

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: P935857

Luminaire Tested: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P935857
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-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

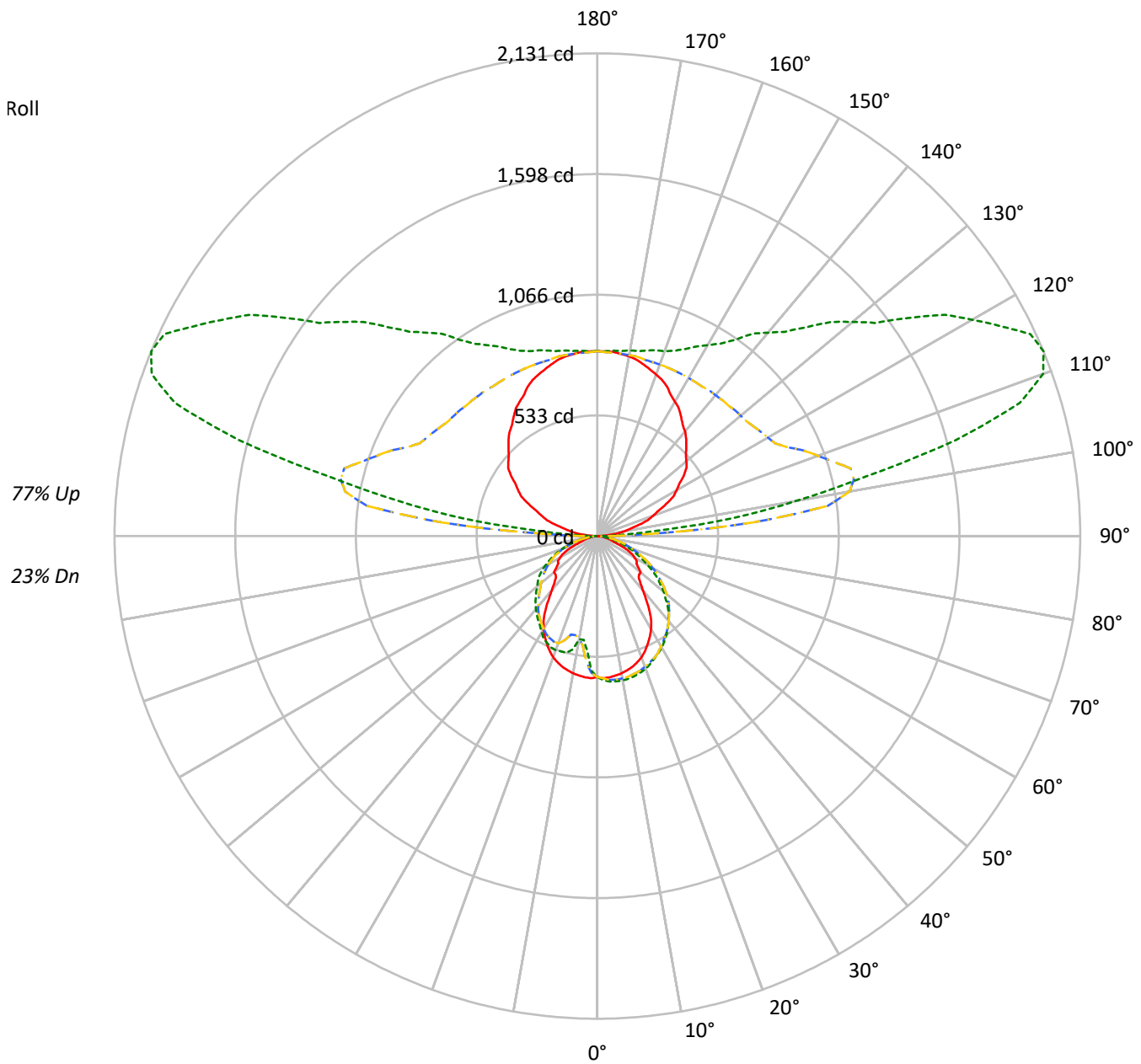
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6908.7 lumens
Efficiency: N/A
Efficacy: 124.3 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: P935857
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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - · - 135°-315°



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	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°	5777	5777	5777	5777
5°	5814	5832	5814	4585
10°	5769	5745	5769	4107
15°	5699	5620	5699	4693
20°	5574	5473	5574	4703
25°	5323	5258	5323	4603
30°	5002	5079	5002	4385
35°	4453	4853	4453	4144
40°	3703	4587	3703	3963
45°	3303	4277	3303	3753
50°	3502	3905	3502	3543
55°	3285	3506	3285	3422
60°	3374	2977	3374	3135
65°	3045	2461	3045	2750
70°	2094	1962	2094	2307
75°	1813	1450	1813	1737
80°	1437	958	1437	1043
85°	778	506	778	431

