

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: P333727-930

Luminaire Tested: **S125RDIW-S1270D770U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333727-930
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: S125RDIW-S1270D770U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6147.9 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

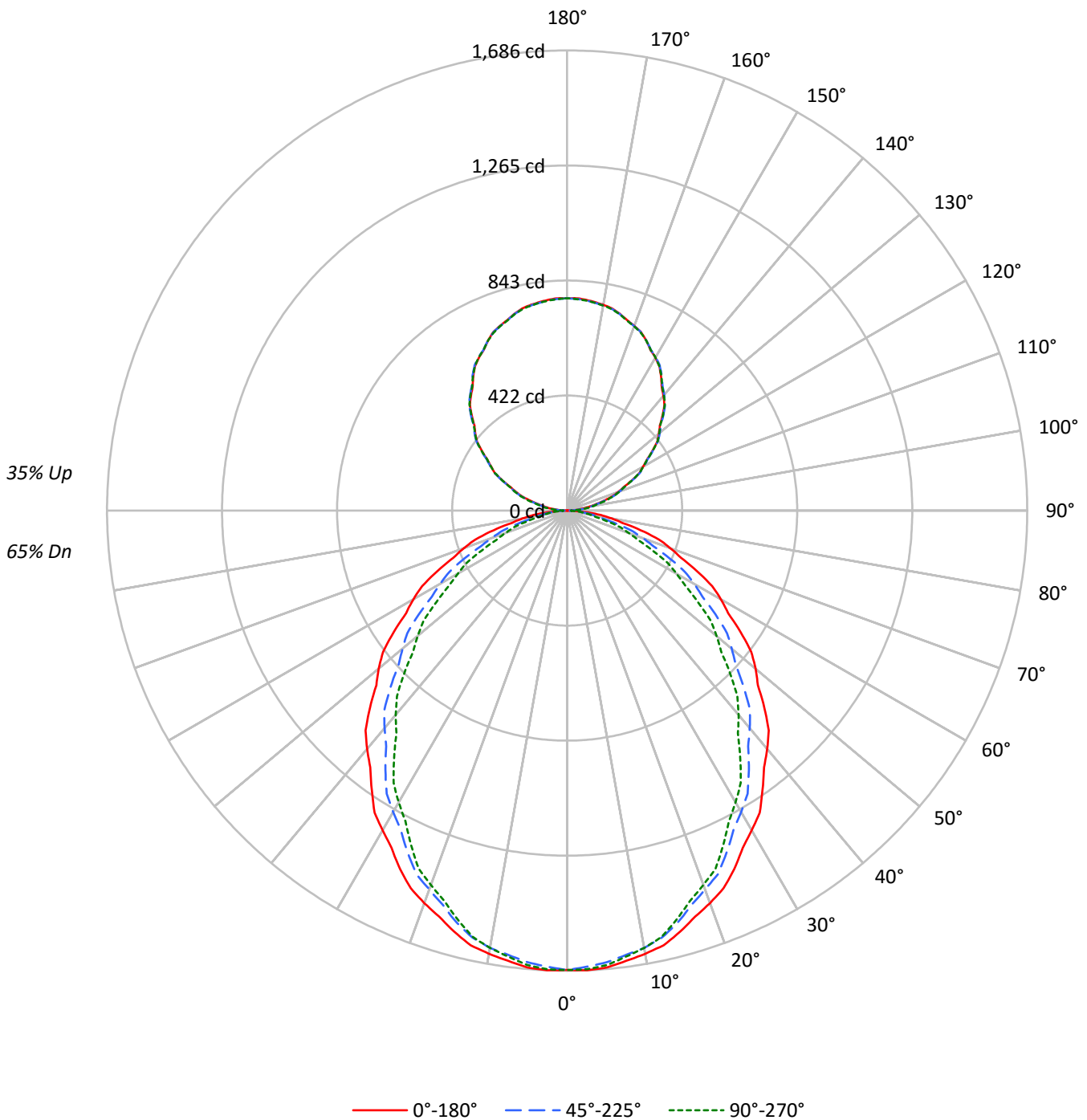
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	67	62	61	59	55
2	93	85	79	74	87	80	75	70	71	67	63	63	60	57	55	53	50	47
3	85	75	68	62	79	71	64	59	63	58	54	56	52	48	49	46	43	40
4	78	67	59	53	73	63	56	50	56	50	46	50	45	42	44	40	37	34
5	71	60	51	45	67	56	49	43	50	44	40	45	40	36	40	36	33	30
6	66	54	45	40	62	51	43	38	46	39	35	41	36	32	36	32	29	26
7	61	49	41	35	57	46	39	34	41	35	31	37	32	28	33	29	26	23
8	57	44	36	31	53	42	35	30	38	32	28	34	29	25	30	26	23	21
9	53	41	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21	19
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10869	10869	10869
5°	10895	10771	10836
10°	10812	10670	10670
15°	10683	10454	10369
20°	10519	10152	10030
25°	10326	9855	9638
30°	10086	9508	9205
35°	9842	9150	8719
40°	9613	8777	8241
45°	9334	8360	7721
50°	9055	7905	7178
55°	8731	7472	6598
60°	8407	6945	5977
65°	8023	6333	5265
70°	7585	5569	4538
75°	6977	4694	3773
80°	6148	3686	3169
85°	5187	3016	2831



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.3	2.6
10°-20°	442.3	7.2
20°-30°	641.3	10.4
30°-40°	730.9	11.9
40°-50°	712.5	11.6
50°-60°	599.7	9.8
60°-70°	420.4	6.8
70°-80°	216.1	3.5
80°-90°	56.3	0.9
90°-100°	52.1	0.8
100°-110°	153.8	2.5
110°-120°	260.5	4.2
120°-130°	342.9	5.6
130°-140°	384.2	6.2
140°-150°	376.6	6.1
150°-160°	316.3	5.1
160°-170°	210.2	3.4
170°-180°	73.6	1.2
0°-30°	1241.9	20.2
0°-40°	1972.8	32.1
0°-60°	3284.9	53.4
0°-90°	3977.7	64.7
90°-120°	466.4	7.6
90°-150°	1570.1	25.5
90°-180°	2170.0	35.3
0°-180°	6147.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1683	1683	1683	1683	1683	
5°	1680	1675	1661	1673	1672	159
15°	1598	1589	1564	1562	1551	450
25°	1449	1428	1383	1367	1352	666
35°	1248	1216	1161	1125	1106	781
45°	1022	983	915	866	845	788
55°	775	733	664	608	586	693
65°	525	480	414	365	344	520
75°	280	241	188	161	151	296
85°	70	48	41	39	38	79
90°	1	5	10	13	14	5
95°	39	41	47	51	52	42
105°	138	141	145	148	150	147
115°	261	263	264	264	263	258
125°	381	384	385	384	383	341
135°	495	499	499	499	497	381
