

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: P934435

Luminaire Tested: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934435
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-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

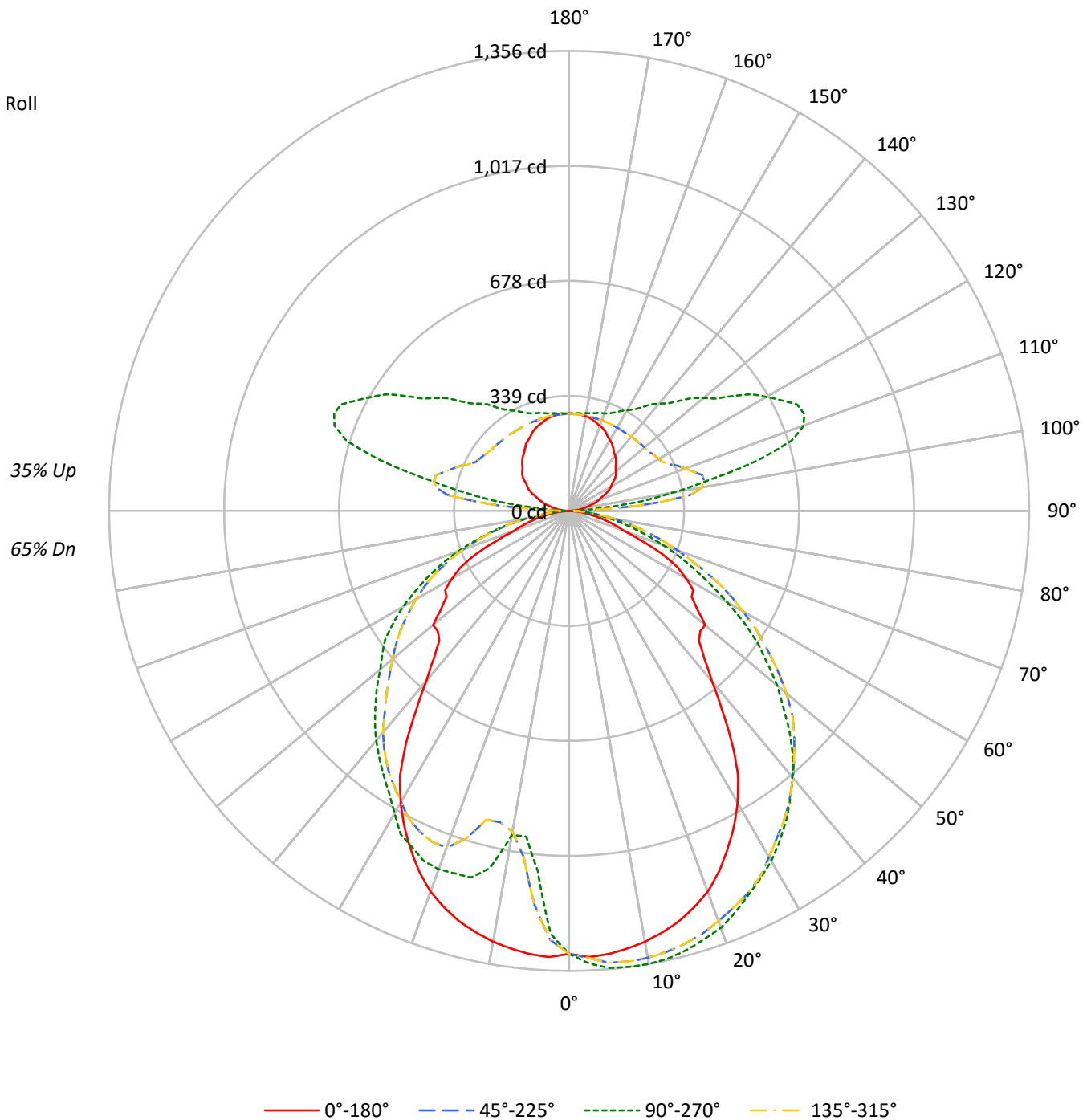
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5246.5 lumens
Efficiency: N/A
Efficacy: 116.1 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	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°	12112	12112	12112	12112
5°	12190	12227	12190	9614
10°	12095	12044	12095	8611
15°	11949	11783	11949	9839
20°	11686	11474	11686	9860
25°	11162	11024	11162	9651
30°	10487	10650	10487	9192
35°	9335	10176	9335	8689
40°	7766	9618	7766	8307
45°	6925	8966	6925	7870
50°	7340	8188	7340	7430
55°	6887	7349	6887	7176
60°	7073	6242	7073	6572
65°	6383	5159	6383	5768
70°	4389	4113	4389	4836
75°	3807	3040	3807	3640
80°	3005	2009	3005	2188
85°	1631	1064	1631	905

