

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: P332614-927

Luminaire Tested: **S124DIP-S795D1035U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332614-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S795D1035U927-4F0-1E-UDD-F1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 795 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: 5538.1 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: General Diffuse

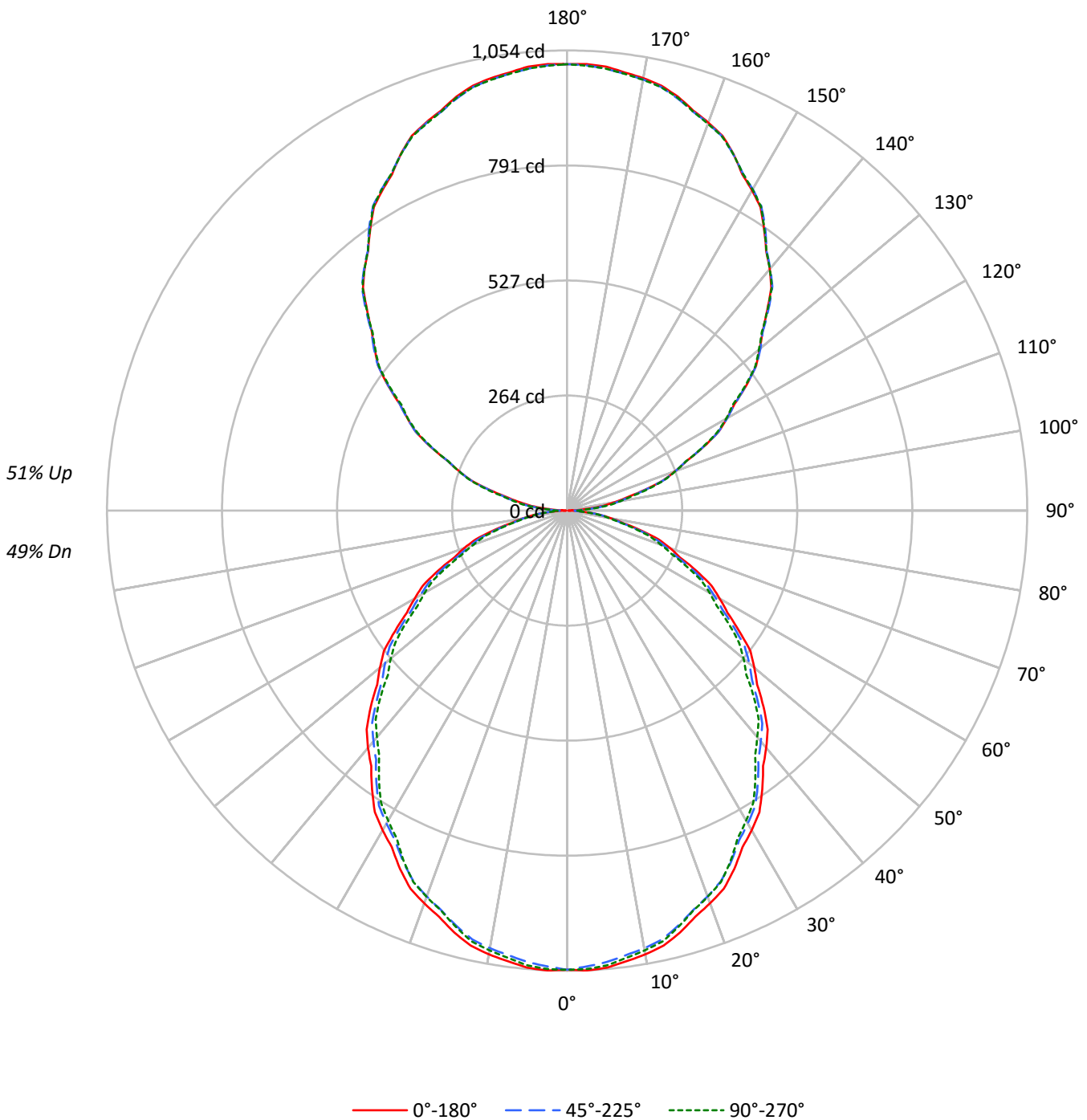
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8490	8490	8490
5°	8515	8413	8474
10°	8461	8344	8385
15°	8359	8226	8247
20°	8223	8079	8086
25°	8068	7911	7888
30°	7879	7713	7643
35°	7681	7508	7407
40°	7477	7273	7140
45°	7263	7042	6907
50°	7027	6836	6625
55°	6773	6570	6356
60°	6516	6273	6082
65°	6229	5989	5746
70°	5908	5611	5391
75°	5415	5153	5022
80°	4816	4621	4505
85°	4215	4057	3974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	1.8
10°-20°	279.0	5.0
20°-30°	410.7	7.4
30°-40°	477.4	8.6
40°-50°	477.5	8.6
50°-60°	417.6	7.5
60°-70°	310.2	5.6
70°-80°	176.2	3.2
80°-90°	53.9	1.0
90°-100°	67.4	1.2
100°-110°	199.8	3.6
110°-120°	339.1	6.1
120°-130°	447.1	8.1
130°-140°	502.1	9.1
140°-150°	493.4	8.9
150°-160°	415.0	7.5
160°-170°	276.1	5.0
170°-180°	96.7	1.7
0°-30°	788.7	14.2
0°-40°	1266.2	22.9
0°-60°	2161.3	39.0
0°-90°	2701.6	48.8
90°-120°	606.3	10.9
90°-150°	2048.8	37.0
90°-180°	2837.0	51.2
0°-180°	5538.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1052	1052	1052	1052	1052	
5°	1051	1047	1038	1047	1046	100
15°	1000	996	984	989	987	282
25°	906	900	888	889	886	417
35°	779	773	762	756	752	487
45°	636	630	617	608	605	490
55°	481	478	467	457	452	431
65°	326	322	314	305	301	323
75°	174	169	165	162	161	184
85°	46	45	44	44	43	50
90°	2	11	17	22	24	5
95°	48	54	60	62	62	53
105°	184	185	188	191	193	196
115°	345	345	343	342	342	340
125°	502	502	501	500	498	447
135°	648	652	652	651	648	501
145°	787	790	791	790	788	492
155°	901	901	901	903	901	415
165°	981	979	977	982	979	276
175°	1021	1017	1016	1021	1016	97
180°	1022	1022	1022	1022	1022	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1051.6	1051.6	1051.6	1051.6	1051.6	1051.6	1051.6	1051.6	1051.6	1051.6	1051.6
2.5°	1054.3	1053.8	1053.4	1053.0	1052.5	1051.5	1049.8	1048.1	1046.5	1044.9	1046.3
