

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: P934660

Luminaire Tested: SQ4-FA-075U-050D-93050-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

**Test Information**

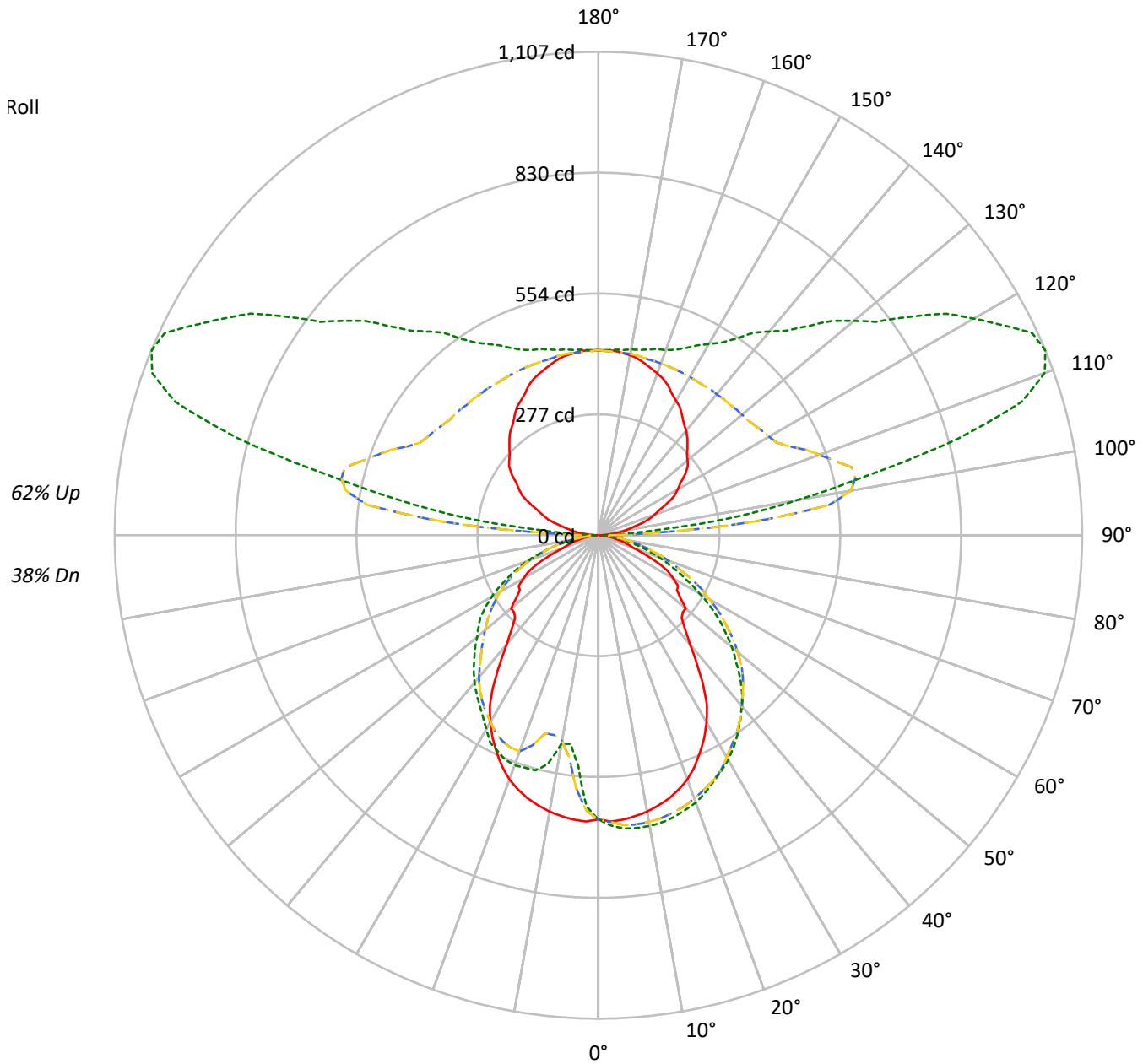
Test Method: LM-79-2019  
Report Number: P934660  
REPORT IS A COMBINATION OF REPORTS P933706 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-075U-050D-93050-1D-UNV-STD-W-4-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4436.2 lumens  
Efficiency: N/A  
Efficacy: 129.0 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): 34.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

TEST NUMBER: P934660  
CATALOG NUMBER: SQ4-FA-075U-050D-93050-1D-UNV-STD-W-4-5000K

### Luminous Intensity Polar Plot



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



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38	38	38	38
1	95	91	87	84	86	83	79	77	67	65	63	53	52	50	40	39	38	32	32	32	32
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32	27	27	27	27
3	79	70	63	57	71	64	57	52	52	47	44	41	38	35	31	29	27	23	23	23	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	30	28	25	24	20	20	20	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17	17	17	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15	15	15	15
7	56	44	36	31	51	40	34	29	33	28	24	27	23	20	21	18	16	13	13	13	13
8	52	40	32	27	47	37	30	25	30	25	22	24	21	18	19	16	14	12	12	12	12
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	11	11	11	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	14	16	14	12	10	10	10	10

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

	0°	90°	180°	270°
0°	6037	6037	6037	6037
5°	6075	6094	6075	4791
10°	6028	6003	6028	4292
15°	5955	5873	5955	4904
20°	5823	5718	5823	4914
25°	5562	5493	5562	4810
30°	5226	5307	5226	4581
35°	4652	5072	4652	4330
40°	3869	4793	3869	4140
45°	3450	4468	3450	3922
50°	3659	4080	3659	3702
55°	3432	3663	3432	3576
60°	3526	3110	3526	3275
65°	3180	2571	3180	2874
70°	2188	2049	2188	2410
75°	1895	1514	1895	1814
80°	1498	1002	1498	1090
85°	811	530	811	450

