

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: P934271

Luminaire Tested: SQ4-FA-050U-050D-935-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934271
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-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

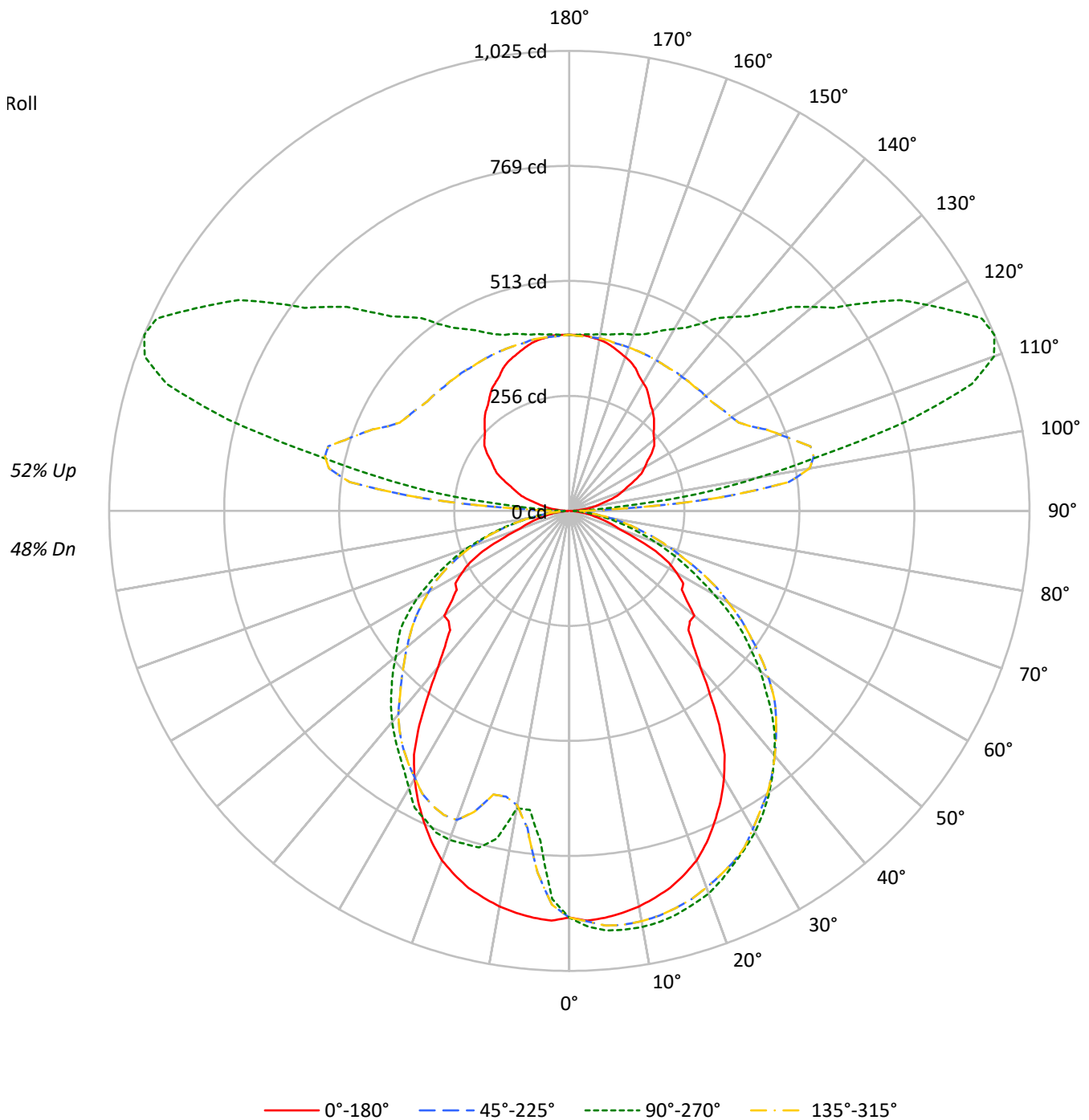
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4894.7 lumens
Efficiency: N/A
Efficacy: 114.9 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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	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°	5604	5604	5604	5604
5°	5644	5657	5644	4448
10°	5604	5573	5604	3984
15°	5541	5452	5541	4552
20°	5423	5309	5423	4562
25°	5184	5100	5184	4465
30°	4875	4927	4875	4253
35°	4345	4708	4345	4020
40°	3618	4451	3618	3844
45°	3230	4148	3230	3641
50°	3429	3788	3429	3438
55°	3224	3401	3224	3320
60°	3319	2888	3319	3040
65°	3005	2387	3005	2668
70°	2075	1902	2075	2237
75°	1814	1406	1814	1684
80°	1452	929	1452	1012
85°	817	493	817	418