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 10635 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.8	2.2
10°-20°	334.6	6.4
20°-30°	517.2	9.9
30°-40°	617.4	11.8
40°-50°	621.0	11.8
50°-60°	540.3	10.3
60°-70°	383.1	7.3
70°-80°	202.7	3.9
80°-90°	51.6	1.0
90°-100°	139.9	2.7
100°-110°	367.9	7.0
110°-120°	381.4	7.3
120°-130°	306.0	5.8
130°-140°	240.1	4.6
140°-150°	184.3	3.5
150°-160°	132.7	2.5
160°-170°	81.2	1.5
170°-180°	27.4	0.5
0°-30°	969.6	18.5
0°-40°	1586.9	30.2
0°-60°	2748.3	52.4
0°-90°	3385.7	64.5
90°-120°	889.2	16.9
90°-150°	1619.5	30.9
90°-180°	1861.0	35.5
0°-180°	5246.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1305	1305	1305	1305	1305	
5°	1312	1352	1312	1063	1312	124
15°	1252	1340	1252	1119	1252	352
25°	1103	1250	1103	1094	1103	506
35°	838	1115	838	952	838	519
45°	541	919	541	806	541	433
55°	441	678	441	662	441	405
65°	306	409	306	457	306	293
75°	116	194	116	232	116	122
85°	20	49	20	42	20	27
90°	2	7	2	7	2	2
95°	18	85	18	85	18	21
105°	66	576	66	576	66	70
115°	118	742	118	742	118	116
125°	164	591	164	591	164	145
135°	195	458	195	458	195	151
145°	226	372	226	372	226	142
155°	256	320	256	320	256	118
165°	276	298	276	298	276	78
175°	287	289	287	289	287	27
180°	287	287	287	287	287	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3
2.5°	1316.4	1316.4	1323.9	1326.3	1326.3	1322.6	1319.0	1322.6	1333.7	1337.5	1336.3
5°	1311.6	1321.4	1335.0	1337.5	1339.9	1338.7	1336.3	1338.7	1351.0	1353.5	1354.8
7.5°	1301.7	1320.2	1337.5	1341.2	1344.9	1341.2	1339.9	1342.4	1354.8	1357.2	1357.2
10°	1289.3	1315.2	1335.0	1337.5	1341.2	1337.5	1337.5	1342.4	1354.8	1357.2	1358.5
12.5°	1272.0	1307.8	1326.3	1328.9	1333.7	1332.5	1331.3	1336.3	1348.6	1351.0	1351.0
15°	1252.2	1294.3	1311.6	1314.0	1322.6	1320.2	1320.2	1325.1	1338.7	1342.4	1341.2
17.5°	1225.1	1277.0	1296.7	1300.5	1306.6	1305.3	1306.6	1311.6	1323.9	1326.3	1327.6
20°	1194.2	1253.5	1277.0	1280.6	1286.8	1286.8	1286.8	1293.0	1305.3	1310.3	1310.3
22.5°	1152.2	1228.8	1253.5	1256.0	1263.3	1263.3	1265.9	1274.5	1285.6	1286.8	1286.8
25°	1102.9	1201.7	1222.6	1230.1	1237.5	1241.1	1244.8	1249.8	1253.5	1252.2	1253.5
27.5°	1051.0	1167.1	1194.2	1199.1	1209.0	1212.8	1217.6	1219.0	1220.2	1223.8	1221.4
30°	992.9	1118.8	1159.6	1164.6	1180.6	1183.1	1178.2	1180.6	1186.8	1189.3	1191.8
32.5°	927.4	1047.2	1123.8	1134.9	1149.8	1142.3	1141.1	1144.8	1154.7	1154.7	1157.2
35°	838.5	991.7	1090.5	1100.3	1111.5	1102.9	1107.7	1109.0	1115.2	1118.8	1117.6
37.5°	740.9	943.5	1055.9	1063.3	1071.9	1060.8	1068.3	1071.9	1076.9	1074.4	1074.4
40°	654.6	868.2	1015.2	1020.0	1027.5	1018.8	1026.2	1028.7	1031.2	1028.7	1027.5
42.5°	590.4	785.4	971.9	978.1	973.1	979.3	981.8	986.8	983.0	978.1	978.1
45°	540.9	763.2	925.0	932.4	925.0	934.9	938.5	938.5	927.4	925.0	923.8
47.5°	524.8	718.8	878.1	878.1	874.3	886.7	892.9	884.2	873.1	869.5	869.5
50°	523.6	669.3	813.8	808.9	826.2	841.0	834.9	826.2	817.6	803.9	803.9
52.5°	475.5	608.9	731.1	749.6	776.8	785.4	775.5	766.9	752.1	745.9	740.9
55°	440.9	545.9	655.8	692.8	721.2	732.3	713.8	705.1	682.9	679.3	676.7
57.5°	433.5	454.5	586.6	633.5	668.1	666.9	655.8	639.7	621.2	617.5	616.3
60°	397.6	328.5	512.5	568.1	603.9	600.2	590.4	575.5	558.2	555.8	553.3
62.5°	360.6	238.4	428.6	491.6	542.1	540.9	532.3	510.1	497.7	491.6	486.6
65°	306.3	200.0	305.0	408.7	481.7	484.1	465.6	449.5	435.9	428.6	427.3
67.5°	233.4	163.0	206.2	340.9	423.6	421.1	397.6	390.2	372.9	369.2	361.8
70°	172.9	108.7	143.3	276.7	366.8	360.6	342.1	333.4	317.4	308.7	303.8
72.5°	143.3	87.7	105.0	214.9	308.7	301.3	285.3	275.4	261.8	254.4	249.5
75°	116.1	92.6	80.3	159.3	250.7	245.7	231.0	221.1	209.9	200.0	201.3
77.5°	85.2	86.5	64.2	117.3	198.8	191.4	182.7	170.4	165.4	155.6	155.6
80°	64.2	68.0	48.1	80.3	143.3	143.3	135.8	127.2	118.5	113.7	113.7
82.5°	43.2	43.2	35.8	50.7	97.6	93.8	88.9	86.5	81.5	79.1	79.1
85°	19.7	24.7	22.2	30.8	53.1	55.6	55.6	53.1	51.9	49.4	50.7
87.5°	6.2	11.1	13.6	17.3	27.2	28.4	29.6	29.6	29.6	30.8	30.8
90°	2.0	3.5	5.0	5.4	8.5	12.6	14.7	13.0	9.7	7.3	7.3
92.5°	7.7	20.8	33.9	37.2	52.3	72.3	82.4	72.3	51.9	36.6	35.1
95°	18.5	42.4	66.5	72.4	128.6	203.5	241.0	215.0	163.1	124.2	119.8
97.5°	32.0	53.1	74.2	79.5	173.2	298.2	360.6	344.3	311.4	286.9	278.4
100°	42.3	61.5	80.8	85.5	189.5	328.1	397.4	398.7	401.1	402.9	392.9
102.5°	51.2	69.2	87.0	91.5	196.9	337.5	407.8	428.7	470.5	501.8	493.2
105°	66.3	81.4	96.6	100.4	202.5	338.6	406.7	453.5	547.2	617.5	612.9
107.5°	81.7	95.8	109.9	113.5	203.5	323.6	383.6	448.9	579.6	677.6	678.7
110°	92.1	104.8	117.6	120.8	202.0	310.2	364.3	437.3	583.4	693.0	697.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	102.3	114.4	126.6	129.6	202.0	298.5	346.8	421.6	571.0	683.2	690.6
115°	117.7	128.9	140.1	142.9	203.9	285.1	325.7	397.7	541.8	649.8	660.0
117.5°	132.9	143.1	153.3	155.8	207.7	276.8	311.4	376.3	506.2	603.7	615.0
120°	141.8	151.4	161.0	163.4	210.8	274.0	305.6	364.9	483.7	572.8	583.8
122.5°	150.5	160.2	169.8	172.3	215.2	272.5	301.1	354.5	461.6	541.8	552.6
