

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: P333282-927

Luminaire Tested: **S125DIP-S1090D1035U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333282-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1090D1035U927-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6322.2 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

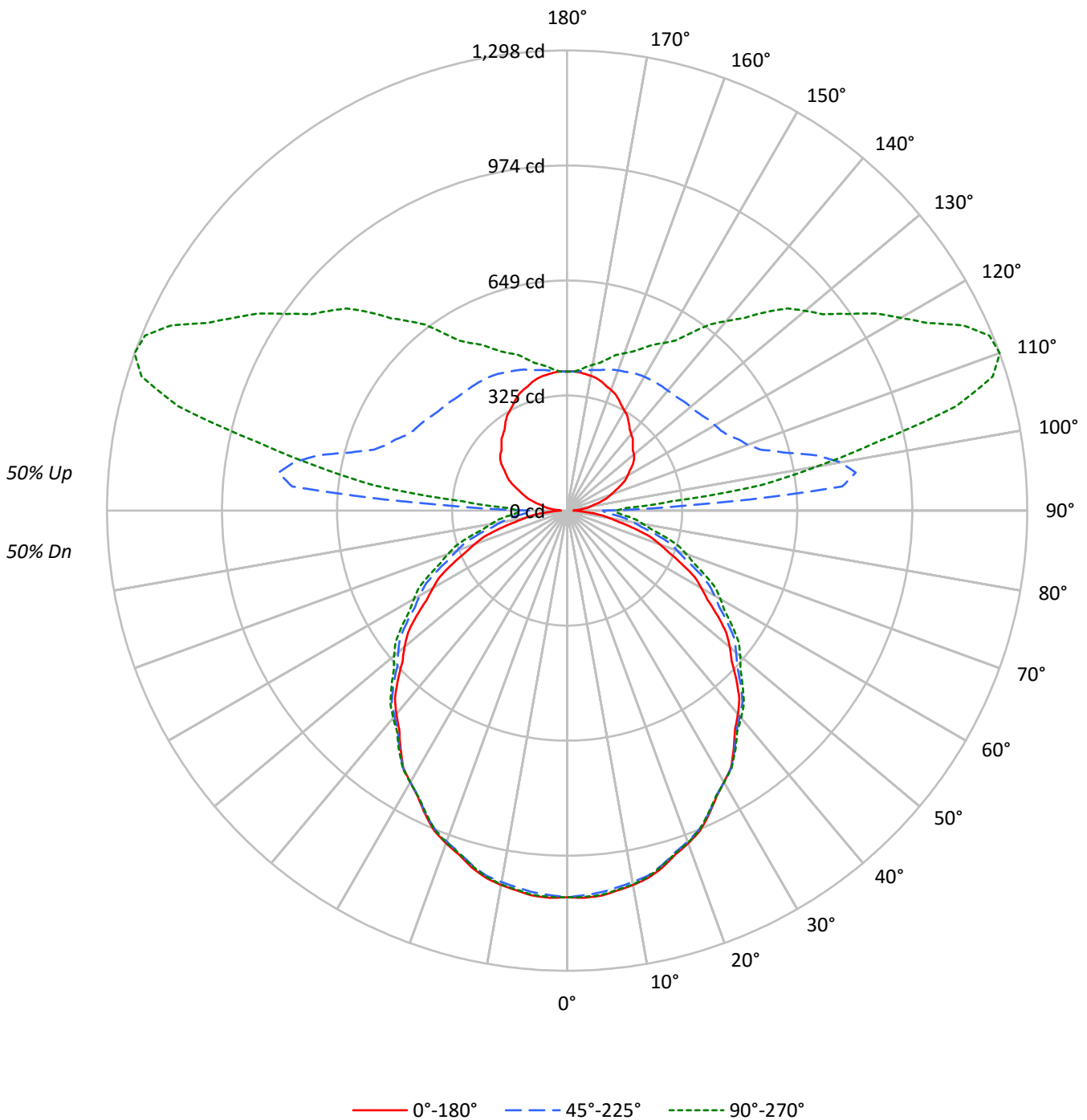
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	92	88	84	89	85	82	78	72	69	67	60	58	56	49	47	46	41
2	88	80	74	68	81	74	69	64	63	58	55	52	49	46	42	40	38	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	37	35	32	28
4	73	62	54	48	67	57	50	45	49	43	39	41	36	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	33	36	32	29	30	27	24	21
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21	18
7	57	45	36	31	52	41	34	29	35	30	25	30	25	22	25	21	19	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	27	23	30	24	20	25	21	18	21	17	15	13
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7045	7045	7045
5°	7059	6915	6937
10°	7008	6791	6781
15°	6926	6644	6583
20°	6814	6461	6385
25°	6679	6266	6141
30°	6517	6050	5920
35°	6366	5853	5717
40°	6211	5644	5513
45°	6037	5466	5331
50°	5872	5272	5172
55°	5671	5090	4983
60°	5453	4881	4791
65°	5225	4664	4575
70°	4967	4366	4353
75°	4557	4080	4079
80°	4018	3734	3783
85°	3519	3499	3689



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.1	1.6
10°-20°	292.8	4.6
20°-30°	435.5	6.9
30°-40°	515.8	8.2
40°-50°	533.3	8.4
50°-60°	491.3	7.8
60°-70°	397.1	6.3
70°-80°	265.9	4.2
80°-90°	140.1	2.2
90°-100°	361.7	5.7
100°-110°	668.3	10.6
110°-120°	611.8	9.7
120°-130°	486.6	7.7
130°-140°	382.5	6.1
140°-150°	283.4	4.5
150°-160°	198.2	3.1
160°-170°	116.8	1.8
170°-180°	38.0	0.6
0°-30°	831.4	13.2
0°-40°	1347.2	21.3
0°-60°	2371.8	37.5
0°-90°	3174.9	50.2
90°-120°	1641.8	26.0
90°-150°	2794.3	44.2
90°-180°	3147.0	49.8
0°-180°	6322.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1091	1088	1081	1089	1089	103
15°	1042	1042	1035	1041	1037	293
25°	946	949	943	947	942	435
35°	819	826	824	826	827	512
45°	675	686	692	699	700	521
55°	519	536	553	564	569	463
65°	357	382	407	423	428	354
75°	197	225	259	279	286	209
85°	59	94	132	154	164	63
90°	18	59	100	128	138	13
95°	40	119	779	419	295	39
105°	99	153	632	1208	1136	104
115°	166	208	502	1052	1235	164
125°	226	264	466	830	967	200
135°	262	314	447	684	792	203
