

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: P934434

Luminaire Tested: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934434
REPORT IS A COMBINATION OF REPORTS P933698 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

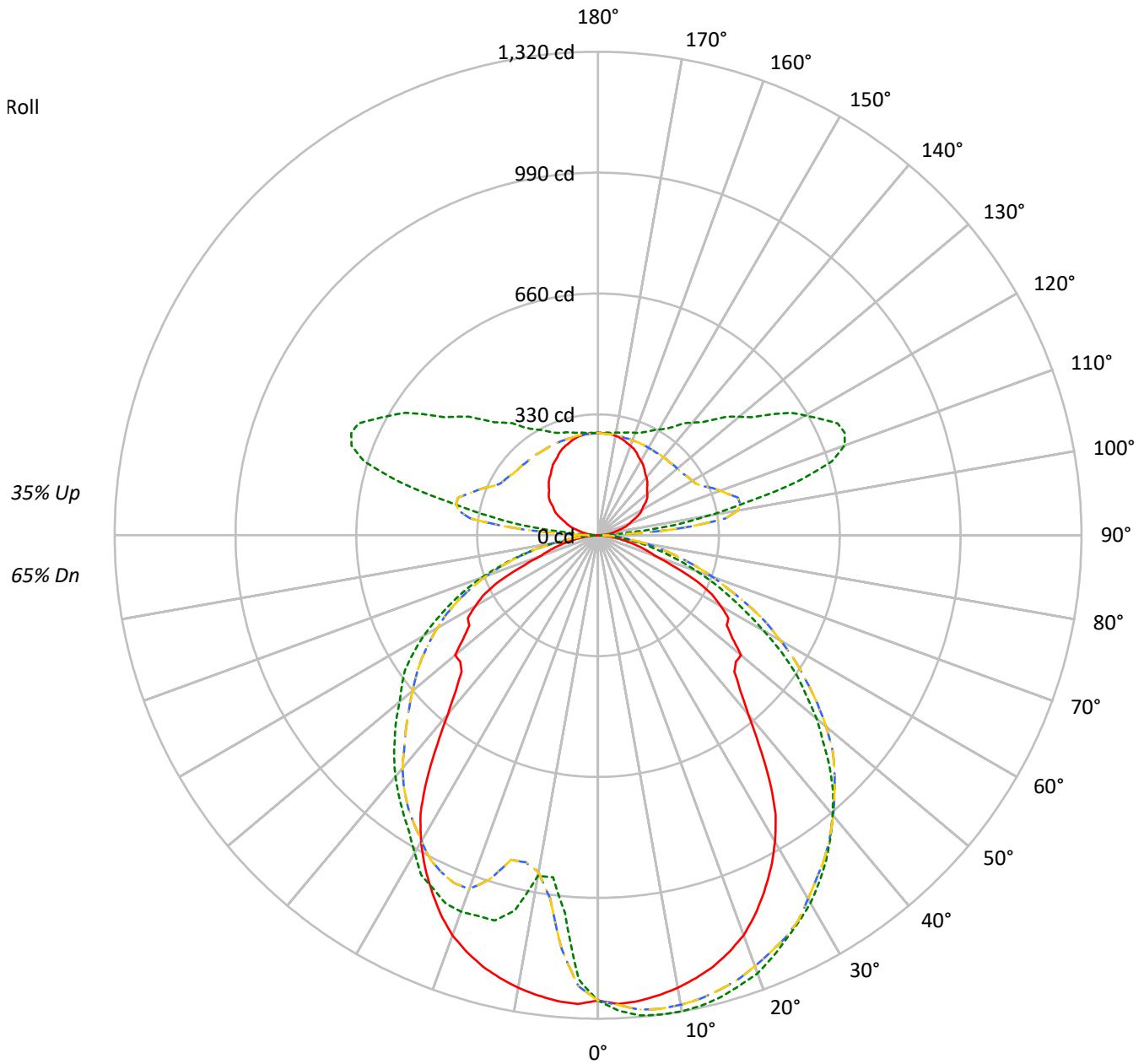
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5105.8 lumens
Efficiency: N/A
Efficacy: 113.0 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-Direct

Input Watts (W): 45.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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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
RCR																				
0	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	65		
1	101	97	93	89	95	91	88	84	80	78	75	71	69	67	62	60	59	55		
2	92	85	78	73	86	80	74	69	70	66	63	62	59	56	54	52	50	46		
3	84	74	67	61	79	70	63	58	62	57	53	55	51	47	48	45	42	39		
4	77	66	58	52	72	62	55	49	55	49	45	49	44	41	43	39	36	33		
5	71	59	50	44	66	56	48	42	49	43	39	44	39	35	39	35	32	29		
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	25		
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25	22		
8	56	43	35	30	52	41	34	29	37	31	27	33	28	24	29	25	22	20		
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20	18		
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18	16		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11787	11787	11787	11787
5°	11863	11900	11863	9357
10°	11771	11721	11771	8380
15°	11629	11467	11629	9575
20°	11373	11167	11373	9596
25°	10862	10728	10862	9392
30°	10206	10364	10206	8946
35°	9085	9903	9085	8455
40°	7558	9360	7558	8084
45°	6739	8726	6739	7658
50°	7144	7968	7144	7231
55°	6703	7153	6703	6983
60°	6884	6074	6884	6395
65°	6212	5021	6212	5613
70°	4273	4003	4273	4705
75°	3706	2958	3706	3543
80°	2925	1956	2925	2130
85°	1590	1034	1590	879