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°  
 Vertical Angle: 45°  
 Luminance: 5300 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.7	1.3
10°-20°	166.7	3.8
20°-30°	257.7	5.8
30°-40°	307.7	6.9
40°-50°	309.5	7.0
50°-60°	269.3	6.1
60°-70°	190.9	4.3
70°-80°	101.0	2.3
80°-90°	26.8	0.6
90°-100°	206.6	4.7
100°-110°	543.2	12.2
110°-120°	563.2	12.7
120°-130°	451.8	10.2
130°-140°	354.5	8.0
140°-150°	272.1	6.1
150°-160°	195.9	4.4
160°-170°	119.9	2.7
170°-180°	40.5	0.9
0°-30°	483.2	10.9
0°-40°	790.9	17.8
0°-60°	1369.6	30.9
0°-90°	1688.3	38.1
90°-120°	1313.1	29.6
90°-150°	2391.5	53.9
90°-180°	2748.0	61.9
0°-180°	4436.2	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	651	651	651	651	651	
5°	654	674	654	530	654	62
15°	624	668	624	558	624	176
25°	550	623	550	545	550	252
35°	418	556	418	474	418	259
45°	270	458	270	402	270	216
55°	220	338	220	330	220	202
65°	153	204	153	228	153	146
75°	58	97	58	116	58	61
85°	10	25	10	21	10	13
90°	3	11	3	11	3	3
95°	27	125	27	125	27	30
105°	98	851	98	851	98	104
115°	174	1095	174	1095	174	172
125°	242	872	242	872	242	215
135°	288	677	288	677	288	223
145°	334	549	334	549	334	209
155°	378	473	378	473	378	174
165°	408	440	408	440	408	115
175°	424	427	424	427	424	40
180°	424	424	424	424	424	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6
2.5°	656.1	656.1	659.7	661.0	661.0	659.2	657.3	659.2	664.7	666.5	665.9
5°	653.6	658.5	665.3	666.5	667.8	667.2	665.9	667.2	673.3	674.5	675.1
7.5°	648.7	657.9	666.5	668.4	670.2	668.4	667.8	669.0	675.1	676.3	676.3
10°	642.6	655.4	665.3	666.5	668.4	666.5	666.5	669.0	675.1	676.3	677.0
12.5°	633.9	651.7	661.0	662.2	664.7	664.0	663.5	665.9	672.1	673.3	673.3
15°	624.0	645.0	653.6	654.9	659.2	657.9	657.9	660.4	667.2	669.0	668.4
17.5°	610.5	636.4	646.2	648.1	651.2	650.6	651.2	653.6	659.7	661.0	661.7
20°	595.1	624.7	636.4	638.3	641.3	641.3	641.3	644.4	650.6	653.0	653.0
22.5°	574.2	612.4	624.7	626.0	629.6	629.6	630.8	635.1	640.6	641.3	641.3
25°	549.6	598.8	609.3	613.0	616.7	618.5	620.4	622.8	624.7	624.0	624.7
27.5°	523.7	581.6	595.1	597.6	602.6	604.4	606.9	607.4	608.1	609.9	608.7
30°	494.8	557.6	577.9	580.4	588.3	589.6	587.1	588.3	591.5	592.6	593.9
32.5°	462.2	521.9	560.1	565.6	573.0	569.3	568.7	570.5	575.5	575.5	576.7
35°	417.9	494.2	543.5	548.4	553.9	549.6	552.1	552.6	555.8	557.6	556.9
37.5°	369.3	470.2	526.2	529.9	534.2	528.7	532.4	534.2	536.7	535.5	535.5
40°	326.1	432.7	505.9	508.4	512.1	507.8	511.4	512.7	513.9	512.7	512.1
42.5°	294.2	391.4	484.4	487.5	485.0	488.0	489.3	491.8	489.9	487.5	487.5
45°	269.5	380.4	461.0	464.6	461.0	465.9	467.7	467.7	462.2	461.0	460.3
47.5°	261.5	358.2	437.6	437.6	435.7	441.9	445.0	440.7	435.2	433.2	433.2
50°	261.0	333.6	405.6	403.1	411.8	419.1	416.1	411.8	407.5	400.7	400.7
52.5°	236.9	303.4	364.3	373.6	387.1	391.4	386.5	382.2	374.8	371.8	369.3
55°	219.7	272.0	326.8	345.2	359.5	365.0	355.7	351.4	340.4	338.5	337.3
57.5°	216.0	226.5	292.4	315.7	332.9	332.4	326.8	318.8	309.5	307.7	307.2
60°	198.2	163.7	255.4	283.1	300.9	299.1	294.2	286.8	278.2	277.0	275.8
62.5°	179.7	118.7	213.5	244.9	270.2	269.5	265.3	254.2	248.1	244.9	242.5
65°	152.6	99.7	152.1	203.7	240.1	241.3	232.0	224.0	217.2	213.5	212.9
67.5°	116.4	81.2	102.8	169.9	211.1	209.9	198.2	194.5	185.8	184.0	180.3
70°	86.2	54.1	71.4	137.8	182.8	179.7	170.5	166.2	158.2	153.9	151.4
72.5°	71.4	43.7	52.3	107.1	153.9	150.1	142.2	137.3	130.5	126.8	124.3
75°	57.8	46.2	40.0	79.4	124.9	122.5	115.1	110.1	104.6	99.7	100.3
77.5°	42.5	43.0	32.0	58.5	99.1	95.4	91.1	85.0	82.5	77.5	77.5
80°	32.0	33.9	24.0	40.0	71.4	71.4	67.7	63.4	59.1	56.6	56.6
82.5°	21.6	21.6	17.8	25.2	48.6	46.8	44.3	43.0	40.7	39.4	39.4
85°	9.8	12.3	11.1	15.4	26.4	27.7	27.7	26.4	25.9	24.6	25.2
87.5°	3.1	5.5	6.8	8.6	13.6	14.1	14.8	14.8	14.8	15.4	15.4
90°	2.8	5.1	7.4	8.0	12.6	18.6	21.7	19.3	14.4	10.8	10.8
92.5°	11.4	30.7	50.0	54.9	77.2	106.9	121.8	106.7	76.6	54.1	51.9
95°	27.3	62.8	98.2	107.0	190.0	300.5	355.9	317.5	240.9	183.4	176.9
97.5°	47.3	78.5	109.7	117.5	255.9	440.3	532.5	508.3	459.9	423.6	411.2
100°	62.6	90.9	119.2	126.3	279.8	484.5	586.9	588.6	592.2	594.8	580.1
102.5°	75.7	102.1	128.5	135.1	290.8	498.5	602.3	633.1	694.8	741.0	728.4
105°	97.8	120.2	142.6	148.2	299.0	500.1	600.5	669.7	808.0	911.7	904.9
107.5°	120.6	141.5	162.3	167.6	300.5	477.8	566.4	662.9	855.8	1000.5	1002.1
110°	136.0	154.8	173.7	178.4	298.3	458.0	538.0	645.8	861.4	1023.2	1030.3