5°	1050.8	1050.0	1049.2	1048.5	1047.7	1046.3	1044.3	1042.2	1040.1	1038.1	1040.1
7.5°	1041.0	1040.2	1039.5	1038.7	1038.0	1036.5	1034.2	1031.9	1029.6	1027.3	1029.0
10°	1032.2	1031.5	1030.7	1030.0	1029.2	1027.6	1025.2	1022.8	1020.3	1017.9	1019.4
12.5°	1020.7	1020.0	1019.2	1018.5	1017.8	1016.1	1013.5	1010.9	1008.4	1005.8	1007.4
15°	1000.2	999.4	998.7	997.9	997.2	995.5	992.6	989.8	987.0	984.2	985.3
17.5°	975.4	974.5	973.5	972.6	971.7	969.9	967.3	964.6	961.9	959.3	960.0
20°	957.2	956.2	955.4	954.4	953.5	951.6	948.8	945.9	943.2	940.4	941.0
22.5°	937.7	936.4	935.2	934.0	932.7	930.7	927.9	925.1	922.3	919.5	920.5
25°	905.8	904.5	903.2	901.9	900.6	898.6	896.0	893.3	890.7	888.1	888.3
27.5°	869.4	868.1	866.7	865.4	864.0	862.1	859.7	857.3	854.8	852.4	851.9
30°	845.2	843.7	842.2	840.7	839.2	837.2	834.7	832.3	829.9	827.4	826.7
32.5°	819.5	818.2	816.8	815.5	814.1	812.1	809.6	807.0	804.5	801.8	801.0
35°	779.4	778.1	776.8	775.5	774.2	772.2	769.6	767.0	764.4	761.8	760.4
37.5°	737.1	735.9	734.7	733.6	732.3	730.3	727.5	724.7	721.9	719.1	717.6
40°	709.5	708.0	706.5	705.0	703.5	701.3	698.5	695.7	692.9	690.1	688.2
42.5°	679.9	678.9	678.0	677.2	676.2	674.2	671.1	668.0	664.9	661.8	659.7
45°	636.2	634.9	633.6	632.2	631.0	628.8	625.8	622.8	619.8	616.8	614.7
47.5°	590.5	589.6	588.7	587.8	586.9	585.1	582.3	579.6	576.8	574.0	571.6
50°	559.5	558.7	558.0	557.2	556.5	554.8	552.2	549.6	546.9	544.3	541.7
52.5°	529.2	528.3	527.4	526.5	525.5	523.7	520.9	518.2	515.4	512.6	510.3
55°	481.2	480.5	480.0	479.4	478.9	477.3	474.7	472.1	469.4	466.8	464.5
57.5°	435.3	434.7	434.0	433.4	432.8	431.1	428.6	426.0	423.4	420.8	418.7
60°	403.6	402.7	401.7	400.8	399.9	398.2	395.8	393.3	390.9	388.5	386.7
62.5°	372.6	371.9	371.1	370.3	369.5	367.8	365.2	362.6	360.0	357.4	355.9
65°	326.1	325.2	324.2	323.3	322.3	320.9	319.1	317.2	315.3	313.5	311.6
67.5°	279.2	278.4	277.5	276.6	275.8	274.5	272.7	270.8	269.1	267.3	265.5
70°	250.3	249.0	247.6	246.3	245.0	243.6	242.1	240.6	239.1	237.7	236.1
72.5°	219.3	217.9	216.7	215.3	214.0	212.8	211.6	210.3	209.1	207.9	206.8
75°	173.6	172.6	171.7	170.8	169.8	168.9	167.9	167.0	166.1	165.2	164.4
77.5°	129.9	129.5	129.1	128.7	128.3	127.7	126.8	126.0	125.2	124.4	124.1
80°	103.6	103.1	102.5	102.0	101.4	100.9	100.5	100.2	99.8	99.4	99.0
82.5°	78.0	77.8	77.5	77.2	77.0	76.8	76.8	76.7	76.6	76.5	76.3
