

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: P934259

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P934259
REPORT IS A COMBINATION OF REPORTS P933690 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-050U-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: -

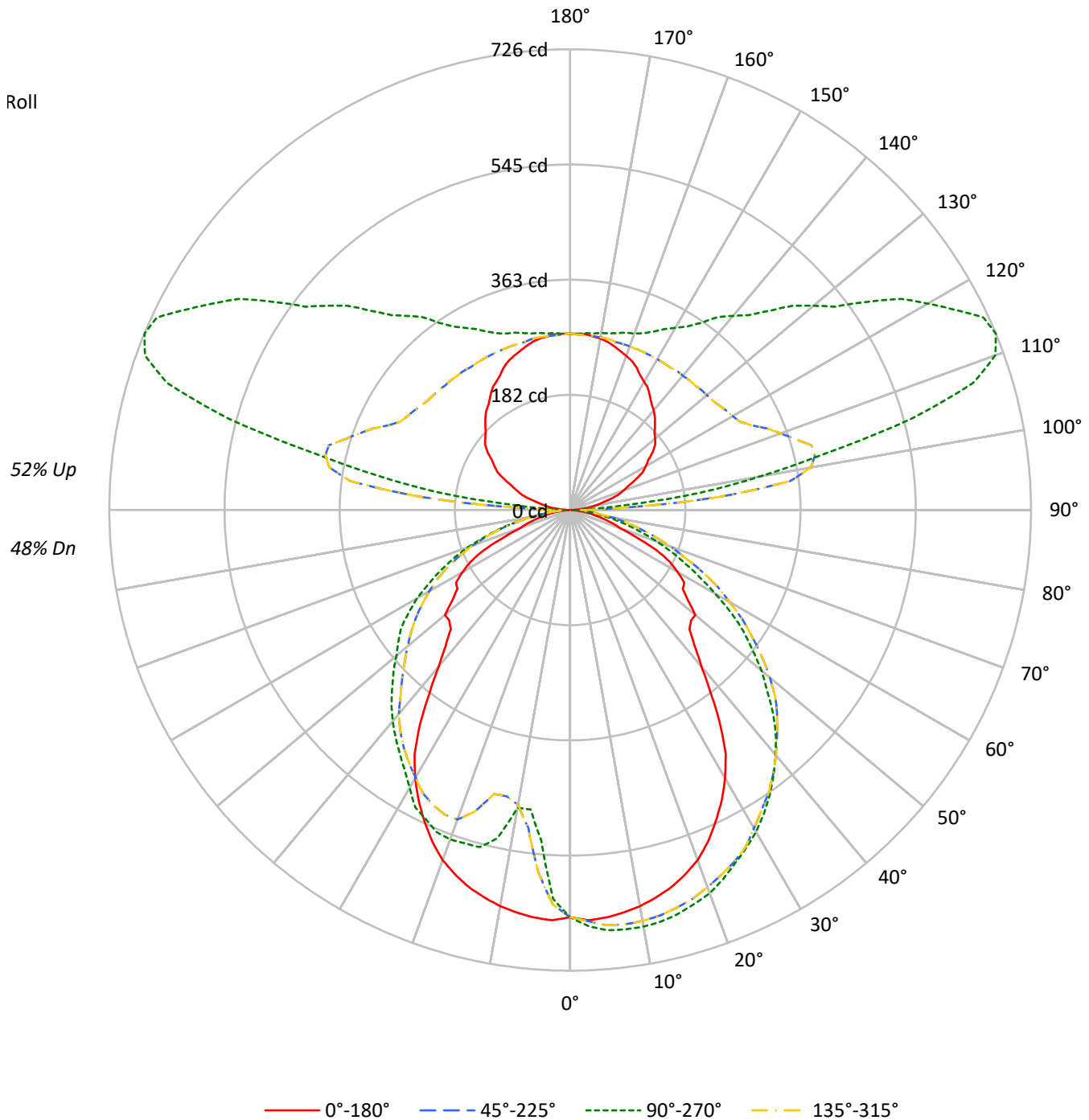
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3466.7 lumens
Efficiency: N/A
Efficacy: 122.1 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: General Diffuse