125°	163.8	172.5	181.3	183.6	221.2	271.3	296.3	341.7	432.6	500.7	510.7
127.5°	174.5	183.5	192.4	194.6	227.1	270.6	292.3	331.3	409.2	467.7	476.1
130°	180.3	189.9	199.5	201.9	231.5	271.0	290.7	325.5	394.9	447.0	454.7
132.5°	186.3	195.9	205.4	207.9	235.1	271.3	289.4	320.4	382.6	429.2	436.2
135°	195.2	203.9	212.6	214.8	238.9	271.0	287.0	313.0	365.1	404.2	410.1
137.5°	204.2	212.8	221.5	223.7	244.7	272.7	286.7	308.6	352.7	385.7	390.6
140°	211.7	219.7	227.7	229.7	248.2	272.9	285.3	304.3	342.4	370.9	375.5
142.5°	217.5	224.9	232.2	234.1	251.2	273.9	285.3	302.0	335.4	360.4	364.3
145°	226.4	232.7	239.2	240.8	255.0	274.0	283.4	297.0	324.3	344.8	347.8
147.5°	235.3	241.5	247.7	249.3	260.7	275.8	283.4	294.2	315.7	331.7	334.3
150°	241.0	246.6	252.3	253.7	263.6	276.8	283.4	292.5	310.6	324.2	326.3
152.5°	246.9	251.2	255.5	256.6	265.5	277.4	283.4	291.2	306.7	318.3	319.8
155°	255.8	259.0	262.2	262.9	269.8	278.8	283.4	289.6	301.9	311.2	312.2
157.5°	262.4	265.5	268.5	269.3	274.0	280.2	283.4	288.2	297.8	305.0	305.7
160°	266.9	269.2	271.6	272.2	275.9	280.9	283.4	287.5	295.7	301.9	302.3
162.5°	271.3	273.0	274.8	275.3	278.0	281.6	283.4	286.9	293.8	299.0	299.4
165°	276.1	277.7	279.4	279.8	281.0	282.6	283.4	285.8	290.8	294.5	294.9
167.5°	280.5	281.3	282.0	282.2	283.2	284.6	285.3	287.0	290.2	292.7	292.8
170°	283.4	284.2	284.9	285.1	285.2	285.3	285.3	287.0	290.2	292.7	292.7
172.5°	284.9	285.1	285.3	285.3	285.3	285.3	285.3	286.6	289.1	291.1	290.9
175°	287.0	287.0	287.0	287.0	286.5	285.6	285.3	286.1	287.8	289.0	289.0
177.5°	287.0	287.0	287.0	287.0	286.6	286.0	285.7	286.4	287.7	288.6	288.5
180°	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3
2.5°	1338.7	1335.0	1338.7	1336.3	1337.5	1333.7	1322.6	1319.0	1322.6	1326.3	1326.3
5°	1354.8	1352.3	1354.8	1354.8	1353.5	1351.0	1338.7	1336.3	1338.7	1339.9	1337.5
7.5°	1359.7	1356.0	1359.7	1357.2	1357.2	1354.8	1342.4	1339.9	1341.2	1344.9	1341.2
10°	1359.7	1356.0	1359.7	1358.5	1357.2	1354.8	1342.4	1337.5	1337.5	1341.2	1337.5
12.5°	1353.5	1351.0	1353.5	1351.0	1351.0	1348.6	1336.3	1331.3	1332.5	1333.7	1328.9
15°	1343.6	1339.9	1343.6	1341.2	1342.4	1338.7	1325.1	1320.2	1320.2	1322.6	1314.0
17.5°	1328.9	1323.9	1328.9	1327.6	1326.3	1323.9	1311.6	1306.6	1305.3	1306.6	1300.5
20°	1311.6	1307.8	1311.6	1310.3	1310.3	1305.3	1293.0	1286.8	1286.8	1286.8	1280.6
22.5°	1284.4	1280.6	1284.4	1286.8	1286.8	1285.6	1274.5	1265.9	1263.3	1263.3	1256.0
25°	1253.5	1249.8	1253.5	1253.5	1252.2	1253.5	1249.8	1244.8	1241.1	1237.5	1230.1
27.5°	1223.8	1221.4	1223.8	1221.4	1223.8	1220.2	1219.0	1217.6	1212.8	1209.0	1199.1
30°	1194.2	1191.8	1194.2	1191.8	1189.3	1186.8	1180.6	1178.2	1183.1	1180.6	1164.6
32.5°	1157.2	1154.7	1157.2	1157.2	1154.7	1154.7	1144.8	1141.1	1142.3	1149.8	1134.9
35°	1118.8	1115.2	1118.8	1117.6	1118.8	1115.2	1109.0	1107.7	1102.9	1111.5	1100.3
37.5°	1074.4	1070.7	1074.4	1074.4	1074.4	1076.9	1071.9	1068.3	1060.8	1071.9	1063.3
40°	1028.7	1023.8	1028.7	1027.5	1028.7	1031.2	1028.7	1026.2	1018.8	1027.5	1020.0
42.5°	976.9	975.6	976.9	978.1	978.1	983.0	986.8	981.8	979.3	973.1	978.1
45°	921.2	918.8	921.2	923.8	925.0	927.4	938.5	938.5	934.9	925.0	932.4
47.5°	862.0	855.8	862.0	869.5	869.5	873.1	884.2	892.9	886.7	874.3	878.1
50°	799.0	800.3	799.0	803.9	803.9	817.6	826.2	834.9	841.0	826.2	808.9
52.5°	737.3	736.1	737.3	740.9	745.9	752.1	766.9	775.5	785.4	776.8	749.6
55°	675.5	678.0	675.5	676.7	679.3	682.9	705.1	713.8	732.3	721.2	692.8
57.5°	613.8	610.1	613.8	616.3	617.5	621.2	639.7	655.8	666.9	668.1	633.5
60°	542.1	537.2	542.1	553.3	555.8	558.2	575.5	590.4	600.2	603.9	568.1
62.5°	479.1	470.5	479.1	486.6	491.6	497.7	510.1	532.3	540.9	542.1	491.6
65°	412.5	408.7	412.5	427.3	428.6	435.9	449.5	465.6	484.1	481.7	408.7
67.5°	352.0	352.0	352.0	361.8	369.2	372.9	390.2	397.6	421.1	423.6	340.9
70°	296.4	295.2	296.4	303.8	308.7	317.4	333.4	342.1	360.6	366.8	276.7
72.5°	243.3	242.1	243.3	249.5	254.4	261.8	275.4	285.3	301.3	308.7	214.9
75°	196.4	193.9	196.4	201.3	200.0	209.9	221.1	231.0	245.7	250.7	159.3
77.5°	150.7	150.7	150.7	155.6	155.6	165.4	170.4	182.7	191.4	198.8	117.3
80°	112.4	111.1	112.4	113.7	113.7	118.5	127.2	135.8	143.3	143.3	80.3
82.5°	79.1	76.6	79.1	79.1	79.1	81.5	86.5	88.9	93.8	97.6	50.7
85°	49.4	49.4	49.4	50.7	49.4	51.9	53.1	55.6	55.6	53.1	30.8
87.5°	32.2	30.8	32.2	30.8	30.8	29.6	29.6	29.6	28.4	27.2	17.3
90°	7.3	7.3	7.3	7.3	7.3	9.7	13.0	14.7	12.6	8.5	5.4
92.5°	29.3	23.5	29.3	35.1	36.6	51.9	72.3	82.4	72.3	52.3	37.2
95°	102.2	84.6	102.2	119.8	124.2	163.1	215.0	241.0	203.5	128.6	72.4
97.5°	244.9	211.3	244.9	278.4	286.9	311.4	344.3	360.6	298.2	173.2	79.5
100°	352.9	312.8	352.9	392.9	402.9	401.1	398.7	397.4	328.1	189.5	85.5
102.5°	459.0	424.8	459.0	493.2	501.8	470.5	428.7	407.8	337.5	196.9	91.5
105°	594.5	576.1	594.5	612.9	617.5	547.2	453.5	406.7	338.6	202.5	100.4
107.5°	683.1	687.6	683.1	678.7	677.6	579.6	448.9	383.6	323.6	203.5	113.5
110°	716.9	736.1	716.9	697.8	693.0	583.4	437.3	364.3	310.2	202.0	120.8



