

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: NEO-RAY

Report Number: P333239-927

Luminaire Tested: **S125DIP-S850D1035U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333239-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D1035U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5544.2 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

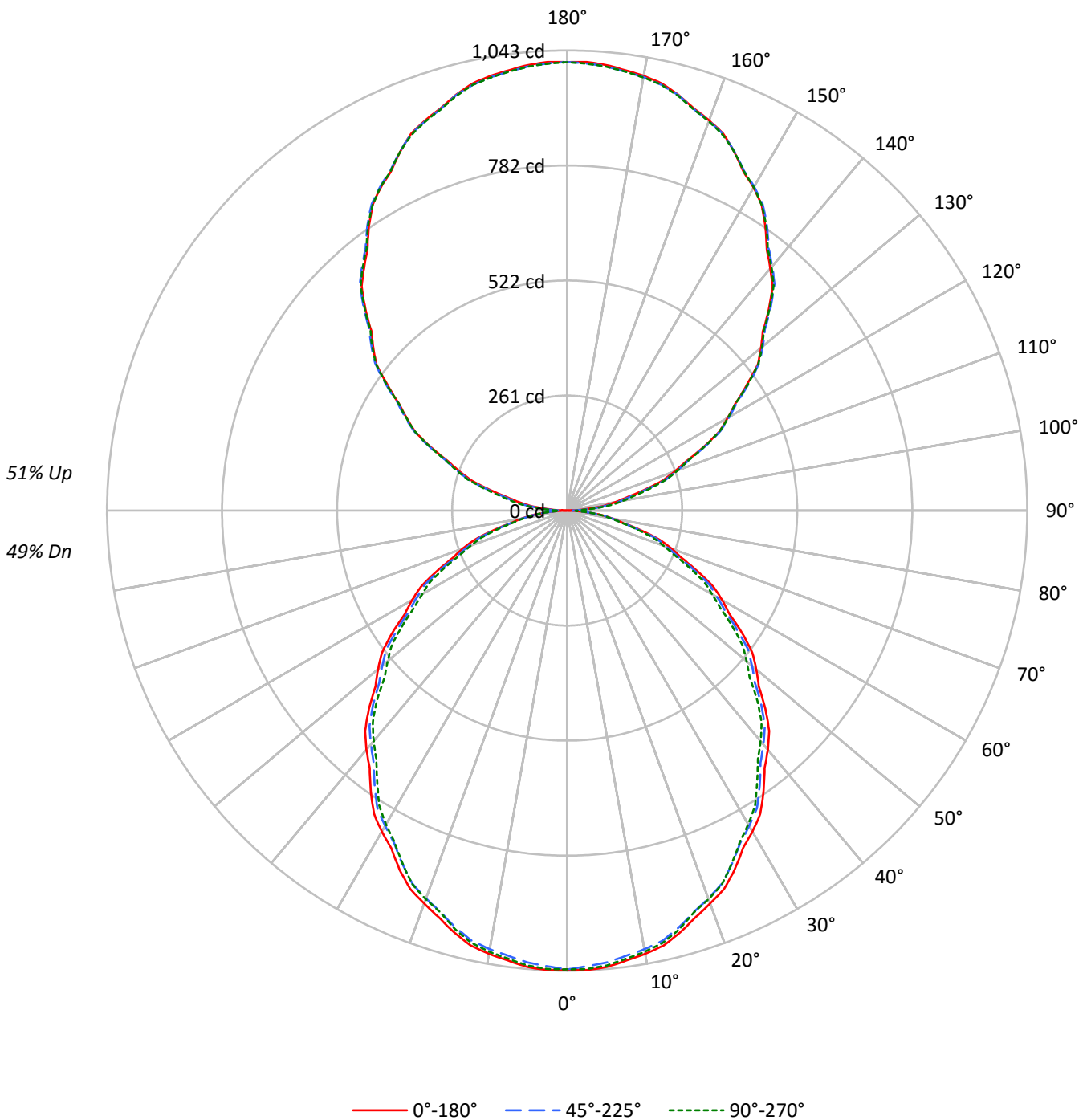
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49				49
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41				41
2	89	81	75	70	81	75	70	65	63	59	56	53	50	47	43	41	39	34				34
3	81	71	64	58	74	66	60	54	56	51	47	47	43	40	38	35	33	29				29
4	74	63	55	49	68	58	52	46	50	44	40	41	37	34	34	31	29	25				25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	22				22
6	63	50	42	37	57	47	40	34	40	34	30	34	29	26	28	24	22	19				19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	19	17				17
8	54	41	34	28	49	38	32	27	33	27	24	28	24	20	23	20	17	15				15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14				14
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14	12				12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6716	6716	6716
5°	6731	6667	6710
10°	6690	6620	6658
15°	6618	6540	6568
20°	6514	6429	6441
25°	6402	6297	6291
30°	6264	6154	6123
35°	6117	6000	5916
40°	5966	5833	5751
45°	5802	5681	5569
50°	5621	5497	5332
55°	5447	5290	5141
60°	5239	5079	4899
65°	4991	4828	4664
70°	4755	4538	4381
75°	4332	4190	4045
80°	3857	3794	3704
85°	3349	3416	3231



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.1	1.8
10°-20°	277.0	5.0
20°-30°	409.0	7.4
30°-40°	477.2	8.6
40°-50°	479.3	8.6
50°-60°	420.7	7.6
60°-70°	313.5	5.7
70°-80°	179.3	3.2
80°-90°	54.4	1.0
90°-100°	68.1	1.2
100°-110°	201.0	3.6
110°-120°	340.5	6.1
120°-130°	448.1	8.1
130°-140°	502.1	9.1
140°-150°	492.1	8.9
150°-160°	413.3	7.5
160°-170°	274.7	5.0
170°-180°	96.1	1.7
0°-30°	784.0	14.1
0°-40°	1261.2	22.7
0°-60°	2161.2	39.0
0°-90°	2708.3	48.9
90°-120°	609.5	11.0
90°-150°	2051.7	37.0
90°-180°	2836.0	51.2
0°-180°	5544.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1038	1036	1028	1035	1035	98
15°	990	987	978	982	982	279
25°	898	894	884	885	883	413
35°	776	772	761	757	750	485
45°	635	631	622	612	610	489
55°	484	481	470	462	457	432
65°	327	325	316	309	305	324
75°	174	172	168	165	162	185
85°	45	46	46	45	44	51
90°	1	7	13	17	19	5
95°	51	53	61	66	68	55
105°	180	184	189	194	196	193