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5072 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.2	0.8
10°-20°	159.6	2.3
20°-30°	246.7	3.6
30°-40°	294.5	4.3
40°-50°	296.2	4.3
50°-60°	257.7	3.7
60°-70°	182.7	2.6
70°-80°	96.7	1.4
80°-90°	27.2	0.4
90°-100°	397.9	5.8
100°-110°	1046.0	15.1
110°-120°	1084.6	15.7
120°-130°	870.0	12.6
130°-140°	682.6	9.9
140°-150°	523.9	7.6
150°-160°	377.3	5.5
160°-170°	230.9	3.3
170°-180°	78.0	1.1
0°-30°	462.4	6.7
0°-40°	756.9	11.0
0°-60°	1310.8	19.0
0°-90°	1617.4	23.4
90°-120°	2528.5	36.6
90°-150°	4605.1	66.7
90°-180°	5291.0	76.6
0°-180°	6908.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	623	623	623	623	623	
5°	626	645	626	507	626	59
15°	597	639	597	534	597	168
25°	526	596	526	522	526	242
35°	400	532	400	454	400	247
45°	258	438	258	385	258	207
55°	210	323	210	316	210	193
65°	146	195	146	218	146	140
75°	55	92	55	111	55	58
85°	9	24	9	20	9	13
90°	5	21	5	21	5	5
95°	53	240	53	240	53	58
105°	188	1638	188	1638	188	200
115°	335	2109	335	2109	335	331
125°	466	1680	466	1680	466	413
135°	555	1303	555	1303	555	429
145°	644	1057	644	1057	644	403
155°	728	910	728	910	728	334
165°	785	848	785	848	785	222
175°	816	822	816	822	816	77
180°	816	816	816	816	816	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6
2.5°	627.9	627.9	631.4	632.6	632.6	630.9	629.1	630.9	636.2	637.9	637.3
5°	625.5	630.3	636.8	637.9	639.1	638.5	637.3	638.5	644.4	645.6	646.2
7.5°	620.9	629.7	637.9	639.7	641.4	639.7	639.1	640.3	646.2	647.3	647.3
10°	615.0	627.3	636.8	637.9	639.7	637.9	637.9	640.3	646.2	647.3	647.9
12.5°	606.7	623.8	632.6	633.8	636.2	635.5	635.0	637.3	643.3	644.4	644.4
15°	597.2	617.3	625.5	626.8	630.9	629.7	629.7	632.0	638.5	640.3	639.7
17.5°	584.3	609.1	618.5	620.3	623.2	622.6	623.2	625.5	631.4	632.6	633.3
20°	569.6	597.9	609.1	610.9	613.8	613.8	613.8	616.7	622.6	625.0	625.0
22.5°	549.6	586.1	597.9	599.1	602.6	602.6	603.7	607.9	613.1	613.8	613.8
25°	526.0	573.1	583.1	586.7	590.2	592.0	593.7	596.1	597.9	597.2	597.9
27.5°	501.2	556.7	569.6	571.9	576.7	578.4	580.8	581.3	582.0	583.7	582.6
30°	473.6	533.7	553.1	555.4	563.1	564.3	561.9	563.1	566.1	567.2	568.4
32.5°	442.4	499.5	536.0	541.3	548.4	544.9	544.3	546.0	550.8	550.8	551.9
35°	400.0	473.0	520.1	524.9	530.1	526.0	528.4	528.9	531.9	533.7	533.0
37.5°	353.4	450.0	503.6	507.1	511.3	506.0	509.5	511.3	513.6	512.5	512.5
40°	312.1	414.1	484.2	486.6	490.1	486.0	489.5	490.7	491.8	490.7	490.1
42.5°	281.6	374.6	463.6	466.6	464.2	467.1	468.3	470.7	468.8	466.6	466.6
45°	258.0	364.1	441.2	444.7	441.2	445.9	447.7	447.7	442.4	441.2	440.6
47.5°	250.3	342.8	418.8	418.8	417.0	422.9	425.9	421.8	416.5	414.6	414.6
50°	249.8	319.3	388.2	385.8	394.1	401.1	398.2	394.1	390.0	383.5	383.5
52.5°	226.8	290.4	348.7	357.6	370.5	374.6	369.9	365.8	358.7	355.8	353.4
55°	210.3	260.3	312.8	330.4	344.0	349.3	340.4	336.3	325.8	324.0	322.8
57.5°	206.8	216.8	279.8	302.1	318.6	318.1	312.8	305.1	296.3	294.5	294.0
60°	189.7	156.7	244.4	271.0	288.0	286.2	281.6	274.5	266.2	265.1	263.9
62.5°	172.0	113.7	204.4	234.4	258.6	258.0	253.9	243.3	237.4	234.4	232.0
65°	146.1	95.4	145.5	195.0	229.8	230.9	222.0	214.4	207.9	204.4	203.8
67.5°	111.4	77.7	98.4	162.6	202.0	200.9	189.7	186.1	177.9	176.1	172.6
70°	82.5	51.8	68.3	131.9	175.0	172.0	163.2	159.1	151.4	147.3	144.9
72.5°	68.3	41.8	50.1	102.5	147.3	143.7	136.0	131.4	124.9	121.4	119.0
75°	55.3	44.2	38.3	76.0	119.5	117.3	110.1	105.4	100.1	95.4	96.0
77.5°	40.7	41.2	30.7	55.9	94.9	91.3	87.2	81.3	79.0	74.2	74.2
80°	30.7	32.4	23.0	38.3	68.3	68.3	64.8	60.7	56.6	54.2	54.2
82.5°	20.6	20.6	17.0	24.2	46.5	44.8	42.4	41.2	38.9	37.7	37.7
85°	9.4	11.8	10.6	14.8	25.3	26.5	26.5	25.3	24.8	23.5	24.2
87.5°	3.0	5.3	6.5	8.3	13.0	13.5	14.1	14.1	14.1	14.8	14.8
90°	5.4	9.8	14.2	15.4	24.2	35.8	41.6	37.0	27.8	20.8	20.8
92.5°	21.9	59.1	96.4	105.7	148.6	205.8	234.4	205.4	147.6	104.1	100.0
95°	52.6	120.8	188.9	206.0	365.7	578.8	685.3	611.6	464.0	353.3	340.8
97.5°	90.9	151.1	211.2	226.3	492.6	847.9	1025.5	978.9	885.6	815.7	791.8
100°	120.5	175.0	229.6	243.2	538.8	933.0	1130.1	1133.5	1140.4	1145.5	1117.0
102.5°	145.7	196.7	247.5	260.2	560.1	959.8	1159.7	1219.1	1337.9	1427.1	1402.7
105°	188.5	231.6	274.6	285.4	575.7	962.8	1156.4	1289.5	1555.9	1755.7	1742.6
107.5°	232.3	272.4	312.7	322.7	578.7	920.0	1090.7	1276.4	1648.0	1926.6	1929.8
110°	261.8	298.1	334.5	343.5	574.3	882.0	1035.9	1243.6	1658.9	1970.5	1984.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	290.9	325.5	360.1	368.7	574.5	848.9	986.1	1198.6	1623.7	1942.5	1963.4
115°	334.7	366.6	398.5	406.5	579.8	810.8	926.3	1131.1	1540.6	1847.8	1876.8
117.5°	378.0	407.0	436.0	443.2	590.6	787.0	885.2	1070.0	1439.6	1716.8	1749.0
120°	403.1	430.5	457.7	464.5	599.3	779.0	868.8	1037.6	1375.3	1628.6	1659.9
122.5°	427.8	455.3	482.9	489.7	611.9	774.8	856.3	1008.3	1312.4	1540.5	1571.3