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 4955 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	1.7
10°-20°	232.2	4.7
20°-30°	358.9	7.3
30°-40°	428.5	8.8
40°-50°	431.0	8.8
50°-60°	375.0	7.7
60°-70°	265.9	5.4
70°-80°	140.7	2.9
80°-90°	36.5	0.7
90°-100°	191.3	3.9
100°-110°	503.0	10.3
110°-120°	521.5	10.7
120°-130°	418.3	8.5
130°-140°	328.2	6.7
140°-150°	251.9	5.1
150°-160°	181.4	3.7
160°-170°	111.0	2.3
170°-180°	37.5	0.8
0°-30°	672.9	13.7
0°-40°	1101.4	22.5
0°-60°	1907.4	39.0
0°-90°	2350.5	48.0
90°-120°	1215.8	24.8
90°-150°	2214.3	45.2
90°-180°	2544.0	52.0
0°-180°	4894.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	906	906	906	906	906	
5°	910	938	910	738	910	86
15°	869	930	869	776	869	245
25°	765	867	765	759	765	351
35°	582	774	582	661	582	360
45°	375	638	375	560	375	301
55°	306	471	306	459	306	281
65°	213	284	213	317	213	203
75°	81	134	81	161	81	85
85°	14	34	14	29	14	19
90°	3	10	3	10	3	3
95°	25	116	25	116	25	28
105°	91	788	91	788	91	96
115°	161	1014	161	1014	161	159
125°	224	808	224	808	224	199
135°	267	627	267	627	267	206
145°	310	508	310	508	310	194
155°	350	438	350	438	350	161
165°	377	408	377	408	377	107
175°	392	395	392	395	392	37
180°	392	392	392	392	392	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9
2.5°	913.7	913.7	918.8	920.5	920.5	917.9	915.4	917.9	925.7	928.3	927.4
5°	910.2	917.1	926.6	928.3	930.0	929.1	927.4	929.1	937.6	939.4	940.3
7.5°	903.4	916.2	928.3	930.8	933.4	930.8	930.0	931.7	940.3	942.0	942.0
10°	894.8	912.8	926.6	928.3	930.8	928.3	928.3	931.7	940.3	942.0	942.8
12.5°	882.8	907.6	920.5	922.2	925.7	924.8	923.9	927.4	935.9	937.6	937.6
15°	869.1	898.3	910.2	912.0	917.9	916.2	916.2	919.6	929.1	931.7	930.8
17.5°	850.2	886.3	900.0	902.5	906.8	905.9	906.8	910.2	918.8	920.5	921.4
20°	828.8	870.0	886.3	888.8	893.1	893.1	893.1	897.4	905.9	909.3	909.3
22.5°	799.7	852.8	870.0	871.7	876.8	876.8	878.5	884.5	892.2	893.1	893.1
25°	765.4	833.9	848.5	853.7	858.8	861.4	863.9	867.4	870.0	869.1	870.0
27.5°	729.4	809.9	828.8	832.2	839.1	841.7	845.1	846.0	846.8	849.4	847.7
30°	689.1	776.5	804.8	808.2	819.4	821.1	817.7	819.4	823.6	825.4	827.1
32.5°	643.7	726.8	779.9	787.7	798.0	792.8	791.9	794.5	801.4	801.4	803.1
35°	582.0	688.2	756.8	763.6	771.4	765.4	768.8	769.7	774.0	776.5	775.7
37.5°	514.3	654.8	732.8	737.9	744.0	736.2	741.4	744.0	747.4	745.7	745.7
40°	454.3	602.5	704.5	707.9	713.1	707.1	712.3	714.0	715.7	714.0	713.1
42.5°	409.7	545.1	674.5	678.8	675.4	679.6	681.4	684.8	682.3	678.8	678.8
45°	375.4	529.7	642.0	647.1	642.0	648.8	651.4	651.4	643.7	642.0	641.1
47.5°	364.2	498.8	609.4	609.4	606.8	615.4	619.7	613.7	605.9	603.4	603.4
50°	363.4	464.5	564.8	561.4	573.4	583.7	579.4	573.4	567.4	558.0	558.0
52.5°	330.0	422.5	507.4	520.2	539.1	545.1	538.3	532.2	521.9	517.7	514.3
55°	306.0	378.8	455.1	480.9	500.6	508.2	495.4	489.4	474.0	471.4	469.7
57.5°	300.8	315.4	407.1	439.7	463.7	462.8	455.1	444.0	431.1	428.6	427.7
60°	276.0	228.0	355.7	394.3	419.1	416.5	409.7	399.4	387.4	385.7	384.0
62.5°	250.2	165.5	297.4	341.1	376.2	375.4	369.4	354.0	345.4	341.1	337.7
65°	212.6	138.9	211.7	283.7	334.2	335.9	323.2	312.0	302.5	297.4	296.6
67.5°	162.0	113.1	143.1	236.6	294.0	292.2	276.0	270.9	258.8	256.3	251.2
70°	120.0	75.4	99.4	192.0	254.6	250.2	237.5	231.4	220.2	214.3	210.9
72.5°	99.4	60.8	72.8	149.1	214.3	209.2	198.0	191.1	181.7	176.5	173.1
75°	80.6	64.2	55.7	110.6	174.0	170.6	160.3	153.4	145.7	138.9	139.7
77.5°	59.1	60.0	44.6	81.5	138.0	132.8	126.9	118.3	114.8	108.0	108.0
80°	44.6	47.1	33.4	55.7	99.4	99.4	94.3	88.3	82.3	78.9	78.9
82.5°	30.0	30.0	24.9	35.1	67.7	65.2	61.7	60.0	56.6	54.9	54.9
85°	13.7	17.1	15.4	21.4	36.9	38.6	38.6	36.9	36.0	34.3	35.1
87.5°	4.3	7.8	9.5	12.0	18.8	19.7	20.5	20.5	20.5	21.4	21.4
90°	2.6	4.8	6.9	7.4	11.6	17.2	20.0	17.8	13.3	10.0	10.0
92.5°	10.6	28.5	46.3	50.9	71.5	99.0	112.7	98.7	70.9	50.0	48.1
95°	25.3	58.0	90.8	99.0	175.9	278.3	329.6	294.1	223.1	169.9	163.8
97.5°	43.7	72.7	101.6	108.8	236.9	407.8	493.1	470.7	425.8	392.2	380.7
100°	57.9	84.2	110.4	117.0	259.1	448.7	543.4	545.0	548.3	550.8	537.2
102.5°	70.0	94.6	119.0	125.2	269.3	461.5	557.6	586.2	643.3	686.2	674.5
105°	90.7	111.4	132.1	137.3	276.8	463.0	556.0	620.1	748.1	844.2	837.9
107.5°	111.7	131.0	150.3	155.1	278.3	442.4	524.4	613.7	792.4	926.4	927.9
110°	125.9	143.3	160.8	165.1	276.1	424.1	498.1	597.9	797.7	947.5	954.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	139.9	156.5	173.1	177.3	276.2	408.2	474.1	576.4	780.8	934.0	944.1
115°	160.9	176.3	191.6	195.4	278.8	389.9	445.4	543.9	740.8	888.5	902.4
117.5°	181.7	195.7	209.6	213.1	284.0	378.5	425.7	514.5	692.2	825.5	841.0
120°	193.8	207.0	220.1	223.4	288.1	374.5	417.7	498.9	661.3	783.1	798.2
122.5°	205.8	219.0	232.2	235.5	294.2	372.5	411.7	484.8	631.1	740.7	755.6