Input Watts (W): 28.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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

Luminous Intensity Polar Plot





TEST NUMBER: P934259

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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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48
1	97	93	89	86	89	86	83	80	72	70	68	60	58	56	48	47	46	41
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39	34
3	81	71	64	58	74	66	60	55	56	51	47	46	43	40	38	35	33	29
4	74	63	55	49	68	58	52	46	50	44	40	41	37	34	33	31	28	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	21
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	22	19
7	58	45	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19	17
8	54	41	34	28	49	38	31	27	33	27	23	28	23	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	16	13
10	47	34	27	22	43	32	26	21	28	22	19	23	19	16	20	16	14	12

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	1.7
10°-20°	164.5	4.7
20°-30°	254.2	7.3
30°-40°	303.5	8.8
40°-50°	305.3	8.8
50°-60°	265.6	7.7
60°-70°	188.3	5.4
70°-80°	99.6	2.9
80°-90°	25.9	0.7
90°-100°	135.5	3.9
100°-110°	356.2	10.3
110°-120°	369.4	10.7
120°-130°	296.3	8.5
130°-140°	232.5	6.7
140°-150°	178.4	5.1
150°-160°	128.5	3.7
160°-170°	78.6	2.3
170°-180°	26.6	0.8
0°-30°	476.6	13.7
0°-40°	780.1	22.5
0°-60°	1350.9	39.0
0°-90°	1664.8	48.0
90°-120°	861.1	24.8
90°-150°	1568.3	45.2
90°-180°	1802.0	52.0
0°-180°	3466.7	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°	2	7	2	7	2	2
95°	18	82	18	82	18	20
105°	64	558	64	558	64	68
115°	114	718	114	718	114	113
125°	159	572	159	572	159	141
135°	189	444	189	444	189	146
145°	219	360	219	360	219	137
155°	248	310	248	310	248	114
165°	267	289	267	289	267	75
175°	278	280	278	280	278	26
180°	278	278	278	278	278	



