

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P#

Luminaire Tested: **4SNLED-LD5-69SL-RM-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33524)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-69SL-RM-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

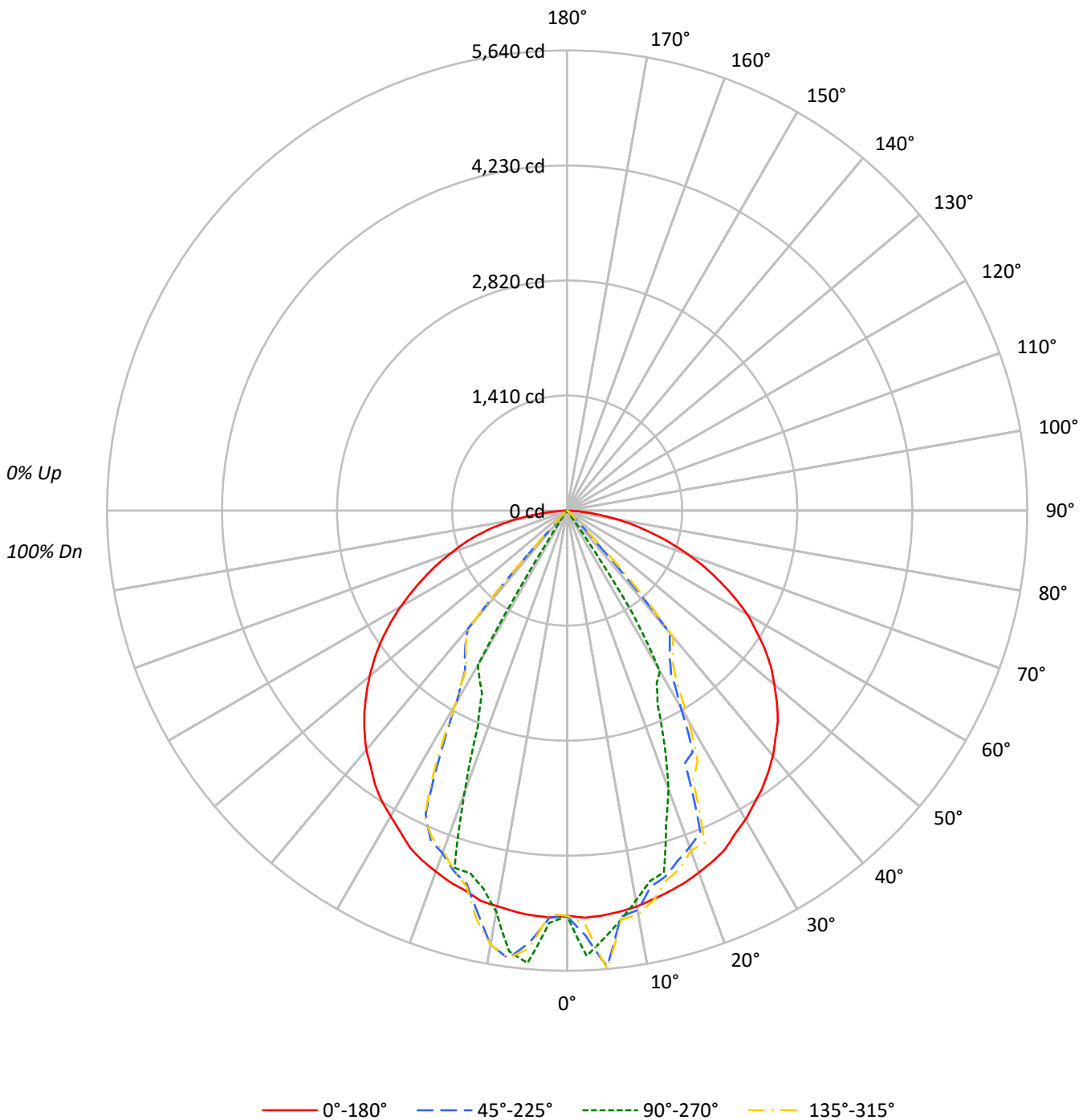
Lumens per Lamp: N/A
Luminaire Lumens: 7062.1 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 70
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: 25 FT



TEST NUMBER: P#
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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					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65					65			
5	85	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59					59			
6	80	69	62	57	79	69	62	57	67	61	56	65	60	56	64	59	55	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45					45			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	40134	40134	40134	40134
5°	40298	41278	40286	43713
10°	40202	37352	40178	38431
15°	40093	34864	39994	34955
20°	40139	27461	40025	27799
25°	40255	19873	40058	18753
30°	40071	17433	39648	16758
35°	40190	384	39600	466
40°	40327	83	39362	83
45°	40470	50	38950	37
50°	40161	39	38319	39
55°	39924	28	37472	28
60°	39171	29	36109	29
65°	37129	48	34484	32
70°	34445	52	32791	52
75°	30467	59	30967	59
80°	24746	67	26161	67
85°	14558	79	14866	79



