

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: P935859

Luminaire Tested: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935859
REPORT IS A COMBINATION OF REPORTS P933770 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

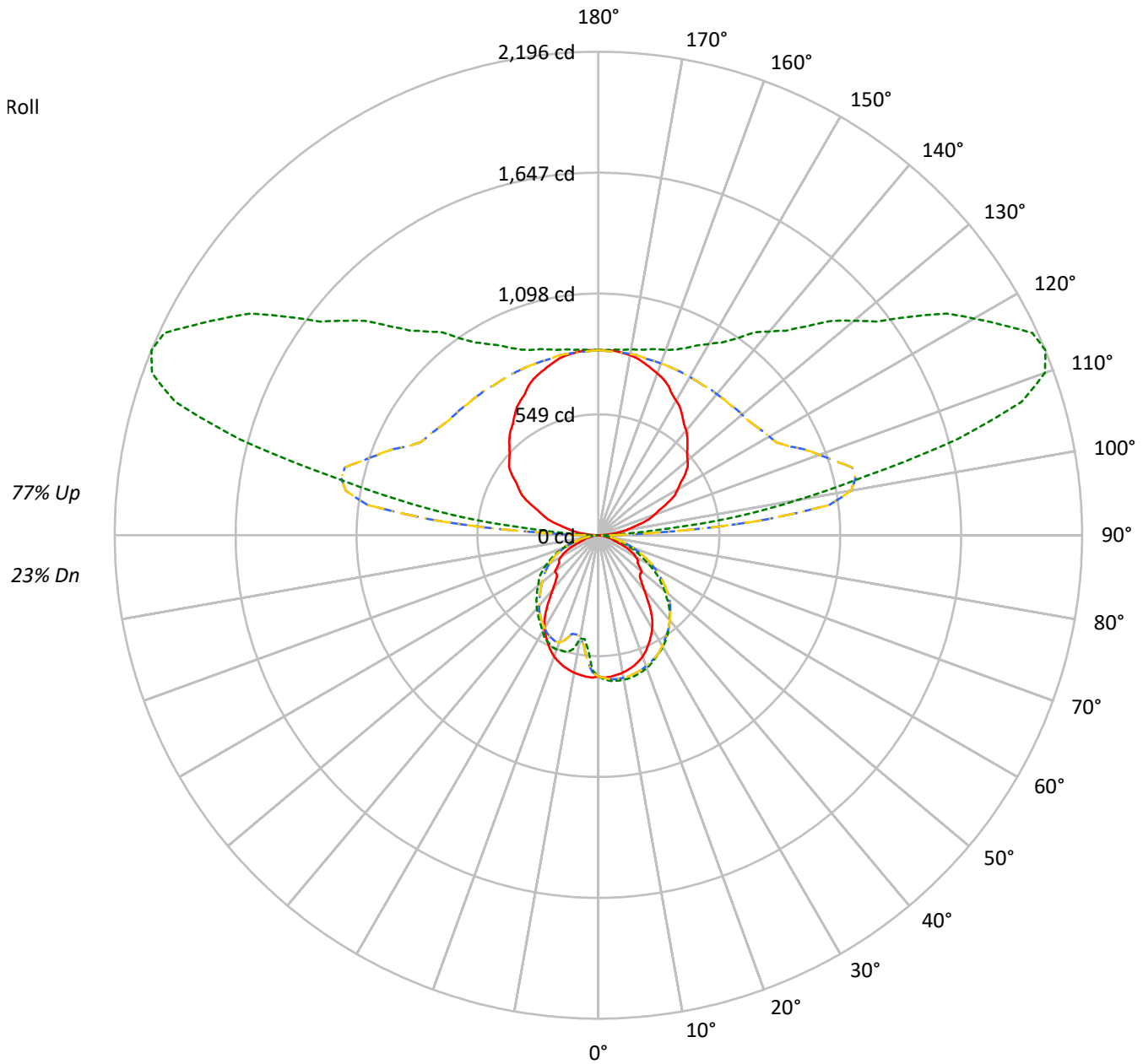
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7120.0 lumens
Efficiency: N/A
Efficacy: 128.1 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-Indirect

Input Watts (W): 55.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P935859
CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-4000K

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	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	23
1	92	88	84	81	81	78	75	72	60	58	56	43	42	41	28	27	27	20
2	84	77	71	66	74	68	63	59	52	49	46	38	36	34	25	24	23	17
3	76	67	60	55	67	60	54	49	46	42	39	34	31	29	22	20	19	14
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	19	18	16	12
5	64	53	45	39	56	47	40	36	36	32	28	27	24	21	17	16	14	10
6	59	47	39	34	52	42	35	31	33	28	24	24	21	18	16	14	12	9
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	14	12	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	6
10	43	32	25	20	38	28	22	18	22	18	15	17	14	11	11	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5954	5954	5954	5954
5°	5992	6011	5992	4725
10°	5946	5921	5946	4233
15°	5874	5793	5874	4837
20°	5744	5640	5744	4847
25°	5486	5418	5486	4744
30°	5155	5235	5155	4519
35°	4589	5002	4589	4271
40°	3817	4728	3817	4084
45°	3403	4408	3403	3868
50°	3608	4025	3608	3652
55°	3385	3613	3385	3527
60°	3478	3067	3478	3231
65°	3136	2536	3136	2835
70°	2158	2021	2158	2377
75°	1869	1494	1869	1789
80°	1479	989	1479	1076
85°	803	524	803	444

