

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: P333735-830

Luminaire Tested: **S125RDIW-S1270D1340U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333735-830
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-S1270D1340U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8983.9 lumens
Efficiency: N/A
Efficacy: 117.9 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: General Diffuse

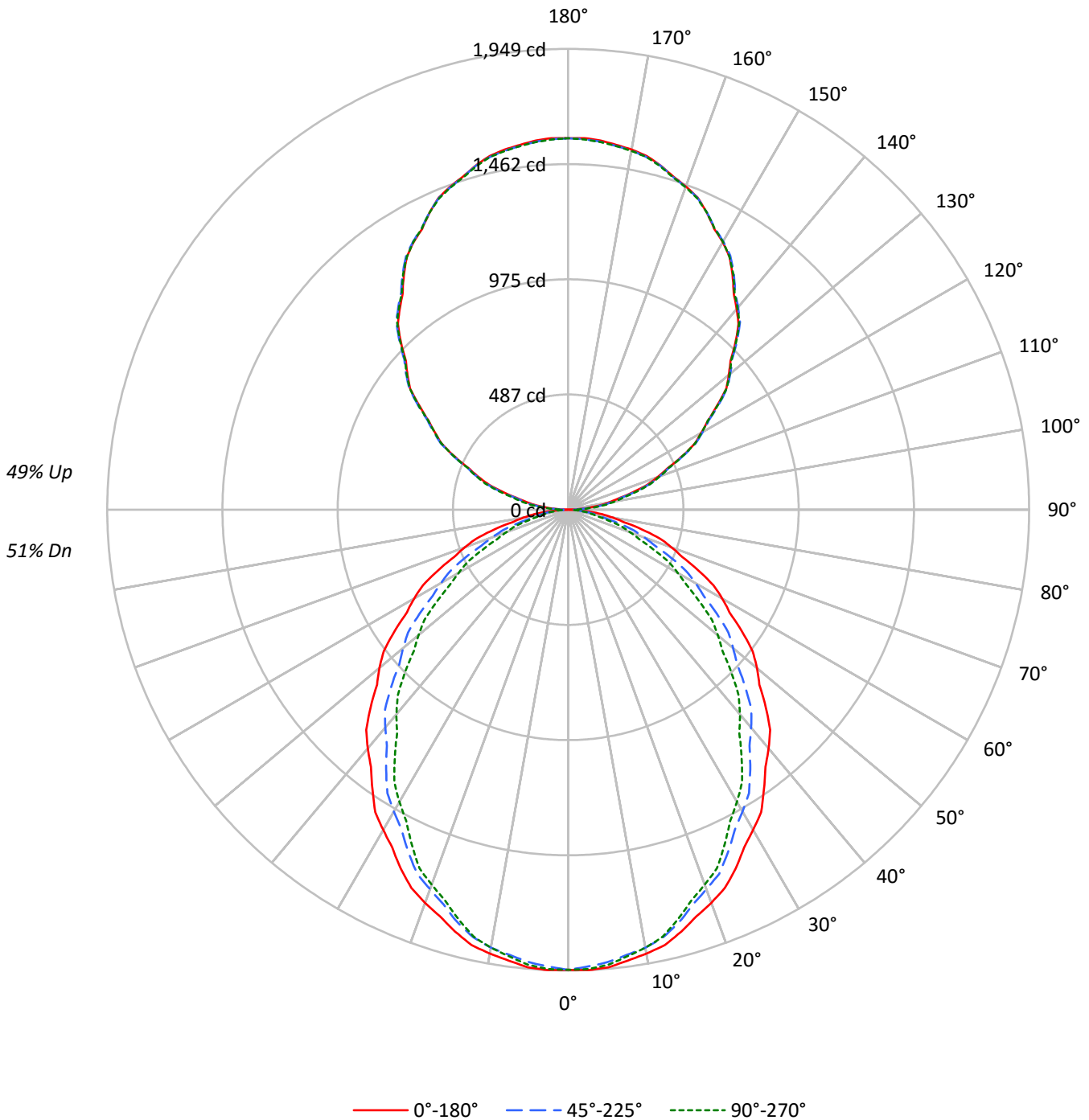
Input Watts (W): 76.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51																			51									
1	98	94	90	87	91	87	84	81	74	72	69	62	60	59	51	50	49	44																			44									
2	90	82	76	71	83	76	71	67	65	61	58	55	52	49	45	43	41	37																			37									
3	82	73	65	60	75	67	61	56	58	53	49	49	45	42	40	38	35	31																			31									
4	75	64	57	51	69	60	53	48	51	46	42	43	39	36	36	33	31	27																			27									
5	69	57	49	43	64	53	46	41	46	40	36	39	35	31	32	29	27	24																			24									
6	64	52	44	38	59	48	41	36	41	36	32	35	31	28	30	26	24	21																			21									
7	59	47	39	33	54	44	36	31	38	32	28	32	28	25	27	24	21	19																			19									
8	55	42	35	29	50	40	33	28	34	29	25	29	25	22	25	22	19	17																			17									
9	51	39	31	26	47	36	30	25	32	26	22	27	23	20	23	20	17	15																			15									
10	48	36	28	24	44	33	27	22	29	24	20	25	21	18	21	18	16	14																			14									

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12566	12566	12566
5°	12595	12452	12528
10°	12499	12336	12336
15°	12351	12085	11987
20°	12160	11736	11595
25°	11938	11393	11142
30°	11660	10992	10641
35°	11378	10578	10080
40°	11113	10146	9528
45°	10791	9664	8925
50°	10468	9139	8298
55°	10094	8637	7629
60°	9719	8029	6909
65°	9274	7321	6085
70°	8769	6437	5246
75°	8067	5425	4362
80°	7107	4262	3663
85°	5995	3483	3268



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.0	2.0
10°-20°	511.3	5.7
20°-30°	741.4	8.3
30°-40°	845.0	9.4
40°-50°	823.6	9.2
50°-60°	693.3	7.7
60°-70°	486.0	5.4
70°-80°	249.8	2.8
80°-90°	66.5	0.7
90°-100°	105.2	1.2
100°-110°	310.7	3.5
110°-120°	526.3	5.9
120°-130°	692.7	7.7
130°-140°	776.1	8.6
