

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: P332619-927

Luminaire Tested: **SA4XXDIP-C795D1205U927-4F0-1E-UDD-D**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332619-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C795D1205U927-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 795 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6375.5 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

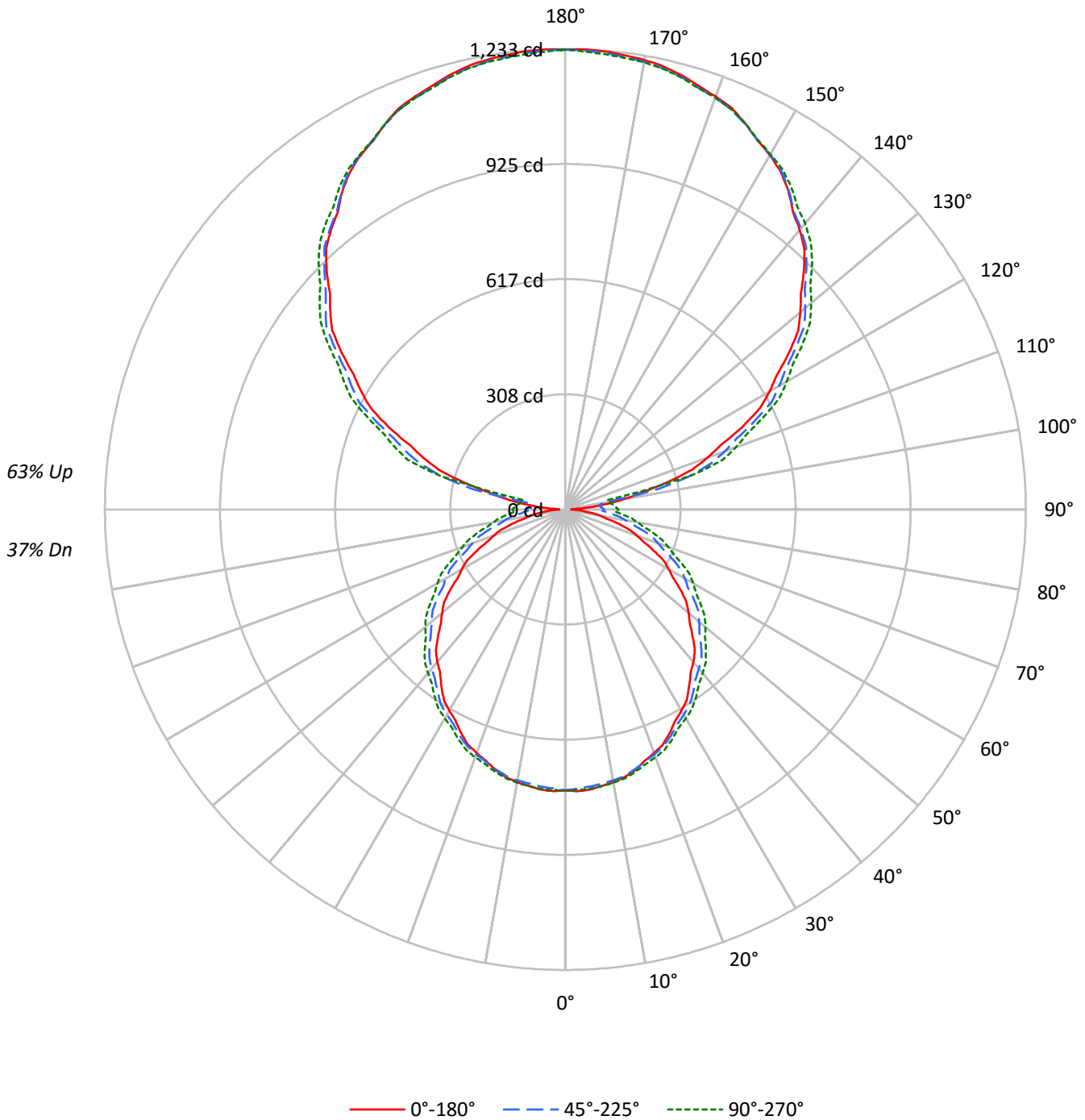
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P332619-927