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 10349 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.7	2.2
10°-20°	325.6	6.4
20°-30°	503.3	9.9
30°-40°	600.8	11.8
40°-50°	604.4	11.8
50°-60°	525.9	10.3
60°-70°	372.8	7.3
70°-80°	197.3	3.9
80°-90°	50.2	1.0
90°-100°	136.2	2.7
100°-110°	358.0	7.0
110°-120°	371.2	7.3
120°-130°	297.8	5.8
130°-140°	233.6	4.6
140°-150°	179.3	3.5
150°-160°	129.1	2.5
160°-170°	79.0	1.5
170°-180°	26.7	0.5
0°-30°	943.6	18.5
0°-40°	1544.4	30.2
0°-60°	2674.6	52.4
0°-90°	3294.9	64.5
90°-120°	865.4	16.9
90°-150°	1576.0	30.9
90°-180°	1811.0	35.5
0°-180°	5105.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1270	1270	1270	1270	1270	
5°	1276	1316	1276	1035	1276	121
15°	1219	1304	1219	1089	1219	343
25°	1073	1216	1073	1065	1073	493
35°	816	1085	816	927	816	505
45°	526	894	526	785	526	422
55°	429	660	429	644	429	394
65°	298	398	298	445	298	285
75°	113	189	113	226	113	119
85°	19	48	19	41	19	26
90°	2	7	2	7	2	2
95°	18	82	18	82	18	20
105°	64	561	64	561	64	68
115°	114	722	114	722	114	113
125°	159	575	159	575	159	142
135°	190	446	190	446	190	147
145°	220	362	220	362	220	138
155°	249	312	249	312	249	114
165°	269	290	269	290	269	76
175°	279	281	279	281	279	27
180°	279	279	279	279	279	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3
2.5°	1281.1	1281.1	1288.4	1290.8	1290.8	1287.1	1283.6	1287.1	1298.0	1301.6	1300.4
5°	1276.4	1286.0	1299.2	1301.6	1304.0	1302.8	1300.4	1302.8	1314.8	1317.2	1318.4
7.5°	1266.8	1284.8	1301.6	1305.2	1308.8	1305.2	1304.0	1306.4	1318.4	1320.8	1320.8
10°	1254.8	1280.0	1299.2	1301.6	1305.2	1301.6	1301.6	1306.4	1318.4	1320.8	1322.1
12.5°	1237.9	1272.8	1290.8	1293.2	1298.0	1296.8	1295.6	1300.4	1312.4	1314.8	1314.8
15°	1218.6	1259.6	1276.4	1278.8	1287.1	1284.8	1284.8	1289.6	1302.8	1306.4	1305.2
17.5°	1192.3	1242.7	1261.9	1265.6	1271.6	1270.3	1271.6	1276.4	1288.4	1290.8	1292.0
20°	1162.2	1219.9	1242.7	1246.3	1252.3	1252.3	1252.3	1258.3	1270.3	1275.1	1275.1
22.5°	1121.3	1195.8	1219.9	1222.3	1229.5	1229.5	1231.9	1240.3	1251.1	1252.3	1252.3
25°	1073.3	1169.4	1189.8	1197.1	1204.3	1207.8	1211.5	1216.3	1219.9	1218.6	1219.9
27.5°	1022.8	1135.8	1162.2	1167.0	1176.6	1180.3	1185.0	1186.3	1187.4	1191.0	1188.6
30°	966.3	1088.8	1128.5	1133.3	1149.0	1151.3	1146.6	1149.0	1155.0	1157.4	1159.8
32.5°	902.5	1019.2	1093.7	1104.5	1118.9	1111.7	1110.5	1114.1	1123.8	1123.8	1126.1
35°	816.0	965.1	1061.3	1070.8	1081.6	1073.3	1078.0	1079.3	1085.3	1088.8	1087.7
37.5°	721.1	918.2	1027.6	1034.8	1043.2	1032.3	1039.6	1043.2	1048.0	1045.6	1045.6
40°	637.0	844.9	988.0	992.7	1000.0	991.5	998.7	1001.1	1003.5	1001.1	1000.0
42.5°	574.5	764.4	945.8	951.8	947.0	953.0	955.5	960.3	956.7	951.8	951.8
45°	526.4	742.7	900.2	907.4	900.2	909.8	913.4	913.4	902.5	900.2	899.0
47.5°	510.8	699.5	854.5	854.5	850.9	862.9	869.0	860.5	849.7	846.1	846.1
50°	509.6	651.4	792.0	787.2	804.0	818.5	812.5	804.0	795.7	782.4	782.4
52.5°	462.7	592.5	711.5	729.5	756.0	764.4	754.7	746.4	731.9	725.9	721.1
55°	429.1	531.2	638.2	674.2	701.9	712.7	694.7	686.2	664.6	661.0	658.6
57.5°	421.9	442.3	570.9	616.6	650.2	649.0	638.2	622.6	604.5	600.9	599.7
60°	387.0	319.6	498.8	552.9	587.7	584.1	574.5	560.1	543.2	540.9	538.4
62.5°	350.9	232.0	417.1	478.4	527.6	526.4	518.0	496.4	484.4	478.4	473.6
65°	298.1	194.7	296.8	397.8	468.7	471.1	453.1	437.4	424.3	417.1	415.8
67.5°	227.1	158.6	200.7	331.7	412.2	409.8	387.0	379.8	362.9	359.3	352.1
70°	168.3	105.8	139.4	269.3	356.9	350.9	332.9	324.5	308.9	300.5	295.6
72.5°	139.4	85.3	102.2	209.1	300.5	293.3	277.6	268.0	254.8	247.6	242.8
75°	113.0	90.1	78.1	155.0	244.0	239.1	224.8	215.1	204.3	194.7	195.9
77.5°	83.0	84.1	62.5	114.2	193.5	186.3	177.8	165.8	161.0	151.5	151.5
80°	62.5	66.1	46.8	78.1	139.4	139.4	132.2	123.8	115.3	110.6	110.6
82.5°	42.0	42.0	34.8	49.3	95.0	91.3	86.5	84.1	79.3	77.0	77.0
85°	19.2	24.0	21.6	30.0	51.7	54.1	54.1	51.7	50.5	48.0	49.3
87.5°	6.0	10.8	13.2	16.8	26.5	27.7	28.8	28.8	28.8	30.0	30.0
90°	1.9	3.4	4.9	5.3	8.3	12.3	14.3	12.6	9.5	7.1	7.1
92.5°	7.5	20.2	33.0	36.2	50.8	70.4	80.2	70.3	50.5	35.7	34.2
95°	18.0	41.3	64.7	70.5	125.2	198.0	234.5	209.2	158.7	120.9	116.6
97.5°	31.1	51.7	72.2	77.4	168.6	290.2	350.9	335.0	303.1	279.2	271.0
100°	41.2	59.9	78.6	83.2	184.4	319.3	386.8	388.0	390.3	392.1	382.3
102.5°	49.8	67.3	84.7	89.1	191.7	328.5	396.9	417.3	457.9	488.4	480.0
105°	64.5	79.2	94.0	97.7	197.0	329.6	395.8	441.4	532.5	600.9	596.4
107.5°	79.5	93.2	107.0	110.4	198.0	314.9	373.3	436.9	564.1	659.4	660.5
110°	89.6	102.0	114.4	117.5	196.6	301.9	354.6	425.6	567.8	674.4	679.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	99.5	111.3	123.2	126.2	196.6	290.5	337.5	410.2	555.7	664.9	672.0
115°	114.5	125.4	136.4	139.1	198.4	277.4	317.0	387.1	527.2	632.4	642.3
117.5°	129.4	139.3	149.2	151.6	202.1	269.3	303.0	366.2	492.7	587.5	598.5
120°	138.0	147.4	156.6	159.0	205.1	266.6	297.4	355.1	470.7	557.4	568.2
122.5°	146.5	155.9	165.3	167.6	209.4	265.2	293.0	345.0	449.2	527.2	537.8