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	498.3	7.1
10°-20°	1359.1	19.2
20°-30°	1729.5	24.5
30°-40°	1460.9	20.7
40°-50°	955.1	13.5
50°-60°	601.8	8.5
60°-70°	320.4	4.5
70°-80°	116.8	1.7
80°-90°	20.1	0.3
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°	3586.9	50.8
0°-40°	5047.8	71.5
0°-60°	6604.8	93.5
0°-90°	7062.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7062.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4966	4966	4966	4966	4966	
5°	4981	5256	4980	5566	4981	474
15°	4832	4586	4820	4598	4832	1366
25°	4580	2619	4558	2471	4580	2106
35°	4163	49	4102	60	4163	2604
45°	3652	6	3515	4	3652	2808
55°	2960	3	2778	3	2960	2638
65°	2072	4	1924	3	2072	2052
75°	1090	4	1108	4	1090	1156
85°	213	4	218	4	213	270
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5
2.5°	4994.8	4997.8	4999.3	5002.3	5006.8	5008.3	5011.2	5008.3	5008.3	5008.3	5008.3
5°	4981.4	4987.4	4991.9	4997.8	5008.3	5009.8	5021.7	5023.2	5029.1	5041.1	5050.0
7.5°	4959.1	4965.0	4974.0	4988.9	5003.8	5020.2	5041.1	5063.4	5094.7	5124.5	5161.8
10°	4926.3	4933.7	4944.2	4957.6	5030.6	5041.1	5087.3	5151.4	5169.2	5263.1	5333.2
12.5°	4878.6	4903.9	4930.8	4942.7	5012.7	5123.0	5278.1	5246.8	5212.5	5519.5	5515.1
15°	4832.4	4866.7	4853.2	4950.1	5014.2	5206.5	5140.9	5281.0	5537.4	5474.8	5477.8
17.5°	4783.2	4790.6	4865.2	4945.7	5060.4	5158.8	5239.3	5431.6	5482.3	5486.7	5431.6
20°	4720.6	4756.4	4865.2	4938.2	5132.0	5178.2	5352.6	5451.0	5430.1	5379.4	5285.5
22.5°	4656.5	4765.3	4875.6	4978.5	5114.1	5237.8	5324.3	5370.5	5261.7	5061.9	4954.6
25°	4580.5	4644.6	4789.2	4939.7	5109.6	5181.2	5231.8	5157.3	5015.7	4836.8	4656.5
27.5°	4462.7	4565.6	4750.4	4920.3	5073.8	5160.3	5078.3	4899.5	4671.4	4553.6	4471.7
30°	4371.8	4505.9	4658.0	4821.9	4981.4	5032.1	4823.4	4619.2	4462.7	4345.0	4327.1
32.5°	4261.5	4452.3	4596.9	4753.4	4887.5	4820.5	4617.7	4353.9	4224.2	4179.5	4197.4
35°	4163.1	4307.7	4497.0	4650.5	4747.4	4596.9	4276.4	4112.4	4049.8	4075.2	4042.4
37.5°	4045.4	4236.2	4410.5	4543.2	4510.4	4283.9	4012.6	3908.2	3915.7	3894.8	3832.2
40°	3923.1	4105.0	4286.8	4412.0	4297.3	3951.5	3771.1	3748.7	3753.2	3686.1	3596.7
42.5°	3780.0	3945.5	4127.3	4240.6	3993.2	3723.4	3601.2	3604.2	3565.4	3471.5	3423.8
45°	3651.9	3803.9	3993.2	4003.6	3699.6	3474.5	3438.7	3400.0	3313.5	3282.2	3246.4
47.5°	3487.9	3656.3	3812.8	3756.2	3411.9	3271.8	3244.9	3160.0	3116.7	3092.9	3063.1
50°	3313.5	3483.4	3626.5	3465.5	3140.6	3107.8	3019.9	2952.8	2923.0	2897.6	2870.8
52.5°	3148.1	3288.2	3434.2	3157.0	2931.9	2900.6	2800.8	2762.0	2732.2	2703.9	2697.9
55°	2960.2	3084.0	3183.8	2863.4	2732.2	2659.1	2587.6	2560.8	2532.5	2519.0	2541.4
57.5°	2747.1	2887.2	2872.3	2574.2	2516.1	2410.2	2383.4	2365.5	2344.6	2353.6	2167.3
60°	2554.8	2662.1	2589.1	2362.5	2264.2	2192.6	2168.8	2156.8	2168.8	1986.9	1746.9
62.5°	2317.8	2438.5	2291.0	2115.1	2010.8	1976.5	1955.6	1972.0	1797.6	1597.9	1539.7
65°	2071.9	2203.0	1985.4	1849.8	1784.2	1754.4	1752.9	1614.3	1442.9	1365.3	1365.3
67.5°	1834.9	1970.5	1690.3	1577.0	1551.7	1554.6	1468.2	1258.0	1210.3	1158.2	1007.6
70°	1583.0	1702.2	1396.6	1328.1	1313.2	1302.7	1092.6	1035.9	979.3	840.7	828.7
72.5°	1332.6	1390.7	1122.4	1106.0	1103.0	916.7	875.0	778.1	712.5	696.1	688.6
75°	1089.6	1071.7	886.9	901.8	760.2	694.6	627.5	570.9	561.9	556.0	138.6
77.5°	860.0	770.6	699.1	608.1	544.1	462.1	448.7	439.7	289.2	104.3	85.0
80°	626.0	499.3	465.1	395.0	336.9	323.5	330.9	101.4	80.5	67.1	58.1
82.5°	398.0	319.0	260.8	228.1	222.1	96.9	71.5	58.1	50.7	43.2	35.8
85°	213.1	141.6	131.2	110.3	65.6	44.7	37.3	28.3	23.8	19.4	17.9
87.5°	67.1	56.6	46.2	37.3	22.4	14.9	11.9	10.4	8.9	7.5	7.5
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):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5
2.5°	5005.3	5008.3	5006.8	5011.2	5011.2	5017.2	5021.7	5026.1	5035.1	5039.6	5073.8
5°	5069.4	5076.8	5099.2	5120.1	5145.4	5152.8	5196.1	5206.5	5257.2	5263.1	5430.1
7.5°	5212.5	5240.8	5294.4	5348.1	5401.8	5436.1	5495.7	5532.9	5573.2	5609.0	5741.6
10°	5385.4	5433.1	5485.2	5538.9	5570.2	5635.8	5671.6	5677.5	5667.1	5609.0	5394.3
12.5°	5555.3	5603.0	5580.6	5591.1	5628.3	5512.1	5528.5	5445.0	5503.1	5215.4	5002.3
15°	5531.4	5528.5	5473.3	5294.4	5324.3	5102.2	5012.7	4944.2	4999.3	4969.5	4936.7
17.5°	5459.9	5324.3	5228.9	5014.2	4923.3	4860.7	4862.2	4863.7	4836.8	4865.2	4781.7
20°	5157.3	5005.3	4863.7	4787.7	4760.8	4716.1	4738.5	4716.1	4717.6	4726.5	4598.4
22.5°	4754.9	4708.7	4626.7	4650.5	4641.6	4681.8	4652.0	4605.8	4620.7	4553.6	4456.8
25°	4592.4	4538.7	4535.8	4544.7	4531.3	4513.4	4486.6	4416.5	4412.0	4391.2	4346.5
27.5°	4428.4	4431.4	4440.4	4413.5	4365.8	4330.1	4289.8	4255.5	4268.9	4245.1	4184.0
30°	4315.2	4313.7	4260.0	4236.2	4148.2	4149.7	4139.3	4118.4	4105.0	4106.5	4067.7
32.5°	4154.2	4108.0	4046.9	4017.0	4009.6	3982.8	3961.9	3966.4	3976.8	3939.5	3979.8
35°	3988.7	3893.3	3884.4	3859.0	3835.2	3817.3	3824.8	3795.0	3793.5	3789.0	3461.1
37.5°	3766.6	3720.4	3716.0	3689.1	3672.7	3668.3	3639.9	3644.4	3657.8	3681.7	2951.3
40°	3583.3	3541.6	3531.1	3529.6	3493.9	3490.9	3498.3	3526.7	3546.0	3397.0	2812.7
42.5°	3386.5	3389.5	3356.7	3335.9	3340.3	3353.7	3389.5	3291.1	2851.4	2717.3	2571.2
45°	3218.1	3203.2	3185.3	3179.4	3218.1	3191.3	2797.8	2581.6	2529.5	2523.5	2113.6
47.5°	3042.2	3037.7	3030.3	3034.8	2814.2	2508.6	2419.2	2390.8	2399.8	2393.8	1815.5
50°	2864.8	2870.8	2870.8	2507.1	2301.4	2250.7	2258.2	2283.5	2125.5	1983.9	1691.8
52.5°	2711.3	2665.1	2283.5	2152.4	2106.2	2128.5	2074.9	1876.6	1733.5	1650.0	1565.1
55°	2426.6	2086.8	2001.8	1980.9	1997.3	1799.1	1676.9	1548.7	1511.4	1502.5	1453.3
57.5°	1909.4	1840.8	1848.3	1764.8	1575.5	1463.7	1414.5	1396.6	1380.3	1368.3	119.2
60°	1688.8	1708.2	1563.6	1384.7	1308.7	1293.8	1281.9	1265.5	1262.5	1241.6	76.0
62.5°	1545.7	1359.4	1234.2	1189.5	1171.6	1167.1	1144.7	1137.3	965.9	132.7	56.6
65°	1165.6	1089.6	1065.7	1055.3	1035.9	1035.9	860.0	135.6	110.3	95.4	50.7
67.5°	951.0	945.0	933.1	919.7	626.0	131.2	114.8	99.9	86.5	76.0	44.7
70°	804.9	801.9	730.4	134.1	111.8	98.4	86.5	77.5	71.5	64.1	40.2
72.5°	660.3	134.1	113.3	98.4	85.0	77.5	70.1	62.6	56.6	52.2	32.8
75°	102.8	90.9	80.5	73.0	67.1	59.6	53.7	49.2	47.7	41.7	22.4
77.5°	74.5	64.1	58.1	52.2	46.2	41.7	35.8	31.3	28.3	23.8	16.4
80°	52.2	46.2	41.7	34.3	29.8	25.3	22.4	19.4	17.9	14.9	7.5
82.5°	29.8	25.3	22.4	17.9	16.4	13.4	11.9	10.4	10.4	7.5	7.5
85°	13.4	13.4	10.4	8.9	7.5	7.5	7.5	6.0	6.0	4.5	4.5
87.5°	6.0	6.0	6.0	6.0	6.0	4.5	4.5	4.5	4.5	4.5	3.0
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):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5
2.5°	5121.5	5140.9	5178.2	5216.9	5173.7	5328.7	5316.8	5369.0	5397.3	5410.7	5442.0
5°	5577.7	5664.1	5692.4	5607.5	5558.3	5507.6	5392.8	5306.4	5316.8	5288.5	5185.6
7.5°	5568.7	5383.9	5135.0	5021.7	5012.7	4999.3	5035.1	5056.0	5058.9	5057.5	5054.5
10°	5097.7	5002.3	4985.9	4971.0	4977.0	4921.8	4896.5	4824.9	4863.7	4842.8	4850.3
12.5°	4954.6	4932.2	4844.3	4722.1	4795.1	4740.0	4708.7	4729.5	4705.7	4683.3	4675.9
15°	4869.6	4725.1	4675.9	4646.1	4625.2	4613.3	4623.7	4599.9	4592.4	4587.9	4598.4
17.5°	4693.8	4635.6	4582.0	4503.0	4504.5	4500.0	4529.8	4574.5	4577.5	4347.9	4140.8
20°	4555.1	4507.4	4438.9	4389.7	4456.8	4337.5	3876.9	3657.8	3623.5	3623.5	3629.5
22.5°	4444.8	4339.0	4343.5	4266.0	3638.4	3510.3	3513.2	3526.7	3465.5	3256.9	3234.5
25°	4294.3	4277.9	3951.5	3414.9	3419.3	3319.5	3165.9	2949.8	2715.8	2715.8	2677.0
27.5°	4181.0	3833.7	3356.7	3334.4	2999.0	2787.3	2656.2	2457.9	2431.1	2405.8	2408.7
30°	4084.1	3243.4	3255.4	2787.3	2539.9	2364.0	2353.6	2320.8	2304.4	2299.9	2283.5
32.5°	3228.5	3158.5	2724.7	2373.0	2276.1	2247.8	2234.3	2197.1	2195.6	2167.3	1970.5
35°	3027.3	2772.4	2280.5	2185.2	2156.8	2130.0	2107.6	1414.5	166.9	67.1	58.1
37.5°	2797.8	2316.3	2109.1	2065.9	2039.1	1507.0	150.5	52.2	37.3	26.8	23.8
40°	2371.5	2068.9	2003.3	1955.6	806.4	52.2	32.8	25.3	14.9	13.4	11.9
42.5°	2000.3	1949.6	1879.6	572.4	59.6	25.3	16.4	11.9	10.4	10.4	8.9
45°	1872.1	1827.4	757.2	56.6	37.3	11.9	10.4	10.4	8.9	6.0	6.0
47.5°	1752.9	1542.7	68.6	35.8	23.8	10.4	8.9	6.0	6.0	6.0	4.5
50°	1626.2	85.0	47.7	26.8	14.9	6.0	6.0	6.0	6.0	4.5	4.5
52.5°	304.1	59.6	38.8	23.8	7.5	6.0	6.0	6.0	4.5	4.5	4.5
55°	71.5	47.7	35.8	20.9	6.0	6.0	6.0	4.5	4.5	4.5	3.0
57.5°	53.7	35.8	28.3	19.4	6.0	4.5	4.5	4.5	4.5	4.5	3.0
60°	44.7	25.3	22.4	17.9	4.5	4.5	4.5	4.5	4.5	4.5	3.0
62.5°	31.3	20.9	16.4	13.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5
65°	25.3	16.4	13.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
67.5°	22.4	13.4	8.9	3.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5
70°	17.9	4.5	4.5	3.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5
72.5°	14.9	4.5	3.0	3.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5
75°	14.9	7.5	3.0	3.0	4.5	4.5	6.0	6.0	4.5	4.5	4.5
77.5°	10.4	7.5	3.0	3.0	4.5	4.5	6.0	6.0	4.5	4.5	4.5
80°	6.0	7.5	3.0	4.5	4.5	8.9	10.4	6.0	4.5	4.5	4.5
82.5°	6.0	7.5	8.9	8.9	4.5	7.5	8.9	7.5	6.0	4.5	4.5
85°	6.0	4.5	6.0	7.5	4.5	7.5	7.5	6.0	6.0	4.5	4.5
87.5°	3.0	4.5	4.5	6.0	6.0	6.0	7.5	6.0	6.0	6.0	4.5
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: P#