CATALOG NUMBER: SA4XXDIP-C795D1205U927-4F0-1E-UDD-D

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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44	37
1	94	90	85	82	85	81	78	75	66	63	61	51	50	48	38	37	36	30
2	85	78	71	66	77	71	65	61	57	53	50	45	42	39	33	31	30	24
3	78	68	61	55	70	62	55	50	50	45	41	39	36	33	29	27	25	20
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15
6	60	48	39	34	54	43	36	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	29	50	39	32	27	32	27	23	25	21	18	19	16	14	11
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	17	15	13	10
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	16	13	11	9
10	44	32	25	20	40	29	23	19	24	19	16	19	16	13	15	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6075	6075	6075
5°	6093	5937	5954
10°	6056	5839	5835
15°	6002	5727	5695
20°	5920	5603	5561
25°	5828	5464	5411
30°	5728	5326	5258
35°	5615	5184	5124
40°	5525	5049	4984
45°	5391	4925	4864
50°	5277	4781	4738
55°	5160	4647	4588
60°	4976	4475	4453
65°	4776	4290	4285
70°	4532	4078	4091
75°	4196	3847	3915
80°	3817	3624	3742
85°	3344	3427	3643



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.3	1.1
10°-20°	204.2	3.2
20°-30°	308.7	4.8
30°-40°	373.5	5.9
40°-50°	394.9	6.2
50°-60°	371.6	5.8
60°-70°	308.3	4.8
70°-80°	216.6	3.4
80°-90°	126.0	2.0
90°-100°	114.8	1.8
100°-110°	322.2	5.1
110°-120°	549.5	8.6
120°-130°	672.1	10.5
130°-140°	706.1	11.1
140°-150°	653.8	10.3
150°-160°	525.9	8.2
160°-170°	339.2	5.3
170°-180°	116.9	1.8
0°-30°	584.1	9.2
0°-40°	957.6	15.0
0°-60°	1724.1	27.0
0°-90°	2375.0	37.3
90°-120°	986.5	15.5
90°-150°	3018.6	47.3
90°-180°	4000.0	62.7
0°-180°	6375.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	752	752	752	752	752	
5°	753	751	745	751	751	71
15°	722	723	720	728	727	203
25°	661	666	668	677	678	304
35°	578	588	597	608	611	362
45°	482	498	514	528	532	372
55°	378	396	420	437	442	336
65°	261	288	317	337	345	259
75°	145	176	212	234	243	154
85°	45	80	118	142	152	48
90°	16	60	104	132	142	11
95°	62	60	94	121	130	74
105°	285	308	343	369	346	298
115°	522	534	559	578	585	514
125°	731	734	753	771	777	652
135°	904	903	912	927	935	696
145°	1041	1043	1043	1049	1054	650
155°	1140	1141	1139	1142	1140	526
165°	1203	1199	1198	1205	1198	340
175°	1231	1226	1226	1233	1223	117
180°	1231	1231	1231	1231	1231	



