

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: P934485

Luminaire Tested: SQ4-FA-050U-100D-B2750-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934485
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-B2750-1D-UNV-STD-W-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

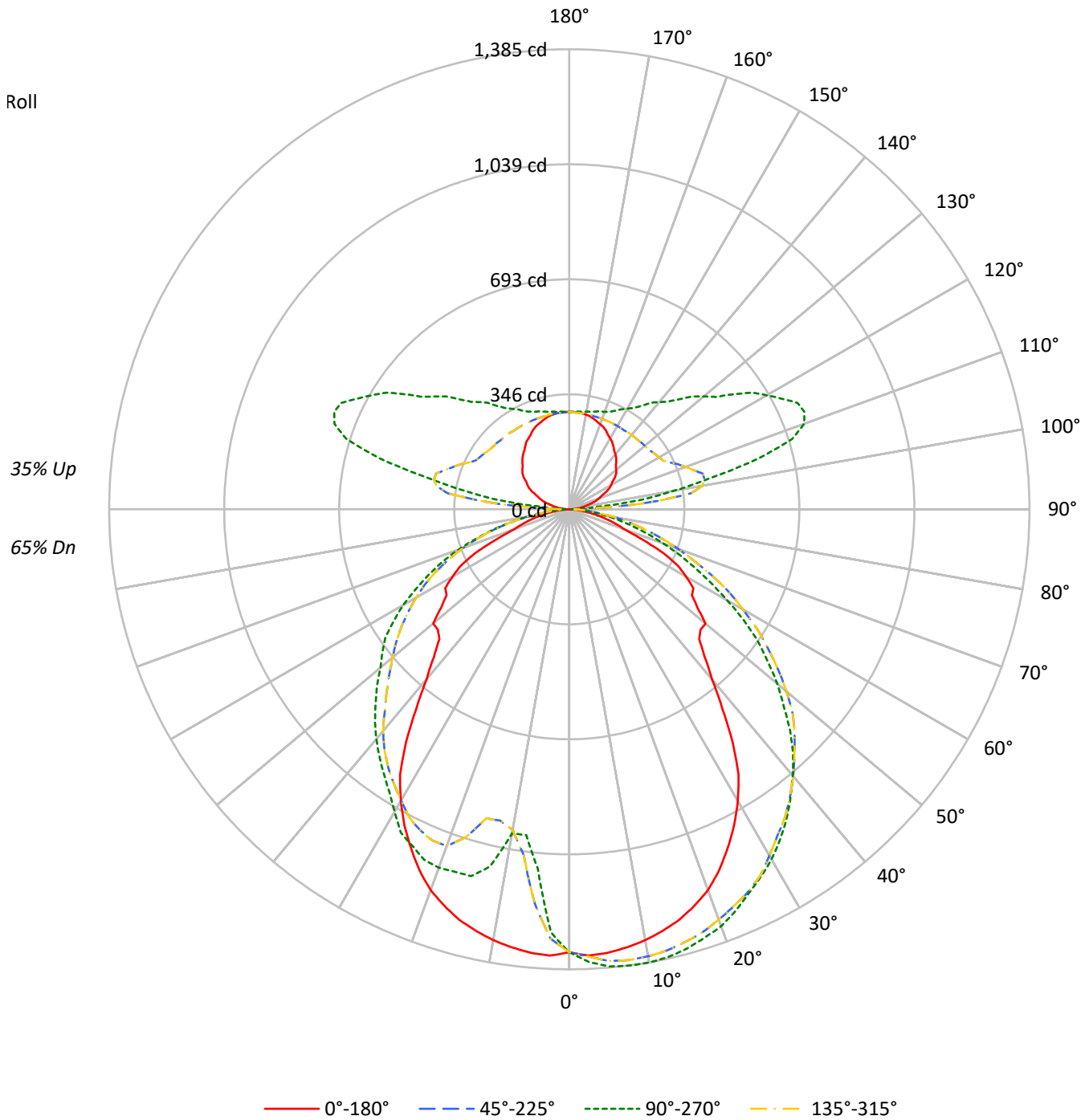
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5360.4 lumens
Efficiency: N/A
Efficacy: 118.6 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





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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12376	12376	12376	12376
5°	12455	12493	12455	9823
10°	12358	12306	12358	8798
15°	12209	12039	12209	10052
20°	11940	11723	11940	10074
25°	11404	11263	11404	9860
30°	10715	10880	10715	9392
35°	9538	10397	9538	8877
40°	7935	9827	7935	8487
45°	7076	9161	7076	8041
50°	7500	8366	7500	7591
55°	7037	7510	7037	7331
60°	7227	6376	7227	6715
65°	6523	5271	6523	5893
70°	4486	4202	4486	4940
75°	3889	3106	3889	3719
80°	3070	2052	3070	2236
85°	1673	1086	1673	924

