

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: P933858

Luminaire Tested: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P933858
REPORT IS A COMBINATION OF REPORTS P933674 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

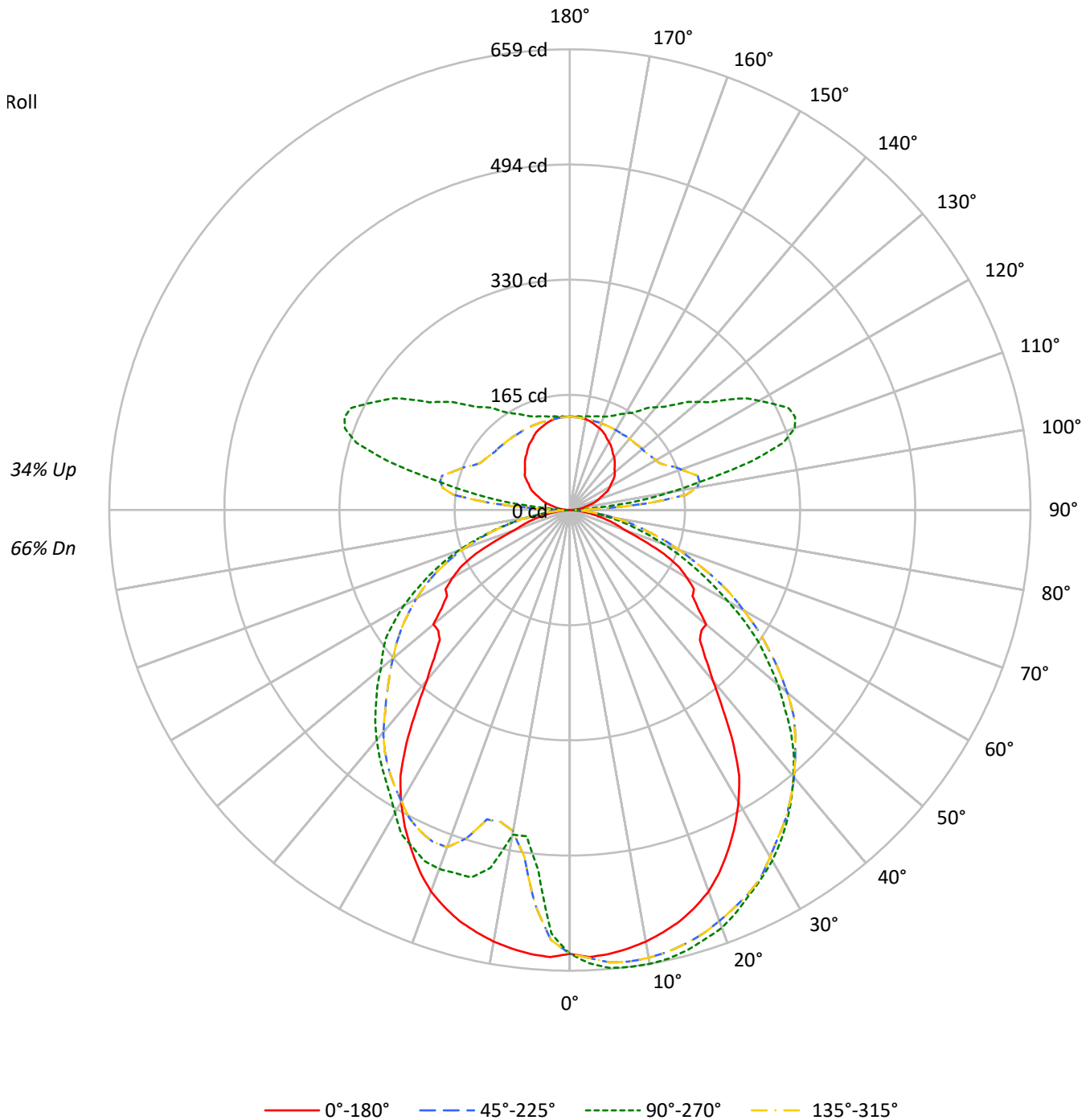
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2512.2 lumens
Efficiency: N/A
Efficacy: 114.2 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): 22
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: P933858
CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-4-3500K

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	92	92	92	81	81	81	70	70	70	70	70	70	66
1	101	97	93	89	95	91	88	85	81	78	76	71	69	68	62	61	60	60	60	60	55
2	92	85	78	73	87	80	74	70	71	67	63	63	59	56	55	52	50	50	50	50	46
3	84	75	67	61	79	70	64	58	63	57	53	55	51	48	49	46	43	43	43	43	39
4	77	66	58	52	72	62	55	49	56	50	45	49	45	41	43	40	37	37	37	37	34
5	71	59	50	44	66	56	48	43	50	44	39	44	39	35	39	35	32	32	32	32	29
6	65	53	45	39	61	50	43	37	45	39	34	40	35	31	35	31	28	28	28	28	26
7	60	48	40	34	57	45	38	33	41	35	30	36	31	28	32	28	25	25	25	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	25	30	26	22	22	22	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	20	20	20	18
10	49	36	29	24	46	35	28	23	31	26	22	28	23	20	25	21	18	18	18	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5890	5890	5890	5890
5°	5926	5945	5926	4675
10°	5881	5856	5881	4187
15°	5810	5729	5810	4784
20°	5682	5579	5682	4794
25°	5427	5359	5427	4692
30°	5099	5177	5099	4470
35°	4539	4947	4539	4225
40°	3775	4677	3775	4039
45°	3367	4360	3367	3826
50°	3569	3981	3569	3612
55°	3347	3574	3347	3489
60°	3440	3035	3440	3195
65°	3103	2509	3103	2803
70°	2135	1999	2135	2352
75°	1850	1478	1850	1770
80°	1460	978	1460	1063
85°	795	517	795	440