TEST NUMBER: P332619-927

CATALOG NUMBER: SA4XXDIP-C795D1205U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5
2.5°	755.2	754.7	754.2	753.8	753.4	752.6	751.3	750.1	748.9	747.7	748.8
5°	753.3	752.7	752.2	751.6	751.1	750.1	748.8	747.5	746.2	744.9	746.4
7.5°	746.9	746.6	746.2	745.9	745.5	744.8	743.8	742.7	741.6	740.5	742.2
10°	741.5	741.3	741.2	740.9	740.8	740.2	739.3	738.3	737.4	736.4	738.2
12.5°	734.1	734.0	734.0	734.0	734.0	733.6	733.0	732.3	731.7	731.0	732.6
15°	722.2	722.3	722.5	722.7	722.9	722.7	722.2	721.6	721.0	720.4	722.2
17.5°	705.8	706.3	706.9	707.5	708.1	708.2	708.1	708.1	707.9	707.8	709.6
20°	694.3	694.9	695.5	696.0	696.6	697.0	697.1	697.3	697.5	697.7	699.6
22.5°	681.5	682.2	682.9	683.7	684.4	684.9	685.2	685.6	685.9	686.3	688.1
25°	660.6	661.7	662.9	664.0	665.1	666.0	666.5	667.1	667.7	668.2	670.3
27.5°	637.4	639.0	640.6	642.3	644.0	645.2	646.1	646.9	647.8	648.6	650.5
30°	621.9	623.4	624.9	626.4	627.9	629.2	630.6	631.8	633.2	634.5	636.5
32.5°	605.0	606.8	608.6	610.4	612.2	613.8	615.3	616.7	618.2	619.6	622.0
35°	578.1	580.3	582.6	584.8	587.0	589.1	591.0	592.9	594.7	596.6	599.2
37.5°	550.9	553.5	556.1	558.6	561.3	563.7	566.0	568.3	570.7	573.0	575.7
40°	533.4	535.8	538.2	540.7	543.1	545.7	548.3	550.9	553.5	556.1	559.0
42.5°	513.2	515.9	518.6	521.3	524.1	527.0	530.0	533.1	536.2	539.2	542.4
45°	482.0	485.5	489.1	492.7	496.2	499.8	503.4	506.9	510.4	514.0	517.2
47.5°	452.2	455.8	459.5	463.2	466.8	470.7	474.8	479.0	483.1	487.2	490.5
50°	430.6	434.7	438.8	442.9	447.0	451.1	455.3	459.4	463.5	467.6	471.4
52.5°	409.0	413.1	417.2	421.4	425.5	429.9	434.6	439.3	444.1	448.8	452.5
55°	377.5	381.4	385.4	389.3	393.2	398.0	403.6	409.2	414.9	420.5	424.2
57.5°	342.3	347.1	352.0	356.9	361.7	366.9	372.6	378.1	383.7	389.3	393.7
60°	319.3	324.2	329.1	334.0	338.8	344.4	350.5	356.7	362.9	369.1	373.4
62.5°	297.1	302.5	307.8	313.1	318.4	324.2	330.3	336.5	342.7	348.9	353.2
65°	261.2	267.2	273.2	279.2	285.2	291.4	297.7	304.1	310.5	316.8	321.5
67.5°	226.6	233.1	239.4	245.7	252.2	258.7	265.5	272.4	279.2	286.0	290.7
70°	203.0	209.5	215.8	222.2	228.5	235.3	242.4	249.5	256.6	263.7	268.8
72.5°	180.1	186.6	193.2	199.7	206.2	213.3	220.9	228.4	236.0	243.5	248.4
75°	145.0	151.9	158.8	165.7	172.6	180.1	187.9	195.7	203.7	211.5	216.7
77.5°	112.1	119.4	126.7	134.1	141.4	149.2	157.5	165.7	174.0	182.2	187.5
80°	91.8	99.3	106.8	114.3	121.8	129.7	137.9	146.2	154.4	162.6	168.3
82.5°	71.6	79.4	87.2	95.0	102.7	110.8	119.1	127.3	135.5	143.8	149.5
85°	44.7	52.5	60.4	68.3	76.1	84.3	92.7	101.1	109.6	118.0	123.6
87.5°	25.5	33.6	41.7	49.7	57.8	66.1	74.7	83.3	91.7	100.3	105.9
90°	16.2	26.0	35.7	45.5	55.2	64.9	74.6	84.3	94.0	103.7	110.4