85°	45.5	45.5	45.5	45.5	45.5	45.3	44.9	44.6	44.2	43.8	43.8
87.5°	18.0	18.2	18.5	18.7	18.9	19.2	19.3	19.4	19.5	19.6	19.9
90°	2.4	4.3	6.3	8.2	10.1	11.8	13.2	14.6	16.0	17.4	18.5
92.5°	17.0	19.2	21.3	23.5	25.7	27.4	28.4	29.3	30.3	31.3	31.9
95°	47.5	49.0	50.6	52.2	53.8	55.1	56.4	57.7	58.9	60.1	60.6
97.5°	82.9	84.1	85.4	86.7	87.9	89.3	90.7	92.1	93.6	95.1	95.7
100°	110.7	111.4	112.1	112.8	113.5	114.6	116.2	117.8	119.4	121.0	121.4
102.5°	139.8	140.1	140.4	140.6	140.9	141.8	143.2	144.7	146.1	147.6	148.1
105°	184.3	184.4	184.6	184.7	185.0	185.4	186.1	186.8	187.5	188.2	188.7
107.5°	230.9	231.1	231.3	231.6	231.7	231.9	232.0	232.1	232.2	232.3	232.8
110°	262.5	262.8	263.2	263.6	264.0	264.0	263.8	263.6	263.5	263.3	262.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	295.4	295.5	295.6	295.6	295.7	295.6	295.2	294.9	294.6	294.3	294.2
115°	344.8	344.8	344.8	344.8	344.8	344.6	344.2	343.9	343.5	343.2	343.0
117.5°	391.3	391.4	391.5	391.7	391.8	391.7	391.5	391.3	391.0	390.8	390.1
120°	422.2	422.9	423.7	424.4	425.1	425.2	424.6	424.1	423.6	423.0	422.2
122.5°	454.5	454.8	455.0	455.3	455.6	455.7	455.4	455.1	454.9	454.6	454.1
125°	502.1	502.1	502.1	502.1	502.1	502.0	501.8	501.7	501.5	501.3	501.0
127.5°	545.3	545.8	546.3	546.8	547.4	547.5	547.2	546.9	546.7	546.4	546.1
130°	575.6	576.2	576.7	577.2	577.7	578.0	578.0	578.0	578.0	578.0	577.7
132.5°	606.7	607.0	607.4	607.8	608.2	608.3	608.2	608.0	607.8	607.8	607.4
135°	647.6	648.6	649.7	650.8	651.8	652.4	652.4	652.4	652.4	652.4	652.0
137.5°	692.2	692.7	693.2	693.6	694.2	694.5	694.8	695.1	695.4	695.7	695.2
140°	721.9	722.2	722.6	722.9	723.3	723.5	723.5	723.5	723.5	723.5	723.3
142.5°	749.1	749.5	749.8	750.2	750.5	750.6	750.5	750.4	750.2	750.0	750.0
145°	786.7	787.4	788.1	788.9	789.6	790.0	790.2	790.4	790.5	790.7	790.5
147.5°	824.1	824.9	825.8	826.6	827.4	827.8	827.7	827.5	827.4	827.3	827.1
150°	846.8	847.6	848.3	849.0	849.7	850.0	850.0	850.0	850.0	850.0	850.0
152.5°	868.4	868.8	869.2	869.7	870.1	870.3	870.4	870.6	870.8	870.8	871.3
155°	901.4	901.4	901.4	901.4	901.4	901.3	901.1	900.9	900.8	900.6	901.3
157.5°	929.2	928.9	928.6	928.3	928.0	927.8	927.7	927.7	927.7	927.6	928.2
160°	945.7	945.5	945.3	945.2	945.0	944.8	944.6	944.4	944.3	944.1	944.6
162.5°	960.8	960.4	960.0	959.5	959.0	958.7	958.5	958.4	958.2	958.0	958.9
