

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: P934359

Luminaire Tested: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

**Test Information**

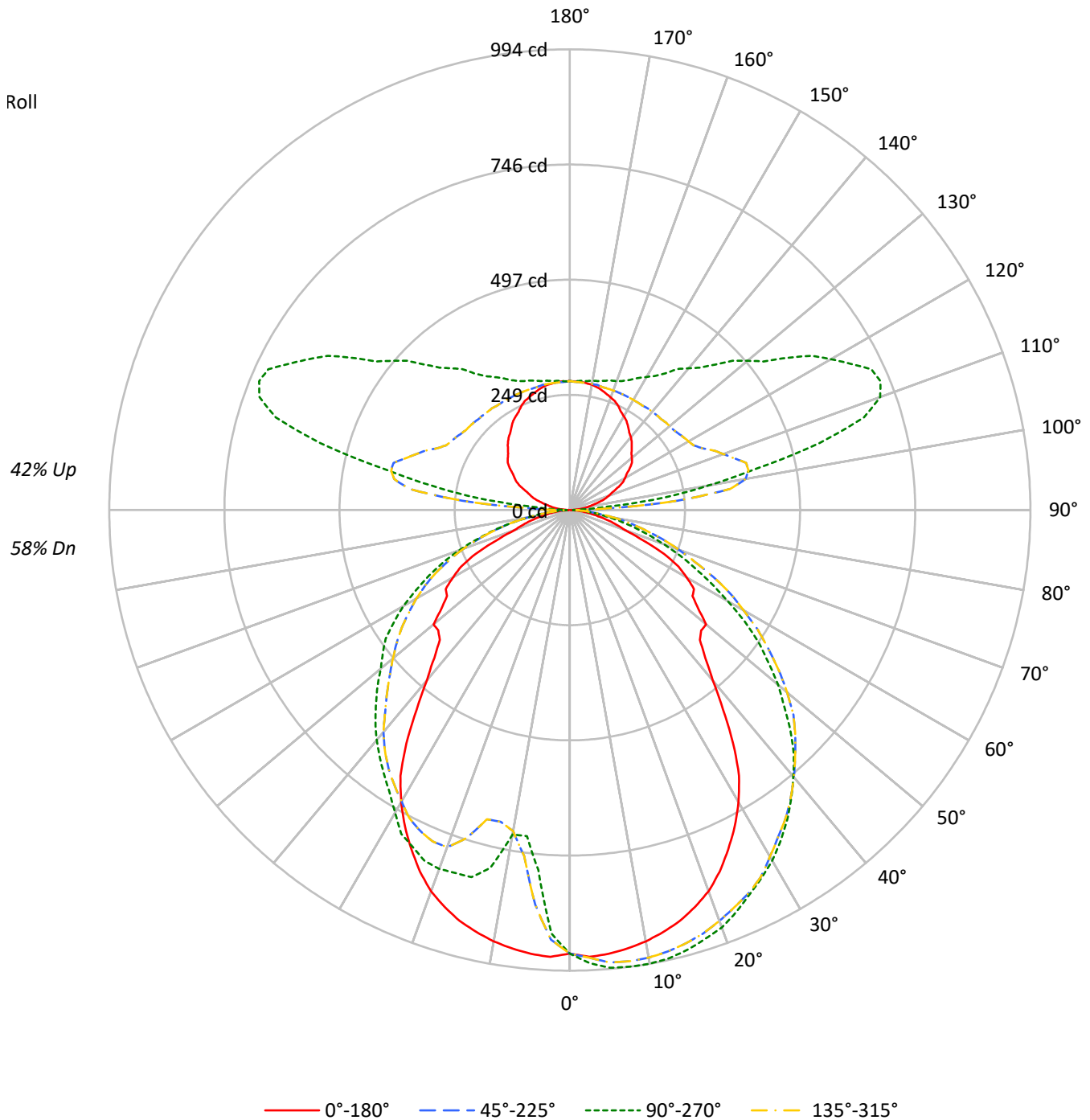
Test Method: LM-79-2019  
Report Number: P934359  
REPORT IS A COMBINATION OF REPORTS P933694 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4284.1 lumens  
Efficiency: N/A  
Efficacy: 117.7 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: General Diffuse  
  
Input Watts (W): 36.4  
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: P934359  
CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P934359

CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

**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	0
RCR																		
0	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	100	95	91	88	93	89	86	83	77	75	72	66	64	63	56	55	54	49
2	91	83	77	72	84	78	72	68	68	63	60	58	55	52	49	47	45	41
3	83	73	66	60	77	68	62	57	60	55	50	51	48	44	44	41	39	35
4	76	65	57	51	70	61	54	48	53	47	43	46	41	38	39	36	33	30
5	70	58	49	43	65	54	47	41	47	42	37	41	37	33	35	32	29	26
6	64	52	44	38	60	49	41	36	43	37	32	37	32	29	32	28	25	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	25	29	25	23	20
8	55	42	35	29	51	40	33	28	35	29	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	32	27	23	28	24	20	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	26	22	18	23	19	17	15

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

	0°	90°	180°	270°
0°	8878	8878	8878	8878
5°	8936	8963	8936	7047
10°	8866	8829	8866	6312
15°	8759	8638	8759	7213
20°	8566	8411	8566	7228
25°	8181	8080	8181	7075
30°	7687	7806	7687	6738
35°	6843	7459	6843	6369
40°	5692	7051	5692	6090
45°	5078	6572	5078	5769
50°	5382	6002	5382	5446
55°	5048	5387	5048	5261
60°	5185	4576	5185	4818
65°	4678	3782	4678	4229
70°	3217	3013	3217	3544
75°	2791	2228	2791	2668
80°	2204	1474	2204	1604
85°	1201	780	1201	664

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°  
 Vertical Angle: 45°  
 Luminance: 7796 cd/sqm