145°	303	346	440	553	612	190
155°	345	371	429	484	505	159
165°	376	387	411	436	443	106
175°	391	391	395	399	398	37
180°	392	392	392	392	392	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1093.4	1093.0	1092.6	1092.3	1091.9	1091.0	1089.6	1088.3	1087.0	1085.7	1087.0
5°	1090.8	1090.4	1089.9	1089.4	1088.9	1087.8	1086.2	1084.5	1082.8	1081.2	1083.1
7.5°	1081.2	1081.0	1080.8	1080.6	1080.5	1079.5	1077.8	1076.0	1074.4	1072.6	1074.3
10°	1072.6	1072.6	1072.6	1072.6	1072.6	1071.7	1069.8	1067.9	1066.0	1064.1	1065.7
12.5°	1060.7	1060.8	1061.0	1061.2	1061.4	1060.7	1059.2	1057.7	1056.2	1054.6	1056.0
15°	1041.6	1041.9	1042.1	1042.4	1042.6	1041.9	1040.2	1038.6	1036.9	1035.2	1036.6
17.5°	1016.8	1017.2	1017.7	1018.2	1018.7	1018.1	1016.4	1014.8	1013.1	1011.5	1012.6
20°	998.9	999.3	999.8	1000.3	1000.8	1000.1	998.5	996.8	995.1	993.5	994.2
22.5°	978.3	979.1	980.0	980.9	981.8	981.2	979.4	977.6	975.7	973.8	974.7
25°	946.4	947.1	947.8	948.6	949.3	949.0	947.5	946.1	944.7	943.3	944.2
27.5°	910.9	912.0	913.0	914.1	915.1	914.8	913.2	911.6	910.0	908.4	909.0
30°	884.4	885.8	887.2	888.7	890.1	890.1	888.7	887.2	885.8	884.4	884.9
32.5°	860.5	861.7	862.9	864.2	865.4	865.5	864.4	863.4	862.4	861.3	861.8
35°	819.2	820.9	822.5	824.2	825.9	826.3	825.6	824.9	824.2	823.5	824.2
37.5°	777.9	779.4	780.9	782.4	783.9	784.7	784.4	784.2	783.9	783.7	784.7
40°	749.6	751.5	753.4	755.3	757.2	758.1	757.9	757.6	757.4	757.2	758.1
42.5°	718.8	721.4	723.8	726.3	728.7	730.2	730.8	731.3	731.8	732.4	733.5
45°	674.8	677.4	680.0	682.6	685.2	687.1	688.3	689.5	690.7	691.9	693.6
47.5°	629.7	632.1	634.5	636.9	639.4	641.6	643.6	645.7	647.8	649.7	652.2
50°	598.9	601.5	604.1	606.7	609.3	612.0	614.6	617.2	619.8	622.4	625.0
52.5°	566.3	569.6	572.7	575.9	579.1	582.3	585.5	588.7	591.8	595.0	597.9
55°	518.6	522.4	526.2	530.0	533.9	537.7	541.5	545.3	549.1	552.9	555.5
57.5°	469.9	474.4	479.0	483.6	488.1	492.7	497.0	501.4	505.7	510.1	513.1
60°	437.4	442.1	446.9	451.6	456.4	461.1	465.9	470.6	475.4	480.1	483.7
62.5°	405.8	410.5	415.3	420.0	424.8	429.7	434.8	440.0	445.1	450.2	454.2
65°	357.2	362.7	368.1	373.6	379.1	384.6	390.3	396.0	401.7	407.4	411.0
67.5°	311.4	316.7	321.9	327.3	332.5	338.0	343.9	349.7	355.5	361.2	365.6
70°	278.1	283.5	289.0	294.5	299.9	305.7	311.9	318.1	324.2	330.4	334.9
72.5°	245.6	251.2	256.8	262.5	268.2	274.3	281.1	287.9	294.6	301.3	306.3
75°	196.8	203.0	209.1	215.3	221.5	228.4	236.0	243.6	251.2	258.8	263.6