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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°	1.9	3.3	4.9	5.2	8.2	12.2	14.2	12.6	9.4	7.1	7.1
92.5°	7.4	20.1	32.9	36.0	50.6	70.1	79.8	70.0	50.2	35.5	34.0
95°	17.9	41.1	64.4	70.1	124.6	197.1	233.4	208.2	158.0	120.3	116.0
97.5°	31.0	51.4	71.9	77.0	167.7	288.7	349.2	333.4	301.6	277.8	269.6
100°	41.0	59.6	78.2	82.8	183.5	317.7	384.9	386.1	388.4	390.1	380.4
102.5°	49.6	67.0	84.3	88.6	190.7	326.9	394.9	415.2	455.7	486.0	477.7
105°	64.2	78.8	93.5	97.2	196.1	327.9	393.8	439.2	529.9	597.9	593.5
107.5°	79.1	92.8	106.4	109.9	197.1	313.4	371.5	434.7	561.3	656.2	657.2
110°	89.2	101.5	113.9	116.9	195.6	300.4	352.8	423.5	565.0	671.1	675.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	99.0	110.8	122.6	125.5	195.6	289.1	335.8	408.2	553.0	661.6	668.7
115°	114.0	124.8	135.7	138.4	197.4	276.1	315.4	385.1	524.6	629.3	639.1
117.5°	128.7	138.6	148.4	150.9	201.1	268.0	301.5	364.4	490.2	584.6	595.6
120°	137.3	146.6	155.9	158.2	204.1	265.3	295.9	353.4	468.4	554.7	565.4
122.5°	145.7	155.1	164.5	166.8	208.4	263.9	291.6	343.3	447.0	524.6	535.1
125°	158.6	167.1	175.6	177.8	214.2	262.7	286.9	330.9	418.9	484.9	494.6
127.5°	169.0	177.7	186.3	188.5	220.0	262.0	283.0	320.8	396.3	452.9	461.1
130°	174.6	183.9	193.2	195.5	224.2	262.4	281.5	315.2	382.4	432.8	440.4
132.5°	180.4	189.7	199.0	201.3	227.6	262.7	280.2	310.3	370.5	415.6	422.4
135°	189.0	197.4	205.9	208.0	231.4	262.4	278.0	303.1	353.6	391.4	397.2
137.5°	197.8	206.1	214.5	216.6	237.0	264.0	277.6	298.9	341.5	373.5	378.3
140°	205.0	212.7	220.5	222.4	240.3	264.3	276.3	294.7	331.6	359.2	363.6
142.5°	210.6	217.8	224.8	226.7	243.2	265.2	276.3	292.5	324.8	349.0	352.8
145°	219.2	225.4	231.6	233.2	246.9	265.3	274.4	287.7	314.1	333.9	336.8
147.5°	227.8	233.9	239.9	241.4	252.4	267.1	274.4	284.9	305.7	321.2	323.7
150°	233.4	238.8	244.3	245.7	255.3	268.0	274.4	283.2	300.8	314.0	316.0
152.5°	239.1	243.3	247.5	248.5	257.2	268.7	274.4	282.0	297.0	308.2	309.7
155°	247.7	250.8	253.9	254.6	261.2	270.0	274.4	280.4	292.4	301.3	302.3
157.5°	254.1	257.1	260.1	260.8	265.3	271.4	274.4	279.1	288.4	295.4	296.1
160°	258.4	260.7	263.0	263.6	267.2	272.0	274.4	278.4	286.4	292.4	292.7
162.5°	262.7	264.4	266.1	266.6	269.2	272.7	274.4	277.8	284.5	289.6	289.9
165°	267.4	268.9	270.6	270.9	272.1	273.6	274.4	276.8	281.6	285.2	285.6
167.5°	271.6	272.4	273.1	273.3	274.3	275.6	276.3	277.9	281.1	283.4	283.6
170°	274.4	275.2	275.9	276.1	276.2	276.3	276.3	277.9	281.1	283.4	283.4
172.5°	275.9	276.1	276.3	276.3	276.3	276.3	276.3	277.5	280.0	281.9	281.7
175°	278.0	278.0	278.0	278.0	277.4	276.6	276.3	277.1	278.7	279.9	279.9
177.5°	278.0	278.0	278.0	278.0	277.5	277.0	276.7	277.3	278.6	279.5	279.3
180°	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0



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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°	7.1	7.1	7.1	7.1	7.1	9.4	12.6	14.2	12.2	8.2	5.2
92.5°	28.4	22.7	28.4	34.0	35.5	50.2	70.0	79.8	70.1	50.6	36.0
95°	98.9	81.9	98.9	116.0	120.3	158.0	208.2	233.4	197.1	124.6	70.1
97.5°	237.2	204.7	237.2	269.6	277.8	301.6	333.4	349.2	288.7	167.7	77.0
100°	341.7	303.0	341.7	380.4	390.1	388.4	386.1	384.9	317.7	183.5	82.8
102.5°	444.5	411.4	444.5	477.7	486.0	455.7	415.2	394.9	326.9	190.7	88.6
105°	575.7	557.9	575.7	593.5	597.9	529.9	439.2	393.8	327.9	196.1	97.2
107.5°	661.5	665.8	661.5	657.2	656.2	561.3	434.7	371.5	313.4	197.1	109.9
110°	694.3	712.8	694.3	675.7	671.1	565.0	423.5	352.8	300.4	195.6	116.9