140°-150°	760.7	8.5
150°-160°	638.9	7.1
160°-170°	424.7	4.7
170°-180°	148.6	1.7
0°-30°	1435.7	16.0
0°-40°	2280.6	25.4
0°-60°	3797.6	42.3
0°-90°	4600.0	51.2
90°-120°	942.3	10.5
90°-150°	3171.8	35.3
90°-180°	4384.0	48.8
0°-180°	8983.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1946	1946	1946	1946	1946	
5°	1943	1936	1921	1934	1932	184
15°	1847	1837	1808	1805	1793	520
25°	1675	1651	1599	1580	1564	770
35°	1443	1406	1342	1300	1278	903
45°	1182	1137	1058	1001	977	911
55°	896	847	767	703	678	802
65°	607	555	479	422	398	601
75°	323	278	217	186	175	342
85°	81	55	47	46	44	91
90°	1	11	20	26	29	8
95°	80	82	94	102	105	85
105°	279	285	292	299	303	298
115°	527	532	534	533	532	521
125°	769	776	778	775	774	688
135°	1000	1007	1009	1008	1004	771
145°	1212	1216	1220	1220	1216	757
155°	1386	1387	1388	1392	1386	638
165°	1508	1505	1506	1510	1504	425
175°	1567	1563	1562	1569	1561	149
180°	1571	1571	1571	1571	1571	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7
2.5°	1949.2	1948.4	1947.6	1946.8	1946.1	1944.4	1941.7	1939.1	1936.5	1933.9	1936.5
5°	1942.8	1941.4	1940.1	1938.8	1937.5	1935.0	1931.5	1927.9	1924.3	1920.7	1923.9
7.5°	1923.6	1922.4	1921.2	1919.9	1918.6	1915.9	1911.6	1907.2	1903.0	1898.7	1900.9
10°	1906.0	1905.0	1904.0	1903.1	1902.1	1899.3	1894.7	1890.2	1885.6	1881.0	1882.0
12.5°	1886.0	1884.8	1883.5	1882.3	1881.0	1877.4	1871.2	1865.1	1858.9	1852.8	1853.5
15°	1847.2	1845.2	1843.3	1841.4	1839.4	1834.9	1828.1	1821.3	1814.4	1807.5	1807.2
17.5°	1803.4	1800.4	1797.4	1794.4	1791.4	1785.6	1777.0	1768.3	1759.7	1751.1	1749.5
20°	1769.3	1766.0	1762.7	1759.5	1756.2	1749.4	1739.0	1728.5	1718.1	1707.6	1706.0
22.5°	1731.7	1728.4	1725.1	1721.9	1718.6	1711.6	1700.5	1689.6	1678.6	1667.6	1664.4
25°	1675.3	1670.4	1665.5	1660.6	1655.7	1647.2	1635.1	1623.1	1610.9	1598.8	1594.6
27.5°	1610.6	1604.7	1598.7	1592.8	1586.9	1577.4	1564.4	1551.5	1538.6	1525.7	1519.8
30°	1563.6	1557.4	1551.1	1545.0	1538.8	1528.8	1515.0	1501.4	1487.6	1473.9	1466.4
32.5°	1517.8	1510.5	1503.3	1496.0	1488.7	1478.1	1464.1	1450.2	1436.2	1422.2	1413.9
35°	1443.1	1435.2	1427.4	1419.6	1411.7	1400.4	1385.7	1371.1	1356.4	1341.7	1332.2
