

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: P333469-840

Luminaire Tested: **S125DIW-S1270D770U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333469-840
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: S125DIW-S1270D770U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7664.5 lumens
Efficiency: N/A
Efficacy: 128.2 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: Semi-Direct

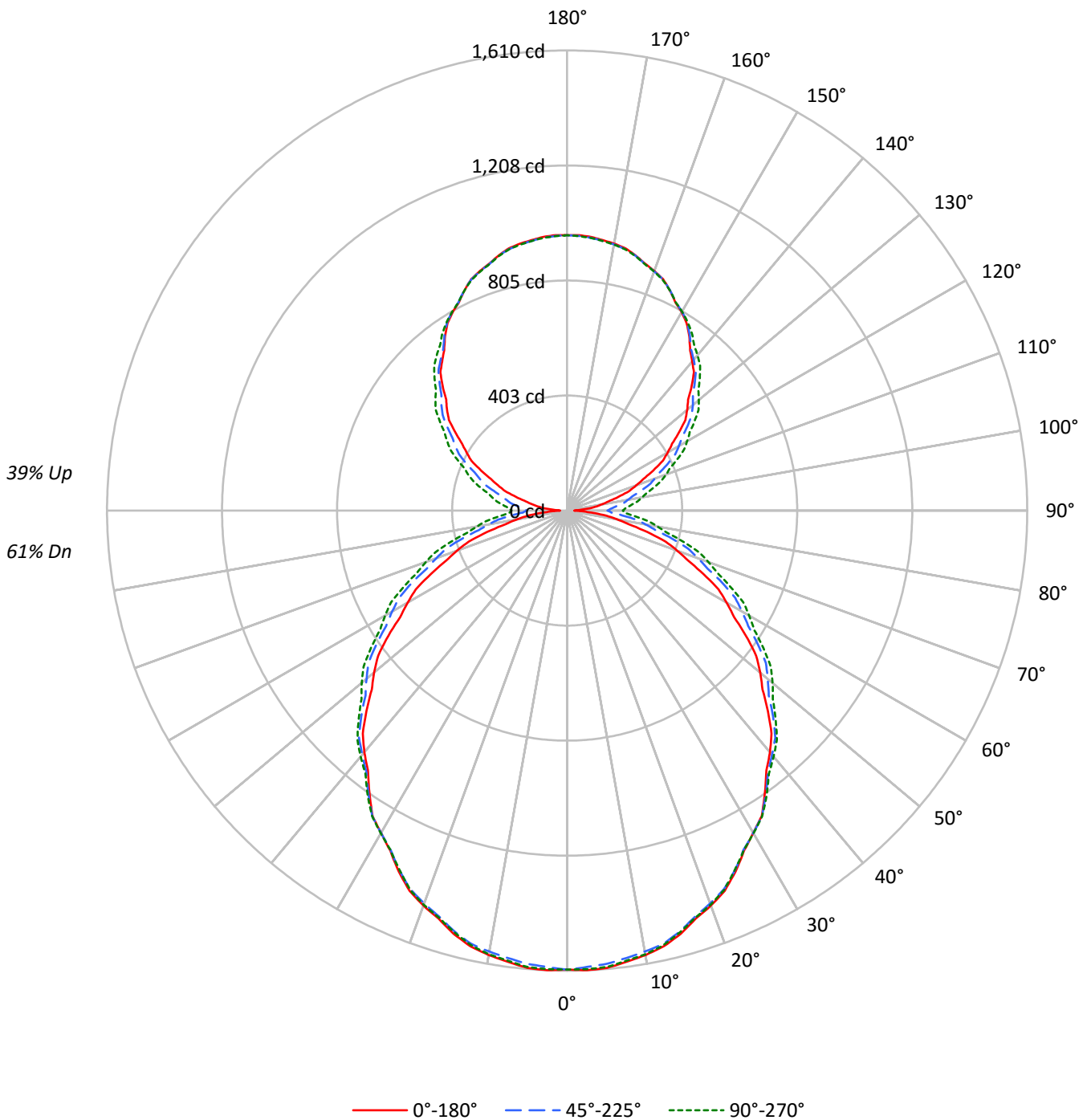
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66	61
1	99	95	90	86	93	88	85	81	77	74	72	67	65	63	57	56	54	49
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	47	45	41
3	82	72	64	58	76	67	60	55	59	53	49	51	47	43	44	41	38	34
4	75	63	55	49	70	60	52	46	52	46	41	45	41	37	39	35	32	29
5	69	56	48	42	64	53	45	40	47	40	36	41	36	32	35	31	28	25
6	63	51	42	36	59	48	40	34	42	36	31	37	32	28	32	28	25	22
7	59	46	37	32	55	43	36	30	38	32	27	33	28	25	29	25	22	19
8	54	42	33	28	51	39	32	27	35	29	24	31	26	22	27	23	20	17
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	25	21	18	15
10	47	35	27	22	44	33	26	21	29	24	20	26	21	18	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10372	10372	10372
5°	10393	10181	10213
10°	10318	9998	9984
15°	10197	9781	9692
20°	10031	9512	9401
25°	9834	9224	9042
30°	9595	8907	8715
35°	9372	8616	8417
40°	9145	8310	8116
45°	8889	8048	7849
50°	8644	7763	7614
55°	8351	7495	7337
60°	8029	7187	7054
65°	7692	6868	6736
70°	7312	6430	6408
75°	6707	6007	6007
80°	5917	5497	5569
85°	5183	5154	5432



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.9	2.0
10°-20°	431.1	5.6
20°-30°	641.1	8.4
30°-40°	759.4	9.9
40°-50°	785.2	10.2
50°-60°	723.3	9.4
60°-70°	584.7	7.6
70°-80°	391.6	5.1
80°-90°	205.2	2.7
90°-100°	178.5	2.3
100°-110°	274.5	3.6
110°-120°	379.0	4.9
120°-130°	456.7	6.0
130°-140°	489.9	6.4
140°-150°	469.3	6.1
150°-160°	391.8	5.1
160°-170°	260.4	3.4
170°-180°	91.1	1.2
0°-30°	1224.1	16.0
0°-40°	1983.5	25.9
0°-60°	3491.9	45.6
0°-90°	4673.3	61.0
90°-120°	832.0	10.9
90°-150°	2247.8	29.3
90°-180°	2991.0	39.0