TEST NUMBER: P934359

CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.4	2.0
10°-20°	245.2	5.7
20°-30°	379.1	8.8
30°-40°	452.6	10.6
40°-50°	455.2	10.6
50°-60°	396.1	9.2
60°-70°	280.8	6.6
70°-80°	148.6	3.5
80°-90°	38.1	0.9
90°-100°	135.5	3.2
100°-110°	356.2	8.3
110°-120°	369.4	8.6
120°-130°	296.3	6.9
130°-140°	232.5	5.4
140°-150°	178.4	4.2
150°-160°	128.5	3.0
160°-170°	78.6	1.8
170°-180°	26.6	0.6
0°-30°	710.7	16.6
0°-40°	1163.3	27.2
0°-60°	2014.6	47.0
0°-90°	2482.1	57.9
90°-120°	861.1	20.1
90°-150°	1568.3	36.6
90°-180°	1802.0	42.1
0°-180°	4284.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	957	957	957	957	957	
5°	961	991	961	779	961	91
15°	918	982	918	820	918	258
25°	808	916	808	802	808	371
35°	615	818	615	698	615	380
45°	397	674	397	591	397	318
55°	323	497	323	485	323	297
65°	224	300	224	335	224	215
75°	85	142	85	170	85	89
85°	14	36	14	31	14	20
90°	2	7	2	7	2	2
95°	18	82	18	82	18	20
105°	64	558	64	558	64	68
115°	114	718	114	718	114	113
125°	159	572	159	572	159	141
135°	189	444	189	444	189	146
145°	219	360	219	360	219	137
155°	248	310	248	310	248	114
165°	267	289	267	289	267	75
175°	278	280	278	280	278	26
180°	278	278	278	278	278	



TEST NUMBER: P934359

CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8
2.5°	965.0	965.0	970.5	972.3	972.3	969.6	966.9	969.6	977.8	980.5	979.6
5°	961.4	968.7	978.7	980.5	982.3	981.4	979.6	981.4	990.4	992.2	993.1
7.5°	954.1	967.8	980.5	983.2	985.9	983.2	982.3	984.1	993.1	995.0	995.0
10°	945.1	964.1	978.7	980.5	983.2	980.5	980.5	984.1	993.1	995.0	995.9
12.5°	932.4	958.7	972.3	974.1	977.8	976.8	975.9	979.6	988.6	990.4	990.4
15°	917.9	948.7	961.4	963.2	969.6	967.8	967.8	971.4	981.4	984.1	983.2
17.5°	898.0	936.0	950.5	953.2	957.8	956.8	957.8	961.4	970.5	972.3	973.2
20°	875.4	918.8	936.0	938.7	943.3	943.3	943.3	947.8	956.8	960.5	960.5
22.5°	844.6	900.7	918.8	920.6	926.1	926.1	927.9	934.2	942.4	943.3	943.3
25°	808.4	880.8	896.2	901.6	907.1	909.8	912.5	916.1	918.8	917.9	918.8
27.5°	770.4	855.5	875.4	879.0	886.2	889.0	892.6	893.5	894.4	897.1	895.3
30°	727.8	820.2	850.0	853.7	865.4	867.2	863.6	865.4	870.0	871.8	873.6
32.5°	679.9	767.7	823.8	831.9	842.8	837.4	836.5	839.2	846.4	846.4	848.2
35°	614.7	726.9	799.3	806.6	814.7	808.4	812.0	812.9	817.5	820.2	819.3
37.5°	543.2	691.6	774.0	779.4	785.8	777.6	783.1	785.8	789.4	787.6	787.6
40°	479.8	636.4	744.1	747.8	753.2	746.8	752.3	754.1	755.9	754.1	753.2
42.5°	432.8	575.8	712.5	717.0	713.4	717.9	719.7	723.3	720.6	717.0	717.0
45°	396.6	559.5	678.1	683.5	678.1	685.3	688.0	688.0	679.9	678.1	677.2
47.5°	384.8	526.9	643.7	643.7	640.9	650.0	654.5	648.2	640.0	637.3	637.3
50°	383.9	490.7	596.6	593.0	605.6	616.5	612.0	605.6	599.3	589.4	589.4
52.5°	348.6	446.3	535.9	549.5	569.4	575.8	568.5	562.2	551.3	546.8	543.2
55°	323.2	400.2	480.7	507.9	528.7	536.9	523.3	516.9	500.6	497.9	496.1
57.5°	317.7	333.2	430.0	464.4	489.8	488.9	480.7	469.0	455.4	452.7	451.8
60°	291.5	240.8	375.7	416.5	442.7	440.0	432.8	421.9	409.2	407.4	405.6
62.5°	264.3	174.7	314.1	360.3	397.5	396.6	390.2	373.9	364.9	360.3	356.7
65°	224.5	146.6	223.6	299.6	353.1	354.9	341.3	329.6	319.5	314.1	313.2
67.5°	171.1	119.5	151.2	249.8	310.5	308.7	291.5	286.0	273.4	270.6	265.2
70°	126.7	79.7	105.0	202.8	268.8	264.3	250.7	244.4	232.6	226.3	222.7
72.5°	105.0	64.3	76.9	157.5	226.3	220.9	209.1	201.9	191.9	186.5	182.8
75°	85.1	67.9	58.8	116.8	183.7	180.1	169.3	162.0	153.9	146.6	147.5
77.5°	62.5	63.4	47.1	86.0	145.7	140.3	134.0	124.9	121.3	114.1	114.1
80°	47.1	49.8	35.3	58.8	105.0	105.0	99.6	93.2	86.9	83.3	83.3
82.5°	31.7	31.7	26.2	37.1	71.5	68.8	65.2	63.4	59.7	57.9	57.9
85°	14.5	18.1	16.3	22.6	38.9	40.7	40.7	38.9	38.0	36.2	37.1
87.5°	4.5	8.1	10.0	12.7	19.9	20.8	21.7	21.7	21.7	22.6	22.6
90°	1.9	3.3	4.9	5.2	8.2	12.2	14.2	12.6	9.4	7.1	7.1
92.5°	7.4	20.1	32.9	36.0	50.6	70.1	79.8	70.0	50.2	35.5	34.0
95°	17.9	41.1	64.4	70.1	124.6	197.1	233.4	208.2	158.0	120.3	116.0
97.5°	31.0	51.4	71.9	77.0	167.7	288.7	349.2	333.4	301.6	277.8	269.6
100°	41.0	59.6	78.2	82.8	183.5	317.7	384.9	386.1	388.4	390.1	380.4
102.5°	49.6	67.0	84.3	88.6	190.7	326.9	394.9	415.2	455.7	486.0	477.7
105°	64.2	78.8	93.5	97.2	196.1	327.9	393.8	439.2	529.9	597.9	593.5
107.5°	79.1	92.8	106.4	109.9	197.1	313.4	371.5	434.7	561.3	656.2	657.2
110°	89.2	101.5	113.9	116.9	195.6	300.4	352.8	423.5	565.0	671.1	675.7