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 10866 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.4	2.2
10°-20°	341.8	6.4
20°-30°	528.4	9.9
30°-40°	630.8	11.8
40°-50°	634.5	11.8
50°-60°	552.1	10.3
60°-70°	391.4	7.3
70°-80°	207.1	3.9
80°-90°	52.7	1.0
90°-100°	142.9	2.7
100°-110°	375.9	7.0
110°-120°	389.7	7.3
120°-130°	312.6	5.8
130°-140°	245.3	4.6
140°-150°	188.3	3.5
150°-160°	135.6	2.5
160°-170°	83.0	1.5
170°-180°	28.0	0.5
0°-30°	990.6	18.5
0°-40°	1621.4	30.2
0°-60°	2808.0	52.4
0°-90°	3459.2	64.5
90°-120°	908.5	16.9
90°-150°	1654.7	30.9
90°-180°	1901.0	35.5
0°-180°	5360.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1334	1334	1334	1334	1334	
5°	1340	1382	1340	1086	1340	127
15°	1279	1369	1279	1143	1279	360
25°	1127	1277	1127	1118	1127	517
35°	857	1139	857	973	857	530
45°	553	939	553	824	553	443
55°	450	693	450	676	450	414
65°	313	418	313	467	313	299
75°	119	198	119	237	119	125
85°	20	50	20	43	20	27
90°	2	7	2	7	2	2
95°	19	86	19	86	19	21
105°	68	589	68	589	68	72
115°	120	758	120	758	120	119
125°	167	604	167	604	167	149
135°	199	468	199	468	199	154
145°	231	380	231	380	231	145
155°	261	327	261	327	261	120
165°	282	305	282	305	282	80
175°	293	295	293	295	293	28
180°	293	293	293	293	293	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7
2.5°	1345.0	1345.0	1352.7	1355.1	1355.1	1351.3	1347.6	1351.3	1362.7	1366.5	1365.3
5°	1340.1	1350.1	1364.0	1366.5	1369.0	1367.8	1365.3	1367.8	1380.4	1382.9	1384.2
7.5°	1329.9	1348.8	1366.5	1370.3	1374.1	1370.3	1369.0	1371.6	1384.2	1386.7	1386.7
10°	1317.3	1343.8	1364.0	1366.5	1370.3	1366.5	1366.5	1371.6	1384.2	1386.7	1388.0
12.5°	1299.7	1336.2	1355.1	1357.7	1362.7	1361.4	1360.2	1365.3	1377.9	1380.4	1380.4
15°	1279.4	1322.4	1340.1	1342.5	1351.3	1348.8	1348.8	1353.9	1367.8	1371.6	1370.3
17.5°	1251.7	1304.7	1324.9	1328.7	1335.0	1333.7	1335.0	1340.1	1352.7	1355.1	1356.4
20°	1220.1	1280.8	1304.7	1308.4	1314.7	1314.7	1314.7	1321.1	1333.7	1338.7	1338.7
22.5°	1177.2	1255.4	1280.8	1283.2	1290.8	1290.8	1293.4	1302.1	1313.5	1314.7	1314.7
25°	1126.8	1227.7	1249.1	1256.8	1264.3	1268.0	1271.9	1276.9	1280.8	1279.4	1280.8
27.5°	1073.8	1192.4	1220.1	1225.2	1235.3	1239.1	1244.1	1245.4	1246.7	1250.4	1247.9
30°	1014.5	1143.1	1184.8	1189.8	1206.3	1208.7	1203.8	1206.3	1212.6	1215.1	1217.6
32.5°	947.6	1070.0	1148.2	1159.6	1174.7	1167.1	1165.9	1169.7	1179.8	1179.8	1182.3
35°	856.7	1013.3	1114.2	1124.2	1135.6	1126.8	1131.8	1133.1	1139.4	1143.1	1141.9
37.5°	757.0	964.0	1078.9	1086.4	1095.2	1083.8	1091.5	1095.2	1100.3	1097.8	1097.8
40°	668.8	887.0	1037.2	1042.2	1049.8	1041.0	1048.5	1051.1	1053.6	1051.1	1049.8
42.5°	603.2	802.5	993.0	999.3	994.3	1000.6	1003.1	1008.2	1004.4	999.3	999.3
45°	552.7	779.8	945.1	952.6	945.1	955.2	958.9	958.9	947.6	945.1	943.8
47.5°	536.2	734.4	897.1	897.1	893.3	905.9	912.3	903.4	892.1	888.3	888.3
50°	535.0	683.9	831.5	826.5	844.1	859.3	853.0	844.1	835.3	821.4	821.4
52.5°	485.8	622.1	747.0	765.9	793.7	802.5	792.4	783.6	768.4	762.1	757.0
55°	450.5	557.7	670.0	707.8	736.9	748.2	729.3	720.5	697.7	694.0	691.4
57.5°	442.9	464.3	599.4	647.3	682.6	681.4	670.0	653.6	634.7	630.9	629.6
60°	406.3	335.6	523.6	580.4	617.0	613.2	603.2	588.0	570.3	567.8	565.3
62.5°	368.4	243.5	437.9	502.2	553.9	552.7	543.9	521.1	508.5	502.2	497.2
65°	313.0	204.4	311.6	417.6	492.1	494.6	475.7	459.3	445.4	437.9	436.5
67.5°	238.5	166.6	210.7	348.3	432.8	430.2	406.3	398.7	381.0	377.2	369.7
70°	176.7	111.1	146.4	282.7	374.7	368.4	349.5	340.6	324.3	315.4	310.4
72.5°	146.4	89.6	107.2	219.6	315.4	307.9	291.5	281.3	267.5	260.0	254.9
75°	118.6	94.6	82.0	162.7	256.1	251.1	236.0	225.9	214.5	204.4	205.7
77.5°	87.1	88.3	65.6	119.9	203.1	195.6	186.7	174.1	169.0	159.0	159.0
80°	65.6	69.4	49.2	82.0	146.4	146.4	138.8	130.0	121.1	116.1	116.1
82.5°	44.1	44.1	36.6	51.8	99.7	95.9	90.8	88.3	83.3	80.8	80.8
85°	20.2	25.2	22.7	31.5	54.2	56.8	56.8	54.2	53.0	50.4	51.8
87.5°	6.3	11.4	13.8	17.7	27.8	29.0	30.3	30.3	30.3	31.5	31.5
90°	2.0	3.5	5.2	5.5	8.7	12.9	15.0	13.3	9.9	7.4	7.4
92.5°	7.8	21.2	34.7	38.0	53.4	73.9	84.2	73.8	53.0	37.4	35.9
95°	18.9	43.4	67.9	74.0	131.4	207.9	246.2	219.6	166.6	126.9	122.4
97.5°	32.7	54.2	75.8	81.3	177.0	304.6	368.4	351.7	318.2	293.1	284.5
100°	43.3	62.8	82.5	87.4	193.6	335.2	406.1	407.3	409.8	411.6	401.4
102.5°	52.3	70.7	88.9	93.5	201.2	344.9	416.7	438.1	480.7	512.7	504.0
105°	67.7	83.2	98.7	102.6	206.9	346.0	415.5	463.4	559.1	630.9	626.2
107.5°	83.5	97.9	112.3	115.9	207.9	330.6	391.9	458.7	592.2	692.3	693.4
110°	94.1	107.1	120.1	123.4	206.4	317.0	372.3	446.8	596.1	708.0	712.9



