

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: P933831

Luminaire Tested: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P933831
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-92765-1D-UNV-STD-W-4-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I
Lens
Light Source: -
Ballast/Driver: -

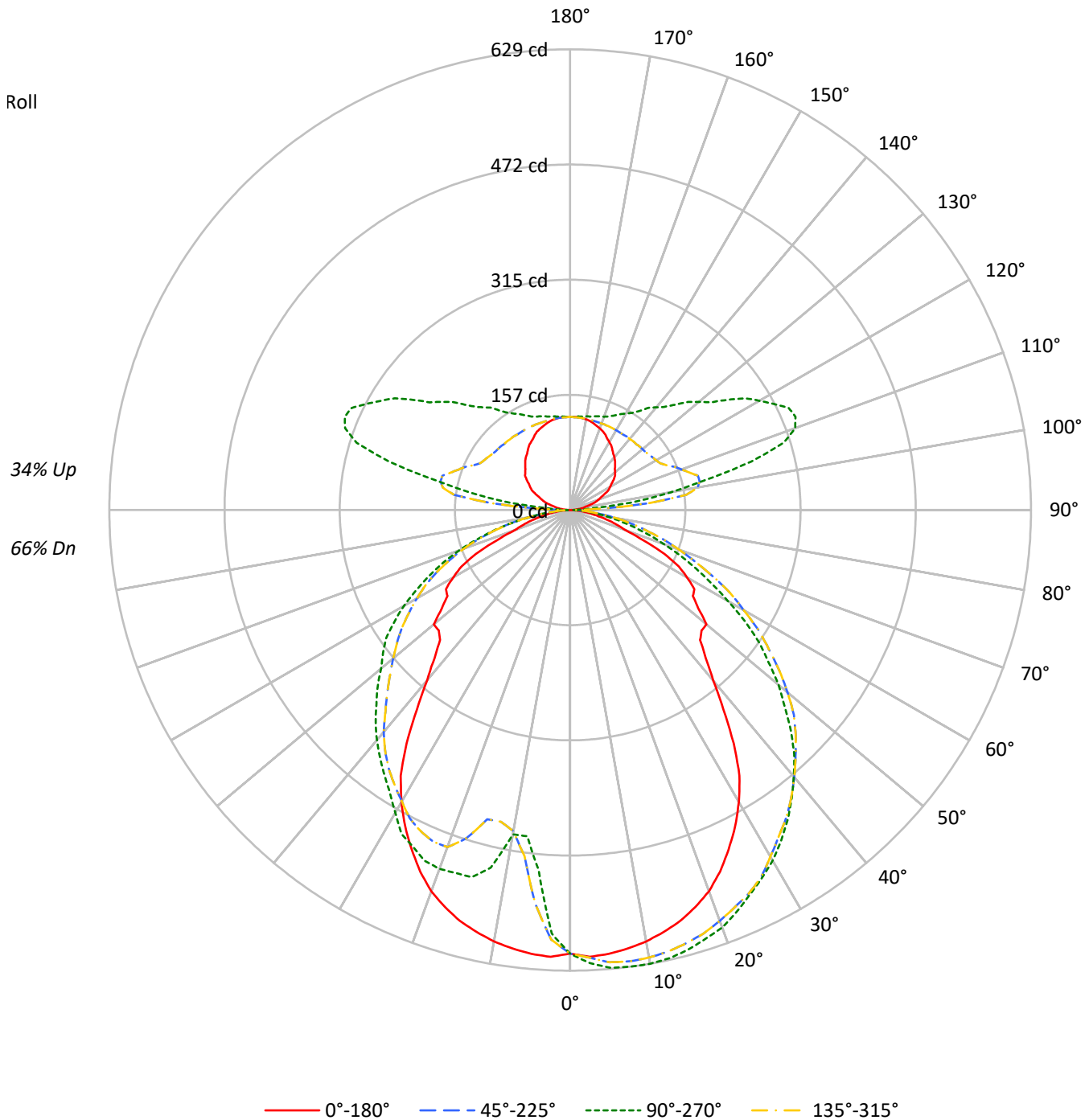
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2396.7 lumens
Efficiency: N/A
Efficacy: 108.9 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: P933831
CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P933831

CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

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°	5619	5619	5619	5619
5°	5654	5672	5654	4459
10°	5611	5587	5611	3994
15°	5542	5465	5542	4564
20°	5420	5322	5420	4574
25°	5177	5113	5177	4476
30°	4864	4940	4864	4264
35°	4331	4720	4331	4030
40°	3602	4462	3602	3854
45°	3212	4159	3212	3649
50°	3405	3798	3405	3446
55°	3194	3409	3194	3329
60°	3282	2894	3282	3049
65°	2959	2393	2959	2675
70°	2036	1907	2036	2243
75°	1764	1409	1764	1688
80°	1395	933	1395	1014
85°	754	493	754	420

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°
 Vertical Angle: 45°
 Luminance: 4932 cd/sqm



TEST NUMBER: P933831

CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.7	2.3
10°-20°	155.2	6.5
20°-30°	239.9	10.0
30°-40°	286.4	11.9
40°-50°	288.0	12.0
50°-60°	250.6	10.5
60°-70°	177.7	7.4
70°-80°	94.0	3.9
80°-90°	23.9	1.0
90°-100°	62.1	2.6
100°-110°	163.4	6.8
110°-120°	169.4	7.1
120°-130°	135.8	5.7
130°-140°	106.6	4.4
140°-150°	81.8	3.4
150°-160°	58.9	2.5
160°-170°	36.0	1.5
170°-180°	12.2	0.5
0°-30°	449.7	18.8
0°-40°	736.1	30.7
0°-60°	1274.8	53.2
0°-90°	1570.4	65.5
90°-120°	394.9	16.5
90°-150°	719.1	30.0
90°-180°	826.0	34.5
0°-180°	2396.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	606	606	606	606	606	
5°	608	627	608	493	608	58
15°	581	622	581	519	581	163
25°	512	580	512	508	512	235
35°	389	517	389	442	389	241
45°	251	426	251	374	251	201
55°	204	314	204	307	204	188
65°	142	190	142	212	142	136
75°	54	90	54	108	54	57
85°	9	23	9	20	9	12
90°	1	3	1	3	1	1
95°	8	38	8	38	8	9
105°	30	256	30	256	30	31
115°	52	329	52	329	52	52
125°	73	262	73	262	73	65
135°	87	204	87	204	87	67
145°	100	165	100	165	100	63
155°	114	142	114	142	114	52
165°	123	132	123	132	123	35
175°	127	128	127	128	127	12
180°	127	127	127	127	127	