125°	223.9	235.9	248.0	251.0	302.4	370.9	405.1	467.2	591.5	684.6	698.2
127.5°	238.6	250.8	263.0	266.1	310.6	369.9	399.6	452.9	559.5	639.5	651.0
130°	246.6	259.7	272.8	276.0	316.5	370.4	397.5	444.9	539.9	611.1	621.8
132.5°	254.7	267.9	281.0	284.2	321.4	370.9	395.7	438.2	523.1	586.9	596.4
135°	266.8	278.8	290.7	293.7	326.7	370.5	392.5	428.1	499.3	552.6	560.9
137.5°	279.2	291.0	302.8	305.8	334.5	372.8	391.9	422.0	482.1	527.3	534.0
140°	289.5	300.4	311.2	314.0	339.4	373.2	390.1	416.1	468.1	507.0	513.3
142.5°	297.3	307.4	317.5	320.0	343.4	374.5	390.1	413.0	458.5	492.8	498.2
145°	309.5	318.3	327.1	329.3	348.7	374.5	387.5	406.1	443.5	471.5	475.6
147.5°	321.6	330.2	338.8	340.9	356.4	377.1	387.5	402.1	431.5	453.6	457.0
150°	329.6	337.3	345.0	346.9	360.5	378.5	387.5	399.9	424.7	443.3	446.0
152.5°	337.6	343.5	349.4	350.9	363.0	379.3	387.5	398.1	419.3	435.1	437.2
155°	349.8	354.2	358.4	359.5	368.8	381.3	387.5	395.9	412.8	425.4	426.8
157.5°	358.8	363.0	367.2	368.2	374.6	383.2	387.5	394.0	407.2	417.0	417.9
160°	364.8	368.1	371.3	372.2	377.3	384.1	387.5	393.1	404.4	412.8	413.3
162.5°	370.9	373.3	375.8	376.4	380.1	385.0	387.5	392.3	401.7	408.8	409.3
165°	377.4	379.7	381.9	382.5	384.2	386.4	387.5	390.9	397.6	402.7	403.3
167.5°	383.5	384.5	385.6	385.9	387.3	389.2	390.1	392.3	396.8	400.1	400.4
170°	387.5	388.5	389.6	389.9	390.0	390.0	390.1	392.3	396.8	400.1	400.1
172.5°	389.6	389.9	390.0	390.1	390.1	390.1	390.1	391.8	395.3	398.0	397.8
175°	392.5	392.5	392.5	392.5	391.7	390.6	390.1	391.2	393.5	395.1	395.1
177.5°	392.5	392.5	392.5	392.5	391.9	391.1	390.6	391.5	393.3	394.6	394.3
180°	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9
2.5°	929.1	926.6	929.1	927.4	928.3	925.7	917.9	915.4	917.9	920.5	920.5
5°	940.3	938.5	940.3	940.3	939.4	937.6	929.1	927.4	929.1	930.0	928.3
7.5°	943.7	941.1	943.7	942.0	942.0	940.3	931.7	930.0	930.8	933.4	930.8
10°	943.7	941.1	943.7	942.8	942.0	940.3	931.7	928.3	928.3	930.8	928.3
12.5°	939.4	937.6	939.4	937.6	937.6	935.9	927.4	923.9	924.8	925.7	922.2
15°	932.5	930.0	932.5	930.8	931.7	929.1	919.6	916.2	916.2	917.9	912.0
17.5°	922.2	918.8	922.2	921.4	920.5	918.8	910.2	906.8	905.9	906.8	902.5
20°	910.2	907.6	910.2	909.3	909.3	905.9	897.4	893.1	893.1	893.1	888.8
22.5°	891.4	888.8	891.4	893.1	893.1	892.2	884.5	878.5	876.8	876.8	871.7
25°	870.0	867.4	870.0	870.0	869.1	870.0	867.4	863.9	861.4	858.8	853.7
27.5°	849.4	847.7	849.4	847.7	849.4	846.8	846.0	845.1	841.7	839.1	832.2
30°	828.8	827.1	828.8	827.1	825.4	823.6	819.4	817.7	821.1	819.4	808.2
32.5°	803.1	801.4	803.1	803.1	801.4	801.4	794.5	791.9	792.8	798.0	787.7
35°	776.5	774.0	776.5	775.7	776.5	774.0	769.7	768.8	765.4	771.4	763.6
37.5°	745.7	743.1	745.7	745.7	745.7	747.4	744.0	741.4	736.2	744.0	737.9
40°	714.0	710.6	714.0	713.1	714.0	715.7	714.0	712.3	707.1	713.1	707.9
42.5°	677.9	677.1	677.9	678.8	678.8	682.3	684.8	681.4	679.6	675.4	678.8
45°	639.4	637.6	639.4	641.1	642.0	643.7	651.4	651.4	648.8	642.0	647.1
47.5°	598.3	593.9	598.3	603.4	603.4	605.9	613.7	619.7	615.4	606.8	609.4
50°	554.6	555.4	554.6	558.0	558.0	567.4	573.4	579.4	583.7	573.4	561.4
52.5°	511.7	510.9	511.7	514.3	517.7	521.9	532.2	538.3	545.1	539.1	520.2
55°	468.9	470.6	468.9	469.7	471.4	474.0	489.4	495.4	508.2	500.6	480.9
57.5°	426.0	423.4	426.0	427.7	428.6	431.1	444.0	455.1	462.8	463.7	439.7
60°	376.2	372.8	376.2	384.0	385.7	387.4	399.4	409.7	416.5	419.1	394.3
62.5°	332.5	326.6	332.5	337.7	341.1	345.4	354.0	369.4	375.4	376.2	341.1
65°	286.3	283.7	286.3	296.6	297.4	302.5	312.0	323.2	335.9	334.2	283.7
67.5°	244.3	244.3	244.3	251.2	256.3	258.8	270.9	276.0	292.2	294.0	236.6
70°	205.7	204.8	205.7	210.9	214.3	220.2	231.4	237.5	250.2	254.6	192.0
72.5°	168.9	168.0	168.9	173.1	176.5	181.7	191.1	198.0	209.2	214.3	149.1
75°	136.3	134.5	136.3	139.7	138.9	145.7	153.4	160.3	170.6	174.0	110.6
77.5°	104.5	104.5	104.5	108.0	108.0	114.8	118.3	126.9	132.8	138.0	81.5
80°	78.0	77.1	78.0	78.9	78.9	82.3	88.3	94.3	99.4	99.4	55.7
82.5°	54.9	53.2	54.9	54.9	54.9	56.6	60.0	61.7	65.2	67.7	35.1
85°	34.3	34.3	34.3	35.1	34.3	36.0	36.9	38.6	38.6	36.9	21.4
87.5°	22.3	21.4	22.3	21.4	21.4	20.5	20.5	20.5	19.7	18.8	12.0
90°	10.0	10.0	10.0	10.0	10.0	13.3	17.8	20.0	17.2	11.6	7.4
92.5°	40.0	32.1	40.0	48.1	50.0	70.9	98.7	112.7	99.0	71.5	50.9
95°	139.7	115.6	139.7	163.8	169.9	223.1	294.1	329.6	278.3	175.9	99.0
97.5°	334.8	289.0	334.8	380.7	392.2	425.8	470.7	493.1	407.8	236.9	108.8
100°	482.5	427.8	482.5	537.2	550.8	548.3	545.0	543.4	448.7	259.1	117.0
102.5°	627.7	580.8	627.7	674.5	686.2	643.3	586.2	557.6	461.5	269.3	125.2
105°	812.8	787.6	812.8	837.9	844.2	748.1	620.1	556.0	463.0	276.8	137.3
107.5°	934.0	940.1	934.0	927.9	926.4	792.4	613.7	524.4	442.4	278.3	155.1
110°	980.2	1006.5	980.2	954.1	947.5	797.7	597.9	498.1	424.1	276.1	165.1



