2	212.4	203.0
75°	173.8	175.7	173.8	176.6	173.8	175.7	173.8	174.8	173.8	171.9	165.4
77.5°	132.4	134.4	132.4	132.4	132.4	134.4	132.4	133.4	133.4	133.4	127.8
80°	94.0	93.0	93.0	92.1	93.0	93.0	94.0	94.0	94.9	93.0	91.2
82.5°	60.1	59.2	59.2	61.1	59.2	59.2	60.1	61.1	59.2	59.2	59.2
85°	32.9	33.8	31.9	31.9	31.9	33.8	32.9	31.0	32.9	32.9	31.9
87.5°	12.2	11.3	11.3	11.3	11.3	11.3	12.2	13.2	13.2	13.2	14.1
90°	10.9	10.9	10.9	10.9	10.9	10.9	10.9	14.6	19.5	21.9	18.9
92.5°	54.8	52.7	43.9	35.2	43.9	52.7	54.8	77.7	108.3	123.6	108.5
95°	186.2	179.6	153.2	126.7	153.2	179.6	186.2	244.6	322.4	361.3	305.1
97.5°	429.9	417.3	367.1	316.8	367.1	417.3	429.9	466.8	516.0	540.6	447.0
100°	603.8	588.9	528.9	469.0	528.9	588.9	603.8	601.1	597.5	595.7	491.8
102.5°	752.2	739.4	688.1	636.7	688.1	739.4	752.2	705.3	642.6	611.3	505.9
105°	925.5	918.6	891.0	863.4	891.0	918.6	925.5	820.1	679.8	609.5	507.5
107.5°	1015.5	1017.2	1023.9	1030.6	1023.9	1017.2	1015.5	868.6	672.8	574.9	484.9
110°	1038.7	1045.9	1074.6	1103.3	1074.6	1045.9	1038.7	874.5	655.5	546.0	464.9



TEST NUMBER: P934307

CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1023.9	1035.0	1079.1	1123.2	1079.1	1035.0	1023.9	855.9	631.9	519.8	447.5
115°	974.0	989.3	1050.5	1111.7	1050.5	989.3	974.0	812.1	596.3	488.3	427.4
117.5°	905.0	922.0	989.9	1057.8	989.9	922.0	905.0	758.9	564.0	466.6	414.9
120°	858.4	875.0	940.9	1006.9	940.9	875.0	858.4	725.0	547.0	457.9	410.6
122.5°	812.0	828.3	893.4	958.4	893.4	828.3	812.0	691.8	531.4	451.3	408.3
125°	750.5	765.4	825.4	885.3	825.4	765.4	750.5	648.4	512.2	444.1	406.6
127.5°	701.1	713.7	764.3	814.9	764.3	713.7	701.1	613.4	496.5	438.0	405.5
130°	670.0	681.6	728.3	775.0	728.3	681.6	670.0	591.9	487.7	435.7	406.1
132.5°	643.3	653.8	695.6	737.5	695.6	653.8	643.3	573.5	480.4	433.7	406.6
135°	605.8	614.9	650.9	687.0	650.9	614.9	605.8	547.3	469.3	430.3	406.2
137.5°	578.1	585.4	615.0	644.6	615.0	585.4	578.1	528.6	462.6	429.6	408.6
140°	555.8	562.7	590.3	617.9	590.3	562.7	555.8	513.1	456.2	427.7	409.1
142.5°	540.2	546.2	569.9	593.7	569.9	546.2	540.2	502.7	452.7	427.7	410.6
145°	516.9	521.4	539.4	557.3	539.4	521.4	516.9	486.1	445.2	424.8	410.6
147.5°	497.3	501.0	515.8	530.7	515.8	501.0	497.3	473.1	440.8	424.8	413.4
150°	486.0	488.9	501.1	513.1	501.1	488.9	486.0	465.6	438.4	424.8	414.9
152.5°	477.0	479.2	488.4	497.5	488.4	479.2	477.0	459.6	436.4	424.8	415.8
155°	466.3	467.8	473.9	479.9	473.9	467.8	466.3	452.5	434.0	424.8	418.0
157.5°	457.1	458.1	462.4	466.6	462.4	458.1	457.1	446.4	432.0	424.8	420.1
160°	452.5	453.1	455.5	457.9	455.5	453.1	452.5	443.3	430.9	424.8	421.0
162.5°	448.1	448.7	451.0	453.4	451.0	448.7	448.1	440.4	430.0	424.8	422.1
165°	441.5	442.2	444.6	447.0	444.6	442.2	441.5	435.9	428.5	424.8	423.6
167.5°	438.6	438.9	439.9	440.9	439.9	438.9	438.6	435.0	430.1	427.7	426.7
170°	438.6	438.6	438.6	438.6	438.6	438.6	438.6	435.0	430.1	427.7	427.6
172.5°	436.3	436.1	435.2	434.3	435.2	436.1	436.3	433.4	429.5	427.7	427.7
175°	433.1	433.1	433.1	433.1	433.1	433.1	433.1	431.3	428.9	427.7	428.2
177.5°	432.5	432.3	431.3	430.3	431.3	432.3	432.5	431.1	429.2	428.2	428.7
180°	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3