TEST NUMBER: P933831

CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5
2.5°	610.6	610.6	614.0	615.2	615.2	613.5	611.8	613.5	618.6	620.4	619.8
5°	608.3	612.9	619.2	620.4	621.5	621.0	619.8	621.0	626.7	627.8	628.4
7.5°	603.8	612.3	620.4	622.1	623.8	622.1	621.5	622.7	628.4	629.5	629.5
10°	598.1	610.0	619.2	620.4	622.1	620.4	620.4	622.7	628.4	629.5	630.1
12.5°	590.0	606.6	615.2	616.3	618.6	618.0	617.5	619.8	625.6	626.7	626.7
15°	580.8	600.3	608.3	609.5	613.5	612.3	612.3	614.6	621.0	622.7	622.1
17.5°	568.3	592.3	601.5	603.2	606.1	605.5	606.1	608.3	614.0	615.2	615.8
20°	553.9	581.4	592.3	594.0	596.9	596.9	596.9	599.8	605.5	607.8	607.8
22.5°	534.4	570.0	581.4	582.6	586.0	586.0	587.1	591.1	596.3	596.9	596.9
25°	511.5	557.3	567.1	570.6	574.0	575.7	577.4	579.7	581.4	580.8	581.4
27.5°	487.5	541.3	553.9	556.2	560.8	562.5	564.8	565.3	565.9	567.7	566.5
30°	460.5	519.0	537.8	540.2	547.6	548.8	546.5	547.6	550.5	551.6	552.8
32.5°	430.2	485.7	521.3	526.4	533.3	529.9	529.3	531.0	535.6	535.6	536.7
35°	389.0	459.9	505.8	510.4	515.6	511.5	513.8	514.4	517.3	519.0	518.4
37.5°	343.7	437.7	489.8	493.2	497.2	492.1	495.5	497.2	499.5	498.4	498.4
40°	303.6	402.7	470.9	473.2	476.6	472.6	476.0	477.2	478.3	477.2	476.6
42.5°	273.8	364.3	450.8	453.7	451.4	454.2	455.4	457.7	455.9	453.7	453.7
45°	250.9	354.0	429.0	432.4	429.0	433.6	435.3	435.3	430.2	429.0	428.4
47.5°	243.4	333.4	407.2	407.2	405.5	411.3	414.2	410.2	405.0	403.2	403.2
50°	242.9	310.5	377.5	375.2	383.2	390.1	387.3	383.2	379.2	372.9	372.9
52.5°	220.5	282.4	339.1	347.7	360.3	364.3	359.8	355.7	348.8	346.0	343.7
55°	204.5	253.2	304.2	321.3	334.6	339.7	331.1	327.0	316.8	315.1	313.9
57.5°	201.1	210.8	272.1	293.8	309.9	309.4	304.2	296.7	288.1	286.4	285.9
60°	184.5	152.4	237.7	263.5	280.1	278.4	273.8	266.9	258.9	257.8	256.7
62.5°	167.2	110.5	198.8	228.0	251.5	250.9	246.9	236.6	230.9	228.0	225.7
65°	142.0	92.8	141.5	189.6	223.4	224.6	215.9	208.5	202.2	198.8	198.2
67.5°	108.3	75.6	95.7	158.1	196.4	195.3	184.5	181.0	173.0	171.3	167.8
70°	80.2	50.4	66.5	128.3	170.1	167.2	158.7	154.7	147.3	143.2	140.9
72.5°	66.5	40.7	48.7	99.7	143.2	139.7	132.3	127.8	121.5	118.0	115.7
75°	53.8	43.0	37.2	73.9	116.2	114.0	107.1	102.5	97.4	92.8	93.4
77.5°	39.5	40.1	29.8	54.4	92.2	88.8	84.8	79.1	76.8	72.2	72.2
80°	29.8	31.5	22.4	37.2	66.5	66.5	63.0	59.0	55.0	52.7	52.7
82.5°	20.1	20.1	16.6	23.5	45.3	43.6	41.3	40.1	37.8	36.6	36.6
85°	9.1	11.4	10.3	14.3	24.6	25.8	25.8	24.6	24.1	22.9	23.5
87.5°	2.9	5.1	6.3	8.0	12.6	13.2	13.8	13.8	13.8	14.3	14.3
90°	0.9	1.5	2.2	2.4	3.8	5.6	6.5	5.8	4.4	3.2	3.2
92.5°	3.4	9.2	15.0	16.5	23.2	32.2	36.6	32.1	23.1	16.2	15.5
95°	8.2	18.9	29.6	32.2	57.1	90.4	107.0	95.5	72.4	55.2	53.2
97.5°	14.2	23.6	33.0	35.4	77.0	132.4	160.1	152.9	138.3	127.4	123.6
100°	18.8	27.3	35.9	38.0	84.1	145.7	176.5	177.0	178.1	178.9	174.4
102.5°	22.7	30.7	38.7	40.7	87.5	149.9	181.1	190.4	208.9	222.8	219.0
105°	29.5	36.2	42.9	44.6	89.9	150.3	180.6	201.4	243.0	274.2	272.1
107.5°	36.3	42.5	48.9	50.4	90.4	143.7	170.3	199.4	257.3	300.9	301.4
110°	40.9	46.5	52.2	53.6	89.7	137.8	161.8	194.2	259.1	307.7	309.9