115°	341	344	346	345	344	337
125°	498	502	503	501	501	445
135°	647	652	652	652	649	498
145°	784	787	789	789	787	490
155°	897	897	898	900	897	413
165°	975	974	974	977	973	275
175°	1014	1011	1011	1015	1010	96
180°	1016	1016	1016	1016	1016	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9
2.5°	1042.6	1042.1	1041.7	1041.2	1040.8	1039.8	1038.4	1037.0	1035.5	1034.0	1035.5
5°	1038.3	1037.9	1037.5	1037.2	1036.8	1035.7	1033.9	1032.1	1030.2	1028.4	1030.1
7.5°	1028.7	1028.4	1028.0	1027.6	1027.3	1026.1	1024.1	1022.1	1020.1	1018.0	1019.6
10°	1020.2	1019.9	1019.5	1019.1	1018.7	1017.6	1015.5	1013.5	1011.5	1009.5	1011.0
12.5°	1009.6	1009.0	1008.4	1007.7	1007.0	1005.8	1003.9	1002.0	1000.1	998.3	999.5
15°	989.8	989.2	988.6	988.1	987.5	986.3	984.3	982.2	980.2	978.2	979.1
17.5°	966.9	966.1	965.3	964.5	963.7	962.2	960.1	958.1	955.9	953.9	955.0
20°	947.8	947.5	947.1	946.7	946.3	944.9	942.5	940.2	937.8	935.4	936.8
22.5°	928.7	928.0	927.4	926.7	926.1	924.6	922.4	920.1	917.9	915.7	916.6
25°	898.4	897.5	896.6	895.6	894.8	893.1	890.7	888.4	886.0	883.6	884.0
27.5°	863.0	862.5	862.0	861.4	860.9	859.4	856.9	854.4	852.0	849.5	849.6
30°	840.0	839.5	838.9	838.4	837.8	836.1	833.5	830.7	827.9	825.2	824.8
32.5°	815.0	814.1	813.3	812.5	811.7	810.0	807.6	805.1	802.6	800.2	799.5
35°	775.9	775.1	774.4	773.6	772.9	771.3	768.7	766.1	763.6	761.0	760.1
37.5°	735.2	734.3	733.3	732.5	731.5	729.8	727.5	725.0	722.6	720.3	718.8
40°	707.6	706.6	705.8	704.8	703.9	702.2	699.6	697.0	694.5	691.9	690.3
42.5°	677.9	677.2	676.4	675.7	674.9	673.2	670.7	668.0	665.5	663.0	661.5
45°	635.2	634.4	633.7	633.0	632.2	630.7	628.6	626.4	624.2	622.0	619.8
47.5°	589.1	589.1	589.1	589.1	589.2	588.0	585.3	582.7	580.0	577.4	575.1
50°	559.4	558.9	558.3	557.8	557.3	555.9	553.7	551.5	549.3	547.1	544.7
52.5°	529.2	528.8	528.4	528.0	527.6	526.2	523.9	521.5	519.2	516.8	514.8
55°	483.8	483.2	482.7	482.1	481.6	480.0	477.4	474.9	472.3	469.8	468.1
57.5°	435.9	435.6	435.3	435.0	434.7	433.5	431.3	429.2	427.0	424.8	422.7
60°	405.6	404.9	404.2	403.4	402.7	401.3	399.3	397.3	395.3	393.2	391.4
62.5°	374.0	373.4	372.9	372.2	371.7	370.5	368.8	367.1	365.4	363.6	361.7
65°	326.6	326.2	325.9	325.5	325.2	324.0	321.9	320.0	317.9	315.9	314.3
67.5°	280.7	280.0	279.2	278.4	277.7	276.5	275.0	273.5	272.0	270.5	269.1
70°	251.8	250.8	249.9	249.0	248.1	246.8	245.2	243.5	241.9	240.3	239.2