TEST NUMBER: P934359

CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	99.0	110.8	122.6	125.5	195.6	289.1	335.8	408.2	553.0	661.6	668.7
115°	114.0	124.8	135.7	138.4	197.4	276.1	315.4	385.1	524.6	629.3	639.1
117.5°	128.7	138.6	148.4	150.9	201.1	268.0	301.5	364.4	490.2	584.6	595.6
120°	137.3	146.6	155.9	158.2	204.1	265.3	295.9	353.4	468.4	554.7	565.4
122.5°	145.7	155.1	164.5	166.8	208.4	263.9	291.6	343.3	447.0	524.6	535.1
125°	158.6	167.1	175.6	177.8	214.2	262.7	286.9	330.9	418.9	484.9	494.6
127.5°	169.0	177.7	186.3	188.5	220.0	262.0	283.0	320.8	396.3	452.9	461.1
130°	174.6	183.9	193.2	195.5	224.2	262.4	281.5	315.2	382.4	432.8	440.4
132.5°	180.4	189.7	199.0	201.3	227.6	262.7	280.2	310.3	370.5	415.6	422.4
135°	189.0	197.4	205.9	208.0	231.4	262.4	278.0	303.1	353.6	391.4	397.2
137.5°	197.8	206.1	214.5	216.6	237.0	264.0	277.6	298.9	341.5	373.5	378.3
140°	205.0	212.7	220.5	222.4	240.3	264.3	276.3	294.7	331.6	359.2	363.6
142.5°	210.6	217.8	224.8	226.7	243.2	265.2	276.3	292.5	324.8	349.0	352.8
145°	219.2	225.4	231.6	233.2	246.9	265.3	274.4	287.7	314.1	333.9	336.8
147.5°	227.8	233.9	239.9	241.4	252.4	267.1	274.4	284.9	305.7	321.2	323.7
150°	233.4	238.8	244.3	245.7	255.3	268.0	274.4	283.2	300.8	314.0	316.0
152.5°	239.1	243.3	247.5	248.5	257.2	268.7	274.4	282.0	297.0	308.2	309.7
155°	247.7	250.8	253.9	254.6	261.2	270.0	274.4	280.4	292.4	301.3	302.3
157.5°	254.1	257.1	260.1	260.8	265.3	271.4	274.4	279.1	288.4	295.4	296.1
160°	258.4	260.7	263.0	263.6	267.2	272.0	274.4	278.4	286.4	292.4	292.7
162.5°	262.7	264.4	266.1	266.6	269.2	272.7	274.4	277.8	284.5	289.6	289.9
165°	267.4	268.9	270.6	270.9	272.1	273.6	274.4	276.8	281.6	285.2	285.6
167.5°	271.6	272.4	273.1	273.3	274.3	275.6	276.3	277.9	281.1	283.4	283.6
170°	274.4	275.2	275.9	276.1	276.2	276.3	276.3	277.9	281.1	283.4	283.4
172.5°	275.9	276.1	276.3	276.3	276.3	276.3	276.3	277.5	280.0	281.9	281.7
175°	278.0	278.0	278.0	278.0	277.4	276.6	276.3	277.1	278.7	279.9	279.9
177.5°	278.0	278.0	278.0	278.0	277.5	277.0	276.7	277.3	278.6	279.5	279.3
180°	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0