TEST NUMBER: P934271

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	984.4	1024.6	984.4	944.1	934.0	780.8	576.4	474.1	408.2	276.2	177.3
115°	958.2	1014.1	958.2	902.4	888.5	740.8	543.9	445.4	389.9	278.8	195.4
117.5°	902.9	964.9	902.9	841.0	825.5	692.2	514.5	425.7	378.5	284.0	213.1
120°	858.3	918.5	858.3	798.2	783.1	661.3	498.9	417.7	374.5	288.1	223.4
122.5°	814.9	874.2	814.9	755.6	740.7	631.1	484.8	411.7	372.5	294.2	235.5
125°	752.9	807.6	752.9	698.2	684.6	591.5	467.2	405.1	370.9	302.4	251.0
127.5°	697.2	743.4	697.2	651.0	639.5	559.5	452.9	399.6	369.9	310.6	266.1
130°	664.4	707.0	664.4	621.8	611.1	539.9	444.9	397.5	370.4	316.5	276.0
132.5°	634.6	672.7	634.6	596.4	586.9	523.1	438.2	395.7	370.9	321.4	284.2
135°	593.8	626.6	593.8	560.9	552.6	499.3	428.1	392.5	370.5	326.7	293.7
137.5°	561.0	588.0	561.0	534.0	527.3	482.1	422.0	391.9	372.8	334.5	305.8
140°	538.5	563.7	538.5	513.3	507.0	468.1	416.1	390.1	373.2	339.4	314.0
142.5°	519.9	541.5	519.9	498.2	492.8	458.5	413.0	390.1	374.5	343.4	320.0
145°	492.0	508.4	492.0	475.6	471.5	443.5	406.1	387.5	374.5	348.7	329.3
147.5°	470.6	484.1	470.6	457.0	453.6	431.5	402.1	387.5	377.1	356.4	340.9
150°	457.1	468.1	457.1	446.0	443.3	424.7	399.9	387.5	378.5	360.5	346.9
152.5°	445.5	453.9	445.5	437.2	435.1	419.3	398.1	387.5	379.3	363.0	350.9
155°	432.3	437.8	432.3	426.8	425.4	412.8	395.9	387.5	381.3	368.8	359.5
157.5°	421.8	425.7	421.8	417.9	417.0	407.2	394.0	387.5	383.2	374.6	368.2
160°	415.5	417.7	415.5	413.3	412.8	404.4	393.1	387.5	384.1	377.3	372.2
162.5°	411.4	413.6	411.4	409.3	408.8	401.7	392.3	387.5	385.0	380.1	376.4
165°	405.6	407.8	405.6	403.3	402.7	397.6	390.9	387.5	386.4	384.2	382.5
167.5°	401.3	402.2	401.3	400.4	400.1	396.8	392.3	390.1	389.2	387.3	385.9
170°	400.1	400.1	400.1	400.1	400.1	396.8	392.3	390.1	390.0	390.0	389.9
172.5°	396.9	396.2	396.9	397.8	398.0	395.3	391.8	390.1	390.1	390.1	390.1
175°	395.1	395.1	395.1	395.1	395.1	393.5	391.2	390.1	390.6	391.7	392.5
177.5°	393.5	392.5	393.5	394.3	394.6	393.3	391.5	390.6	391.1	391.9	392.5
180°	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5