92.5°	24.4	31.3	38.1	45.0	51.9	60.1	69.8	79.5	89.2	98.9	105.4
95°	61.6	60.8	60.0	59.3	58.5	62.0	69.9	77.8	85.7	93.6	99.8
97.5°	117.5	127.1	136.7	146.4	156.1	153.3	138.1	122.9	107.6	92.4	97.4
100°	160.3	168.8	177.3	185.8	194.4	188.2	167.3	146.4	125.5	104.6	106.2
102.5°	208.8	215.8	222.8	229.7	236.7	241.9	245.4	248.9	252.3	255.8	223.2
105°	284.6	289.6	294.6	299.6	304.5	311.0	318.9	326.9	334.9	342.8	349.4
107.5°	356.5	360.1	363.8	367.5	371.2	377.0	384.9	392.9	400.8	408.8	414.3
110°	404.4	407.7	410.8	414.1	417.3	422.9	430.6	438.4	446.2	454.0	458.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	450.8	454.2	457.7	461.1	464.5	469.7	476.5	483.3	490.1	497.0	501.1
115°	522.4	524.7	527.0	529.3	531.6	535.6	541.4	547.2	552.9	558.7	563.3
117.5°	587.6	589.4	591.2	593.0	594.8	598.8	604.8	610.9	616.9	622.9	626.7
120°	631.1	632.5	633.8	635.2	636.6	639.8	645.1	650.3	655.5	660.8	665.0
122.5°	672.3	672.9	673.5	674.1	674.7	677.7	683.1	688.6	694.0	699.4	703.4
125°	730.6	731.2	731.8	732.5	733.1	735.5	739.8	744.1	748.4	752.6	756.8
127.5°	786.3	786.4	786.4	786.4	786.4	788.7	793.2	797.7	802.3	806.8	810.1
130°	821.7	821.8	821.8	821.8	821.8	823.6	827.3	830.8	834.5	838.0	841.6
132.5°	854.9	855.1	855.2	855.4	855.6	857.3	860.5	863.6	866.8	870.0	873.4
135°	903.7	903.6	903.3	903.2	902.9	903.9	906.0	908.2	910.3	912.4	915.8
137.5°	947.8	947.6	947.5	947.5	947.4	948.1	949.6	951.1	952.7	954.2	957.4
140°	976.4	976.7	976.9	977.2	977.4	977.8	978.3	979.0	979.5	980.2	983.2
142.5°	1001.6	1002.3	1003.0	1003.7	1004.3	1004.8	1004.9	1005.0	1005.2	1005.3	1007.9
145°	1041.0	1041.4	1041.8	1042.3	1042.7	1042.9	1042.9	1042.9	1042.9	1042.9	1044.3
147.5°	1072.5	1073.4	1074.4	1075.3	1076.3	1076.7	1076.5	1076.3	1076.0	1075.9	1076.2
150°	1095.3	1095.9	1096.5	1097.2	1097.8	1098.0	1097.8	1097.6	1097.4	1097.2	1097.2
152.5°	1113.7	1114.4	1115.0	1115.6	1116.3	1116.3	1116.0	1115.6	1115.2	1114.9	1115.2
155°	1140.5	1140.7	1140.9	1141.1	1141.3	1141.1	1140.5	1139.9	1139.2	1138.6	1139.5
157.5°	1163.1	1163.0	1162.8	1162.8	1162.6	1162.2	1161.5	1160.9	1160.2	1159.4	1160.5
160°	1176.4	1175.8	1175.1	1174.6	1173.9	1173.5	1173.3	1173.1	1172.9	1172.7	1173.9
162.5°	1188.1	1187.4	1186.6	1185.8	1185.0	1184.6	1184.3	1184.2	1183.9	1183.8	1184.9
165°	1203.1	1202.1	1201.0	1200.0	1199.0	1198.5	1198.5	1198.5	1198.5	1198.5	1200.1
167.5°	1214.8	1213.8	1212.8	1211.6	1210.6	1210.0	1209.9	1209.7	1209.7	1209.5	1211.3
170°	1221.5	1220.3	1219.0	1217.8	1216.6	1216.1	1216.2	1216.5	1216.6	1216.9	1218.5
172.5°	1225.9	1224.6	1223.4	1222.2	1221.0	1220.4	1220.7	1220.9	1221.1	1221.3	1222.9
175°	1230.7	1229.5	1228.2	1227.0	1225.7	1225.3	1225.4	1225.7	1225.9	1226.1	1227.9