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	151.1	169.0	186.9	191.4	298.3	440.9	512.1	622.5	843.2	1008.7	1019.7
115°	173.8	190.3	206.9	211.1	301.1	421.0	481.1	587.4	800.0	959.5	974.6
117.5°	196.3	211.3	226.4	230.2	306.7	408.6	459.7	555.7	747.6	891.5	908.2
120°	209.4	223.6	237.7	241.3	311.2	404.5	451.1	538.9	714.2	845.7	862.0
122.5°	222.2	236.5	250.7	254.3	317.7	402.3	444.6	523.5	681.5	800.0	816.0
125°	241.8	254.8	267.9	271.1	326.6	400.6	437.6	504.6	638.8	739.4	754.2
127.5°	257.8	270.9	284.0	287.3	335.4	399.6	431.6	489.2	604.4	690.7	703.2
130°	266.3	280.4	294.6	298.2	341.8	400.1	429.3	480.6	583.1	660.0	671.5
132.5°	275.1	289.3	303.4	307.0	347.1	400.6	427.3	473.2	565.0	633.9	644.1
135°	288.2	301.0	313.9	317.2	352.8	400.2	423.9	462.3	539.2	596.9	605.8
137.5°	301.6	314.3	327.1	330.3	361.3	402.7	423.3	455.8	520.8	569.5	576.8
140°	312.7	324.4	336.2	339.1	366.5	403.1	421.3	449.4	505.5	547.6	554.4
142.5°	321.2	332.0	342.9	345.6	370.8	404.5	421.3	446.0	495.3	532.3	538.1
145°	334.2	343.8	353.2	355.6	376.5	404.5	418.5	438.7	478.9	509.2	513.6
147.5°	347.3	356.5	365.8	368.1	384.9	407.3	418.5	434.3	466.1	489.9	493.5
150°	355.9	364.2	372.6	374.7	389.3	408.7	418.5	431.9	458.7	478.8	481.7
152.5°	364.7	371.0	377.4	378.9	392.1	409.7	418.5	429.9	452.8	470.0	472.2
155°	377.8	382.5	387.1	388.3	398.4	411.8	418.5	427.6	445.7	459.4	460.9
157.5°	387.5	392.0	396.6	397.7	404.6	413.9	418.5	425.5	439.7	450.3	451.3
160°	394.0	397.5	401.0	402.0	407.5	414.8	418.5	424.5	436.7	445.8	446.4
162.5°	400.6	403.2	405.9	406.5	410.5	415.8	418.5	423.6	433.8	441.5	442.1
165°	407.6	410.0	412.4	413.1	414.9	417.3	418.5	422.1	429.5	435.0	435.6
167.5°	414.2	415.3	416.4	416.7	418.3	420.3	421.3	423.7	428.6	432.1	432.4
170°	418.5	419.6	420.8	421.0	421.1	421.2	421.3	423.7	428.6	432.1	432.1
172.5°	420.8	421.0	421.2	421.3	421.3	421.3	421.3	423.2	427.0	429.8	429.7
175°	423.9	423.9	423.9	423.9	423.1	421.9	421.3	422.5	424.9	426.7	426.7
177.5°	423.9	423.9	423.9	423.9	423.2	422.3	421.9	422.8	424.7	426.2	425.9
180°	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9