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5
2.5°	5456.9	5462.9	5369.0	5336.2	5364.5	5358.5	5333.2	5239.3	5228.9	5166.3	5075.3
5°	5215.4	5255.7	5206.5	5291.5	5251.2	5291.5	5413.7	5470.3	5562.7	5619.4	5640.3
7.5°	5047.0	5056.0	5056.0	5063.4	5070.9	5072.4	5063.4	5057.5	5032.1	5000.8	5057.5
10°	4842.8	4853.2	4871.1	4868.2	4866.7	4898.0	4905.4	4969.5	4966.5	4978.5	5021.7
12.5°	4737.0	4656.5	4729.5	4710.2	4737.0	4695.2	4772.8	4759.3	4763.8	4799.6	4892.0
15°	4561.1	4586.4	4604.3	4604.3	4614.8	4605.8	4596.9	4658.0	4695.2	4696.7	4690.8
17.5°	4222.7	4030.5	4227.2	4176.5	4580.5	4590.9	4556.6	4528.3	4528.3	4550.7	4598.4
20°	3625.0	3629.5	3631.0	3650.4	3674.2	3672.7	3674.2	4261.5	4540.2	4476.1	4432.9
22.5°	3177.9	3122.7	3225.6	3218.1	3346.3	3487.9	3623.5	3610.1	3619.1	4033.4	4406.1
25°	2547.4	2618.9	2560.8	2586.1	2730.7	2899.1	3003.5	3276.2	3572.9	3552.0	3648.9
27.5°	2398.3	2378.9	2405.8	2405.8	2425.1	2447.5	2505.6	2659.1	2923.0	3200.2	3462.6
30°	2256.7	2273.1	2276.1	2302.9	2317.8	2332.7	2341.7	2399.8	2459.4	2651.7	2975.1
32.5°	1694.8	1486.1	1955.6	2082.3	2189.6	2215.0	2232.9	2256.7	2299.9	2328.2	2490.7
35°	49.2	49.2	52.2	59.6	76.0	512.8	1952.6	2152.4	2180.7	2216.5	2246.3
37.5°	23.8	17.9	20.9	22.4	26.8	37.3	53.7	166.9	1858.7	2101.7	2134.5
40°	10.4	10.4	10.4	10.4	11.9	14.9	22.4	37.3	56.6	1495.0	2016.7
42.5°	8.9	8.9	8.9	8.9	8.9	8.9	10.4	13.4	26.8	64.1	1058.3
45°	6.0	6.0	4.5	6.0	6.0	7.5	8.9	8.9	11.9	40.2	73.0
47.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	7.5	8.9	26.8	38.8
50°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	20.9	26.8
52.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	8.9	23.8
55°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	6.0	20.9
57.5°	3.0	3.0	3.0	3.0	3.0	4.5	3.0	3.0	4.5	4.5	19.4
60°	3.0	3.0	3.0	3.0	3.0	4.5	4.5	4.5	4.5	4.5	17.9
62.5°	4.5	4.5	3.0	4.5	3.0	3.0	4.5	4.5	4.5	4.5	11.9
65°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.0	4.5
67.5°	4.5	4.5	4.5	4.5	3.0	4.5	3.0	4.5	4.5	3.0	3.0
70°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.0	3.0	3.0	3.0
72.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.0	3.0	3.0	3.0
75°	4.5	4.5	4.5	4.5	4.5	4.5	6.0	6.0	3.0	3.0	3.0
77.5°	4.5	4.5	4.5	4.5	4.5	4.5	7.5	8.9	7.5	7.5	3.0
80°	4.5	4.5	4.5	4.5	4.5	4.5	7.5	7.5	7.5	7.5	10.4
82.5°	4.5	4.5	4.5	4.5	4.5	4.5	6.0	6.0	6.0	6.0	7.5
85°	4.5	4.5	4.5	4.5	4.5	4.5	6.0	6.0	6.0	4.5	6.0
87.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.0	4.5	4.5	4.5
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: P#