TEST NUMBER: P933831

CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	45.4	50.8	56.2	57.6	89.7	132.6	154.0	187.2	253.6	303.4	306.6
115°	52.3	57.2	62.2	63.5	90.5	126.7	144.7	176.6	240.6	288.5	293.1
117.5°	59.0	63.5	68.1	69.2	92.2	122.9	138.3	167.2	224.8	268.1	273.2
120°	62.9	67.2	71.5	72.5	93.5	121.6	135.6	162.0	214.8	254.4	259.2
122.5°	66.8	71.1	75.3	76.4	95.5	120.9	133.7	157.4	204.9	240.5	245.3
125°	72.7	76.6	80.5	81.6	98.2	120.4	131.5	151.7	192.1	222.3	226.8
127.5°	77.5	81.5	85.4	86.4	100.9	120.1	129.7	147.1	181.8	207.7	211.5
130°	80.0	84.3	88.6	89.7	102.8	120.3	129.1	144.5	175.4	198.5	201.9
132.5°	82.8	87.0	91.3	92.3	104.4	120.4	128.5	142.3	169.9	190.6	193.7
135°	86.7	90.5	94.5	95.4	106.1	120.3	127.4	139.0	162.1	179.5	182.1
137.5°	90.7	94.6	98.4	99.3	108.6	121.0	127.3	137.0	156.6	171.3	173.5
140°	94.0	97.5	101.1	102.0	110.2	121.2	126.7	135.1	152.0	164.7	166.7
142.5°	96.6	99.8	103.1	103.9	111.5	121.6	126.7	134.1	149.0	160.1	161.9
145°	100.5	103.3	106.3	106.9	113.3	121.6	125.8	131.9	144.0	153.1	154.5
147.5°	104.5	107.2	110.0	110.7	115.7	122.5	125.8	130.6	140.2	147.3	148.4
150°	107.0	109.5	112.1	112.7	117.0	122.9	125.8	129.8	137.9	144.0	144.9
152.5°	109.7	111.5	113.4	113.9	117.9	123.2	125.8	129.2	136.1	141.4	142.0
155°	113.6	115.0	116.4	116.8	119.7	123.8	125.8	128.5	134.1	138.2	138.6
157.5°	116.5	117.9	119.2	119.6	121.6	124.4	125.8	127.9	132.2	135.4	135.7
160°	118.5	119.5	120.6	120.9	122.5	124.7	125.8	127.6	131.3	134.0	134.2
162.5°	120.4	121.2	122.1	122.2	123.4	125.0	125.8	127.4	130.4	132.7	132.9
165°	122.6	123.3	124.0	124.2	124.7	125.5	125.8	126.9	129.1	130.8	130.9
167.5°	124.5	124.9	125.2	125.3	125.7	126.3	126.7	127.4	128.8	129.9	130.0
170°	125.8	126.2	126.5	126.6	126.6	126.7	126.7	127.4	128.8	129.9	129.9
172.5°	126.5	126.6	126.7	126.7	126.7	126.7	126.7	127.3	128.4	129.2	129.1
175°	127.4	127.4	127.4	127.4	127.2	126.8	126.7	127.0	127.8	128.3	128.3
177.5°	127.4	127.4	127.4	127.4	127.3	127.0	126.8	127.1	127.7	128.1	128.0
180°	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4



TEST NUMBER: P933831

CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5
2.5°	621.0	619.2	621.0	619.8	620.4	618.6	613.5	611.8	613.5	615.2	615.2
5°	628.4	627.3	628.4	628.4	627.8	626.7	621.0	619.8	621.0	621.5	620.4
7.5°	630.7	629.0	630.7	629.5	629.5	628.4	622.7	621.5	622.1	623.8	622.1
10°	630.7	629.0	630.7	630.1	629.5	628.4	622.7	620.4	620.4	622.1	620.4
12.5°	627.8	626.7	627.8	626.7	626.7	625.6	619.8	617.5	618.0	618.6	616.3
15°	623.3	621.5	623.3	622.1	622.7	621.0	614.6	612.3	612.3	613.5	609.5
17.5°	616.3	614.0	616.3	615.8	615.2	614.0	608.3	606.1	605.5	606.1	603.2
20°	608.3	606.6	608.3	607.8	607.8	605.5	599.8	596.9	596.9	596.9	594.0
22.5°	595.8	594.0	595.8	596.9	596.9	596.3	591.1	587.1	586.0	586.0	582.6
25°	581.4	579.7	581.4	581.4	580.8	581.4	579.7	577.4	575.7	574.0	570.6
27.5°	567.7	566.5	567.7	566.5	567.7	565.9	565.3	564.8	562.5	560.8	556.2
30°	553.9	552.8	553.9	552.8	551.6	550.5	547.6	546.5	548.8	547.6	540.2
32.5°	536.7	535.6	536.7	536.7	535.6	535.6	531.0	529.3	529.9	533.3	526.4
35°	519.0	517.3	519.0	518.4	519.0	517.3	514.4	513.8	511.5	515.6	510.4
37.5°	498.4	496.7	498.4	498.4	498.4	499.5	497.2	495.5	492.1	497.2	493.2
40°	477.2	474.9	477.2	476.6	477.2	478.3	477.2	476.0	472.6	476.6	473.2
42.5°	453.1	452.5	453.1	453.7	453.7	455.9	457.7	455.4	454.2	451.4	453.7
45°	427.3	426.2	427.3	428.4	429.0	430.2	435.3	435.3	433.6	429.0	432.4
47.5°	399.8	397.0	399.8	403.2	403.2	405.0	410.2	414.2	411.3	405.5	407.2
50°	370.6	371.2	370.6	372.9	372.9	379.2	383.2	387.3	390.1	383.2	375.2
52.5°	342.0	341.4	342.0	343.7	346.0	348.8	355.7	359.8	364.3	360.3	347.7
55°	313.3	314.5	313.3	313.9	315.1	316.8	327.0	331.1	339.7	334.6	321.3
57.5°	284.7	283.0	284.7	285.9	286.4	288.1	296.7	304.2	309.4	309.9	293.8
60°	251.5	249.1	251.5	256.7	257.8	258.9	266.9	273.8	278.4	280.1	263.5
62.5°	222.2	218.2	222.2	225.7	228.0	230.9	236.6	246.9	250.9	251.5	228.0
65°	191.3	189.6	191.3	198.2	198.8	202.2	208.5	215.9	224.6	223.4	189.6
67.5°	163.2	163.2	163.2	167.8	171.3	173.0	181.0	184.5	195.3	196.4	158.1
70°	137.5	136.9	137.5	140.9	143.2	147.3	154.7	158.7	167.2	170.1	128.3
72.5°	112.8	112.2	112.8	115.7	118.0	121.5	127.8	132.3	139.7	143.2	99.7
75°	91.1	89.9	91.1	93.4	92.8	97.4	102.5	107.1	114.0	116.2	73.9
77.5°	69.9	69.9	69.9	72.2	72.2	76.8	79.1	84.8	88.8	92.2	54.4
80°	52.1	51.6	52.1	52.7	52.7	55.0	59.0	63.0	66.5	66.5	37.2
82.5°	36.6	35.5	36.6	36.6	36.6	37.8	40.1	41.3	43.6	45.3	23.5
85°	22.9	22.9	22.9	23.5	22.9	24.1	24.6	25.8	25.8	24.6	14.3
87.5°	14.9	14.3	14.9	14.3	14.3	13.8	13.8	13.8	13.2	12.6	8.0
90°	3.2	3.2	3.2	3.2	3.2	4.4	5.8	6.5	5.6	3.8	2.4
92.5°	13.0	10.4	13.0	15.5	16.2	23.1	32.1	36.6	32.2	23.2	16.5
95°	45.4	37.6	45.4	53.2	55.2	72.4	95.5	107.0	90.4	57.1	32.2
97.5°	108.7	93.9	108.7	123.6	127.4	138.3	152.9	160.1	132.4	77.0	35.4
100°	156.7	139.0	156.7	174.4	178.9	178.1	177.0	176.5	145.7	84.1	38.0
102.5°	203.8	188.6	203.8	219.0	222.8	208.9	190.4	181.1	149.9	87.5	40.7
105°	264.0	255.8	264.0	272.1	274.2	243.0	201.4	180.6	150.3	89.9	44.6
107.5°	303.4	305.4	303.4	301.4	300.9	257.3	199.4	170.3	143.7	90.4	50.4
110°	318.3	326.9	318.3	309.9	307.7	259.1	194.2	161.8	137.8	89.7	53.6



