

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:

Luminaire Tested: SQ4-FA-0U-125D-935-1D-UNV-STD-W-12

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-4)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-0U-125D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

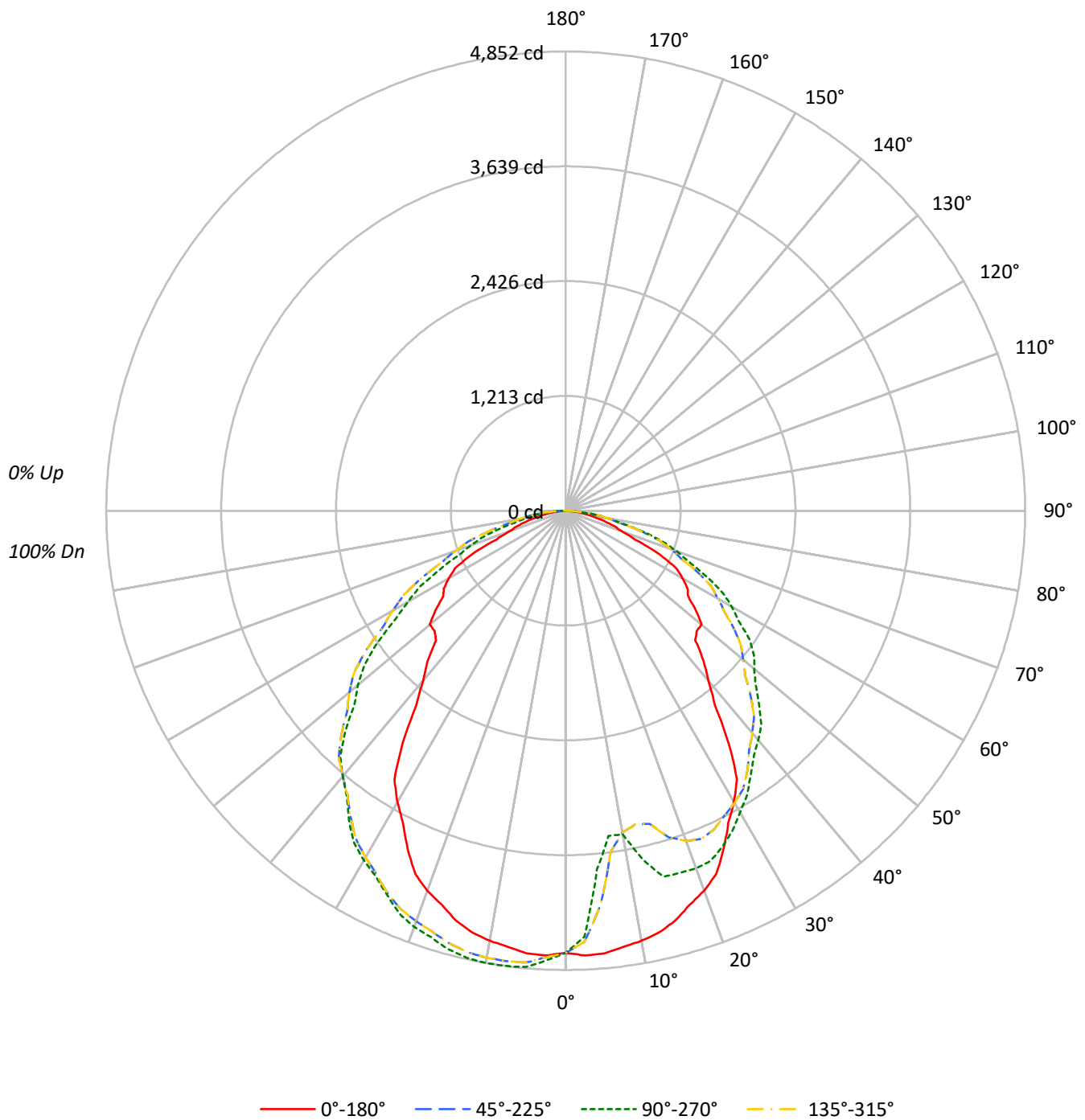
Lumens per Lamp: N/A
Luminaire Lumens: 12104.2 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

Input Watts (W): 140.8
Input Voltage (V): 120
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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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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14365	14365	14365	14365
5°	14488	11746	14488	14938
10°	14407	10833	14407	15152
15°	14267	12747	14267	15266
20°	13985	13161	13985	15316
25°	13391	13286	13391	15175
30°	12617	13072	12617	15144
35°	11265	12792	11265	14981
40°	9403	12702	9403	14707
45°	8418	12550	8418	14300
50°	8965	12432	8965	13700
55°	8459	12700	8459	13008
60°	8752	12449	8752	11824
65°	7975	11898	7975	10644
70°	5563	11166	5563	9497
75°	4936	9872	4936	8244
80°	4070	7670	4070	7043
85°	2495	5300	2495	6239

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 14607 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.1	3.5
10°-20°	1196.6	9.9
20°-30°	1849.3	15.3
30°-40°	2209.4	18.3
40°-50°	2223.7	18.4
50°-60°	1930.6	16.0
60°-70°	1366.7	11.3
70°-80°	722.9	6.0
80°-90°	183.9	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3467.0	28.6
0°-40°	5676.4	46.9
0°-60°	9830.8	81.2
0°-90°	12104.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12104.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4671	4671	4671	4671	4671	
5°	4693	3805	4693	4839	4693	445
15°	4481	4004	4481	4795	4481	1260
25°	3946	3915	3946	4472	3946	1810
35°	3000	3407	3000	3990	3000	1853
45°	1936	2886	1936	3288	1936	1559
55°	1578	2369	1578	2426	1578	1451
65°	1096	1635	1096	1463	1096	1043
75°	415	831	415	694	415	438
85°	71	150	71	177	71	101
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9
2.5°	4702.8	4667.4	4653.3	4625.0	4572.0	4543.7	4564.9	4529.5	4543.7	4504.8	4543.7
5°	4693.0	4613.5	4547.2	4436.7	4277.6	4092.0	4047.9	3933.0	3862.3	3804.8	3862.3
7.5°	4648.8	4512.7	4310.3	3972.7	3701.4	3568.8	3536.1	3503.4	3494.6	3465.4	3494.6
10°	4613.5	4427.9	4052.3	3672.2	3482.2	3420.3	3433.6	3446.9	3473.4	3469.0	3473.4