125°	465.7	490.7	515.8	522.1	628.9	771.3	842.6	971.7	1230.0	1423.7	1452.2
127.5°	496.3	521.6	546.9	553.2	645.8	769.3	831.0	942.0	1163.7	1330.1	1354.1
130°	512.8	540.0	567.2	574.1	658.3	770.5	826.7	925.4	1122.8	1270.9	1293.0
132.5°	529.7	557.0	584.2	591.1	668.3	771.3	822.8	911.1	1088.0	1220.5	1240.3
135°	554.9	579.8	604.5	610.8	679.3	770.5	816.2	890.2	1038.2	1149.3	1166.4
137.5°	580.6	605.2	629.8	636.0	695.7	775.4	815.2	877.7	1002.8	1096.7	1110.7
140°	602.1	624.7	647.4	653.0	705.8	776.2	811.3	865.3	973.4	1054.5	1067.6
142.5°	618.5	639.4	660.3	665.6	714.1	778.9	811.3	858.8	953.7	1025.0	1036.2
145°	643.7	662.0	680.2	684.7	725.1	779.0	805.8	844.7	922.3	980.5	989.1
147.5°	668.8	686.7	704.4	708.9	741.2	784.3	805.8	836.4	897.4	943.3	950.3
150°	685.3	701.4	717.4	721.4	749.5	787.0	805.8	831.7	883.2	922.0	927.7
152.5°	702.3	714.5	726.6	729.7	755.1	788.9	805.8	827.9	872.0	905.0	909.3
155°	727.5	736.5	745.5	747.8	767.1	792.9	805.8	823.4	858.5	884.7	887.6
157.5°	746.1	754.9	763.6	765.8	779.1	797.0	805.8	819.5	846.7	867.1	869.2
160°	758.7	765.5	772.4	774.0	784.7	798.8	805.8	817.5	840.9	858.4	859.5
162.5°	771.3	776.4	781.5	782.8	790.5	800.7	805.8	815.7	835.4	850.2	851.2
165°	785.0	789.6	794.2	795.4	798.9	803.6	805.8	812.9	827.0	837.5	838.7
167.5°	797.6	799.8	802.0	802.5	805.4	809.4	811.3	815.9	825.2	832.1	832.6
170°	805.8	808.0	810.2	810.8	810.9	811.2	811.3	815.9	825.2	832.1	832.1
172.5°	810.2	810.7	811.2	811.3	811.3	811.3	811.3	815.0	822.3	827.7	827.3
175°	816.2	816.2	816.2	816.2	814.5	812.3	811.3	813.6	818.2	821.7	821.7
177.5°	816.2	816.2	816.2	816.2	815.0	813.3	812.4	814.3	817.9	820.6	820.1
180°	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6
2.5°	638.5	636.8	638.5	637.3	637.9	636.2	630.9	629.1	630.9	632.6	632.6
5°	646.2	645.0	646.2	646.2	645.6	644.4	638.5	637.3	638.5	639.1	637.9
7.5°	648.5	646.8	648.5	647.3	647.3	646.2	640.3	639.1	639.7	641.4	639.7
10°	648.5	646.8	648.5	647.9	647.3	646.2	640.3	637.9	637.9	639.7	637.9
12.5°	645.6	644.4	645.6	644.4	644.4	643.3	637.3	635.0	635.5	636.2	633.8
15°	640.9	639.1	640.9	639.7	640.3	638.5	632.0	629.7	629.7	630.9	626.8
17.5°	633.8	631.4	633.8	633.3	632.6	631.4	625.5	623.2	622.6	623.2	620.3
20°	625.5	623.8	625.5	625.0	625.0	622.6	616.7	613.8	613.8	613.8	610.9
22.5°	612.6	610.9	612.6	613.8	613.8	613.1	607.9	603.7	602.6	602.6	599.1
25°	597.9	596.1	597.9	597.9	597.2	597.9	596.1	593.7	592.0	590.2	586.7
27.5°	583.7	582.6	583.7	582.6	583.7	582.0	581.3	580.8	578.4	576.7	571.9
30°	569.6	568.4	569.6	568.4	567.2	566.1	563.1	561.9	564.3	563.1	555.4
32.5°	551.9	550.8	551.9	551.9	550.8	550.8	546.0	544.3	544.9	548.4	541.3
35°	533.7	531.9	533.7	533.0	533.7	531.9	528.9	528.4	526.0	530.1	524.9
37.5°	512.5	510.7	512.5	512.5	512.5	513.6	511.3	509.5	506.0	511.3	507.1
40°	490.7	488.3	490.7	490.1	490.7	491.8	490.7	489.5	486.0	490.1	486.6
42.5°	465.9	465.3	465.9	466.6	466.6	468.8	470.7	468.3	467.1	464.2	466.6
45°	439.4	438.3	439.4	440.6	441.2	442.4	447.7	447.7	445.9	441.2	444.7
47.5°	411.1	408.2	411.1	414.6	414.6	416.5	421.8	425.9	422.9	417.0	418.8
50°	381.1	381.7	381.1	383.5	383.5	390.0	394.1	398.2	401.1	394.1	385.8
52.5°	351.7	351.1	351.7	353.4	355.8	358.7	365.8	369.9	374.6	370.5	357.6
55°	322.2	323.4	322.2	322.8	324.0	325.8	336.3	340.4	349.3	344.0	330.4
57.5°	292.7	291.0	292.7	294.0	294.5	296.3	305.1	312.8	318.1	318.6	302.1
60°	258.6	256.2	258.6	263.9	265.1	266.2	274.5	281.6	286.2	288.0	271.0
62.5°	228.5	224.4	228.5	232.0	234.4	237.4	243.3	253.9	258.0	258.6	234.4
65°	196.7	195.0	196.7	203.8	204.4	207.9	214.4	222.0	230.9	229.8	195.0
67.5°	167.8	167.8	167.8	172.6	176.1	177.9	186.1	189.7	200.9	202.0	162.6
70°	141.4	140.8	141.4	144.9	147.3	151.4	159.1	163.2	172.0	175.0	131.9
72.5°	116.0	115.4	116.0	119.0	121.4	124.9	131.4	136.0	143.7	147.3	102.5
75°	93.6	92.5	93.6	96.0	95.4	100.1	105.4	110.1	117.3	119.5	76.0
77.5°	71.8	71.8	71.8	74.2	74.2	79.0	81.3	87.2	91.3	94.9	55.9
80°	53.6	53.0	53.6	54.2	54.2	56.6	60.7	64.8	68.3	68.3	38.3
82.5°	37.7	36.5	37.7	37.7	37.7	38.9	41.2	42.4	44.8	46.5	24.2
85°	23.5	23.5	23.5	24.2	23.5	24.8	25.3	26.5	26.5	25.3	14.8
87.5°	15.3	14.8	15.3	14.8	14.8	14.1	14.1	14.1	13.5	13.0	8.3
90°	20.8	20.8	20.8	20.8	20.8	27.8	37.0	41.6	35.8	24.2	15.4
92.5°	83.4	66.8	83.4	100.0	104.1	147.6	205.4	234.4	205.8	148.6	105.7
95°	290.6	240.5	290.6	340.8	353.3	464.0	611.6	685.3	578.8	365.7	206.0
97.5°	696.4	600.9	696.4	791.8	815.7	885.6	978.9	1025.5	847.9	492.6	226.3
100°	1003.4	889.6	1003.4	1117.0	1145.5	1140.4	1133.5	1130.1	933.0	538.8	243.2
102.5°	1305.3	1207.9	1305.3	1402.7	1427.1	1337.9	1219.1	1159.7	959.8	560.1	260.2
105°	1690.3	1637.9	1690.3	1742.6	1755.7	1555.9	1289.5	1156.4	962.8	575.7	285.4
107.5°	1942.5	1955.1	1942.5	1929.8	1926.6	1648.0	1276.4	1090.7	920.0	578.7	322.7
110°	2038.6	2093.2	2038.6	1984.1	1970.5	1658.9	1243.6	1035.9	882.0	574.3	343.5