TEST NUMBER: P934485

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	104.5	116.9	129.3	132.5	206.4	305.0	354.3	430.7	583.4	698.0	705.6
115°	120.2	131.7	143.2	146.0	208.3	291.3	332.8	406.4	553.5	663.9	674.3
117.5°	135.8	146.2	156.6	159.2	212.2	282.8	318.1	384.5	517.2	616.8	628.4
120°	144.9	154.7	164.5	166.9	215.4	279.9	312.2	372.8	494.2	585.2	596.5
122.5°	153.8	163.7	173.5	176.0	219.8	278.4	307.6	362.2	471.6	553.5	564.6
125°	167.3	176.3	185.3	187.6	226.0	277.1	302.7	349.1	442.0	511.6	521.8
127.5°	178.3	187.5	196.5	198.8	232.1	276.5	298.6	338.5	418.1	477.9	486.5
130°	184.2	194.1	203.8	206.3	236.6	276.9	297.0	332.5	403.5	456.7	464.6
132.5°	190.3	200.2	209.9	212.4	240.2	277.1	295.7	327.4	390.9	438.5	445.7
135°	199.4	208.3	217.3	219.5	244.1	276.9	293.3	319.8	373.0	412.9	419.1
137.5°	208.7	217.5	226.3	228.5	250.0	278.6	292.9	315.3	360.3	394.0	399.1
140°	216.3	224.4	232.6	234.6	253.6	278.9	291.5	310.9	349.8	378.9	383.6
142.5°	222.2	229.8	237.2	239.1	256.6	279.8	291.5	308.6	342.7	368.2	372.3
145°	231.3	237.8	244.4	246.0	260.5	279.9	289.6	303.5	331.4	352.3	355.4
147.5°	240.4	246.8	253.1	254.7	266.3	281.8	289.6	300.5	322.5	338.9	341.5
150°	246.2	251.9	257.8	259.2	269.3	282.8	289.6	298.8	317.3	331.3	333.4
152.5°	252.3	256.7	261.1	262.1	271.3	283.4	289.6	297.5	313.3	325.2	326.7
155°	261.4	264.6	267.9	268.6	275.6	284.9	289.6	295.9	308.5	317.9	319.0
157.5°	268.1	271.2	274.4	275.1	279.9	286.3	289.6	294.4	304.3	311.6	312.4
160°	272.7	275.0	277.5	278.1	281.9	287.0	289.6	293.8	302.2	308.5	308.8
162.5°	277.1	279.0	280.8	281.2	284.0	287.7	289.6	293.1	300.2	305.5	305.9
165°	282.1	283.7	285.4	285.8	287.1	288.7	289.6	292.0	297.1	300.9	301.3
167.5°	286.6	287.4	288.1	288.3	289.4	290.8	291.5	293.2	296.5	299.0	299.2
170°	289.6	290.3	291.1	291.3	291.4	291.5	291.5	293.2	296.5	299.0	299.0
172.5°	291.1	291.3	291.5	291.5	291.5	291.5	291.5	292.8	295.4	297.4	297.2
175°	293.3	293.3	293.3	293.3	292.7	291.8	291.5	292.3	294.0	295.3	295.3
177.5°	293.3	293.3	293.3	293.3	292.8	292.2	291.9	292.6	293.9	294.9	294.7
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7
2.5°	1367.8	1364.0	1367.8	1365.3	1366.5	1362.7	1351.3	1347.6	1351.3	1355.1	1355.1
5°	1384.2	1381.7	1384.2	1384.2	1382.9	1380.4	1367.8	1365.3	1367.8	1369.0	1366.5
7.5°	1389.2	1385.4	1389.2	1386.7	1386.7	1384.2	1371.6	1369.0	1370.3	1374.1	1370.3
10°	1389.2	1385.4	1389.2	1388.0	1386.7	1384.2	1371.6	1366.5	1366.5	1370.3	1366.5
12.5°	1382.9	1380.4	1382.9	1380.4	1380.4	1377.9	1365.3	1360.2	1361.4	1362.7	1357.7
15°	1372.8	1369.0	1372.8	1370.3	1371.6	1367.8	1353.9	1348.8	1348.8	1351.3	1342.5
17.5°	1357.7	1352.7	1357.7	1356.4	1355.1	1352.7	1340.1	1335.0	1333.7	1335.0	1328.7
20°	1340.1	1336.2	1340.1	1338.7	1338.7	1333.7	1321.1	1314.7	1314.7	1314.7	1308.4
22.5°	1312.3	1308.4	1312.3	1314.7	1314.7	1313.5	1302.1	1293.4	1290.8	1290.8	1283.2
25°	1280.8	1276.9	1280.8	1280.8	1279.4	1280.8	1276.9	1271.9	1268.0	1264.3	1256.8
27.5°	1250.4	1247.9	1250.4	1247.9	1250.4	1246.7	1245.4	1244.1	1239.1	1235.3	1225.2
30°	1220.1	1217.6	1220.1	1217.6	1215.1	1212.6	1206.3	1203.8	1208.7	1206.3	1189.8
32.5°	1182.3	1179.8	1182.3	1182.3	1179.8	1179.8	1169.7	1165.9	1167.1	1174.7	1159.6
35°	1143.1	1139.4	1143.1	1141.9	1143.1	1139.4	1133.1	1131.8	1126.8	1135.6	1124.2
37.5°	1097.8	1094.0	1097.8	1097.8	1097.8	1100.3	1095.2	1091.5	1083.8	1095.2	1086.4
40°	1051.1	1046.0	1051.1	1049.8	1051.1	1053.6	1051.1	1048.5	1041.0	1049.8	1042.2
42.5°	998.1	996.8	998.1	999.3	999.3	1004.4	1008.2	1003.1	1000.6	994.3	999.3
45°	941.2	938.8	941.2	943.8	945.1	947.6	958.9	958.9	955.2	945.1	952.6
47.5°	880.7	874.4	880.7	888.3	888.3	892.1	903.4	912.3	905.9	893.3	897.1
50°	816.3	817.7	816.3	821.4	821.4	835.3	844.1	853.0	859.3	844.1	826.5
52.5°	753.3	752.1	753.3	757.0	762.1	768.4	783.6	792.4	802.5	793.7	765.9
55°	690.2	692.8	690.2	691.4	694.0	697.7	720.5	729.3	748.2	736.9	707.8
57.5°	627.1	623.3	627.1	629.6	630.9	634.7	653.6	670.0	681.4	682.6	647.3
60°	553.9	548.8	553.9	565.3	567.8	570.3	588.0	603.2	613.2	617.0	580.4
62.5°	489.5	480.7	489.5	497.2	502.2	508.5	521.1	543.9	552.7	553.9	502.2
65°	421.4	417.6	421.4	436.5	437.9	445.4	459.3	475.7	494.6	492.1	417.6
67.5°	359.7	359.7	359.7	369.7	377.2	381.0	398.7	406.3	430.2	432.8	348.3
70°	302.8	301.6	302.8	310.4	315.4	324.3	340.6	349.5	368.4	374.7	282.7
72.5°	248.6	247.3	248.6	254.9	260.0	267.5	281.3	291.5	307.9	315.4	219.6
75°	200.6	198.1	200.6	205.7	204.4	214.5	225.9	236.0	251.1	256.1	162.7
77.5°	153.9	153.9	153.9	159.0	159.0	169.0	174.1	186.7	195.6	203.1	119.9
80°	114.8	113.5	114.8	116.1	116.1	121.1	130.0	138.8	146.4	146.4	82.0
82.5°	80.8	78.2	80.8	80.8	80.8	83.3	88.3	90.8	95.9	99.7	51.8
85°	50.4	50.4	50.4	51.8	50.4	53.0	54.2	56.8	56.8	54.2	31.5
87.5°	32.9	31.5	32.9	31.5	31.5	30.3	30.3	30.3	29.0	27.8	17.7
90°	7.4	7.4	7.4	7.4	7.4	9.9	13.3	15.0	12.9	8.7	5.5
92.5°	30.0	24.0	30.0	35.9	37.4	53.0	73.8	84.2	73.9	53.4	38.0
95°	104.4	86.4	104.4	122.4	126.9	166.6	219.6	246.2	207.9	131.4	74.0
97.5°	250.2	215.9	250.2	284.5	293.1	318.2	351.7	368.4	304.6	177.0	81.3
100°	360.5	319.6	360.5	401.4	411.6	409.8	407.3	406.1	335.2	193.6	87.4
102.5°	469.0	434.0	469.0	504.0	512.7	480.7	438.1	416.7	344.9	201.2	93.5
105°	607.4	588.6	607.4	626.2	630.9	559.1	463.4	415.5	346.0	206.9	102.6
107.5°	697.9	702.5	697.9	693.4	692.3	592.2	458.7	391.9	330.6	207.9	115.9
110°	732.5	752.1	732.5	712.9	708.0	596.1	446.8	372.3	317.0	206.4	123.4