37.5°	1369.9	1360.4	1350.9	1341.3	1331.7	1319.4	1304.3	1289.1	1273.9	1258.8	1247.5
40°	1318.1	1308.3	1298.5	1288.7	1279.0	1266.2	1250.6	1234.9	1219.2	1203.5	1191.2
42.5°	1264.1	1254.1	1244.0	1233.9	1223.9	1210.7	1194.6	1178.4	1162.2	1145.9	1134.1
45°	1181.5	1172.1	1162.5	1153.1	1143.6	1129.9	1111.9	1094.0	1076.0	1058.1	1045.0
47.5°	1096.0	1086.0	1076.0	1066.0	1056.0	1042.0	1023.9	1005.8	987.7	969.6	956.1
50°	1041.9	1031.1	1020.3	1009.6	998.8	984.1	965.4	946.9	928.2	909.6	895.9
52.5°	983.1	972.0	961.0	950.0	939.0	924.6	907.1	889.6	871.9	854.4	839.6
55°	896.5	886.0	875.5	865.1	854.6	840.3	822.0	803.7	785.4	767.1	752.4
57.5°	808.8	797.7	786.5	775.3	764.1	749.8	732.2	714.4	696.8	679.2	664.9
60°	752.4	740.9	729.5	718.1	706.7	692.1	674.5	656.9	639.2	621.6	607.3
62.5°	692.5	681.6	670.6	659.7	648.8	634.4	616.5	598.6	580.7	562.8	549.5
65°	606.9	595.8	584.8	573.6	562.5	548.3	531.0	513.7	496.3	479.1	466.0
67.5°	522.0	510.9	499.7	488.7	477.6	463.7	447.1	430.6	414.0	397.4	385.4
70°	464.4	453.3	442.1	431.0	420.0	406.2	389.9	373.6	357.2	340.9	330.8
72.5°	407.9	397.1	386.3	375.4	364.6	351.5	336.2	320.9	305.7	290.4	281.1
75°	323.3	313.5	303.7	293.9	284.1	272.4	258.6	245.0	231.2	217.4	210.3
77.5°	239.2	231.4	223.6	215.7	207.9	198.5	187.5	176.5	165.6	154.6	149.6
80°	191.1	183.2	175.4	167.5	159.7	151.2	142.0	132.9	123.8	114.6	111.7
82.5°	144.0	137.0	129.9	122.8	115.8	109.1	102.8	96.6	90.3	84.1	82.7
85°	80.9	74.9	69.1	63.2	57.3	53.5	51.9	50.3	48.6	47.0	46.7
87.5°	27.2	25.9	24.5	23.1	21.7	21.1	21.2	21.3	21.4	21.6	21.8
90°	1.2	3.4	5.6	7.7	9.9	12.0	13.9	15.7	17.6	19.6	20.9
92.5°	29.6	31.1	32.6	34.1	35.6	37.6	40.0	42.3	44.6	46.9	48.7
95°	79.5	80.0	80.6	81.1	81.6	83.3	86.0	88.7	91.4	94.2	96.0
97.5°	132.1	132.2	132.5	132.7	132.9	134.9	138.6	142.4	146.2	149.9	151.7
100°	171.2	171.2	171.2	171.2	171.2	173.0	176.4	180.0	183.5	187.1	189.5
102.5°	213.2	214.3	215.4	216.5	217.5	219.0	220.8	222.6	224.4	226.2	228.8
105°	278.8	280.1	281.4	282.9	284.2	285.7	287.3	289.0	290.6	292.2	293.9
107.5°	351.1	352.5	353.8	355.2	356.6	357.9	359.1	360.3	361.7	362.9	363.7
110°	401.1	402.4	403.8	405.1	406.4	407.6	408.4	409.2	410.0	410.8	411.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	451.9	452.6	453.3	454.0	454.7	455.6	456.6	457.6	458.6	459.7	460.1