145°	600	602	604	604	602	375
155°	686	686	687	689	686	316
165°	746	745	746	748	744	210
175°	776	774	774	777	773	74
180°	778	778	778	778	778	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0
2.5°	1686.0	1685.4	1684.7	1684.0	1683.3	1681.9	1679.6	1677.3	1675.1	1672.8	1675.1
5°	1680.5	1679.4	1678.2	1677.1	1675.9	1673.8	1670.7	1667.6	1664.5	1661.4	1664.2
7.5°	1663.9	1662.9	1661.8	1660.7	1659.6	1657.3	1653.5	1649.8	1646.1	1642.3	1644.3
10°	1648.7	1647.8	1647.0	1646.2	1645.3	1642.9	1638.9	1635.0	1631.0	1627.1	1627.9
12.5°	1631.4	1630.4	1629.2	1628.2	1627.1	1623.9	1618.6	1613.3	1607.9	1602.6	1603.3
15°	1597.8	1596.1	1594.5	1592.8	1591.1	1587.2	1581.3	1575.4	1569.5	1563.5	1563.3
17.5°	1559.9	1557.4	1554.8	1552.2	1549.6	1544.5	1537.1	1529.6	1522.2	1514.7	1513.3
20°	1530.5	1527.6	1524.8	1522.0	1519.1	1513.2	1504.2	1495.2	1486.1	1477.1	1475.7
22.5°	1497.9	1495.1	1492.2	1489.5	1486.6	1480.5	1471.0	1461.5	1452.0	1442.5	1439.7
25°	1449.1	1444.9	1440.6	1436.4	1432.2	1424.8	1414.4	1403.9	1393.4	1383.0	1379.3
27.5°	1393.2	1388.0	1382.9	1377.8	1372.6	1364.5	1353.2	1342.1	1330.9	1319.7	1314.6
30°	1352.5	1347.1	1341.7	1336.4	1331.1	1322.4	1310.5	1298.7	1286.8	1275.0	1268.4
32.5°	1312.9	1306.6	1300.3	1294.0	1287.8	1278.6	1266.5	1254.4	1242.3	1230.2	1223.0
35°	1248.3	1241.5	1234.7	1227.9	1221.2	1211.4	1198.7	1186.0	1173.3	1160.6	1152.3
37.5°	1185.0	1176.7	1168.5	1160.3	1151.9	1141.3	1128.2	1115.1	1102.0	1088.8	1079.0
40°	1140.2	1131.7	1123.2	1114.8	1106.4	1095.3	1081.7	1068.2	1054.6	1041.1	1030.4
42.5°	1093.5	1084.8	1076.0	1067.3	1058.7	1047.3	1033.3	1019.3	1005.3	991.2	981.0
45°	1022.0	1013.8	1005.6	997.4	989.2	977.4	961.8	946.3	930.7	915.3	903.9
47.5°	948.0	939.4	930.7	922.1	913.5	901.3	885.7	870.0	854.4	838.7	827.0
50°	901.2	891.9	882.6	873.3	864.0	851.3	835.1	819.0	802.9	786.8	774.9
52.5°	850.4	840.8	831.3	821.7	812.2	799.8	784.6	769.5	754.2	739.1	726.3
55°	775.4	766.4	757.3	748.3	739.2	726.8	711.0	695.2	679.4	663.6	650.9
57.5°	699.6	690.0	680.3	670.7	661.0	648.6	633.3	618.0	602.8	587.5	575.1
60°	650.9	640.9	631.0	621.2	611.3	598.7	583.4	568.2	552.9	537.7	525.3
62.5°	599.0	589.5	580.1	570.6	561.3	548.8	533.3	517.8	502.3	486.8	475.3
65°	525.0	515.4	505.8	496.2	486.6	474.3	459.3	444.3	429.3	414.4	403.1
67.5°	451.5	441.9	432.3	422.7	413.1	401.1	386.8	372.4	358.1	343.7	333.4
70°	401.7	392.1	382.5	372.8	363.3	351.4	337.3	323.2	309.0	294.9	286.2