0°-180°	7664.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1606	1606	1606	1606	1606	
5°	1606	1602	1592	1604	1603	152
15°	1534	1534	1524	1533	1527	432
25°	1393	1397	1389	1394	1387	641
35°	1206	1216	1212	1217	1217	755
45°	994	1010	1019	1029	1031	766
55°	764	789	814	831	838	682
65°	526	562	600	623	630	522
75°	290	331	381	411	420	307
85°	87	139	194	227	241	92
90°	26	82	141	180	194	19
95°	69	113	173	211	225	68
105°	185	215	266	300	315	198
115°	332	348	389	416	425	329
125°	478	482	513	536	544	428
135°	616	620	631	651	656	475
145°	744	746	748	756	760	465
155°	850	850	851	853	850	391
165°	924	923	924	926	922	261
175°	961	958	958	962	957	91
180°	963	963	963	963	963	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1609.7	1609.2	1608.6	1608.1	1607.5	1606.3	1604.3	1602.4	1600.4	1598.4	1600.4
5°	1606.0	1605.3	1604.6	1603.9	1603.2	1601.6	1599.1	1596.7	1594.3	1591.9	1594.6
7.5°	1591.9	1591.5	1591.2	1590.9	1590.7	1589.3	1586.8	1584.3	1581.8	1579.2	1581.7
10°	1579.2	1579.2	1579.2	1579.2	1579.2	1577.8	1575.0	1572.3	1569.4	1566.6	1569.0
12.5°	1561.6	1561.9	1562.2	1562.5	1562.7	1561.8	1559.5	1557.2	1555.0	1552.8	1554.7
15°	1533.6	1533.9	1534.3	1534.6	1535.0	1533.9	1531.5	1529.0	1526.6	1524.1	1526.2
17.5°	1497.0	1497.7	1498.4	1499.1	1499.9	1498.9	1496.5	1494.1	1491.6	1489.1	1490.8
20°	1470.6	1471.3	1472.0	1472.7	1473.4	1472.5	1470.1	1467.6	1465.1	1462.7	1463.8
22.5°	1440.4	1441.6	1442.9	1444.1	1445.4	1444.6	1441.9	1439.2	1436.4	1433.7	1435.0
25°	1393.4	1394.5	1395.5	1396.5	1397.7	1397.1	1395.0	1392.9	1390.8	1388.7	1390.1
27.5°	1341.2	1342.7	1344.2	1345.7	1347.4	1346.9	1344.5	1342.1	1339.8	1337.4	1338.4
30°	1302.1	1304.2	1306.3	1308.4	1310.5	1310.5	1308.4	1306.3	1304.2	1302.1	1302.8
32.5°	1266.9	1268.7	1270.5	1272.3	1274.1	1274.2	1272.7	1271.2	1269.6	1268.1	1268.8
35°	1206.1	1208.5	1210.9	1213.5	1215.9	1216.6	1215.5	1214.5	1213.5	1212.3	1213.5
37.5°	1145.3	1147.5	1149.7	1152.1	1154.3	1155.2	1154.9	1154.5	1154.2	1153.8	1155.2
40°	1103.7	1106.5	1109.3	1112.2	1114.9	1116.1	1115.8	1115.4	1115.1	1114.8	1116.1