TEST NUMBER: P933831

CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
112.5°	319.7	332.8	319.7	306.6	303.4	253.6	187.2	154.0	132.6	89.7	57.6
115°	311.2	329.4	311.2	293.1	288.5	240.6	176.6	144.7	126.7	90.5	63.5
117.5°	293.2	313.4	293.2	273.2	268.1	224.8	167.2	138.3	122.9	92.2	69.2
120°	278.8	298.3	278.8	259.2	254.4	214.8	162.0	135.6	121.6	93.5	72.5
122.5°	264.6	283.9	264.6	245.3	240.5	204.9	157.4	133.7	120.9	95.5	76.4
125°	244.5	262.3	244.5	226.8	222.3	192.1	151.7	131.5	120.4	98.2	81.6
127.5°	226.4	241.4	226.4	211.5	207.7	181.8	147.1	129.7	120.1	100.9	86.4
130°	215.8	229.6	215.8	201.9	198.5	175.4	144.5	129.1	120.3	102.8	89.7
132.5°	206.1	218.5	206.1	193.7	190.6	169.9	142.3	128.5	120.4	104.4	92.3
135°	192.9	203.5	192.9	182.1	179.5	162.1	139.0	127.4	120.3	106.1	95.4
137.5°	182.2	191.0	182.2	173.5	171.3	156.6	137.0	127.3	121.0	108.6	99.3
140°	174.8	183.0	174.8	166.7	164.7	152.0	135.1	126.7	121.2	110.2	102.0
142.5°	168.9	175.9	168.9	161.9	160.1	149.0	134.1	126.7	121.6	111.5	103.9
145°	159.8	165.1	159.8	154.5	153.1	144.0	131.9	125.8	121.6	113.3	106.9
147.5°	152.8	157.2	152.8	148.4	147.3	140.2	130.6	125.8	122.5	115.7	110.7
150°	148.4	152.0	148.4	144.9	144.0	137.9	129.8	125.8	122.9	117.0	112.7
152.5°	144.7	147.4	144.7	142.0	141.4	136.1	129.2	125.8	123.2	117.9	113.9
155°	140.4	142.2	140.4	138.6	138.2	134.1	128.5	125.8	123.8	119.7	116.8
157.5°	137.0	138.3	137.0	135.7	135.4	132.2	127.9	125.8	124.4	121.6	119.6
160°	135.0	135.6	135.0	134.2	134.0	131.3	127.6	125.8	124.7	122.5	120.9
162.5°	133.6	134.3	133.6	132.9	132.7	130.4	127.4	125.8	125.0	123.4	122.2
165°	131.7	132.4	131.7	130.9	130.8	129.1	126.9	125.8	125.5	124.7	124.2
167.5°	130.3	130.6	130.3	130.0	129.9	128.8	127.4	126.7	126.3	125.7	125.3
170°	129.9	129.9	129.9	129.9	129.9	128.8	127.4	126.7	126.7	126.6	126.6
172.5°	128.9	128.6	128.9	129.1	129.2	128.4	127.3	126.7	126.7	126.7	126.7
175°	128.3	128.3	128.3	128.3	128.3	127.8	127.0	126.7	126.8	127.2	127.4
177.5°	127.8	127.4	127.8	128.0	128.1	127.7	127.1	126.8	127.0	127.3	127.4
180°	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4