TEST NUMBER: P935857

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	2047.2	2130.9	2047.2	1963.4	1942.5	1623.7	1198.6	986.1	848.9	574.5	368.7
115°	1993.0	2109.1	1993.0	1876.8	1847.8	1540.6	1131.1	926.3	810.8	579.8	406.5
117.5°	1877.8	2006.6	1877.8	1749.0	1716.8	1439.6	1070.0	885.2	787.0	590.6	443.2
120°	1785.1	1910.2	1785.1	1659.9	1628.6	1375.3	1037.6	868.8	779.0	599.3	464.5
122.5°	1694.8	1818.2	1694.8	1571.3	1540.5	1312.4	1008.3	856.3	774.8	611.9	489.7
125°	1565.8	1679.6	1565.8	1452.2	1423.7	1230.0	971.7	842.6	771.3	628.9	522.1
127.5°	1450.0	1545.9	1450.0	1354.1	1330.1	1163.7	942.0	831.0	769.3	645.8	553.2
130°	1381.7	1470.3	1381.7	1293.0	1270.9	1122.8	925.4	826.7	770.5	658.3	574.1
132.5°	1319.6	1399.0	1319.6	1240.3	1220.5	1088.0	911.1	822.8	771.3	668.3	591.1
135°	1234.8	1303.2	1234.8	1166.4	1149.3	1038.2	890.2	816.2	770.5	679.3	610.8
137.5°	1166.7	1222.7	1166.7	1110.7	1096.7	1002.8	877.7	815.2	775.4	695.7	636.0
140°	1119.9	1172.3	1119.9	1067.6	1054.5	973.4	865.3	811.3	776.2	705.8	653.0
142.5°	1081.3	1126.2	1081.3	1036.2	1025.0	953.7	858.8	811.3	778.9	714.1	665.6
145°	1023.2	1057.3	1023.2	989.1	980.5	922.3	844.7	805.8	779.0	725.1	684.7
147.5°	978.6	1006.9	978.6	950.3	943.3	897.4	836.4	805.8	784.3	741.2	708.9
150°	950.6	973.4	950.6	927.7	922.0	883.2	831.7	805.8	787.0	749.5	721.4
152.5°	926.6	943.8	926.6	909.3	905.0	872.0	827.9	805.8	788.9	755.1	729.7
155°	899.0	910.4	899.0	887.6	884.7	858.5	823.4	805.8	792.9	767.1	747.8
157.5°	877.2	885.2	877.2	869.2	867.1	846.7	819.5	805.8	797.0	779.1	765.8
160°	864.2	868.8	864.2	859.5	858.4	840.9	817.5	805.8	798.8	784.7	774.0
162.5°	855.6	860.0	855.6	851.2	850.2	835.4	815.7	805.8	800.7	790.5	782.8
165°	843.3	848.0	843.3	838.7	837.5	827.0	812.9	805.8	803.6	798.9	795.4
167.5°	834.6	836.5	834.6	832.6	832.1	825.2	815.9	811.3	809.4	805.4	802.5
170°	832.1	832.1	832.1	832.1	832.1	825.2	815.9	811.3	811.2	810.9	810.8
172.5°	825.6	823.9	825.6	827.3	827.7	822.3	815.0	811.3	811.3	811.3	811.3
175°	821.7	821.7	821.7	821.7	821.7	818.2	813.6	811.3	812.3	814.5	816.2
177.5°	818.1	816.2	818.1	820.1	820.6	817.9	814.3	812.4	813.3	815.0	816.2
180°	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2