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5
2.5°	5082.8	5032.1	5015.7	4981.4	4978.5	4981.4	4974.0	4963.5	4969.5	4959.1	4950.1
5°	5652.2	5516.5	5428.6	5310.8	5148.4	5112.6	5103.7	5053.0	5035.1	5029.1	5005.3
7.5°	5191.6	5439.0	5588.1	5638.8	5448.0	5403.3	5351.1	5309.4	5269.1	5193.1	5146.9
10°	4987.4	4999.3	5142.4	5309.4	5580.6	5617.9	5646.2	5555.3	5530.0	5336.2	5294.4
12.5°	4939.7	4941.2	4957.6	5058.9	5272.1	5295.9	5395.8	5449.5	5515.1	5552.3	5522.5
15°	4722.1	4842.8	4932.2	4941.2	4960.6	5002.3	5032.1	5218.4	5297.4	5509.1	5497.2
17.5°	4620.7	4659.5	4789.2	4895.0	4877.1	4862.2	4886.0	4911.4	4987.4	5199.1	5196.1
20°	4452.3	4576.0	4646.1	4756.4	4856.2	4860.7	4833.9	4819.0	4789.2	4823.4	4854.7
22.5°	4380.7	4400.1	4531.3	4608.8	4722.1	4762.3	4768.3	4769.8	4753.4	4735.5	4726.5
25°	4373.3	4312.2	4379.2	4476.1	4559.6	4602.8	4652.0	4668.4	4662.5	4662.5	4653.5
27.5°	3578.8	4292.8	4257.0	4321.1	4422.5	4452.3	4477.6	4528.3	4559.6	4582.0	4592.4
30°	3408.9	3537.1	4161.6	4170.6	4273.4	4270.4	4298.8	4340.5	4380.7	4432.9	4446.3
32.5°	3015.4	3329.9	3809.9	4020.0	4127.3	4137.8	4152.7	4164.6	4201.9	4260.0	4310.7
35°	2416.2	3033.3	3264.3	3948.5	3967.9	3988.7	3997.7	4026.0	4037.9	4061.8	4106.5
37.5°	2186.6	2507.1	3131.7	3414.9	3784.5	3802.4	3850.1	3862.0	3881.4	3900.8	3935.1
40°	2054.0	2141.9	2607.0	3049.7	3637.0	3648.9	3665.3	3695.1	3696.6	3718.9	3750.2
42.5°	1948.2	2004.8	2140.4	2912.5	3532.6	3531.1	3492.4	3511.7	3520.7	3544.5	3587.8
45°	1556.1	1881.1	1967.5	2378.9	2812.7	3015.4	3404.4	3340.3	3338.8	3347.8	3394.0
47.5°	79.0	1769.3	1830.4	1963.1	2656.2	2663.6	2714.3	3140.6	3206.2	3185.3	3189.8
50°	53.7	122.2	1705.2	1766.3	2289.5	2474.3	2511.6	2531.0	2776.9	3051.2	3006.4
52.5°	41.7	70.1	1044.9	1639.6	1860.2	1995.9	2235.8	2373.0	2387.9	2498.2	2872.3
55°	37.3	53.7	113.3	1512.9	1581.5	1611.3	1751.4	1991.4	2185.2	2243.3	2247.8
57.5°	32.8	49.2	77.5	684.2	1438.4	1444.3	1468.2	1551.7	1726.1	1885.6	2065.9
60°	29.8	43.2	61.1	117.8	1307.2	1322.1	1326.6	1349.0	1369.8	1478.6	1685.8
62.5°	17.9	34.3	53.7	85.0	1034.4	1188.0	1186.5	1201.4	1220.8	1232.7	1274.4
65°	14.9	26.8	46.2	71.5	126.7	158.0	959.9	1067.2	1079.2	1095.6	1103.0
67.5°	13.4	23.8	34.3	56.6	95.4	108.8	125.2	155.0	846.6	954.0	968.9
70°	11.9	16.4	28.3	47.7	77.5	83.5	93.9	107.3	126.7	156.5	766.1
72.5°	7.5	11.9	19.4	34.3	59.6	67.1	73.0	82.0	90.9	108.8	125.2
75°	3.0	8.9	16.4	25.3	46.2	50.7	55.2	61.1	68.6	80.5	89.4
77.5°	3.0	7.5	13.4	17.9	29.8	34.3	40.2	44.7	50.7	56.6	65.6
80°	10.4	6.0	8.9	13.4	20.9	22.4	25.3	28.3	32.8	37.3	43.2
82.5°	7.5	8.9	10.4	8.9	10.4	13.4	14.9	17.9	19.4	22.4	23.8
85°	6.0	6.0	7.5	7.5	7.5	7.5	7.5	7.5	8.9	10.4	13.4
87.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.0	6.0
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: P#

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5
2.5°	4950.1	4947.1	4938.2	4938.2	4936.7	4942.7	4947.1	4951.6	4950.1	4959.1	4950.1
5°	4987.4	4979.9	4966.5	4954.6	4950.1	4953.1	4948.6	4953.1	4947.1	4954.6	4941.2
7.5°	5090.2	5064.9	5012.7	4991.9	4965.0	4963.5	4950.1	4947.1	4938.2	4938.2	4921.8
10°	5272.1	5149.9	5135.0	5072.4	5050.0	4941.2	4965.0	4924.8	4920.3	4900.9	4893.5
12.5°	5421.1	5325.8	5297.4	5242.3	5179.7	4959.1	5008.3	4921.8	4917.3	4878.6	4838.3
15°	5424.1	5479.3	5401.8	5249.7	5236.3	5084.3	4984.4	4954.6	4915.8	4799.6	4819.0
17.5°	5249.7	5376.4	5413.7	5380.9	5285.5	5182.7	5042.5	4982.9	4866.7	4814.5	4778.7
20°	4966.5	5094.7	5254.2	5264.6	5324.3	5251.2	5067.9	4971.0	4830.9	4740.0	4710.2
22.5°	4741.5	4835.4	5018.7	5103.7	5176.7	5202.0	5085.8	4942.7	4768.3	4680.3	4662.5
25°	4622.2	4643.1	4698.2	4798.1	4959.1	5075.3	5091.7	4939.7	4848.8	4656.5	4555.1
27.5°	4579.0	4561.1	4538.7	4589.4	4710.2	4851.8	4945.7	4971.0	4744.4	4561.1	4459.7
30°	4468.7	4479.1	4444.8	4426.9	4505.9	4652.0	4819.0	4860.7	4686.3	4497.0	4380.7
32.5°	4333.0	4350.9	4356.9	4325.6	4309.2	4410.5	4590.9	4690.8	4681.8	4406.1	4276.4
35°	4163.1	4213.8	4227.2	4228.7	4201.9	4185.5	4289.8	4497.0	4576.0	4364.3	4176.5
37.5°	3984.3	3999.2	4072.2	4091.6	4091.6	4042.4	4119.9	4285.3	4395.6	4270.4	4054.3
40°	3760.7	3808.4	3876.9	3911.2	3945.5	3950.0	3906.7	4023.0	4204.9	4173.6	3939.5
42.5°	3598.2	3629.5	3671.2	3717.4	3787.5	3805.4	3760.7	3781.5	3970.8	4052.8	3790.5
45°	3408.9	3450.6	3462.6	3513.2	3586.3	3638.4	3637.0	3593.7	3745.8	3847.1	3681.7
47.5°	3215.1	3255.4	3276.2	3301.6	3355.2	3422.3	3459.6	3440.2	3470.0	3668.3	3537.1
50°	3015.4	3037.7	3079.5	3107.8	3143.6	3182.3	3271.8	3289.7	3247.9	3405.9	3377.6
52.5°	2826.1	2833.5	2861.9	2890.2	2937.9	2966.2	3037.7	3091.4	3088.4	3134.6	3200.2
55°	2678.5	2645.7	2651.7	2674.1	2705.4	2748.6	2788.8	2872.3	2900.6	2909.6	3013.9
57.5°	2092.7	2429.6	2459.4	2457.9	2495.2	2514.6	2551.8	2607.0	2708.3	2686.0	2802.2
60°	1901.9	1939.2	2220.9	2253.7	2267.1	2285.0	2329.7	2380.4	2454.9	2502.6	2553.3
62.5°	1450.3	1676.9	1761.8	2010.8	2049.5	2059.9	2089.8	2113.6	2191.1	2299.9	2279.1
65°	1122.4	1219.3	1478.6	1580.0	1791.6	1818.5	1860.2	1885.6	1907.9	2033.1	2039.1
67.5°	970.4	985.3	1055.3	1250.6	1384.7	1591.9	1617.3	1639.6	1673.9	1763.3	1818.5
70°	828.7	846.6	866.0	882.4	1056.8	1193.9	1386.2	1393.7	1416.0	1475.6	1600.9
72.5°	156.5	708.0	719.9	730.4	749.7	840.7	1024.0	1173.1	1182.0	1210.3	1325.1
75°	105.8	123.7	169.9	584.3	603.7	609.6	640.9	827.3	964.4	970.4	1021.0
77.5°	76.0	85.0	102.8	122.2	311.5	468.0	475.5	509.8	651.4	754.2	763.2
80°	52.2	58.1	68.6	77.5	95.4	125.2	345.8	356.2	374.1	515.7	542.6
82.5°	29.8	34.3	40.2	49.2	56.6	71.5	92.4	119.2	243.0	259.4	344.3
85°	14.9	16.4	19.4	23.8	28.3	34.3	46.2	56.6	77.5	140.1	144.6
87.5°	7.5	7.5	7.5	7.5	11.9	13.4	16.4	20.9	26.8	40.2	52.2
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: P#