TEST NUMBER: P933831

CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
0°	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5
2.5°	614.0	610.6	610.6	604.9	602.6	600.9	598.1	589.4	587.1	584.8	588.3
5°	619.2	612.9	608.3	598.1	589.4	586.0	575.1	554.5	540.7	530.4	524.7
7.5°	620.4	612.3	603.8	587.7	567.1	557.9	524.7	486.9	476.6	467.5	461.7
10°	619.2	610.0	598.1	574.0	525.3	509.2	476.0	451.4	445.1	443.4	445.1
12.5°	615.2	606.6	590.0	549.9	481.7	470.9	451.4	437.1	435.9	438.8	454.2
15°	608.3	600.3	580.8	517.9	457.7	449.7	435.9	430.7	437.1	457.1	503.5
17.5°	601.5	592.3	568.3	486.3	439.4	433.6	423.9	434.2	469.7	496.7	512.1
20°	592.3	581.4	553.9	463.4	426.2	421.0	416.5	462.9	489.8	499.5	508.1
22.5°	581.4	570.0	534.4	447.4	412.5	408.4	411.3	478.9	489.8	496.7	504.1
25°	567.1	557.3	511.5	434.8	401.5	397.0	407.8	477.2	483.4	485.1	500.1
27.5°	553.9	541.3	487.5	423.3	388.4	386.7	410.8	469.7	474.3	476.0	492.1
30°	537.8	519.0	460.5	411.3	374.6	374.0	411.3	460.5	459.4	464.0	480.0
32.5°	521.3	485.7	430.2	396.4	361.5	360.9	407.2	446.8	445.7	451.9	464.0
35°	505.8	459.9	389.0	379.2	344.8	345.4	397.5	430.7	431.3	437.1	444.5
37.5°	489.8	437.7	343.7	360.3	328.8	328.8	384.4	415.9	414.8	416.5	426.7
40°	470.9	402.7	303.6	335.7	313.9	312.2	368.3	399.8	395.8	395.3	409.6
42.5°	450.8	364.3	273.8	303.0	296.7	294.4	348.8	380.3	372.9	374.6	393.0
45°	429.0	354.0	250.9	256.1	279.0	277.2	327.6	358.1	352.8	357.5	376.3
47.5°	407.2	333.4	243.4	212.5	260.1	259.5	304.2	336.3	333.4	338.0	358.1
50°	377.5	310.5	242.9	182.2	238.9	241.1	276.1	315.1	315.1	319.1	340.3
52.5°	339.1	282.4	220.5	164.9	214.2	221.1	251.5	296.7	297.8	301.8	320.8
55°	304.2	253.2	204.5	151.8	185.0	200.0	227.4	277.8	280.1	284.1	301.3
57.5°	272.1	210.8	201.1	136.3	158.1	172.4	206.2	259.5	260.6	264.1	280.7
60°	237.7	152.4	184.5	119.7	134.6	145.5	186.7	237.7	241.7	244.0	258.4
62.5°	198.8	110.5	167.2	108.3	123.2	125.5	170.7	217.1	222.2	224.0	232.6
65°	141.5	92.8	142.0	98.6	111.1	111.7	153.5	195.9	200.5	203.4	209.7
67.5°	95.7	75.6	108.3	89.3	102.0	102.5	136.9	171.3	177.6	179.9	183.9
70°	66.5	50.4	80.2	79.6	91.6	92.8	119.2	149.0	154.7	156.4	158.7
72.5°	48.7	40.7	66.5	71.6	80.8	81.9	100.8	123.8	129.5	131.2	132.3
75°	37.2	43.0	53.8	62.4	68.8	69.3	82.5	100.8	104.8	106.0	106.5
77.5°	29.8	40.1	39.5	50.4	56.1	55.0	64.7	77.9	81.3	81.3	81.3
80°	22.4	31.5	29.8	36.1	41.3	40.1	46.4	55.6	56.7	57.8	57.3
82.5°	16.6	20.1	20.1	22.9	27.5	26.4	30.9	36.1	36.1	36.1	37.2
85°	10.3	11.4	9.1	12.0	15.5	14.9	17.2	19.5	20.1	20.1	18.9
87.5°	6.3	5.1	2.9	4.6	6.8	6.8	8.0	8.6	8.0	8.0	8.0
90°	2.2	1.5	0.9	1.5	2.2	2.4	3.8	5.6	6.5	5.8	4.4
92.5°	15.0	9.2	3.4	9.2	15.0	16.5	23.2	32.2	36.6	32.1	23.1
95°	29.6	18.9	8.2	18.9	29.6	32.2	57.1	90.4	107.0	95.5	72.4
97.5°	33.0	23.6	14.2	23.6	33.0	35.4	77.0	132.4	160.1	152.9	138.3
100°	35.9	27.3	18.8	27.3	35.9	38.0	84.1	145.7	176.5	177.0	178.1
102.5°	38.7	30.7	22.7	30.7	38.7	40.7	87.5	149.9	181.1	190.4	208.9
105°	42.9	36.2	29.5	36.2	42.9	44.6	89.9	150.3	180.6	201.4	243.0
107.5°	48.9	42.5	36.3	42.5	48.9	50.4	90.4	143.7	170.3	199.4	257.3
110°	52.2	46.5	40.9	46.5	52.2	53.6	89.7	137.8	161.8	194.2	259.1