TEST NUMBER: P935857

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6
2.5°	631.4	627.9	627.9	622.0	619.6	617.9	615.0	606.1	603.7	601.4	605.0
5°	636.8	630.3	625.5	615.0	606.1	602.6	591.4	570.2	556.1	545.4	539.5
7.5°	637.9	629.7	620.9	604.4	583.1	573.7	539.5	500.7	490.1	480.7	474.7
10°	636.8	627.3	615.0	590.2	540.2	523.6	489.5	464.2	457.7	455.9	457.7
12.5°	632.6	623.8	606.7	565.5	495.4	484.2	464.2	449.4	448.3	451.2	467.1
15°	625.5	617.3	597.2	532.5	470.7	462.4	448.3	442.9	449.4	470.1	517.8
17.5°	618.5	609.1	584.3	500.1	451.8	445.9	435.9	446.5	483.0	510.7	526.6
20°	609.1	597.9	569.6	476.6	438.3	432.9	428.3	476.0	503.6	513.6	522.5
22.5°	597.9	586.1	549.6	460.1	424.1	420.0	422.9	492.5	503.6	510.7	518.4
25°	583.1	573.1	526.0	447.1	412.9	408.2	419.4	490.7	497.1	498.9	514.2
27.5°	569.6	556.7	501.2	435.3	399.4	397.6	422.4	483.0	487.7	489.5	506.0
30°	553.1	533.7	473.6	422.9	385.2	384.6	422.9	473.6	472.4	477.1	493.6
32.5°	536.0	499.5	442.4	407.6	371.7	371.1	418.8	459.4	458.3	464.7	477.1
35°	520.1	473.0	400.0	390.0	354.6	355.2	408.8	442.9	443.5	449.4	457.1
37.5°	503.6	450.0	353.4	370.5	338.1	338.1	395.2	427.6	426.5	428.3	438.8
40°	484.2	414.1	312.1	345.2	322.8	321.0	378.7	411.1	407.0	406.5	421.1
42.5°	463.6	374.6	281.6	311.6	305.1	302.8	358.7	391.1	383.5	385.2	404.1
45°	441.2	364.1	258.0	263.3	286.9	285.1	336.9	368.2	362.8	367.6	387.0
47.5°	418.8	342.8	250.3	218.5	267.4	266.8	312.8	345.8	342.8	347.5	368.2
50°	388.2	319.3	249.8	187.3	245.7	247.9	284.0	324.0	324.0	328.1	349.9
52.5°	348.7	290.4	226.8	169.6	220.3	227.4	258.6	305.1	306.3	310.4	329.9
55°	312.8	260.3	210.3	156.1	190.2	205.6	233.8	285.7	288.0	292.1	309.9
57.5°	279.8	216.8	206.8	140.2	162.6	177.3	212.0	266.8	268.0	271.6	288.6
60°	244.4	156.7	189.7	123.1	138.4	149.6	192.0	244.4	248.6	250.9	265.7
62.5°	204.4	113.7	172.0	111.4	126.7	129.0	175.6	223.3	228.5	230.3	239.2
65°	145.5	95.4	146.1	101.4	114.3	114.9	157.8	201.5	206.1	209.1	215.6
67.5°	98.4	77.7	111.4	91.9	104.9	105.4	140.8	176.1	182.6	185.0	189.1
70°	68.3	51.8	82.5	81.9	94.2	95.4	122.5	153.2	159.1	160.8	163.2
72.5°	50.1	41.8	68.3	73.6	83.1	84.2	103.6	127.3	133.2	134.9	136.0
75°	38.3	44.2	55.3	64.2	70.7	71.2	84.8	103.6	107.8	109.0	109.5
77.5°	30.7	41.2	40.7	51.8	57.7	56.6	66.6	80.1	83.6	83.6	83.6
80°	23.0	32.4	30.7	37.2	42.4	41.2	47.7	57.2	58.3	59.5	58.9
82.5°	17.0	20.6	20.6	23.5	28.3	27.1	31.8	37.2	37.2	37.2	38.3
85°	10.6	11.8	9.4	12.4	15.9	15.3	17.7	20.0	20.6	20.6	19.4
87.5°	6.5	5.3	3.0	4.7	7.0	7.0	8.3	8.9	8.3	8.3	8.3
90°	14.2	9.8	5.4	9.8	14.2	15.4	24.2	35.8	41.6	37.0	27.8
92.5°	96.4	59.1	21.9	59.1	96.4	105.7	148.6	205.8	234.4	205.4	147.6
95°	188.9	120.8	52.6	120.8	188.9	206.0	365.7	578.8	685.3	611.6	464.0
97.5°	211.2	151.1	90.9	151.1	211.2	226.3	492.6	847.9	1025.5	978.9	885.6
100°	229.6	175.0	120.5	175.0	229.6	243.2	538.8	933.0	1130.1	1133.5	1140.4
102.5°	247.5	196.7	145.7	196.7	247.5	260.2	560.1	959.8	1159.7	1219.1	1337.9
105°	274.6	231.6	188.5	231.6	274.6	285.4	575.7	962.8	1156.4	1289.5	1555.9
107.5°	312.7	272.4	232.3	272.4	312.7	322.7	578.7	920.0	1090.7	1276.4	1648.0
110°	334.5	298.1	261.8	298.1	334.5	343.5	574.3	882.0	1035.9	1243.6	1658.9