12.5°	4564.0	4279.4	3783.6	3520.2	3393.8	3392.1	3490.2	3666.0	3788.0	3780.1	3788.0
15°	4480.9	3994.8	3530.8	3362.9	3323.1	3526.4	3884.3	3968.3	3999.2	4003.7	3999.2
17.5°	4361.6	3716.4	3369.1	3258.6	3393.8	3835.7	3944.4	3982.5	4009.0	4010.7	4009.0
20°	4273.2	3575.0	3287.8	3212.7	3570.6	3853.4	3919.7	3968.3	4012.5	4021.3	4012.5
22.5°	4153.0	3476.0	3202.9	3180.8	3669.6	3835.7	3895.0	3968.3	4005.4	4003.7	4005.4
25°	3946.2	3354.1	3097.8	3146.4	3681.1	3742.9	3857.8	3906.4	3910.9	3915.3	3910.9
27.5°	3719.1	3247.1	2974.9	3169.3	3609.5	3653.7	3777.4	3802.2	3818.9	3811.9	3818.9
30°	3552.9	3172.9	2890.1	3172.9	3552.9	3579.4	3703.2	3720.8	3698.7	3681.1	3698.7
32.5°	3365.6	3081.0	2808.8	3148.1	3468.1	3505.2	3604.2	3597.1	3575.0	3560.9	3575.0
35°	3000.5	2925.4	2660.3	3066.8	3323.1	3371.7	3429.2	3424.8	3420.3	3407.1	3420.3
37.5°	2589.6	2741.6	2513.6	2940.4	3183.5	3180.0	3265.7	3284.2	3279.8	3263.0	3279.8
40°	2342.1	2589.6	2421.6	2841.5	3084.5	3049.1	3159.6	3181.7	3177.3	3164.0	3177.3
42.5°	2158.3	2388.1	2315.6	2721.3	2964.3	2921.9	3057.1	3079.2	3067.7	3058.0	3067.7
45°	1935.5	1975.3	2152.1	2527.7	2761.9	2757.5	2903.3	2925.4	2898.9	2885.6	2898.9
47.5°	1877.2	1592.6	1973.5	2303.2	2561.3	2578.1	2734.5	2754.0	2730.1	2718.6	2730.1
50°	1873.7	1405.3	1842.7	2130.0	2430.5	2461.4	2624.9	2633.8	2602.8	2598.4	2602.8
52.5°	1735.8	1299.2	1690.7	1978.0	2317.4	2355.4	2504.7	2503.0	2500.3	2506.5	2500.3
55°	1577.6	1171.0	1427.4	1754.4	2143.2	2191.9	2324.4	2328.8	2359.8	2368.6	2359.8
57.5°	1525.5	1026.1	1183.4	1560.8	1968.2	2006.3	2130.9	2141.5	2162.7	2161.8	2162.7
60°	1422.9	923.6	1038.5	1440.6	1833.9	1882.5	1993.0	2010.7	2028.3	2023.9	2028.3
62.5°	1316.9	852.9	967.8	1341.6	1706.6	1758.8	1833.9	1865.7	1872.8	1864.8	1872.8
65°	1095.9	760.1	857.3	1184.3	1511.3	1568.8	1617.4	1639.5	1643.9	1635.0	1643.9
67.5°	791.9	674.3	770.7	1028.8	1286.8	1351.3	1379.6	1392.9	1388.5	1404.4	1388.5
70°	618.7	614.2	707.0	919.2	1149.0	1206.4	1224.1	1237.3	1232.9	1241.8	1232.9
72.5°	533.8	564.8	639.9	806.0	993.4	1050.9	1061.5	1064.1	1077.4	1068.5	1077.4
75°	415.4	481.7	530.3	636.3	777.8	817.5	821.9	826.4	817.5	830.8	817.5
77.5°	289.9	366.8	410.1	471.1	566.5	591.3	590.4	593.0	586.0	585.1	586.0
80°	229.8	278.4	318.2	357.9	428.6	446.3	441.9	437.5	437.5	433.1	437.5
82.5°	169.7	197.1	233.3	262.5	308.4	312.0	318.2	310.2	310.2	316.4	310.2
85°	70.7	92.8	119.3	132.6	150.2	154.7	145.8	159.1	150.2	150.2	150.2