TEST NUMBER: P934485

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	735.6	765.7	735.6	705.6	698.0	583.4	430.7	354.3	305.0	206.4	132.5
115°	716.1	757.8	716.1	674.3	663.9	553.5	406.4	332.8	291.3	208.3	146.0
117.5°	674.7	721.0	674.7	628.4	616.8	517.2	384.5	318.1	282.8	212.2	159.2
120°	641.4	686.4	641.4	596.5	585.2	494.2	372.8	312.2	279.9	215.4	166.9
122.5°	609.0	653.3	609.0	564.6	553.5	471.6	362.2	307.6	278.4	219.8	176.0
125°	562.6	603.5	562.6	521.8	511.6	442.0	349.1	302.7	277.1	226.0	187.6
127.5°	521.0	555.4	521.0	486.5	477.9	418.1	338.5	298.6	276.5	232.1	198.8
130°	496.5	528.3	496.5	464.6	456.7	403.5	332.5	297.0	276.9	236.6	206.3
132.5°	474.2	502.7	474.2	445.7	438.5	390.9	327.4	295.7	277.1	240.2	212.4
135°	443.7	468.2	443.7	419.1	412.9	373.0	319.8	293.3	276.9	244.1	219.5
137.5°	419.1	439.3	419.1	399.1	394.0	360.3	315.3	292.9	278.6	250.0	228.5
140°	402.4	421.3	402.4	383.6	378.9	349.8	310.9	291.5	278.9	253.6	234.6
142.5°	388.5	404.7	388.5	372.3	368.2	342.7	308.6	291.5	279.8	256.6	239.1
145°	367.7	379.9	367.7	355.4	352.3	331.4	303.5	289.6	279.9	260.5	246.0
147.5°	351.6	361.8	351.6	341.5	338.9	322.5	300.5	289.6	281.8	266.3	254.7
150°	341.6	349.8	341.6	333.4	331.3	317.3	298.8	289.6	282.8	269.3	259.2
152.5°	332.9	339.1	332.9	326.7	325.2	313.3	297.5	289.6	283.4	271.3	262.1
155°	323.1	327.2	323.1	319.0	317.9	308.5	295.9	289.6	284.9	275.6	268.6
157.5°	315.2	318.1	315.2	312.4	311.6	304.3	294.4	289.6	286.3	279.9	275.1
160°	310.6	312.2	310.6	308.8	308.5	302.2	293.8	289.6	287.0	281.9	278.1
162.5°	307.5	309.0	307.5	305.9	305.5	300.2	293.1	289.6	287.7	284.0	281.2
165°	303.0	304.7	303.0	301.3	300.9	297.1	292.0	289.6	288.7	287.1	285.8
167.5°	299.9	300.5	299.9	299.2	299.0	296.5	293.2	291.5	290.8	289.4	288.3
170°	299.0	299.0	299.0	299.0	299.0	296.5	293.2	291.5	291.5	291.4	291.3
172.5°	296.6	296.0	296.6	297.2	297.4	295.4	292.8	291.5	291.5	291.5	291.5
175°	295.3	295.3	295.3	295.3	295.3	294.0	292.3	291.5	291.8	292.7	293.3
177.5°	294.0	293.3	294.0	294.7	294.9	293.9	292.6	291.9	292.2	292.8	293.3
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