TEST NUMBER: P935857

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	360.1	325.5	290.9	325.5	360.1	368.7	574.5	848.9	986.1	1198.6	1623.7
115°	398.5	366.6	334.7	366.6	398.5	406.5	579.8	810.8	926.3	1131.1	1540.6
117.5°	436.0	407.0	378.0	407.0	436.0	443.2	590.6	787.0	885.2	1070.0	1439.6
120°	457.7	430.5	403.1	430.5	457.7	464.5	599.3	779.0	868.8	1037.6	1375.3
122.5°	482.9	455.3	427.8	455.3	482.9	489.7	611.9	774.8	856.3	1008.3	1312.4
125°	515.8	490.7	465.7	490.7	515.8	522.1	628.9	771.3	842.6	971.7	1230.0
127.5°	546.9	521.6	496.3	521.6	546.9	553.2	645.8	769.3	831.0	942.0	1163.7
130°	567.2	540.0	512.8	540.0	567.2	574.1	658.3	770.5	826.7	925.4	1122.8
132.5°	584.2	557.0	529.7	557.0	584.2	591.1	668.3	771.3	822.8	911.1	1088.0
135°	604.5	579.8	554.9	579.8	604.5	610.8	679.3	770.5	816.2	890.2	1038.2
137.5°	629.8	605.2	580.6	605.2	629.8	636.0	695.7	775.4	815.2	877.7	1002.8
140°	647.4	624.7	602.1	624.7	647.4	653.0	705.8	776.2	811.3	865.3	973.4
142.5°	660.3	639.4	618.5	639.4	660.3	665.6	714.1	778.9	811.3	858.8	953.7
145°	680.2	662.0	643.7	662.0	680.2	684.7	725.1	779.0	805.8	844.7	922.3
147.5°	704.4	686.7	668.8	686.7	704.4	708.9	741.2	784.3	805.8	836.4	897.4
150°	717.4	701.4	685.3	701.4	717.4	721.4	749.5	787.0	805.8	831.7	883.2
152.5°	726.6	714.5	702.3	714.5	726.6	729.7	755.1	788.9	805.8	827.9	872.0
155°	745.5	736.5	727.5	736.5	745.5	747.8	767.1	792.9	805.8	823.4	858.5
157.5°	763.6	754.9	746.1	754.9	763.6	765.8	779.1	797.0	805.8	819.5	846.7
160°	772.4	765.5	758.7	765.5	772.4	774.0	784.7	798.8	805.8	817.5	840.9
162.5°	781.5	776.4	771.3	776.4	781.5	782.8	790.5	800.7	805.8	815.7	835.4
165°	794.2	789.6	785.0	789.6	794.2	795.4	798.9	803.6	805.8	812.9	827.0
167.5°	802.0	799.8	797.6	799.8	802.0	802.5	805.4	809.4	811.3	815.9	825.2
170°	810.2	808.0	805.8	808.0	810.2	810.8	810.9	811.2	811.3	815.9	825.2
172.5°	811.2	810.7	810.2	810.7	811.2	811.3	811.3	811.3	811.3	815.0	822.3
175°	816.2	816.2	816.2	816.2	816.2	816.2	814.5	812.3	811.3	813.6	818.2
177.5°	816.2	816.2	816.2	816.2	816.2	816.2	815.0	813.3	812.4	814.3	817.9
180°	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2



TEST NUMBER: P935857

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6	622.6
2.5°	600.8	599.1	601.4	595.0	601.4	599.1	600.8	605.0	601.4	603.7	606.1
5°	527.2	524.3	514.9	507.1	514.9	524.3	527.2	539.5	545.4	556.1	570.2
7.5°	471.2	468.8	466.6	461.8	466.6	468.8	471.2	474.7	480.7	490.1	500.7
10°	458.8	459.4	463.0	462.4	463.0	459.4	458.8	457.7	455.9	457.7	464.2
12.5°	490.7	496.0	515.4	514.2	515.4	496.0	490.7	467.1	451.2	448.3	449.4
15°	527.2	528.9	533.0	533.7	533.0	528.9	527.2	517.8	470.1	449.4	442.9
17.5°	530.8	531.3	534.3	534.3	534.3	531.3	530.8	526.6	510.7	483.0	446.5
20°	527.8	528.9	534.9	536.0	534.9	528.9	527.8	522.5	513.6	503.6	476.0
22.5°	526.6	528.9	533.7	533.0	533.7	528.9	526.6	518.4	510.7	503.6	492.5
25°	520.7	520.7	521.3	521.9	521.3	520.7	520.7	514.2	498.9	497.1	490.7
27.5°	508.4	509.5	513.0	512.5	513.0	509.5	508.4	506.0	489.5	487.7	483.0
30°	497.1	496.0	493.0	490.7	493.0	496.0	497.1	493.6	477.1	472.4	473.6
32.5°	478.3	475.3	472.4	470.7	472.4	475.3	478.3	477.1	464.7	458.3	459.4
35°	455.9	456.5	455.9	454.2	455.9	456.5	455.9	457.1	449.4	443.5	442.9
37.5°	440.0	441.2	440.6	438.3	440.6	441.2	440.0	438.8	428.3	426.5	427.6
40°	423.5	424.1	423.5	421.8	423.5	424.1	423.5	421.1	406.5	407.0	411.1
42.5°	407.6	407.0	405.2	404.1	405.2	407.0	407.6	404.1	385.2	383.5	391.1
45°	389.4	390.0	386.4	384.6	386.4	390.0	389.4	387.0	367.6	362.8	368.2
47.5°	371.1	371.1	368.2	366.3	368.2	371.1	371.1	368.2	347.5	342.8	345.8
50°	351.7	351.1	346.9	346.3	346.9	351.1	351.7	349.9	328.1	324.0	324.0
52.5°	329.3	329.3	329.9	331.0	329.9	329.3	329.3	329.9	310.4	306.3	305.1
55°	309.9	310.4	314.5	315.7	314.5	310.4	309.9	309.9	292.1	288.0	285.7
57.5°	289.8	289.8	292.7	292.7	292.7	289.8	289.8	288.6	271.6	268.0	266.8
60°	266.8	268.0	270.3	269.8	270.3	268.0	266.8	265.7	250.9	248.6	244.4
62.5°	242.7	243.9	244.4	243.3	244.4	243.9	242.7	239.2	230.3	228.5	223.3
65°	217.4	218.5	219.1	217.9	219.1	218.5	217.4	215.6	209.1	206.1	201.5
67.5°	191.5	190.9	190.2	192.6	190.2	190.9	191.5	189.1	185.0	182.6	176.1
70°	164.9	164.9	164.3	165.6	164.3	164.9	164.9	163.2	160.8	159.1	153.2
72.5°	136.7	136.0	138.4	136.7	138.4	136.0	136.7	136.0	134.9	133.2	127.3
75°	109.0	110.1	109.0	110.8	109.0	110.1	109.0	109.5	109.0	107.8	103.6
77.5°	83.1	84.2	83.1	83.1	83.1	84.2	83.1	83.6	83.6	83.6	80.1
80°	58.9	58.3	58.3	57.7	58.3	58.3	58.9	58.9	59.5	58.3	57.2
82.5°	37.7	37.2	37.2	38.3	37.2	37.2	37.7	38.3	37.2	37.2	37.2
85°	20.6	21.2	20.0	20.0	20.0	21.2	20.6	19.4	20.6	20.6	20.0
87.5°	7.6	7.0	7.0	7.0	7.0	7.0	7.6	8.3	8.3	8.3	8.9
90°	20.8	20.8	20.8	20.8	20.8	20.8	20.8	27.8	37.0	41.6	35.8
92.5°	104.1	100.0	83.4	66.8	83.4	100.0	104.1	147.6	205.4	234.4	205.8
95°	353.3	340.8	290.6	240.5	290.6	340.8	353.3	464.0	611.6	685.3	578.8
97.5°	815.7	791.8	696.4	600.9	696.4	791.8	815.7	885.6	978.9	1025.5	847.9
100°	1145.5	1117.0	1003.4	889.6	1003.4	1117.0	1145.5	1140.4	1133.5	1130.1	933.0
102.5°	1427.1	1402.7	1305.3	1207.9	1305.3	1402.7	1427.1	1337.9	1219.1	1159.7	959.8
105°	1755.7	1742.6	1690.3	1637.9	1690.3	1742.6	1755.7	1555.9	1289.5	1156.4	962.8
107.5°	1926.6	1929.8	1942.5	1955.1	1942.5	1929.8	1926.6	1648.0	1276.4	1090.7	920.0
110°	1970.5	1984.1	2038.6	2093.2	2038.6	1984.1	1970.5	1658.9	1243.6	1035.9	882.0