125°	159.4	167.9	176.5	178.7	215.2	264.0	288.4	332.6	421.0	487.3	497.0
127.5°	169.8	178.6	187.2	189.4	221.0	263.3	284.4	322.4	398.2	455.2	463.4
130°	175.5	184.8	194.1	196.5	225.3	263.7	282.9	316.7	384.3	435.0	442.5
132.5°	181.3	190.7	199.9	202.3	228.8	264.0	281.6	311.8	372.3	417.7	424.5
135°	189.9	198.4	206.9	209.0	232.5	263.7	279.3	304.6	355.3	393.3	399.1
137.5°	198.8	207.1	215.6	217.7	238.1	265.3	279.0	300.4	343.2	375.3	380.1
140°	206.0	213.8	221.6	223.5	241.5	265.6	277.6	296.2	333.2	360.9	365.4
142.5°	211.7	218.9	226.0	227.8	244.4	266.5	277.6	293.9	326.4	350.8	354.6
145°	220.3	226.5	232.8	234.3	248.1	266.6	275.8	289.1	315.6	335.6	338.5
147.5°	229.0	235.1	241.1	242.6	253.7	268.4	275.8	286.3	307.2	322.8	325.3
150°	234.5	240.0	245.5	246.9	256.5	269.3	275.8	284.6	302.3	315.6	317.6
152.5°	240.3	244.5	248.7	249.7	258.4	270.0	275.8	283.4	298.5	309.7	311.2
155°	249.0	252.1	255.2	255.9	262.5	271.3	275.8	281.8	293.8	302.8	303.8
157.5°	255.3	258.3	261.3	262.1	266.6	272.7	275.8	280.4	289.8	296.8	297.5
160°	259.7	262.0	264.3	264.9	268.5	273.3	275.8	279.8	287.8	293.8	294.2
162.5°	264.0	265.7	267.4	267.9	270.5	274.1	275.8	279.2	285.9	291.0	291.4
165°	268.7	270.3	271.9	272.3	273.4	275.0	275.8	278.2	283.0	286.6	287.0
167.5°	273.0	273.7	274.4	274.6	275.6	277.0	277.6	279.3	282.4	284.8	285.0
170°	275.8	276.5	277.3	277.4	277.5	277.6	277.6	279.3	282.4	284.8	284.8
172.5°	277.3	277.4	277.6	277.6	277.6	277.6	277.6	278.9	281.4	283.3	283.1
175°	279.3	279.3	279.3	279.3	278.8	278.0	277.6	278.4	280.1	281.3	281.3
177.5°	279.3	279.3	279.3	279.3	278.9	278.3	278.1	278.7	280.0	280.9	280.7
180°	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3
2.5°	1302.8	1299.2	1302.8	1300.4	1301.6	1298.0	1287.1	1283.6	1287.1	1290.8	1290.8
5°	1318.4	1316.1	1318.4	1318.4	1317.2	1314.8	1302.8	1300.4	1302.8	1304.0	1301.6
7.5°	1323.2	1319.6	1323.2	1320.8	1320.8	1318.4	1306.4	1304.0	1305.2	1308.8	1305.2
10°	1323.2	1319.6	1323.2	1322.1	1320.8	1318.4	1306.4	1301.6	1301.6	1305.2	1301.6
12.5°	1317.2	1314.8	1317.2	1314.8	1314.8	1312.4	1300.4	1295.6	1296.8	1298.0	1293.2
15°	1307.6	1304.0	1307.6	1305.2	1306.4	1302.8	1289.6	1284.8	1284.8	1287.1	1278.8
17.5°	1293.2	1288.4	1293.2	1292.0	1290.8	1288.4	1276.4	1271.6	1270.3	1271.6	1265.6
20°	1276.4	1272.8	1276.4	1275.1	1275.1	1270.3	1258.3	1252.3	1252.3	1252.3	1246.3
22.5°	1249.9	1246.3	1249.9	1252.3	1252.3	1251.1	1240.3	1231.9	1229.5	1229.5	1222.3
25°	1219.9	1216.3	1219.9	1219.9	1218.6	1219.9	1216.3	1211.5	1207.8	1204.3	1197.1
27.5°	1191.0	1188.6	1191.0	1188.6	1191.0	1187.4	1186.3	1185.0	1180.3	1176.6	1167.0
30°	1162.2	1159.8	1162.2	1159.8	1157.4	1155.0	1149.0	1146.6	1151.3	1149.0	1133.3
32.5°	1126.1	1123.8	1126.1	1126.1	1123.8	1123.8	1114.1	1110.5	1111.7	1118.9	1104.5
35°	1088.8	1085.3	1088.8	1087.7	1088.8	1085.3	1079.3	1078.0	1073.3	1081.6	1070.8
37.5°	1045.6	1042.0	1045.6	1045.6	1045.6	1048.0	1043.2	1039.6	1032.3	1043.2	1034.8
40°	1001.1	996.3	1001.1	1000.0	1001.1	1003.5	1001.1	998.7	991.5	1000.0	992.7
42.5°	950.7	949.5	950.7	951.8	951.8	956.7	960.3	955.5	953.0	947.0	951.8
45°	896.5	894.2	896.5	899.0	900.2	902.5	913.4	913.4	909.8	900.2	907.4
47.5°	838.9	832.9	838.9	846.1	846.1	849.7	860.5	869.0	862.9	850.9	854.5
50°	777.6	778.8	777.6	782.4	782.4	795.7	804.0	812.5	818.5	804.0	787.2
52.5°	717.5	716.3	717.5	721.1	725.9	731.9	746.4	754.7	764.4	756.0	729.5
55°	657.4	659.9	657.4	658.6	661.0	664.6	686.2	694.7	712.7	701.9	674.2
57.5°	597.4	593.7	597.4	599.7	600.9	604.5	622.6	638.2	649.0	650.2	616.6
60°	527.6	522.8	527.6	538.4	540.9	543.2	560.1	574.5	584.1	587.7	552.9
62.5°	466.3	457.9	466.3	473.6	478.4	484.4	496.4	518.0	526.4	527.6	478.4
65°	401.4	397.8	401.4	415.8	417.1	424.3	437.4	453.1	471.1	468.7	397.8
67.5°	342.6	342.6	342.6	352.1	359.3	362.9	379.8	387.0	409.8	412.2	331.7
70°	288.4	287.3	288.4	295.6	300.5	308.9	324.5	332.9	350.9	356.9	269.3
72.5°	236.8	235.6	236.8	242.8	247.6	254.8	268.0	277.6	293.3	300.5	209.1
75°	191.1	188.7	191.1	195.9	194.7	204.3	215.1	224.8	239.1	244.0	155.0
77.5°	146.6	146.6	146.6	151.5	151.5	161.0	165.8	177.8	186.3	193.5	114.2
80°	109.3	108.2	109.3	110.6	110.6	115.3	123.8	132.2	139.4	139.4	78.1
82.5°	77.0	74.5	77.0	77.0	77.0	79.3	84.1	86.5	91.3	95.0	49.3
85°	48.0	48.0	48.0	49.3	48.0	50.5	51.7	54.1	54.1	51.7	30.0
87.5°	31.3	30.0	31.3	30.0	30.0	28.8	28.8	28.8	27.7	26.5	16.8
90°	7.1	7.1	7.1	7.1	7.1	9.5	12.6	14.3	12.3	8.3	5.3
92.5°	28.6	22.8	28.6	34.2	35.7	50.5	70.3	80.2	70.4	50.8	36.2
95°	99.4	82.3	99.4	116.6	120.9	158.7	209.2	234.5	198.0	125.2	70.5
97.5°	238.3	205.7	238.3	271.0	279.2	303.1	335.0	350.9	290.2	168.6	77.4
100°	343.4	304.5	343.4	382.3	392.1	390.3	388.0	386.8	319.3	184.4	83.2
102.5°	446.7	413.4	446.7	480.0	488.4	457.9	417.3	396.9	328.5	191.7	89.1
105°	578.5	560.6	578.5	596.4	600.9	532.5	441.4	395.8	329.6	197.0	97.7
107.5°	664.8	669.1	664.8	660.5	659.4	564.1	436.9	373.3	314.9	198.0	110.4
110°	697.7	716.3	697.7	679.0	674.4	567.8	425.6	354.6	301.9	196.6	117.5