115°	527.0	528.0	529.1	530.2	531.3	532.2	532.6	533.2	533.8	534.3	534.0
117.5°	602.3	602.8	603.2	603.7	604.3	604.7	605.2	605.7	606.1	606.7	606.9
120°	649.2	650.5	652.0	653.3	654.7	655.4	655.7	656.0	656.3	656.6	656.6
122.5°	700.1	700.6	701.1	701.5	702.0	702.7	703.3	704.1	704.7	705.5	705.2
125°	769.0	770.6	772.3	773.9	775.5	776.5	776.7	777.0	777.3	777.6	777.0
127.5°	842.4	843.3	844.2	845.2	846.1	846.7	847.1	847.3	847.7	848.0	847.7
130°	886.4	887.8	889.1	890.5	891.8	892.8	893.3	893.9	894.4	894.9	894.7
132.5°	930.4	932.6	934.9	937.1	939.3	940.4	940.3	940.2	940.1	940.0	939.7
135°	1000.1	1001.7	1003.3	1005.0	1006.6	1007.6	1007.9	1008.1	1008.4	1008.7	1008.7
137.5°	1065.6	1067.2	1068.8	1070.4	1072.0	1073.0	1073.7	1074.2	1074.9	1075.4	1075.7
140°	1107.7	1109.1	1110.4	1111.8	1113.1	1114.2	1115.0	1115.9	1116.6	1117.5	1118.0
142.5°	1149.8	1150.9	1152.1	1153.2	1154.3	1155.4	1156.4	1157.4	1158.5	1159.5	1159.9
145°	1211.6	1212.7	1213.8	1214.8	1216.0	1216.9	1217.8	1218.5	1219.4	1220.2	1220.2
147.5°	1268.9	1269.4	1270.1	1270.6	1271.2	1271.9	1272.5	1273.2	1273.8	1274.5	1275.2
150°	1307.0	1306.7	1306.5	1306.2	1305.9	1306.3	1307.4	1308.5	1309.6	1310.7	1310.7
152.5°	1338.3	1338.7	1339.1	1339.4	1339.8	1340.2	1340.7	1341.0	1341.5	1342.0	1342.7
155°	1386.5	1386.5	1386.5	1386.5	1386.5	1386.6	1386.9	1387.1	1387.4	1387.7	1388.7
157.5°	1429.5	1428.9	1428.3	1427.7	1427.1	1426.9	1427.2	1427.5	1427.8	1428.0	1429.1
160°	1454.9	1454.2	1453.3	1452.5	1451.7	1451.4	1451.7	1452.0	1452.2	1452.5	1453.6
162.5°	1477.4	1476.9	1476.2	1475.6	1475.1	1474.8	1474.8	1474.9	1474.9	1475.0	1476.3
165°	1507.5	1506.9	1506.4	1505.9	1505.3	1505.2	1505.4	1505.7	1506.0	1506.3	1507.4
167.5°	1533.0	1531.8	1530.8	1529.7	1528.6	1528.0	1528.0	1528.0	1528.0	1528.0	1529.7
170°	1546.6	1545.6	1544.5	1543.4	1542.3	1541.7	1541.7	1541.7	1541.7	1541.7	1543.4
172.5°	1556.4	1555.3	1554.3	1553.1	1552.1	1551.5	1551.5	1551.5	1551.5	1551.5	1553.1
175°	1567.4	1566.3	1565.3	1564.1	1563.1	1562.5	1562.5	1562.5	1562.5	1562.5	1564.1
177.5°	1573.0	1572.2	1571.3	1570.5	1569.5	1569.1	1568.8	1568.6	1568.4	1568.1	1569.4