TEST NUMBER: P934435

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	720.0	749.4	720.0	690.6	683.2	571.0	421.6	346.8	298.5	202.0	129.6
115°	700.8	741.7	700.8	660.0	649.8	541.8	397.7	325.7	285.1	203.9	142.9
117.5°	660.4	705.7	660.4	615.0	603.7	506.2	376.3	311.4	276.8	207.7	155.8
120°	627.7	671.8	627.7	583.8	572.8	483.7	364.9	305.6	274.0	210.8	163.4
122.5°	596.1	639.4	596.1	552.6	541.8	461.6	354.5	301.1	272.5	215.2	172.3
125°	550.6	590.6	550.6	510.7	500.7	432.6	341.7	296.3	271.3	221.2	183.6
127.5°	509.9	543.6	509.9	476.1	467.7	409.2	331.3	292.3	270.6	227.1	194.6
130°	486.0	517.1	486.0	454.7	447.0	394.9	325.5	290.7	271.0	231.5	201.9
132.5°	464.1	492.0	464.1	436.2	429.2	382.6	320.4	289.4	271.3	235.1	207.9
135°	434.3	458.3	434.3	410.1	404.2	365.1	313.0	287.0	271.0	238.9	214.8
137.5°	410.2	430.0	410.2	390.6	385.7	352.7	308.6	286.7	272.7	244.7	223.7
140°	393.9	412.3	393.9	375.5	370.9	342.4	304.3	285.3	272.9	248.2	229.7
142.5°	380.2	396.1	380.2	364.3	360.4	335.4	302.0	285.3	273.9	251.2	234.1
145°	359.9	371.8	359.9	347.8	344.8	324.3	297.0	283.4	274.0	255.0	240.8
147.5°	344.2	354.1	344.2	334.3	331.7	315.7	294.2	283.4	275.8	260.7	249.3
150°	334.3	342.4	334.3	326.3	324.2	310.6	292.5	283.4	276.8	263.6	253.7
152.5°	325.8	331.9	325.8	319.8	318.3	306.7	291.2	283.4	277.4	265.5	256.6
155°	316.2	320.2	316.2	312.2	311.2	301.9	289.6	283.4	278.8	269.8	262.9
157.5°	308.5	311.4	308.5	305.7	305.0	297.8	288.2	283.4	280.2	274.0	269.3
160°	304.0	305.6	304.0	302.3	301.9	295.7	287.5	283.4	280.9	275.9	272.2
162.5°	301.0	302.5	301.0	299.4	299.0	293.8	286.9	283.4	281.6	278.0	275.3
165°	296.6	298.3	296.6	294.9	294.5	290.8	285.8	283.4	282.6	281.0	279.8
167.5°	293.5	294.2	293.5	292.8	292.7	290.2	287.0	285.3	284.6	283.2	282.2
170°	292.7	292.7	292.7	292.7	292.7	290.2	287.0	285.3	285.3	285.2	285.1
172.5°	290.3	289.8	290.3	290.9	291.1	289.1	286.6	285.3	285.3	285.3	285.3
175°	289.0	289.0	289.0	289.0	289.0	287.8	286.1	285.3	285.6	286.5	287.0
177.5°	287.8	287.0	287.8	288.5	288.6	287.7	286.4	285.7	286.0	286.6	287.0
180°	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0