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5228 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.9	0.8
10°-20°	164.5	2.3
20°-30°	254.2	3.6
30°-40°	303.5	4.3
40°-50°	305.3	4.3
50°-60°	265.6	3.7
60°-70°	188.3	2.6
70°-80°	99.6	1.4
80°-90°	28.0	0.4
90°-100°	410.0	5.8
100°-110°	1078.0	15.1
110°-120°	1117.8	15.7
120°-130°	896.6	12.6
130°-140°	703.5	9.9
140°-150°	540.0	7.6
150°-160°	388.9	5.5
160°-170°	237.9	3.3
170°-180°	80.4	1.1
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0°-30°	476.6	6.7
0°-40°	780.1	11.0
0°-60°	1350.9	19.0
0°-90°	1666.9	23.4
90°-120°	2605.9	36.6
90°-150°	4745.9	66.7
90°-180°	5453.0	76.6
0°-180°	7120.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	642	642	642	642	642	
5°	645	665	645	523	645	61
15°	616	659	616	550	616	173
25°	542	614	542	538	542	249
35°	412	548	412	468	412	255
45°	266	452	266	396	266	213
55°	217	333	217	325	217	199
65°	150	201	150	225	150	144
75°	57	95	57	114	57	60
85°	10	24	10	21	10	13
90°	6	22	6	22	6	5
95°	54	248	54	248	54	60
105°	194	1688	194	1688	194	206
115°	345	2174	345	2174	345	341
125°	480	1731	480	1731	480	426
135°	572	1343	572	1343	572	442
145°	663	1090	663	1090	663	416
155°	750	938	750	938	750	344
165°	809	874	809	874	809	228
175°	841	847	841	847	841	80
180°	841	841	841	841	841	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7
2.5°	647.1	647.1	650.7	652.0	652.0	650.2	648.4	650.2	655.6	657.4	656.8
5°	644.7	649.5	656.2	657.4	658.7	658.1	656.8	658.1	664.1	665.3	665.9
7.5°	639.9	648.9	657.4	659.2	661.0	659.2	658.7	659.9	665.9	667.1	667.1
10°	633.8	646.5	656.2	657.4	659.2	657.4	657.4	659.9	665.9	667.1	667.7
12.5°	625.3	642.8	652.0	653.2	655.6	655.0	654.4	656.8	662.9	664.1	664.1
15°	615.5	636.1	644.7	645.9	650.2	648.9	648.9	651.4	658.1	659.9	659.2
17.5°	602.2	627.7	637.4	639.2	642.3	641.7	642.3	644.7	650.7	652.0	652.6
20°	587.0	616.1	627.7	629.5	632.5	632.5	632.5	635.6	641.7	644.1	644.1
22.5°	566.4	604.0	616.1	617.4	621.0	621.0	622.2	626.5	631.9	632.5	632.5
25°	542.1	590.6	600.9	604.6	608.3	610.1	611.9	614.3	616.1	615.5	616.1
27.5°	516.6	573.7	587.0	589.4	594.3	596.1	598.6	599.1	599.8	601.6	600.4
30°	488.1	550.0	570.0	572.4	580.3	581.6	579.1	580.3	583.4	584.6	585.8
32.5°	455.9	514.8	552.4	557.9	565.2	561.6	560.9	562.7	567.6	567.6	568.8
35°	412.2	487.4	536.0	540.9	546.4	542.1	544.5	545.1	548.2	550.0	549.3
37.5°	364.2	463.8	519.0	522.6	526.9	521.5	525.1	526.9	529.3	528.2	528.2
40°	321.7	426.8	499.0	501.5	505.1	500.8	504.4	505.7	506.9	505.7	505.1
42.5°	290.2	386.1	477.7	480.8	478.4	481.4	482.6	485.1	483.2	480.8	480.8
45°	265.8	375.2	454.7	458.3	454.7	459.6	461.4	461.4	455.9	454.7	454.0
47.5°	258.0	353.3	431.6	431.6	429.8	435.8	438.9	434.7	429.2	427.3	427.3
50°	257.4	329.0	400.1	397.6	406.1	413.4	410.4	406.1	401.9	395.2	395.2
52.5°	233.7	299.2	359.3	368.5	381.8	386.1	381.3	377.0	369.7	366.7	364.2
55°	216.7	268.3	322.3	340.5	354.6	360.0	350.8	346.6	335.7	333.9	332.6
57.5°	213.1	223.4	288.4	311.4	328.4	327.8	322.3	314.5	305.3	303.5	303.0
60°	195.5	161.5	251.9	279.2	296.8	295.0	290.2	282.9	274.4	273.2	272.0
62.5°	177.2	117.1	210.6	241.6	266.5	265.8	261.7	250.7	244.7	241.6	239.1
65°	150.5	98.3	150.0	200.9	236.8	238.0	228.8	220.9	214.3	210.6	210.0
67.5°	114.8	80.1	101.4	167.5	208.2	207.0	195.5	191.8	183.3	181.5	177.9
70°	85.0	53.4	70.4	136.0	180.3	177.2	168.2	163.9	156.0	151.8	149.4
72.5°	70.4	43.1	51.6	105.6	151.8	148.1	140.2	135.4	128.7	125.1	122.6
75°	57.0	45.5	39.5	78.3	123.2	120.8	113.5	108.6	103.2	98.3	98.9
77.5°	41.9	42.5	31.6	57.7	97.8	94.1	89.9	83.8	81.4	76.5	76.5
80°	31.6	33.4	23.7	39.5	70.4	70.4	66.8	62.5	58.3	55.8	55.8
82.5°	21.3	21.3	17.6	24.9	48.0	46.2	43.7	42.5	40.1	38.8	38.8
85°	9.7	12.1	11.0	15.2	26.1	27.3	27.3	26.1	25.5	24.3	24.9
87.5°	3.1	5.4	6.7	8.5	13.4	13.9	14.6	14.6	14.6	15.2	15.2
90°	5.6	10.1	14.7	15.8	24.9	36.9	42.9	38.1	28.6	21.5	21.5
92.5°	22.5	60.9	99.4	109.0	153.2	212.1	241.6	211.7	152.1	107.3	103.0
95°	54.2	124.5	194.7	212.3	376.9	596.5	706.3	630.3	478.2	364.1	351.2
97.5°	93.7	155.7	217.7	233.2	507.7	873.8	1056.9	1008.8	912.7	840.6	816.0
100°	124.2	180.4	236.6	250.6	555.3	961.6	1164.7	1168.2	1175.3	1180.5	1151.2
102.5°	150.2	202.7	255.1	268.2	577.2	989.2	1195.2	1256.4	1378.8	1470.7	1445.6
105°	194.2	238.7	283.0	294.2	593.3	992.2	1191.7	1329.0	1603.5	1809.4	1795.9
107.5°	239.4	280.8	322.2	332.6	596.4	948.2	1124.0	1315.5	1698.4	1985.6	1988.8
110°	269.8	307.2	344.7	354.0	591.9	909.0	1067.5	1281.6	1709.7	2030.7	2044.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	299.8	335.5	371.1	380.0	592.1	874.8	1016.2	1235.3	1673.4	2001.9	2023.5
115°	345.0	377.8	410.7	418.9	597.5	835.6	954.7	1165.7	1587.7	1904.3	1934.2
117.5°	389.6	419.5	449.3	456.7	608.6	811.1	912.3	1102.8	1483.6	1769.3	1802.5
120°	415.5	443.6	471.7	478.7	617.6	802.8	895.4	1069.4	1417.4	1678.4	1710.7
122.5°	440.9	469.2	497.7	504.7	630.6	798.5	882.4	1039.1	1352.5	1587.6	1619.3