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**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6
2.5°	667.2	665.3	667.2	665.9	666.5	664.7	659.2	657.3	659.2	661.0	661.0
5°	675.1	674.0	675.1	675.1	674.5	673.3	667.2	665.9	667.2	667.8	666.5
7.5°	677.6	675.8	677.6	676.3	676.3	675.1	669.0	667.8	668.4	670.2	668.4
10°	677.6	675.8	677.6	677.0	676.3	675.1	669.0	666.5	666.5	668.4	666.5
12.5°	674.5	673.3	674.5	673.3	673.3	672.1	665.9	663.5	664.0	664.7	662.2
15°	669.6	667.8	669.6	668.4	669.0	667.2	660.4	657.9	657.9	659.2	654.9
17.5°	662.2	659.7	662.2	661.7	661.0	659.7	653.6	651.2	650.6	651.2	648.1
20°	653.6	651.7	653.6	653.0	653.0	650.6	644.4	641.3	641.3	641.3	638.3
22.5°	640.1	638.3	640.1	641.3	641.3	640.6	635.1	630.8	629.6	629.6	626.0
25°	624.7	622.8	624.7	624.7	624.0	624.7	622.8	620.4	618.5	616.7	613.0
27.5°	609.9	608.7	609.9	608.7	609.9	608.1	607.4	606.9	604.4	602.6	597.6
30°	595.1	593.9	595.1	593.9	592.6	591.5	588.3	587.1	589.6	588.3	580.4
32.5°	576.7	575.5	576.7	576.7	575.5	575.5	570.5	568.7	569.3	573.0	565.6
35°	557.6	555.8	557.6	556.9	557.6	555.8	552.6	552.1	549.6	553.9	548.4
37.5°	535.5	533.6	535.5	535.5	535.5	536.7	534.2	532.4	528.7	534.2	529.9
40°	512.7	510.2	512.7	512.1	512.7	513.9	512.7	511.4	507.8	512.1	508.4
42.5°	486.8	486.2	486.8	487.5	487.5	489.9	491.8	489.3	488.0	485.0	487.5
45°	459.1	457.9	459.1	460.3	461.0	462.2	467.7	467.7	465.9	461.0	464.6
47.5°	429.6	426.5	429.6	433.2	433.2	435.2	440.7	445.0	441.9	435.7	437.6
50°	398.2	398.8	398.2	400.7	400.7	407.5	411.8	416.1	419.1	411.8	403.1
52.5°	367.4	366.8	367.4	369.3	371.8	374.8	382.2	386.5	391.4	387.1	373.6
55°	336.6	337.9	336.6	337.3	338.5	340.4	351.4	355.7	365.0	359.5	345.2
57.5°	305.9	304.0	305.9	307.2	307.7	309.5	318.8	326.8	332.4	332.9	315.7
60°	270.2	267.7	270.2	275.8	277.0	278.2	286.8	294.2	299.1	300.9	283.1
62.5°	238.8	234.5	238.8	242.5	244.9	248.1	254.2	265.3	269.5	270.2	244.9
65°	205.6	203.7	205.6	212.9	213.5	217.2	224.0	232.0	241.3	240.1	203.7
67.5°	175.4	175.4	175.4	180.3	184.0	185.8	194.5	198.2	209.9	211.1	169.9
70°	147.7	147.1	147.7	151.4	153.9	158.2	166.2	170.5	179.7	182.8	137.8
72.5°	121.2	120.6	121.2	124.3	126.8	130.5	137.3	142.2	150.1	153.9	107.1
75°	97.8	96.6	97.8	100.3	99.7	104.6	110.1	115.1	122.5	124.9	79.4
77.5°	75.1	75.1	75.1	77.5	77.5	82.5	85.0	91.1	95.4	99.1	58.5
80°	56.0	55.4	56.0	56.6	56.6	59.1	63.4	67.7	71.4	71.4	40.0
82.5°	39.4	38.2	39.4	39.4	39.4	40.7	43.0	44.3	46.8	48.6	25.2
85°	24.6	24.6	24.6	25.2	24.6	25.9	26.4	27.7	27.7	26.4	15.4
87.5°	16.0	15.4	16.0	15.4	15.4	14.8	14.8	14.8	14.1	13.6	8.6
90°	10.8	10.8	10.8	10.8	10.8	14.4	19.3	21.7	18.6	12.6	8.0
92.5°	43.3	34.7	43.3	51.9	54.1	76.6	106.7	121.8	106.9	77.2	54.9
95°	151.0	124.9	151.0	176.9	183.4	240.9	317.5	355.9	300.5	190.0	107.0
97.5°	361.7	312.1	361.7	411.2	423.6	459.9	508.3	532.5	440.3	255.9	117.5
100°	521.1	462.0	521.1	580.1	594.8	592.2	588.6	586.9	484.5	279.8	126.3
102.5°	677.8	627.2	677.8	728.4	741.0	694.8	633.1	602.3	498.5	290.8	135.1
105°	877.8	850.6	877.8	904.9	911.7	808.0	669.7	600.5	500.1	299.0	148.2
107.5°	1008.7	1015.3	1008.7	1002.1	1000.5	855.8	662.9	566.4	477.8	300.5	167.6
110°	1058.7	1087.0	1058.7	1030.3	1023.2	861.4	645.8	538.0	458.0	298.3	178.4





TEST NUMBER: P934660

CATALOG NUMBER: SQ4-FA-075U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	1063.1	1106.6	1063.1	1019.7	1008.7	843.2	622.5	512.1	440.9	298.3	191.4
115°	1035.0	1095.3	1035.0	974.6	959.5	800.0	587.4	481.1	421.0	301.1	211.1
117.5°	975.1	1042.0	975.1	908.2	891.5	747.6	555.7	459.7	408.6	306.7	230.2
120°	927.0	991.9	927.0	862.0	845.7	714.2	538.9	451.1	404.5	311.2	241.3
122.5°	880.1	944.2	880.1	816.0	800.0	681.5	523.5	444.6	402.3	317.7	254.3
125°	813.2	872.2	813.2	754.2	739.4	638.8	504.6	437.6	400.6	326.6	271.1
127.5°	753.0	802.8	753.0	703.2	690.7	604.4	489.2	431.6	399.6	335.4	287.3
130°	717.5	763.5	717.5	671.5	660.0	583.1	480.6	429.3	400.1	341.8	298.2
132.5°	685.3	726.5	685.3	644.1	633.9	565.0	473.2	427.3	400.6	347.1	307.0
135°	641.3	676.8	641.3	605.8	596.9	539.2	462.3	423.9	400.2	352.8	317.2
137.5°	605.9	635.0	605.9	576.8	569.5	520.8	455.8	423.3	402.7	361.3	330.3
140°	581.6	608.8	581.6	554.4	547.6	505.5	449.4	421.3	403.1	366.5	339.1
142.5°	561.4	584.8	561.4	538.1	532.3	495.3	446.0	421.3	404.5	370.8	345.6
145°	531.3	549.1	531.3	513.6	509.2	478.9	438.7	418.5	404.5	376.5	355.6
147.5°	508.2	522.9	508.2	493.5	489.9	466.1	434.3	418.5	407.3	384.9	368.1
150°	493.6	505.6	493.6	481.7	478.8	458.7	431.9	418.5	408.7	389.3	374.7
152.5°	481.1	490.1	481.1	472.2	470.0	452.8	429.9	418.5	409.7	392.1	378.9
155°	466.8	472.8	466.8	460.9	459.4	445.7	427.6	418.5	411.8	398.4	388.3
157.5°	455.5	459.7	455.5	451.3	450.3	439.7	425.5	418.5	413.9	404.6	397.7
160°	448.8	451.1	448.8	446.4	445.8	436.7	424.5	418.5	414.8	407.5	402.0
162.5°	444.3	446.6	444.3	442.1	441.5	433.8	423.6	418.5	415.8	410.5	406.5
165°	438.0	440.4	438.0	435.6	435.0	429.5	422.1	418.5	417.3	414.9	413.1
167.5°	433.4	434.4	433.4	432.4	432.1	428.6	423.7	421.3	420.3	418.3	416.7
170°	432.1	432.1	432.1	432.1	432.1	428.6	423.7	421.3	421.2	421.1	421.0
172.5°	428.7	427.8	428.7	429.7	429.8	427.0	423.2	421.3	421.3	421.3	421.3
175°	426.7	426.7	426.7	426.7	426.7	424.9	422.5	421.3	421.9	423.1	423.9
177.5°	424.9	423.9	424.9	425.9	426.2	424.7	422.8	421.9	422.3	423.2	423.9
180°	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9