TEST NUMBER: P934307

CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	993.1	993.1	993.1	993.1	993.1
2.5°	980.9	985.7	988.5	992.2	1001.6
5°	943.3	961.2	966.9	980.9	997.8
7.5°	860.7	915.1	930.2	964.0	990.3
10°	780.8	835.3	861.6	941.5	980.9
12.5°	740.4	772.3	790.2	902.0	967.8
15°	715.0	737.6	750.7	849.4	952.8
17.5°	695.3	711.2	720.7	797.7	932.0
20°	683.0	690.6	699.0	760.1	908.6
22.5°	674.6	670.0	676.5	733.8	876.7
25°	669.0	651.1	658.7	713.1	839.0
27.5°	673.7	634.2	637.1	694.3	799.6
30°	674.6	613.5	614.5	674.6	755.4
32.5°	668.1	592.0	592.9	650.2	705.6
35°	652.0	566.6	565.6	622.0	638.0
37.5°	630.4	539.3	539.3	591.0	563.8
40°	604.1	512.1	514.9	550.6	498.0
42.5°	572.2	483.0	486.7	497.1	449.2
45°	537.4	454.8	457.6	420.0	411.5
47.5°	498.9	425.6	426.6	348.6	399.3
50°	452.9	395.5	391.8	298.8	398.4
52.5°	412.5	362.7	351.4	270.6	361.7
55°	373.0	327.9	303.5	249.0	335.4
57.5°	338.3	282.8	259.4	223.6	329.8
60°	306.3	238.6	220.8	196.3	302.5
62.5°	280.0	205.8	202.0	177.6	274.3
65°	251.8	183.3	182.3	161.6	233.0
67.5°	224.5	168.2	167.3	146.5	177.6
70°	195.4	152.2	150.4	130.6	131.5
72.5°	165.4	134.4	132.4	117.4	109.0
75°	135.3	113.7	112.7	102.5	88.4
77.5°	106.2	90.2	92.1	82.7	64.8
80°	76.1	65.8	67.6	59.2	48.8
82.5°	50.7	43.2	45.1	37.5	32.9
85°	28.2	24.5	25.4	19.7	15.0
87.5°	13.2	11.3	11.3	7.5	4.7
90°	12.7	8.1	7.6	5.2	2.9
92.5°	78.4	55.8	50.8	31.2	11.6
95°	192.8	108.5	99.6	63.6	27.7
97.5°	259.7	119.3	111.3	79.7	47.9
100°	284.0	128.2	121.0	92.3	63.5
102.5°	295.2	137.2	130.5	103.7	76.8
105°	303.5	150.5	144.8	122.1	99.4
107.5°	305.0	170.1	164.8	143.6	122.4
110°	302.7	181.0	176.2	157.1	138.0