TEST NUMBER: P934259

CATALOG NUMBER: SQ4-FA-050U-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°	697.2	725.8	697.2	668.7	661.6	553.0	408.2	335.8	289.1	195.6	125.5
115°	678.7	718.2	678.7	639.1	629.3	524.6	385.1	315.4	276.1	197.4	138.4
117.5°	639.5	683.4	639.5	595.6	584.6	490.2	364.4	301.5	268.0	201.1	150.9
120°	607.9	650.5	607.9	565.4	554.7	468.4	353.4	295.9	265.3	204.1	158.2
122.5°	577.2	619.2	577.2	535.1	524.6	447.0	343.3	291.6	263.9	208.4	166.8
125°	533.2	572.0	533.2	494.6	484.9	418.9	330.9	286.9	262.7	214.2	177.8
127.5°	493.8	526.4	493.8	461.1	452.9	396.3	320.8	283.0	262.0	220.0	188.5
130°	470.6	500.7	470.6	440.4	432.8	382.4	315.2	281.5	262.4	224.2	195.5
132.5°	449.4	476.5	449.4	422.4	415.6	370.5	310.3	280.2	262.7	227.6	201.3
135°	420.5	443.8	420.5	397.2	391.4	353.6	303.1	278.0	262.4	231.4	208.0
137.5°	397.3	416.4	397.3	378.3	373.5	341.5	298.9	277.6	264.0	237.0	216.6
140°	381.4	399.3	381.4	363.6	359.2	331.6	294.7	276.3	264.3	240.3	222.4
142.5°	368.2	383.6	368.2	352.8	349.0	324.8	292.5	276.3	265.2	243.2	226.7
145°	348.5	360.1	348.5	336.8	333.9	314.1	287.7	274.4	265.3	246.9	233.2
147.5°	333.3	342.9	333.3	323.7	321.2	305.7	284.9	274.4	267.1	252.4	241.4
150°	323.8	331.6	323.8	316.0	314.0	300.8	283.2	274.4	268.0	255.3	245.7
152.5°	315.5	321.4	315.5	309.7	308.2	297.0	282.0	274.4	268.7	257.2	248.5
155°	306.2	310.1	306.2	302.3	301.3	292.4	280.4	274.4	270.0	261.2	254.6
157.5°	298.8	301.5	298.8	296.1	295.4	288.4	279.1	274.4	271.4	265.3	260.8
160°	294.4	295.9	294.4	292.7	292.4	286.4	278.4	274.4	272.0	267.2	263.6
162.5°	291.5	292.9	291.5	289.9	289.6	284.5	277.8	274.4	272.7	269.2	266.6
165°	287.2	288.8	287.2	285.6	285.2	281.6	276.8	274.4	273.6	272.1	270.9
167.5°	284.2	284.9	284.2	283.6	283.4	281.1	277.9	276.3	275.6	274.3	273.3
170°	283.4	283.4	283.4	283.4	283.4	281.1	277.9	276.3	276.3	276.2	276.1
172.5°	281.1	280.6	281.1	281.7	281.9	280.0	277.5	276.3	276.3	276.3	276.3
175°	279.9	279.9	279.9	279.9	279.9	278.7	277.1	276.3	276.6	277.4	278.0
177.5°	278.7	278.0	278.7	279.3	279.5	278.6	277.3	276.7	277.0	277.5	278.0
180°	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0



TEST NUMBER: P934259

CATALOG NUMBER: SQ4-FA-050U-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°	4.9	3.3	1.9	3.3	4.9	5.2	8.2	12.2	14.2	12.6	9.4
92.5°	32.9	20.1	7.4	20.1	32.9	36.0	50.6	70.1	79.8	70.0	50.2
95°	64.4	41.1	17.9	41.1	64.4	70.1	124.6	197.1	233.4	208.2	158.0
97.5°	71.9	51.4	31.0	51.4	71.9	77.0	167.7	288.7	349.2	333.4	301.6
100°	78.2	59.6	41.0	59.6	78.2	82.8	183.5	317.7	384.9	386.1	388.4
102.5°	84.3	67.0	49.6	67.0	84.3	88.6	190.7	326.9	394.9	415.2	455.7
105°	93.5	78.8	64.2	78.8	93.5	97.2	196.1	327.9	393.8	439.2	529.9
107.5°	106.4	92.8	79.1	92.8	106.4	109.9	197.1	313.4	371.5	434.7	561.3
110°	113.9	101.5	89.2	101.5	113.9	116.9	195.6	300.4	352.8	423.5	565.0