TEST NUMBER: P934660

CATALOG NUMBER: SQ4-FA-075U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6
2.5°	659.7	656.1	656.1	649.9	647.4	645.6	642.6	633.3	630.8	628.3	632.1
5°	665.3	658.5	653.6	642.6	633.3	629.6	617.9	595.8	581.0	569.9	563.7
7.5°	666.5	657.9	648.7	631.5	609.3	599.4	563.7	523.2	512.1	502.3	496.0
10°	665.3	655.4	642.6	616.7	564.4	547.1	511.4	485.0	478.2	476.4	478.2
12.5°	661.0	651.7	633.9	590.8	517.6	505.9	485.0	469.6	468.4	471.4	488.0
15°	653.6	645.0	624.0	556.4	491.8	483.2	468.4	462.8	469.6	491.2	541.0
17.5°	646.2	636.4	610.5	522.5	472.1	465.9	455.5	466.6	504.6	533.6	550.2
20°	636.4	624.7	595.1	497.9	457.9	452.3	447.5	497.3	526.2	536.7	545.9
22.5°	624.7	612.4	574.2	480.7	443.2	438.8	441.9	514.6	526.2	533.6	541.6
25°	609.3	598.8	549.6	467.1	431.4	426.5	438.2	512.7	519.4	521.3	537.3
27.5°	595.1	581.6	523.7	454.8	417.3	415.4	441.3	504.6	509.6	511.4	528.7
30°	577.9	557.6	494.8	441.9	402.5	401.9	441.9	494.8	493.6	498.5	515.7
32.5°	560.1	521.9	462.2	425.9	388.4	387.7	437.6	480.0	478.9	485.6	498.5
35°	543.5	494.2	417.9	407.5	370.5	371.1	427.1	462.8	463.4	469.6	477.6
37.5°	526.2	470.2	369.3	387.1	353.3	353.3	413.0	446.8	445.6	447.5	458.5
40°	505.9	432.7	326.1	360.7	337.3	335.4	395.7	429.6	425.3	424.7	440.0
42.5°	484.4	391.4	294.2	325.6	318.8	316.3	374.8	408.6	400.7	402.5	422.2
45°	461.0	380.4	269.5	275.1	299.7	297.9	352.0	384.7	379.1	384.1	404.3
47.5°	437.6	358.2	261.5	228.3	279.4	278.8	326.8	361.3	358.2	363.1	384.7
50°	405.6	333.6	261.0	195.7	256.7	259.1	296.7	338.5	338.5	342.9	365.6
52.5°	364.3	303.4	236.9	177.2	230.2	237.6	270.2	318.8	320.0	324.3	344.7
55°	326.8	272.0	219.7	163.1	198.8	214.8	244.3	298.5	300.9	305.2	323.8
57.5°	292.4	226.5	216.0	146.5	169.9	185.3	221.5	278.8	280.0	283.8	301.6
60°	255.4	163.7	198.2	128.7	144.6	156.3	200.6	255.4	259.7	262.2	277.6
62.5°	213.5	118.7	179.7	116.4	132.3	134.8	183.4	233.3	238.8	240.6	249.9
65°	152.1	99.7	152.6	105.9	119.4	120.0	164.9	210.5	215.4	218.5	225.3
67.5°	102.8	81.2	116.4	96.0	109.6	110.1	147.1	184.0	190.8	193.3	197.6
70°	71.4	54.1	86.2	85.5	98.5	99.7	128.0	160.0	166.2	168.0	170.5
72.5°	52.3	43.7	71.4	76.9	86.8	88.0	108.3	133.0	139.1	141.0	142.2
75°	40.0	46.2	57.8	67.1	73.9	74.4	88.6	108.3	112.6	113.9	114.4
77.5°	32.0	43.0	42.5	54.1	60.3	59.1	69.6	83.7	87.4	87.4	87.4
80°	24.0	33.9	32.0	38.8	44.3	43.0	49.8	59.7	60.9	62.1	61.6
82.5°	17.8	21.6	21.6	24.6	29.5	28.4	33.2	38.8	38.8	38.8	40.0
85°	11.1	12.3	9.8	12.9	16.6	16.0	18.4	20.9	21.6	21.6	20.3
87.5°	6.8	5.5	3.1	5.0	7.3	7.3	8.6	9.3	8.6	8.6	8.6
90°	7.4	5.1	2.8	5.1	7.4	8.0	12.6	18.6	21.7	19.3	14.4
92.5°	50.0	30.7	11.4	30.7	50.0	54.9	77.2	106.9	121.8	106.7	76.6
95°	98.2	62.8	27.3	62.8	98.2	107.0	190.0	300.5	355.9	317.5	240.9
97.5°	109.7	78.5	47.3	78.5	109.7	117.5	255.9	440.3	532.5	508.3	459.9
100°	119.2	90.9	62.6	90.9	119.2	126.3	279.8	484.5	586.9	588.6	592.2
102.5°	128.5	102.1	75.7	102.1	128.5	135.1	290.8	498.5	602.3	633.1	694.8
105°	142.6	120.2	97.8	120.2	142.6	148.2	299.0	500.1	600.5	669.7	808.0
107.5°	162.3	141.5	120.6	141.5	162.3	167.6	300.5	477.8	566.4	662.9	855.8
110°	173.7	154.8	136.0	154.8	173.7	178.4	298.3	458.0	538.0	645.8	861.4