TEST NUMBER: P934271

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9
2.5°	918.8	913.7	913.7	905.1	901.7	899.1	894.8	882.0	878.5	875.1	880.2
5°	926.6	917.1	910.2	894.8	882.0	876.8	860.5	829.7	809.1	793.6	785.1
7.5°	928.3	916.2	903.4	879.3	848.5	834.8	785.1	728.5	713.1	699.4	690.8
10°	926.6	912.8	894.8	858.8	786.0	761.9	712.3	675.4	665.9	663.4	665.9
12.5°	920.5	907.6	882.8	822.8	720.8	704.5	675.4	654.0	652.2	656.6	679.6
15°	910.2	898.3	869.1	774.8	684.8	672.8	652.2	644.5	654.0	684.0	753.4
17.5°	900.0	886.3	850.2	727.7	657.4	648.8	634.2	649.6	702.8	743.1	766.2
20°	886.3	870.0	828.8	693.4	637.6	630.0	623.1	692.5	732.8	747.4	760.2
22.5°	870.0	852.8	799.7	669.4	617.1	611.1	615.4	716.5	732.8	743.1	754.3
25°	848.5	833.9	765.4	650.5	600.8	593.9	610.3	714.0	723.3	726.0	748.2
27.5°	828.8	809.9	729.4	633.4	581.1	578.5	614.5	702.8	709.7	712.3	736.2
30°	804.8	776.5	689.1	615.4	560.5	559.7	615.4	689.1	687.4	694.2	718.2
32.5°	779.9	726.8	643.7	593.1	540.8	540.0	609.4	668.6	666.9	676.2	694.2
35°	756.8	688.2	582.0	567.4	516.0	516.8	594.8	644.5	645.4	654.0	665.1
37.5°	732.8	654.8	514.3	539.1	491.9	491.9	575.1	622.2	620.5	623.1	638.6
40°	704.5	602.5	454.3	502.3	469.7	467.2	551.1	598.3	592.2	591.4	612.8
42.5°	674.5	545.1	409.7	453.4	444.0	440.6	521.9	569.1	558.0	560.5	588.0
45°	642.0	529.7	375.4	383.1	417.4	414.8	490.2	535.7	528.0	534.8	563.1
47.5°	609.4	498.8	364.2	318.0	389.1	388.3	455.1	503.1	498.8	505.7	535.7
50°	564.8	464.5	363.4	272.6	357.4	360.8	413.1	471.4	471.4	477.4	509.2
52.5°	507.4	422.5	330.0	246.8	320.5	330.8	376.2	444.0	445.7	451.7	479.9
55°	455.1	378.8	306.0	227.1	276.8	299.1	340.3	415.7	419.1	425.1	450.8
57.5°	407.1	315.4	300.8	204.0	236.6	258.0	308.6	388.3	390.0	395.2	420.0
60°	355.7	228.0	276.0	179.1	201.4	217.7	279.4	355.7	361.7	365.1	386.6
62.5°	297.4	165.5	250.2	162.0	184.3	187.7	255.4	324.9	332.5	335.1	348.0
65°	211.7	138.9	212.6	147.4	166.3	167.2	229.7	293.1	300.0	304.2	313.7
67.5°	143.1	113.1	162.0	133.7	152.6	153.4	204.8	256.3	265.7	269.1	275.1
70°	99.4	75.4	120.0	119.1	137.2	138.9	178.2	222.9	231.4	234.0	237.5
72.5°	72.8	60.8	99.4	107.1	120.8	122.6	150.9	185.1	193.7	196.3	198.0
75°	55.7	64.2	80.6	93.5	102.8	103.7	123.5	150.9	156.9	158.6	159.4
77.5°	44.6	60.0	59.1	75.4	84.0	82.3	96.9	116.6	121.7	121.7	121.7
80°	33.4	47.1	44.6	54.0	61.7	60.0	69.4	83.2	84.9	86.6	85.7
82.5°	24.9	30.0	30.0	34.3	41.2	39.4	46.3	54.0	54.0	54.0	55.7
85°	15.4	17.1	13.7	18.0	23.2	22.3	25.7	29.1	30.0	30.0	28.3
87.5°	9.5	7.8	4.3	6.8	10.3	10.3	12.0	12.9	12.0	12.0	12.0
90°	6.9	4.8	2.6	4.8	6.9	7.4	11.6	17.2	20.0	17.8	13.3
92.5°	46.3	28.5	10.6	28.5	46.3	50.9	71.5	99.0	112.7	98.7	70.9
95°	90.8	58.0	25.3	58.0	90.8	99.0	175.9	278.3	329.6	294.1	223.1
97.5°	101.6	72.7	43.7	72.7	101.6	108.8	236.9	407.8	493.1	470.7	425.8
100°	110.4	84.2	57.9	84.2	110.4	117.0	259.1	448.7	543.4	545.0	548.3
102.5°	119.0	94.6	70.0	94.6	119.0	125.2	269.3	461.5	557.6	586.2	643.3
105°	132.1	111.4	90.7	111.4	132.1	137.3	276.8	463.0	556.0	620.1	748.1
107.5°	150.3	131.0	111.7	131.0	150.3	155.1	278.3	442.4	524.4	613.7	792.4
110°	160.8	143.3	125.9	143.3	160.8	165.1	276.1	424.1	498.1	597.9	797.7