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 5170 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.3	2.3
10°-20°	162.7	6.5
20°-30°	251.4	10.0
30°-40°	300.2	11.9
40°-50°	301.9	12.0
50°-60°	262.7	10.5
60°-70°	186.3	7.4
70°-80°	98.5	3.9
80°-90°	25.1	1.0
90°-100°	65.1	2.6
100°-110°	171.2	6.8
110°-120°	177.5	7.1
120°-130°	142.4	5.7
130°-140°	111.7	4.4
140°-150°	85.8	3.4
150°-160°	61.8	2.5
160°-170°	37.8	1.5
170°-180°	12.8	0.5
0°-30°	471.4	18.8
0°-40°	771.6	30.7
0°-60°	1336.2	53.2
0°-90°	1646.1	65.5
90°-120°	413.9	16.5
90°-150°	753.8	30.0
90°-180°	866.0	34.5
0°-180°	2512.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	635	635	635	635	635	
5°	638	658	638	517	638	60
15°	609	652	609	544	609	171
25°	536	608	536	532	536	246
35°	408	542	408	463	408	252
45°	263	447	263	392	263	211
55°	214	330	214	322	214	197
65°	149	199	149	222	149	142
75°	56	94	56	113	56	59
85°	10	24	10	20	10	13
90°	1	3	1	3	1	1
95°	9	39	9	39	9	10
105°	31	268	31	268	31	33
115°	55	345	55	345	55	54
125°	76	275	76	275	76	68
135°	91	213	91	213	91	70
145°	105	173	105	173	105	66
155°	119	149	119	149	119	55
165°	128	139	128	139	128	36
175°	134	134	134	134	134	13
180°	134	134	134	134	134	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7
2.5°	640.1	640.1	643.6	644.9	644.9	643.1	641.3	643.1	648.5	650.3	649.6
5°	637.6	642.5	649.1	650.3	651.5	650.9	649.6	650.9	656.9	658.1	658.7
7.5°	632.9	641.8	650.3	652.1	653.8	652.1	651.5	652.7	658.7	659.8	659.8
10°	626.9	639.4	649.1	650.3	652.1	650.3	650.3	652.7	658.7	659.8	660.5
12.5°	618.5	635.9	644.9	646.1	648.5	647.8	647.3	649.6	655.7	656.9	656.9
15°	608.8	629.2	637.6	638.9	643.1	641.8	641.8	644.3	650.9	652.7	652.1
17.5°	595.7	620.9	630.5	632.3	635.3	634.7	635.3	637.6	643.6	644.9	645.5
20°	580.6	609.4	620.9	622.7	625.6	625.6	625.6	628.7	634.7	637.1	637.1
22.5°	560.2	597.4	609.4	610.7	614.3	614.3	615.4	619.6	625.0	625.6	625.6
25°	536.2	584.2	594.4	598.1	601.6	603.4	605.2	607.6	609.4	608.8	609.4
27.5°	511.0	567.4	580.6	583.0	587.9	589.7	592.1	592.6	593.2	595.0	593.9
30°	482.8	544.0	563.8	566.2	574.0	575.2	572.8	574.0	577.0	578.2	579.4
32.5°	451.0	509.2	546.4	551.8	559.0	555.5	554.8	556.6	561.5	561.5	562.6
35°	407.7	482.1	530.2	535.0	540.4	536.2	538.6	539.2	542.2	544.0	543.4
37.5°	360.3	458.8	513.4	517.0	521.2	515.8	519.4	521.2	523.6	522.4	522.4
40°	318.2	422.1	493.6	496.0	499.6	495.4	499.0	500.2	501.4	500.2	499.6
42.5°	287.0	381.9	472.5	475.6	473.2	476.1	477.4	479.8	477.9	475.6	475.6
45°	263.0	371.1	449.7	453.3	449.7	454.5	456.3	456.3	451.0	449.7	449.1
47.5°	255.2	349.4	426.9	426.9	425.1	431.1	434.1	429.9	424.6	422.7	422.7
50°	254.6	325.4	395.7	393.3	401.7	408.9	405.9	401.7	397.5	390.9	390.9
52.5°	231.2	296.0	355.4	364.5	377.6	381.9	377.1	372.9	365.6	362.7	360.3
55°	214.3	265.4	318.8	336.8	350.7	356.1	347.0	342.8	332.1	330.3	329.0
57.5°	210.8	221.0	285.2	308.0	324.8	324.3	318.8	311.0	302.0	300.2	299.7
60°	193.4	159.7	249.2	276.2	293.6	291.8	287.0	279.8	271.4	270.2	269.0
62.5°	175.3	115.9	208.3	239.0	263.6	263.0	258.8	248.0	242.0	239.0	236.5
65°	148.9	97.2	148.4	198.8	234.2	235.4	226.3	218.5	211.9	208.3	207.7
67.5°	113.5	79.2	100.3	165.7	205.9	204.8	193.4	189.7	181.3	179.5	175.9
70°	84.1	52.8	69.7	134.5	178.3	175.3	166.3	162.1	154.4	150.1	147.7
72.5°	69.7	42.6	51.0	104.5	150.1	146.5	138.7	133.9	127.3	123.7	121.3
75°	56.4	45.0	39.0	77.4	121.9	119.5	112.3	107.4	102.1	97.2	97.9
77.5°	41.5	42.0	31.2	57.0	96.7	93.1	88.9	82.9	80.5	75.7	75.7
80°	31.2	33.0	23.5	39.0	69.7	69.7	66.1	61.9	57.7	55.2	55.2
82.5°	21.0	21.0	17.4	24.6	47.5	45.7	43.2	42.0	39.7	38.4	38.4
85°	9.6	12.0	10.8	15.0	25.8	27.0	27.0	25.8	25.2	24.0	24.6
87.5°	3.0	5.4	6.6	8.4	13.3	13.8	14.4	14.4	14.4	15.0	15.0
90°	0.9	1.6	2.3	2.5	3.9	5.8	6.8	6.1	4.6	3.4	3.4
92.5°	3.6	9.7	15.8	17.3	24.4	33.8	38.4	33.7	24.2	17.0	16.3
95°	8.6	19.8	31.0	33.8	59.9	94.7	112.2	100.1	75.9	57.8	55.8
97.5°	14.9	24.7	34.6	37.1	80.7	138.8	167.9	160.3	145.0	133.5	129.6
100°	19.7	28.6	37.6	39.8	88.2	152.7	185.0	185.5	186.7	187.5	182.8
102.5°	23.8	32.1	40.6	42.6	91.7	157.1	189.8	199.6	219.0	233.6	229.6
105°	30.9	38.0	44.9	46.7	94.3	157.6	189.3	211.1	254.7	287.4	285.2
107.5°	38.1	44.6	51.2	52.8	94.7	150.6	178.5	209.0	269.8	315.4	316.0
110°	42.9	48.8	54.7	56.2	94.0	144.4	169.6	203.6	271.5	322.6	324.8