TEST NUMBER: P934434

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	700.7	729.3	700.7	672.0	664.9	555.7	410.2	337.5	290.5	196.6	126.2
115°	682.0	721.8	682.0	642.3	632.4	527.2	387.1	317.0	277.4	198.4	139.1
117.5°	642.7	686.8	642.7	598.5	587.5	492.7	366.2	303.0	269.3	202.1	151.6
120°	610.9	653.8	610.9	568.2	557.4	470.7	355.1	297.4	266.6	205.1	159.0
122.5°	580.1	622.3	580.1	537.8	527.2	449.2	345.0	293.0	265.2	209.4	167.6
125°	535.9	574.8	535.9	497.0	487.3	421.0	332.6	288.4	264.0	215.2	178.7
127.5°	496.2	529.0	496.2	463.4	455.2	398.2	322.4	284.4	263.3	221.0	189.4
130°	472.9	503.2	472.9	442.5	435.0	384.3	316.7	282.9	263.7	225.3	196.5
132.5°	451.6	478.8	451.6	424.5	417.7	372.3	311.8	281.6	264.0	228.8	202.3
135°	422.6	446.0	422.6	399.1	393.3	355.3	304.6	279.3	263.7	232.5	209.0
137.5°	399.2	418.4	399.2	380.1	375.3	343.2	300.4	279.0	265.3	238.1	217.7
140°	383.3	401.2	383.3	365.4	360.9	333.2	296.2	277.6	265.6	241.5	223.5
142.5°	370.0	385.5	370.0	354.6	350.8	326.4	293.9	277.6	266.5	244.4	227.8
145°	350.2	361.9	350.2	338.5	335.6	315.6	289.1	275.8	266.6	248.1	234.3
147.5°	334.9	344.6	334.9	325.3	322.8	307.2	286.3	275.8	268.4	253.7	242.6
150°	325.4	333.2	325.4	317.6	315.6	302.3	284.6	275.8	269.3	256.5	246.9
152.5°	317.1	323.0	317.1	311.2	309.7	298.5	283.4	275.8	270.0	258.4	249.7
155°	307.7	311.6	307.7	303.8	302.8	293.8	281.8	275.8	271.3	262.5	255.9
157.5°	300.3	303.0	300.3	297.5	296.8	289.8	280.4	275.8	272.7	266.6	262.1
160°	295.8	297.4	295.8	294.2	293.8	287.8	279.8	275.8	273.3	268.5	264.9
162.5°	292.9	294.4	292.9	291.4	291.0	285.9	279.2	275.8	274.1	270.5	267.9
165°	288.6	290.3	288.6	287.0	286.6	283.0	278.2	275.8	275.0	273.4	272.3
167.5°	285.6	286.3	285.6	285.0	284.8	282.4	279.3	277.6	277.0	275.6	274.6
170°	284.8	284.8	284.8	284.8	284.8	282.4	279.3	277.6	277.6	277.5	277.4
172.5°	282.5	282.0	282.5	283.1	283.3	281.4	278.9	277.6	277.6	277.6	277.6
175°	281.3	281.3	281.3	281.3	281.3	280.1	278.4	277.6	278.0	278.8	279.3
177.5°	280.1	279.3	280.1	280.7	280.9	280.0	278.7	278.1	278.3	278.9	279.3
180°	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3