TEST NUMBER: P934271

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	173.1	156.5	139.9	156.5	173.1	177.3	276.2	408.2	474.1	576.4	780.8
115°	191.6	176.3	160.9	176.3	191.6	195.4	278.8	389.9	445.4	543.9	740.8
117.5°	209.6	195.7	181.7	195.7	209.6	213.1	284.0	378.5	425.7	514.5	692.2
120°	220.1	207.0	193.8	207.0	220.1	223.4	288.1	374.5	417.7	498.9	661.3
122.5°	232.2	219.0	205.8	219.0	232.2	235.5	294.2	372.5	411.7	484.8	631.1
125°	248.0	235.9	223.9	235.9	248.0	251.0	302.4	370.9	405.1	467.2	591.5
127.5°	263.0	250.8	238.6	250.8	263.0	266.1	310.6	369.9	399.6	452.9	559.5
130°	272.8	259.7	246.6	259.7	272.8	276.0	316.5	370.4	397.5	444.9	539.9
132.5°	281.0	267.9	254.7	267.9	281.0	284.2	321.4	370.9	395.7	438.2	523.1
135°	290.7	278.8	266.8	278.8	290.7	293.7	326.7	370.5	392.5	428.1	499.3
137.5°	302.8	291.0	279.2	291.0	302.8	305.8	334.5	372.8	391.9	422.0	482.1
140°	311.2	300.4	289.5	300.4	311.2	314.0	339.4	373.2	390.1	416.1	468.1
142.5°	317.5	307.4	297.3	307.4	317.5	320.0	343.4	374.5	390.1	413.0	458.5
145°	327.1	318.3	309.5	318.3	327.1	329.3	348.7	374.5	387.5	406.1	443.5
147.5°	338.8	330.2	321.6	330.2	338.8	340.9	356.4	377.1	387.5	402.1	431.5
150°	345.0	337.3	329.6	337.3	345.0	346.9	360.5	378.5	387.5	399.9	424.7
152.5°	349.4	343.5	337.6	343.5	349.4	350.9	363.0	379.3	387.5	398.1	419.3
155°	358.4	354.2	349.8	354.2	358.4	359.5	368.8	381.3	387.5	395.9	412.8
157.5°	367.2	363.0	358.8	363.0	367.2	368.2	374.6	383.2	387.5	394.0	407.2
160°	371.3	368.1	364.8	368.1	371.3	372.2	377.3	384.1	387.5	393.1	404.4
162.5°	375.8	373.3	370.9	373.3	375.8	376.4	380.1	385.0	387.5	392.3	401.7
165°	381.9	379.7	377.4	379.7	381.9	382.5	384.2	386.4	387.5	390.9	397.6
167.5°	385.6	384.5	383.5	384.5	385.6	385.9	387.3	389.2	390.1	392.3	396.8
170°	389.6	388.5	387.5	388.5	389.6	389.9	390.0	390.0	390.1	392.3	396.8
172.5°	390.0	389.9	389.6	389.9	390.0	390.1	390.1	390.1	390.1	391.8	395.3
175°	392.5	392.5	392.5	392.5	392.5	392.5	391.7	390.6	390.1	391.2	393.5
177.5°	392.5	392.5	392.5	392.5	392.5	392.5	391.9	391.1	390.6	391.5	393.3
180°	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5



TEST NUMBER: P934271

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9	905.9
2.5°	874.2	871.7	875.1	865.6	875.1	871.7	874.2	880.2	875.1	878.5	882.0
5°	767.1	762.8	749.1	737.9	749.1	762.8	767.1	785.1	793.6	809.1	829.7
7.5°	685.7	682.3	678.8	672.0	678.8	682.3	685.7	690.8	699.4	713.1	728.5
10°	667.7	668.6	673.7	672.8	673.7	668.6	667.7	665.9	663.4	665.9	675.4
12.5°	714.0	721.6	749.9	748.2	749.9	721.6	714.0	679.6	656.6	652.2	654.0
15°	767.1	769.7	775.7	776.5	775.7	769.7	767.1	753.4	684.0	654.0	644.5
17.5°	772.3	773.1	777.4	777.4	777.4	773.1	772.3	766.2	743.1	702.8	649.6
20°	768.0	769.7	778.2	779.9	778.2	769.7	768.0	760.2	747.4	732.8	692.5
22.5°	766.2	769.7	776.5	775.7	776.5	769.7	766.2	754.3	743.1	732.8	716.5
25°	757.7	757.7	758.5	759.4	758.5	757.7	757.7	748.2	726.0	723.3	714.0
27.5°	739.7	741.4	746.5	745.7	746.5	741.4	739.7	736.2	712.3	709.7	702.8
30°	723.3	721.6	717.4	714.0	717.4	721.6	723.3	718.2	694.2	687.4	689.1
32.5°	696.0	691.7	687.4	684.8	687.4	691.7	696.0	694.2	676.2	666.9	668.6
35°	663.4	664.2	663.4	660.8	663.4	664.2	663.4	665.1	654.0	645.4	644.5
37.5°	640.3	642.0	641.1	637.6	641.1	642.0	640.3	638.6	623.1	620.5	622.2
40°	616.3	617.1	616.3	613.7	616.3	617.1	616.3	612.8	591.4	592.2	598.3
42.5°	593.1	592.2	589.7	588.0	589.7	592.2	593.1	588.0	560.5	558.0	569.1
45°	566.6	567.4	562.2	559.7	562.2	567.4	566.6	563.1	534.8	528.0	535.7
47.5°	540.0	540.0	535.7	533.1	535.7	540.0	540.0	535.7	505.7	498.8	503.1
50°	511.7	510.9	504.8	504.0	504.8	510.9	511.7	509.2	477.4	471.4	471.4
52.5°	479.1	479.1	479.9	481.7	479.9	479.1	479.1	479.9	451.7	445.7	444.0
55°	450.8	451.7	457.7	459.4	457.7	451.7	450.8	450.8	425.1	419.1	415.7
57.5°	421.7	421.7	426.0	426.0	426.0	421.7	421.7	420.0	395.2	390.0	388.3
60°	388.3	390.0	393.4	392.5	393.4	390.0	388.3	386.6	365.1	361.7	355.7
62.5°	353.2	354.9	355.7	354.0	355.7	354.9	353.2	348.0	335.1	332.5	324.9
65°	316.3	318.0	318.8	317.1	318.8	318.0	316.3	313.7	304.2	300.0	293.1
67.5°	278.5	277.7	276.8	280.3	276.8	277.7	278.5	275.1	269.1	265.7	256.3
70°	240.0	240.0	239.2	240.9	239.2	240.0	240.0	237.5	234.0	231.4	222.9
72.5°	198.9	198.0	201.4	198.9	201.4	198.0	198.9	198.0	196.3	193.7	185.1
75°	158.6	160.3	158.6	161.1	158.6	160.3	158.6	159.4	158.6	156.9	150.9
77.5°	120.8	122.6	120.8	120.8	120.8	122.6	120.8	121.7	121.7	121.7	116.6
80°	85.7	84.9	84.9	84.0	84.9	84.9	85.7	85.7	86.6	84.9	83.2
82.5°	54.9	54.0	54.0	55.7	54.0	54.0	54.9	55.7	54.0	54.0	54.0
85°	30.0	30.8	29.1	29.1	29.1	30.8	30.0	28.3	30.0	30.0	29.1
87.5°	11.2	10.3	10.3	10.3	10.3	10.3	11.2	12.0	12.0	12.0	12.9
90°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	13.3	17.8	20.0	17.2
92.5°	50.0	48.1	40.0	32.1	40.0	48.1	50.0	70.9	98.7	112.7	99.0
95°	169.9	163.8	139.7	115.6	139.7	163.8	169.9	223.1	294.1	329.6	278.3
97.5°	392.2	380.7	334.8	289.0	334.8	380.7	392.2	425.8	470.7	493.1	407.8
100°	550.8	537.2	482.5	427.8	482.5	537.2	550.8	548.3	545.0	543.4	448.7
102.5°	686.2	674.5	627.7	580.8	627.7	674.5	686.2	643.3	586.2	557.6	461.5
105°	844.2	837.9	812.8	787.6	812.8	837.9	844.2	748.1	620.1	556.0	463.0
107.5°	926.4	927.9	934.0	940.1	934.0	927.9	926.4	792.4	613.7	524.4	442.4
110°	947.5	954.1	980.2	1006.5	980.2	954.1	947.5	797.7	597.9	498.1	424.1