77.5°	150.0	157.1	164.2	171.3	178.5	185.7	193.0	200.3	207.6	214.9	220.1
80°	120.8	127.9	135.1	142.2	149.3	156.9	165.0	173.1	181.2	189.3	194.5
82.5°	94.3	101.8	109.3	116.8	124.4	132.2	140.5	148.8	157.1	165.3	170.4
85°	58.8	66.6	74.5	82.3	90.2	98.2	106.5	114.9	123.2	131.5	136.7
87.5°	33.5	41.3	49.2	57.1	65.0	73.2	81.4	89.8	98.1	106.5	112.1
90°	17.9	26.3	35.5	44.7	53.9	63.3	72.2	81.8	90.7	100.4	106.6
92.5°	25.0	34.1	47.8	64.6	85.3	116.1	167.5	248.2	335.1	339.2	296.0
95°	40.0	47.0	59.5	74.4	97.9	140.6	233.4	415.4	641.7	778.7	769.0
97.5°	55.9	62.5	72.5	86.7	107.9	140.2	204.0	339.3	575.4	821.0	945.2
100°	67.1	73.7	81.8	95.5	115.6	145.6	199.1	309.4	516.3	782.5	985.2
102.5°	79.5	85.1	92.3	106.2	124.5	153.7	201.9	295.6	471.3	719.0	955.1
105°	99.0	102.8	110.5	122.2	138.7	166.4	208.3	285.7	424.9	632.2	863.9
107.5°	118.0	122.8	129.8	139.5	155.9	180.9	221.3	288.4	403.1	571.5	772.1
110°	131.7	136.1	142.1	152.1	166.8	192.1	231.2	292.4	394.7	542.2	719.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	146.2	150.0	154.9	164.3	178.4	202.7	240.3	298.2	391.5	523.6	678.7
115°	166.2	169.4	173.4	182.2	195.7	219.4	254.8	306.9	389.0	501.9	633.6
117.5°	184.1	187.5	191.2	199.4	213.9	236.5	270.1	317.7	389.4	488.8	604.3
120°	196.7	199.8	203.7	211.5	225.7	248.5	281.7	325.1	391.5	481.6	587.6
122.5°	209.1	211.2	214.1	221.6	236.5	259.1	292.1	333.4	392.7	475.0	572.6
125°	225.7	227.0	230.8	237.7	252.5	275.3	306.1	344.8	395.5	465.9	551.9
127.5°	237.7	239.9	244.7	253.5	269.3	291.6	320.7	355.8	399.8	459.1	532.5
130°	246.0	248.1	254.2	264.3	280.6	302.7	330.6	363.9	402.9	455.2	520.2
132.5°	251.4	254.4	262.0	273.5	290.7	312.4	339.5	370.3	405.9	451.8	509.2
135°	261.5	264.4	273.7	286.1	302.5	324.6	350.7	378.5	409.4	446.6	494.8
137.5°	274.3	276.5	285.1	297.6	313.7	336.0	359.1	384.9	413.5	443.8	482.6
140°	281.0	283.4	292.9	305.5	320.6	342.1	365.2	389.2	414.7	441.8	476.1
142.5°	289.9	291.4	300.1	312.5	326.8	346.7	368.5	391.0	415.1	440.8	470.8
145°	303.2	304.5	312.2	323.0	337.0	355.1	375.7	395.4	416.8	439.7	464.6
147.5°	316.0	317.0	323.8	334.1	346.3	362.3	380.4	398.2	417.6	437.6	458.9
150°	324.2	325.8	331.4	341.7	352.7	366.1	383.6	400.1	417.6	435.7	454.7
152.5°	333.1	334.1	339.0	347.9	358.4	370.6	386.7	401.4	416.9	433.2	450.3
155°	344.8	344.8	349.5	357.4	365.4	376.4	389.8	402.5	415.2	428.6	442.8