180°	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7
2.5°	1939.1	1941.7	1944.4	1945.5	1945.3	1945.0	1944.7	1944.5
5°	1927.2	1930.5	1933.7	1935.0	1934.4	1933.7	1933.1	1932.4
7.5°	1903.2	1905.5	1907.8	1908.6	1907.8	1907.1	1906.4	1905.7
10°	1882.9	1884.0	1884.9	1884.9	1884.0	1882.9	1882.0	1881.0
12.5°	1854.3	1854.9	1855.7	1855.3	1853.8	1852.3	1850.8	1849.3
15°	1806.9	1806.6	1806.2	1804.6	1801.7	1798.7	1795.7	1792.8
17.5°	1747.9	1746.2	1744.6	1742.6	1740.1	1737.7	1735.3	1732.9
20°	1704.3	1702.7	1701.1	1698.7	1695.8	1692.9	1690.0	1687.1
22.5°	1661.2	1658.0	1654.8	1652.0	1649.6	1647.2	1644.7	1642.4
25°	1590.4	1586.1	1581.9	1577.9	1574.3	1570.7	1567.2	1563.6
27.5°	1513.8	1507.9	1501.9	1497.2	1493.7	1490.3	1486.8	1483.4
30°	1459.0	1451.4	1443.9	1438.7	1435.8	1432.8	1429.8	1426.9
32.5°	1405.6	1397.3	1389.0	1383.0	1379.3	1375.5	1371.9	1368.1
35°	1322.8	1313.2	1303.8	1296.8	1292.2	1287.6	1283.1	1278.5
37.5°	1236.1	1224.7	1213.3	1205.4	1201.0	1196.6	1192.1	1187.7
40°	1178.7	1166.3	1154.0	1145.8	1141.8	1137.9	1134.0	1130.1
42.5°	1122.2	1110.3	1098.4	1089.6	1083.8	1078.1	1072.3	1066.6
45°	1031.9	1018.9	1005.8	996.8	991.9	987.0	982.1	977.2
47.5°	942.7	929.3	915.8	906.3	900.9	895.5	890.0	884.7
50°	882.2	868.5	854.8	845.5	840.6	835.7	830.8	825.9
52.5°	824.8	810.1	795.3	785.5	780.6	775.7	770.8	765.9
55°	737.7	723.0	708.3	698.3	693.1	687.9	682.7	677.5
57.5°	650.4	636.1	621.7	612.3	607.6	602.9	598.3	593.7
60°	592.9	578.5	564.1	554.5	549.6	544.7	539.8	534.9
62.5°	536.2	522.8	509.5	500.4	495.5	490.6	485.7	480.8
65°	453.0	439.9	426.8	417.8	412.9	408.0	403.1	398.2
67.5°	373.4	361.5	349.6	341.6	337.7	333.8	329.9	325.9
70°	320.7	310.6	300.5	293.4	289.5	285.6	281.6	277.8
72.5°	271.7	262.4	253.0	247.0	244.4	241.9	239.2	236.6
75°	203.1	196.0	188.8	184.0	181.7	179.5	177.2	174.8
77.5°	144.5	139.5	134.5	131.1	129.4	127.7	126.0	124.3
80°	108.8	105.8	102.8	101.0	100.4	99.7	99.2	98.5
82.5°	81.3	79.9	78.6	77.7	77.3	76.9	76.5	76.2
85°	46.4	46.1	45.7	45.4	45.1	44.8	44.4	44.1
87.5°	22.1	22.3	22.6	22.7	22.6	22.5	22.4	22.3
90°	22.2	23.7	25.0	26.1	26.9	27.7	28.6	29.3
92.5°	50.5	52.3	54.1	55.3	55.9	56.6	57.1	57.7