TEST NUMBER: P934660

CATALOG NUMBER: SQ4-FA-075U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	186.9	169.0	151.1	169.0	186.9	191.4	298.3	440.9	512.1	622.5	843.2
115°	206.9	190.3	173.8	190.3	206.9	211.1	301.1	421.0	481.1	587.4	800.0
117.5°	226.4	211.3	196.3	211.3	226.4	230.2	306.7	408.6	459.7	555.7	747.6
120°	237.7	223.6	209.4	223.6	237.7	241.3	311.2	404.5	451.1	538.9	714.2
122.5°	250.7	236.5	222.2	236.5	250.7	254.3	317.7	402.3	444.6	523.5	681.5
125°	267.9	254.8	241.8	254.8	267.9	271.1	326.6	400.6	437.6	504.6	638.8
127.5°	284.0	270.9	257.8	270.9	284.0	287.3	335.4	399.6	431.6	489.2	604.4
130°	294.6	280.4	266.3	280.4	294.6	298.2	341.8	400.1	429.3	480.6	583.1
132.5°	303.4	289.3	275.1	289.3	303.4	307.0	347.1	400.6	427.3	473.2	565.0
135°	313.9	301.0	288.2	301.0	313.9	317.2	352.8	400.2	423.9	462.3	539.2
137.5°	327.1	314.3	301.6	314.3	327.1	330.3	361.3	402.7	423.3	455.8	520.8
140°	336.2	324.4	312.7	324.4	336.2	339.1	366.5	403.1	421.3	449.4	505.5
142.5°	342.9	332.0	321.2	332.0	342.9	345.6	370.8	404.5	421.3	446.0	495.3
145°	353.2	343.8	334.2	343.8	353.2	355.6	376.5	404.5	418.5	438.7	478.9
147.5°	365.8	356.5	347.3	356.5	365.8	368.1	384.9	407.3	418.5	434.3	466.1
150°	372.6	364.2	355.9	364.2	372.6	374.7	389.3	408.7	418.5	431.9	458.7
152.5°	377.4	371.0	364.7	371.0	377.4	378.9	392.1	409.7	418.5	429.9	452.8
155°	387.1	382.5	377.8	382.5	387.1	388.3	398.4	411.8	418.5	427.6	445.7
157.5°	396.6	392.0	387.5	392.0	396.6	397.7	404.6	413.9	418.5	425.5	439.7
160°	401.0	397.5	394.0	397.5	401.0	402.0	407.5	414.8	418.5	424.5	436.7
162.5°	405.9	403.2	400.6	403.2	405.9	406.5	410.5	415.8	418.5	423.6	433.8
165°	412.4	410.0	407.6	410.0	412.4	413.1	414.9	417.3	418.5	422.1	429.5
167.5°	416.4	415.3	414.2	415.3	416.4	416.7	418.3	420.3	421.3	423.7	428.6
170°	420.8	419.6	418.5	419.6	420.8	421.0	421.1	421.2	421.3	423.7	428.6
172.5°	421.2	421.0	420.8	421.0	421.2	421.3	421.3	421.3	421.3	423.2	427.0
175°	423.9	423.9	423.9	423.9	423.9	423.9	423.1	421.9	421.3	422.5	424.9
177.5°	423.9	423.9	423.9	423.9	423.9	423.9	423.2	422.3	421.9	422.8	424.7
180°	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9



TEST NUMBER: P934660

CATALOG NUMBER: SQ4-FA-075U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6	650.6
2.5°	627.8	626.0	628.3	621.6	628.3	626.0	627.8	632.1	628.3	630.8	633.3
5°	550.8	547.8	538.0	529.9	538.0	547.8	550.8	563.7	569.9	581.0	595.8
7.5°	492.3	489.9	487.5	482.5	487.5	489.9	492.3	496.0	502.3	512.1	523.2
10°	479.4	480.0	483.7	483.2	483.7	480.0	479.4	478.2	476.4	478.2	485.0
12.5°	512.7	518.2	538.5	537.3	538.5	518.2	512.7	488.0	471.4	468.4	469.6
15°	550.8	552.6	556.9	557.6	556.9	552.6	550.8	541.0	491.2	469.6	462.8
17.5°	554.6	555.1	558.2	558.2	558.2	555.1	554.6	550.2	533.6	504.6	466.6
20°	551.4	552.6	558.9	560.1	558.9	552.6	551.4	545.9	536.7	526.2	497.3
22.5°	550.2	552.6	557.6	556.9	557.6	552.6	550.2	541.6	533.6	526.2	514.6
25°	544.1	544.1	544.7	545.3	544.7	544.1	544.1	537.3	521.3	519.4	512.7
27.5°	531.2	532.4	536.0	535.5	536.0	532.4	531.2	528.7	511.4	509.6	504.6
30°	519.4	518.2	515.1	512.7	515.1	518.2	519.4	515.7	498.5	493.6	494.8
32.5°	499.8	496.7	493.6	491.8	493.6	496.7	499.8	498.5	485.6	478.9	480.0
35°	476.4	477.0	476.4	474.5	476.4	477.0	476.4	477.6	469.6	463.4	462.8
37.5°	459.8	461.0	460.3	457.9	460.3	461.0	459.8	458.5	447.5	445.6	446.8
40°	442.5	443.2	442.5	440.7	442.5	443.2	442.5	440.0	424.7	425.3	429.6
42.5°	425.9	425.3	423.4	422.2	423.4	425.3	425.9	422.2	402.5	400.7	408.6
45°	406.8	407.5	403.7	401.9	403.7	407.5	406.8	404.3	384.1	379.1	384.7
47.5°	387.7	387.7	384.7	382.8	384.7	387.7	387.7	384.7	363.1	358.2	361.3
50°	367.4	366.8	362.5	361.8	362.5	366.8	367.4	365.6	342.9	338.5	338.5
52.5°	344.0	344.0	344.7	345.9	344.7	344.0	344.0	344.7	324.3	320.0	318.8
55°	323.8	324.3	328.6	329.9	328.6	324.3	323.8	323.8	305.2	300.9	298.5
57.5°	302.8	302.8	305.9	305.9	305.9	302.8	302.8	301.6	283.8	280.0	278.8
60°	278.8	280.0	282.5	281.9	282.5	280.0	278.8	277.6	262.2	259.7	255.4
62.5°	253.6	254.8	255.4	254.2	255.4	254.8	253.6	249.9	240.6	238.8	233.3
65°	227.1	228.3	229.0	227.7	229.0	228.3	227.1	225.3	218.5	215.4	210.5
67.5°	200.1	199.4	198.8	201.3	198.8	199.4	200.1	197.6	193.3	190.8	184.0
70°	172.3	172.3	171.7	173.0	171.7	172.3	172.3	170.5	168.0	166.2	160.0
72.5°	142.8	142.2	144.6	142.8	144.6	142.2	142.8	142.2	141.0	139.1	133.0
75°	113.9	115.1	113.9	115.7	113.9	115.1	113.9	114.4	113.9	112.6	108.3
77.5°	86.8	88.0	86.8	86.8	86.8	88.0	86.8	87.4	87.4	87.4	83.7
80°	61.6	60.9	60.9	60.3	60.9	60.9	61.6	61.6	62.1	60.9	59.7
82.5°	39.4	38.8	38.8	40.0	38.8	38.8	39.4	40.0	38.8	38.8	38.8
85°	21.6	22.1	20.9	20.9	20.9	22.1	21.6	20.3	21.6	21.6	20.9
87.5°	8.0	7.3	7.3	7.3	7.3	7.3	8.0	8.6	8.6	8.6	9.3
90°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	14.4	19.3	21.7	18.6
92.5°	54.1	51.9	43.3	34.7	43.3	51.9	54.1	76.6	106.7	121.8	106.9
95°	183.4	176.9	151.0	124.9	151.0	176.9	183.4	240.9	317.5	355.9	300.5
97.5°	423.6	411.2	361.7	312.1	361.7	411.2	423.6	459.9	508.3	532.5	440.3
100°	594.8	580.1	521.1	462.0	521.1	580.1	594.8	592.2	588.6	586.9	484.5
102.5°	741.0	728.4	677.8	627.2	677.8	728.4	741.0	694.8	633.1	602.3	498.5
105°	911.7	904.9	877.8	850.6	877.8	904.9	911.7	808.0	669.7	600.5	500.1
107.5°	1000.5	1002.1	1008.7	1015.3	1008.7	1002.1	1000.5	855.8	662.9	566.4	477.8
110°	1023.2	1030.3	1058.7	1087.0	1058.7	1030.3	1023.2	861.4	645.8	538.0	458.0



