

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: P333626-930

Luminaire Tested: **S125RDIP-S1270D810U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333626-930
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: S125RDIP-S1270D810U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6263.8 lumens
Efficiency: N/A
Efficacy: 103.2 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

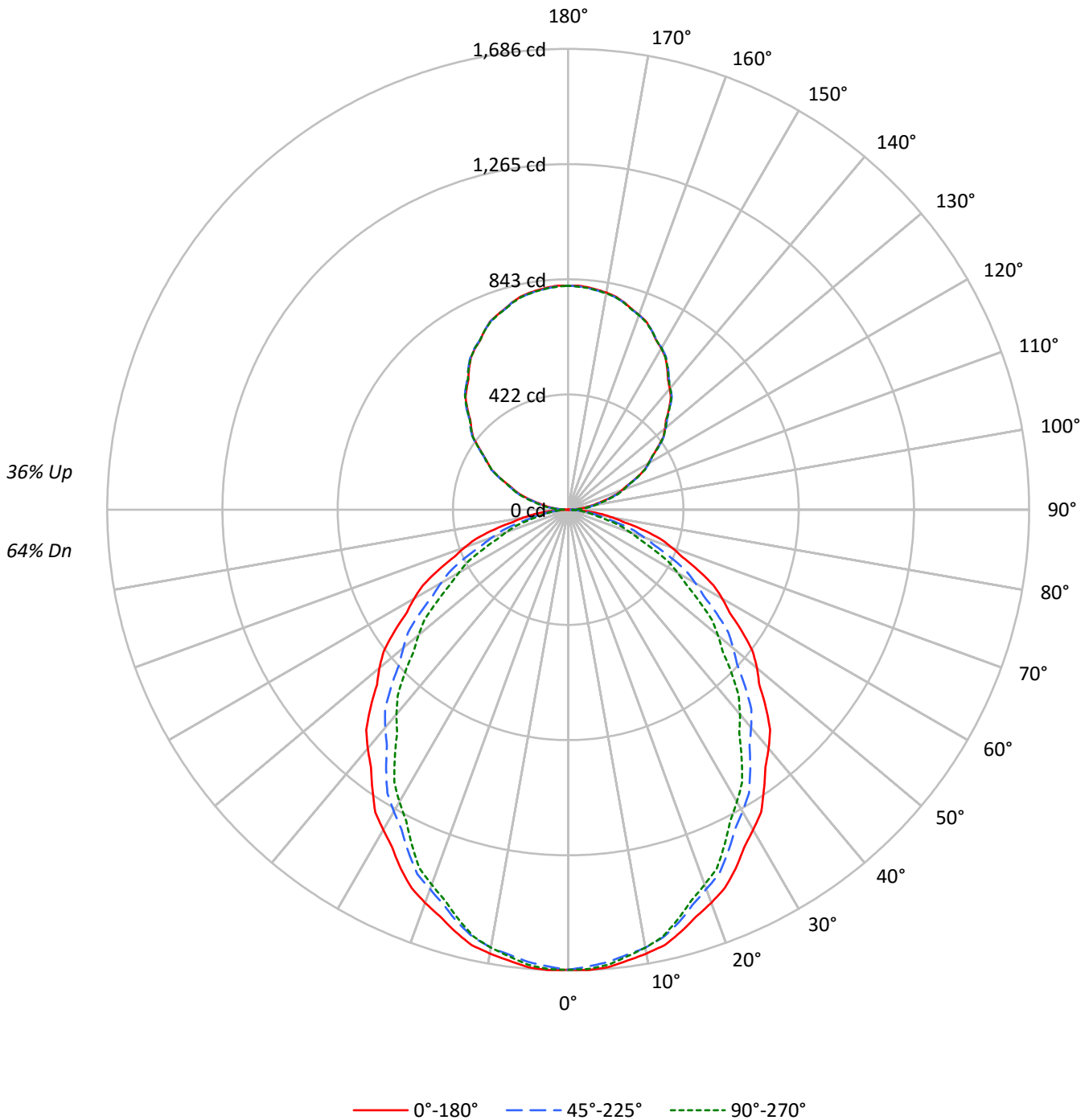
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69	64
1	101	97	93	89	95	91	88	85	80	78	75	70	68	67	61	60	58	54
2	92	85	79	74	86	80	74	70	71	66	63	62	59	56	54	52	50	46
3	84	75	67	62	79	71	64	59	62	57	53	55	51	48	48	45	43	39
4	77	66	58	52	72	63	56	50	56	50	46	49	45	41	43	40	37	34
5	71	59	51	45	67	56	49	43	50	44	40	44	40	36	39	35	32	29
6	66	53	45	39	61	51	43	38	45	39	35	40	35	32	35	32	29	26
7	61	48	40	35	57	46	39	33	41	35	31	37	32	28	32	29	25	23
8	57	44	36	31	53	42	35	30	38	32	27	34	29	25	30	26	23	21
9	53	40	33	28	50	38	31	27	35	29	25	31	26	23	28	24	21	19
10	49	37	30	25	46	35	29	24	32	26	22	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	2.5
10°-20°	442.3	7.1
20°-30°	641.3	10.2
30°-40°	730.9	11.7
40°-50°	712.5	11.4
50°-60°	599.7	9.6
60°-70°	420.4	6.7
70°-80°	216.1	3.4
80°-90°	56.4	0.9
90°-100°	54.9	0.9
100°-110°	162.0	2.6
110°-120°	274.4	4.4
120°-130°	361.2	5.8
130°-140°	404.7	6.5
140°-150°	396.7	6.3
150°-160°	333.1	5.3
160°-170°	221.5	3.5
170°-180°	77.5	1.2
0°-30°	1241.9	19.8
0°-40°	1972.8	31.5
0°-60°	3284.9	52.4
0°-90°	3977.8	63.5
90°-120°	491.4	7.8
90°-150°	1653.9	26.4
90°-180°	2286.0	36.5
0°-180°	6263.8	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	6	10	13	15	6
95°	41	43	49	53	55	44
105°	145	149	152	156	158	155
115°	275	277	279	278	277	272
125°	401	405	405	404	404	359
135°	522	525	526	526	523	402
145°	632	634	636	636	634	395
155°	723	723	724	726	723	333
165°	786	785	786	788	784	222
175°	817	815	815	818	814	78
180°	819	819	819	819	819	