TEST NUMBER: P933858

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	47.6	53.3	58.9	60.3	94.0	139.0	161.4	196.3	265.8	318.0	321.4
115°	54.8	60.0	65.2	66.5	94.9	132.8	151.7	185.2	252.2	302.4	307.2
117.5°	61.9	66.6	71.4	72.5	96.7	128.8	145.0	175.2	235.6	281.0	286.3
120°	66.0	70.5	74.9	76.0	98.0	127.5	142.2	169.8	225.2	266.6	271.7
122.5°	70.0	74.5	79.0	80.1	100.1	126.8	140.1	165.0	214.8	252.1	257.1
125°	76.2	80.3	84.4	85.5	103.0	126.2	137.9	159.0	201.4	233.0	237.7
127.5°	81.2	85.4	89.5	90.6	105.7	125.9	136.0	154.2	190.5	217.7	221.7
130°	83.9	88.4	92.8	94.0	107.8	126.1	135.3	151.5	183.8	208.1	211.7
132.5°	86.8	91.2	95.7	96.8	109.4	126.2	134.7	149.2	178.1	199.8	203.1
135°	90.9	94.9	99.0	100.0	111.2	126.1	133.6	145.7	169.9	188.1	190.9
137.5°	95.1	99.1	103.1	104.1	113.9	126.9	133.4	143.6	164.1	179.5	181.8
140°	98.6	102.2	106.0	106.9	115.5	127.0	132.8	141.6	159.4	172.6	174.8
142.5°	101.3	104.7	108.1	109.0	116.9	127.5	132.8	140.6	156.1	167.8	169.7
145°	105.4	108.3	111.4	112.1	118.7	127.5	131.9	138.2	150.9	160.5	162.0
147.5°	109.5	112.4	115.3	116.0	121.3	128.4	131.9	136.9	146.9	154.4	155.6
150°	112.2	114.8	117.5	118.1	122.7	128.8	131.9	136.1	144.6	150.9	151.8
152.5°	115.0	116.9	118.9	119.4	123.6	129.1	131.9	135.5	142.7	148.2	148.9
155°	119.1	120.5	122.0	122.4	125.5	129.7	131.9	134.7	140.6	144.9	145.3
157.5°	122.1	123.6	125.0	125.3	127.5	130.4	131.9	134.1	138.6	141.9	142.3
160°	124.2	125.3	126.4	126.7	128.4	130.7	131.9	133.8	137.6	140.5	140.7
162.5°	126.2	127.0	127.9	128.1	129.4	131.1	131.9	133.5	136.7	139.1	139.3
165°	128.5	129.2	130.0	130.2	130.7	131.5	131.9	133.0	135.4	137.1	137.3
167.5°	130.5	130.9	131.3	131.3	131.8	132.4	132.8	133.5	135.0	136.2	136.3
170°	131.9	132.2	132.6	132.7	132.7	132.8	132.8	133.5	135.0	136.2	136.2
172.5°	132.6	132.7	132.8	132.8	132.8	132.8	132.8	133.4	134.6	135.5	135.4
175°	133.6	133.6	133.6	133.6	133.3	133.0	132.8	133.1	133.9	134.5	134.5
177.5°	133.6	133.6	133.6	133.6	133.4	133.1	133.0	133.2	133.8	134.3	134.2
180°	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6