TEST NUMBER: P934435

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3
2.5°	1323.9	1316.4	1316.4	1304.1	1299.1	1295.5	1289.3	1270.8	1265.9	1260.9	1268.3
5°	1335.0	1321.4	1311.6	1289.3	1270.8	1263.3	1239.9	1195.5	1165.8	1143.6	1131.3
7.5°	1337.5	1320.2	1301.7	1267.1	1222.6	1202.9	1131.3	1049.8	1027.5	1007.7	995.4
10°	1335.0	1315.2	1289.3	1237.5	1132.5	1097.9	1026.2	973.1	959.6	955.8	959.6
12.5°	1326.3	1307.8	1272.0	1185.6	1038.6	1015.2	973.1	942.3	939.8	946.0	979.3
15°	1311.6	1294.3	1252.2	1116.4	986.8	969.5	939.8	928.7	942.3	985.5	1085.6
17.5°	1296.7	1277.0	1225.1	1048.5	947.2	934.9	913.9	936.1	1012.7	1070.7	1104.1
20°	1277.0	1253.5	1194.2	999.1	918.8	907.7	897.8	997.9	1055.9	1076.9	1095.4
22.5°	1253.5	1228.8	1152.2	964.5	889.2	880.5	886.7	1032.5	1055.9	1070.7	1086.8
25°	1222.6	1201.7	1102.9	937.3	865.7	855.8	879.3	1028.7	1042.3	1046.0	1078.1
27.5°	1194.2	1167.1	1051.0	912.6	837.3	833.6	885.4	1012.7	1022.6	1026.2	1060.8
30°	1159.6	1118.8	992.9	886.7	807.7	806.5	886.7	992.9	990.4	1000.3	1034.9
32.5°	1123.8	1047.2	927.4	854.6	779.3	778.0	878.1	963.3	960.8	974.4	1000.3
35°	1090.5	991.7	838.5	817.6	743.5	744.7	857.0	928.7	929.9	942.3	958.4
37.5°	1055.9	943.5	740.9	776.8	708.9	708.9	828.6	896.6	894.1	897.8	920.0
40°	1015.2	868.2	654.6	723.6	676.7	673.1	794.1	862.0	853.4	852.2	883.0
42.5°	971.9	785.4	590.4	653.3	639.7	634.8	752.1	820.0	803.9	807.7	847.2
45°	925.0	763.2	540.9	552.0	601.4	597.7	706.4	771.9	760.8	770.7	811.4
47.5°	878.1	718.8	524.8	458.2	560.6	559.4	655.8	725.0	718.8	728.6	771.9
50°	813.8	669.3	523.6	392.8	515.0	519.9	595.2	679.3	679.3	687.9	733.6
52.5°	731.1	608.9	475.5	355.7	461.8	476.7	542.1	639.7	642.1	650.8	691.6
55°	655.8	545.9	440.9	327.2	398.9	431.0	490.3	599.0	603.9	612.5	649.6
57.5°	586.6	454.5	433.5	294.0	340.9	371.7	444.5	559.4	561.9	569.3	605.1
60°	512.5	328.5	397.6	258.1	290.2	313.7	402.6	512.5	521.2	526.1	557.0
62.5°	428.6	238.4	360.6	233.4	265.5	270.5	368.0	468.0	479.1	482.9	501.4
65°	305.0	200.0	306.3	212.5	239.6	240.8	331.0	422.4	432.2	438.4	452.0
67.5°	206.2	163.0	233.4	192.6	219.8	221.1	295.2	369.2	382.9	387.8	396.4
70°	143.3	108.7	172.9	171.7	197.6	200.0	256.9	321.1	333.4	337.1	342.1
72.5°	105.0	87.7	143.3	154.4	174.1	176.6	217.3	266.8	279.1	282.8	285.3
75°	80.3	92.6	116.1	134.6	148.2	149.5	177.9	217.3	226.0	228.4	229.7
77.5°	64.2	86.5	85.2	108.7	121.0	118.5	139.6	168.0	175.4	175.4	175.4
80°	48.1	68.0	64.2	77.8	88.9	86.5	100.0	119.8	122.3	124.7	123.5
82.5°	35.8	43.2	43.2	49.4	59.3	56.8	66.6	77.8	77.8	77.8	80.3
85°	22.2	24.7	19.7	25.9	33.4	32.2	37.0	42.0	43.2	43.2	40.8
87.5°	13.6	11.1	6.2	9.9	14.9	14.9	17.3	18.5	17.3	17.3	17.3
90°	5.0	3.5	2.0	3.5	5.0	5.4	8.5	12.6	14.7	13.0	9.7
92.5°	33.9	20.8	7.7	20.8	33.9	37.2	52.3	72.3	82.4	72.3	51.9
95°	66.5	42.4	18.5	42.4	66.5	72.4	128.6	203.5	241.0	215.0	163.1
97.5°	74.2	53.1	32.0	53.1	74.2	79.5	173.2	298.2	360.6	344.3	311.4
100°	80.8	61.5	42.3	61.5	80.8	85.5	189.5	328.1	397.4	398.7	401.1
102.5°	87.0	69.2	51.2	69.2	87.0	91.5	196.9	337.5	407.8	428.7	470.5
105°	96.6	81.4	66.3	81.4	96.6	100.4	202.5	338.6	406.7	453.5	547.2
107.5°	109.9	95.8	81.7	95.8	109.9	113.5	203.5	323.6	383.6	448.9	579.6
110°	117.6	104.8	92.1	104.8	117.6	120.8	202.0	310.2	364.3	437.3	583.4