TEST NUMBER: P934259

CATALOG NUMBER: SQ4-FA-050U-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°	122.6	110.8	99.0	110.8	122.6	125.5	195.6	289.1	335.8	408.2	553.0
115°	135.7	124.8	114.0	124.8	135.7	138.4	197.4	276.1	315.4	385.1	524.6
117.5°	148.4	138.6	128.7	138.6	148.4	150.9	201.1	268.0	301.5	364.4	490.2
120°	155.9	146.6	137.3	146.6	155.9	158.2	204.1	265.3	295.9	353.4	468.4
122.5°	164.5	155.1	145.7	155.1	164.5	166.8	208.4	263.9	291.6	343.3	447.0
125°	175.6	167.1	158.6	167.1	175.6	177.8	214.2	262.7	286.9	330.9	418.9
127.5°	186.3	177.7	169.0	177.7	186.3	188.5	220.0	262.0	283.0	320.8	396.3
130°	193.2	183.9	174.6	183.9	193.2	195.5	224.2	262.4	281.5	315.2	382.4
132.5°	199.0	189.7	180.4	189.7	199.0	201.3	227.6	262.7	280.2	310.3	370.5
135°	205.9	197.4	189.0	197.4	205.9	208.0	231.4	262.4	278.0	303.1	353.6
137.5°	214.5	206.1	197.8	206.1	214.5	216.6	237.0	264.0	277.6	298.9	341.5
140°	220.5	212.7	205.0	212.7	220.5	222.4	240.3	264.3	276.3	294.7	331.6
142.5°	224.8	217.8	210.6	217.8	224.8	226.7	243.2	265.2	276.3	292.5	324.8
145°	231.6	225.4	219.2	225.4	231.6	233.2	246.9	265.3	274.4	287.7	314.1
147.5°	239.9	233.9	227.8	233.9	239.9	241.4	252.4	267.1	274.4	284.9	305.7
150°	244.3	238.8	233.4	238.8	244.3	245.7	255.3	268.0	274.4	283.2	300.8
152.5°	247.5	243.3	239.1	243.3	247.5	248.5	257.2	268.7	274.4	282.0	297.0
155°	253.9	250.8	247.7	250.8	253.9	254.6	261.2	270.0	274.4	280.4	292.4
157.5°	260.1	257.1	254.1	257.1	260.1	260.8	265.3	271.4	274.4	279.1	288.4
160°	263.0	260.7	258.4	260.7	263.0	263.6	267.2	272.0	274.4	278.4	286.4
162.5°	266.1	264.4	262.7	264.4	266.1	266.6	269.2	272.7	274.4	277.8	284.5
165°	270.6	268.9	267.4	268.9	270.6	270.9	272.1	273.6	274.4	276.8	281.6
167.5°	273.1	272.4	271.6	272.4	273.1	273.3	274.3	275.6	276.3	277.9	281.1
170°	275.9	275.2	274.4	275.2	275.9	276.1	276.2	276.3	276.3	277.9	281.1
172.5°	276.3	276.1	275.9	276.1	276.3	276.3	276.3	276.3	276.3	277.5	280.0
175°	278.0	278.0	278.0	278.0	278.0	278.0	277.4	276.6	276.3	277.1	278.7
177.5°	278.0	278.0	278.0	278.0	278.0	278.0	277.5	277.0	276.7	277.3	278.6
180°	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0



TEST NUMBER: P934259

CATALOG NUMBER: SQ4-FA-050U-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°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	9.4	12.6	14.2	12.2
92.5°	35.5	34.0	28.4	22.7	28.4	34.0	35.5	50.2	70.0	79.8	70.1
95°	120.3	116.0	98.9	81.9	98.9	116.0	120.3	158.0	208.2	233.4	197.1
97.5°	277.8	269.6	237.2	204.7	237.2	269.6	277.8	301.6	333.4	349.2	288.7
100°	390.1	380.4	341.7	303.0	341.7	380.4	390.1	388.4	386.1	384.9	317.7
102.5°	486.0	477.7	444.5	411.4	444.5	477.7	486.0	455.7	415.2	394.9	326.9
105°	597.9	593.5	575.7	557.9	575.7	593.5	597.9	529.9	439.2	393.8	327.9
107.5°	656.2	657.2	661.5	665.8	661.5	657.2	656.2	561.3	434.7	371.5	313.4
110°	671.1	675.7	694.3	712.8	694.3	675.7	671.1	565.0	423.5	352.8	300.4