TEST NUMBER: P934485

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7
2.5°	1352.7	1345.0	1345.0	1332.4	1327.4	1323.6	1317.3	1298.4	1293.4	1288.3	1295.8
5°	1364.0	1350.1	1340.1	1317.3	1298.4	1290.8	1266.8	1221.4	1191.1	1168.4	1155.8
7.5°	1366.5	1348.8	1329.9	1294.6	1249.1	1229.0	1155.8	1072.6	1049.8	1029.6	1017.0
10°	1364.0	1343.8	1317.3	1264.3	1157.1	1121.7	1048.5	994.3	980.4	976.6	980.4
12.5°	1355.1	1336.2	1299.7	1211.3	1061.2	1037.2	994.3	962.7	960.3	966.6	1000.6
15°	1340.1	1322.4	1279.4	1140.7	1008.2	990.5	960.3	948.9	962.7	1006.9	1109.1
17.5°	1324.9	1304.7	1251.7	1071.2	967.8	955.2	933.7	956.4	1034.6	1094.0	1128.0
20°	1304.7	1280.8	1220.1	1020.8	938.8	927.4	917.3	1019.6	1078.9	1100.3	1119.2
22.5°	1280.8	1255.4	1177.2	985.5	908.5	899.6	905.9	1054.9	1078.9	1094.0	1110.4
25°	1249.1	1227.7	1126.8	957.7	884.5	874.4	898.4	1051.1	1064.9	1068.7	1101.5
27.5°	1220.1	1192.4	1073.8	932.5	855.5	851.7	904.7	1034.6	1044.8	1048.5	1083.8
30°	1184.8	1143.1	1014.5	905.9	825.2	824.0	905.9	1014.5	1011.9	1022.0	1057.4
32.5°	1148.2	1070.0	947.6	873.2	796.2	794.9	897.1	984.2	981.6	995.6	1022.0
35°	1114.2	1013.3	856.7	835.3	759.6	760.8	875.6	948.9	950.1	962.7	979.2
37.5°	1078.9	964.0	757.0	793.7	724.3	724.3	846.6	916.0	913.6	917.3	940.0
40°	1037.2	887.0	668.8	739.4	691.4	687.7	811.4	880.7	871.9	870.7	902.2
42.5°	993.0	802.5	603.2	667.4	653.6	648.5	768.4	837.8	821.4	825.2	865.6
45°	945.1	779.8	552.7	564.0	614.4	610.7	721.7	788.6	777.3	787.4	829.0
47.5°	897.1	734.4	536.2	468.1	572.8	571.6	670.0	740.7	734.4	744.4	788.6
50°	831.5	683.9	535.0	401.3	526.2	531.2	608.1	694.0	694.0	702.8	749.5
52.5°	747.0	622.1	485.8	363.4	471.9	487.0	553.9	653.6	656.1	665.0	706.6
55°	670.0	557.7	450.5	334.3	407.6	440.4	500.9	612.0	617.0	625.8	663.7
57.5°	599.4	464.3	442.9	300.3	348.3	379.8	454.2	571.6	574.1	581.7	618.3
60°	523.6	335.6	406.3	263.7	296.5	320.5	411.3	523.6	532.5	537.5	569.1
62.5°	437.9	243.5	368.4	238.5	271.3	276.4	376.0	478.2	489.5	493.4	512.3
65°	311.6	204.4	313.0	217.1	244.8	246.0	338.2	431.6	441.6	447.9	461.8
67.5°	210.7	166.6	238.5	196.8	224.6	225.9	301.6	377.2	391.2	396.2	405.0
70°	146.4	111.1	176.7	175.4	201.9	204.4	262.4	328.0	340.6	344.5	349.5
72.5°	107.2	89.6	146.4	157.8	177.9	180.4	222.0	272.6	285.2	289.0	291.5
75°	82.0	94.6	118.6	137.5	151.4	152.7	181.7	222.0	230.9	233.4	234.6
77.5°	65.6	88.3	87.1	111.1	123.7	121.1	142.6	171.6	179.2	179.2	179.2
80°	49.2	69.4	65.6	79.5	90.8	88.3	102.2	122.4	124.9	127.4	126.2
82.5°	36.6	44.1	44.1	50.4	60.5	58.1	68.1	79.5	79.5	79.5	82.0
85°	22.7	25.2	20.2	26.5	34.1	32.9	37.8	42.9	44.1	44.1	41.6
87.5°	13.8	11.4	6.3	10.1	15.2	15.2	17.7	18.9	17.7	17.7	17.7
90°	5.2	3.5	2.0	3.5	5.2	5.5	8.7	12.9	15.0	13.3	9.9
92.5°	34.7	21.2	7.8	21.2	34.7	38.0	53.4	73.9	84.2	73.8	53.0
95°	67.9	43.4	18.9	43.4	67.9	74.0	131.4	207.9	246.2	219.6	166.6
97.5°	75.8	54.2	32.7	54.2	75.8	81.3	177.0	304.6	368.4	351.7	318.2
100°	82.5	62.8	43.3	62.8	82.5	87.4	193.6	335.2	406.1	407.3	409.8
102.5°	88.9	70.7	52.3	70.7	88.9	93.5	201.2	344.9	416.7	438.1	480.7
105°	98.7	83.2	67.7	83.2	98.7	102.6	206.9	346.0	415.5	463.4	559.1
107.5°	112.3	97.9	83.5	97.9	112.3	115.9	207.9	330.6	391.9	458.7	592.2
110°	120.1	107.1	94.1	107.1	120.1	123.4	206.4	317.0	372.3	446.8	596.1