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5
2.5°	4951.6	4972.5	4990.4	4994.8	4994.8	4997.8	5002.3	5005.3	5008.3	5011.2	5008.3
5°	4942.7	4965.0	4979.9	4984.4	4984.4	4993.4	5000.8	5009.8	5014.2	5014.2	5011.2
7.5°	4920.3	4936.7	4956.1	4968.0	4969.5	4984.4	4997.8	4996.3	5002.3	5005.3	5012.7
10°	4890.5	4890.5	4923.3	4932.2	4939.7	4956.1	4960.6	4969.5	4990.4	4993.4	5012.7
12.5°	4875.6	4860.7	4899.5	4903.9	4929.3	4908.4	4935.2	4944.2	4923.3	4951.6	4914.4
15°	4808.5	4826.4	4820.5	4833.9	4878.6	4854.7	4927.8	4903.9	4957.6	4893.5	5006.8
17.5°	4753.4	4750.4	4774.2	4786.2	4795.1	4845.8	4865.2	4892.0	4912.9	4895.0	4939.7
20°	4713.1	4689.3	4707.2	4720.6	4751.9	4790.6	4802.6	4762.3	4832.4	4951.6	4979.9
22.5°	4637.1	4620.7	4641.6	4641.6	4689.3	4683.3	4728.0	4702.7	4768.3	4906.9	5051.5
25°	4534.3	4535.8	4558.1	4584.9	4593.9	4661.0	4684.8	4717.6	4799.6	4965.0	5053.0
27.5°	4429.9	4421.0	4434.4	4489.5	4535.8	4584.9	4592.4	4704.2	4816.0	4929.3	5006.8
30°	4325.6	4316.6	4325.6	4365.8	4421.0	4453.8	4535.8	4684.8	4789.2	4866.7	4939.7
32.5°	4213.8	4204.9	4225.7	4255.5	4352.4	4356.9	4519.4	4659.5	4741.5	4798.1	4784.7
35°	4094.6	4082.6	4102.0	4148.2	4237.6	4270.4	4440.4	4544.7	4637.1	4663.9	4601.3
37.5°	3951.5	3930.6	3954.4	4018.5	4112.4	4207.8	4349.4	4470.2	4519.4	4447.8	4373.3
40°	3802.4	3787.5	3829.2	3862.0	3972.3	4105.0	4267.5	4352.4	4321.1	4239.1	4157.2
42.5°	3669.7	3638.4	3675.7	3738.3	3863.5	4014.1	4145.2	4192.9	4118.4	3997.7	3902.3
45°	3507.3	3470.0	3514.7	3598.2	3732.3	3903.8	4006.6	3990.2	3863.5	3759.2	3628.0
47.5°	3337.4	3292.6	3337.4	3437.2	3587.8	3769.6	3844.1	3769.6	3610.1	3479.0	3373.1
50°	3170.4	3118.2	3161.5	3312.0	3459.6	3599.7	3598.2	3453.6	3358.2	3215.1	3122.7
52.5°	3005.0	2930.4	2973.7	3137.6	3285.2	3444.7	3326.9	3192.8	3078.0	2952.8	2923.0
55°	2800.8	2720.3	2778.4	3016.9	3130.2	3224.1	3036.3	2918.5	2805.2	2742.6	2705.4
57.5°	2607.0	2519.0	2569.7	2851.4	2934.9	2958.8	2785.8	2618.9	2551.8	2531.0	2477.3
60°	2407.2	2307.4	2355.1	2680.0	2738.1	2641.3	2471.3	2341.7	2328.2	2286.5	2244.8
62.5°	2216.5	2106.2	2136.0	2466.9	2493.7	2317.8	2161.3	2127.0	2094.2	2052.5	2030.1
65°	1997.3	1882.6	1924.3	2240.3	2215.0	1988.4	1900.5	1893.0	1849.8	1815.5	1848.3
67.5°	1796.1	1660.5	1718.6	1992.9	1878.1	1693.3	1657.5	1639.6	1605.3	1624.7	1280.4
70°	1575.5	1428.0	1507.0	1726.1	1556.1	1433.9	1420.5	1393.7	1395.2	1109.0	934.6
72.5°	1329.6	1201.4	1316.2	1433.9	1231.2	1195.4	1176.0	1173.1	946.5	769.1	725.9
75°	1113.4	983.8	1107.5	1152.2	980.8	956.9	955.4	790.0	621.6	593.2	579.8
77.5°	869.0	769.1	886.9	819.8	752.7	725.9	651.4	488.9	468.0	448.7	168.4
80°	585.8	593.2	661.8	564.9	536.6	457.6	360.7	345.8	298.1	119.2	93.9
82.5°	356.2	447.2	421.8	353.3	345.8	248.9	228.1	116.3	86.5	68.6	59.6
85°	184.8	226.6	217.6	192.3	143.1	128.2	71.5	55.2	44.7	34.3	28.3
87.5°	62.6	83.5	80.5	64.1	49.2	38.8	25.3	20.9	14.9	11.9	10.4
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: P#