TEST NUMBER: P934271

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	934.0	944.1	984.4	1024.6	984.4	944.1	934.0	780.8	576.4	474.1	408.2
115°	888.5	902.4	958.2	1014.1	958.2	902.4	888.5	740.8	543.9	445.4	389.9
117.5°	825.5	841.0	902.9	964.9	902.9	841.0	825.5	692.2	514.5	425.7	378.5
120°	783.1	798.2	858.3	918.5	858.3	798.2	783.1	661.3	498.9	417.7	374.5
122.5°	740.7	755.6	814.9	874.2	814.9	755.6	740.7	631.1	484.8	411.7	372.5
125°	684.6	698.2	752.9	807.6	752.9	698.2	684.6	591.5	467.2	405.1	370.9
127.5°	639.5	651.0	697.2	743.4	697.2	651.0	639.5	559.5	452.9	399.6	369.9
130°	611.1	621.8	664.4	707.0	664.4	621.8	611.1	539.9	444.9	397.5	370.4
132.5°	586.9	596.4	634.6	672.7	634.6	596.4	586.9	523.1	438.2	395.7	370.9
135°	552.6	560.9	593.8	626.6	593.8	560.9	552.6	499.3	428.1	392.5	370.5
137.5°	527.3	534.0	561.0	588.0	561.0	534.0	527.3	482.1	422.0	391.9	372.8
140°	507.0	513.3	538.5	563.7	538.5	513.3	507.0	468.1	416.1	390.1	373.2
142.5°	492.8	498.2	519.9	541.5	519.9	498.2	492.8	458.5	413.0	390.1	374.5
145°	471.5	475.6	492.0	508.4	492.0	475.6	471.5	443.5	406.1	387.5	374.5
147.5°	453.6	457.0	470.6	484.1	470.6	457.0	453.6	431.5	402.1	387.5	377.1
150°	443.3	446.0	457.1	468.1	457.1	446.0	443.3	424.7	399.9	387.5	378.5
152.5°	435.1	437.2	445.5	453.9	445.5	437.2	435.1	419.3	398.1	387.5	379.3
155°	425.4	426.8	432.3	437.8	432.3	426.8	425.4	412.8	395.9	387.5	381.3
157.5°	417.0	417.9	421.8	425.7	421.8	417.9	417.0	407.2	394.0	387.5	383.2
160°	412.8	413.3	415.5	417.7	415.5	413.3	412.8	404.4	393.1	387.5	384.1
162.5°	408.8	409.3	411.4	413.6	411.4	409.3	408.8	401.7	392.3	387.5	385.0
165°	402.7	403.3	405.6	407.8	405.6	403.3	402.7	397.6	390.9	387.5	386.4
167.5°	400.1	400.4	401.3	402.2	401.3	400.4	400.1	396.8	392.3	390.1	389.2
170°	400.1	400.1	400.1	400.1	400.1	400.1	400.1	396.8	392.3	390.1	390.0
172.5°	398.0	397.8	396.9	396.2	396.9	397.8	398.0	395.3	391.8	390.1	390.1
175°	395.1	395.1	395.1	395.1	395.1	395.1	395.1	393.5	391.2	390.1	390.6
177.5°	394.6	394.3	393.5	392.5	393.5	394.3	394.6	393.3	391.5	390.6	391.1
180°	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5