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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	19.5	18.1	17.4	17.4	17.4	17.3	17.3	17.4
90°	0.7	1.8	2.9	4.1	5.1	6.2	7.3	8.2	9.2	10.2	10.9
92.5°	15.4	16.2	17.0	17.8	18.6	19.6	20.8	22.0	23.2	24.5	25.4
95°	41.4	41.7	42.0	42.3	42.6	43.5	44.8	46.2	47.7	49.1	50.1
97.5°	68.9	69.0	69.1	69.2	69.3	70.4	72.3	74.3	76.2	78.2	79.1
100°	89.3	89.3	89.3	89.3	89.3	90.2	92.0	93.8	95.7	97.5	98.8
102.5°	111.2	111.8	112.3	112.9	113.5	114.2	115.1	116.1	117.0	118.0	119.4
105°	145.4	146.1	146.8	147.5	148.2	149.0	149.9	150.7	151.5	152.4	153.2
107.5°	183.1	183.8	184.5	185.2	186.0	186.6	187.3	187.9	188.6	189.2	189.6
110°	209.1	209.9	210.5	211.2	212.0	212.5	213.0	213.4	213.8	214.2	214.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	235.6	236.0	236.4	236.8	237.1	237.6	238.1	238.6	239.2	239.7	239.9
115°	274.8	275.3	275.9	276.5	277.0	277.4	277.8	278.0	278.3	278.6	278.4
117.5°	314.1	314.3	314.5	314.8	315.0	315.4	315.6	315.8	316.1	316.3	316.4
120°	338.5	339.2	340.0	340.6	341.4	341.8	341.9	342.1	342.2	342.3	342.3
122.5°	365.0	365.3	365.6	365.8	366.1	366.4	366.7	367.1	367.5	367.9	367.7
125°	401.0	401.9	402.7	403.6	404.4	404.9	405.0	405.2	405.3	405.4	405.2
127.5°	439.3	439.8	440.2	440.7	441.2	441.5	441.6	441.8	442.1	442.2	442.1
130°	462.2	462.9	463.7	464.3	465.0	465.5	465.8	466.1	466.4	466.7	466.5
132.5°	485.2	486.3	487.5	488.6	489.8	490.3	490.3	490.2	490.2	490.2	490.0
135°	521.5	522.4	523.2	524.1	524.9	525.4	525.5	525.7	525.8	525.9	525.9
137.5°	555.7	556.5	557.3	558.2	559.0	559.5	559.9	560.1	560.4	560.8	560.9
140°	577.6	578.3	579.0	579.8	580.4	581.0	581.4	581.9	582.3	582.7	583.0
142.5°	599.6	600.1	600.7	601.3	601.9	602.5	603.0	603.6	604.1	604.6	604.8
145°	631.8	632.3	632.9	633.5	634.1	634.5	635.0	635.4	635.9	636.3	636.3
147.5°	661.6	661.9	662.3	662.6	662.8	663.2	663.6	663.9	664.2	664.6	664.9
150°	681.5	681.3	681.3	681.1	680.9	681.2	681.8	682.3	682.9	683.5	683.5
152.5°	697.8	698.1	698.2	698.5	698.6	698.9	699.0	699.3	699.5	699.8	700.1
155°	722.9	722.9	722.9	722.9	722.9	723.0	723.2	723.3	723.4	723.6	724.1
157.5°	745.4	745.1	744.8	744.4	744.1	744.0	744.2	744.4	744.4	744.6	745.2
160°	758.6	758.2	757.8	757.4	756.9	756.8	756.9	757.1	757.2	757.4	758.0
162.5°	770.4	770.1	769.7	769.5	769.2	769.0	769.0	769.1	769.1	769.2	769.8
165°	786.1	785.8	785.5	785.2	785.0	784.9	785.0	785.1	785.3	785.5	786.0
167.5°	799.3	798.7	798.2	797.6	797.0	796.8	796.8	796.8	796.8	796.8	797.6
170°	806.5	805.9	805.4	804.8	804.2	803.9	803.9	803.9	803.9	803.9	804.8
172.5°	811.5	811.0	810.4	809.8	809.3	809.0	809.0	809.0	809.0	809.0	809.8
175°	817.3	816.8	816.2	815.6	815.1	814.7	814.7	814.7	814.7	814.7	815.6
177.5°	820.3	819.8	819.4	818.9	818.4	818.2	818.1	817.9	817.8	817.7	818.4
180°	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2