125°	479.9	505.7	531.6	538.0	648.1	794.9	868.3	1001.4	1267.6	1467.3	1496.6
127.5°	511.5	537.6	563.6	570.2	665.6	792.8	856.5	970.8	1199.3	1370.8	1395.5
130°	528.4	556.5	584.6	591.6	678.4	794.1	851.9	953.7	1157.2	1309.8	1332.6
132.5°	545.9	574.1	602.1	609.2	688.7	794.9	848.0	939.0	1121.2	1257.8	1278.3
135°	571.9	597.5	623.0	629.4	700.1	794.1	841.2	917.5	1070.0	1184.4	1202.1
137.5°	598.4	623.7	649.1	655.4	717.0	799.1	840.1	904.5	1033.5	1130.3	1144.7
140°	620.5	643.8	667.2	673.0	727.4	799.9	836.1	891.8	1003.2	1086.7	1100.2
142.5°	637.4	659.0	680.5	685.9	736.0	802.7	836.1	885.1	982.9	1056.3	1067.9
145°	663.4	682.2	701.0	705.7	747.3	802.8	830.5	870.5	950.5	1010.5	1019.3
147.5°	689.3	707.7	725.9	730.6	763.9	808.3	830.5	862.0	924.9	972.1	979.4
150°	706.3	722.9	739.3	743.5	772.5	811.1	830.5	857.1	910.2	950.1	956.0
152.5°	723.8	736.3	748.8	752.0	778.2	813.0	830.5	853.2	898.6	932.7	937.1
155°	749.7	759.1	768.3	770.7	790.6	817.2	830.5	848.6	884.7	911.8	914.8
157.5°	768.9	778.0	786.9	789.2	803.0	821.3	830.5	844.5	872.6	893.7	895.7
160°	781.9	788.9	796.0	797.7	808.7	823.2	830.5	842.5	866.6	884.6	885.8
162.5°	794.9	800.2	805.4	806.8	814.6	825.2	830.5	840.6	861.0	876.2	877.3
165°	809.0	813.7	818.5	819.7	823.3	828.1	830.5	837.7	852.3	863.2	864.3
167.5°	822.0	824.2	826.5	827.0	830.0	834.1	836.1	840.9	850.4	857.5	858.1
170°	830.5	832.7	835.0	835.6	835.7	836.0	836.1	840.9	850.4	857.5	857.5
172.5°	835.0	835.5	836.0	836.1	836.1	836.1	836.1	839.9	847.4	853.0	852.6
175°	841.2	841.2	841.2	841.2	839.4	837.2	836.1	838.5	843.2	846.9	846.9
177.5°	841.2	841.2	841.2	841.2	839.9	838.2	837.3	839.2	842.9	845.7	845.1
180°	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7
2.5°	658.1	656.2	658.1	656.8	657.4	655.6	650.2	648.4	650.2	652.0	652.0
5°	665.9	664.8	665.9	665.9	665.3	664.1	658.1	656.8	658.1	658.7	657.4
7.5°	668.4	666.6	668.4	667.1	667.1	665.9	659.9	658.7	659.2	661.0	659.2
10°	668.4	666.6	668.4	667.7	667.1	665.9	659.9	657.4	657.4	659.2	657.4
12.5°	665.3	664.1	665.3	664.1	664.1	662.9	656.8	654.4	655.0	655.6	653.2
15°	660.5	658.7	660.5	659.2	659.9	658.1	651.4	648.9	648.9	650.2	645.9
17.5°	653.2	650.7	653.2	652.6	652.0	650.7	644.7	642.3	641.7	642.3	639.2
20°	644.7	642.8	644.7	644.1	644.1	641.7	635.6	632.5	632.5	632.5	629.5
22.5°	631.3	629.5	631.3	632.5	632.5	631.9	626.5	622.2	621.0	621.0	617.4
25°	616.1	614.3	616.1	616.1	615.5	616.1	614.3	611.9	610.1	608.3	604.6
27.5°	601.6	600.4	601.6	600.4	601.6	599.8	599.1	598.6	596.1	594.3	589.4
30°	587.0	585.8	587.0	585.8	584.6	583.4	580.3	579.1	581.6	580.3	572.4
32.5°	568.8	567.6	568.8	568.8	567.6	567.6	562.7	560.9	561.6	565.2	557.9
35°	550.0	548.2	550.0	549.3	550.0	548.2	545.1	544.5	542.1	546.4	540.9
37.5°	528.2	526.4	528.2	528.2	528.2	529.3	526.9	525.1	521.5	526.9	522.6
40°	505.7	503.3	505.7	505.1	505.7	506.9	505.7	504.4	500.8	505.1	501.5
42.5°	480.2	479.6	480.2	480.8	480.8	483.2	485.1	482.6	481.4	478.4	480.8
45°	452.9	451.7	452.9	454.0	454.7	455.9	461.4	461.4	459.6	454.7	458.3
47.5°	423.7	420.7	423.7	427.3	427.3	429.2	434.7	438.9	435.8	429.8	431.6
50°	392.7	393.4	392.7	395.2	395.2	401.9	406.1	410.4	413.4	406.1	397.6
52.5°	362.4	361.8	362.4	364.2	366.7	369.7	377.0	381.3	386.1	381.8	368.5
55°	332.0	333.3	332.0	332.6	333.9	335.7	346.6	350.8	360.0	354.6	340.5
57.5°	301.7	299.9	301.7	303.0	303.5	305.3	314.5	322.3	327.8	328.4	311.4
60°	266.5	264.0	266.5	272.0	273.2	274.4	282.9	290.2	295.0	296.8	279.2
62.5°	235.5	231.3	235.5	239.1	241.6	244.7	250.7	261.7	265.8	266.5	241.6
65°	202.8	200.9	202.8	210.0	210.6	214.3	220.9	228.8	238.0	236.8	200.9
67.5°	173.0	173.0	173.0	177.9	181.5	183.3	191.8	195.5	207.0	208.2	167.5
70°	145.7	145.1	145.7	149.4	151.8	156.0	163.9	168.2	177.2	180.3	136.0
72.5°	119.6	118.9	119.6	122.6	125.1	128.7	135.4	140.2	148.1	151.8	105.6
75°	96.5	95.3	96.5	98.9	98.3	103.2	108.6	113.5	120.8	123.2	78.3
77.5°	74.0	74.0	74.0	76.5	76.5	81.4	83.8	89.9	94.1	97.8	57.7
80°	55.2	54.7	55.2	55.8	55.8	58.3	62.5	66.8	70.4	70.4	39.5
82.5°	38.8	37.7	38.8	38.8	38.8	40.1	42.5	43.7	46.2	48.0	24.9
85°	24.3	24.3	24.3	24.9	24.3	25.5	26.1	27.3	27.3	26.1	15.2
87.5°	15.7	15.2	15.7	15.2	15.2	14.6	14.6	14.6	13.9	13.4	8.5
90°	21.5	21.5	21.5	21.5	21.5	28.6	38.1	42.9	36.9	24.9	15.8
92.5°	85.9	68.9	85.9	103.0	107.3	152.1	211.7	241.6	212.1	153.2	109.0
95°	299.5	247.8	299.5	351.2	364.1	478.2	630.3	706.3	596.5	376.9	212.3
97.5°	717.7	619.3	717.7	816.0	840.6	912.7	1008.8	1056.9	873.8	507.7	233.2
100°	1034.1	916.8	1034.1	1151.2	1180.5	1175.3	1168.2	1164.7	961.6	555.3	250.6
102.5°	1345.3	1244.9	1345.3	1445.6	1470.7	1378.8	1256.4	1195.2	989.2	577.2	268.2
105°	1742.0	1688.0	1742.0	1795.9	1809.4	1603.5	1329.0	1191.7	992.2	593.3	294.2
107.5°	2001.9	2014.9	2001.9	1988.8	1985.6	1698.4	1315.5	1124.0	948.2	596.4	332.6
110°	2101.0	2157.2	2101.0	2044.8	2030.7	1709.7	1281.6	1067.5	909.0	591.9	354.0