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CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	905.9	905.9	905.9	905.9	905.9
2.5°	894.8	899.1	901.7	905.1	913.7
5°	860.5	876.8	882.0	894.8	910.2
7.5°	785.1	834.8	848.5	879.3	903.4
10°	712.3	761.9	786.0	858.8	894.8
12.5°	675.4	704.5	720.8	822.8	882.8
15°	652.2	672.8	684.8	774.8	869.1
17.5°	634.2	648.8	657.4	727.7	850.2
20°	623.1	630.0	637.6	693.4	828.8
22.5°	615.4	611.1	617.1	669.4	799.7
25°	610.3	593.9	600.8	650.5	765.4
27.5°	614.5	578.5	581.1	633.4	729.4
30°	615.4	559.7	560.5	615.4	689.1
32.5°	609.4	540.0	540.8	593.1	643.7
35°	594.8	516.8	516.0	567.4	582.0
37.5°	575.1	491.9	491.9	539.1	514.3
40°	551.1	467.2	469.7	502.3	454.3
42.5°	521.9	440.6	444.0	453.4	409.7
45°	490.2	414.8	417.4	383.1	375.4
47.5°	455.1	388.3	389.1	318.0	364.2
50°	413.1	360.8	357.4	272.6	363.4
52.5°	376.2	330.8	320.5	246.8	330.0
55°	340.3	299.1	276.8	227.1	306.0
57.5°	308.6	258.0	236.6	204.0	300.8
60°	279.4	217.7	201.4	179.1	276.0
62.5°	255.4	187.7	184.3	162.0	250.2
65°	229.7	167.2	166.3	147.4	212.6
67.5°	204.8	153.4	152.6	133.7	162.0
70°	178.2	138.9	137.2	119.1	120.0
72.5°	150.9	122.6	120.8	107.1	99.4
75°	123.5	103.7	102.8	93.5	80.6
77.5°	96.9	82.3	84.0	75.4	59.1
80°	69.4	60.0	61.7	54.0	44.6
82.5°	46.3	39.4	41.2	34.3	30.0
85°	25.7	22.3	23.2	18.0	13.7
87.5°	12.0	10.3	10.3	6.8	4.3
90°	11.6	7.4	6.9	4.8	2.6
92.5°	71.5	50.9	46.3	28.5	10.6
95°	175.9	99.0	90.8	58.0	25.3
97.5°	236.9	108.8	101.6	72.7	43.7
100°	259.1	117.0	110.4	84.2	57.9
102.5°	269.3	125.2	119.0	94.6	70.0
105°	276.8	137.3	132.1	111.4	90.7
107.5°	278.3	155.1	150.3	131.0	111.7
110°	276.1	165.1	160.8	143.3	125.9



TEST NUMBER: P934271

CATALOG NUMBER: SQ4-FA-050U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	276.2	177.3	173.1	156.5	139.9
115°	278.8	195.4	191.6	176.3	160.9
117.5°	284.0	213.1	209.6	195.7	181.7
120°	288.1	223.4	220.1	207.0	193.8
122.5°	294.2	235.5	232.2	219.0	205.8
125°	302.4	251.0	248.0	235.9	223.9
127.5°	310.6	266.1	263.0	250.8	238.6
130°	316.5	276.0	272.8	259.7	246.6
132.5°	321.4	284.2	281.0	267.9	254.7
135°	326.7	293.7	290.7	278.8	266.8
137.5°	334.5	305.8	302.8	291.0	279.2
140°	339.4	314.0	311.2	300.4	289.5
142.5°	343.4	320.0	317.5	307.4	297.3
145°	348.7	329.3	327.1	318.3	309.5
147.5°	356.4	340.9	338.8	330.2	321.6
150°	360.5	346.9	345.0	337.3	329.6
152.5°	363.0	350.9	349.4	343.5	337.6
155°	368.8	359.5	358.4	354.2	349.8
157.5°	374.6	368.2	367.2	363.0	358.8
160°	377.3	372.2	371.3	368.1	364.8
162.5°	380.1	376.4	375.8	373.3	370.9
165°	384.2	382.5	381.9	379.7	377.4
167.5°	387.3	385.9	385.6	384.5	383.5
170°	390.0	389.9	389.6	388.5	387.5
172.5°	390.1	390.1	390.0	389.9	389.6
175°	391.7	392.5	392.5	392.5	392.5
177.5°	391.9	392.5	392.5	392.5	392.5
180°	392.5	392.5	392.5	392.5	392.5



TEST NUMBER: P934271
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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	10.60	11.45	11.58	12.44	13.74	13.43	14.27	14.40	15.26	16.56
	3H	11.08	11.84	12.07	12.83	14.15	14.77	15.53	15.76	16.52	17.85
	4H	11.27	11.99	12.27	12.99	14.32	15.21	15.93	16.21	16.93	18.26
	6H	11.39	12.05	12.40	13.05	14.39	15.50	16.16	16.51	17.16	18.50
	8H	11.39	12.02	12.40	13.04	14.38	15.57	16.20	16.58	17.22	18.56
	12H	11.36	11.96	12.38	12.97	14.33	15.61	16.20	16.63	17.22	18.58
4H	2H	11.63	12.35	12.64	13.35	14.68	13.84	14.55	14.84	15.55	16.88
	3H	12.66	13.26	13.67	14.28	15.63	15.34	15.94	16.35	16.96	18.31
	4H	12.93	13.48	13.96	14.50	15.87	15.87	16.41	16.89	17.43	18.80
	6H	13.06	13.53	14.09	14.57	15.94	16.23	16.70	17.26	17.74	19.10
	8H	13.06	13.50	14.10	14.54	15.92	16.33	16.77	17.37	17.81	19.19
	12H	13.03	13.43	14.08	14.48	15.86	16.39	16.78	17.44	17.84	19.22
8H	4H	13.39	13.82	14.42	14.86	16.24	15.99	16.43	17.02	17.46	18.84
	6H	13.65	14.01	14.70	15.09	16.46	16.42	16.78	17.48	17.86	19.24
	8H	13.69	14.01	14.75	15.07	16.47	16.57	16.89	17.64	17.96	19.35
	12H	13.67	13.95	14.74	15.01	16.45	16.67	16.95	17.74	18.01	19.45
12H	4H	13.39	13.79	14.44	14.84	16.22	15.95	16.35	17.00	17.40	18.78
	6H	13.71	14.03	14.77	15.09	16.48	16.42	16.74	17.48	17.80	19.20
	8H	13.77	14.05	14.84	15.11	16.55	16.58	16.86	17.65	17.92	19.36