TEST NUMBER: P934435

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	126.6	114.4	102.3	114.4	126.6	129.6	202.0	298.5	346.8	421.6	571.0
115°	140.1	128.9	117.7	128.9	140.1	142.9	203.9	285.1	325.7	397.7	541.8
117.5°	153.3	143.1	132.9	143.1	153.3	155.8	207.7	276.8	311.4	376.3	506.2
120°	161.0	151.4	141.8	151.4	161.0	163.4	210.8	274.0	305.6	364.9	483.7
122.5°	169.8	160.2	150.5	160.2	169.8	172.3	215.2	272.5	301.1	354.5	461.6
125°	181.3	172.5	163.8	172.5	181.3	183.6	221.2	271.3	296.3	341.7	432.6
127.5°	192.4	183.5	174.5	183.5	192.4	194.6	227.1	270.6	292.3	331.3	409.2
130°	199.5	189.9	180.3	189.9	199.5	201.9	231.5	271.0	290.7	325.5	394.9
132.5°	205.4	195.9	186.3	195.9	205.4	207.9	235.1	271.3	289.4	320.4	382.6
135°	212.6	203.9	195.2	203.9	212.6	214.8	238.9	271.0	287.0	313.0	365.1
137.5°	221.5	212.8	204.2	212.8	221.5	223.7	244.7	272.7	286.7	308.6	352.7
140°	227.7	219.7	211.7	219.7	227.7	229.7	248.2	272.9	285.3	304.3	342.4
142.5°	232.2	224.9	217.5	224.9	232.2	234.1	251.2	273.9	285.3	302.0	335.4
145°	239.2	232.7	226.4	232.7	239.2	240.8	255.0	274.0	283.4	297.0	324.3
147.5°	247.7	241.5	235.3	241.5	247.7	249.3	260.7	275.8	283.4	294.2	315.7
150°	252.3	246.6	241.0	246.6	252.3	253.7	263.6	276.8	283.4	292.5	310.6
152.5°	255.5	251.2	246.9	251.2	255.5	256.6	265.5	277.4	283.4	291.2	306.7
155°	262.2	259.0	255.8	259.0	262.2	262.9	269.8	278.8	283.4	289.6	301.9
157.5°	268.5	265.5	262.4	265.5	268.5	269.3	274.0	280.2	283.4	288.2	297.8
160°	271.6	269.2	266.9	269.2	271.6	272.2	275.9	280.9	283.4	287.5	295.7
162.5°	274.8	273.0	271.3	273.0	274.8	275.3	278.0	281.6	283.4	286.9	293.8
165°	279.4	277.7	276.1	277.7	279.4	279.8	281.0	282.6	283.4	285.8	290.8
167.5°	282.0	281.3	280.5	281.3	282.0	282.2	283.2	284.6	285.3	287.0	290.2
170°	284.9	284.2	283.4	284.2	284.9	285.1	285.2	285.3	285.3	287.0	290.2
172.5°	285.3	285.1	284.9	285.1	285.3	285.3	285.3	285.3	285.3	286.6	289.1
175°	287.0	287.0	287.0	287.0	287.0	287.0	286.5	285.6	285.3	286.1	287.8
177.5°	287.0	287.0	287.0	287.0	287.0	287.0	286.6	286.0	285.7	286.4	287.7
180°	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0



TEST NUMBER: P934435

CATALOG NUMBER: SQ4-FA-050U-100D-92765-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3	1305.3
2.5°	1259.7	1256.0	1260.9	1247.3	1260.9	1256.0	1259.7	1268.3	1260.9	1265.9	1270.8
5°	1105.3	1099.1	1079.4	1063.3	1079.4	1099.1	1105.3	1131.3	1143.6	1165.8	1195.5
7.5°	988.0	983.0	978.1	968.2	978.1	983.0	988.0	995.4	1007.7	1027.5	1049.8
10°	962.0	963.3	970.7	969.5	970.7	963.3	962.0	959.6	955.8	959.6	973.1
12.5°	1028.7	1039.9	1080.6	1078.1	1080.6	1039.9	1028.7	979.3	946.0	939.8	942.3
15°	1105.3	1109.0	1117.6	1118.8	1117.6	1109.0	1105.3	1085.6	985.5	942.3	928.7
17.5°	1112.7	1114.0	1120.2	1120.2	1120.2	1114.0	1112.7	1104.1	1070.7	1012.7	936.1
20°	1106.5	1109.0	1121.4	1123.8	1121.4	1109.0	1106.5	1095.4	1076.9	1055.9	997.9
22.5°	1104.1	1109.0	1118.8	1117.6	1118.8	1109.0	1104.1	1086.8	1070.7	1055.9	1032.5
25°	1091.7	1091.7	1093.0	1094.2	1093.0	1091.7	1091.7	1078.1	1046.0	1042.3	1028.7
27.5°	1065.8	1068.3	1075.7	1074.4	1075.7	1068.3	1065.8	1060.8	1026.2	1022.6	1012.7
30°	1042.3	1039.9	1033.7	1028.7	1033.7	1039.9	1042.3	1034.9	1000.3	990.4	992.9
32.5°	1002.8	996.6	990.4	986.8	990.4	996.6	1002.8	1000.3	974.4	960.8	963.3
35°	955.8	957.1	955.8	952.2	955.8	957.1	955.8	958.4	942.3	929.9	928.7
37.5°	922.6	925.0	923.8	918.8	923.8	925.0	922.6	920.0	897.8	894.1	896.6
40°	888.0	889.2	888.0	884.2	888.0	889.2	888.0	883.0	852.2	853.4	862.0
42.5°	854.6	853.4	849.6	847.2	849.6	853.4	854.6	847.2	807.7	803.9	820.0
45°	816.3	817.6	810.1	806.5	810.1	817.6	816.3	811.4	770.7	760.8	771.9
47.5°	778.0	778.0	771.9	768.1	771.9	778.0	778.0	771.9	728.6	718.8	725.0
50°	737.3	736.1	727.4	726.2	727.4	736.1	737.3	733.6	687.9	679.3	679.3
52.5°	690.4	690.4	691.6	694.0	691.6	690.4	690.4	691.6	650.8	642.1	639.7
55°	649.6	650.8	659.4	662.0	659.4	650.8	649.6	649.6	612.5	603.9	599.0
57.5°	607.6	607.6	613.8	613.8	613.8	607.6	607.6	605.1	569.3	561.9	559.4
60°	559.4	561.9	566.8	565.6	566.8	561.9	559.4	557.0	526.1	521.2	512.5
62.5°	508.8	511.3	512.5	510.1	512.5	511.3	508.8	501.4	482.9	479.1	468.0
65°	455.7	458.2	459.4	457.0	459.4	458.2	455.7	452.0	438.4	432.2	422.4
67.5°	401.4	400.1	398.9	403.8	398.9	400.1	401.4	396.4	387.8	382.9	369.2
70°	345.7	345.7	344.5	347.1	344.5	345.7	345.7	342.1	337.1	333.4	321.1
72.5°	286.5	285.3	290.2	286.5	290.2	285.3	286.5	285.3	282.8	279.1	266.8
75°	228.4	231.0	228.4	232.2	228.4	231.0	228.4	229.7	228.4	226.0	217.3
77.5°	174.1	176.6	174.1	174.1	174.1	176.6	174.1	175.4	175.4	175.4	168.0
80°	123.5	122.3	122.3	121.0	122.3	122.3	123.5	123.5	124.7	122.3	119.8
82.5°	79.1	77.8	77.8	80.3	77.8	77.8	79.1	80.3	77.8	77.8	77.8
85°	43.2	44.5	42.0	42.0	42.0	44.5	43.2	40.8	43.2	43.2	42.0
87.5°	16.1	14.9	14.9	14.9	14.9	14.9	16.1	17.3	17.3	17.3	18.5
90°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	9.7	13.0	14.7	12.6
92.5°	36.6	35.1	29.3	23.5	29.3	35.1	36.6	51.9	72.3	82.4	72.3
95°	124.2	119.8	102.2	84.6	102.2	119.8	124.2	163.1	215.0	241.0	203.5
97.5°	286.9	278.4	244.9	211.3	244.9	278.4	286.9	311.4	344.3	360.6	298.2
100°	402.9	392.9	352.9	312.8	352.9	392.9	402.9	401.1	398.7	397.4	328.1
102.5°	501.8	493.2	459.0	424.8	459.0	493.2	501.8	470.5	428.7	407.8	337.5
105°	617.5	612.9	594.5	576.1	594.5	612.9	617.5	547.2	453.5	406.7	338.6
107.5°	677.6	678.7	683.1	687.6	683.1	678.7	677.6	579.6	448.9	383.6	323.6
110°	693.0	697.8	716.9	736.1	716.9	697.8	693.0	583.4	437.3	364.3	310.2