TEST NUMBER: P935859

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2109.8	2196.1	2109.8	2023.5	2001.9	1673.4	1235.3	1016.2	874.8	592.1	380.0
115°	2053.9	2173.6	2053.9	1934.2	1904.3	1587.7	1165.7	954.7	835.6	597.5	418.9
117.5°	1935.2	2067.9	1935.2	1802.5	1769.3	1483.6	1102.8	912.3	811.1	608.6	456.7
120°	1839.6	1968.6	1839.6	1710.7	1678.4	1417.4	1069.4	895.4	802.8	617.6	478.7
122.5°	1746.6	1873.8	1746.6	1619.3	1587.6	1352.5	1039.1	882.4	798.5	630.6	504.7
125°	1613.7	1730.9	1613.7	1496.6	1467.3	1267.6	1001.4	868.3	794.9	648.1	538.0
127.5°	1494.3	1593.2	1494.3	1395.5	1370.8	1199.3	970.8	856.5	792.8	665.6	570.2
130°	1423.9	1515.2	1423.9	1332.6	1309.8	1157.2	953.7	851.9	794.1	678.4	591.6
132.5°	1360.0	1441.8	1360.0	1278.3	1257.8	1121.2	939.0	848.0	794.9	688.7	609.2
135°	1272.6	1343.1	1272.6	1202.1	1184.4	1070.0	917.5	841.2	794.1	700.1	629.4
137.5°	1202.4	1260.1	1202.4	1144.7	1130.3	1033.5	904.5	840.1	799.1	717.0	655.4
140°	1154.2	1208.1	1154.2	1100.2	1086.7	1003.2	891.8	836.1	799.9	727.4	673.0
142.5°	1114.3	1160.7	1114.3	1067.9	1056.3	982.9	885.1	836.1	802.7	736.0	685.9
145°	1054.5	1089.6	1054.5	1019.3	1010.5	950.5	870.5	830.5	802.8	747.3	705.7
147.5°	1008.5	1037.7	1008.5	979.4	972.1	924.9	862.0	830.5	808.3	763.9	730.6
150°	979.7	1003.2	979.7	956.0	950.1	910.2	857.1	830.5	811.1	772.5	743.5
152.5°	954.9	972.7	954.9	937.1	932.7	898.6	853.2	830.5	813.0	778.2	752.0
155°	926.5	938.3	926.5	914.8	911.8	884.7	848.6	830.5	817.2	790.6	770.7
157.5°	904.0	912.3	904.0	895.7	893.7	872.6	844.5	830.5	821.3	803.0	789.2
160°	890.6	895.4	890.6	885.8	884.6	866.6	842.5	830.5	823.2	808.7	797.7
162.5°	881.8	886.3	881.8	877.3	876.2	861.0	840.6	830.5	825.2	814.6	806.8
165°	869.1	873.9	869.1	864.3	863.2	852.3	837.7	830.5	828.1	823.3	819.7
167.5°	860.1	862.1	860.1	858.1	857.5	850.4	840.9	836.1	834.1	830.0	827.0
170°	857.5	857.5	857.5	857.5	857.5	850.4	840.9	836.1	836.0	835.7	835.6
172.5°	850.9	849.1	850.9	852.6	853.0	847.4	839.9	836.1	836.1	836.1	836.1
175°	846.9	846.9	846.9	846.9	846.9	843.2	838.5	836.1	837.2	839.4	841.2
177.5°	843.2	841.2	843.2	845.1	845.7	842.9	839.2	837.3	838.2	839.9	841.2
180°	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2