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5
2.5°	5005.3	5005.3	5002.3	5005.3	5006.8	5003.8	5003.8	5006.8	5008.3	5009.8	5017.2
5°	5012.7	5015.7	5020.2	5029.1	5030.6	5048.5	5056.0	5060.4	5064.9	5066.4	5056.0
7.5°	5029.1	5039.6	5048.5	5047.0	5036.6	5008.3	4999.3	4991.9	5005.3	5039.6	5079.8
10°	5044.0	4996.3	4906.9	5029.1	4991.9	5026.1	5127.5	5149.9	5218.4	5315.3	5343.6
12.5°	4941.2	5072.4	5100.7	4963.5	5216.9	5123.0	5234.8	5333.2	5361.5	5459.9	5400.3
15°	5051.5	5115.6	5158.8	5295.9	5281.0	5361.5	5392.8	5373.4	5377.9	5403.3	5470.3
17.5°	5050.0	5178.2	5206.5	5298.9	5361.5	5363.0	5354.1	5345.1	5369.0	5388.4	5348.1
20°	5136.4	5178.2	5233.3	5270.6	5282.5	5297.4	5325.8	5303.4	5258.7	5215.4	5197.6
22.5°	5093.2	5187.1	5234.8	5240.8	5233.3	5187.1	5145.4	5082.8	5061.9	5039.6	5047.0
25°	5102.2	5145.4	5139.4	5115.6	5084.3	4997.8	4977.0	4950.1	4909.9	4813.0	4725.1
27.5°	5038.1	5015.7	4988.9	4930.8	4874.1	4827.9	4775.7	4689.3	4617.7	4513.4	4474.6
30°	4930.8	4841.3	4775.7	4741.5	4686.3	4608.8	4529.8	4424.0	4333.0	4312.2	4292.8
32.5°	4725.1	4637.1	4583.5	4500.0	4406.1	4313.7	4222.7	4181.0	4161.6	4164.6	4146.7
35°	4514.9	4437.4	4356.9	4231.7	4161.6	4069.2	4036.4	4027.5	4009.6	3990.2	3969.3
37.5°	4291.3	4200.4	4079.6	4005.1	3935.1	3897.8	3881.4	3868.0	3836.7	3802.4	3778.6
40°	4075.2	3911.2	3844.1	3771.1	3750.2	3733.8	3710.0	3677.2	3634.0	3628.0	3617.6
42.5°	3786.0	3668.3	3610.1	3595.2	3569.9	3541.6	3520.7	3484.9	3467.0	3479.0	3487.9
45°	3511.7	3452.1	3432.7	3414.9	3367.2	3326.9	3313.5	3301.6	3316.5	3382.1	3225.6
47.5°	3289.7	3265.8	3242.0	3212.1	3167.4	3137.6	3151.0	3163.0	3176.4	2694.9	2459.4
50°	3097.4	3064.6	3027.3	2994.5	2967.7	2964.7	3034.8	2824.6	2365.5	2353.6	2115.1
52.5°	2887.2	2838.0	2815.7	2796.3	2808.2	2852.9	2361.0	2191.1	2101.7	1825.9	1703.7
55°	2660.6	2617.4	2617.4	2635.3	2571.2	2083.8	2058.5	1779.7	1611.3	1563.6	1544.2
57.5°	2434.1	2429.6	2454.9	2244.8	1891.5	1814.0	1524.8	1463.7	1436.9	1430.9	1399.6
60°	2226.9	2268.6	1899.0	1746.9	1518.9	1369.8	1328.1	1320.6	1292.3	1281.9	1253.6
62.5°	2061.4	1709.7	1591.9	1299.8	1223.7	1204.4	1182.0	1171.6	1146.2	1012.1	296.6
65°	1489.1	1407.1	1141.8	1092.6	1086.6	1058.3	1049.4	943.5	222.1	149.1	126.7
67.5°	1123.9	997.2	962.9	954.0	925.6	869.0	257.9	147.6	126.7	110.3	96.9
70°	863.0	840.7	815.3	794.5	234.0	146.1	126.7	107.3	92.4	82.0	74.5
72.5°	706.5	691.6	402.4	153.5	125.2	105.8	93.9	82.0	71.5	65.6	59.6
75°	553.0	153.5	126.7	105.8	90.9	77.5	68.6	61.1	55.2	50.7	46.2
77.5°	125.2	101.4	86.5	73.0	65.6	58.1	52.2	44.7	40.2	35.8	29.8
80°	77.5	67.1	56.6	52.2	44.7	37.3	32.8	29.8	23.8	22.4	19.4
82.5°	50.7	40.2	35.8	29.8	23.8	22.4	19.4	14.9	13.4	11.9	10.4
85°	22.4	19.4	16.4	13.4	10.4	8.9	7.5	6.0	6.0	6.0	6.0
87.5°	7.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.0	3.0
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: P#

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5
2.5°	5020.2	5047.0	5072.4	5064.9	5038.1	4996.3	4984.4	4968.0	4979.9	5005.3	5015.7
5°	5056.0	5041.1	5094.7	5173.7	5301.9	5313.8	5403.3	5424.1	5495.7	5540.4	5538.9
7.5°	5106.6	5318.3	5406.2	5501.6	5544.9	5534.4	5547.8	5537.4	5521.0	5513.6	5504.6
10°	5364.5	5525.5	5558.3	5558.3	5491.2	5400.3	5361.5	5294.4	5160.3	5163.3	5140.9
12.5°	5515.1	5571.7	5494.2	5428.6	5158.8	5054.5	4941.2	4887.5	4856.2	4808.5	4826.4
15°	5436.1	5355.6	5309.4	5097.7	4932.2	4744.4	4747.4	4714.6	4680.3	4683.3	4661.0
17.5°	5319.8	5255.7	4927.8	4781.7	4701.2	4628.2	4614.8	4571.5	4549.2	4541.7	4540.2
20°	5160.3	4929.3	4684.8	4649.0	4552.2	4468.7	4455.3	4468.7	4537.2	4415.0	4000.6
22.5°	4974.0	4641.6	4570.0	4468.7	4403.1	4370.3	4452.3	4079.6	3516.2	3584.8	3511.7
25°	4658.0	4513.4	4391.2	4313.7	4306.2	4105.0	3420.8	3349.3	2987.1	2793.3	2575.7
27.5°	4426.9	4364.3	4236.2	4222.7	4125.9	3356.7	3000.5	2607.0	2462.4	2440.0	2392.3
30°	4286.8	4197.4	4119.9	3781.5	3292.6	2702.4	2407.2	2352.1	2326.8	2299.9	2258.2
32.5°	4118.4	4033.4	4070.7	3179.4	2624.9	2326.8	2267.1	2226.9	2180.7	2162.8	2012.2
35°	3947.0	3908.2	3180.8	2672.6	2256.7	2185.2	2140.4	2098.7	1669.4	403.9	137.1
37.5°	3763.6	3754.7	2858.9	2217.9	2113.6	2046.5	1919.8	396.5	93.9	64.1	47.7
40°	3620.6	2860.4	2259.7	2079.3	1994.4	1888.5	265.3	65.6	41.7	25.3	16.4
42.5°	3525.2	2572.7	2022.7	1951.1	1766.3	195.3	67.1	28.3	16.4	13.4	10.4
45°	2717.3	2031.6	1890.0	1815.5	223.6	67.1	38.8	13.4	10.4	8.9	6.0
47.5°	2507.1	1845.3	1761.8	396.5	74.5	35.8	26.8	8.9	6.0	6.0	6.0
50°	1899.0	1705.2	1402.6	96.9	47.7	25.3	19.4	6.0	6.0	6.0	4.5
52.5°	1664.9	1574.0	150.5	64.1	37.3	19.4	11.9	4.5	4.5	4.5	4.5
55°	1521.9	998.7	89.4	49.2	31.3	17.9	7.5	4.5	4.5	4.5	3.0
57.5°	1392.2	134.1	65.6	41.7	28.3	16.4	4.5	4.5	4.5	4.5	3.0
60°	1180.5	96.9	53.7	37.3	26.8	14.9	4.5	4.5	4.5	4.5	4.5
62.5°	153.5	76.0	46.2	32.8	19.4	11.9	3.0	4.5	4.5	4.5	4.5
65°	111.8	59.6	41.7	22.4	11.9	4.5	3.0	4.5	4.5	4.5	4.5
67.5°	86.5	49.2	31.3	19.4	10.4	3.0	3.0	4.5	4.5	4.5	4.5
70°	68.6	41.7	25.3	16.4	8.9	3.0	3.0	4.5	4.5	4.5	4.5
72.5°	53.7	29.8	17.9	8.9	6.0	3.0	3.0	4.5	4.5	4.5	4.5
75°	40.2	23.8	13.4	7.5	3.0	3.0	3.0	4.5	4.5	4.5	4.5
77.5°	26.8	14.9	10.4	6.0	6.0	6.0	7.5	7.5	4.5	4.5	4.5
80°	17.9	10.4	7.5	7.5	7.5	6.0	7.5	7.5	4.5	7.5	4.5
82.5°	8.9	7.5	7.5	6.0	6.0	4.5	6.0	6.0	6.0	6.0	4.5
85°	6.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.0	6.0	4.5
87.5°	3.0	3.0	3.0	3.0	4.5	4.5	4.5	4.5	6.0	6.0	4.5
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: P#