165°	981.3	980.7	980.2	979.7	979.1	978.7	978.3	978.0	977.6	977.3	978.3
167.5°	997.0	996.2	995.5	994.7	994.0	993.6	993.6	993.7	993.7	993.8	994.8
170°	1005.8	1004.9	1004.0	1003.1	1002.3	1001.9	1002.1	1002.3	1002.4	1002.6	1003.7
172.5°	1012.1	1011.4	1010.7	1009.9	1009.2	1008.8	1008.8	1008.8	1008.9	1008.9	1010.1
175°	1020.8	1019.9	1019.1	1018.2	1017.3	1016.8	1016.6	1016.4	1016.2	1016.1	1017.3
177.5°	1023.7	1022.9	1022.2	1021.5	1020.8	1020.5	1020.5	1020.5	1020.5	1020.5	1021.4
180°	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1051.6	1051.6	1051.6	1051.6	1051.6	1051.6	1051.6	1051.6
2.5°	1047.8	1049.3	1050.8	1051.5	1051.4	1051.2	1051.1	1050.9
5°	1042.2	1044.3	1046.3	1047.2	1046.8	1046.5	1046.1	1045.7
7.5°	1030.6	1032.3	1033.9	1034.6	1034.4	1034.2	1034.0	1033.7
10°	1020.9	1022.4	1023.9	1024.5	1024.1	1023.7	1023.3	1022.9
12.5°	1009.1	1010.7	1012.3	1012.9	1012.4	1011.9	1011.3	1010.8
15°	986.4	987.5	988.6	989.0	988.4	987.9	987.3	986.7
17.5°	960.7	961.4	962.1	962.3	961.9	961.5	961.2	960.8
20°	941.5	942.1	942.6	942.7	942.3	942.0	941.6	941.2
22.5°	921.5	922.5	923.5	923.7	923.0	922.3	921.6	921.0
25°	888.5	888.7	888.9	888.6	887.9	887.1	886.4	885.6
27.5°	851.5	851.0	850.6	849.9	849.0	848.0	847.1	846.1
30°	825.9	825.2	824.4	823.6	822.7	821.7	820.8	819.9
32.5°	800.0	799.2	798.3	797.3	796.4	795.4	794.5	793.6
35°	759.1	757.8	756.5	755.3	754.4	753.5	752.6	751.6
37.5°	716.2	714.8	713.4	712.1	710.8	709.6	708.4	707.1
40°	686.3	684.5	682.6	681.2	680.2	679.4	678.4	677.5
42.5°	657.4	655.3	653.1	651.7	651.1	650.5	649.8	649.2
45°	612.7	610.6	608.6	607.3	606.7	606.1	605.5	605.0
47.5°	569.3	567.0	564.7	562.8	561.4	560.0	558.6	557.1
50°	539.1	536.5	533.9	532.0	530.8	529.7	528.6	527.5
52.5°	508.0	505.6	503.4	501.5	500.1	498.7	497.3	495.8
55°	462.3	460.1	457.8	456.1	455.0	453.9	452.7	451.6
57.5°	416.5	414.4	412.3	410.7	409.6	408.4	407.4	406.3
60°	385.1	383.4	381.7	380.4	379.5	378.5	377.6	376.7
62.5°	354.3	352.8	351.3	350.1	349.1	348.2	347.3	346.3
65°	309.7	307.8	305.9	304.6	303.6	302.7	301.7	300.8
67.5°	263.7	261.9	260.1	259.0	258.8	258.6	258.3	258.0
70°	234.6	233.1	231.6	230.6	230.0	229.5	228.9	228.4
72.5°	205.6	204.4	203.2	202.3	201.7	201.1	200.6	200.0
75°	163.7	162.9	162.2	161.7	161.5	161.3	161.1	161.0
77.5°	123.9	123.7	123.5	123.1	122.6	122.2	121.7	121.2