TEST NUMBER: P934660

CATALOG NUMBER: SQ4-FA-075U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1008.7	1019.7	1063.1	1106.6	1063.1	1019.7	1008.7	843.2	622.5	512.1	440.9
115°	959.5	974.6	1035.0	1095.3	1035.0	974.6	959.5	800.0	587.4	481.1	421.0
117.5°	891.5	908.2	975.1	1042.0	975.1	908.2	891.5	747.6	555.7	459.7	408.6
120°	845.7	862.0	927.0	991.9	927.0	862.0	845.7	714.2	538.9	451.1	404.5
122.5°	800.0	816.0	880.1	944.2	880.1	816.0	800.0	681.5	523.5	444.6	402.3
125°	739.4	754.2	813.2	872.2	813.2	754.2	739.4	638.8	504.6	437.6	400.6
127.5°	690.7	703.2	753.0	802.8	753.0	703.2	690.7	604.4	489.2	431.6	399.6
130°	660.0	671.5	717.5	763.5	717.5	671.5	660.0	583.1	480.6	429.3	400.1
132.5°	633.9	644.1	685.3	726.5	685.3	644.1	633.9	565.0	473.2	427.3	400.6
135°	596.9	605.8	641.3	676.8	641.3	605.8	596.9	539.2	462.3	423.9	400.2
137.5°	569.5	576.8	605.9	635.0	605.9	576.8	569.5	520.8	455.8	423.3	402.7
140°	547.6	554.4	581.6	608.8	581.6	554.4	547.6	505.5	449.4	421.3	403.1
142.5°	532.3	538.1	561.4	584.8	561.4	538.1	532.3	495.3	446.0	421.3	404.5
145°	509.2	513.6	531.3	549.1	531.3	513.6	509.2	478.9	438.7	418.5	404.5
147.5°	489.9	493.5	508.2	522.9	508.2	493.5	489.9	466.1	434.3	418.5	407.3
150°	478.8	481.7	493.6	505.6	493.6	481.7	478.8	458.7	431.9	418.5	408.7
152.5°	470.0	472.2	481.1	490.1	481.1	472.2	470.0	452.8	429.9	418.5	409.7
155°	459.4	460.9	466.8	472.8	466.8	460.9	459.4	445.7	427.6	418.5	411.8
157.5°	450.3	451.3	455.5	459.7	455.5	451.3	450.3	439.7	425.5	418.5	413.9
160°	445.8	446.4	448.8	451.1	448.8	446.4	445.8	436.7	424.5	418.5	414.8
162.5°	441.5	442.1	444.3	446.6	444.3	442.1	441.5	433.8	423.6	418.5	415.8
165°	435.0	435.6	438.0	440.4	438.0	435.6	435.0	429.5	422.1	418.5	417.3
167.5°	432.1	432.4	433.4	434.4	433.4	432.4	432.1	428.6	423.7	421.3	420.3
170°	432.1	432.1	432.1	432.1	432.1	432.1	432.1	428.6	423.7	421.3	421.2
172.5°	429.8	429.7	428.7	427.8	428.7	429.7	429.8	427.0	423.2	421.3	421.3
175°	426.7	426.7	426.7	426.7	426.7	426.7	426.7	424.9	422.5	421.3	421.9
177.5°	426.2	425.9	424.9	423.9	424.9	425.9	426.2	424.7	422.8	421.9	422.3
180°	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9	423.9