TEST NUMBER: P933831

CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	160°	170°	180°	190°	200°	202.5°	210°	220°	225°	230°	240°
112.5°	56.2	50.8	45.4	50.8	56.2	57.6	89.7	132.6	154.0	187.2	253.6
115°	62.2	57.2	52.3	57.2	62.2	63.5	90.5	126.7	144.7	176.6	240.6
117.5°	68.1	63.5	59.0	63.5	68.1	69.2	92.2	122.9	138.3	167.2	224.8
120°	71.5	67.2	62.9	67.2	71.5	72.5	93.5	121.6	135.6	162.0	214.8
122.5°	75.3	71.1	66.8	71.1	75.3	76.4	95.5	120.9	133.7	157.4	204.9
125°	80.5	76.6	72.7	76.6	80.5	81.6	98.2	120.4	131.5	151.7	192.1
127.5°	85.4	81.5	77.5	81.5	85.4	86.4	100.9	120.1	129.7	147.1	181.8
130°	88.6	84.3	80.0	84.3	88.6	89.7	102.8	120.3	129.1	144.5	175.4
132.5°	91.3	87.0	82.8	87.0	91.3	92.3	104.4	120.4	128.5	142.3	169.9
135°	94.5	90.5	86.7	90.5	94.5	95.4	106.1	120.3	127.4	139.0	162.1
137.5°	98.4	94.6	90.7	94.6	98.4	99.3	108.6	121.0	127.3	137.0	156.6
140°	101.1	97.5	94.0	97.5	101.1	102.0	110.2	121.2	126.7	135.1	152.0
142.5°	103.1	99.8	96.6	99.8	103.1	103.9	111.5	121.6	126.7	134.1	149.0
145°	106.3	103.3	100.5	103.3	106.3	106.9	113.3	121.6	125.8	131.9	144.0
147.5°	110.0	107.2	104.5	107.2	110.0	110.7	115.7	122.5	125.8	130.6	140.2
150°	112.1	109.5	107.0	109.5	112.1	112.7	117.0	122.9	125.8	129.8	137.9
152.5°	113.4	111.5	109.7	111.5	113.4	113.9	117.9	123.2	125.8	129.2	136.1
155°	116.4	115.0	113.6	115.0	116.4	116.8	119.7	123.8	125.8	128.5	134.1
157.5°	119.2	117.9	116.5	117.9	119.2	119.6	121.6	124.4	125.8	127.9	132.2
160°	120.6	119.5	118.5	119.5	120.6	120.9	122.5	124.7	125.8	127.6	131.3
162.5°	122.1	121.2	120.4	121.2	122.1	122.2	123.4	125.0	125.8	127.4	130.4
165°	124.0	123.3	122.6	123.3	124.0	124.2	124.7	125.5	125.8	126.9	129.1
167.5°	125.2	124.9	124.5	124.9	125.2	125.3	125.7	126.3	126.7	127.4	128.8
170°	126.5	126.2	125.8	126.2	126.5	126.6	126.6	126.7	126.7	127.4	128.8
172.5°	126.7	126.6	126.5	126.6	126.7	126.7	126.7	126.7	126.7	127.3	128.4
175°	127.4	127.4	127.4	127.4	127.4	127.4	127.2	126.8	126.7	127.0	127.8
177.5°	127.4	127.4	127.4	127.4	127.4	127.4	127.3	127.0	126.8	127.1	127.7
180°	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4



TEST NUMBER: P933831

CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
0°	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5	605.5
2.5°	584.3	582.6	584.8	578.6	584.8	582.6	584.3	588.3	584.8	587.1	589.4
5°	512.6	509.8	500.7	493.2	500.7	509.8	512.6	524.7	530.4	540.7	554.5
7.5°	458.2	455.9	453.7	449.1	453.7	455.9	458.2	461.7	467.5	476.6	486.9
10°	446.2	446.8	450.2	449.7	450.2	446.8	446.2	445.1	443.4	445.1	451.4
12.5°	477.2	482.3	501.2	500.1	501.2	482.3	477.2	454.2	438.8	435.9	437.1
15°	512.6	514.4	518.4	519.0	518.4	514.4	512.6	503.5	457.1	437.1	430.7
17.5°	516.1	516.7	519.6	519.6	519.6	516.7	516.1	512.1	496.7	469.7	434.2
20°	513.2	514.4	520.2	521.3	520.2	514.4	513.2	508.1	499.5	489.8	462.9
22.5°	512.1	514.4	519.0	518.4	519.0	514.4	512.1	504.1	496.7	489.8	478.9
25°	506.4	506.4	506.9	507.5	506.9	506.4	506.4	500.1	485.1	483.4	477.2
27.5°	494.4	495.5	498.9	498.4	498.9	495.5	494.4	492.1	476.0	474.3	469.7
30°	483.4	482.3	479.4	477.2	479.4	482.3	483.4	480.0	464.0	459.4	460.5
32.5°	465.2	462.3	459.4	457.7	459.4	462.3	465.2	464.0	451.9	445.7	446.8
35°	443.4	444.0	443.4	441.7	443.4	444.0	443.4	444.5	437.1	431.3	430.7
37.5°	427.9	429.0	428.4	426.2	428.4	429.0	427.9	426.7	416.5	414.8	415.9
40°	411.9	412.5	411.9	410.2	411.9	412.5	411.9	409.6	395.3	395.8	399.8
42.5°	396.4	395.8	394.1	393.0	394.1	395.8	396.4	393.0	374.6	372.9	380.3
45°	378.6	379.2	375.7	374.0	375.7	379.2	378.6	376.3	357.5	352.8	358.1
47.5°	360.9	360.9	358.1	356.3	358.1	360.9	360.9	358.1	338.0	333.4	336.3
50°	342.0	341.4	337.4	336.8	337.4	341.4	342.0	340.3	319.1	315.1	315.1
52.5°	320.2	320.2	320.8	321.9	320.8	320.2	320.2	320.8	301.8	297.8	296.7
55°	301.3	301.8	305.9	307.1	305.9	301.8	301.3	301.3	284.1	280.1	277.8
57.5°	281.9	281.9	284.7	284.7	284.7	281.9	281.9	280.7	264.1	260.6	259.5
60°	259.5	260.6	262.9	262.4	262.9	260.6	259.5	258.4	244.0	241.7	237.7
62.5°	236.0	237.2	237.7	236.6	237.7	237.2	236.0	232.6	224.0	222.2	217.1
65°	211.4	212.5	213.1	211.9	213.1	212.5	211.4	209.7	203.4	200.5	195.9
67.5°	186.2	185.6	185.0	187.3	185.0	185.6	186.2	183.9	179.9	177.6	171.3
70°	160.4	160.4	159.8	161.0	159.8	160.4	160.4	158.7	156.4	154.7	149.0
72.5°	132.9	132.3	134.6	132.9	134.6	132.3	132.9	132.3	131.2	129.5	123.8
75°	106.0	107.1	106.0	107.7	106.0	107.1	106.0	106.5	106.0	104.8	100.8
77.5°	80.8	81.9	80.8	80.8	80.8	81.9	80.8	81.3	81.3	81.3	77.9
80°	57.3	56.7	56.7	56.1	56.7	56.7	57.3	57.3	57.8	56.7	55.6
82.5°	36.6	36.1	36.1	37.2	36.1	36.1	36.6	37.2	36.1	36.1	36.1
85°	20.1	20.6	19.5	19.5	19.5	20.6	20.1	18.9	20.1	20.1	19.5
87.5°	7.4	6.8	6.8	6.8	6.8	6.8	7.4	8.0	8.0	8.0	8.6
90°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	4.4	5.8	6.5	5.6
92.5°	16.2	15.5	13.0	10.4	13.0	15.5	16.2	23.1	32.1	36.6	32.2
95°	55.2	53.2	45.4	37.6	45.4	53.2	55.2	72.4	95.5	107.0	90.4
97.5°	127.4	123.6	108.7	93.9	108.7	123.6	127.4	138.3	152.9	160.1	132.4
100°	178.9	174.4	156.7	139.0	156.7	174.4	178.9	178.1	177.0	176.5	145.7
102.5°	222.8	219.0	203.8	188.6	203.8	219.0	222.8	208.9	190.4	181.1	149.9
105°	274.2	272.1	264.0	255.8	264.0	272.1	274.2	243.0	201.4	180.6	150.3
107.5°	300.9	301.4	303.4	305.4	303.4	301.4	300.9	257.3	199.4	170.3	143.7
110°	307.7	309.9	318.3	326.9	318.3	309.9	307.7	259.1	194.2	161.8	137.8