TEST NUMBER: P934434

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3
2.5°	1288.4	1281.1	1281.1	1269.1	1264.3	1260.8	1254.8	1236.7	1231.9	1227.1	1234.3
5°	1299.2	1286.0	1276.4	1254.8	1236.7	1229.5	1206.6	1163.4	1134.5	1112.9	1100.9
7.5°	1301.6	1284.8	1266.8	1233.1	1189.8	1170.6	1100.9	1021.6	1000.0	980.7	968.7
10°	1299.2	1280.0	1254.8	1204.3	1102.1	1068.5	998.7	947.0	933.8	930.2	933.8
12.5°	1290.8	1272.8	1237.9	1153.8	1010.8	988.0	947.0	917.0	914.6	920.6	953.0
15°	1276.4	1259.6	1218.6	1086.5	960.3	943.5	914.6	903.8	917.0	959.0	1056.5
17.5°	1261.9	1242.7	1192.3	1020.3	921.8	909.8	889.4	911.0	985.5	1042.0	1074.5
20°	1242.7	1219.9	1162.2	972.3	894.2	883.3	873.7	971.1	1027.6	1048.0	1066.0
22.5°	1219.9	1195.8	1121.3	938.7	865.3	856.9	862.9	1004.8	1027.6	1042.0	1057.6
25°	1189.8	1169.4	1073.3	912.2	842.5	832.9	855.7	1001.1	1014.3	1018.0	1049.2
27.5°	1162.2	1135.8	1022.8	888.2	814.9	811.2	861.7	985.5	995.1	998.7	1032.3
30°	1128.5	1088.8	966.3	862.9	786.0	784.8	862.9	966.3	963.9	973.5	1007.2
32.5°	1093.7	1019.2	902.5	831.7	758.4	757.2	854.5	937.5	935.0	948.3	973.5
35°	1061.3	965.1	816.0	795.7	723.5	724.7	834.0	903.8	905.0	917.0	932.7
37.5°	1027.6	918.2	721.1	756.0	689.9	689.9	806.4	872.5	870.2	873.7	895.4
40°	988.0	844.9	637.0	704.2	658.6	655.0	772.8	838.9	830.5	829.3	859.3
42.5°	945.8	764.4	574.5	635.7	622.6	617.7	731.9	798.0	782.4	786.0	824.5
45°	900.2	742.7	526.4	537.2	585.3	581.7	687.4	751.2	740.4	750.0	789.7
47.5°	854.5	699.5	510.8	445.9	545.6	544.4	638.2	705.5	699.5	709.1	751.2
50°	792.0	651.4	509.6	382.2	501.2	505.9	579.3	661.0	661.0	669.4	713.9
52.5°	711.5	592.5	462.7	346.1	449.5	463.9	527.6	622.6	624.9	633.4	673.0
55°	638.2	531.2	429.1	318.5	388.2	419.4	477.1	582.9	587.7	596.1	632.2
57.5°	570.9	442.3	421.9	286.1	331.7	361.8	432.6	544.4	546.9	554.1	588.9
60°	498.8	319.6	387.0	251.2	282.4	305.3	391.8	498.8	507.2	511.9	542.1
62.5°	417.1	232.0	350.9	227.1	258.4	263.2	358.1	455.5	466.3	469.9	487.9
65°	296.8	194.7	298.1	206.8	233.1	234.3	322.1	411.1	420.6	426.6	439.9
67.5°	200.7	158.6	227.1	187.5	213.9	215.1	287.3	359.3	372.6	377.4	385.8
70°	139.4	105.8	168.3	167.1	192.3	194.7	250.0	312.5	324.5	328.1	332.9
72.5°	102.2	85.3	139.4	150.3	169.5	171.8	211.5	259.6	271.6	275.3	277.6
75°	78.1	90.1	113.0	131.0	144.2	145.5	173.1	211.5	220.0	222.3	223.5
77.5°	62.5	84.1	83.0	105.8	117.8	115.3	135.8	163.5	170.6	170.6	170.6
80°	46.8	66.1	62.5	75.7	86.5	84.1	97.3	116.6	119.0	121.3	120.2
82.5°	34.8	42.0	42.0	48.0	57.7	55.3	64.9	75.7	75.7	75.7	78.1
85°	21.6	24.0	19.2	25.2	32.5	31.3	36.0	40.8	42.0	42.0	39.7
87.5°	13.2	10.8	6.0	9.6	14.5	14.5	16.8	18.0	16.8	16.8	16.8
90°	4.9	3.4	1.9	3.4	4.9	5.3	8.3	12.3	14.3	12.6	9.5
92.5°	33.0	20.2	7.5	20.2	33.0	36.2	50.8	70.4	80.2	70.3	50.5
95°	64.7	41.3	18.0	41.3	64.7	70.5	125.2	198.0	234.5	209.2	158.7
97.5°	72.2	51.7	31.1	51.7	72.2	77.4	168.6	290.2	350.9	335.0	303.1
100°	78.6	59.9	41.2	59.9	78.6	83.2	184.4	319.3	386.8	388.0	390.3
102.5°	84.7	67.3	49.8	67.3	84.7	89.1	191.7	328.5	396.9	417.3	457.9
105°	94.0	79.2	64.5	79.2	94.0	97.7	197.0	329.6	395.8	441.4	532.5
107.5°	107.0	93.2	79.5	93.2	107.0	110.4	198.0	314.9	373.3	436.9	564.1
110°	114.4	102.0	89.6	102.0	114.4	117.5	196.6	301.9	354.6	425.6	567.8