TEST NUMBER: P935859

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7
2.5°	650.7	647.1	647.1	641.0	638.6	636.8	633.8	624.7	622.2	619.8	623.5
5°	656.2	649.5	644.7	633.8	624.7	621.0	609.4	587.6	573.1	562.1	556.0
7.5°	657.4	648.9	639.9	622.8	600.9	591.3	556.0	516.0	505.1	495.4	489.2
10°	656.2	646.5	633.8	608.3	556.7	539.7	504.4	478.4	471.7	469.9	471.7
12.5°	652.0	642.8	625.3	582.7	510.5	499.0	478.4	463.2	462.0	465.0	481.4
15°	644.7	636.1	615.5	548.8	485.1	476.6	462.0	456.5	463.2	484.4	533.6
17.5°	637.4	627.7	602.2	515.4	465.6	459.6	449.2	460.2	497.7	526.4	542.7
20°	627.7	616.1	587.0	491.1	451.7	446.2	441.4	490.5	519.0	529.3	538.5
22.5°	616.1	604.0	566.4	474.1	437.1	432.8	435.8	507.5	519.0	526.4	534.2
25°	600.9	590.6	542.1	460.7	425.5	420.7	432.2	505.7	512.3	514.1	530.0
27.5°	587.0	573.7	516.6	448.6	411.6	409.8	435.3	497.7	502.6	504.4	521.5
30°	570.0	550.0	488.1	435.8	397.0	396.4	435.8	488.1	486.9	491.7	508.7
32.5°	552.4	514.8	455.9	420.1	383.1	382.4	431.6	473.5	472.3	478.9	491.7
35°	536.0	487.4	412.2	401.9	365.4	366.0	421.3	456.5	457.1	463.2	471.0
37.5°	519.0	463.8	364.2	381.8	348.5	348.5	407.3	440.7	439.5	441.4	452.2
40°	499.0	426.8	321.7	355.7	332.6	330.8	390.3	423.7	419.5	418.9	434.0
42.5°	477.7	386.1	290.2	321.2	314.5	312.0	369.7	403.1	395.2	397.0	416.5
45°	454.7	375.2	265.8	271.4	295.6	293.8	347.2	379.4	373.9	378.8	398.8
47.5°	431.6	353.3	258.0	225.2	275.6	275.0	322.3	356.4	353.3	358.2	379.4
50°	400.1	329.0	257.4	193.1	253.2	255.5	292.6	333.9	333.9	338.2	360.6
52.5°	359.3	299.2	233.7	174.8	227.0	234.3	266.5	314.5	315.6	319.9	340.0
55°	322.3	268.3	216.7	160.8	196.1	211.9	241.0	294.4	296.8	301.1	319.3
57.5°	288.4	223.4	213.1	144.5	167.5	182.8	218.5	275.0	276.2	279.9	297.4
60°	251.9	161.5	195.5	126.9	142.7	154.1	197.9	251.9	256.2	258.6	273.8
62.5°	210.6	117.1	177.2	114.8	130.5	133.0	180.9	230.1	235.5	237.3	246.5
65°	150.0	98.3	150.5	104.5	117.8	118.4	162.7	207.6	212.4	215.5	222.2
67.5°	101.4	80.1	114.8	94.7	108.1	108.6	145.1	181.5	188.2	190.6	194.9
70°	70.4	53.4	85.0	84.4	97.1	98.3	126.3	157.9	163.9	165.7	168.2
72.5°	51.6	43.1	70.4	75.9	85.6	86.8	106.8	131.2	137.2	139.0	140.2
75°	39.5	45.5	57.0	66.2	72.9	73.4	87.4	106.8	111.1	112.3	112.9
77.5°	31.6	42.5	41.9	53.4	59.5	58.3	68.6	82.6	86.2	86.2	86.2
80°	23.7	33.4	31.6	38.3	43.7	42.5	49.2	58.9	60.1	61.3	60.7
82.5°	17.6	21.3	21.3	24.3	29.1	28.0	32.8	38.3	38.3	38.3	39.5
85°	11.0	12.1	9.7	12.8	16.4	15.7	18.2	20.6	21.3	21.3	20.0
87.5°	6.7	5.4	3.1	4.9	7.2	7.2	8.5	9.1	8.5	8.5	8.5
90°	14.7	10.1	5.6	10.1	14.7	15.8	24.9	36.9	42.9	38.1	28.6
92.5°	99.4	60.9	22.5	60.9	99.4	109.0	153.2	212.1	241.6	211.7	152.1
95°	194.7	124.5	54.2	124.5	194.7	212.3	376.9	596.5	706.3	630.3	478.2
97.5°	217.7	155.7	93.7	155.7	217.7	233.2	507.7	873.8	1056.9	1008.8	912.7
100°	236.6	180.4	124.2	180.4	236.6	250.6	555.3	961.6	1164.7	1168.2	1175.3
102.5°	255.1	202.7	150.2	202.7	255.1	268.2	577.2	989.2	1195.2	1256.4	1378.8
105°	283.0	238.7	194.2	238.7	283.0	294.2	593.3	992.2	1191.7	1329.0	1603.5
107.5°	322.2	280.8	239.4	280.8	322.2	332.6	596.4	948.2	1124.0	1315.5	1698.4
110°	344.7	307.2	269.8	307.2	344.7	354.0	591.9	909.0	1067.5	1281.6	1709.7