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CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	683.2	690.6	720.0	749.4	720.0	690.6	683.2	571.0	421.6	346.8	298.5
115°	649.8	660.0	700.8	741.7	700.8	660.0	649.8	541.8	397.7	325.7	285.1
117.5°	603.7	615.0	660.4	705.7	660.4	615.0	603.7	506.2	376.3	311.4	276.8
120°	572.8	583.8	627.7	671.8	627.7	583.8	572.8	483.7	364.9	305.6	274.0
122.5°	541.8	552.6	596.1	639.4	596.1	552.6	541.8	461.6	354.5	301.1	272.5
125°	500.7	510.7	550.6	590.6	550.6	510.7	500.7	432.6	341.7	296.3	271.3
127.5°	467.7	476.1	509.9	543.6	509.9	476.1	467.7	409.2	331.3	292.3	270.6
130°	447.0	454.7	486.0	517.1	486.0	454.7	447.0	394.9	325.5	290.7	271.0
132.5°	429.2	436.2	464.1	492.0	464.1	436.2	429.2	382.6	320.4	289.4	271.3
135°	404.2	410.1	434.3	458.3	434.3	410.1	404.2	365.1	313.0	287.0	271.0
137.5°	385.7	390.6	410.2	430.0	410.2	390.6	385.7	352.7	308.6	286.7	272.7
140°	370.9	375.5	393.9	412.3	393.9	375.5	370.9	342.4	304.3	285.3	272.9
142.5°	360.4	364.3	380.2	396.1	380.2	364.3	360.4	335.4	302.0	285.3	273.9
145°	344.8	347.8	359.9	371.8	359.9	347.8	344.8	324.3	297.0	283.4	274.0
147.5°	331.7	334.3	344.2	354.1	344.2	334.3	331.7	315.7	294.2	283.4	275.8
150°	324.2	326.3	334.3	342.4	334.3	326.3	324.2	310.6	292.5	283.4	276.8
152.5°	318.3	319.8	325.8	331.9	325.8	319.8	318.3	306.7	291.2	283.4	277.4
155°	311.2	312.2	316.2	320.2	316.2	312.2	311.2	301.9	289.6	283.4	278.8
157.5°	305.0	305.7	308.5	311.4	308.5	305.7	305.0	297.8	288.2	283.4	280.2
160°	301.9	302.3	304.0	305.6	304.0	302.3	301.9	295.7	287.5	283.4	280.9
162.5°	299.0	299.4	301.0	302.5	301.0	299.4	299.0	293.8	286.9	283.4	281.6
165°	294.5	294.9	296.6	298.3	296.6	294.9	294.5	290.8	285.8	283.4	282.6
167.5°	292.7	292.8	293.5	294.2	293.5	292.8	292.7	290.2	287.0	285.3	284.6
170°	292.7	292.7	292.7	292.7	292.7	292.7	292.7	290.2	287.0	285.3	285.3
172.5°	291.1	290.9	290.3	289.8	290.3	290.9	291.1	289.1	286.6	285.3	285.3
175°	289.0	289.0	289.0	289.0	289.0	289.0	289.0	287.8	286.1	285.3	285.6
177.5°	288.6	288.5	287.8	287.0	287.8	288.5	288.6	287.7	286.4	285.7	286.0
180°	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0