TEST NUMBER: P934434

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	123.2	111.3	99.5	111.3	123.2	126.2	196.6	290.5	337.5	410.2	555.7
115°	136.4	125.4	114.5	125.4	136.4	139.1	198.4	277.4	317.0	387.1	527.2
117.5°	149.2	139.3	129.4	139.3	149.2	151.6	202.1	269.3	303.0	366.2	492.7
120°	156.6	147.4	138.0	147.4	156.6	159.0	205.1	266.6	297.4	355.1	470.7
122.5°	165.3	155.9	146.5	155.9	165.3	167.6	209.4	265.2	293.0	345.0	449.2
125°	176.5	167.9	159.4	167.9	176.5	178.7	215.2	264.0	288.4	332.6	421.0
127.5°	187.2	178.6	169.8	178.6	187.2	189.4	221.0	263.3	284.4	322.4	398.2
130°	194.1	184.8	175.5	184.8	194.1	196.5	225.3	263.7	282.9	316.7	384.3
132.5°	199.9	190.7	181.3	190.7	199.9	202.3	228.8	264.0	281.6	311.8	372.3
135°	206.9	198.4	189.9	198.4	206.9	209.0	232.5	263.7	279.3	304.6	355.3
137.5°	215.6	207.1	198.8	207.1	215.6	217.7	238.1	265.3	279.0	300.4	343.2
140°	221.6	213.8	206.0	213.8	221.6	223.5	241.5	265.6	277.6	296.2	333.2
142.5°	226.0	218.9	211.7	218.9	226.0	227.8	244.4	266.5	277.6	293.9	326.4
145°	232.8	226.5	220.3	226.5	232.8	234.3	248.1	266.6	275.8	289.1	315.6
147.5°	241.1	235.1	229.0	235.1	241.1	242.6	253.7	268.4	275.8	286.3	307.2
150°	245.5	240.0	234.5	240.0	245.5	246.9	256.5	269.3	275.8	284.6	302.3
152.5°	248.7	244.5	240.3	244.5	248.7	249.7	258.4	270.0	275.8	283.4	298.5
155°	255.2	252.1	249.0	252.1	255.2	255.9	262.5	271.3	275.8	281.8	293.8
157.5°	261.3	258.3	255.3	258.3	261.3	262.1	266.6	272.7	275.8	280.4	289.8
160°	264.3	262.0	259.7	262.0	264.3	264.9	268.5	273.3	275.8	279.8	287.8
162.5°	267.4	265.7	264.0	265.7	267.4	267.9	270.5	274.1	275.8	279.2	285.9
165°	271.9	270.3	268.7	270.3	271.9	272.3	273.4	275.0	275.8	278.2	283.0
167.5°	274.4	273.7	273.0	273.7	274.4	274.6	275.6	277.0	277.6	279.3	282.4
170°	277.3	276.5	275.8	276.5	277.3	277.4	277.5	277.6	277.6	279.3	282.4
172.5°	277.6	277.4	277.3	277.4	277.6	277.6	277.6	277.6	277.6	278.9	281.4
175°	279.3	279.3	279.3	279.3	279.3	279.3	278.8	278.0	277.6	278.4	280.1
177.5°	279.3	279.3	279.3	279.3	279.3	279.3	278.9	278.3	278.1	278.7	280.0
180°	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3



TEST NUMBER: P934434

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3	1270.3
2.5°	1225.9	1222.3	1227.1	1213.8	1227.1	1222.3	1225.9	1234.3	1227.1	1231.9	1236.7
5°	1075.6	1069.6	1050.4	1034.8	1050.4	1069.6	1075.6	1100.9	1112.9	1134.5	1163.4
7.5°	961.5	956.7	951.8	942.2	951.8	956.7	961.5	968.7	980.7	1000.0	1021.6
10°	936.2	937.5	944.7	943.5	944.7	937.5	936.2	933.8	930.2	933.8	947.0
12.5°	1001.1	1012.0	1051.6	1049.2	1051.6	1012.0	1001.1	953.0	920.6	914.6	917.0
15°	1075.6	1079.3	1087.7	1088.8	1087.7	1079.3	1075.6	1056.5	959.0	917.0	903.8
17.5°	1082.8	1084.1	1090.1	1090.1	1090.1	1084.1	1082.8	1074.5	1042.0	985.5	911.0
20°	1076.8	1079.3	1091.3	1093.7	1091.3	1079.3	1076.8	1066.0	1048.0	1027.6	971.1
22.5°	1074.5	1079.3	1088.8	1087.7	1088.8	1079.3	1074.5	1057.6	1042.0	1027.6	1004.8
25°	1062.5	1062.5	1063.6	1064.8	1063.6	1062.5	1062.5	1049.2	1018.0	1014.3	1001.1
27.5°	1037.2	1039.6	1046.8	1045.6	1046.8	1039.6	1037.2	1032.3	998.7	995.1	985.5
30°	1014.3	1012.0	1006.0	1001.1	1006.0	1012.0	1014.3	1007.2	973.5	963.9	966.3
32.5°	975.9	969.9	963.9	960.3	963.9	969.9	975.9	973.5	948.3	935.0	937.5
35°	930.2	931.5	930.2	926.6	930.2	931.5	930.2	932.7	917.0	905.0	903.8
37.5°	897.8	900.2	899.0	894.2	899.0	900.2	897.8	895.4	873.7	870.2	872.5
40°	864.2	865.3	864.2	860.5	864.2	865.3	864.2	859.3	829.3	830.5	838.9
42.5°	831.7	830.5	826.9	824.5	826.9	830.5	831.7	824.5	786.0	782.4	798.0
45°	794.4	795.7	788.4	784.8	788.4	795.7	794.4	789.7	750.0	740.4	751.2
47.5°	757.2	757.2	751.2	747.5	751.2	757.2	757.2	751.2	709.1	699.5	705.5
50°	717.5	716.3	707.9	706.7	707.9	716.3	717.5	713.9	669.4	661.0	661.0
52.5°	671.9	671.9	673.0	675.4	673.0	671.9	671.9	673.0	633.4	624.9	622.6
55°	632.2	633.4	641.7	644.2	641.7	633.4	632.2	632.2	596.1	587.7	582.9
57.5°	591.3	591.3	597.4	597.4	597.4	591.3	591.3	588.9	554.1	546.9	544.4
60°	544.4	546.9	551.6	550.4	551.6	546.9	544.4	542.1	511.9	507.2	498.8
62.5°	495.1	497.6	498.8	496.4	498.8	497.6	495.1	487.9	469.9	466.3	455.5
65°	443.4	445.9	447.1	444.7	447.1	445.9	443.4	439.9	426.6	420.6	411.1
67.5°	390.6	389.4	388.2	393.0	388.2	389.4	390.6	385.8	377.4	372.6	359.3
70°	336.5	336.5	335.3	337.7	335.3	336.5	336.5	332.9	328.1	324.5	312.5
72.5°	278.8	277.6	282.4	278.8	282.4	277.6	278.8	277.6	275.3	271.6	259.6
75°	222.3	224.8	222.3	226.0	222.3	224.8	222.3	223.5	222.3	220.0	211.5
77.5°	169.5	171.8	169.5	169.5	169.5	171.8	169.5	170.6	170.6	170.6	163.5
80°	120.2	119.0	119.0	117.8	119.0	119.0	120.2	120.2	121.3	119.0	116.6
82.5°	77.0	75.7	75.7	78.1	75.7	75.7	77.0	78.1	75.7	75.7	75.7
85°	42.0	43.3	40.8	40.8	40.8	43.3	42.0	39.7	42.0	42.0	40.8
87.5°	15.6	14.5	14.5	14.5	14.5	14.5	15.6	16.8	16.8	16.8	18.0
90°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	9.5	12.6	14.3	12.3
92.5°	35.7	34.2	28.6	22.8	28.6	34.2	35.7	50.5	70.3	80.2	70.4
95°	120.9	116.6	99.4	82.3	99.4	116.6	120.9	158.7	209.2	234.5	198.0
97.5°	279.2	271.0	238.3	205.7	238.3	271.0	279.2	303.1	335.0	350.9	290.2
100°	392.1	382.3	343.4	304.5	343.4	382.3	392.1	390.3	388.0	386.8	319.3
102.5°	488.4	480.0	446.7	413.4	446.7	480.0	488.4	457.9	417.3	396.9	328.5
105°	600.9	596.4	578.5	560.6	578.5	596.4	600.9	532.5	441.4	395.8	329.6
107.5°	659.4	660.5	664.8	669.1	664.8	660.5	659.4	564.1	436.9	373.3	314.9
110°	674.4	679.0	697.7	716.3	697.7	679.0	674.4	567.8	425.6	354.6	301.9