TEST NUMBER: P935859

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	371.1	335.5	299.8	335.5	371.1	380.0	592.1	874.8	1016.2	1235.3	1673.4
115°	410.7	377.8	345.0	377.8	410.7	418.9	597.5	835.6	954.7	1165.7	1587.7
117.5°	449.3	419.5	389.6	419.5	449.3	456.7	608.6	811.1	912.3	1102.8	1483.6
120°	471.7	443.6	415.5	443.6	471.7	478.7	617.6	802.8	895.4	1069.4	1417.4
122.5°	497.7	469.2	440.9	469.2	497.7	504.7	630.6	798.5	882.4	1039.1	1352.5
125°	531.6	505.7	479.9	505.7	531.6	538.0	648.1	794.9	868.3	1001.4	1267.6
127.5°	563.6	537.6	511.5	537.6	563.6	570.2	665.6	792.8	856.5	970.8	1199.3
130°	584.6	556.5	528.4	556.5	584.6	591.6	678.4	794.1	851.9	953.7	1157.2
132.5°	602.1	574.1	545.9	574.1	602.1	609.2	688.7	794.9	848.0	939.0	1121.2
135°	623.0	597.5	571.9	597.5	623.0	629.4	700.1	794.1	841.2	917.5	1070.0
137.5°	649.1	623.7	598.4	623.7	649.1	655.4	717.0	799.1	840.1	904.5	1033.5
140°	667.2	643.8	620.5	643.8	667.2	673.0	727.4	799.9	836.1	891.8	1003.2
142.5°	680.5	659.0	637.4	659.0	680.5	685.9	736.0	802.7	836.1	885.1	982.9
145°	701.0	682.2	663.4	682.2	701.0	705.7	747.3	802.8	830.5	870.5	950.5
147.5°	725.9	707.7	689.3	707.7	725.9	730.6	763.9	808.3	830.5	862.0	924.9
150°	739.3	722.9	706.3	722.9	739.3	743.5	772.5	811.1	830.5	857.1	910.2
152.5°	748.8	736.3	723.8	736.3	748.8	752.0	778.2	813.0	830.5	853.2	898.6
155°	768.3	759.1	749.7	759.1	768.3	770.7	790.6	817.2	830.5	848.6	884.7
157.5°	786.9	778.0	768.9	778.0	786.9	789.2	803.0	821.3	830.5	844.5	872.6
160°	796.0	788.9	781.9	788.9	796.0	797.7	808.7	823.2	830.5	842.5	866.6
162.5°	805.4	800.2	794.9	800.2	805.4	806.8	814.6	825.2	830.5	840.6	861.0
165°	818.5	813.7	809.0	813.7	818.5	819.7	823.3	828.1	830.5	837.7	852.3
167.5°	826.5	824.2	822.0	824.2	826.5	827.0	830.0	834.1	836.1	840.9	850.4
170°	835.0	832.7	830.5	832.7	835.0	835.6	835.7	836.0	836.1	840.9	850.4
172.5°	836.0	835.5	835.0	835.5	836.0	836.1	836.1	836.1	836.1	839.9	847.4
175°	841.2	841.2	841.2	841.2	841.2	841.2	839.4	837.2	836.1	838.5	843.2
177.5°	841.2	841.2	841.2	841.2	841.2	841.2	839.9	838.2	837.3	839.2	842.9
180°	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2



TEST NUMBER: P935859

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7	641.7
2.5°	619.2	617.4	619.8	613.2	619.8	617.4	619.2	623.5	619.8	622.2	624.7
5°	543.3	540.3	530.6	522.6	530.6	540.3	543.3	556.0	562.1	573.1	587.6
7.5°	485.6	483.2	480.8	475.9	480.8	483.2	485.6	489.2	495.4	505.1	516.0
10°	472.9	473.5	477.1	476.6	477.1	473.5	472.9	471.7	469.9	471.7	478.4
12.5°	505.7	511.1	531.1	530.0	531.1	511.1	505.7	481.4	465.0	462.0	463.2
15°	543.3	545.1	549.3	550.0	549.3	545.1	543.3	533.6	484.4	463.2	456.5
17.5°	547.0	547.5	550.6	550.6	550.6	547.5	547.0	542.7	526.4	497.7	460.2
20°	543.9	545.1	551.2	552.4	551.2	545.1	543.9	538.5	529.3	519.0	490.5
22.5°	542.7	545.1	550.0	549.3	550.0	545.1	542.7	534.2	526.4	519.0	507.5
25°	536.7	536.7	537.2	537.8	537.2	536.7	536.7	530.0	514.1	512.3	505.7
27.5°	523.9	525.1	528.7	528.2	528.7	525.1	523.9	521.5	504.4	502.6	497.7
30°	512.3	511.1	508.1	505.7	508.1	511.1	512.3	508.7	491.7	486.9	488.1
32.5°	493.0	489.9	486.9	485.1	486.9	489.9	493.0	491.7	478.9	472.3	473.5
35°	469.9	470.5	469.9	468.1	469.9	470.5	469.9	471.0	463.2	457.1	456.5
37.5°	453.5	454.7	454.0	451.7	454.0	454.7	453.5	452.2	441.4	439.5	440.7
40°	436.5	437.1	436.5	434.7	436.5	437.1	436.5	434.0	418.9	419.5	423.7
42.5°	420.1	419.5	417.6	416.5	417.6	419.5	420.1	416.5	397.0	395.2	403.1
45°	401.3	401.9	398.2	396.4	398.2	401.9	401.3	398.8	378.8	373.9	379.4
47.5°	382.4	382.4	379.4	377.5	379.4	382.4	382.4	379.4	358.2	353.3	356.4
50°	362.4	361.8	357.5	356.9	357.5	361.8	362.4	360.6	338.2	333.9	333.9
52.5°	339.3	339.3	340.0	341.2	340.0	339.3	339.3	340.0	319.9	315.6	314.5
55°	319.3	319.9	324.1	325.4	324.1	319.9	319.3	319.3	301.1	296.8	294.4
57.5°	298.7	298.7	301.7	301.7	301.7	298.7	298.7	297.4	279.9	276.2	275.0
60°	275.0	276.2	278.6	278.1	278.6	276.2	275.0	273.8	258.6	256.2	251.9
62.5°	250.1	251.4	251.9	250.7	251.9	251.4	250.1	246.5	237.3	235.5	230.1
65°	224.0	225.2	225.8	224.6	225.8	225.2	224.0	222.2	215.5	212.4	207.6
67.5°	197.3	196.7	196.1	198.5	196.1	196.7	197.3	194.9	190.6	188.2	181.5
70°	170.0	170.0	169.4	170.6	169.4	170.0	170.0	168.2	165.7	163.9	157.9
72.5°	140.8	140.2	142.7	140.8	142.7	140.2	140.8	140.2	139.0	137.2	131.2
75°	112.3	113.5	112.3	114.1	112.3	113.5	112.3	112.9	112.3	111.1	106.8
77.5°	85.6	86.8	85.6	85.6	85.6	86.8	85.6	86.2	86.2	86.2	82.6
80°	60.7	60.1	60.1	59.5	60.1	60.1	60.7	60.7	61.3	60.1	58.9
82.5°	38.8	38.3	38.3	39.5	38.3	38.3	38.8	39.5	38.3	38.3	38.3
85°	21.3	21.8	20.6	20.6	20.6	21.8	21.3	20.0	21.3	21.3	20.6
87.5°	7.9	7.2	7.2	7.2	7.2	7.2	7.9	8.5	8.5	8.5	9.1
90°	21.5	21.5	21.5	21.5	21.5	21.5	21.5	28.6	38.1	42.9	36.9
92.5°	107.3	103.0	85.9	68.9	85.9	103.0	107.3	152.1	211.7	241.6	212.1
95°	364.1	351.2	299.5	247.8	299.5	351.2	364.1	478.2	630.3	706.3	596.5
97.5°	840.6	816.0	717.7	619.3	717.7	816.0	840.6	912.7	1008.8	1056.9	873.8
100°	1180.5	1151.2	1034.1	916.8	1034.1	1151.2	1180.5	1175.3	1168.2	1164.7	961.6
102.5°	1470.7	1445.6	1345.3	1244.9	1345.3	1445.6	1470.7	1378.8	1256.4	1195.2	989.2
105°	1809.4	1795.9	1742.0	1688.0	1742.0	1795.9	1809.4	1603.5	1329.0	1191.7	992.2
107.5°	1985.6	1988.8	2001.9	2014.9	2001.9	1988.8	1985.6	1698.4	1315.5	1124.0	948.2
110°	2030.7	2044.8	2101.0	2157.2	2101.0	2044.8	2030.7	1709.7	1281.6	1067.5	909.0