TEST NUMBER: P934485

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	129.3	116.9	104.5	116.9	129.3	132.5	206.4	305.0	354.3	430.7	583.4
115°	143.2	131.7	120.2	131.7	143.2	146.0	208.3	291.3	332.8	406.4	553.5
117.5°	156.6	146.2	135.8	146.2	156.6	159.2	212.2	282.8	318.1	384.5	517.2
120°	164.5	154.7	144.9	154.7	164.5	166.9	215.4	279.9	312.2	372.8	494.2
122.5°	173.5	163.7	153.8	163.7	173.5	176.0	219.8	278.4	307.6	362.2	471.6
125°	185.3	176.3	167.3	176.3	185.3	187.6	226.0	277.1	302.7	349.1	442.0
127.5°	196.5	187.5	178.3	187.5	196.5	198.8	232.1	276.5	298.6	338.5	418.1
130°	203.8	194.1	184.2	194.1	203.8	206.3	236.6	276.9	297.0	332.5	403.5
132.5°	209.9	200.2	190.3	200.2	209.9	212.4	240.2	277.1	295.7	327.4	390.9
135°	217.3	208.3	199.4	208.3	217.3	219.5	244.1	276.9	293.3	319.8	373.0
137.5°	226.3	217.5	208.7	217.5	226.3	228.5	250.0	278.6	292.9	315.3	360.3
140°	232.6	224.4	216.3	224.4	232.6	234.6	253.6	278.9	291.5	310.9	349.8
142.5°	237.2	229.8	222.2	229.8	237.2	239.1	256.6	279.8	291.5	308.6	342.7
145°	244.4	237.8	231.3	237.8	244.4	246.0	260.5	279.9	289.6	303.5	331.4
147.5°	253.1	246.8	240.4	246.8	253.1	254.7	266.3	281.8	289.6	300.5	322.5
150°	257.8	251.9	246.2	251.9	257.8	259.2	269.3	282.8	289.6	298.8	317.3
152.5°	261.1	256.7	252.3	256.7	261.1	262.1	271.3	283.4	289.6	297.5	313.3
155°	267.9	264.6	261.4	264.6	267.9	268.6	275.6	284.9	289.6	295.9	308.5
157.5°	274.4	271.2	268.1	271.2	274.4	275.1	279.9	286.3	289.6	294.4	304.3
160°	277.5	275.0	272.7	275.0	277.5	278.1	281.9	287.0	289.6	293.8	302.2
162.5°	280.8	279.0	277.1	279.0	280.8	281.2	284.0	287.7	289.6	293.1	300.2
165°	285.4	283.7	282.1	283.7	285.4	285.8	287.1	288.7	289.6	292.0	297.1
167.5°	288.1	287.4	286.6	287.4	288.1	288.3	289.4	290.8	291.5	293.2	296.5
170°	291.1	290.3	289.6	290.3	291.1	291.3	291.4	291.5	291.5	293.2	296.5
172.5°	291.5	291.3	291.1	291.3	291.5	291.5	291.5	291.5	291.5	292.8	295.4
175°	293.3	293.3	293.3	293.3	293.3	293.3	292.7	291.8	291.5	292.3	294.0
177.5°	293.3	293.3	293.3	293.3	293.3	293.3	292.8	292.2	291.9	292.6	293.9
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



TEST NUMBER: P934485

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7	1333.7
2.5°	1287.1	1283.2	1288.3	1274.4	1288.3	1283.2	1287.1	1295.8	1288.3	1293.4	1298.4
5°	1129.3	1123.0	1102.8	1086.4	1102.8	1123.0	1129.3	1155.8	1168.4	1191.1	1221.4
7.5°	1009.4	1004.4	999.3	989.2	999.3	1004.4	1009.4	1017.0	1029.6	1049.8	1072.6
10°	982.9	984.2	991.8	990.5	991.8	984.2	982.9	980.4	976.6	980.4	994.3
12.5°	1051.1	1062.4	1104.1	1101.5	1104.1	1062.4	1051.1	1000.6	966.6	960.3	962.7
15°	1129.3	1133.1	1141.9	1143.1	1141.9	1133.1	1129.3	1109.1	1006.9	962.7	948.9
17.5°	1136.8	1138.2	1144.5	1144.5	1144.5	1138.2	1136.8	1128.0	1094.0	1034.6	956.4
20°	1130.5	1133.1	1145.7	1148.2	1145.7	1133.1	1130.5	1119.2	1100.3	1078.9	1019.6
22.5°	1128.0	1133.1	1143.1	1141.9	1143.1	1133.1	1128.0	1110.4	1094.0	1078.9	1054.9
25°	1115.4	1115.4	1116.7	1117.9	1116.7	1115.4	1115.4	1101.5	1068.7	1064.9	1051.1
27.5°	1088.9	1091.5	1099.0	1097.8	1099.0	1091.5	1088.9	1083.8	1048.5	1044.8	1034.6
30°	1064.9	1062.4	1056.1	1051.1	1056.1	1062.4	1064.9	1057.4	1022.0	1011.9	1014.5
32.5°	1024.5	1018.2	1011.9	1008.2	1011.9	1018.2	1024.5	1022.0	995.6	981.6	984.2
35°	976.6	977.9	976.6	972.9	976.6	977.9	976.6	979.2	962.7	950.1	948.9
37.5°	942.6	945.1	943.8	938.8	943.8	945.1	942.6	940.0	917.3	913.6	916.0
40°	907.2	908.5	907.2	903.4	907.2	908.5	907.2	902.2	870.7	871.9	880.7
42.5°	873.2	871.9	868.1	865.6	868.1	871.9	873.2	865.6	825.2	821.4	837.8
45°	834.0	835.3	827.7	824.0	827.7	835.3	834.0	829.0	787.4	777.3	788.6
47.5°	794.9	794.9	788.6	784.8	788.6	794.9	794.9	788.6	744.4	734.4	740.7
50°	753.3	752.1	743.2	741.9	743.2	752.1	753.3	749.5	702.8	694.0	694.0
52.5°	705.4	705.4	706.6	709.1	706.6	705.4	705.4	706.6	665.0	656.1	653.6
55°	663.7	665.0	673.8	676.3	673.8	665.0	663.7	663.7	625.8	617.0	612.0
57.5°	620.8	620.8	627.1	627.1	627.1	620.8	620.8	618.3	581.7	574.1	571.6
60°	571.6	574.1	579.1	577.9	579.1	574.1	571.6	569.1	537.5	532.5	523.6
62.5°	519.8	522.4	523.6	521.1	523.6	522.4	519.8	512.3	493.4	489.5	478.2
65°	465.6	468.1	469.4	466.9	469.4	468.1	465.6	461.8	447.9	441.6	431.6
67.5°	410.1	408.8	407.6	412.6	407.6	408.8	410.1	405.0	396.2	391.2	377.2
70°	353.3	353.3	352.0	354.6	352.0	353.3	353.3	349.5	344.5	340.6	328.0
72.5°	292.7	291.5	296.5	292.7	296.5	291.5	292.7	291.5	289.0	285.2	272.6
75°	233.4	236.0	233.4	237.2	233.4	236.0	233.4	234.6	233.4	230.9	222.0
77.5°	177.9	180.4	177.9	177.9	177.9	180.4	177.9	179.2	179.2	179.2	171.6
80°	126.2	124.9	124.9	123.7	124.9	124.9	126.2	126.2	127.4	124.9	122.4
82.5°	80.8	79.5	79.5	82.0	79.5	79.5	80.8	82.0	79.5	79.5	79.5
85°	44.1	45.5	42.9	42.9	42.9	45.5	44.1	41.6	44.1	44.1	42.9
87.5°	16.4	15.2	15.2	15.2	15.2	15.2	16.4	17.7	17.7	17.7	18.9
90°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	9.9	13.3	15.0	12.9
92.5°	37.4	35.9	30.0	24.0	30.0	35.9	37.4	53.0	73.8	84.2	73.9
95°	126.9	122.4	104.4	86.4	104.4	122.4	126.9	166.6	219.6	246.2	207.9
97.5°	293.1	284.5	250.2	215.9	250.2	284.5	293.1	318.2	351.7	368.4	304.6
100°	411.6	401.4	360.5	319.6	360.5	401.4	411.6	409.8	407.3	406.1	335.2
102.5°	512.7	504.0	469.0	434.0	469.0	504.0	512.7	480.7	438.1	416.7	344.9
105°	630.9	626.2	607.4	588.6	607.4	626.2	630.9	559.1	463.4	415.5	346.0
107.5°	692.3	693.4	697.9	702.5	697.9	693.4	692.3	592.2	458.7	391.9	330.6
110°	708.0	712.9	732.5	752.1	732.5	712.9	708.0	596.1	446.8	372.3	317.0