TEST NUMBER: P935857

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	1942.5	1963.4	2047.2	2130.9	2047.2	1963.4	1942.5	1623.7	1198.6	986.1	848.9
115°	1847.8	1876.8	1993.0	2109.1	1993.0	1876.8	1847.8	1540.6	1131.1	926.3	810.8
117.5°	1716.8	1749.0	1877.8	2006.6	1877.8	1749.0	1716.8	1439.6	1070.0	885.2	787.0
120°	1628.6	1659.9	1785.1	1910.2	1785.1	1659.9	1628.6	1375.3	1037.6	868.8	779.0
122.5°	1540.5	1571.3	1694.8	1818.2	1694.8	1571.3	1540.5	1312.4	1008.3	856.3	774.8
125°	1423.7	1452.2	1565.8	1679.6	1565.8	1452.2	1423.7	1230.0	971.7	842.6	771.3
127.5°	1330.1	1354.1	1450.0	1545.9	1450.0	1354.1	1330.1	1163.7	942.0	831.0	769.3
130°	1270.9	1293.0	1381.7	1470.3	1381.7	1293.0	1270.9	1122.8	925.4	826.7	770.5
132.5°	1220.5	1240.3	1319.6	1399.0	1319.6	1240.3	1220.5	1088.0	911.1	822.8	771.3
135°	1149.3	1166.4	1234.8	1303.2	1234.8	1166.4	1149.3	1038.2	890.2	816.2	770.5
137.5°	1096.7	1110.7	1166.7	1222.7	1166.7	1110.7	1096.7	1002.8	877.7	815.2	775.4
140°	1054.5	1067.6	1119.9	1172.3	1119.9	1067.6	1054.5	973.4	865.3	811.3	776.2
142.5°	1025.0	1036.2	1081.3	1126.2	1081.3	1036.2	1025.0	953.7	858.8	811.3	778.9
145°	980.5	989.1	1023.2	1057.3	1023.2	989.1	980.5	922.3	844.7	805.8	779.0
147.5°	943.3	950.3	978.6	1006.9	978.6	950.3	943.3	897.4	836.4	805.8	784.3
150°	922.0	927.7	950.6	973.4	950.6	927.7	922.0	883.2	831.7	805.8	787.0
152.5°	905.0	909.3	926.6	943.8	926.6	909.3	905.0	872.0	827.9	805.8	788.9
155°	884.7	887.6	899.0	910.4	899.0	887.6	884.7	858.5	823.4	805.8	792.9
157.5°	867.1	869.2	877.2	885.2	877.2	869.2	867.1	846.7	819.5	805.8	797.0
160°	858.4	859.5	864.2	868.8	864.2	859.5	858.4	840.9	817.5	805.8	798.8
162.5°	850.2	851.2	855.6	860.0	855.6	851.2	850.2	835.4	815.7	805.8	800.7
165°	837.5	838.7	843.3	848.0	843.3	838.7	837.5	827.0	812.9	805.8	803.6
167.5°	832.1	832.6	834.6	836.5	834.6	832.6	832.1	825.2	815.9	811.3	809.4
170°	832.1	832.1	832.1	832.1	832.1	832.1	832.1	825.2	815.9	811.3	811.2
172.5°	827.7	827.3	825.6	823.9	825.6	827.3	827.7	822.3	815.0	811.3	811.3
175°	821.7	821.7	821.7	821.7	821.7	821.7	821.7	818.2	813.6	811.3	812.3
177.5°	820.6	820.1	818.1	816.2	818.1	820.1	820.6	817.9	814.3	812.4	813.3
180°	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2	816.2