42.5°	1058.3	1062.0	1065.6	1069.2	1073.0	1075.1	1075.9	1076.7	1077.4	1078.2	1079.8
45°	993.5	997.3	1001.2	1005.0	1008.9	1011.7	1013.5	1015.2	1016.9	1018.7	1021.2
47.5°	927.1	930.6	934.2	937.8	941.3	944.6	947.7	950.7	953.6	956.6	960.3
50°	881.7	885.6	889.4	893.2	897.2	901.0	904.8	908.7	912.5	916.4	920.2
52.5°	833.8	838.6	843.2	847.9	852.6	857.3	862.0	866.7	871.3	876.1	880.2
55°	763.7	769.2	774.9	780.4	786.0	791.6	797.2	802.8	808.4	814.1	817.9
57.5°	691.9	698.5	705.3	712.0	718.7	725.3	731.7	738.1	744.6	751.0	755.5
60°	644.0	651.0	657.9	665.0	672.0	678.9	686.0	693.0	699.9	706.9	712.2
62.5°	597.3	604.4	611.4	618.3	625.3	632.7	640.2	647.7	655.3	662.9	668.6
65°	525.8	533.9	542.0	550.1	558.1	566.3	574.7	583.1	591.5	599.9	605.1
67.5°	458.5	466.3	474.0	481.8	489.6	497.8	506.2	514.8	523.3	531.9	538.3
70°	409.4	417.4	425.5	433.5	441.5	450.1	459.2	468.4	477.5	486.6	493.2
72.5°	361.5	369.8	378.2	386.5	394.9	403.9	413.8	423.8	433.7	443.7	450.9
75°	289.7	298.8	307.9	317.0	326.1	336.3	347.4	358.6	369.8	381.0	388.0
77.5°	220.8	231.3	241.8	252.3	262.8	273.4	284.2	294.9	305.7	316.5	324.2
80°	177.9	188.4	198.9	209.4	219.9	231.1	243.0	254.9	266.8	278.7	286.4
82.5°	138.9	150.0	161.0	172.1	183.1	194.7	206.9	219.0	231.3	243.4	250.9
85°	86.6	98.2	109.7	121.3	132.8	144.7	156.9	169.2	181.4	193.7	201.4
87.5°	49.3	60.7	72.2	83.6	95.1	106.9	119.1	131.2	143.3	155.4	163.7
90°	26.0	38.5	51.0	63.5	76.0	88.9	101.9	115.0	128.1	141.1	150.0
92.5°	40.8	52.1	63.4	74.7	85.9	98.5	112.0	125.6	139.3	152.9	161.7
95°	69.2	78.7	88.1	97.5	106.9	118.5	132.0	145.5	159.1	172.7	181.6
97.5°	99.6	107.9	116.1	124.5	132.8	143.9	157.6	171.5	185.2	198.9	207.4
100°	122.3	129.7	136.9	144.3	151.7	162.0	175.4	188.7	202.1	215.5	224.3
102.5°	146.8	154.2	161.7	169.2	176.6	186.3	198.3	210.4	222.4	234.4	243.1
105°	185.1	191.6	197.9	204.4	210.9	219.7	231.3	242.8	254.3	265.8	273.8
107.5°	227.6	233.2	238.7	244.4	249.9	258.1	269.0	279.8	290.7	301.5	309.0
110°	256.9	262.0	267.0	272.1	277.0	284.7	295.0	305.3	315.6	325.9	333.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	288.1	291.9	295.7	299.5	303.3	310.2	320.4	330.5	340.7	350.8	357.4