72.5°	220.1	219.5	218.9	218.3	217.7	216.8	215.8	214.7	213.7	212.6	211.4
75°	173.6	173.3	172.9	172.5	172.1	171.5	170.6	169.7	168.7	167.9	167.3
77.5°	130.6	130.5	130.4	130.2	130.1	129.8	129.2	128.7	128.2	127.7	127.4
80°	103.7	103.7	103.7	103.7	103.7	103.5	103.1	102.7	102.3	102.0	101.9
82.5°	79.9	79.7	79.4	79.1	78.8	78.6	78.5	78.5	78.4	78.3	78.0
85°	45.2	45.5	45.6	45.8	45.9	46.1	46.1	46.1	46.1	46.1	45.9
87.5°	17.9	18.2	18.5	18.8	19.1	19.3	19.3	19.4	19.6	19.6	19.8
90°	0.8	2.2	3.6	5.0	6.4	7.8	9.0	10.2	11.4	12.7	13.5
92.5°	19.2	20.1	21.1	22.1	23.1	24.3	25.8	27.3	28.8	30.3	31.5
95°	51.4	51.7	52.1	52.4	52.8	53.9	55.6	57.4	59.2	60.9	62.1
97.5°	85.4	85.6	85.7	85.9	86.0	87.3	89.7	92.1	94.5	97.0	98.2
100°	110.7	110.7	110.7	110.7	110.7	111.9	114.2	116.5	118.7	121.0	122.6
102.5°	137.9	138.6	139.3	140.1	140.8	141.6	142.8	144.0	145.1	146.3	148.1
105°	180.3	181.2	182.0	183.0	183.9	184.8	185.8	186.9	188.0	189.0	190.0
107.5°	227.1	228.0	228.9	229.8	230.7	231.5	232.3	233.1	233.9	234.7	235.3
110°	259.4	260.3	261.2	262.1	262.9	263.6	264.1	264.7	265.2	265.7	266.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	292.3	292.8	293.2	293.7	294.1	294.7	295.4	296.0	296.7	297.4	297.6
115°	340.9	341.6	342.3	343.0	343.6	344.2	344.5	344.9	345.2	345.6	345.5
117.5°	389.6	389.9	390.2	390.5	390.9	391.2	391.5	391.8	392.1	392.4	392.6
120°	419.9	420.8	421.7	422.6	423.5	424.0	424.1	424.4	424.5	424.7	424.7
122.5°	452.9	453.2	453.5	453.8	454.2	454.5	455.0	455.4	455.9	456.3	456.2
125°	497.5	498.5	499.6	500.7	501.7	502.3	502.5	502.6	502.8	503.0	502.6
127.5°	544.9	545.5	546.1	546.7	547.3	547.7	548.0	548.1	548.3	548.6	548.3
130°	573.4	574.3	575.1	576.0	576.9	577.5	577.9	578.2	578.5	578.9	578.8
132.5°	601.8	603.3	604.8	606.2	607.6	608.3	608.2	608.2	608.1	608.0	607.8
135°	647.0	648.0	649.0	650.1	651.2	651.8	652.0	652.1	652.3	652.4	652.4
137.5°	689.4	690.3	691.3	692.4	693.4	694.1	694.5	694.9	695.3	695.6	695.9
140°	716.5	717.4	718.3	719.1	720.0	720.7	721.3	721.8	722.3	722.9	723.2
142.5°	743.7	744.5	745.2	745.9	746.7	747.4	748.1	748.8	749.4	750.0	750.3
145°	783.8	784.5	785.1	785.8	786.6	787.2	787.7	788.2	788.8	789.3	789.3
147.5°	820.8	821.2	821.6	822.0	822.3	822.8	823.2	823.6	823.9	824.4	824.8
150°	845.4	845.3	845.1	844.9	844.8	845.0	845.7	846.4	847.1	847.8	847.8
152.5°	865.7	865.9	866.2	866.4	866.6	867.0	867.2	867.5	867.8	868.1	868.5
155°	896.8	896.8	896.8	896.8	896.8	896.9	897.1	897.3	897.5	897.6	898.3