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5
2.5°	5002.3	5006.8	4994.8	5058.9	5026.1	5029.1	5042.5	5008.3	5015.7	4991.9	4975.5
5°	5544.9	5553.8	5562.7	5565.7	5571.7	5579.1	5570.2	5565.7	5556.8	5527.0	5495.7
7.5°	5459.9	5449.5	5445.0	5451.0	5461.4	5465.9	5458.4	5468.8	5507.6	5524.0	5534.4
10°	5012.7	4965.0	4997.8	4993.4	4956.1	5081.3	5047.0	5066.4	5079.8	5216.9	5300.4
12.5°	4799.6	4829.4	4772.8	4744.4	4781.7	4807.0	4832.4	4778.7	4853.2	4819.0	4929.3
15°	4620.7	4602.8	4596.9	4598.4	4590.9	4626.7	4635.6	4647.5	4658.0	4704.2	4722.1
17.5°	4540.2	4570.0	4582.0	4590.9	4576.0	4559.6	4543.2	4519.4	4526.8	4514.9	4549.2
20°	3721.9	3622.0	3616.1	3674.2	3610.1	3645.9	3732.3	4310.7	4291.3	4516.4	4440.4
22.5°	3106.3	3012.4	2931.9	2861.9	2961.7	3003.5	3164.4	3346.3	3641.4	3595.2	3915.7
25°	2536.9	2502.6	2481.8	2471.3	2478.8	2475.8	2511.6	2596.5	2730.7	3046.7	3455.1
27.5°	2373.0	2356.6	2349.1	2325.3	2343.2	2337.2	2365.5	2383.4	2423.6	2454.9	2587.6
30°	2243.3	2223.9	2210.5	2185.2	2203.0	2204.5	2213.5	2259.7	2276.1	2302.9	2344.6
32.5°	819.8	482.9	453.1	430.8	471.0	614.1	1077.7	1884.1	2149.4	2170.2	2217.9
35°	80.5	67.1	59.6	59.6	61.1	67.1	89.4	235.5	430.8	1664.9	2083.8
37.5°	31.3	26.8	22.4	20.9	22.4	25.3	34.3	44.7	61.1	126.7	564.9
40°	13.4	11.9	10.4	10.4	10.4	10.4	11.9	14.9	22.4	41.7	65.6
42.5°	8.9	7.5	7.5	7.5	7.5	7.5	7.5	7.5	10.4	13.4	26.8
45°	6.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.0	7.5	11.9
47.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.0
50°	4.5	4.5	4.5	4.5	3.0	4.5	3.0	4.5	4.5	4.5	4.5
52.5°	4.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5
55°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5
57.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
60°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
62.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	3.0
65°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	3.0
67.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
70°	4.5	4.5	3.0	4.5	3.0	3.0	4.5	4.5	4.5	3.0	3.0
72.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	8.9	8.9	6.0
75°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	7.5	8.9	7.5
77.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	7.5	7.5	7.5
80°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.0	6.0	6.0
82.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.0	6.0	6.0
85°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
87.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
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: P#

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5
2.5°	4947.1	4945.7	4977.0	5000.8	4991.9	5000.8	5011.2	5012.7	5015.7	5003.8	4999.3
5°	5436.1	5389.8	5300.4	5236.3	5161.8	5026.1	4959.1	4966.5	4968.0	4963.5	4969.5
7.5°	5530.0	5525.5	5494.2	5480.8	5430.1	5333.2	5178.2	5151.4	5085.8	5044.0	5009.8
10°	5294.4	5401.8	5430.1	5477.8	5507.6	5489.7	5358.5	5339.2	5297.4	5249.7	5260.2
12.5°	5039.6	5127.5	5132.0	5391.3	5449.5	5455.4	5404.7	5431.6	5437.5	5330.2	5267.6
15°	4726.5	4768.3	4856.2	5097.7	5273.6	5383.9	5416.7	5431.6	5358.5	5354.1	5328.7
17.5°	4589.4	4616.2	4656.5	4792.1	5058.9	5221.4	5360.0	5349.6	5377.9	5357.1	5293.0
20°	4416.5	4438.9	4510.4	4579.0	4710.2	4926.3	5185.6	5205.0	5242.3	5237.8	5255.7
22.5°	4413.5	4334.5	4346.5	4400.1	4537.2	4731.0	5006.8	5070.9	5094.7	5111.1	5130.5
25°	3501.3	4128.8	4243.6	4277.9	4367.3	4480.6	4805.5	4829.4	4874.1	4947.1	5000.8
27.5°	3033.3	3459.6	3918.7	4157.2	4213.8	4307.7	4501.5	4537.2	4689.3	4707.2	4790.6
30°	2393.8	2723.2	3408.9	3982.8	4076.7	4142.3	4279.4	4350.9	4416.5	4488.1	4576.0
32.5°	2252.2	2304.4	2684.5	3295.6	4026.0	3976.8	4078.2	4121.4	4192.9	4255.5	4319.6
35°	2122.5	2158.3	2238.8	2699.4	3279.2	3841.2	3909.7	3938.0	3978.3	4026.0	4072.2
37.5°	1986.9	2040.6	2095.7	2219.4	3033.3	3733.8	3732.3	3765.1	3789.0	3829.2	3868.0
40°	360.7	1873.6	1963.1	2043.5	2352.1	2978.1	3565.4	3580.3	3596.7	3622.0	3662.3
42.5°	58.1	313.0	1839.3	1916.9	2004.8	2666.6	3489.4	3428.3	3417.8	3435.7	3471.5
45°	29.8	76.0	369.7	1790.2	1869.2	2127.0	2852.9	3322.4	3312.0	3277.7	3285.2
47.5°	22.4	47.7	90.9	618.6	1749.9	1825.9	2632.3	2604.0	2802.2	3182.3	3124.2
50°	19.4	32.8	53.7	126.7	1545.7	1681.3	2027.2	2368.5	2472.8	2486.2	2942.4
52.5°	17.9	22.4	38.8	82.0	324.9	1554.6	1648.6	1767.8	1943.7	2320.8	2311.8
55°	16.4	20.9	32.8	55.2	113.3	1401.1	1498.0	1520.4	1557.6	1738.0	1976.5
57.5°	8.9	19.4	31.3	47.7	85.0	256.4	1359.4	1377.3	1407.1	1414.5	1499.5
60°	4.5	17.9	28.3	41.7	62.6	119.2	1222.3	1243.1	1261.0	1264.0	1290.8
62.5°	3.0	16.4	23.8	38.8	52.2	85.0	289.2	590.3	1122.4	1122.4	1153.7
65°	3.0	11.9	14.9	25.3	47.7	70.1	122.2	141.6	275.8	678.2	1012.1
67.5°	3.0	4.5	13.4	20.9	35.8	53.7	89.4	104.3	125.2	143.1	265.3
70°	3.0	3.0	11.9	13.4	22.4	40.2	64.1	73.0	85.0	96.9	111.8
72.5°	3.0	3.0	10.4	10.4	14.9	26.8	49.2	53.7	61.1	68.6	79.0
75°	7.5	6.0	8.9	8.9	10.4	20.9	37.3	41.7	44.7	50.7	58.1
77.5°	7.5	7.5	7.5	7.5	7.5	13.4	23.8	26.8	31.3	34.3	40.2
80°	6.0	6.0	6.0	7.5	7.5	8.9	14.9	16.4	17.9	22.4	23.8
82.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	8.9	10.4	13.4
85°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.0	6.0	6.0	6.0
87.5°	4.5	4.5	4.5	3.0	3.0	4.5	4.5	4.5	4.5	4.5	4.5
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: P#