TEST NUMBER: P935859

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	2001.9	2023.5	2109.8	2196.1	2109.8	2023.5	2001.9	1673.4	1235.3	1016.2	874.8
115°	1904.3	1934.2	2053.9	2173.6	2053.9	1934.2	1904.3	1587.7	1165.7	954.7	835.6
117.5°	1769.3	1802.5	1935.2	2067.9	1935.2	1802.5	1769.3	1483.6	1102.8	912.3	811.1
120°	1678.4	1710.7	1839.6	1968.6	1839.6	1710.7	1678.4	1417.4	1069.4	895.4	802.8
122.5°	1587.6	1619.3	1746.6	1873.8	1746.6	1619.3	1587.6	1352.5	1039.1	882.4	798.5
125°	1467.3	1496.6	1613.7	1730.9	1613.7	1496.6	1467.3	1267.6	1001.4	868.3	794.9
127.5°	1370.8	1395.5	1494.3	1593.2	1494.3	1395.5	1370.8	1199.3	970.8	856.5	792.8
130°	1309.8	1332.6	1423.9	1515.2	1423.9	1332.6	1309.8	1157.2	953.7	851.9	794.1
132.5°	1257.8	1278.3	1360.0	1441.8	1360.0	1278.3	1257.8	1121.2	939.0	848.0	794.9
135°	1184.4	1202.1	1272.6	1343.1	1272.6	1202.1	1184.4	1070.0	917.5	841.2	794.1
137.5°	1130.3	1144.7	1202.4	1260.1	1202.4	1144.7	1130.3	1033.5	904.5	840.1	799.1
140°	1086.7	1100.2	1154.2	1208.1	1154.2	1100.2	1086.7	1003.2	891.8	836.1	799.9
142.5°	1056.3	1067.9	1114.3	1160.7	1114.3	1067.9	1056.3	982.9	885.1	836.1	802.7
145°	1010.5	1019.3	1054.5	1089.6	1054.5	1019.3	1010.5	950.5	870.5	830.5	802.8
147.5°	972.1	979.4	1008.5	1037.7	1008.5	979.4	972.1	924.9	862.0	830.5	808.3
150°	950.1	956.0	979.7	1003.2	979.7	956.0	950.1	910.2	857.1	830.5	811.1
152.5°	932.7	937.1	954.9	972.7	954.9	937.1	932.7	898.6	853.2	830.5	813.0
155°	911.8	914.8	926.5	938.3	926.5	914.8	911.8	884.7	848.6	830.5	817.2
157.5°	893.7	895.7	904.0	912.3	904.0	895.7	893.7	872.6	844.5	830.5	821.3
160°	884.6	885.8	890.6	895.4	890.6	885.8	884.6	866.6	842.5	830.5	823.2
162.5°	876.2	877.3	881.8	886.3	881.8	877.3	876.2	861.0	840.6	830.5	825.2
165°	863.2	864.3	869.1	873.9	869.1	864.3	863.2	852.3	837.7	830.5	828.1
167.5°	857.5	858.1	860.1	862.1	860.1	858.1	857.5	850.4	840.9	836.1	834.1
170°	857.5	857.5	857.5	857.5	857.5	857.5	857.5	850.4	840.9	836.1	836.0
172.5°	853.0	852.6	850.9	849.1	850.9	852.6	853.0	847.4	839.9	836.1	836.1
175°	846.9	846.9	846.9	846.9	846.9	846.9	846.9	843.2	838.5	836.1	837.2
177.5°	845.7	845.1	843.2	841.2	843.2	845.1	845.7	842.9	839.2	837.3	838.2
180°	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2