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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7
2.5°	650.9	649.1	650.9	649.6	650.3	648.5	643.1	641.3	643.1	644.9	644.9
5°	658.7	657.5	658.7	658.7	658.1	656.9	650.9	649.6	650.9	651.5	650.3
7.5°	661.1	659.3	661.1	659.8	659.8	658.7	652.7	651.5	652.1	653.8	652.1
10°	661.1	659.3	661.1	660.5	659.8	658.7	652.7	650.3	650.3	652.1	650.3
12.5°	658.1	656.9	658.1	656.9	656.9	655.7	649.6	647.3	647.8	648.5	646.1
15°	653.3	651.5	653.3	652.1	652.7	650.9	644.3	641.8	641.8	643.1	638.9
17.5°	646.1	643.6	646.1	645.5	644.9	643.6	637.6	635.3	634.7	635.3	632.3
20°	637.6	635.9	637.6	637.1	637.1	634.7	628.7	625.6	625.6	625.6	622.7
22.5°	624.5	622.7	624.5	625.6	625.6	625.0	619.6	615.4	614.3	614.3	610.7
25°	609.4	607.6	609.4	609.4	608.8	609.4	607.6	605.2	603.4	601.6	598.1
27.5°	595.0	593.9	595.0	593.9	595.0	593.2	592.6	592.1	589.7	587.9	583.0
30°	580.6	579.4	580.6	579.4	578.2	577.0	574.0	572.8	575.2	574.0	566.2
32.5°	562.6	561.5	562.6	562.6	561.5	561.5	556.6	554.8	555.5	559.0	551.8
35°	544.0	542.2	544.0	543.4	544.0	542.2	539.2	538.6	536.2	540.4	535.0
37.5°	522.4	520.6	522.4	522.4	522.4	523.6	521.2	519.4	515.8	521.2	517.0
40°	500.2	497.8	500.2	499.6	500.2	501.4	500.2	499.0	495.4	499.6	496.0
42.5°	475.0	474.3	475.0	475.6	475.6	477.9	479.8	477.4	476.1	473.2	475.6
45°	447.9	446.8	447.9	449.1	449.7	451.0	456.3	456.3	454.5	449.7	453.3
47.5°	419.1	416.1	419.1	422.7	422.7	424.6	429.9	434.1	431.1	425.1	426.9
50°	388.5	389.1	388.5	390.9	390.9	397.5	401.7	405.9	408.9	401.7	393.3
52.5°	358.5	357.9	358.5	360.3	362.7	365.6	372.9	377.1	381.9	377.6	364.5
55°	328.4	329.7	328.4	329.0	330.3	332.1	342.8	347.0	356.1	350.7	336.8
57.5°	298.4	296.6	298.4	299.7	300.2	302.0	311.0	318.8	324.3	324.8	308.0
60°	263.6	261.2	263.6	269.0	270.2	271.4	279.8	287.0	291.8	293.6	276.2
62.5°	233.0	228.8	233.0	236.5	239.0	242.0	248.0	258.8	263.0	263.6	239.0
65°	200.5	198.8	200.5	207.7	208.3	211.9	218.5	226.3	235.4	234.2	198.8
67.5°	171.1	171.1	171.1	175.9	179.5	181.3	189.7	193.4	204.8	205.9	165.7
70°	144.1	143.5	144.1	147.7	150.1	154.4	162.1	166.3	175.3	178.3	134.5
72.5°	118.3	117.6	118.3	121.3	123.7	127.3	133.9	138.7	146.5	150.1	104.5
75°	95.4	94.3	95.4	97.9	97.2	102.1	107.4	112.3	119.5	121.9	77.4
77.5°	73.2	73.2	73.2	75.7	75.7	80.5	82.9	88.9	93.1	96.7	57.0
80°	54.6	54.1	54.6	55.2	55.2	57.7	61.9	66.1	69.7	69.7	39.0
82.5°	38.4	37.2	38.4	38.4	38.4	39.7	42.0	43.2	45.7	47.5	24.6
85°	24.0	24.0	24.0	24.6	24.0	25.2	25.8	27.0	27.0	25.8	15.0
87.5°	15.6	15.0	15.6	15.0	15.0	14.4	14.4	14.4	13.8	13.3	8.4
90°	3.4	3.4	3.4	3.4	3.4	4.6	6.1	6.8	5.8	3.9	2.5
92.5°	13.6	10.9	13.6	16.3	17.0	24.2	33.7	38.4	33.8	24.4	17.3
95°	47.6	39.4	47.6	55.8	57.8	75.9	100.1	112.2	94.7	59.9	33.8
97.5°	114.0	98.4	114.0	129.6	133.5	145.0	160.3	167.9	138.8	80.7	37.1
100°	164.3	145.7	164.3	182.8	187.5	186.7	185.5	185.0	152.7	88.2	39.8
102.5°	213.6	197.7	213.6	229.6	233.6	219.0	199.6	189.8	157.1	91.7	42.6
105°	276.7	268.1	276.7	285.2	287.4	254.7	211.1	189.3	157.6	94.3	46.7
107.5°	318.0	320.1	318.0	316.0	315.4	269.8	209.0	178.5	150.6	94.7	52.8
110°	333.7	342.6	333.7	324.8	322.6	271.5	203.6	169.6	144.4	94.0	56.2



TEST NUMBER: P933858

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	335.1	348.8	335.1	321.4	318.0	265.8	196.3	161.4	139.0	94.0	60.3
115°	326.3	345.2	326.3	307.2	302.4	252.2	185.2	151.7	132.8	94.9	66.5
117.5°	307.4	328.5	307.4	286.3	281.0	235.6	175.2	145.0	128.8	96.7	72.5
120°	292.2	312.6	292.2	271.7	266.6	225.2	169.8	142.2	127.5	98.0	76.0
122.5°	277.4	297.6	277.4	257.1	252.1	214.8	165.0	140.1	126.8	100.1	80.1
125°	256.3	275.0	256.3	237.7	233.0	201.4	159.0	137.9	126.2	103.0	85.5
127.5°	237.3	253.0	237.3	221.7	217.7	190.5	154.2	136.0	125.9	105.7	90.6
130°	226.2	240.7	226.2	211.7	208.1	183.8	151.5	135.3	126.1	107.8	94.0
132.5°	216.0	229.0	216.0	203.1	199.8	178.1	149.2	134.7	126.2	109.4	96.8
135°	202.2	213.4	202.2	190.9	188.1	169.9	145.7	133.6	126.1	111.2	100.0
137.5°	191.0	200.2	191.0	181.8	179.5	164.1	143.6	133.4	126.9	113.9	104.1
140°	183.3	191.9	183.3	174.8	172.6	159.4	141.6	132.8	127.0	115.5	106.9
142.5°	177.0	184.3	177.0	169.7	167.8	156.1	140.6	132.8	127.5	116.9	109.0
145°	167.5	173.1	167.5	162.0	160.5	150.9	138.2	131.9	127.5	118.7	112.1
147.5°	160.2	164.8	160.2	155.6	154.4	146.9	136.9	131.9	128.4	121.3	116.0
150°	155.6	159.4	155.6	151.8	150.9	144.6	136.1	131.9	128.8	122.7	118.1
152.5°	151.7	154.5	151.7	148.9	148.2	142.7	135.5	131.9	129.1	123.6	119.4
155°	147.2	149.1	147.2	145.3	144.9	140.6	134.7	131.9	129.7	125.5	122.4
157.5°	143.6	145.0	143.6	142.3	141.9	138.6	134.1	131.9	130.4	127.5	125.3
160°	141.5	142.2	141.5	140.7	140.5	137.6	133.8	131.9	130.7	128.4	126.7
162.5°	140.0	140.7	140.0	139.3	139.1	136.7	133.5	131.9	131.1	129.4	128.1
165°	138.1	138.8	138.1	137.3	137.1	135.4	133.0	131.9	131.5	130.7	130.2
167.5°	136.5	136.9	136.5	136.3	136.2	135.0	133.5	132.8	132.4	131.8	131.3
170°	136.2	136.2	136.2	136.2	136.2	135.0	133.5	132.8	132.8	132.7	132.7
172.5°	135.1	134.8	135.1	135.4	135.5	134.6	133.4	132.8	132.8	132.8	132.8
175°	134.5	134.5	134.5	134.5	134.5	133.9	133.1	132.8	133.0	133.3	133.6
177.5°	133.9	133.6	133.9	134.2	134.3	133.8	133.2	133.0	133.1	133.4	133.6
180°	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6