177.5°	1232.9	1231.8	1230.6	1229.5	1228.3	1227.9	1228.2	1228.5	1228.9	1229.2	1230.5
180°	1230.7	1230.7	1230.7	1230.7	1230.7	1230.7	1230.7	1230.7	1230.7	1230.7	1230.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	752.5	752.5	752.5	752.5	752.5	752.5	752.5	752.5
2.5°	749.8	750.9	751.9	752.4	752.3	752.1	751.9	751.8
5°	747.9	749.4	750.8	751.5	751.3	751.1	751.0	750.8
7.5°	743.9	745.5	747.3	748.0	747.8	747.6	747.4	747.3
10°	739.8	741.5	743.2	743.9	743.8	743.5	743.4	743.2
12.5°	734.1	735.7	737.2	737.9	737.9	737.8	737.8	737.8
15°	723.8	725.5	727.1	727.9	727.8	727.5	727.4	727.1
17.5°	711.2	713.0	714.7	715.5	715.3	715.2	715.0	714.9
20°	701.4	703.3	705.2	706.2	706.2	706.2	706.2	706.2
22.5°	690.0	691.8	693.7	694.8	695.1	695.4	695.7	696.0
25°	672.3	674.4	676.4	677.6	677.7	677.9	678.1	678.3
27.5°	652.4	654.3	656.3	657.4	657.6	657.8	658.1	658.2
30°	638.6	640.6	642.7	644.0	644.4	644.7	645.1	645.5
32.5°	624.4	626.8	629.1	630.5	630.8	631.2	631.6	632.0
35°	601.8	604.4	607.0	608.6	609.2	609.7	610.4	610.9
37.5°	578.3	581.0	583.6	585.3	585.8	586.5	587.0	587.6
40°	561.7	564.6	567.4	569.1	569.9	570.6	571.4	572.1
42.5°	545.5	548.6	551.7	553.6	554.1	554.8	555.4	556.0
45°	520.4	523.6	526.7	528.8	529.7	530.7	531.6	532.5
47.5°	493.8	497.1	500.4	502.6	503.7	504.9	506.0	507.1
50°	475.2	478.9	482.6	485.1	486.2	487.4	488.5	489.6
52.5°	456.3	460.0	463.7	466.2	467.3	468.4	469.5	470.7
55°	427.9	431.7	435.5	437.9	439.0	440.1	441.2	442.4
57.5°	398.2	402.7	407.1	409.9	410.9	411.9	413.0	414.1
60°	377.7	382.0	386.3	389.2	390.7	392.2	393.7	395.2
62.5°	357.4	361.8	366.1	369.0	370.5	372.0	373.4	374.9
65°	326.2	330.9	335.6	338.7	340.2	341.7	343.1	344.6
67.5°	295.5	300.2	305.0	308.1	309.6	311.0	312.5	313.9
70°	273.9	278.9	284.0	287.2	288.4	289.8	291.0	292.4
72.5°	253.3	258.3	263.2	266.3	267.8	269.3	270.7	272.2
75°	222.0	227.2	232.5	235.9	237.7	239.3	241.0	242.6
77.5°	192.8	198.1	203.4	207.0	208.8	210.6	212.4	214.2
80°	173.9	179.5	185.1	188.6	190.1	191.6	193.1	194.6
82.5°	155.3	161.1	166.8	170.6	172.1	173.8	175.5	177.1
85°	129.2	134.8	140.5	144.2	146.1	147.9	149.8	151.7
87.5°	111.6	117.3	122.9	126.7	128.4	130.2	131.9	133.6
90°	117.0	123.7	130.3	134.6	136.5	138.4	140.3	142.2
92.5°	111.9	118.4	124.9	129.0	130.6	132.1	133.7	135.3
95°	106.2	112.4	118.7	122.8	124.7	126.6	128.4	130.3
97.5°	102.4	107.5	112.5	115.9	117.7	119.5	121.4	123.2
100°	107.7	109.2	110.8	112.4	113.9	115.4	116.9	118.4
102.5°	190.6	158.0	125.4	109.8	111.3	112.8	114.3	115.8
105°	355.8	362.3	368.9	369.2	363.4	357.5	351.6	345.8
107.5°	419.8	425.3	430.8	434.7	436.7	438.9	441.0	443.1
110°	463.4	468.1	472.9	476.3	478.3	480.5	482.6	484.7