72.5°	352.9	343.5	334.1	324.7	315.4	304.0	290.8	277.6	264.4	251.2	243.1
75°	279.6	271.2	262.7	254.2	245.7	235.6	223.7	211.9	200.0	188.1	181.9
77.5°	206.9	200.2	193.4	186.6	179.9	171.7	162.2	152.7	143.2	133.7	129.4
80°	165.3	158.5	151.7	144.9	138.1	130.8	122.9	115.0	107.0	99.1	96.6
82.5°	124.6	118.5	112.3	106.2	100.2	94.4	88.9	83.6	78.1	72.7	71.5
85°	70.0	64.8	59.8	54.6	49.6	46.3	44.9	43.5	42.1	40.7	40.4
87.5°	23.5	22.2	20.8	19.4	18.0	17.4	17.3	17.3	17.2	17.2	17.3
90°	0.6	1.7	2.8	3.8	4.9	6.0	6.8	7.8	8.7	9.7	10.4
92.5°	14.7	15.4	16.1	16.9	17.7	18.6	19.8	21.0	22.1	23.2	24.1
95°	39.4	39.6	39.9	40.1	40.4	41.3	42.6	43.9	45.2	46.6	47.5
97.5°	65.4	65.5	65.6	65.7	65.8	66.8	68.6	70.5	72.3	74.2	75.1
100°	84.7	84.7	84.7	84.7	84.7	85.6	87.3	89.1	90.8	92.6	93.8
102.5°	105.6	106.1	106.6	107.1	107.7	108.4	109.3	110.2	111.0	111.9	113.3
105°	138.0	138.7	139.3	140.0	140.7	141.5	142.3	143.0	143.8	144.6	145.4
107.5°	173.8	174.5	175.2	175.9	176.5	177.2	177.8	178.4	179.0	179.6	180.0
110°	198.5	199.2	199.8	200.6	201.2	201.7	202.1	202.5	202.9	203.3	203.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	223.7	224.0	224.4	224.8	225.1	225.5	226.0	226.6	227.1	227.6	227.8
115°	260.9	261.4	262.0	262.4	263.0	263.4	263.7	263.9	264.2	264.5	264.3
117.5°	298.2	298.4	298.6	298.9	299.1	299.4	299.6	299.9	300.1	300.4	300.4
120°	321.4	322.0	322.7	323.4	324.1	324.5	324.6	324.7	324.9	325.0	325.0
122.5°	346.6	346.8	347.1	347.3	347.6	347.8	348.1	348.5	348.9	349.2	349.1
125°	380.7	381.5	382.3	383.1	383.9	384.4	384.5	384.7	384.8	384.9	384.7
127.5°	417.0	417.4	417.9	418.4	418.8	419.1	419.3	419.5	419.6	419.8	419.6
130°	438.8	439.4	440.2	440.8	441.5	442.0	442.2	442.5	442.8	443.0	442.9
132.5°	460.6	461.7	462.8	463.9	465.0	465.5	465.5	465.4	465.4	465.3	465.2
135°	495.0	495.9	496.7	497.5	498.3	498.8	498.9	499.0	499.2	499.3	499.3
137.5°	527.5	528.3	529.0	529.9	530.7	531.2	531.5	531.7	532.1	532.4	532.6
140°	548.4	549.0	549.7	550.3	551.1	551.5	552.0	552.4	552.8	553.2	553.4
142.5°	569.2	569.7	570.3	570.9	571.4	571.9	572.5	573.0	573.5	574.0	574.1
145°	599.8	600.3	600.9	601.4	601.9	602.4	602.8	603.2	603.6	604.1	604.1
147.5°	628.1	628.4	628.7	629.0	629.3	629.6	629.9	630.2	630.6	630.9	631.2
150°	647.0	646.9	646.7	646.6	646.5	646.7	647.2	647.8	648.2	648.8	648.8
152.5°	662.5	662.7	662.8	663.1	663.2	663.4	663.7	663.9	664.1	664.3	664.6
155°	686.3	686.3	686.3	686.3	686.3	686.4	686.6	686.6	686.8	687.0	687.5