TEST NUMBER: P933858

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7
2.5°	643.6	640.1	640.1	634.1	631.6	629.9	626.9	617.9	615.4	613.0	616.7
5°	649.1	642.5	637.6	626.9	617.9	614.3	602.8	581.2	566.8	556.0	550.0
7.5°	650.3	641.8	632.9	616.1	594.4	584.8	550.0	510.4	499.6	490.0	483.9
10°	649.1	639.4	626.9	601.6	550.6	533.8	499.0	473.2	466.5	464.8	466.5
12.5°	644.9	635.9	618.5	576.4	505.0	493.6	473.2	458.1	457.0	459.9	476.1
15°	637.6	629.2	608.8	542.8	479.8	471.4	457.0	451.5	458.1	479.2	527.8
17.5°	630.5	620.9	595.7	509.8	460.5	454.5	444.3	455.2	492.3	520.6	536.8
20°	620.9	609.4	580.6	485.8	446.8	441.3	436.6	485.2	513.4	523.6	532.6
22.5°	609.4	597.4	560.2	469.0	432.3	428.1	431.1	502.0	513.4	520.6	528.4
25°	594.4	584.2	536.2	455.7	420.9	416.1	427.5	500.2	506.7	508.5	524.2
27.5°	580.6	567.4	511.0	443.7	407.1	405.3	430.6	492.3	497.2	499.0	515.8
30°	563.8	544.0	482.8	431.1	392.7	392.1	431.1	482.8	481.6	486.3	503.2
32.5°	546.4	509.2	451.0	415.5	378.9	378.3	426.9	468.3	467.2	473.7	486.3
35°	530.2	482.1	407.7	397.5	361.4	362.1	416.7	451.5	452.1	458.1	465.9
37.5°	513.4	458.8	360.3	377.6	344.7	344.7	402.9	435.9	434.8	436.6	447.3
40°	493.6	422.1	318.2	351.9	329.0	327.2	386.1	419.1	414.9	414.4	429.3
42.5°	472.5	381.9	287.0	317.7	311.0	308.6	365.6	398.7	390.9	392.7	411.9
45°	449.7	371.1	263.0	268.4	292.4	290.6	343.4	375.3	369.9	374.7	394.5
47.5°	426.9	349.4	255.2	222.8	272.6	272.0	318.8	352.5	349.4	354.3	375.3
50°	395.7	325.4	254.6	191.0	250.4	252.7	289.5	330.3	330.3	334.5	356.7
52.5°	355.4	296.0	231.2	172.9	224.5	231.8	263.6	311.0	312.2	316.4	336.3
55°	318.8	265.4	214.3	159.1	193.9	209.6	238.3	291.2	293.6	297.8	315.9
57.5°	285.2	221.0	210.8	142.9	165.7	180.8	216.1	272.0	273.2	276.8	294.2
60°	249.2	159.7	193.4	125.5	141.1	152.5	195.7	249.2	253.4	255.8	270.8
62.5°	208.3	115.9	175.3	113.5	129.1	131.5	179.0	227.6	233.0	234.8	243.8
65°	148.4	97.2	148.9	103.3	116.5	117.1	160.9	205.4	210.1	213.2	219.8
67.5°	100.3	79.2	113.5	93.6	106.9	107.4	143.5	179.5	186.1	188.6	192.8
70°	69.7	52.8	84.1	83.4	96.1	97.2	124.9	156.1	162.1	163.9	166.3
72.5°	51.0	42.6	69.7	75.0	84.7	85.9	105.6	129.7	135.7	137.5	138.7
75°	39.0	45.0	56.4	65.4	72.1	72.6	86.5	105.6	109.9	111.1	111.6
77.5°	31.2	42.0	41.5	52.8	58.8	57.7	67.9	81.7	85.2	85.2	85.2
80°	23.5	33.0	31.2	37.9	43.2	42.0	48.6	58.3	59.4	60.6	60.1
82.5°	17.4	21.0	21.0	24.0	28.8	27.7	32.4	37.9	37.9	37.9	39.0
85°	10.8	12.0	9.6	12.6	16.2	15.6	18.0	20.4	21.0	21.0	19.8
87.5°	6.6	5.4	3.0	4.8	7.2	7.2	8.4	9.0	8.4	8.4	8.4
90°	2.3	1.6	0.9	1.6	2.3	2.5	3.9	5.8	6.8	6.1	4.6
92.5°	15.8	9.7	3.6	9.7	15.8	17.3	24.4	33.8	38.4	33.7	24.2
95°	31.0	19.8	8.6	19.8	31.0	33.8	59.9	94.7	112.2	100.1	75.9
97.5°	34.6	24.7	14.9	24.7	34.6	37.1	80.7	138.8	167.9	160.3	145.0
100°	37.6	28.6	19.7	28.6	37.6	39.8	88.2	152.7	185.0	185.5	186.7
102.5°	40.6	32.1	23.8	32.1	40.6	42.6	91.7	157.1	189.8	199.6	219.0
105°	44.9	38.0	30.9	38.0	44.9	46.7	94.3	157.6	189.3	211.1	254.7
107.5°	51.2	44.6	38.1	44.6	51.2	52.8	94.7	150.6	178.5	209.0	269.8
110°	54.7	48.8	42.9	48.8	54.7	56.2	94.0	144.4	169.6	203.6	271.5