TEST NUMBER: P934307

CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	302.8	194.4	189.8	171.6	153.4
115°	305.6	214.3	210.1	193.2	176.4
117.5°	311.3	233.6	229.8	214.5	199.2
120°	315.9	244.9	241.3	226.9	212.5
122.5°	322.5	258.2	254.5	240.0	225.6
125°	331.5	275.2	271.9	258.6	245.5
127.5°	340.4	291.7	288.3	275.0	261.6
130°	347.0	302.6	299.1	284.7	270.3
132.5°	352.3	311.6	308.0	293.6	279.3
135°	358.1	321.9	318.7	305.6	292.5
137.5°	366.7	335.2	331.9	319.1	306.1
140°	372.0	344.2	341.2	329.3	317.4
142.5°	376.4	350.8	348.0	337.0	326.0
145°	382.3	361.0	358.6	348.9	339.3
147.5°	390.7	373.7	371.4	361.9	352.6
150°	395.2	380.3	378.2	369.8	361.3
152.5°	398.0	384.6	383.0	376.6	370.1
155°	404.3	394.1	392.9	388.3	383.5
157.5°	410.7	403.7	402.6	397.9	393.3
160°	413.6	408.0	407.0	403.5	399.9
162.5°	416.7	412.6	412.0	409.3	406.6
165°	421.1	419.3	418.6	416.2	413.8
167.5°	424.6	423.0	422.7	421.5	420.4
170°	427.5	427.4	427.1	425.9	424.8
172.5°	427.7	427.7	427.6	427.4	427.1
175°	429.5	430.3	430.3	430.3	430.3
177.5°	429.6	430.3	430.3	430.3	430.3
180°	430.3	430.3	430.3	430.3	430.3



TEST NUMBER: P934307
 CATALOG NUMBER: SQ4-FA-050U-050D-B50-1D-UNV-STD-W-6

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	10.92	11.77	11.90	12.76	14.06	13.75	14.59	14.72	15.58	16.88
	3H	11.40	12.16	12.38	13.15	14.47	15.09	15.85	16.08	16.84	18.16
	4H	11.59	12.31	12.59	13.31	14.64	15.53	16.25	16.53	17.25	18.58
	6H	11.71	12.37	12.72	13.37	14.71	15.82	16.47	16.82	17.48	18.82
	8H	11.71	12.34	12.72	13.36	14.70	15.89	16.52	16.90	17.54	18.88
	12H	11.68	12.28	12.70	13.29	14.65	15.93	16.52	16.95	17.54	18.90
4H	2H	11.95	12.67	12.96	13.67	15.00	14.16	14.87	15.16	15.87	17.20
	3H	12.98	13.58	13.99	14.60	15.95	15.66	16.25	16.67	17.28	18.63
	4H	13.25	13.80	14.28	14.82	16.19	16.18	16.73	17.21	17.75	19.12
	6H	13.38	13.85	14.41	14.89	16.25	16.55	17.02	17.58	18.06	19.42
	8H	13.38	13.82	14.42	14.86	16.24	16.65	17.09	17.69	18.13	19.51
	12H	13.35	13.75	14.40	14.80	16.18	16.71	17.10	17.76	18.16	19.54
8H	4H	13.71	14.14	14.74	15.18	16.56	16.31	16.75	17.34	17.78	19.16
	6H	13.97	14.33	15.02	15.41	16.78	16.74	17.10	17.80	18.18	19.56
	8H	14.01	14.33	15.07	15.39	16.79	16.89	17.21	17.96	18.28	19.67
	12H	13.99	14.27	15.06	15.33	16.77	16.99	17.27	18.06	18.33	19.76
12H	4H	13.71	14.11	14.76	15.16	16.54	16.27	16.67	17.32	17.72	19.10
	6H	14.03	14.35	15.09	15.41	16.80	16.74	17.06	17.80	18.12	19.52
	8H	14.09	14.37	15.16	15.43	16.87	16.90	17.18	17.97	18.24	19.67