157.5°	924.7	924.3	923.9	923.5	923.1	923.1	923.2	923.4	923.6	923.8	924.5
160°	941.1	940.6	940.1	939.5	939.1	938.9	939.1	939.2	939.4	939.5	940.2
162.5°	955.7	955.3	954.9	954.5	954.2	953.9	954.0	954.0	954.1	954.1	955.0
165°	975.2	974.8	974.5	974.1	973.8	973.7	973.8	974.0	974.1	974.4	975.1
167.5°	991.6	990.9	990.2	989.5	988.8	988.4	988.4	988.4	988.4	988.4	989.5
170°	1000.4	999.7	999.0	998.4	997.7	997.3	997.3	997.3	997.3	997.3	998.4
172.5°	1006.8	1006.1	1005.4	1004.6	1004.0	1003.6	1003.6	1003.6	1003.6	1003.6	1004.6
175°	1013.9	1013.2	1012.5	1011.8	1011.1	1010.7	1010.7	1010.7	1010.7	1010.7	1011.8
177.5°	1017.6	1017.0	1016.4	1015.8	1015.3	1014.9	1014.8	1014.6	1014.5	1014.4	1015.3
180°	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9
2.5°	1037.0	1038.4	1039.8	1040.5	1040.4	1040.2	1040.1	1039.9
5°	1031.7	1033.3	1035.0	1035.7	1035.5	1035.4	1035.1	1035.0
7.5°	1021.3	1022.9	1024.5	1025.2	1025.0	1024.8	1024.6	1024.5
10°	1012.4	1013.9	1015.3	1016.0	1015.8	1015.6	1015.4	1015.3
12.5°	1000.6	1001.8	1003.0	1003.5	1003.5	1003.5	1003.5	1003.4
15°	980.1	981.0	981.9	982.3	982.3	982.3	982.3	982.3
17.5°	956.2	957.3	958.4	958.5	957.6	956.7	955.8	954.9
20°	938.0	939.3	940.6	940.7	939.8	938.9	938.0	937.1
22.5°	917.3	918.2	919.1	919.2	918.5	917.9	917.3	916.7
25°	884.3	884.7	885.1	884.9	884.5	883.9	883.4	882.8
27.5°	849.7	849.8	849.9	849.6	849.1	848.5	848.0	847.4
30°	824.5	824.1	823.7	823.3	822.8	822.2	821.7	821.1
32.5°	798.8	798.2	797.6	796.7	795.7	794.7	793.8	792.8
35°	759.2	758.3	757.4	756.2	754.7	753.3	751.8	750.4
37.5°	717.5	716.1	714.8	713.7	712.9	712.0	711.2	710.3
40°	688.6	687.0	685.3	684.2	683.7	683.2	682.6	682.1
42.5°	660.0	658.5	657.0	655.8	655.0	654.1	653.2	652.4
45°	617.6	615.4	613.2	611.8	611.3	610.8	610.2	609.7
47.5°	572.9	570.7	568.5	566.7	565.5	564.2	562.8	561.6
50°	542.3	540.0	537.6	535.8	534.5	533.2	532.0	530.7
52.5°	512.7	510.6	508.5	506.8	505.3	503.9	502.5	501.1
55°	466.5	464.9	463.2	461.8	460.4	459.1	457.9	456.6
57.5°	420.6	418.5	416.4	414.9	414.2	413.6	412.9	412.2
60°	389.6	387.8	386.0	384.4	383.1	381.8	380.6	379.3
62.5°	359.7	357.7	355.8	354.3	353.3	352.3	351.3	350.3
65°	312.7	311.0	309.3	308.2	307.4	306.7	305.9	305.2
67.5°	267.8	266.3	265.0	264.0	263.6	263.2	262.7	262.3
70°	238.1	236.9	235.8	235.0	234.2	233.5	232.7	232.0
72.5°	210.1	208.9	207.6	206.6	205.9	205.2	204.5	203.7
75°	166.8	166.2	165.6	165.0	164.3	163.5	162.8	162.1