TEST NUMBER: P934259

CATALOG NUMBER: SQ4-FA-050U-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°	661.6	668.7	697.2	725.8	697.2	668.7	661.6	553.0	408.2	335.8	289.1
115°	629.3	639.1	678.7	718.2	678.7	639.1	629.3	524.6	385.1	315.4	276.1
117.5°	584.6	595.6	639.5	683.4	639.5	595.6	584.6	490.2	364.4	301.5	268.0
120°	554.7	565.4	607.9	650.5	607.9	565.4	554.7	468.4	353.4	295.9	265.3
122.5°	524.6	535.1	577.2	619.2	577.2	535.1	524.6	447.0	343.3	291.6	263.9
125°	484.9	494.6	533.2	572.0	533.2	494.6	484.9	418.9	330.9	286.9	262.7
127.5°	452.9	461.1	493.8	526.4	493.8	461.1	452.9	396.3	320.8	283.0	262.0
130°	432.8	440.4	470.6	500.7	470.6	440.4	432.8	382.4	315.2	281.5	262.4
132.5°	415.6	422.4	449.4	476.5	449.4	422.4	415.6	370.5	310.3	280.2	262.7
135°	391.4	397.2	420.5	443.8	420.5	397.2	391.4	353.6	303.1	278.0	262.4
137.5°	373.5	378.3	397.3	416.4	397.3	378.3	373.5	341.5	298.9	277.6	264.0
140°	359.2	363.6	381.4	399.3	381.4	363.6	359.2	331.6	294.7	276.3	264.3
142.5°	349.0	352.8	368.2	383.6	368.2	352.8	349.0	324.8	292.5	276.3	265.2
145°	333.9	336.8	348.5	360.1	348.5	336.8	333.9	314.1	287.7	274.4	265.3
147.5°	321.2	323.7	333.3	342.9	333.3	323.7	321.2	305.7	284.9	274.4	267.1
150°	314.0	316.0	323.8	331.6	323.8	316.0	314.0	300.8	283.2	274.4	268.0
152.5°	308.2	309.7	315.5	321.4	315.5	309.7	308.2	297.0	282.0	274.4	268.7
155°	301.3	302.3	306.2	310.1	306.2	302.3	301.3	292.4	280.4	274.4	270.0
157.5°	295.4	296.1	298.8	301.5	298.8	296.1	295.4	288.4	279.1	274.4	271.4
160°	292.4	292.7	294.4	295.9	294.4	292.7	292.4	286.4	278.4	274.4	272.0
162.5°	289.6	289.9	291.5	292.9	291.5	289.9	289.6	284.5	277.8	274.4	272.7
165°	285.2	285.6	287.2	288.8	287.2	285.6	285.2	281.6	276.8	274.4	273.6
167.5°	283.4	283.6	284.2	284.9	284.2	283.6	283.4	281.1	277.9	276.3	275.6
170°	283.4	283.4	283.4	283.4	283.4	283.4	283.4	281.1	277.9	276.3	276.3
172.5°	281.9	281.7	281.1	280.6	281.1	281.7	281.9	280.0	277.5	276.3	276.3
175°	279.9	279.9	279.9	279.9	279.9	279.9	279.9	278.7	277.1	276.3	276.6
177.5°	279.5	279.3	278.7	278.0	278.7	279.3	279.5	278.6	277.3	276.7	277.0
180°	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0



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CATALOG NUMBER: SQ4-FA-050U-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°	8.2	5.2	4.9	3.3	1.9
92.5°	50.6	36.0	32.9	20.1	7.4
95°	124.6	70.1	64.4	41.1	17.9
97.5°	167.7	77.0	71.9	51.4	31.0
100°	183.5	82.8	78.2	59.6	41.0
102.5°	190.7	88.6	84.3	67.0	49.6
105°	196.1	97.2	93.5	78.8	64.2
107.5°	197.1	109.9	106.4	92.8	79.1
110°	195.6	116.9	113.9	101.5	89.2