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5	4966.5
2.5°	4997.8	4988.9	4981.4	4985.9	4972.5	4966.5	4971.0	4972.5	4975.5	4982.9	4984.4
5°	4984.4	4981.4	4994.8	5002.3	4999.3	5002.3	5002.3	4996.3	4987.4	4993.4	4979.9
7.5°	4975.5	4956.1	4941.2	4944.2	4929.3	4947.1	4963.5	4987.4	4994.8	4994.8	4979.9
10°	5129.0	5108.1	5024.7	4968.0	4930.8	4898.0	4975.5	4896.5	4933.7	4792.1	4954.6
12.5°	5255.7	5284.0	5246.8	5091.7	5064.9	4966.5	5023.2	4926.3	4898.0	4735.5	4787.7
15°	5306.4	5252.7	5240.8	5197.6	5139.4	5111.1	4959.1	4942.7	4896.5	4914.4	4845.8
17.5°	5261.7	5288.5	5252.7	5224.4	5164.8	5097.7	5006.8	4926.3	4862.2	4719.1	4839.8
20°	5218.4	5254.2	5146.9	5164.8	5170.7	5093.2	5045.5	4978.5	4898.0	4763.8	4659.5
22.5°	5146.9	5121.5	5130.5	5103.7	5081.3	5091.7	5026.1	4979.9	4844.3	4783.2	4641.6
25°	5030.6	5021.7	5045.5	5042.5	4988.9	4971.0	4938.2	4889.0	4835.4	4737.0	4620.7
27.5°	4841.3	4887.5	4929.3	4948.6	4920.3	4872.6	4854.7	4826.4	4789.2	4689.3	4602.8
30°	4641.6	4693.8	4741.5	4783.2	4808.5	4787.7	4771.3	4754.9	4698.2	4632.6	4535.8
32.5°	4413.5	4482.1	4547.7	4598.4	4653.5	4669.9	4658.0	4644.6	4596.9	4537.2	4459.7
35°	4149.7	4243.6	4339.0	4429.9	4453.8	4492.5	4531.3	4508.9	4483.6	4424.0	4352.4
37.5°	3926.1	3993.2	4061.8	4176.5	4260.0	4309.2	4377.8	4386.7	4343.5	4315.2	4221.2
40°	3695.1	3756.2	3856.1	3923.1	4037.9	4094.6	4167.6	4200.4	4189.9	4173.6	4091.6
42.5°	3513.2	3543.0	3608.6	3668.3	3781.5	3897.8	3961.9	3997.7	4034.9	4021.5	3979.8
45°	3319.5	3346.3	3368.7	3420.8	3531.1	3634.0	3713.0	3766.6	3833.7	3865.0	3814.3
47.5°	3127.2	3134.6	3161.5	3204.7	3270.3	3349.3	3481.9	3562.4	3625.0	3686.1	3653.3
50°	2979.6	2952.8	2957.3	2984.1	3037.7	3115.3	3210.7	3323.9	3395.5	3470.0	3477.5
52.5°	2604.0	2821.6	2769.4	2784.4	2812.7	2849.9	2949.8	3061.6	3149.5	3213.6	3277.7
55°	2185.2	2228.4	2647.2	2587.6	2605.5	2638.3	2684.5	2796.3	2881.2	2970.7	3060.1
57.5°	1694.8	2016.7	2033.1	2420.7	2411.7	2414.7	2453.5	2517.5	2602.5	2714.3	2790.3
60°	1317.6	1453.3	1717.1	1851.3	2191.1	2203.0	2225.4	2262.7	2335.7	2441.5	2562.3
62.5°	1162.6	1180.5	1274.4	1475.6	1696.3	1963.1	2010.8	2016.7	2049.5	2155.3	2295.5
65°	1021.0	1033.0	1061.3	1082.1	1267.0	1524.8	1754.4	1791.6	1812.5	1875.1	1994.4
67.5°	703.5	889.9	915.2	930.1	948.0	1067.2	1351.9	1541.2	1565.1	1620.2	1724.6
70°	135.6	281.7	770.6	787.0	796.0	822.8	869.0	1170.1	1328.1	1380.3	1428.0
72.5°	92.4	108.8	131.2	310.0	655.8	670.7	681.2	719.9	986.7	1138.8	1164.1
75°	67.1	74.5	87.9	108.8	134.1	436.7	541.1	560.4	579.8	800.4	928.6
77.5°	47.7	53.7	59.6	70.1	82.0	105.8	152.0	418.8	438.2	448.7	633.5
80°	26.8	32.8	40.2	46.2	52.2	59.6	77.5	96.9	216.1	316.0	332.4
82.5°	14.9	17.9	20.9	25.3	28.3	35.8	43.2	52.2	68.6	101.4	214.6
85°	7.5	7.5	7.5	10.4	11.9	16.4	19.4	22.4	31.3	43.2	59.6
87.5°	4.5	4.5	6.0	6.0	6.0	7.5	7.5	7.5	8.9	13.4	19.4
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: P#

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	4966.5	4966.5	4966.5	4966.5	4966.5
2.5°	4985.9	4981.4	4981.4	4999.3	4994.8
5°	4977.0	4972.5	4971.0	4990.4	4981.4
7.5°	4969.5	4953.1	4948.6	4966.5	4959.1
10°	4939.7	4927.8	4935.2	4929.3	4926.3
12.5°	4889.0	4881.6	4850.3	4853.2	4878.6
15°	4798.1	4827.9	4774.2	4821.9	4832.4
17.5°	4631.2	4698.2	4750.4	4778.7	4783.2
20°	4705.7	4728.0	4701.2	4702.7	4720.6
22.5°	4608.8	4619.2	4626.7	4617.7	4656.5
25°	4453.8	4413.5	4500.0	4517.9	4580.5
27.5°	4406.1	4373.3	4413.5	4410.5	4462.7
30°	4367.3	4261.5	4279.4	4307.7	4371.8
32.5°	4312.2	4145.2	4127.3	4189.9	4261.5
35°	4215.3	4057.3	4015.6	4055.8	4163.1
37.5°	4133.3	3935.1	3851.6	3905.3	4045.4
40°	4011.1	3839.7	3710.0	3757.7	3923.1
42.5°	3865.0	3757.7	3558.0	3590.7	3780.0
45°	3717.4	3622.0	3410.4	3426.8	3651.9
47.5°	3566.9	3479.0	3256.9	3259.8	3487.9
50°	3419.3	3303.1	3119.7	3067.6	3313.5
52.5°	3227.0	3119.7	2981.1	2896.1	3148.1
55°	3045.2	2924.5	2823.1	2691.9	2960.2
57.5°	2867.8	2733.7	2665.1	2496.7	2747.1
60°	2624.9	2560.8	2459.4	2298.4	2554.8
62.5°	2375.9	2355.1	2252.2	2085.3	2317.8
65°	2085.3	2134.5	2028.6	1885.6	2071.9
67.5°	1811.0	1899.0	1782.7	1694.8	1834.9
70°	1518.9	1620.2	1554.6	1523.3	1583.0
72.5°	1231.2	1329.6	1335.5	1313.2	1332.6
75°	951.0	1059.8	1119.4	1085.1	1089.6
77.5°	721.4	773.6	839.2	866.0	860.0
80°	445.7	536.6	590.3	645.4	626.0
82.5°	225.1	301.1	366.7	426.3	398.0
85°	93.9	120.7	168.4	222.1	213.1
87.5°	28.3	47.7	50.7	71.5	67.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)