115°	332.5	335.7	338.8	341.9	345.0	351.3	360.7	370.1	379.6	389.0	395.2
117.5°	377.2	379.1	381.0	382.8	384.8	390.2	399.1	408.0	417.0	425.9	431.9
120°	406.0	407.8	409.7	411.6	413.4	418.5	426.8	434.9	443.1	451.4	457.4
122.5°	435.9	436.7	437.5	438.3	439.0	443.5	451.7	459.9	468.2	476.4	481.9
125°	477.9	478.5	479.2	479.8	480.4	484.3	491.5	498.7	505.8	513.0	518.3
127.5°	521.3	521.5	521.7	521.9	522.1	525.2	531.1	537.0	543.0	549.0	553.9
130°	548.3	548.8	549.2	549.7	550.2	553.0	558.3	563.5	568.8	573.9	578.7
132.5°	574.0	575.2	576.5	577.8	579.2	581.7	585.3	589.1	592.8	596.5	601.3
135°	616.4	617.0	617.6	618.3	618.9	620.6	623.2	625.8	628.4	631.1	635.6
137.5°	656.2	656.9	657.6	658.3	659.0	660.1	661.7	663.2	664.8	666.3	670.7
140°	680.8	681.7	682.5	683.3	684.1	685.0	685.8	686.6	687.5	688.3	692.6
142.5°	706.6	707.0	707.4	707.8	708.2	708.8	709.5	710.2	710.9	711.7	715.1
145°	744.5	744.8	745.2	745.5	745.8	746.2	746.7	747.2	747.7	748.2	749.9
147.5°	778.0	778.4	778.7	779.1	779.5	779.8	780.2	780.6	781.0	781.4	782.4
150°	801.4	801.2	801.0	800.9	800.7	801.0	801.6	802.3	802.9	803.7	803.7
152.5°	820.6	820.8	821.0	821.3	821.5	821.7	822.0	822.3	822.5	822.8	823.2
155°	850.1	850.1	850.1	850.1	850.1	850.2	850.4	850.5	850.7	850.9	851.5
157.5°	876.6	876.2	875.8	875.5	875.0	874.9	875.1	875.3	875.5	875.7	876.3
160°	892.1	891.6	891.1	890.6	890.1	889.9	890.1	890.3	890.4	890.6	891.3
162.5°	905.9	905.5	905.1	904.8	904.4	904.2	904.3	904.3	904.3	904.4	905.2
165°	924.3	924.0	923.7	923.3	923.0	922.9	923.1	923.2	923.4	923.6	924.2
167.5°	940.0	939.3	938.6	938.0	937.3	937.0	937.0	937.0	937.0	937.0	938.0
170°	948.4	947.7	947.0	946.3	945.6	945.3	945.3	945.3	945.3	945.3	946.3
172.5°	954.3	953.6	953.0	952.3	951.7	951.3	951.3	951.3	951.3	951.3	952.3
175°	961.1	960.4	959.8	959.1	958.4	958.1	958.1	958.1	958.1	958.1	959.1
177.5°	964.5	964.0	963.4	962.9	962.4	962.1	961.9	961.8	961.7	961.5	962.3
180°	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1602.4	1604.3	1606.3	1607.1	1606.8	1606.6	1606.3	1606.0