TEST NUMBER: P934660

CATALOG NUMBER: SQ4-FA-075U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
0°	650.6	650.6	650.6	650.6	650.6
2.5°	642.6	645.6	647.4	649.9	656.1
5°	617.9	629.6	633.3	642.6	653.6
7.5°	563.7	599.4	609.3	631.5	648.7
10°	511.4	547.1	564.4	616.7	642.6
12.5°	485.0	505.9	517.6	590.8	633.9
15°	468.4	483.2	491.8	556.4	624.0
17.5°	455.5	465.9	472.1	522.5	610.5
20°	447.5	452.3	457.9	497.9	595.1
22.5°	441.9	438.8	443.2	480.7	574.2
25°	438.2	426.5	431.4	467.1	549.6
27.5°	441.3	415.4	417.3	454.8	523.7
30°	441.9	401.9	402.5	441.9	494.8
32.5°	437.6	387.7	388.4	425.9	462.2
35°	427.1	371.1	370.5	407.5	417.9
37.5°	413.0	353.3	353.3	387.1	369.3
40°	395.7	335.4	337.3	360.7	326.1
42.5°	374.8	316.3	318.8	325.6	294.2
45°	352.0	297.9	299.7	275.1	269.5
47.5°	326.8	278.8	279.4	228.3	261.5
50°	296.7	259.1	256.7	195.7	261.0
52.5°	270.2	237.6	230.2	177.2	236.9
55°	244.3	214.8	198.8	163.1	219.7
57.5°	221.5	185.3	169.9	146.5	216.0
60°	200.6	156.3	144.6	128.7	198.2
62.5°	183.4	134.8	132.3	116.4	179.7
65°	164.9	120.0	119.4	105.9	152.6
67.5°	147.1	110.1	109.6	96.0	116.4
70°	128.0	99.7	98.5	85.5	86.2
72.5°	108.3	88.0	86.8	76.9	71.4
75°	88.6	74.4	73.9	67.1	57.8
77.5°	69.6	59.1	60.3	54.1	42.5
80°	49.8	43.0	44.3	38.8	32.0
82.5°	33.2	28.4	29.5	24.6	21.6
85°	18.4	16.0	16.6	12.9	9.8
87.5°	8.6	7.3	7.3	5.0	3.1
90°	12.6	8.0	7.4	5.1	2.8
92.5°	77.2	54.9	50.0	30.7	11.4
95°	190.0	107.0	98.2	62.8	27.3
97.5°	255.9	117.5	109.7	78.5	47.3
100°	279.8	126.3	119.2	90.9	62.6
102.5°	290.8	135.1	128.5	102.1	75.7
105°	299.0	148.2	142.6	120.2	97.8
107.5°	300.5	167.6	162.3	141.5	120.6
110°	298.3	178.4	173.7	154.8	136.0



TEST NUMBER: P934660

CATALOG NUMBER: SQ4-FA-075U-050D-93050-1D-UNV-STD-W-4-5000K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
112.5°	298.3	191.4	186.9	169.0	151.1
115°	301.1	211.1	206.9	190.3	173.8
117.5°	306.7	230.2	226.4	211.3	196.3
120°	311.2	241.3	237.7	223.6	209.4
122.5°	317.7	254.3	250.7	236.5	222.2
125°	326.6	271.1	267.9	254.8	241.8
127.5°	335.4	287.3	284.0	270.9	257.8
130°	341.8	298.2	294.6	280.4	266.3
132.5°	347.1	307.0	303.4	289.3	275.1
135°	352.8	317.2	313.9	301.0	288.2
137.5°	361.3	330.3	327.1	314.3	301.6
140°	366.5	339.1	336.2	324.4	312.7
142.5°	370.8	345.6	342.9	332.0	321.2
145°	376.5	355.6	353.2	343.8	334.2
147.5°	384.9	368.1	365.8	356.5	347.3
150°	389.3	374.7	372.6	364.2	355.9
152.5°	392.1	378.9	377.4	371.0	364.7
155°	398.4	388.3	387.1	382.5	377.8
157.5°	404.6	397.7	396.6	392.0	387.5
160°	407.5	402.0	401.0	397.5	394.0
162.5°	410.5	406.5	405.9	403.2	400.6
165°	414.9	413.1	412.4	410.0	407.6
167.5°	418.3	416.7	416.4	415.3	414.2
170°	421.1	421.0	420.8	419.6	418.5
172.5°	421.3	421.3	421.2	421.0	420.8
175°	423.1	423.9	423.9	423.9	423.9
177.5°	423.2	423.9	423.9	423.9	423.9
180°	423.9	423.9	423.9	423.9	423.9



TEST NUMBER: P934660  
 CATALOG NUMBER: SQ4-FA-075U-050D-93050-1D-UNV-STD-W-4-5000K

**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	9.82	10.59	10.88	11.65	13.08	12.62	13.39	13.68	14.44	15.88
	3H	10.29	10.98	11.36	12.04	13.49	13.95	14.63	15.01	15.70	17.15
	4H	10.48	11.13	11.55	12.20	13.65	14.38	15.03	15.46	16.10	17.56
	6H	10.59	11.19	11.68	12.26	13.73	14.65	15.25	15.74	16.32	17.79
	8H	10.59	11.16	11.68	12.25	13.71	14.72	15.29	15.81	16.38	17.84
	12H	10.56	11.10	11.65	12.18	13.67	14.75	15.29	15.85	16.37	17.86
4H	2H	10.84	11.49	11.92	12.55	14.01	13.02	13.67	14.10	14.74	16.19
	3H	11.85	12.39	12.94	13.49	14.96	14.51	15.05	15.60	16.14	17.61
	4H	12.13	12.62	13.22	13.71	15.20	15.02	15.52	16.12	16.60	18.10
	6H	12.25	12.67	13.35	13.78	15.26	15.38	15.80	16.48	16.91	18.39
	8H	12.25	12.65	13.35	13.75	15.25	15.48	15.87	16.58	16.97	18.47
	12H	12.21	12.57	13.33	13.68	15.19	15.52	15.88	16.64	17.00	18.50
8H	4H	12.57	12.96	13.67	14.06	15.56	15.14	15.54	16.24	16.64	18.14
	6H	12.82	13.15	13.95	14.29	15.79	15.57	15.89	16.69	17.04	18.53
	8H	12.87	13.15	14.00	14.28	15.79	15.71	16.00	16.84	17.12	18.64
	12H	12.85	13.10	13.98	14.22	15.77	15.80	16.05	16.93	17.17	18.73
12H	4H	12.57	12.93	13.69	14.04	15.55	15.10	15.46	16.22	16.57	18.08
	6H	12.88	13.17	14.01	14.29	15.81	15.56	15.85	16.69	16.97	18.49
	8H	12.94	13.20	14.08	14.32	15.87	15.71	15.97	16.85	17.09	18.64