TEST NUMBER: P934434

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	664.9	672.0	700.7	729.3	700.7	672.0	664.9	555.7	410.2	337.5	290.5
115°	632.4	642.3	682.0	721.8	682.0	642.3	632.4	527.2	387.1	317.0	277.4
117.5°	587.5	598.5	642.7	686.8	642.7	598.5	587.5	492.7	366.2	303.0	269.3
120°	557.4	568.2	610.9	653.8	610.9	568.2	557.4	470.7	355.1	297.4	266.6
122.5°	527.2	537.8	580.1	622.3	580.1	537.8	527.2	449.2	345.0	293.0	265.2
125°	487.3	497.0	535.9	574.8	535.9	497.0	487.3	421.0	332.6	288.4	264.0
127.5°	455.2	463.4	496.2	529.0	496.2	463.4	455.2	398.2	322.4	284.4	263.3
130°	435.0	442.5	472.9	503.2	472.9	442.5	435.0	384.3	316.7	282.9	263.7
132.5°	417.7	424.5	451.6	478.8	451.6	424.5	417.7	372.3	311.8	281.6	264.0
135°	393.3	399.1	422.6	446.0	422.6	399.1	393.3	355.3	304.6	279.3	263.7
137.5°	375.3	380.1	399.2	418.4	399.2	380.1	375.3	343.2	300.4	279.0	265.3
140°	360.9	365.4	383.3	401.2	383.3	365.4	360.9	333.2	296.2	277.6	265.6
142.5°	350.8	354.6	370.0	385.5	370.0	354.6	350.8	326.4	293.9	277.6	266.5
145°	335.6	338.5	350.2	361.9	350.2	338.5	335.6	315.6	289.1	275.8	266.6
147.5°	322.8	325.3	334.9	344.6	334.9	325.3	322.8	307.2	286.3	275.8	268.4
150°	315.6	317.6	325.4	333.2	325.4	317.6	315.6	302.3	284.6	275.8	269.3
152.5°	309.7	311.2	317.1	323.0	317.1	311.2	309.7	298.5	283.4	275.8	270.0
155°	302.8	303.8	307.7	311.6	307.7	303.8	302.8	293.8	281.8	275.8	271.3
157.5°	296.8	297.5	300.3	303.0	300.3	297.5	296.8	289.8	280.4	275.8	272.7
160°	293.8	294.2	295.8	297.4	295.8	294.2	293.8	287.8	279.8	275.8	273.3
162.5°	291.0	291.4	292.9	294.4	292.9	291.4	291.0	285.9	279.2	275.8	274.1
165°	286.6	287.0	288.6	290.3	288.6	287.0	286.6	283.0	278.2	275.8	275.0
167.5°	284.8	285.0	285.6	286.3	285.6	285.0	284.8	282.4	279.3	277.6	277.0
170°	284.8	284.8	284.8	284.8	284.8	284.8	284.8	282.4	279.3	277.6	277.6
172.5°	283.3	283.1	282.5	282.0	282.5	283.1	283.3	281.4	278.9	277.6	277.6
175°	281.3	281.3	281.3	281.3	281.3	281.3	281.3	280.1	278.4	277.6	278.0
177.5°	280.9	280.7	280.1	279.3	280.1	280.7	280.9	280.0	278.7	278.1	278.3
180°	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3