TEST NUMBER: P934359

CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8
2.5°	981.4	978.7	981.4	979.6	980.5	977.8	969.6	966.9	969.6	972.3	972.3
5°	993.1	991.3	993.1	993.1	992.2	990.4	981.4	979.6	981.4	982.3	980.5
7.5°	996.8	994.0	996.8	995.0	995.0	993.1	984.1	982.3	983.2	985.9	983.2
10°	996.8	994.0	996.8	995.9	995.0	993.1	984.1	980.5	980.5	983.2	980.5
12.5°	992.2	990.4	992.2	990.4	990.4	988.6	979.6	975.9	976.8	977.8	974.1
15°	985.0	982.3	985.0	983.2	984.1	981.4	971.4	967.8	967.8	969.6	963.2
17.5°	974.1	970.5	974.1	973.2	972.3	970.5	961.4	957.8	956.8	957.8	953.2
20°	961.4	958.7	961.4	960.5	960.5	956.8	947.8	943.3	943.3	943.3	938.7
22.5°	941.5	938.7	941.5	943.3	943.3	942.4	934.2	927.9	926.1	926.1	920.6
25°	918.8	916.1	918.8	918.8	917.9	918.8	916.1	912.5	909.8	907.1	901.6
27.5°	897.1	895.3	897.1	895.3	897.1	894.4	893.5	892.6	889.0	886.2	879.0
30°	875.4	873.6	875.4	873.6	871.8	870.0	865.4	863.6	867.2	865.4	853.7
32.5°	848.2	846.4	848.2	848.2	846.4	846.4	839.2	836.5	837.4	842.8	831.9
35°	820.2	817.5	820.2	819.3	820.2	817.5	812.9	812.0	808.4	814.7	806.6
37.5°	787.6	784.9	787.6	787.6	787.6	789.4	785.8	783.1	777.6	785.8	779.4
40°	754.1	750.5	754.1	753.2	754.1	755.9	754.1	752.3	746.8	753.2	747.8
42.5°	716.1	715.2	716.1	717.0	717.0	720.6	723.3	719.7	717.9	713.4	717.0
45°	675.3	673.5	675.3	677.2	678.1	679.9	688.0	688.0	685.3	678.1	683.5
47.5°	631.9	627.4	631.9	637.3	637.3	640.0	648.2	654.5	650.0	640.9	643.7
50°	585.7	586.6	585.7	589.4	589.4	599.3	605.6	612.0	616.5	605.6	593.0
52.5°	540.5	539.6	540.5	543.2	546.8	551.3	562.2	568.5	575.8	569.4	549.5
55°	495.2	497.0	495.2	496.1	497.9	500.6	516.9	523.3	536.9	528.7	507.9
57.5°	450.0	447.2	450.0	451.8	452.7	455.4	469.0	480.7	488.9	489.8	464.4
60°	397.5	393.8	397.5	405.6	407.4	409.2	421.9	432.8	440.0	442.7	416.5
62.5°	351.3	345.0	351.3	356.7	360.3	364.9	373.9	390.2	396.6	397.5	360.3
65°	302.3	299.6	302.3	313.2	314.1	319.5	329.6	341.3	354.9	353.1	299.6
67.5°	258.0	258.0	258.0	265.2	270.6	273.4	286.0	291.5	308.7	310.5	249.8
70°	217.2	216.3	217.2	222.7	226.3	232.6	244.4	250.7	264.3	268.8	202.8
72.5°	178.3	177.4	178.3	182.8	186.5	191.9	201.9	209.1	220.9	226.3	157.5
75°	143.9	142.1	143.9	147.5	146.6	153.9	162.0	169.3	180.1	183.7	116.8
77.5°	110.4	110.4	110.4	114.1	114.1	121.3	124.9	134.0	140.3	145.7	86.0
80°	82.4	81.5	82.4	83.3	83.3	86.9	93.2	99.6	105.0	105.0	58.8
82.5°	57.9	56.1	57.9	57.9	57.9	59.7	63.4	65.2	68.8	71.5	37.1
85°	36.2	36.2	36.2	37.1	36.2	38.0	38.9	40.7	40.7	38.9	22.6
87.5°	23.5	22.6	23.5	22.6	22.6	21.7	21.7	21.7	20.8	19.9	12.7
90°	7.1	7.1	7.1	7.1	7.1	9.4	12.6	14.2	12.2	8.2	5.2
92.5°	28.4	22.7	28.4	34.0	35.5	50.2	70.0	79.8	70.1	50.6	36.0
95°	98.9	81.9	98.9	116.0	120.3	158.0	208.2	233.4	197.1	124.6	70.1
97.5°	237.2	204.7	237.2	269.6	277.8	301.6	333.4	349.2	288.7	167.7	77.0
100°	341.7	303.0	341.7	380.4	390.1	388.4	386.1	384.9	317.7	183.5	82.8
102.5°	444.5	411.4	444.5	477.7	486.0	455.7	415.2	394.9	326.9	190.7	88.6
105°	575.7	557.9	575.7	593.5	597.9	529.9	439.2	393.8	327.9	196.1	97.2
107.5°	661.5	665.8	661.5	657.2	656.2	561.3	434.7	371.5	313.4	197.1	109.9
110°	694.3	712.8	694.3	675.7	671.1	565.0	423.5	352.8	300.4	195.6	116.9





TEST NUMBER: P934359

CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	697.2	725.8	697.2	668.7	661.6	553.0	408.2	335.8	289.1	195.6	125.5
115°	678.7	718.2	678.7	639.1	629.3	524.6	385.1	315.4	276.1	197.4	138.4
117.5°	639.5	683.4	639.5	595.6	584.6	490.2	364.4	301.5	268.0	201.1	150.9
120°	607.9	650.5	607.9	565.4	554.7	468.4	353.4	295.9	265.3	204.1	158.2
122.5°	577.2	619.2	577.2	535.1	524.6	447.0	343.3	291.6	263.9	208.4	166.8
125°	533.2	572.0	533.2	494.6	484.9	418.9	330.9	286.9	262.7	214.2	177.8
127.5°	493.8	526.4	493.8	461.1	452.9	396.3	320.8	283.0	262.0	220.0	188.5
130°	470.6	500.7	470.6	440.4	432.8	382.4	315.2	281.5	262.4	224.2	195.5
132.5°	449.4	476.5	449.4	422.4	415.6	370.5	310.3	280.2	262.7	227.6	201.3
135°	420.5	443.8	420.5	397.2	391.4	353.6	303.1	278.0	262.4	231.4	208.0
137.5°	397.3	416.4	397.3	378.3	373.5	341.5	298.9	277.6	264.0	237.0	216.6
140°	381.4	399.3	381.4	363.6	359.2	331.6	294.7	276.3	264.3	240.3	222.4
142.5°	368.2	383.6	368.2	352.8	349.0	324.8	292.5	276.3	265.2	243.2	226.7
145°	348.5	360.1	348.5	336.8	333.9	314.1	287.7	274.4	265.3	246.9	233.2
147.5°	333.3	342.9	333.3	323.7	321.2	305.7	284.9	274.4	267.1	252.4	241.4
150°	323.8	331.6	323.8	316.0	314.0	300.8	283.2	274.4	268.0	255.3	245.7
152.5°	315.5	321.4	315.5	309.7	308.2	297.0	282.0	274.4	268.7	257.2	248.5
155°	306.2	310.1	306.2	302.3	301.3	292.4	280.4	274.4	270.0	261.2	254.6
157.5°	298.8	301.5	298.8	296.1	295.4	288.4	279.1	274.4	271.4	265.3	260.8
160°	294.4	295.9	294.4	292.7	292.4	286.4	278.4	274.4	272.0	267.2	263.6
162.5°	291.5	292.9	291.5	289.9	289.6	284.5	277.8	274.4	272.7	269.2	266.6
165°	287.2	288.8	287.2	285.6	285.2	281.6	276.8	274.4	273.6	272.1	270.9
167.5°	284.2	284.9	284.2	283.6	283.4	281.1	277.9	276.3	275.6	274.3	273.3
170°	283.4	283.4	283.4	283.4	283.4	281.1	277.9	276.3	276.3	276.2	276.1
172.5°	281.1	280.6	281.1	281.7	281.9	280.0	277.5	276.3	276.3	276.3	276.3
175°	279.9	279.9	279.9	279.9	279.9	278.7	277.1	276.3	276.6	277.4	278.0
177.5°	278.7	278.0	278.7	279.3	279.5	278.6	277.3	276.7	277.0	277.5	278.0
180°	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0