5°	1597.4	1600.2	1603.1	1604.3	1603.9	1603.6	1603.2	1602.9
7.5°	1584.1	1586.6	1589.0	1590.0	1589.7	1589.3	1589.0	1588.6
10°	1571.6	1574.0	1576.4	1577.5	1577.1	1576.8	1576.4	1576.1
12.5°	1556.5	1558.4	1560.3	1560.8	1559.9	1559.0	1558.1	1557.2
15°	1528.3	1530.5	1532.5	1532.9	1531.5	1530.0	1528.6	1527.2
17.5°	1492.4	1494.0	1495.6	1496.0	1495.1	1494.3	1493.5	1492.6
20°	1464.8	1465.8	1466.9	1467.4	1467.4	1467.4	1467.4	1467.4
22.5°	1436.4	1437.7	1439.1	1439.3	1438.5	1437.6	1436.7	1435.9
25°	1391.5	1392.9	1394.3	1394.1	1392.4	1390.6	1388.9	1387.2
27.5°	1339.4	1340.3	1341.3	1341.5	1340.8	1340.2	1339.6	1339.0
30°	1303.5	1304.2	1304.9	1305.0	1304.7	1304.3	1304.0	1303.6
32.5°	1269.5	1270.2	1270.9	1271.1	1270.7	1270.4	1270.0	1269.7
35°	1214.5	1215.5	1216.6	1217.1	1217.1	1217.1	1217.1	1217.1
37.5°	1156.6	1158.0	1159.4	1160.0	1159.8	1159.7	1159.6	1159.4
40°	1117.5	1118.9	1120.3	1121.4	1122.1	1122.8	1123.5	1124.2
42.5°	1081.6	1083.3	1084.9	1085.8	1086.0	1086.1	1086.3	1086.4
45°	1023.6	1026.0	1028.4	1029.9	1030.3	1030.6	1031.0	1031.3
47.5°	963.8	967.3	971.0	973.1	973.9	974.6	975.4	976.2
50°	924.0	927.9	931.8	934.2	935.2	936.3	937.4	938.4
52.5°	884.3	888.5	892.5	895.0	895.8	896.6	897.4	898.1
55°	821.7	825.6	829.4	832.0	833.4	834.9	836.3	837.7
57.5°	759.8	764.3	768.7	771.4	772.4	773.5	774.6	775.6
60°	717.4	722.7	727.9	731.0	732.2	733.2	734.3	735.3
62.5°	674.5	680.2	686.1	689.6	690.9	692.4	693.7	695.0
65°	610.4	615.6	620.9	624.2	625.6	627.0	628.4	629.8
67.5°	544.6	551.0	557.3	561.4	563.2	565.0	566.9	568.8
70°	499.8	506.4	513.1	517.5	519.6	521.7	523.8	525.8
72.5°	458.1	465.3	472.5	476.9	478.5	480.0	481.5	483.0
75°	395.1	402.0	409.0	413.4	415.2	416.9	418.7	420.4
77.5°	331.8	339.5	347.3	351.8	353.3	354.6	356.0	357.4
80°	294.1	301.7	309.5	314.1	315.4	316.8	318.2	319.6
82.5°	258.2	265.7	273.1	278.0	280.5	283.1	285.6	288.1
85°	209.0	216.7	224.5	229.7	232.5	235.3	238.1	240.9
87.5°	171.9	180.1	188.3	193.7	196.2	198.7	201.4	203.9
90°	158.9	167.7	176.6	182.6	185.5	188.4	191.4	194.3