TEST NUMBER: P933858

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	58.9	53.3	47.6	53.3	58.9	60.3	94.0	139.0	161.4	196.3	265.8
115°	65.2	60.0	54.8	60.0	65.2	66.5	94.9	132.8	151.7	185.2	252.2
117.5°	71.4	66.6	61.9	66.6	71.4	72.5	96.7	128.8	145.0	175.2	235.6
120°	74.9	70.5	66.0	70.5	74.9	76.0	98.0	127.5	142.2	169.8	225.2
122.5°	79.0	74.5	70.0	74.5	79.0	80.1	100.1	126.8	140.1	165.0	214.8
125°	84.4	80.3	76.2	80.3	84.4	85.5	103.0	126.2	137.9	159.0	201.4
127.5°	89.5	85.4	81.2	85.4	89.5	90.6	105.7	125.9	136.0	154.2	190.5
130°	92.8	88.4	83.9	88.4	92.8	94.0	107.8	126.1	135.3	151.5	183.8
132.5°	95.7	91.2	86.8	91.2	95.7	96.8	109.4	126.2	134.7	149.2	178.1
135°	99.0	94.9	90.9	94.9	99.0	100.0	111.2	126.1	133.6	145.7	169.9
137.5°	103.1	99.1	95.1	99.1	103.1	104.1	113.9	126.9	133.4	143.6	164.1
140°	106.0	102.2	98.6	102.2	106.0	106.9	115.5	127.0	132.8	141.6	159.4
142.5°	108.1	104.7	101.3	104.7	108.1	109.0	116.9	127.5	132.8	140.6	156.1
145°	111.4	108.3	105.4	108.3	111.4	112.1	118.7	127.5	131.9	138.2	150.9
147.5°	115.3	112.4	109.5	112.4	115.3	116.0	121.3	128.4	131.9	136.9	146.9
150°	117.5	114.8	112.2	114.8	117.5	118.1	122.7	128.8	131.9	136.1	144.6
152.5°	118.9	116.9	115.0	116.9	118.9	119.4	123.6	129.1	131.9	135.5	142.7
155°	122.0	120.5	119.1	120.5	122.0	122.4	125.5	129.7	131.9	134.7	140.6
157.5°	125.0	123.6	122.1	123.6	125.0	125.3	127.5	130.4	131.9	134.1	138.6
160°	126.4	125.3	124.2	125.3	126.4	126.7	128.4	130.7	131.9	133.8	137.6
162.5°	127.9	127.0	126.2	127.0	127.9	128.1	129.4	131.1	131.9	133.5	136.7
165°	130.0	129.2	128.5	129.2	130.0	130.2	130.7	131.5	131.9	133.0	135.4
167.5°	131.3	130.9	130.5	130.9	131.3	131.3	131.8	132.4	132.8	133.5	135.0
170°	132.6	132.2	131.9	132.2	132.6	132.7	132.7	132.8	132.8	133.5	135.0
172.5°	132.8	132.7	132.6	132.7	132.8	132.8	132.8	132.8	132.8	133.4	134.6
175°	133.6	133.6	133.6	133.6	133.6	133.6	133.3	133.0	132.8	133.1	133.9
177.5°	133.6	133.6	133.6	133.6	133.6	133.6	133.4	133.1	133.0	133.2	133.8
180°	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6



TEST NUMBER: P933858

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7	634.7
2.5°	612.5	610.7	613.0	606.5	613.0	610.7	612.5	616.7	613.0	615.4	617.9
5°	537.4	534.4	524.8	517.0	524.8	534.4	537.4	550.0	556.0	566.8	581.2
7.5°	480.3	477.9	475.6	470.8	475.6	477.9	480.3	483.9	490.0	499.6	510.4
10°	467.7	468.3	471.9	471.4	471.9	468.3	467.7	466.5	464.8	466.5	473.2
12.5°	500.2	505.6	525.4	524.2	525.4	505.6	500.2	476.1	459.9	457.0	458.1
15°	537.4	539.2	543.4	544.0	543.4	539.2	537.4	527.8	479.2	458.1	451.5
17.5°	541.0	541.6	544.6	544.6	544.6	541.6	541.0	536.8	520.6	492.3	455.2
20°	538.0	539.2	545.2	546.4	545.2	539.2	538.0	532.6	523.6	513.4	485.2
22.5°	536.8	539.2	544.0	543.4	544.0	539.2	536.8	528.4	520.6	513.4	502.0
25°	530.8	530.8	531.4	532.0	531.4	530.8	530.8	524.2	508.5	506.7	500.2
27.5°	518.2	519.4	523.0	522.4	523.0	519.4	518.2	515.8	499.0	497.2	492.3
30°	506.7	505.6	502.5	500.2	502.5	505.6	506.7	503.2	486.3	481.6	482.8
32.5°	487.6	484.5	481.6	479.8	481.6	484.5	487.6	486.3	473.7	467.2	468.3
35°	464.8	465.4	464.8	463.0	464.8	465.4	464.8	465.9	458.1	452.1	451.5
37.5°	448.6	449.7	449.1	446.8	449.1	449.7	448.6	447.3	436.6	434.8	435.9
40°	431.7	432.3	431.7	429.9	431.7	432.3	431.7	429.3	414.4	414.9	419.1
42.5°	415.5	414.9	413.1	411.9	413.1	414.9	415.5	411.9	392.7	390.9	398.7
45°	396.9	397.5	393.8	392.1	393.8	397.5	396.9	394.5	374.7	369.9	375.3
47.5°	378.3	378.3	375.3	373.4	375.3	378.3	378.3	375.3	354.3	349.4	352.5
50°	358.5	357.9	353.6	353.0	353.6	357.9	358.5	356.7	334.5	330.3	330.3
52.5°	335.7	335.7	336.3	337.4	336.3	335.7	335.7	336.3	316.4	312.2	311.0
55°	315.9	316.4	320.6	321.9	320.6	316.4	315.9	315.9	297.8	293.6	291.2
57.5°	295.5	295.5	298.4	298.4	298.4	295.5	295.5	294.2	276.8	273.2	272.0
60°	272.0	273.2	275.6	275.0	275.6	273.2	272.0	270.8	255.8	253.4	249.2
62.5°	247.4	248.6	249.2	248.0	249.2	248.6	247.4	243.8	234.8	233.0	227.6
65°	221.6	222.8	223.4	222.1	223.4	222.8	221.6	219.8	213.2	210.1	205.4
67.5°	195.2	194.6	193.9	196.3	193.9	194.6	195.2	192.8	188.6	186.1	179.5
70°	168.1	168.1	167.5	168.8	167.5	168.1	168.1	166.3	163.9	162.1	156.1
72.5°	139.3	138.7	141.1	139.3	141.1	138.7	139.3	138.7	137.5	135.7	129.7
75°	111.1	112.3	111.1	112.9	111.1	112.3	111.1	111.6	111.1	109.9	105.6
77.5°	84.7	85.9	84.7	84.7	84.7	85.9	84.7	85.2	85.2	85.2	81.7
80°	60.1	59.4	59.4	58.8	59.4	59.4	60.1	60.1	60.6	59.4	58.3
82.5°	38.4	37.9	37.9	39.0	37.9	37.9	38.4	39.0	37.9	37.9	37.9
85°	21.0	21.6	20.4	20.4	20.4	21.6	21.0	19.8	21.0	21.0	20.4
87.5°	7.8	7.2	7.2	7.2	7.2	7.2	7.8	8.4	8.4	8.4	9.0
90°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	4.6	6.1	6.8	5.8
92.5°	17.0	16.3	13.6	10.9	13.6	16.3	17.0	24.2	33.7	38.4	33.8
95°	57.8	55.8	47.6	39.4	47.6	55.8	57.8	75.9	100.1	112.2	94.7
97.5°	133.5	129.6	114.0	98.4	114.0	129.6	133.5	145.0	160.3	167.9	138.8
100°	187.5	182.8	164.3	145.7	164.3	182.8	187.5	186.7	185.5	185.0	152.7
102.5°	233.6	229.6	213.6	197.7	213.6	229.6	233.6	219.0	199.6	189.8	157.1
105°	287.4	285.2	276.7	268.1	276.7	285.2	287.4	254.7	211.1	189.3	157.6
107.5°	315.4	316.0	318.0	320.1	318.0	316.0	315.4	269.8	209.0	178.5	150.6
110°	322.6	324.8	333.7	342.6	333.7	324.8	322.6	271.5	203.6	169.6	144.4