87.5°	17.7	28.3	42.4	49.5	53.0	49.5	49.5	42.4	42.4	42.4	42.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9
2.5°	4529.5	4564.9	4543.7	4572.0	4625.0	4653.3	4667.4	4702.8	4702.8	4724.0	4731.0
5°	3933.0	4047.9	4092.0	4277.6	4436.7	4547.2	4613.5	4693.0	4728.4	4777.0	4794.7
7.5°	3503.4	3536.1	3568.8	3701.4	3972.7	4310.3	4512.7	4648.8	4720.4	4784.1	4809.7
10°	3446.9	3433.6	3420.3	3482.2	3672.2	4052.3	4427.9	4613.5	4706.3	4777.0	4799.1
12.5°	3666.0	3490.2	3392.1	3393.8	3520.2	3783.6	4279.4	4564.0	4685.1	4752.3	4777.9
15°	3968.3	3884.3	3526.4	3323.1	3362.9	3530.8	3994.8	4480.9	4631.2	4693.0	4732.8
17.5°	3982.5	3944.4	3835.7	3393.8	3258.6	3369.1	3716.4	4361.6	4552.5	4625.9	4661.2
20°	3968.3	3919.7	3853.4	3570.6	3212.7	3287.8	3575.0	4273.2	4485.3	4569.3	4604.7
22.5°	3968.3	3895.0	3835.7	3669.6	3180.8	3202.9	3476.0	4153.0	4414.6	4502.1	4537.5
25°	3906.4	3857.8	3742.9	3681.1	3146.4	3097.8	3354.1	3946.2	4299.7	4374.9	4427.9
27.5°	3802.2	3777.4	3653.7	3609.5	3169.3	2974.9	3247.1	3719.1	4141.5	4248.5	4305.9
30°	3720.8	3703.2	3579.4	3552.9	3172.9	2890.1	3172.9	3552.9	4003.7	4149.5	4224.6
32.5°	3597.1	3604.2	3505.2	3468.1	3148.1	2808.8	3081.0	3365.6	3798.6	4047.0	4136.2
35°	3424.8	3429.2	3371.7	3323.1	3066.8	2660.3	2925.4	3000.5	3548.5	3902.0	3977.1
37.5°	3284.2	3265.7	3180.0	3183.5	2940.4	2513.6	2741.6	2589.6	3322.2	3749.1	3803.9
40°	3181.7	3159.6	3049.1	3084.5	2841.5	2421.6	2589.6	2342.1	3106.6	3632.5	3676.7
42.5°	3079.2	3057.1	2921.9	2964.3	2721.3	2315.6	2388.1	2158.3	2869.7	3508.7	3521.1
45°	2925.4	2903.3	2757.5	2761.9	2527.7	2152.1	1975.3	1935.5	2731.0	3309.9	3309.9
47.5°	2754.0	2734.5	2578.1	2561.3	2303.2	1973.5	1592.6	1877.2	2536.5	3096.0	3094.2
50°	2633.8	2624.9	2461.4	2430.5	2130.0	1842.7	1405.3	1873.7	2395.1	2912.2	2956.3
52.5°	2503.0	2504.7	2355.4	2317.4	1978.0	1690.7	1299.2	1735.8	2221.9	2675.3	2814.9
55°	2328.8	2324.4	2191.9	2143.2	1754.4	1427.4	1171.0	1577.6	1953.2	2346.5	2580.7
57.5°	2141.5	2130.9	2006.3	1968.2	1560.8	1183.4	1026.1	1525.5	1536.1	2046.0	2344.7
60°	2010.7	1993.0	1882.5	1833.9	1440.6	1038.5	923.6	1422.9	1175.5	1833.9	2160.9
62.5°	1865.7	1833.9	1758.8	1706.6	1341.6	967.8	852.9	1316.9	917.4	1593.5	1984.2
65°	1639.5	1617.4	1568.8	1511.3	1184.3	857.3	760.1	1095.9	715.9	1091.5	1723.4
67.5°	1392.9	1379.6	1351.3	1286.8	1028.8	770.7	674.3	791.9	544.4	692.9	1475.1