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CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	622.6	622.6	622.6	622.6	622.6
2.5°	615.0	617.9	619.6	622.0	627.9
5°	591.4	602.6	606.1	615.0	625.5
7.5°	539.5	573.7	583.1	604.4	620.9
10°	489.5	523.6	540.2	590.2	615.0
12.5°	464.2	484.2	495.4	565.5	606.7
15°	448.3	462.4	470.7	532.5	597.2
17.5°	435.9	445.9	451.8	500.1	584.3
20°	428.3	432.9	438.3	476.6	569.6
22.5°	422.9	420.0	424.1	460.1	549.6
25°	419.4	408.2	412.9	447.1	526.0
27.5°	422.4	397.6	399.4	435.3	501.2
30°	422.9	384.6	385.2	422.9	473.6
32.5°	418.8	371.1	371.7	407.6	442.4
35°	408.8	355.2	354.6	390.0	400.0
37.5°	395.2	338.1	338.1	370.5	353.4
40°	378.7	321.0	322.8	345.2	312.1
42.5°	358.7	302.8	305.1	311.6	281.6
45°	336.9	285.1	286.9	263.3	258.0
47.5°	312.8	266.8	267.4	218.5	250.3
50°	284.0	247.9	245.7	187.3	249.8
52.5°	258.6	227.4	220.3	169.6	226.8
55°	233.8	205.6	190.2	156.1	210.3
57.5°	212.0	177.3	162.6	140.2	206.8
60°	192.0	149.6	138.4	123.1	189.7
62.5°	175.6	129.0	126.7	111.4	172.0
65°	157.8	114.9	114.3	101.4	146.1
67.5°	140.8	105.4	104.9	91.9	111.4
70°	122.5	95.4	94.2	81.9	82.5
72.5°	103.6	84.2	83.1	73.6	68.3
75°	84.8	71.2	70.7	64.2	55.3
77.5°	66.6	56.6	57.7	51.8	40.7
80°	47.7	41.2	42.4	37.2	30.7
82.5°	31.8	27.1	28.3	23.5	20.6
85°	17.7	15.3	15.9	12.4	9.4
87.5°	8.3	7.0	7.0	4.7	3.0
90°	24.2	15.4	14.2	9.8	5.4
92.5°	148.6	105.7	96.4	59.1	21.9
95°	365.7	206.0	188.9	120.8	52.6
97.5°	492.6	226.3	211.2	151.1	90.9
100°	538.8	243.2	229.6	175.0	120.5
102.5°	560.1	260.2	247.5	196.7	145.7
105°	575.7	285.4	274.6	231.6	188.5
107.5°	578.7	322.7	312.7	272.4	232.3
110°	574.3	343.5	334.5	298.1	261.8



TEST NUMBER: P935857

CATALOG NUMBER: SQ4-FA-150U-050D-93050-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	574.5	368.7	360.1	325.5	290.9
115°	579.8	406.5	398.5	366.6	334.7
117.5°	590.6	443.2	436.0	407.0	378.0
120°	599.3	464.5	457.7	430.5	403.1
122.5°	611.9	489.7	482.9	455.3	427.8
125°	628.9	522.1	515.8	490.7	465.7
127.5°	645.8	553.2	546.9	521.6	496.3
130°	658.3	574.1	567.2	540.0	512.8
132.5°	668.3	591.1	584.2	557.0	529.7
135°	679.3	610.8	604.5	579.8	554.9
137.5°	695.7	636.0	629.8	605.2	580.6
140°	705.8	653.0	647.4	624.7	602.1
142.5°	714.1	665.6	660.3	639.4	618.5
145°	725.1	684.7	680.2	662.0	643.7
147.5°	741.2	708.9	704.4	686.7	668.8
150°	749.5	721.4	717.4	701.4	685.3
152.5°	755.1	729.7	726.6	714.5	702.3
155°	767.1	747.8	745.5	736.5	727.5
157.5°	779.1	765.8	763.6	754.9	746.1
160°	784.7	774.0	772.4	765.5	758.7
162.5°	790.5	782.8	781.5	776.4	771.3
165°	798.9	795.4	794.2	789.6	785.0
167.5°	805.4	802.5	802.0	799.8	797.6
170°	810.9	810.8	810.2	808.0	805.8
172.5°	811.3	811.3	811.2	810.7	810.2
175°	814.5	816.2	816.2	816.2	816.2
177.5°	815.0	816.2	816.2	816.2	816.2
180°	816.2	816.2	816.2	816.2	816.2



TEST NUMBER: P935857
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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	7.68	8.34	8.83	9.48	11.09	10.48	11.14	11.63	12.28	13.89
	3H	8.14	8.73	9.30	9.89	11.51	11.80	12.39	12.96	13.54	15.16
	4H	8.32	8.89	9.49	10.04	11.66	12.22	12.79	13.40	13.94	15.57
	6H	8.43	8.95	9.61	10.10	11.74	12.49	13.01	13.67	14.16	15.80
	8H	8.43	8.92	9.61	10.09	11.72	12.55	13.05	13.74	14.22	15.85
	12H	8.39	8.86	9.58	10.02	11.67	12.58	13.05	13.77	14.21	15.86
4H	2H	8.68	9.24	9.86	10.39	12.02	10.86	11.43	12.04	12.58	14.20
	3H	9.69	10.16	10.87	11.33	12.97	12.34	12.81	13.52	13.99	15.62
	4H	9.95	10.39	11.14	11.55	13.21	12.85	13.29	14.04	14.45	16.11
	6H	10.07	10.44	11.26	11.63	13.27	13.20	13.57	14.39	14.76	16.40
	8H	10.07	10.41	11.26	11.59	13.26	13.29	13.64	14.48	14.82	16.48
	12H	10.03	10.34	11.23	11.53	13.20	13.34	13.65	14.54	14.84	16.51
8H	4H	10.39	10.73	11.57	11.91	13.57	12.96	13.31	14.15	14.49	16.15
	6H	10.64	10.92	11.85	12.15	13.80	13.38	13.67	14.59	14.89	16.55
	8H	10.68	10.93	11.89	12.13	13.81	13.53	13.77	14.74	14.97	16.65
	12H	10.65	10.87	11.87	12.07	13.78	13.61	13.83	14.83	15.02	16.73
12H	4H	10.38	10.70	11.59	11.88	13.55	12.92	13.23	14.12	14.42	16.09
	6H	10.70	10.95	11.91	12.14	13.82	13.38	13.62	14.59	14.82	16.50
	8H	10.75	10.97	11.97	12.17	13.88	13.52	13.74	14.74	14.94	16.65