TEST NUMBER: P933858

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	318.0	321.4	335.1	348.8	335.1	321.4	318.0	265.8	196.3	161.4	139.0
115°	302.4	307.2	326.3	345.2	326.3	307.2	302.4	252.2	185.2	151.7	132.8
117.5°	281.0	286.3	307.4	328.5	307.4	286.3	281.0	235.6	175.2	145.0	128.8
120°	266.6	271.7	292.2	312.6	292.2	271.7	266.6	225.2	169.8	142.2	127.5
122.5°	252.1	257.1	277.4	297.6	277.4	257.1	252.1	214.8	165.0	140.1	126.8
125°	233.0	237.7	256.3	275.0	256.3	237.7	233.0	201.4	159.0	137.9	126.2
127.5°	217.7	221.7	237.3	253.0	237.3	221.7	217.7	190.5	154.2	136.0	125.9
130°	208.1	211.7	226.2	240.7	226.2	211.7	208.1	183.8	151.5	135.3	126.1
132.5°	199.8	203.1	216.0	229.0	216.0	203.1	199.8	178.1	149.2	134.7	126.2
135°	188.1	190.9	202.2	213.4	202.2	190.9	188.1	169.9	145.7	133.6	126.1
137.5°	179.5	181.8	191.0	200.2	191.0	181.8	179.5	164.1	143.6	133.4	126.9
140°	172.6	174.8	183.3	191.9	183.3	174.8	172.6	159.4	141.6	132.8	127.0
142.5°	167.8	169.7	177.0	184.3	177.0	169.7	167.8	156.1	140.6	132.8	127.5
145°	160.5	162.0	167.5	173.1	167.5	162.0	160.5	150.9	138.2	131.9	127.5
147.5°	154.4	155.6	160.2	164.8	160.2	155.6	154.4	146.9	136.9	131.9	128.4
150°	150.9	151.8	155.6	159.4	155.6	151.8	150.9	144.6	136.1	131.9	128.8
152.5°	148.2	148.9	151.7	154.5	151.7	148.9	148.2	142.7	135.5	131.9	129.1
155°	144.9	145.3	147.2	149.1	147.2	145.3	144.9	140.6	134.7	131.9	129.7
157.5°	141.9	142.3	143.6	145.0	143.6	142.3	141.9	138.6	134.1	131.9	130.4
160°	140.5	140.7	141.5	142.2	141.5	140.7	140.5	137.6	133.8	131.9	130.7
162.5°	139.1	139.3	140.0	140.7	140.0	139.3	139.1	136.7	133.5	131.9	131.1
165°	137.1	137.3	138.1	138.8	138.1	137.3	137.1	135.4	133.0	131.9	131.5
167.5°	136.2	136.3	136.5	136.9	136.5	136.3	136.2	135.0	133.5	132.8	132.4
170°	136.2	136.2	136.2	136.2	136.2	136.2	136.2	135.0	133.5	132.8	132.8
172.5°	135.5	135.4	135.1	134.8	135.1	135.4	135.5	134.6	133.4	132.8	132.8
175°	134.5	134.5	134.5	134.5	134.5	134.5	134.5	133.9	133.1	132.8	133.0
177.5°	134.3	134.2	133.9	133.6	133.9	134.2	134.3	133.8	133.2	133.0	133.1
180°	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6