TEST NUMBER: P933831

CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	260°	270°	280°	290°	292.5°	300°	310°	315°	320°
112.5°	303.4	306.6	319.7	332.8	319.7	306.6	303.4	253.6	187.2	154.0	132.6
115°	288.5	293.1	311.2	329.4	311.2	293.1	288.5	240.6	176.6	144.7	126.7
117.5°	268.1	273.2	293.2	313.4	293.2	273.2	268.1	224.8	167.2	138.3	122.9
120°	254.4	259.2	278.8	298.3	278.8	259.2	254.4	214.8	162.0	135.6	121.6
122.5°	240.5	245.3	264.6	283.9	264.6	245.3	240.5	204.9	157.4	133.7	120.9
125°	222.3	226.8	244.5	262.3	244.5	226.8	222.3	192.1	151.7	131.5	120.4
127.5°	207.7	211.5	226.4	241.4	226.4	211.5	207.7	181.8	147.1	129.7	120.1
130°	198.5	201.9	215.8	229.6	215.8	201.9	198.5	175.4	144.5	129.1	120.3
132.5°	190.6	193.7	206.1	218.5	206.1	193.7	190.6	169.9	142.3	128.5	120.4
135°	179.5	182.1	192.9	203.5	192.9	182.1	179.5	162.1	139.0	127.4	120.3
137.5°	171.3	173.5	182.2	191.0	182.2	173.5	171.3	156.6	137.0	127.3	121.0
140°	164.7	166.7	174.8	183.0	174.8	166.7	164.7	152.0	135.1	126.7	121.2
142.5°	160.1	161.9	168.9	175.9	168.9	161.9	160.1	149.0	134.1	126.7	121.6
145°	153.1	154.5	159.8	165.1	159.8	154.5	153.1	144.0	131.9	125.8	121.6
147.5°	147.3	148.4	152.8	157.2	152.8	148.4	147.3	140.2	130.6	125.8	122.5
150°	144.0	144.9	148.4	152.0	148.4	144.9	144.0	137.9	129.8	125.8	122.9
152.5°	141.4	142.0	144.7	147.4	144.7	142.0	141.4	136.1	129.2	125.8	123.2
155°	138.2	138.6	140.4	142.2	140.4	138.6	138.2	134.1	128.5	125.8	123.8
157.5°	135.4	135.7	137.0	138.3	137.0	135.7	135.4	132.2	127.9	125.8	124.4
160°	134.0	134.2	135.0	135.6	135.0	134.2	134.0	131.3	127.6	125.8	124.7
162.5°	132.7	132.9	133.6	134.3	133.6	132.9	132.7	130.4	127.4	125.8	125.0
165°	130.8	130.9	131.7	132.4	131.7	130.9	130.8	129.1	126.9	125.8	125.5
167.5°	129.9	130.0	130.3	130.6	130.3	130.0	129.9	128.8	127.4	126.7	126.3
170°	129.9	129.9	129.9	129.9	129.9	129.9	129.9	128.8	127.4	126.7	126.7
172.5°	129.2	129.1	128.9	128.6	128.9	129.1	129.2	128.4	127.3	126.7	126.7
175°	128.3	128.3	128.3	128.3	128.3	128.3	128.3	127.8	127.0	126.7	126.8
177.5°	128.1	128.0	127.8	127.4	127.8	128.0	128.1	127.7	127.1	126.8	127.0
180°	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4