70°	1237.3	1224.1	1206.4	1149.0	919.2	707.0	614.2	618.7	388.9	512.6	1312.5
72.5°	1064.1	1061.5	1050.9	993.4	806.0	639.9	564.8	533.8	328.8	403.0	1146.3
75°	826.4	821.9	817.5	777.8	636.3	530.3	481.7	415.4	331.4	287.2	897.1
77.5°	593.0	590.4	591.3	566.5	471.1	410.1	366.8	289.9	296.1	218.3	671.7
80°	437.5	441.9	446.3	428.6	357.9	318.2	278.4	229.8	243.0	172.3	512.6
82.5°	310.2	318.2	312.0	308.4	262.5	233.3	197.1	169.7	172.3	137.0	381.8
85°	159.1	145.8	154.7	150.2	132.6	119.3	92.8	70.7	88.4	79.5	190.0
87.5°	42.4	49.5	49.5	53.0	49.5	42.4	28.3	17.7	31.8	38.9	77.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9	4670.9
2.5°	4720.4	4720.4	4752.3	4759.3	4766.4	4755.8	4766.4	4759.3	4752.3	4720.4	4720.4
5°	4790.3	4790.3	4834.4	4847.7	4847.7	4838.9	4847.7	4847.7	4834.4	4790.3	4790.3
7.5°	4796.4	4803.5	4847.7	4857.4	4865.4	4852.1	4865.4	4857.4	4847.7	4803.5	4796.4
10°	4785.8	4803.5	4847.7	4861.0	4865.4	4852.1	4865.4	4861.0	4847.7	4803.5	4785.8
12.5°	4771.7	4785.8	4830.0	4839.7	4847.7	4838.0	4847.7	4839.7	4830.0	4785.8	4771.7
15°	4724.0	4741.6	4790.3	4799.1	4807.9	4794.7	4807.9	4799.1	4790.3	4741.6	4724.0
17.5°	4657.7	4679.8	4724.0	4738.1	4742.5	4725.7	4742.5	4738.1	4724.0	4679.8	4657.7
20°	4604.7	4626.7	4670.9	4688.6	4693.0	4679.8	4693.0	4688.6	4670.9	4626.7	4604.7
22.5°	4537.5	4573.7	4614.4	4621.4	4615.3	4602.0	4615.3	4621.4	4614.4	4573.7	4537.5
25°	4441.1	4472.1	4485.3	4485.3	4485.3	4472.1	4485.3	4485.3	4485.3	4472.1	4441.1
27.5°	4318.3	4334.2	4342.2	4349.2	4358.1	4349.2	4358.1	4349.2	4342.2	4334.2	4318.3
30°	4233.5	4224.6	4246.7	4264.4	4273.2	4264.4	4273.2	4264.4	4246.7	4224.6	4233.5
32.5°	4116.8	4122.1	4154.8	4165.4	4167.2	4158.3	4167.2	4165.4	4154.8	4122.1	4116.8
35°	3946.2	3968.3	3990.4	3999.2	4003.7	3990.4	4003.7	3999.2	3990.4	3968.3	3946.2
37.5°	3765.9	3804.8	3820.7	3811.0	3811.9	3797.7	3811.9	3811.0	3820.7	3804.8	3765.9
40°	3645.7	3681.1	3689.9	3676.7	3681.1	3663.4	3681.1	3676.7	3689.9	3681.1	3645.7
42.5°	3532.6	3560.9	3552.0	3535.2	3532.6	3525.5	3532.6	3535.2	3552.0	3560.9	3532.6
45°	3345.2	3358.5	3318.7	3305.5	3296.6	3287.8	3296.6	3305.5	3318.7	3358.5	3345.2
47.5°	3140.2	3122.5	3084.5	3064.2	3039.4	3022.6	3039.4	3064.2	3084.5	3122.5	3140.2
50°	3009.4	2956.3	2925.4	2876.8	2859.1	2863.5	2859.1	2876.8	2925.4	2956.3	3009.4
52.5°	2850.3	2786.7	2738.0	2696.5	2682.4	2679.7	2682.4	2696.5	2738.0	2786.7	2850.3