TEST NUMBER: P934359

CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8
2.5°	970.5	965.0	965.0	955.9	952.3	949.6	945.1	931.5	927.9	924.3	929.7
5°	978.7	968.7	961.4	945.1	931.5	926.1	908.9	876.3	854.6	838.3	829.2
7.5°	980.5	967.8	954.1	928.8	896.2	881.7	829.2	769.5	753.2	738.7	729.7
10°	978.7	964.1	945.1	907.1	830.1	804.8	752.3	713.4	703.4	700.7	703.4
12.5°	972.3	958.7	932.4	869.0	761.3	744.1	713.4	690.7	688.9	693.4	717.9
15°	961.4	948.7	917.9	818.4	723.3	710.6	688.9	680.8	690.7	722.4	795.7
17.5°	950.5	936.0	898.0	768.6	694.3	685.3	669.9	686.2	742.3	784.9	809.3
20°	936.0	918.8	875.4	732.4	673.5	665.4	658.1	731.5	774.0	789.4	803.0
22.5°	918.8	900.7	844.6	707.0	651.8	645.5	650.0	756.8	774.0	784.9	796.6
25°	896.2	880.8	808.4	687.1	634.6	627.4	644.6	754.1	764.0	766.8	790.3
27.5°	875.4	855.5	770.4	669.0	613.8	611.1	649.1	742.3	749.6	752.3	777.6
30°	850.0	820.2	727.8	650.0	592.1	591.2	650.0	727.8	726.0	733.3	758.6
32.5°	823.8	767.7	679.9	626.5	571.2	570.3	643.7	706.1	704.3	714.3	733.3
35°	799.3	726.9	614.7	599.3	545.0	545.9	628.3	680.8	681.7	690.7	702.5
37.5°	774.0	691.6	543.2	569.4	519.7	519.7	607.5	657.2	655.4	658.1	674.4
40°	744.1	636.4	479.8	530.5	496.1	493.4	582.1	631.9	625.6	624.7	647.3
42.5°	712.5	575.8	432.8	478.9	469.0	465.3	551.3	601.1	589.4	592.1	621.0
45°	678.1	559.5	396.6	404.7	440.9	438.2	517.8	565.8	557.7	564.9	594.8
47.5°	643.7	526.9	384.8	335.9	411.0	410.1	480.7	531.4	526.9	534.1	565.8
50°	596.6	490.7	383.9	287.8	377.5	381.2	436.4	497.9	497.9	504.3	537.8
52.5°	535.9	446.3	348.6	260.7	338.6	349.5	397.5	469.0	470.8	477.1	507.0
55°	480.7	400.2	323.2	239.9	292.4	315.9	359.4	439.1	442.7	449.1	476.2
57.5°	430.0	333.2	317.7	215.4	249.8	272.5	325.9	410.1	411.9	417.4	443.6
60°	375.7	240.8	291.5	189.2	212.7	229.9	295.1	375.7	382.1	385.7	408.3
62.5°	314.1	174.7	264.3	171.1	194.6	198.2	269.7	343.1	351.3	354.0	367.6
65°	223.6	146.6	224.5	155.7	175.6	176.5	242.6	309.6	316.8	321.3	331.4
67.5°	151.2	119.5	171.1	141.2	161.1	162.0	216.3	270.6	280.6	284.2	290.6
70°	105.0	79.7	126.7	125.8	144.8	146.6	188.3	235.3	244.4	247.1	250.7
72.5°	76.9	64.3	105.0	113.1	127.6	129.4	159.3	195.5	204.6	207.3	209.1
75°	58.8	67.9	85.1	98.7	108.6	109.5	130.3	159.3	165.6	167.5	168.4
77.5°	47.1	63.4	62.5	79.7	88.7	86.9	102.3	123.1	128.5	128.5	128.5
80°	35.3	49.8	47.1	57.0	65.2	63.4	73.3	87.8	89.6	91.4	90.5
82.5°	26.2	31.7	31.7	36.2	43.4	41.6	48.9	57.0	57.0	57.0	58.8
85°	16.3	18.1	14.5	19.0	24.4	23.5	27.2	30.8	31.7	31.7	29.9
87.5°	10.0	8.1	4.5	7.2	10.9	10.9	12.7	13.6	12.7	12.7	12.7
90°	4.9	3.3	1.9	3.3	4.9	5.2	8.2	12.2	14.2	12.6	9.4
92.5°	32.9	20.1	7.4	20.1	32.9	36.0	50.6	70.1	79.8	70.0	50.2
95°	64.4	41.1	17.9	41.1	64.4	70.1	124.6	197.1	233.4	208.2	158.0
97.5°	71.9	51.4	31.0	51.4	71.9	77.0	167.7	288.7	349.2	333.4	301.6
100°	78.2	59.6	41.0	59.6	78.2	82.8	183.5	317.7	384.9	386.1	388.4
102.5°	84.3	67.0	49.6	67.0	84.3	88.6	190.7	326.9	394.9	415.2	455.7
105°	93.5	78.8	64.2	78.8	93.5	97.2	196.1	327.9	393.8	439.2	529.9
107.5°	106.4	92.8	79.1	92.8	106.4	109.9	197.1	313.4	371.5	434.7	561.3
110°	113.9	101.5	89.2	101.5	113.9	116.9	195.6	300.4	352.8	423.5	565.0