95°	97.9	99.8	101.8	102.9	103.5	104.1	104.6	105.2
97.5°	153.4	155.2	157.0	158.2	158.4	158.8	159.1	159.5
100°	192.0	194.4	196.8	198.3	198.9	199.4	200.0	200.5
102.5°	231.5	234.1	236.9	238.6	239.3	240.1	240.8	241.6
105°	295.5	297.1	298.7	299.9	300.8	301.6	302.4	303.2
107.5°	364.5	365.3	366.2	366.6	366.5	366.4	366.4	366.3
110°	412.5	413.2	414.1	414.3	414.1	413.8	413.5	413.2



TEST NUMBER: P333735-830

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	460.4	460.8	461.2	461.2	460.7	460.2	459.7	459.2
115°	533.8	533.5	533.2	532.9	532.6	532.3	532.2	531.9
117.5°	607.1	607.3	607.6	607.1	606.1	604.9	603.9	602.8
120°	656.6	656.6	656.6	656.0	654.9	653.8	652.7	651.7
122.5°	705.0	704.8	704.6	704.1	703.1	702.3	701.4	700.6
125°	776.5	776.0	775.4	775.1	774.8	774.5	774.2	773.9
127.5°	847.4	847.2	847.0	846.5	846.0	845.5	844.9	844.3
130°	894.4	894.2	893.9	893.4	893.0	892.4	891.8	891.3
132.5°	939.4	939.1	938.9	938.4	937.6	936.8	936.0	935.3
135°	1008.7	1008.7	1008.7	1008.1	1007.0	1006.0	1004.8	1003.8
137.5°	1076.1	1076.4	1076.8	1076.2	1074.9	1073.5	1072.1	1070.8
140°	1118.6	1119.1	1119.6	1119.3	1117.9	1116.5	1115.2	1113.8
142.5°	1160.2	1160.6	1160.8	1160.4	1159.0	1157.6	1156.2	1154.9
145°	1220.2	1220.2	1220.2	1219.7	1219.0	1218.1	1217.3	1216.5
147.5°	1275.7	1276.4	1277.1	1276.5	1274.6	1272.8	1270.9	1269.1
150°	1310.7	1310.7	1310.7	1310.4	1309.9	1309.3	1308.7	1308.2
152.5°	1343.2	1343.9	1344.5	1344.4	1343.4	1342.5	1341.4	1340.5
155°	1389.9	1390.9	1392.0	1391.9	1390.5	1389.2	1387.8	1386.5
157.5°	1430.2	1431.3	1432.4	1432.0	1430.2	1428.4	1426.6	1424.8
160°	1454.6	1455.8	1456.8	1456.7	1455.4	1454.0	1452.6	1451.2
162.5°	1477.6	1478.8	1480.2	1480.1	1478.5	1476.9	1475.4	1473.8
165°	1508.4	1509.6	1510.6	1510.3	1508.7	1507.1	1505.4	1503.8
167.5°	1531.3	1533.0	1534.6	1534.6	1532.9	1531.2	1529.5	1527.8
170°	1545.0	1546.6	1548.2	1548.1	1546.2	1544.4	1542.4	1540.5
172.5°	1554.8	1556.4	1558.0	1558.0	1556.3	1554.6	1552.9	1551.2
175°	1565.8	1567.4	1569.1	1568.9	1567.0	1565.1	1563.2	1561.3
177.5°	1570.7	1572.1	1573.4	1573.3	1571.7	1570.2	1568.7	1567.2
180°	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1

(END OF REPORT)