157.5°	707.7	707.4	707.0	706.8	706.5	706.4	706.5	706.6	706.8	706.9	707.4
160°	720.2	719.8	719.4	719.0	718.6	718.4	718.6	718.8	718.8	719.0	719.6
162.5°	731.4	731.1	730.8	730.5	730.2	730.0	730.1	730.1	730.1	730.2	730.8
165°	746.2	746.0	745.8	745.4	745.2	745.1	745.3	745.3	745.5	745.7	746.2
167.5°	758.9	758.3	757.7	757.2	756.7	756.4	756.4	756.4	756.4	756.4	757.2
170°	765.6	765.1	764.5	764.0	763.4	763.2	763.2	763.2	763.2	763.2	764.0
172.5°	770.5	769.9	769.4	768.8	768.3	768.0	768.0	768.0	768.0	768.0	768.8
175°	775.9	775.3	774.9	774.3	773.7	773.5	773.5	773.5	773.5	773.5	774.3
177.5°	778.7	778.3	777.8	777.4	777.0	776.7	776.6	776.5	776.4	776.2	776.9
180°	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0
2.5°	1677.3	1679.6	1681.9	1682.9	1682.7	1682.5	1682.2	1682.0
5°	1667.0	1669.9	1672.7	1673.8	1673.2	1672.7	1672.1	1671.5
7.5°	1646.3	1648.3	1650.2	1650.9	1650.2	1649.7	1649.0	1648.5
10°	1628.7	1629.6	1630.4	1630.4	1629.6	1628.7	1627.9	1627.1
12.5°	1603.9	1604.5	1605.2	1604.8	1603.5	1602.2	1600.9	1599.6
15°	1562.9	1562.7	1562.4	1561.0	1558.4	1555.9	1553.3	1550.8
17.5°	1511.9	1510.4	1509.0	1507.3	1505.2	1503.1	1501.0	1498.9
20°	1474.2	1472.8	1471.5	1469.4	1466.9	1464.4	1461.8	1459.3
22.5°	1437.0	1434.2	1431.4	1429.0	1426.9	1424.8	1422.7	1420.7
25°	1375.7	1372.0	1368.3	1364.9	1361.8	1358.7	1355.6	1352.5
27.5°	1309.5	1304.3	1299.2	1295.1	1292.1	1289.1	1286.1	1283.1
30°	1262.0	1255.5	1249.0	1244.5	1241.9	1239.3	1236.8	1234.3
32.5°	1215.9	1208.7	1201.5	1196.3	1193.1	1189.8	1186.7	1183.4
35°	1144.2	1136.0	1127.8	1121.7	1117.8	1113.8	1109.9	1105.9
37.5°	1069.2	1059.4	1049.5	1042.7	1038.9	1035.0	1031.2	1027.4
40°	1019.6	1008.9	998.2	991.1	987.7	984.3	980.9	977.5
42.5°	970.7	960.4	950.1	942.5	937.5	932.5	927.6	922.6
45°	892.6	881.3	870.0	862.3	858.0	853.8	849.5	845.3
47.5°	815.5	803.8	792.1	784.0	779.3	774.6	769.9	765.2
50°	763.1	751.2	739.4	731.3	727.1	722.8	718.6	714.4
52.5°	713.5	700.7	687.9	679.5	675.2	671.0	666.8	662.5
55°	638.1	625.4	612.7	604.1	599.6	595.0	590.5	586.0
57.5°	562.6	550.2	537.8	529.6	525.5	521.5	517.6	513.6
60°	512.8	500.4	488.0	479.6	475.4	471.2	466.9	462.7
62.5°	463.8	452.2	440.8	432.8	428.6	424.4	420.1	415.9
65°	391.8	380.5	369.2	361.4	357.2	352.9	348.7	344.5
67.5°	323.0	312.7	302.4	295.5	292.1	288.7	285.4	281.9
70°	277.4	268.6	259.9	253.8	250.4	247.0	243.6	240.3