157.5°	355.2	355.1	358.9	365.7	372.6	381.0	392.5	403.3	413.1	423.9	435.9
160°	362.2	361.4	364.6	370.1	376.4	383.6	393.8	403.3	411.2	420.7	430.2
162.5°	367.9	367.1	370.3	375.2	380.2	386.1	395.1	402.7	409.3	416.9	425.2
165°	376.4	374.9	377.2	381.2	384.4	389.1	395.4	401.7	406.5	411.2	417.6
167.5°	382.1	381.4	382.8	385.0	387.2	390.1	395.4	399.8	402.0	405.7	410.1
170°	386.0	385.2	386.0	387.5	389.1	391.4	395.4	398.5	400.1	402.5	405.7
172.5°	388.5	387.1	387.9	389.4	390.3	391.4	394.7	397.3	397.6	398.7	401.2
175°	391.4	389.8	390.6	391.4	391.4	391.4	393.8	395.4	394.6	394.6	395.4
177.5°	392.8	391.6	391.6	392.2	391.6	391.6	392.8	393.5	392.2	392.2	392.8
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1088.3	1089.6	1091.0	1091.5	1091.4	1091.2	1091.0	1090.8
5°	1085.0	1086.9	1088.8	1089.6	1089.4	1089.2	1088.9	1088.7
7.5°	1075.9	1077.6	1079.3	1080.0	1079.7	1079.5	1079.3	1079.0
10°	1067.4	1069.1	1070.7	1071.4	1071.2	1071.0	1070.7	1070.5
12.5°	1057.2	1058.5	1059.8	1060.1	1059.5	1058.9	1058.3	1057.6
15°	1038.1	1039.5	1040.9	1041.2	1040.2	1039.3	1038.3	1037.4
17.5°	1013.7	1014.7	1015.8	1016.1	1015.5	1014.9	1014.4	1013.8
20°	994.9	995.6	996.3	996.7	996.7	996.7	996.7	996.7
22.5°	975.7	976.5	977.4	977.6	977.0	976.4	975.9	975.3
25°	945.2	946.1	947.1	946.9	945.7	944.5	943.3	942.1
27.5°	909.7	910.4	911.0	911.2	910.7	910.3	909.8	909.4
30°	885.3	885.8	886.3	886.5	886.2	886.0	885.7	885.5
32.5°	862.3	862.8	863.2	863.3	863.1	862.8	862.6	862.4
35°	824.9	825.6	826.3	826.6	826.6	826.6	826.6	826.6
37.5°	785.6	786.6	787.5	787.9	787.8	787.7	787.6	787.5
40°	759.1	760.0	761.0	761.7	762.2	762.6	763.1	763.6
42.5°	734.6	735.8	736.9	737.5	737.6	737.7	737.8	737.9
45°	695.2	696.9	698.5	699.5	699.7	700.0	700.2	700.4
47.5°	654.7	657.0	659.5	660.9	661.5	662.0	662.5	663.1
50°	627.6	630.3	632.9	634.5	635.3	636.0	636.7	637.4
52.5°	600.6	603.4	606.3	607.9	608.4	609.0	609.5	610.0
55°	558.1	560.7	563.3	565.1	566.1	567.0	568.0	568.9
57.5°	516.1	519.1	522.1	523.9	524.7	525.4	526.1	526.8
60°	487.3	490.8	494.4	496.5	497.3	498.0	498.7	499.4
62.5°	458.1	462.1	466.0	468.4	469.4	470.2	471.1	472.1
65°	414.5	418.1	421.7	424.0	424.9	425.9	426.8	427.8
67.5°	369.9	374.2	378.6	381.4	382.5	383.8	385.0	386.3
70°	339.5	344.0	348.5	351.5	352.9	354.3	355.8	357.2
72.5°	311.2	316.1	320.9	323.9	325.0	326.0	327.0	328.1
75°	268.3	273.1	277.8	280.7	281.9	283.1	284.3	285.5
77.5°	225.4	230.6	235.8	238.9	239.9	240.8	241.8	242.7