TEST NUMBER: P934485

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	698.0	705.6	735.6	765.7	735.6	705.6	698.0	583.4	430.7	354.3	305.0
115°	663.9	674.3	716.1	757.8	716.1	674.3	663.9	553.5	406.4	332.8	291.3
117.5°	616.8	628.4	674.7	721.0	674.7	628.4	616.8	517.2	384.5	318.1	282.8
120°	585.2	596.5	641.4	686.4	641.4	596.5	585.2	494.2	372.8	312.2	279.9
122.5°	553.5	564.6	609.0	653.3	609.0	564.6	553.5	471.6	362.2	307.6	278.4
125°	511.6	521.8	562.6	603.5	562.6	521.8	511.6	442.0	349.1	302.7	277.1
127.5°	477.9	486.5	521.0	555.4	521.0	486.5	477.9	418.1	338.5	298.6	276.5
130°	456.7	464.6	496.5	528.3	496.5	464.6	456.7	403.5	332.5	297.0	276.9
132.5°	438.5	445.7	474.2	502.7	474.2	445.7	438.5	390.9	327.4	295.7	277.1
135°	412.9	419.1	443.7	468.2	443.7	419.1	412.9	373.0	319.8	293.3	276.9
137.5°	394.0	399.1	419.1	439.3	419.1	399.1	394.0	360.3	315.3	292.9	278.6
140°	378.9	383.6	402.4	421.3	402.4	383.6	378.9	349.8	310.9	291.5	278.9
142.5°	368.2	372.3	388.5	404.7	388.5	372.3	368.2	342.7	308.6	291.5	279.8
145°	352.3	355.4	367.7	379.9	367.7	355.4	352.3	331.4	303.5	289.6	279.9
147.5°	338.9	341.5	351.6	361.8	351.6	341.5	338.9	322.5	300.5	289.6	281.8
150°	331.3	333.4	341.6	349.8	341.6	333.4	331.3	317.3	298.8	289.6	282.8
152.5°	325.2	326.7	332.9	339.1	332.9	326.7	325.2	313.3	297.5	289.6	283.4
155°	317.9	319.0	323.1	327.2	323.1	319.0	317.9	308.5	295.9	289.6	284.9
157.5°	311.6	312.4	315.2	318.1	315.2	312.4	311.6	304.3	294.4	289.6	286.3
160°	308.5	308.8	310.6	312.2	310.6	308.8	308.5	302.2	293.8	289.6	287.0
162.5°	305.5	305.9	307.5	309.0	307.5	305.9	305.5	300.2	293.1	289.6	287.7
165°	300.9	301.3	303.0	304.7	303.0	301.3	300.9	297.1	292.0	289.6	288.7
167.5°	299.0	299.2	299.9	300.5	299.9	299.2	299.0	296.5	293.2	291.5	290.8
170°	299.0	299.0	299.0	299.0	299.0	299.0	299.0	296.5	293.2	291.5	291.5
172.5°	297.4	297.2	296.6	296.0	296.6	297.2	297.4	295.4	292.8	291.5	291.5
175°	295.3	295.3	295.3	295.3	295.3	295.3	295.3	294.0	292.3	291.5	291.8
177.5°	294.9	294.7	294.0	293.3	294.0	294.7	294.9	293.9	292.6	291.9	292.2
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3