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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°	17.6	17.7	17.9	17.9	17.7	17.6	17.4	17.3
90°	11.6	12.3	13.0	13.6	14.0	14.4	14.8	15.3
92.5°	26.3	27.3	28.2	28.9	29.2	29.4	29.8	30.1
95°	51.0	52.1	53.1	53.7	54.0	54.3	54.5	54.8
97.5°	80.1	81.0	81.9	82.4	82.6	82.8	83.0	83.2
100°	100.1	101.3	102.6	103.5	103.7	104.0	104.3	104.5
102.5°	120.7	122.1	123.5	124.4	124.8	125.1	125.6	126.0
105°	154.1	154.9	155.8	156.4	156.9	157.3	157.7	158.1
107.5°	190.0	190.5	190.9	191.1	191.1	191.0	191.0	191.0
110°	215.1	215.5	215.9	216.1	215.9	215.7	215.6	215.5



TEST NUMBER: P333626-930

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	240.1	240.3	240.5	240.5	240.2	239.9	239.7	239.5
115°	278.3	278.2	278.0	277.9	277.8	277.6	277.4	277.4
117.5°	316.6	316.7	316.8	316.6	316.0	315.4	314.9	314.3
120°	342.3	342.3	342.3	342.1	341.5	341.0	340.4	339.8
122.5°	367.6	367.5	367.4	367.1	366.6	366.2	365.7	365.3
125°	404.9	404.6	404.3	404.1	404.0	403.8	403.7	403.6
127.5°	441.9	441.7	441.6	441.4	441.2	440.8	440.6	440.3
130°	466.4	466.3	466.1	465.9	465.6	465.3	465.0	464.7
132.5°	489.8	489.7	489.6	489.3	488.9	488.5	488.1	487.7
135°	525.9	525.9	525.9	525.7	525.1	524.6	524.0	523.4
137.5°	561.1	561.3	561.4	561.2	560.4	559.8	559.1	558.3
140°	583.3	583.5	583.8	583.6	582.9	582.2	581.5	580.8
142.5°	605.0	605.1	605.3	605.0	604.3	603.6	602.9	602.2
145°	636.3	636.3	636.3	636.0	635.6	635.2	634.8	634.3
147.5°	665.2	665.6	665.9	665.6	664.6	663.7	662.8	661.8
150°	683.5	683.5	683.5	683.3	683.0	682.7	682.4	682.2
152.5°	700.4	700.7	701.1	701.0	700.5	700.0	699.5	699.0
155°	724.7	725.3	725.9	725.8	725.0	724.4	723.7	722.9
157.5°	745.8	746.3	746.9	746.7	745.8	744.9	743.9	743.0
160°	758.6	759.0	759.6	759.6	758.9	758.1	757.4	756.8
162.5°	770.5	771.2	771.8	771.8	770.9	770.1	769.3	768.5
165°	786.6	787.2	787.7	787.6	786.7	785.9	785.0	784.2
167.5°	798.5	799.3	800.2	800.1	799.3	798.4	797.5	796.6
170°	805.6	806.5	807.3	807.2	806.2	805.3	804.3	803.3
172.5°	810.7	811.5	812.4	812.4	811.5	810.7	809.8	808.9
175°	816.4	817.3	818.2	818.1	817.1	816.1	815.1	814.2
177.5°	819.0	819.7	820.4	820.4	819.5	818.8	818.0	817.2
180°	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2

(END OF REPORT)