72.5°	235.1	227.0	218.8	213.7	211.4	209.2	206.9	204.6
75°	175.7	169.5	163.3	159.1	157.2	155.2	153.3	151.2
77.5°	125.0	120.7	116.3	113.4	111.9	110.5	109.0	107.5
80°	94.1	91.6	88.9	87.4	86.8	86.3	85.8	85.2
82.5°	70.4	69.1	68.0	67.2	66.9	66.5	66.2	65.9
85°	40.1	39.9	39.5	39.3	39.0	38.7	38.4	38.2
87.5°	17.4	17.6	17.7	17.7	17.6	17.4	17.3	17.1
90°	11.0	11.7	12.4	12.9	13.3	13.7	14.1	14.5
92.5°	25.0	25.9	26.8	27.4	27.7	28.0	28.3	28.5
95°	48.5	49.4	50.4	51.0	51.3	51.5	51.8	52.0
97.5°	76.0	76.9	77.8	78.3	78.4	78.6	78.8	78.9
100°	95.0	96.2	97.4	98.2	98.5	98.7	99.0	99.2
102.5°	114.6	115.9	117.2	118.1	118.5	118.9	119.2	119.6
105°	146.3	147.1	147.9	148.5	148.9	149.3	149.7	150.1
107.5°	180.4	180.8	181.2	181.4	181.4	181.4	181.3	181.3
110°	204.2	204.6	205.0	205.1	205.0	204.8	204.7	204.6



TEST NUMBER: P333727-930

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	228.0	228.1	228.3	228.3	228.0	227.8	227.6	227.3
115°	264.2	264.1	263.9	263.8	263.7	263.6	263.4	263.3
117.5°	300.5	300.6	300.8	300.5	300.0	299.5	298.9	298.4
120°	325.0	325.0	325.0	324.7	324.2	323.7	323.1	322.6
122.5°	349.0	348.9	348.8	348.5	348.1	347.6	347.2	346.8
125°	384.4	384.1	383.8	383.7	383.5	383.4	383.3	383.1
127.5°	419.6	419.4	419.2	419.1	418.8	418.5	418.2	418.0
130°	442.8	442.6	442.5	442.3	442.1	441.7	441.5	441.2
132.5°	465.0	464.9	464.8	464.5	464.1	463.7	463.4	463.0
135°	499.3	499.3	499.3	499.0	498.5	498.0	497.4	496.9
137.5°	532.7	532.9	533.0	532.7	532.1	531.4	530.8	530.0
140°	553.8	554.0	554.2	554.1	553.4	552.7	552.0	551.4
142.5°	574.3	574.5	574.6	574.4	573.7	573.1	572.3	571.7
145°	604.1	604.1	604.1	603.8	603.4	603.0	602.6	602.2
147.5°	631.5	631.9	632.2	631.9	631.0	630.1	629.2	628.3
150°	648.8	648.8	648.8	648.7	648.4	648.2	647.8	647.6
152.5°	665.0	665.3	665.6	665.5	665.0	664.6	664.1	663.6
155°	688.0	688.5	689.1	689.0	688.4	687.7	687.0	686.3
157.5°	708.0	708.5	709.1	708.9	708.0	707.1	706.2	705.3
160°	720.1	720.6	721.1	721.1	720.4	719.7	719.1	718.4
162.5°	731.5	732.1	732.7	732.7	731.9	731.1	730.3	729.5
165°	746.7	747.3	747.8	747.6	746.9	746.1	745.3	744.4
167.5°	758.1	758.9	759.6	759.6	758.8	758.0	757.2	756.3
170°	764.8	765.6	766.5	766.4	765.4	764.5	763.5	762.6
172.5°	769.6	770.5	771.3	771.3	770.5	769.6	768.7	767.9
175°	775.1	775.9	776.7	776.7	775.7	774.8	773.8	772.9
177.5°	777.6	778.2	778.9	778.8	778.0	777.3	776.6	775.8
180°	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7

(END OF REPORT)