77.5°	127.1	126.7	126.4	126.0	125.4	124.9	124.5	123.9
80°	101.6	101.5	101.3	101.0	100.7	100.3	99.9	99.6
82.5°	77.6	77.3	77.0	76.8	76.8	76.7	76.6	76.5
85°	45.7	45.6	45.3	45.1	44.7	44.4	44.0	43.6
87.5°	20.0	20.2	20.4	20.4	20.1	20.0	19.8	19.6
90°	14.4	15.3	16.2	16.9	17.4	17.9	18.5	19.0
92.5°	32.7	33.8	35.0	35.8	36.2	36.5	36.9	37.3
95°	63.4	64.6	65.8	66.6	66.9	67.3	67.7	68.0
97.5°	99.3	100.4	101.6	102.3	102.5	102.7	102.9	103.1
100°	124.1	125.7	127.3	128.3	128.7	129.0	129.4	129.7
102.5°	149.7	151.5	153.2	154.3	154.8	155.3	155.8	156.3
105°	191.2	192.2	193.2	194.0	194.6	195.1	195.6	196.1
107.5°	235.8	236.3	236.9	237.1	237.0	237.0	237.0	236.9
110°	266.8	267.3	267.8	268.0	267.8	267.7	267.5	267.3



TEST NUMBER: P333239-927

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	297.9	298.1	298.3	298.3	298.0	297.7	297.4	297.1
115°	345.2	345.1	344.9	344.8	344.5	344.4	344.2	344.0
117.5°	392.7	392.8	393.0	392.7	392.0	391.3	390.6	389.9
120°	424.7	424.7	424.7	424.4	423.7	422.9	422.2	421.5
122.5°	456.1	455.9	455.7	455.4	454.9	454.3	453.8	453.2
125°	502.3	501.9	501.6	501.3	501.1	501.0	500.8	500.7
127.5°	548.2	548.0	547.9	547.6	547.2	546.8	546.5	546.2
130°	578.5	578.4	578.2	578.0	577.6	577.3	576.9	576.6
132.5°	607.7	607.5	607.3	607.0	606.5	606.0	605.5	605.0
135°	652.4	652.4	652.4	652.1	651.4	650.7	650.0	649.3
137.5°	696.1	696.2	696.5	696.2	695.3	694.4	693.6	692.7
140°	723.6	723.9	724.3	724.0	723.1	722.2	721.4	720.5
142.5°	750.5	750.7	750.9	750.6	749.7	748.8	748.0	747.0
145°	789.3	789.3	789.3	789.0	788.5	788.0	787.4	787.0
147.5°	825.2	825.7	826.1	825.7	824.5	823.3	822.1	820.9
150°	847.8	847.8	847.8	847.6	847.3	846.9	846.6	846.2
152.5°	868.9	869.3	869.7	869.7	869.0	868.4	867.8	867.1
155°	899.0	899.8	900.5	900.4	899.5	898.6	897.7	896.8
157.5°	925.1	925.8	926.5	926.3	925.2	924.0	922.8	921.7
160°	941.0	941.7	942.4	942.3	941.4	940.6	939.7	938.7
162.5°	955.8	956.6	957.5	957.4	956.4	955.4	954.3	953.3
165°	975.7	976.4	977.2	977.0	976.0	974.9	973.8	972.8
167.5°	990.5	991.6	992.7	992.6	991.6	990.5	989.4	988.2
170°	999.4	1000.4	1001.5	1001.4	1000.2	998.9	997.8	996.5
172.5°	1005.8	1006.8	1007.8	1007.8	1006.7	1005.7	1004.6	1003.5
175°	1012.9	1013.9	1014.9	1014.9	1013.7	1012.4	1011.1	1010.0
177.5°	1016.1	1016.9	1017.7	1017.7	1016.7	1015.7	1014.7	1013.8
180°	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3

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