TEST NUMBER: P934259

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

CANDELA DISTRIBUTION (continued):

	330°	337.5°	340°	350°	360°
112.5°	195.6	125.5	122.6	110.8	99.0
115°	197.4	138.4	135.7	124.8	114.0
117.5°	201.1	150.9	148.4	138.6	128.7
120°	204.1	158.2	155.9	146.6	137.3
122.5°	208.4	166.8	164.5	155.1	145.7
125°	214.2	177.8	175.6	167.1	158.6
127.5°	220.0	188.5	186.3	177.7	169.0
130°	224.2	195.5	193.2	183.9	174.6
132.5°	227.6	201.3	199.0	189.7	180.4
135°	231.4	208.0	205.9	197.4	189.0
137.5°	237.0	216.6	214.5	206.1	197.8
140°	240.3	222.4	220.5	212.7	205.0
142.5°	243.2	226.7	224.8	217.8	210.6
145°	246.9	233.2	231.6	225.4	219.2
147.5°	252.4	241.4	239.9	233.9	227.8
150°	255.3	245.7	244.3	238.8	233.4
152.5°	257.2	248.5	247.5	243.3	239.1
155°	261.2	254.6	253.9	250.8	247.7
157.5°	265.3	260.8	260.1	257.1	254.1
160°	267.2	263.6	263.0	260.7	258.4
162.5°	269.2	266.6	266.1	264.4	262.7
165°	272.1	270.9	270.6	268.9	267.4
167.5°	274.3	273.3	273.1	272.4	271.6
170°	276.2	276.1	275.9	275.2	274.4
172.5°	276.3	276.3	276.3	276.1	275.9
175°	277.4	278.0	278.0	278.0	278.0
177.5°	277.5	278.0	278.0	278.0	278.0
180°	278.0	278.0	278.0	278.0	278.0



TEST NUMBER: P934259
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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	10.81	11.65	11.78	12.64	13.94	13.60	14.45	14.58	15.44	16.74
	3H	11.28	12.04	12.27	13.03	14.36	14.94	15.69	15.92	16.69	18.01
	4H	11.47	12.19	12.47	13.19	14.52	15.38	16.09	16.37	17.09	18.42
	6H	11.59	12.25	12.60	13.26	14.60	15.65	16.31	16.66	17.32	18.66
	8H	11.59	12.22	12.61	13.24	14.58	15.72	16.35	16.74	17.37	18.71
	12H	11.56	12.16	12.58	13.17	14.54	15.75	16.35	16.77	17.37	18.73
4H	2H	11.83	12.54	12.83	13.54	14.87	14.01	14.73	15.02	15.73	17.06
	3H	12.85	13.45	13.87	14.48	15.82	15.51	16.10	16.52	17.13	18.48
	4H	13.13	13.67	14.15	14.70	16.06	16.03	16.57	17.05	17.59	18.96
	6H	13.25	13.72	14.29	14.77	16.13	16.38	16.85	17.42	17.90	19.26
	8H	13.26	13.70	14.29	14.74	16.11	16.48	16.92	17.52	17.96	19.34
	12H	13.23	13.62	14.28	14.67	16.06	16.54	16.93	17.59	17.98	19.37
8H	4H	13.58	14.01	14.61	15.05	16.43	16.15	16.59	17.18	17.63	19.00
	6H	13.84	14.20	14.89	15.28	16.65	16.58	16.94	17.64	18.02	19.40
	8H	13.88	14.20	14.94	15.26	16.66	16.73	17.04	17.79	18.11	19.50
	12H	13.86	14.14	14.93	15.20	16.64	16.82	17.10	17.89	18.16	19.59
12H	4H	13.58	13.98	14.63	15.03	16.41	16.12	16.51	17.17	17.56	18.95
	6H	13.90	14.22	14.96	15.28	16.67	16.58	16.89	17.64	17.96	19.35
	8H	13.96	14.24	15.03	15.30	16.74	16.73	17.01	17.80	18.07	19.51