TEST NUMBER: P934485

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	1333.7	1333.7	1333.7	1333.7	1333.7
2.5°	1317.3	1323.6	1327.4	1332.4	1345.0
5°	1266.8	1290.8	1298.4	1317.3	1340.1
7.5°	1155.8	1229.0	1249.1	1294.6	1329.9
10°	1048.5	1121.7	1157.1	1264.3	1317.3
12.5°	994.3	1037.2	1061.2	1211.3	1299.7
15°	960.3	990.5	1008.2	1140.7	1279.4
17.5°	933.7	955.2	967.8	1071.2	1251.7
20°	917.3	927.4	938.8	1020.8	1220.1
22.5°	905.9	899.6	908.5	985.5	1177.2
25°	898.4	874.4	884.5	957.7	1126.8
27.5°	904.7	851.7	855.5	932.5	1073.8
30°	905.9	824.0	825.2	905.9	1014.5
32.5°	897.1	794.9	796.2	873.2	947.6
35°	875.6	760.8	759.6	835.3	856.7
37.5°	846.6	724.3	724.3	793.7	757.0
40°	811.4	687.7	691.4	739.4	668.8
42.5°	768.4	648.5	653.6	667.4	603.2
45°	721.7	610.7	614.4	564.0	552.7
47.5°	670.0	571.6	572.8	468.1	536.2
50°	608.1	531.2	526.2	401.3	535.0
52.5°	553.9	487.0	471.9	363.4	485.8
55°	500.9	440.4	407.6	334.3	450.5
57.5°	454.2	379.8	348.3	300.3	442.9
60°	411.3	320.5	296.5	263.7	406.3
62.5°	376.0	276.4	271.3	238.5	368.4
65°	338.2	246.0	244.8	217.1	313.0
67.5°	301.6	225.9	224.6	196.8	238.5
70°	262.4	204.4	201.9	175.4	176.7
72.5°	222.0	180.4	177.9	157.8	146.4
75°	181.7	152.7	151.4	137.5	118.6
77.5°	142.6	121.1	123.7	111.1	87.1
80°	102.2	88.3	90.8	79.5	65.6
82.5°	68.1	58.1	60.5	50.4	44.1
85°	37.8	32.9	34.1	26.5	20.2
87.5°	17.7	15.2	15.2	10.1	6.3
90°	8.7	5.5	5.2	3.5	2.0
92.5°	53.4	38.0	34.7	21.2	7.8
95°	131.4	74.0	67.9	43.4	18.9
97.5°	177.0	81.3	75.8	54.2	32.7
100°	193.6	87.4	82.5	62.8	43.3
102.5°	201.2	93.5	88.9	70.7	52.3
105°	206.9	102.6	98.7	83.2	67.7
107.5°	207.9	115.9	112.3	97.9	83.5
110°	206.4	123.4	120.1	107.1	94.1



TEST NUMBER: P934485

CATALOG NUMBER: SQ4-FA-050U-100D-B2750-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	206.4	132.5	129.3	116.9	104.5
115°	208.3	146.0	143.2	131.7	120.2
117.5°	212.2	159.2	156.6	146.2	135.8
120°	215.4	166.9	164.5	154.7	144.9
122.5°	219.8	176.0	173.5	163.7	153.8
125°	226.0	187.6	185.3	176.3	167.3
127.5°	232.1	198.8	196.5	187.5	178.3
130°	236.6	206.3	203.8	194.1	184.2
132.5°	240.2	212.4	209.9	200.2	190.3
135°	244.1	219.5	217.3	208.3	199.4
137.5°	250.0	228.5	226.3	217.5	208.7
140°	253.6	234.6	232.6	224.4	216.3
142.5°	256.6	239.1	237.2	229.8	222.2
145°	260.5	246.0	244.4	237.8	231.3
147.5°	266.3	254.7	253.1	246.8	240.4
150°	269.3	259.2	257.8	251.9	246.2
152.5°	271.3	262.1	261.1	256.7	252.3
155°	275.6	268.6	267.9	264.6	261.4
157.5°	279.9	275.1	274.4	271.2	268.1
160°	281.9	278.1	277.5	275.0	272.7
162.5°	284.0	281.2	280.8	279.0	277.1
165°	287.1	285.8	285.4	283.7	282.1
167.5°	289.4	288.3	288.1	287.4	286.6
170°	291.4	291.3	291.1	290.3	289.6
172.5°	291.5	291.5	291.5	291.3	291.1
175°	292.7	293.3	293.3	293.3	293.3
177.5°	292.8	293.3	293.3	293.3	293.3
180°	293.3	293.3	293.3	293.3	293.3



TEST NUMBER: P934485
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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	14.78	15.79	15.60	16.63	17.68	17.57	18.58	18.40	19.43	20.47
	3H	15.27	16.17	16.10	17.02	18.10	18.92	19.83	19.76	20.68	21.76
	4H	15.46	16.32	16.32	17.18	18.27	19.37	20.22	20.22	21.08	22.17
	6H	15.59	16.38	16.45	17.25	18.35	19.65	20.44	20.51	21.31	22.41
	8H	15.60	16.35	16.47	17.23	18.33	19.72	20.48	20.60	21.36	22.46
	12H	15.57	16.29	16.45	17.17	18.29	19.76	20.48	20.64	21.36	22.48
4H	2H	15.82	16.68	16.68	17.54	18.62	18.00	18.86	18.86	19.72	20.80
	3H	16.86	17.57	17.73	18.47	19.57	19.51	20.23	20.38	21.12	22.22
	4H	17.14	17.79	18.02	18.68	19.81	20.04	20.69	20.92	21.58	22.71
	6H	17.28	17.84	18.17	18.75	19.88	20.41	20.97	21.30	21.88	23.01
	8H	17.29	17.81	18.18	18.72	19.86	20.51	21.03	21.41	21.94	23.09
	12H	17.26	17.73	18.18	18.66	19.81	20.57	21.04	21.49	21.97	23.12
8H	4H	17.60	18.13	18.50	19.04	20.18	20.18	20.70	21.08	21.61	22.75
	6H	17.87	18.30	18.80	19.25	20.40	20.61	21.05	21.54	22.00	23.14
	8H	17.91	18.30	18.85	19.24	20.40	20.76	21.14	21.70	22.09	23.25
	12H	17.91	18.24	18.84	19.18	20.39	20.86	21.20	21.80	22.13	23.34
12H	4H	17.62	18.09	18.53	19.01	20.16	20.15	20.62	21.07	21.55	22.70
	6H	17.93	18.32	18.87	19.26	20.42	20.61	20.99	21.55	21.94	23.10
	8H	18.00	18.34	18.94	19.28	20.49	20.77	21.11	21.71	22.05	23.26