92.5°	170.6	179.5	188.3	194.2	197.0	199.8	202.6	205.4
95°	190.4	199.2	208.1	214.0	216.7	219.5	222.3	225.1
97.5°	215.9	224.3	232.8	238.2	240.9	243.5	246.0	248.6
100°	233.2	242.0	250.9	256.5	258.9	261.4	263.8	266.2
102.5°	251.9	260.5	269.2	274.9	277.4	279.9	282.6	285.1
105°	281.8	289.7	297.7	303.3	306.2	309.1	312.0	315.0
107.5°	316.4	323.9	331.2	336.1	338.2	340.3	342.4	344.6
110°	340.2	347.3	354.5	359.2	361.4	363.8	366.1	368.3



TEST NUMBER: P333469-840

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	364.1	370.6	377.3	381.6	383.7	385.9	388.1	390.2
115°	401.3	407.4	413.5	417.6	419.5	421.4	423.3	425.3
117.5°	438.0	444.0	450.2	454.0	455.8	457.5	459.2	460.9
120°	463.3	469.2	475.1	478.9	480.3	481.7	483.1	484.6
122.5°	487.4	492.9	498.5	502.0	503.6	505.1	506.8	508.3
125°	523.5	528.8	534.0	537.5	539.1	540.7	542.2	543.8
127.5°	559.0	564.0	569.0	572.4	574.0	575.7	577.4	579.2
130°	583.4	588.1	592.9	595.9	597.3	598.7	600.2	601.6
132.5°	605.9	610.7	615.4	618.3	619.2	620.3	621.3	622.3
135°	640.2	644.7	649.2	652.1	653.2	654.3	655.3	656.4
137.5°	675.0	679.3	683.7	686.1	686.7	687.2	687.8	688.3
140°	696.7	700.8	705.1	707.4	708.0	708.6	709.1	709.7
142.5°	718.6	722.1	725.6	727.6	728.2	728.7	729.3	729.8
145°	751.6	753.5	755.2	756.5	757.4	758.3	759.2	760.1
147.5°	783.4	784.4	785.3	785.5	785.1	784.6	784.1	783.6
150°	803.7	803.7	803.7	803.7	803.7	803.7	803.8	803.8
152.5°	823.6	824.0	824.5	824.4	823.8	823.3	822.7	822.2
155°	852.2	852.8	853.5	853.4	852.6	851.8	850.9	850.1
157.5°	877.0	877.6	878.3	878.1	877.0	875.9	874.7	873.6
160°	891.9	892.6	893.2	893.2	892.3	891.5	890.7	889.9
162.5°	906.1	906.8	907.6	907.6	906.6	905.5	904.6	903.6
165°	924.9	925.6	926.2	926.0	925.1	924.1	923.1	922.1
167.5°	939.0	940.0	940.9	940.9	939.9	938.9	937.9	936.8
170°	947.4	948.4	949.4	949.3	948.1	947.0	945.7	944.6
172.5°	953.3	954.3	955.3	955.3	954.3	953.2	952.2	951.2
175°	960.1	961.1	962.1	962.0	960.8	959.7	958.5	957.4
177.5°	963.1	963.9	964.7	964.6	963.7	962.8	961.9	960.9
180°	963.3	963.3	963.3	963.3	963.3	963.3	963.3	963.3

(END OF REPORT)