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CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	1270.3	1270.3	1270.3	1270.3	1270.3
2.5°	1254.8	1260.8	1264.3	1269.1	1281.1
5°	1206.6	1229.5	1236.7	1254.8	1276.4
7.5°	1100.9	1170.6	1189.8	1233.1	1266.8
10°	998.7	1068.5	1102.1	1204.3	1254.8
12.5°	947.0	988.0	1010.8	1153.8	1237.9
15°	914.6	943.5	960.3	1086.5	1218.6
17.5°	889.4	909.8	921.8	1020.3	1192.3
20°	873.7	883.3	894.2	972.3	1162.2
22.5°	862.9	856.9	865.3	938.7	1121.3
25°	855.7	832.9	842.5	912.2	1073.3
27.5°	861.7	811.2	814.9	888.2	1022.8
30°	862.9	784.8	786.0	862.9	966.3
32.5°	854.5	757.2	758.4	831.7	902.5
35°	834.0	724.7	723.5	795.7	816.0
37.5°	806.4	689.9	689.9	756.0	721.1
40°	772.8	655.0	658.6	704.2	637.0
42.5°	731.9	617.7	622.6	635.7	574.5
45°	687.4	581.7	585.3	537.2	526.4
47.5°	638.2	544.4	545.6	445.9	510.8
50°	579.3	505.9	501.2	382.2	509.6
52.5°	527.6	463.9	449.5	346.1	462.7
55°	477.1	419.4	388.2	318.5	429.1
57.5°	432.6	361.8	331.7	286.1	421.9
60°	391.8	305.3	282.4	251.2	387.0
62.5°	358.1	263.2	258.4	227.1	350.9
65°	322.1	234.3	233.1	206.8	298.1
67.5°	287.3	215.1	213.9	187.5	227.1
70°	250.0	194.7	192.3	167.1	168.3
72.5°	211.5	171.8	169.5	150.3	139.4
75°	173.1	145.5	144.2	131.0	113.0
77.5°	135.8	115.3	117.8	105.8	83.0
80°	97.3	84.1	86.5	75.7	62.5
82.5°	64.9	55.3	57.7	48.0	42.0
85°	36.0	31.3	32.5	25.2	19.2
87.5°	16.8	14.5	14.5	9.6	6.0
90°	8.3	5.3	4.9	3.4	1.9
92.5°	50.8	36.2	33.0	20.2	7.5
95°	125.2	70.5	64.7	41.3	18.0
97.5°	168.6	77.4	72.2	51.7	31.1
100°	184.4	83.2	78.6	59.9	41.2
102.5°	191.7	89.1	84.7	67.3	49.8
105°	197.0	97.7	94.0	79.2	64.5
107.5°	198.0	110.4	107.0	93.2	79.5
110°	196.6	117.5	114.4	102.0	89.6



TEST NUMBER: P934434

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	196.6	126.2	123.2	111.3	99.5
115°	198.4	139.1	136.4	125.4	114.5
117.5°	202.1	151.6	149.2	139.3	129.4
120°	205.1	159.0	156.6	147.4	138.0
122.5°	209.4	167.6	165.3	155.9	146.5
125°	215.2	178.7	176.5	167.9	159.4
127.5°	221.0	189.4	187.2	178.6	169.8
130°	225.3	196.5	194.1	184.8	175.5
132.5°	228.8	202.3	199.9	190.7	181.3
135°	232.5	209.0	206.9	198.4	189.9
137.5°	238.1	217.7	215.6	207.1	198.8
140°	241.5	223.5	221.6	213.8	206.0
142.5°	244.4	227.8	226.0	218.9	211.7
145°	248.1	234.3	232.8	226.5	220.3
147.5°	253.7	242.6	241.1	235.1	229.0
150°	256.5	246.9	245.5	240.0	234.5
152.5°	258.4	249.7	248.7	244.5	240.3
155°	262.5	255.9	255.2	252.1	249.0
157.5°	266.6	262.1	261.3	258.3	255.3
160°	268.5	264.9	264.3	262.0	259.7
162.5°	270.5	267.9	267.4	265.7	264.0
165°	273.4	272.3	271.9	270.3	268.7
167.5°	275.6	274.6	274.4	273.7	273.0
170°	277.5	277.4	277.3	276.5	275.8
172.5°	277.6	277.6	277.6	277.4	277.3
175°	278.8	279.3	279.3	279.3	279.3
177.5°	278.9	279.3	279.3	279.3	279.3
180°	279.3	279.3	279.3	279.3	279.3



TEST NUMBER: P934434

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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	14.61	15.62	15.43	16.46	17.51	17.40	18.41	18.23	19.26	20.31
	3H	15.10	16.00	15.93	16.86	17.93	18.75	19.66	19.59	20.51	21.59
	4H	15.29	16.15	16.15	17.01	18.10	19.20	20.05	20.05	20.91	22.00
	6H	15.42	16.21	16.29	17.08	18.18	19.48	20.27	20.34	21.14	22.24
	8H	15.43	16.18	16.30	17.06	18.16	19.56	20.31	20.43	21.19	22.29
	12H	15.40	16.12	16.28	17.00	18.12	19.60	20.31	20.47	21.19	22.32
4H	2H	15.65	16.51	16.51	17.37	18.45	17.83	18.69	18.69	19.55	20.64
	3H	16.69	17.40	17.56	18.30	19.40	19.34	20.06	20.21	20.95	22.05
	4H	16.97	17.62	17.85	18.51	19.64	19.87	20.52	20.75	21.41	22.54
	6H	17.11	17.67	18.00	18.58	19.71	20.24	20.80	21.13	21.71	22.84
	8H	17.12	17.64	18.01	18.55	19.69	20.34	20.87	21.24	21.77	22.92
	12H	17.09	17.56	18.01	18.49	19.64	20.40	20.87	21.32	21.80	22.95
8H	4H	17.43	17.96	18.33	18.87	20.01	20.01	20.53	20.91	21.44	22.59
	6H	17.70	18.13	18.63	19.09	20.23	20.44	20.88	21.37	21.83	22.97
	8H	17.75	18.13	18.68	19.07	20.23	20.59	20.98	21.53	21.92	23.08
	12H	17.74	18.07	18.67	19.01	20.22	20.69	21.03	21.63	21.96	23.18
12H	4H	17.45	17.92	18.36	18.85	19.99	19.98	20.45	20.90	21.38	22.53
	6H	17.76	18.15	18.70	19.09	20.25	20.44	20.83	21.38	21.77	22.93
	8H	17.84	18.17	18.77	19.11	20.32	20.61	20.94	21.54	21.88	23.09