TEST NUMBER: P332619-927

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	505.1	509.2	513.3	516.4	518.7	521.0	523.3	525.5
115°	567.8	572.4	576.9	579.8	581.1	582.4	583.7	585.0
117.5°	630.6	634.4	638.2	640.8	642.2	643.6	645.0	646.4
120°	669.1	673.3	677.4	680.0	681.1	682.2	683.3	684.4
122.5°	707.3	711.4	715.3	717.8	718.7	719.7	720.6	721.6
125°	761.0	765.1	769.3	772.1	773.4	774.7	776.0	777.4
127.5°	813.3	816.6	819.8	822.0	823.1	824.2	825.3	826.4
130°	845.3	848.8	852.4	854.7	855.9	857.0	858.1	859.2
132.5°	876.9	880.3	883.7	885.9	886.8	887.8	888.7	889.7
135°	919.2	922.7	926.1	928.5	930.0	931.6	933.1	934.6
137.5°	960.6	963.8	966.9	968.9	969.7	970.6	971.4	972.2
140°	986.3	989.3	992.4	994.4	995.6	996.7	997.8	999.0
142.5°	1010.5	1013.0	1015.7	1017.4	1018.2	1019.0	1019.9	1020.6
145°	1045.5	1046.9	1048.2	1049.5	1050.6	1051.8	1053.0	1054.1
147.5°	1076.5	1076.8	1077.1	1077.7	1078.5	1079.3	1080.1	1080.9
150°	1097.2	1097.2	1097.2	1097.3	1097.5	1097.7	1098.0	1098.1
152.5°	1115.6	1115.9	1116.2	1116.3	1116.2	1116.0	1115.9	1115.8
155°	1140.3	1141.1	1141.9	1142.0	1141.4	1140.7	1140.2	1139.6
157.5°	1161.6	1162.6	1163.7	1163.7	1162.6	1161.6	1160.5	1159.4
160°	1175.1	1176.4	1177.6	1177.6	1176.4	1175.1	1173.9	1172.7
162.5°	1186.2	1187.4	1188.7	1188.6	1187.2	1185.8	1184.4	1183.0
165°	1201.7	1203.4	1205.0	1204.9	1203.1	1201.2	1199.4	1197.5
167.5°	1213.1	1214.9	1216.7	1216.6	1214.6	1212.5	1210.5	1208.4
170°	1220.1	1221.8	1223.4	1223.2	1221.1	1219.1	1217.1	1215.0
172.5°	1224.6	1226.2	1227.8	1227.6	1225.3	1223.1	1220.9	1218.7
175°	1229.8	1231.6	1233.4	1233.1	1230.7	1228.2	1225.7	1223.3
177.5°	1231.8	1233.1	1234.5	1234.1	1232.2	1230.2	1228.2	1226.3
180°	1230.7	1230.7	1230.7	1230.7	1230.7	1230.7	1230.7	1230.7

(END OF REPORT)