55°	2620.5	2523.3	2443.7	2421.6	2417.2	2426.1	2417.2	2421.6	2443.7	2523.3	2620.5
57.5°	2338.6	2243.1	2177.7	2160.0	2145.0	2130.9	2145.0	2160.0	2177.7	2243.1	2338.6
60°	2147.7	2059.3	1997.4	1979.7	1940.0	1922.3	1940.0	1979.7	1997.4	2059.3	2147.7
62.5°	1978.0	1871.9	1824.2	1788.8	1759.7	1731.4	1759.7	1788.8	1824.2	1871.9	1978.0
65°	1732.3	1608.5	1559.9	1529.0	1476.0	1462.7	1476.0	1529.0	1559.9	1608.5	1732.3
67.5°	1463.6	1355.8	1294.8	1253.2	1219.7	1218.8	1219.7	1253.2	1294.8	1355.8	1463.6
70°	1290.4	1193.1	1135.7	1087.1	1060.6	1056.2	1060.6	1087.1	1135.7	1193.1	1290.4
72.5°	1120.7	1027.0	976.6	931.5	908.6	904.1	908.6	931.5	976.6	1027.0	1120.7
75°	879.4	791.0	751.2	720.3	702.6	693.8	702.6	720.3	751.2	791.0	879.4
77.5°	650.5	578.9	558.6	526.8	511.7	510.8	511.7	526.8	558.6	578.9	650.5
80°	512.6	455.2	424.2	406.6	402.1	397.7	402.1	406.6	424.2	455.2	512.6
82.5°	371.2	338.5	318.2	307.6	306.7	298.7	306.7	307.6	318.2	338.5	371.2
85°	198.9	190.0	185.6	181.2	176.8	176.8	176.8	181.2	185.6	190.0	198.9
87.5°	81.3	84.8	84.8	88.4	91.9	88.4	91.9	88.4	84.8	84.8	81.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-125D-935-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	4670.9	4670.9	4670.9	4670.9
2.5°	4731.0	4724.0	4702.8	4702.8
5°	4794.7	4777.0	4728.4	4693.0
7.5°	4809.7	4784.1	4720.4	4648.8
10°	4799.1	4777.0	4706.3	4613.5
12.5°	4777.9	4752.3	4685.1	4564.0
15°	4732.8	4693.0	4631.2	4480.9
17.5°	4661.2	4625.9	4552.5	4361.6
20°	4604.7	4569.3	4485.3	4273.2
22.5°	4537.5	4502.1	4414.6	4153.0
25°	4427.9	4374.9	4299.7	3946.2
27.5°	4305.9	4248.5	4141.5	3719.1
30°	4224.6	4149.5	4003.7	3552.9
32.5°	4136.2	4047.0	3798.6	3365.6
35°	3977.1	3902.0	3548.5	3000.5
37.5°	3803.9	3749.1	3322.2	2589.6
40°	3676.7	3632.5	3106.6	2342.1
42.5°	3521.1	3508.7	2869.7	2158.3
45°	3309.9	3309.9	2731.0	1935.5
47.5°	3094.2	3096.0	2536.5	1877.2
50°	2956.3	2912.2	2395.1	1873.7
52.5°	2814.9	2675.3	2221.9	1735.8
55°	2580.7	2346.5	1953.2	1577.6
57.5°	2344.7	2046.0	1536.1	1525.5
60°	2160.9	1833.9	1175.5	1422.9
62.5°	1984.2	1593.5	917.4	1316.9
65°	1723.4	1091.5	715.9	1095.9
67.5°	1475.1	692.9	544.4	791.9
70°	1312.5	512.6	388.9	618.7
72.5°	1146.3	403.0	328.8	533.8
75°	897.1	287.2	331.4	415.4
77.5°	671.7	218.3	296.1	289.9
80°	512.6	172.3	243.0	229.8
82.5°	381.8	137.0	172.3	169.7
85°	190.0	79.5	88.4	70.7
87.5°	77.8	38.9	31.8	17.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)