TEST NUMBER: P933858

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	634.7	634.7	634.7	634.7	634.7
2.5°	626.9	629.9	631.6	634.1	640.1
5°	602.8	614.3	617.9	626.9	637.6
7.5°	550.0	584.8	594.4	616.1	632.9
10°	499.0	533.8	550.6	601.6	626.9
12.5°	473.2	493.6	505.0	576.4	618.5
15°	457.0	471.4	479.8	542.8	608.8
17.5°	444.3	454.5	460.5	509.8	595.7
20°	436.6	441.3	446.8	485.8	580.6
22.5°	431.1	428.1	432.3	469.0	560.2
25°	427.5	416.1	420.9	455.7	536.2
27.5°	430.6	405.3	407.1	443.7	511.0
30°	431.1	392.1	392.7	431.1	482.8
32.5°	426.9	378.3	378.9	415.5	451.0
35°	416.7	362.1	361.4	397.5	407.7
37.5°	402.9	344.7	344.7	377.6	360.3
40°	386.1	327.2	329.0	351.9	318.2
42.5°	365.6	308.6	311.0	317.7	287.0
45°	343.4	290.6	292.4	268.4	263.0
47.5°	318.8	272.0	272.6	222.8	255.2
50°	289.5	252.7	250.4	191.0	254.6
52.5°	263.6	231.8	224.5	172.9	231.2
55°	238.3	209.6	193.9	159.1	214.3
57.5°	216.1	180.8	165.7	142.9	210.8
60°	195.7	152.5	141.1	125.5	193.4
62.5°	179.0	131.5	129.1	113.5	175.3
65°	160.9	117.1	116.5	103.3	148.9
67.5°	143.5	107.4	106.9	93.6	113.5
70°	124.9	97.2	96.1	83.4	84.1
72.5°	105.6	85.9	84.7	75.0	69.7
75°	86.5	72.6	72.1	65.4	56.4
77.5°	67.9	57.7	58.8	52.8	41.5
80°	48.6	42.0	43.2	37.9	31.2
82.5°	32.4	27.7	28.8	24.0	21.0
85°	18.0	15.6	16.2	12.6	9.6
87.5°	8.4	7.2	7.2	4.8	3.0
90°	3.9	2.5	2.3	1.6	0.9
92.5°	24.4	17.3	15.8	9.7	3.6
95°	59.9	33.8	31.0	19.8	8.6
97.5°	80.7	37.1	34.6	24.7	14.9
100°	88.2	39.8	37.6	28.6	19.7
102.5°	91.7	42.6	40.6	32.1	23.8
105°	94.3	46.7	44.9	38.0	30.9
107.5°	94.7	52.8	51.2	44.6	38.1
110°	94.0	56.2	54.7	48.8	42.9



TEST NUMBER: P933858

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	94.0	60.3	58.9	53.3	47.6
115°	94.9	66.5	65.2	60.0	54.8
117.5°	96.7	72.5	71.4	66.6	61.9
120°	98.0	76.0	74.9	70.5	66.0
122.5°	100.1	80.1	79.0	74.5	70.0
125°	103.0	85.5	84.4	80.3	76.2
127.5°	105.7	90.6	89.5	85.4	81.2
130°	107.8	94.0	92.8	88.4	83.9
132.5°	109.4	96.8	95.7	91.2	86.8
135°	111.2	100.0	99.0	94.9	90.9
137.5°	113.9	104.1	103.1	99.1	95.1
140°	115.5	106.9	106.0	102.2	98.6
142.5°	116.9	109.0	108.1	104.7	101.3
145°	118.7	112.1	111.4	108.3	105.4
147.5°	121.3	116.0	115.3	112.4	109.5
150°	122.7	118.1	117.5	114.8	112.2
152.5°	123.6	119.4	118.9	116.9	115.0
155°	125.5	122.4	122.0	120.5	119.1
157.5°	127.5	125.3	125.0	123.6	122.1
160°	128.4	126.7	126.4	125.3	124.2
162.5°	129.4	128.1	127.9	127.0	126.2
165°	130.7	130.2	130.0	129.2	128.5
167.5°	131.8	131.3	131.3	130.9	130.5
170°	132.7	132.7	132.6	132.2	131.9
172.5°	132.8	132.8	132.8	132.7	132.6
175°	133.3	133.6	133.6	133.6	133.6
177.5°	133.4	133.6	133.6	133.6	133.6
180°	133.6	133.6	133.6	133.6	133.6



TEST NUMBER: P933858

CATALOG NUMBER: SQ4-FA-025U-050D-93050-1D-UNV-STD-W-4-3500K

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	12.27	13.30	13.09	14.13	15.16	15.07	16.09	15.89	16.93	17.96
	3H	12.76	13.68	13.59	14.52	15.58	16.42	17.34	17.25	18.18	19.24
	4H	12.96	13.83	13.80	14.68	15.75	16.87	17.73	17.71	18.58	19.65
	6H	13.09	13.89	13.94	14.75	15.83	17.15	17.95	18.00	18.81	19.89
	8H	13.10	13.85	13.96	14.73	15.82	17.23	17.98	18.09	18.86	19.95
	12H	13.07	13.80	13.94	14.67	15.78	17.27	17.99	18.13	18.86	19.97
4H	2H	13.32	14.18	14.16	15.03	16.10	15.50	16.37	16.35	17.22	18.29
	3H	14.36	15.08	15.22	15.96	17.05	17.01	17.73	17.87	18.62	19.70
	4H	14.64	15.30	15.51	16.18	17.29	17.54	18.20	18.41	19.08	20.19
	6H	14.78	15.34	15.66	16.25	17.36	17.91	18.47	18.79	19.38	20.50
	8H	14.79	15.32	15.68	16.22	17.34	18.01	18.54	18.90	19.44	20.57
	12H	14.76	15.24	15.67	16.16	17.29	18.07	18.55	18.98	19.47	20.60
8H	4H	15.10	15.63	15.99	16.53	17.66	17.68	18.21	18.57	19.11	20.24
	6H	15.37	15.81	16.29	16.75	17.88	18.11	18.55	19.03	19.49	20.62
	8H	15.42	15.80	16.34	16.74	17.88	18.26	18.65	19.19	19.59	20.73
	12H	15.41	15.75	16.34	16.68	17.87	18.36	18.71	19.29	19.63	20.83
12H	4H	15.12	15.59	16.03	16.51	17.65	17.65	18.13	18.56	19.05	20.18
	6H	15.43	15.82	16.36	16.76	17.90	18.11	18.50	19.04	19.44	20.58
	8H	15.51	15.85	16.44	16.78	17.97	18.28	18.62	19.21	19.55	20.74