80°	98.7	98.3	97.9	97.7	97.4	97.3	97.1	96.9
82.5°	76.0	75.8	75.6	75.4	75.3	75.0	74.9	74.6
85°	43.8	43.8	43.8	43.7	43.6	43.3	43.2	42.9
87.5°	20.0	20.3	20.5	20.7	20.7	20.8	20.8	20.9
90°	19.5	20.6	21.6	22.3	22.7	23.1	23.4	23.7
92.5°	32.6	33.2	33.8	34.3	34.5	34.7	34.9	35.1
95°	61.2	61.7	62.2	62.5	62.5	62.5	62.5	62.5
97.5°	96.3	97.0	97.6	97.9	97.9	97.9	97.9	97.9
100°	121.7	122.0	122.4	122.6	122.6	122.6	122.6	122.6
102.5°	148.5	149.0	149.5	149.8	150.0	150.1	150.3	150.4
105°	189.3	189.8	190.3	190.8	191.3	191.9	192.4	192.9
107.5°	233.3	233.8	234.2	234.5	234.5	234.4	234.4	234.3
110°	262.6	262.2	261.9	262.0	262.5	263.0	263.6	264.1



TEST NUMBER: P332614-927

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	294.1	294.1	294.1	294.1	294.1	294.2	294.4	294.5
115°	342.8	342.6	342.5	342.3	342.1	341.9	341.7	341.6
117.5°	389.6	389.0	388.4	387.9	387.5	387.2	386.8	386.5
120°	421.3	420.4	419.5	419.2	419.6	419.9	420.3	420.6
122.5°	453.4	452.9	452.3	451.6	451.0	450.4	449.7	449.1
125°	500.6	500.3	499.9	499.6	499.2	498.8	498.5	498.1
127.5°	545.7	545.3	544.9	544.6	544.4	544.1	543.8	543.5
130°	577.3	576.9	576.6	576.1	575.4	574.6	573.9	573.2
132.5°	607.0	606.7	606.3	606.0	605.7	605.5	605.1	604.9
135°	651.6	651.3	650.9	650.5	650.0	649.4	648.9	648.4
137.5°	694.7	694.3	693.9	693.6	693.8	693.9	694.0	694.1
140°	723.2	722.9	722.8	722.6	722.5	722.2	722.1	721.9
142.5°	750.0	750.0	750.0	749.9	749.9	749.8	749.8	749.7
145°	790.4	790.2	790.0	789.6	789.1	788.6	788.1	787.5
147.5°	827.0	826.8	826.6	826.5	826.3	826.2	826.0	825.9
150°	850.0	850.0	850.0	849.9	849.8	849.5	849.4	849.2
152.5°	871.7	872.1	872.6	872.6	872.1	871.6	871.2	870.7
155°	902.1	902.7	903.4	903.4	902.7	902.1	901.3	900.6
157.5°	928.7	929.2	929.8	929.7	929.2	928.5	928.0	927.3
160°	945.2	945.7	946.2	946.0	945.2	944.3	943.4	942.5
162.5°	959.9	960.8	961.8	961.9	961.0	960.1	959.3	958.3
165°	979.5	980.5	981.5	981.7	981.0	980.3	979.6	978.9
167.5°	995.9	997.0	998.0	998.0	996.9	995.8	994.7	993.6
170°	1004.7	1005.8	1006.9	1006.7	1005.5	1004.2	1003.1	1001.8
172.5°	1011.3	1012.5	1013.8	1013.7	1012.5	1011.2	1010.0	1008.8
175°	1018.5	1019.8	1021.0	1021.0	1019.8	1018.5	1017.3	1016.1
177.5°	1022.5	1023.4	1024.5	1024.4	1023.3	1022.1	1021.0	1019.9
180°	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4	1022.4

(END OF REPORT)