TEST NUMBER: P934359

CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	122.6	110.8	99.0	110.8	122.6	125.5	195.6	289.1	335.8	408.2	553.0
115°	135.7	124.8	114.0	124.8	135.7	138.4	197.4	276.1	315.4	385.1	524.6
117.5°	148.4	138.6	128.7	138.6	148.4	150.9	201.1	268.0	301.5	364.4	490.2
120°	155.9	146.6	137.3	146.6	155.9	158.2	204.1	265.3	295.9	353.4	468.4
122.5°	164.5	155.1	145.7	155.1	164.5	166.8	208.4	263.9	291.6	343.3	447.0
125°	175.6	167.1	158.6	167.1	175.6	177.8	214.2	262.7	286.9	330.9	418.9
127.5°	186.3	177.7	169.0	177.7	186.3	188.5	220.0	262.0	283.0	320.8	396.3
130°	193.2	183.9	174.6	183.9	193.2	195.5	224.2	262.4	281.5	315.2	382.4
132.5°	199.0	189.7	180.4	189.7	199.0	201.3	227.6	262.7	280.2	310.3	370.5
135°	205.9	197.4	189.0	197.4	205.9	208.0	231.4	262.4	278.0	303.1	353.6
137.5°	214.5	206.1	197.8	206.1	214.5	216.6	237.0	264.0	277.6	298.9	341.5
140°	220.5	212.7	205.0	212.7	220.5	222.4	240.3	264.3	276.3	294.7	331.6
142.5°	224.8	217.8	210.6	217.8	224.8	226.7	243.2	265.2	276.3	292.5	324.8
145°	231.6	225.4	219.2	225.4	231.6	233.2	246.9	265.3	274.4	287.7	314.1
147.5°	239.9	233.9	227.8	233.9	239.9	241.4	252.4	267.1	274.4	284.9	305.7
150°	244.3	238.8	233.4	238.8	244.3	245.7	255.3	268.0	274.4	283.2	300.8
152.5°	247.5	243.3	239.1	243.3	247.5	248.5	257.2	268.7	274.4	282.0	297.0
155°	253.9	250.8	247.7	250.8	253.9	254.6	261.2	270.0	274.4	280.4	292.4
157.5°	260.1	257.1	254.1	257.1	260.1	260.8	265.3	271.4	274.4	279.1	288.4
160°	263.0	260.7	258.4	260.7	263.0	263.6	267.2	272.0	274.4	278.4	286.4
162.5°	266.1	264.4	262.7	264.4	266.1	266.6	269.2	272.7	274.4	277.8	284.5
165°	270.6	268.9	267.4	268.9	270.6	270.9	272.1	273.6	274.4	276.8	281.6
167.5°	273.1	272.4	271.6	272.4	273.1	273.3	274.3	275.6	276.3	277.9	281.1
170°	275.9	275.2	274.4	275.2	275.9	276.1	276.2	276.3	276.3	277.9	281.1
172.5°	276.3	276.1	275.9	276.1	276.3	276.3	276.3	276.3	276.3	277.5	280.0
175°	278.0	278.0	278.0	278.0	278.0	278.0	277.4	276.6	276.3	277.1	278.7
177.5°	278.0	278.0	278.0	278.0	278.0	278.0	277.5	277.0	276.7	277.3	278.6
180°	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0



TEST NUMBER: P934359

CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8	956.8
2.5°	923.4	920.6	924.3	914.3	924.3	920.6	923.4	929.7	924.3	927.9	931.5
5°	810.2	805.7	791.2	779.4	791.2	805.7	810.2	829.2	838.3	854.6	876.3
7.5°	724.2	720.6	717.0	709.7	717.0	720.6	724.2	729.7	738.7	753.2	769.5
10°	705.2	706.1	711.5	710.6	711.5	706.1	705.2	703.4	700.7	703.4	713.4
12.5°	754.1	762.2	792.1	790.3	792.1	762.2	754.1	717.9	693.4	688.9	690.7
15°	810.2	812.9	819.3	820.2	819.3	812.9	810.2	795.7	722.4	690.7	680.8
17.5°	815.6	816.5	821.1	821.1	821.1	816.5	815.6	809.3	784.9	742.3	686.2
20°	811.1	812.9	822.0	823.8	822.0	812.9	811.1	803.0	789.4	774.0	731.5
22.5°	809.3	812.9	820.2	819.3	820.2	812.9	809.3	796.6	784.9	774.0	756.8
25°	800.3	800.3	801.2	802.1	801.2	800.3	800.3	790.3	766.8	764.0	754.1
27.5°	781.2	783.1	788.5	787.6	788.5	783.1	781.2	777.6	752.3	749.6	742.3
30°	764.0	762.2	757.7	754.1	757.7	762.2	764.0	758.6	733.3	726.0	727.8
32.5°	735.1	730.6	726.0	723.3	726.0	730.6	735.1	733.3	714.3	704.3	706.1
35°	700.7	701.6	700.7	698.0	700.7	701.6	700.7	702.5	690.7	681.7	680.8
37.5°	676.2	678.1	677.2	673.5	677.2	678.1	676.2	674.4	658.1	655.4	657.2
40°	650.9	651.8	650.9	648.2	650.9	651.8	650.9	647.3	624.7	625.6	631.9
42.5°	626.5	625.6	622.8	621.0	622.8	625.6	626.5	621.0	592.1	589.4	601.1
45°	598.4	599.3	593.9	591.2	593.9	599.3	598.4	594.8	564.9	557.7	565.8
47.5°	570.3	570.3	565.8	563.1	565.8	570.3	570.3	565.8	534.1	526.9	531.4
50°	540.5	539.6	533.2	532.3	533.2	539.6	540.5	537.8	504.3	497.9	497.9
52.5°	506.1	506.1	507.0	508.8	507.0	506.1	506.1	507.0	477.1	470.8	469.0
55°	476.2	477.1	483.4	485.3	483.4	477.1	476.2	476.2	449.1	442.7	439.1
57.5°	445.4	445.4	450.0	450.0	450.0	445.4	445.4	443.6	417.4	411.9	410.1
60°	410.1	411.9	415.6	414.7	415.6	411.9	410.1	408.3	385.7	382.1	375.7
62.5°	373.0	374.8	375.7	373.9	375.7	374.8	373.0	367.6	354.0	351.3	343.1
65°	334.1	335.9	336.8	335.0	336.8	335.9	334.1	331.4	321.3	316.8	309.6
67.5°	294.2	293.3	292.4	296.0	292.4	293.3	294.2	290.6	284.2	280.6	270.6
70°	253.4	253.4	252.5	254.4	252.5	253.4	253.4	250.7	247.1	244.4	235.3
72.5°	210.0	209.1	212.7	210.0	212.7	209.1	210.0	209.1	207.3	204.6	195.5
75°	167.5	169.3	167.5	170.2	167.5	169.3	167.5	168.4	167.5	165.6	159.3
77.5°	127.6	129.4	127.6	127.6	127.6	129.4	127.6	128.5	128.5	128.5	123.1
80°	90.5	89.6	89.6	88.7	89.6	89.6	90.5	90.5	91.4	89.6	87.8
82.5°	57.9	57.0	57.0	58.8	57.0	57.0	57.9	58.8	57.0	57.0	57.0
85°	31.7	32.6	30.8	30.8	30.8	32.6	31.7	29.9	31.7	31.7	30.8
87.5°	11.8	10.9	10.9	10.9	10.9	10.9	11.8	12.7	12.7	12.7	13.6
90°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	9.4	12.6	14.2	12.2
92.5°	35.5	34.0	28.4	22.7	28.4	34.0	35.5	50.2	70.0	79.8	70.1
95°	120.3	116.0	98.9	81.9	98.9	116.0	120.3	158.0	208.2	233.4	197.1
97.5°	277.8	269.6	237.2	204.7	237.2	269.6	277.8	301.6	333.4	349.2	288.7
100°	390.1	380.4	341.7	303.0	341.7	380.4	390.1	388.4	386.1	384.9	317.7
102.5°	486.0	477.7	444.5	411.4	444.5	477.7	486.0	455.7	415.2	394.9	326.9
105°	597.9	593.5	575.7	557.9	575.7	593.5	597.9	529.9	439.2	393.8	327.9
107.5°	656.2	657.2	661.5	665.8	661.5	657.2	656.2	561.3	434.7	371.5	313.4
110°	671.1	675.7	694.3	712.8	694.3	675.7	671.1	565.0	423.5	352.8	300.4