TEST NUMBER: P935859

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	641.7	641.7	641.7	641.7	641.7
2.5°	633.8	636.8	638.6	641.0	647.1
5°	609.4	621.0	624.7	633.8	644.7
7.5°	556.0	591.3	600.9	622.8	639.9
10°	504.4	539.7	556.7	608.3	633.8
12.5°	478.4	499.0	510.5	582.7	625.3
15°	462.0	476.6	485.1	548.8	615.5
17.5°	449.2	459.6	465.6	515.4	602.2
20°	441.4	446.2	451.7	491.1	587.0
22.5°	435.8	432.8	437.1	474.1	566.4
25°	432.2	420.7	425.5	460.7	542.1
27.5°	435.3	409.8	411.6	448.6	516.6
30°	435.8	396.4	397.0	435.8	488.1
32.5°	431.6	382.4	383.1	420.1	455.9
35°	421.3	366.0	365.4	401.9	412.2
37.5°	407.3	348.5	348.5	381.8	364.2
40°	390.3	330.8	332.6	355.7	321.7
42.5°	369.7	312.0	314.5	321.2	290.2
45°	347.2	293.8	295.6	271.4	265.8
47.5°	322.3	275.0	275.6	225.2	258.0
50°	292.6	255.5	253.2	193.1	257.4
52.5°	266.5	234.3	227.0	174.8	233.7
55°	241.0	211.9	196.1	160.8	216.7
57.5°	218.5	182.8	167.5	144.5	213.1
60°	197.9	154.1	142.7	126.9	195.5
62.5°	180.9	133.0	130.5	114.8	177.2
65°	162.7	118.4	117.8	104.5	150.5
67.5°	145.1	108.6	108.1	94.7	114.8
70°	126.3	98.3	97.1	84.4	85.0
72.5°	106.8	86.8	85.6	75.9	70.4
75°	87.4	73.4	72.9	66.2	57.0
77.5°	68.6	58.3	59.5	53.4	41.9
80°	49.2	42.5	43.7	38.3	31.6
82.5°	32.8	28.0	29.1	24.3	21.3
85°	18.2	15.7	16.4	12.8	9.7
87.5°	8.5	7.2	7.2	4.9	3.1
90°	24.9	15.8	14.7	10.1	5.6
92.5°	153.2	109.0	99.4	60.9	22.5
95°	376.9	212.3	194.7	124.5	54.2
97.5°	507.7	233.2	217.7	155.7	93.7
100°	555.3	250.6	236.6	180.4	124.2
102.5°	577.2	268.2	255.1	202.7	150.2
105°	593.3	294.2	283.0	238.7	194.2
107.5°	596.4	332.6	322.2	280.8	239.4
110°	591.9	354.0	344.7	307.2	269.8



TEST NUMBER: P935859

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	592.1	380.0	371.1	335.5	299.8
115°	597.5	418.9	410.7	377.8	345.0
117.5°	608.6	456.7	449.3	419.5	389.6
120°	617.6	478.7	471.7	443.6	415.5
122.5°	630.6	504.7	497.7	469.2	440.9
125°	648.1	538.0	531.6	505.7	479.9
127.5°	665.6	570.2	563.6	537.6	511.5
130°	678.4	591.6	584.6	556.5	528.4
132.5°	688.7	609.2	602.1	574.1	545.9
135°	700.1	629.4	623.0	597.5	571.9
137.5°	717.0	655.4	649.1	623.7	598.4
140°	727.4	673.0	667.2	643.8	620.5
142.5°	736.0	685.9	680.5	659.0	637.4
145°	747.3	705.7	701.0	682.2	663.4
147.5°	763.9	730.6	725.9	707.7	689.3
150°	772.5	743.5	739.3	722.9	706.3
152.5°	778.2	752.0	748.8	736.3	723.8
155°	790.6	770.7	768.3	759.1	749.7
157.5°	803.0	789.2	786.9	778.0	768.9
160°	808.7	797.7	796.0	788.9	781.9
162.5°	814.6	806.8	805.4	800.2	794.9
165°	823.3	819.7	818.5	813.7	809.0
167.5°	830.0	827.0	826.5	824.2	822.0
170°	835.7	835.6	835.0	832.7	830.5
172.5°	836.1	836.1	836.0	835.5	835.0
175°	839.4	841.2	841.2	841.2	841.2
177.5°	839.9	841.2	841.2	841.2	841.2
180°	841.2	841.2	841.2	841.2	841.2



TEST NUMBER: P935859
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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	7.78	8.45	8.94	9.59	11.20	10.58	11.25	11.74	12.39	14.00
	3H	8.24	8.84	9.41	9.99	11.61	11.90	12.50	13.06	13.65	15.27
	4H	8.43	8.99	9.60	10.14	11.77	12.33	12.89	13.50	14.05	15.67
	6H	8.53	9.05	9.71	10.21	11.84	12.60	13.11	13.78	14.27	15.90
	8H	8.53	9.02	9.71	10.19	11.82	12.66	13.15	13.84	14.32	15.95
	12H	8.49	8.96	9.68	10.13	11.78	12.69	13.16	13.87	14.32	15.97
4H	2H	8.78	9.35	9.96	10.50	12.12	10.97	11.53	12.15	12.68	14.31
	3H	9.79	10.26	10.97	11.44	13.08	12.44	12.91	13.63	14.09	15.73
	4H	10.06	10.49	11.24	11.66	13.31	12.96	13.39	14.14	14.55	16.21
	6H	10.17	10.54	11.36	11.73	13.38	13.30	13.67	14.49	14.86	16.51
	8H	10.17	10.52	11.36	11.70	13.36	13.40	13.75	14.59	14.92	16.59
	12H	10.13	10.45	11.34	11.63	13.30	13.44	13.76	14.65	14.94	16.61
8H	4H	10.49	10.84	11.68	12.02	13.68	13.07	13.41	14.25	14.59	16.25
	6H	10.74	11.03	11.95	12.25	13.91	13.49	13.77	14.69	14.99	16.65
	8H	10.78	11.03	12.00	12.23	13.91	13.63	13.88	14.84	15.08	16.76
	12H	10.76	10.98	11.98	12.17	13.88	13.71	13.93	14.93	15.13	16.84
12H	4H	10.49	10.80	11.69	11.99	13.66	13.02	13.34	14.23	14.52	16.19
	6H	10.80	11.05	12.01	12.25	13.93	13.48	13.73	14.69	14.93	16.61
	8H	10.86	11.08	12.08	12.27	13.98	13.63	13.85	14.84	15.04	16.75