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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	1305.3	1305.3	1305.3	1305.3	1305.3
2.5°	1289.3	1295.5	1299.1	1304.1	1316.4
5°	1239.9	1263.3	1270.8	1289.3	1311.6
7.5°	1131.3	1202.9	1222.6	1267.1	1301.7
10°	1026.2	1097.9	1132.5	1237.5	1289.3
12.5°	973.1	1015.2	1038.6	1185.6	1272.0
15°	939.8	969.5	986.8	1116.4	1252.2
17.5°	913.9	934.9	947.2	1048.5	1225.1
20°	897.8	907.7	918.8	999.1	1194.2
22.5°	886.7	880.5	889.2	964.5	1152.2
25°	879.3	855.8	865.7	937.3	1102.9
27.5°	885.4	833.6	837.3	912.6	1051.0
30°	886.7	806.5	807.7	886.7	992.9
32.5°	878.1	778.0	779.3	854.6	927.4
35°	857.0	744.7	743.5	817.6	838.5
37.5°	828.6	708.9	708.9	776.8	740.9
40°	794.1	673.1	676.7	723.6	654.6
42.5°	752.1	634.8	639.7	653.3	590.4
45°	706.4	597.7	601.4	552.0	540.9
47.5°	655.8	559.4	560.6	458.2	524.8
50°	595.2	519.9	515.0	392.8	523.6
52.5°	542.1	476.7	461.8	355.7	475.5
55°	490.3	431.0	398.9	327.2	440.9
57.5°	444.5	371.7	340.9	294.0	433.5
60°	402.6	313.7	290.2	258.1	397.6
62.5°	368.0	270.5	265.5	233.4	360.6
65°	331.0	240.8	239.6	212.5	306.3
67.5°	295.2	221.1	219.8	192.6	233.4
70°	256.9	200.0	197.6	171.7	172.9
72.5°	217.3	176.6	174.1	154.4	143.3
75°	177.9	149.5	148.2	134.6	116.1
77.5°	139.6	118.5	121.0	108.7	85.2
80°	100.0	86.5	88.9	77.8	64.2
82.5°	66.6	56.8	59.3	49.4	43.2
85°	37.0	32.2	33.4	25.9	19.7
87.5°	17.3	14.9	14.9	9.9	6.2
90°	8.5	5.4	5.0	3.5	2.0
92.5°	52.3	37.2	33.9	20.8	7.7
95°	128.6	72.4	66.5	42.4	18.5
97.5°	173.2	79.5	74.2	53.1	32.0
100°	189.5	85.5	80.8	61.5	42.3
102.5°	196.9	91.5	87.0	69.2	51.2
105°	202.5	100.4	96.6	81.4	66.3
107.5°	203.5	113.5	109.9	95.8	81.7
110°	202.0	120.8	117.6	104.8	92.1



TEST NUMBER: P934435
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CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	202.0	129.6	126.6	114.4	102.3
115°	203.9	142.9	140.1	128.9	117.7
117.5°	207.7	155.8	153.3	143.1	132.9
120°	210.8	163.4	161.0	151.4	141.8
122.5°	215.2	172.3	169.8	160.2	150.5
125°	221.2	183.6	181.3	172.5	163.8
127.5°	227.1	194.6	192.4	183.5	174.5
130°	231.5	201.9	199.5	189.9	180.3
132.5°	235.1	207.9	205.4	195.9	186.3
135°	238.9	214.8	212.6	203.9	195.2
137.5°	244.7	223.7	221.5	212.8	204.2
140°	248.2	229.7	227.7	219.7	211.7
142.5°	251.2	234.1	232.2	224.9	217.5
145°	255.0	240.8	239.2	232.7	226.4
147.5°	260.7	249.3	247.7	241.5	235.3
150°	263.6	253.7	252.3	246.6	241.0
152.5°	265.5	256.6	255.5	251.2	246.9
155°	269.8	262.9	262.2	259.0	255.8
157.5°	274.0	269.3	268.5	265.5	262.4
160°	275.9	272.2	271.6	269.2	266.9
162.5°	278.0	275.3	274.8	273.0	271.3
165°	281.0	279.8	279.4	277.7	276.1
167.5°	283.2	282.2	282.0	281.3	280.5
170°	285.2	285.1	284.9	284.2	283.4
172.5°	285.3	285.3	285.3	285.1	284.9
175°	286.5	287.0	287.0	287.0	287.0
177.5°	286.6	287.0	287.0	287.0	287.0
180°	287.0	287.0	287.0	287.0	287.0



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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	14.70	15.71	15.52	16.56	17.60	17.50	18.51	18.32	19.35	20.40
	3H	15.19	16.10	16.03	16.95	18.02	18.85	19.75	19.68	20.61	21.68
	4H	15.39	16.24	16.24	17.10	18.19	19.29	20.15	20.14	21.01	22.09
	6H	15.52	16.30	16.38	17.17	18.27	19.58	20.36	20.44	21.23	22.33
	8H	15.52	16.27	16.39	17.16	18.26	19.65	20.40	20.52	21.29	22.39
	12H	15.50	16.21	16.38	17.09	18.22	19.69	20.41	20.57	21.29	22.41
4H	2H	15.75	16.60	16.60	17.46	18.55	17.93	18.78	18.78	19.64	20.73
	3H	16.79	17.50	17.65	18.39	19.49	19.44	20.15	20.31	21.04	22.15
	4H	17.07	17.72	17.95	18.61	19.73	19.97	20.61	20.85	21.51	22.63
	6H	17.20	17.76	18.10	18.68	19.81	20.33	20.89	21.23	21.81	22.94
	8H	17.21	17.73	18.11	18.64	19.79	20.44	20.96	21.34	21.87	23.01
	12H	17.19	17.66	18.10	18.58	19.73	20.50	20.97	21.41	21.90	23.05
8H	4H	17.53	18.05	18.43	18.96	20.10	20.10	20.63	21.00	21.54	22.68
	6H	17.80	18.23	18.72	19.18	20.32	20.54	20.97	21.46	21.92	23.07
	8H	17.84	18.22	18.78	19.17	20.33	20.69	21.07	21.62	22.01	23.17
	12H	17.83	18.17	18.77	19.10	20.32	20.79	21.12	21.72	22.06	23.27
12H	4H	17.54	18.01	18.46	18.94	20.09	20.08	20.55	20.99	21.47	22.62
	6H	17.86	18.24	18.79	19.18	20.34	20.54	20.92	21.47	21.86	23.02
	8H	17.93	18.27	18.87	19.20	20.41	20.70	21.04	21.64	21.97	23.18