TEST NUMBER: P934359

CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	661.6	668.7	697.2	725.8	697.2	668.7	661.6	553.0	408.2	335.8	289.1
115°	629.3	639.1	678.7	718.2	678.7	639.1	629.3	524.6	385.1	315.4	276.1
117.5°	584.6	595.6	639.5	683.4	639.5	595.6	584.6	490.2	364.4	301.5	268.0
120°	554.7	565.4	607.9	650.5	607.9	565.4	554.7	468.4	353.4	295.9	265.3
122.5°	524.6	535.1	577.2	619.2	577.2	535.1	524.6	447.0	343.3	291.6	263.9
125°	484.9	494.6	533.2	572.0	533.2	494.6	484.9	418.9	330.9	286.9	262.7
127.5°	452.9	461.1	493.8	526.4	493.8	461.1	452.9	396.3	320.8	283.0	262.0
130°	432.8	440.4	470.6	500.7	470.6	440.4	432.8	382.4	315.2	281.5	262.4
132.5°	415.6	422.4	449.4	476.5	449.4	422.4	415.6	370.5	310.3	280.2	262.7
135°	391.4	397.2	420.5	443.8	420.5	397.2	391.4	353.6	303.1	278.0	262.4
137.5°	373.5	378.3	397.3	416.4	397.3	378.3	373.5	341.5	298.9	277.6	264.0
140°	359.2	363.6	381.4	399.3	381.4	363.6	359.2	331.6	294.7	276.3	264.3
142.5°	349.0	352.8	368.2	383.6	368.2	352.8	349.0	324.8	292.5	276.3	265.2
145°	333.9	336.8	348.5	360.1	348.5	336.8	333.9	314.1	287.7	274.4	265.3
147.5°	321.2	323.7	333.3	342.9	333.3	323.7	321.2	305.7	284.9	274.4	267.1
150°	314.0	316.0	323.8	331.6	323.8	316.0	314.0	300.8	283.2	274.4	268.0
152.5°	308.2	309.7	315.5	321.4	315.5	309.7	308.2	297.0	282.0	274.4	268.7
155°	301.3	302.3	306.2	310.1	306.2	302.3	301.3	292.4	280.4	274.4	270.0
157.5°	295.4	296.1	298.8	301.5	298.8	296.1	295.4	288.4	279.1	274.4	271.4
160°	292.4	292.7	294.4	295.9	294.4	292.7	292.4	286.4	278.4	274.4	272.0
162.5°	289.6	289.9	291.5	292.9	291.5	289.9	289.6	284.5	277.8	274.4	272.7
165°	285.2	285.6	287.2	288.8	287.2	285.6	285.2	281.6	276.8	274.4	273.6
167.5°	283.4	283.6	284.2	284.9	284.2	283.6	283.4	281.1	277.9	276.3	275.6
170°	283.4	283.4	283.4	283.4	283.4	283.4	283.4	281.1	277.9	276.3	276.3
172.5°	281.9	281.7	281.1	280.6	281.1	281.7	281.9	280.0	277.5	276.3	276.3
175°	279.9	279.9	279.9	279.9	279.9	279.9	279.9	278.7	277.1	276.3	276.6
177.5°	279.5	279.3	278.7	278.0	278.7	279.3	279.5	278.6	277.3	276.7	277.0
180°	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0