TEST NUMBER: P933831

CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
0°	605.5	605.5	605.5	605.5	605.5
2.5°	598.1	600.9	602.6	604.9	610.6
5°	575.1	586.0	589.4	598.1	608.3
7.5°	524.7	557.9	567.1	587.7	603.8
10°	476.0	509.2	525.3	574.0	598.1
12.5°	451.4	470.9	481.7	549.9	590.0
15°	435.9	449.7	457.7	517.9	580.8
17.5°	423.9	433.6	439.4	486.3	568.3
20°	416.5	421.0	426.2	463.4	553.9
22.5°	411.3	408.4	412.5	447.4	534.4
25°	407.8	397.0	401.5	434.8	511.5
27.5°	410.8	386.7	388.4	423.3	487.5
30°	411.3	374.0	374.6	411.3	460.5
32.5°	407.2	360.9	361.5	396.4	430.2
35°	397.5	345.4	344.8	379.2	389.0
37.5°	384.4	328.8	328.8	360.3	343.7
40°	368.3	312.2	313.9	335.7	303.6
42.5°	348.8	294.4	296.7	303.0	273.8
45°	327.6	277.2	279.0	256.1	250.9
47.5°	304.2	259.5	260.1	212.5	243.4
50°	276.1	241.1	238.9	182.2	242.9
52.5°	251.5	221.1	214.2	164.9	220.5
55°	227.4	200.0	185.0	151.8	204.5
57.5°	206.2	172.4	158.1	136.3	201.1
60°	186.7	145.5	134.6	119.7	184.5
62.5°	170.7	125.5	123.2	108.3	167.2
65°	153.5	111.7	111.1	98.6	142.0
67.5°	136.9	102.5	102.0	89.3	108.3
70°	119.2	92.8	91.6	79.6	80.2
72.5°	100.8	81.9	80.8	71.6	66.5
75°	82.5	69.3	68.8	62.4	53.8
77.5°	64.7	55.0	56.1	50.4	39.5
80°	46.4	40.1	41.3	36.1	29.8
82.5°	30.9	26.4	27.5	22.9	20.1
85°	17.2	14.9	15.5	12.0	9.1
87.5°	8.0	6.8	6.8	4.6	2.9
90°	3.8	2.4	2.2	1.5	0.9
92.5°	23.2	16.5	15.0	9.2	3.4
95°	57.1	32.2	29.6	18.9	8.2
97.5°	77.0	35.4	33.0	23.6	14.2
100°	84.1	38.0	35.9	27.3	18.8
102.5°	87.5	40.7	38.7	30.7	22.7
105°	89.9	44.6	42.9	36.2	29.5
107.5°	90.4	50.4	48.9	42.5	36.3
110°	89.7	53.6	52.2	46.5	40.9



TEST NUMBER: P933831

CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	89.7	57.6	56.2	50.8	45.4
115°	90.5	63.5	62.2	57.2	52.3
117.5°	92.2	69.2	68.1	63.5	59.0
120°	93.5	72.5	71.5	67.2	62.9
122.5°	95.5	76.4	75.3	71.1	66.8
125°	98.2	81.6	80.5	76.6	72.7
127.5°	100.9	86.4	85.4	81.5	77.5
130°	102.8	89.7	88.6	84.3	80.0
132.5°	104.4	92.3	91.3	87.0	82.8
135°	106.1	95.4	94.5	90.5	86.7
137.5°	108.6	99.3	98.4	94.6	90.7
140°	110.2	102.0	101.1	97.5	94.0
142.5°	111.5	103.9	103.1	99.8	96.6
145°	113.3	106.9	106.3	103.3	100.5
147.5°	115.7	110.7	110.0	107.2	104.5
150°	117.0	112.7	112.1	109.5	107.0
152.5°	117.9	113.9	113.4	111.5	109.7
155°	119.7	116.8	116.4	115.0	113.6
157.5°	121.6	119.6	119.2	117.9	116.5
160°	122.5	120.9	120.6	119.5	118.5
162.5°	123.4	122.2	122.1	121.2	120.4
165°	124.7	124.2	124.0	123.3	122.6
167.5°	125.7	125.3	125.2	124.9	124.5
170°	126.6	126.6	126.5	126.2	125.8
172.5°	126.7	126.7	126.7	126.6	126.5
175°	127.2	127.4	127.4	127.4	127.4
177.5°	127.3	127.4	127.4	127.4	127.4
180°	127.4	127.4	127.4	127.4	127.4



TEST NUMBER: P933831
 CATALOG NUMBER: SQ4-FA-025U-050D-92765-1D-UNV-STD-W-4-2700K

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	12.11	13.13	12.92	13.97	15.00	14.91	15.93	15.72	16.76	17.80
	3H	12.60	13.52	13.43	14.36	15.42	16.26	17.17	17.08	18.02	19.08
	4H	12.80	13.66	13.64	14.51	15.58	16.70	17.57	17.54	18.42	19.49
	6H	12.93	13.72	13.78	14.58	15.67	16.99	17.78	17.84	18.64	19.73
	8H	12.93	13.69	13.80	14.57	15.65	17.06	17.82	17.93	18.70	19.78
	12H	12.91	13.63	13.78	14.50	15.61	17.10	17.83	17.97	18.70	19.81
4H	2H	13.16	14.02	14.00	14.87	15.94	15.34	16.20	16.19	17.06	18.13
	3H	14.20	14.92	15.05	15.80	16.89	16.85	17.57	17.71	18.46	19.54
	4H	14.48	15.14	15.35	16.02	17.13	17.38	18.03	18.25	18.92	20.03
	6H	14.61	15.18	15.50	16.09	17.20	17.75	18.31	18.63	19.22	20.33
	8H	14.62	15.15	15.51	16.05	17.18	17.85	18.38	18.74	19.28	20.41
	12H	14.60	15.08	15.51	16.00	17.13	17.91	18.39	18.82	19.31	20.44
8H	4H	14.94	15.47	15.83	16.37	17.50	17.52	18.05	18.41	18.95	20.07
	6H	15.21	15.65	16.13	16.59	17.72	17.95	18.39	18.87	19.33	20.46
	8H	15.25	15.64	16.18	16.58	17.72	18.10	18.49	19.03	19.42	20.57
	12H	15.25	15.59	16.17	16.51	17.71	18.20	18.54	19.13	19.47	20.66
12H	4H	14.95	15.43	15.86	16.35	17.48	17.49	17.97	18.40	18.89	20.02
	6H	15.27	15.66	16.20	16.59	17.74	17.95	18.34	18.88	19.27	20.42
	8H	15.34	15.69	16.27	16.61	17.81	18.11	18.46	19.04	19.38	20.58