80°	199.7	204.9	210.2	213.3	214.2	215.2	216.1	217.1
82.5°	175.4	180.5	185.4	188.9	190.6	192.3	194.0	195.7
85°	142.0	147.2	152.4	156.0	157.9	159.8	161.7	163.6
87.5°	117.7	123.3	129.0	132.8	134.5	136.2	138.0	139.7
90°	112.9	119.1	125.4	130.6	132.2	133.9	136.3	138.0
92.5°	235.0	201.8	181.9	173.7	165.2	165.0	165.6	166.0
95°	657.1	542.2	450.1	387.1	332.6	310.5	305.9	294.9
97.5°	929.5	850.2	760.4	671.4	624.2	581.5	560.2	551.6
100°	1051.1	1017.4	940.9	861.9	808.7	753.2	725.4	714.2
102.5°	1089.7	1118.4	1084.1	1031.6	974.6	935.6	905.2	897.1
105°	1058.4	1171.5	1211.1	1205.5	1181.9	1157.5	1143.4	1135.5
107.5°	964.0	1113.3	1207.3	1251.7	1266.0	1267.3	1263.5	1258.7
110°	894.4	1049.2	1165.2	1235.5	1272.7	1289.4	1296.6	1298.3



TEST NUMBER: P333282-927

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	838.7	985.7	1102.8	1185.0	1238.7	1266.1	1281.6	1289.0
115°	768.3	895.2	1007.8	1096.9	1160.0	1199.4	1222.9	1234.6
117.5°	720.6	830.4	927.7	1009.6	1072.9	1113.7	1137.3	1145.3
120°	694.4	793.4	884.4	956.7	1016.7	1056.1	1078.9	1086.6
122.5°	673.6	765.3	846.7	914.5	968.1	1004.3	1027.1	1034.3
125°	643.5	727.9	800.6	860.0	905.5	939.1	957.7	966.8
127.5°	612.7	691.5	759.2	815.0	856.5	886.5	904.4	909.3
130°	594.0	666.9	731.9	785.5	826.2	853.6	870.5	876.5
132.5°	574.7	643.2	702.5	754.2	794.7	821.8	837.3	843.8
135°	548.5	606.2	659.9	707.1	743.1	770.4	785.8	791.7
137.5°	526.7	573.6	618.5	658.7	690.8	715.5	729.5	735.7
140°	514.3	554.1	593.0	628.0	658.2	679.8	692.6	697.5
142.5°	503.6	537.3	570.8	601.2	627.0	645.3	657.5	661.8
145°	490.3	516.0	541.7	564.1	584.1	598.5	608.1	612.2
147.5°	478.6	498.9	518.1	534.6	550.1	561.3	566.7	568.6
150°	472.1	489.5	504.5	518.9	531.0	540.7	544.2	545.2
152.5°	465.8	481.3	495.0	506.1	516.2	523.8	527.0	527.8
155°	456.3	469.0	480.1	488.7	496.6	502.2	504.5	505.3
157.5°	446.8	457.2	465.8	472.6	478.8	483.3	485.5	485.4
160°	440.5	448.4	456.3	461.8	467.4	471.3	472.9	472.1
162.5°	433.6	440.8	447.4	452.3	456.6	459.9	460.3	460.1
165°	423.9	429.4	434.2	438.1	441.2	442.8	442.8	442.8
167.5°	414.7	418.4	422.0	424.8	426.4	427.9	427.2	427.1
170°	409.6	412.0	414.4	416.0	417.6	418.4	418.4	417.6
172.5°	403.9	406.3	408.1	409.0	409.3	410.7	409.5	408.7
175°	397.8	397.8	399.3	399.3	399.3	400.1	398.5	397.8
177.5°	393.5	394.1	394.1	394.1	393.5	394.1	392.2	392.2
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2

(END OF REPORT)