TEST NUMBER: P934359

CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
0°	956.8	956.8	956.8	956.8	956.8
2.5°	945.1	949.6	952.3	955.9	965.0
5°	908.9	926.1	931.5	945.1	961.4
7.5°	829.2	881.7	896.2	928.8	954.1
10°	752.3	804.8	830.1	907.1	945.1
12.5°	713.4	744.1	761.3	869.0	932.4
15°	688.9	710.6	723.3	818.4	917.9
17.5°	669.9	685.3	694.3	768.6	898.0
20°	658.1	665.4	673.5	732.4	875.4
22.5°	650.0	645.5	651.8	707.0	844.6
25°	644.6	627.4	634.6	687.1	808.4
27.5°	649.1	611.1	613.8	669.0	770.4
30°	650.0	591.2	592.1	650.0	727.8
32.5°	643.7	570.3	571.2	626.5	679.9
35°	628.3	545.9	545.0	599.3	614.7
37.5°	607.5	519.7	519.7	569.4	543.2
40°	582.1	493.4	496.1	530.5	479.8
42.5°	551.3	465.3	469.0	478.9	432.8
45°	517.8	438.2	440.9	404.7	396.6
47.5°	480.7	410.1	411.0	335.9	384.8
50°	436.4	381.2	377.5	287.8	383.9
52.5°	397.5	349.5	338.6	260.7	348.6
55°	359.4	315.9	292.4	239.9	323.2
57.5°	325.9	272.5	249.8	215.4	317.7
60°	295.1	229.9	212.7	189.2	291.5
62.5°	269.7	198.2	194.6	171.1	264.3
65°	242.6	176.5	175.6	155.7	224.5
67.5°	216.3	162.0	161.1	141.2	171.1
70°	188.3	146.6	144.8	125.8	126.7
72.5°	159.3	129.4	127.6	113.1	105.0
75°	130.3	109.5	108.6	98.7	85.1
77.5°	102.3	86.9	88.7	79.7	62.5
80°	73.3	63.4	65.2	57.0	47.1
82.5°	48.9	41.6	43.4	36.2	31.7
85°	27.2	23.5	24.4	19.0	14.5
87.5°	12.7	10.9	10.9	7.2	4.5
90°	8.2	5.2	4.9	3.3	1.9
92.5°	50.6	36.0	32.9	20.1	7.4
95°	124.6	70.1	64.4	41.1	17.9
97.5°	167.7	77.0	71.9	51.4	31.0
100°	183.5	82.8	78.2	59.6	41.0
102.5°	190.7	88.6	84.3	67.0	49.6
105°	196.1	97.2	93.5	78.8	64.2
107.5°	197.1	109.9	106.4	92.8	79.1
110°	195.6	116.9	113.9	101.5	89.2



TEST NUMBER: P934359

CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	330°	337.5°	340°	350°	360°
112.5°	195.6	125.5	122.6	110.8	99.0
115°	197.4	138.4	135.7	124.8	114.0
117.5°	201.1	150.9	148.4	138.6	128.7
120°	204.1	158.2	155.9	146.6	137.3
122.5°	208.4	166.8	164.5	155.1	145.7
125°	214.2	177.8	175.6	167.1	158.6
127.5°	220.0	188.5	186.3	177.7	169.0
130°	224.2	195.5	193.2	183.9	174.6
132.5°	227.6	201.3	199.0	189.7	180.4
135°	231.4	208.0	205.9	197.4	189.0
137.5°	237.0	216.6	214.5	206.1	197.8
140°	240.3	222.4	220.5	212.7	205.0
142.5°	243.2	226.7	224.8	217.8	210.6
145°	246.9	233.2	231.6	225.4	219.2
147.5°	252.4	241.4	239.9	233.9	227.8
150°	255.3	245.7	244.3	238.8	233.4
152.5°	257.2	248.5	247.5	243.3	239.1
155°	261.2	254.6	253.9	250.8	247.7
157.5°	265.3	260.8	260.1	257.1	254.1
160°	267.2	263.6	263.0	260.7	258.4
162.5°	269.2	266.6	266.1	264.4	262.7
165°	272.1	270.9	270.6	268.9	267.4
167.5°	274.3	273.3	273.1	272.4	271.6
170°	276.2	276.1	275.9	275.2	274.4
172.5°	276.3	276.3	276.3	276.1	275.9
175°	277.4	278.0	278.0	278.0	278.0
177.5°	277.5	278.0	278.0	278.0	278.0
180°	278.0	278.0	278.0	278.0	278.0



TEST NUMBER: P934359

CATALOG NUMBER: SQ4-FA-050U-075D-93050-1D-UNV-STD-W-4-4000K

**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	13.08	14.02	13.97	14.93	16.08	15.88	16.82	16.77	17.72	18.88
	3H	13.57	14.41	14.46	15.32	16.50	17.22	18.06	18.12	18.98	20.16
	4H	13.76	14.55	14.67	15.48	16.66	17.66	18.46	18.58	19.38	20.57
	6H	13.88	14.62	14.81	15.54	16.74	17.94	18.68	18.87	19.60	20.80
	8H	13.89	14.58	14.82	15.53	16.73	18.02	18.71	18.95	19.66	20.86
	12H	13.86	14.52	14.80	15.46	16.69	18.05	18.72	18.99	19.66	20.88
4H	2H	14.12	14.91	15.04	15.83	17.02	16.30	17.10	17.22	18.02	19.21
	3H	15.15	15.81	16.08	16.76	17.97	17.80	18.47	18.73	19.42	20.62
	4H	15.43	16.03	16.37	16.98	18.21	18.33	18.93	19.27	19.88	21.11
	6H	15.56	16.08	16.51	17.05	18.28	18.69	19.21	19.64	20.18	21.41
	8H	15.57	16.05	16.52	17.02	18.26	18.79	19.28	19.75	20.24	21.49
	12H	15.54	15.98	16.51	16.96	18.21	18.85	19.29	19.82	20.27	21.52
8H	4H	15.88	16.37	16.84	17.34	18.58	18.46	18.95	19.42	19.91	21.15
	6H	16.15	16.55	17.13	17.56	18.80	18.89	19.29	19.87	20.30	21.54
	8H	16.19	16.55	17.18	17.54	18.80	19.04	19.39	20.03	20.39	21.65
	12H	16.18	16.49	17.17	17.48	18.79	19.13	19.45	20.13	20.44	21.74
12H	4H	15.89	16.33	16.87	17.31	18.56	18.43	18.87	19.40	19.85	21.10
	6H	16.21	16.56	17.20	17.56	18.82	18.89	19.24	19.88	20.24	21.50
	8H	16.28	16.59	17.27	17.58	18.89	19.05	19.36	20.04	20.35	21.66