

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: P333468-840

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333468-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
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-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8076.2 lumens
Efficiency: N/A
Efficacy: 135.1 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

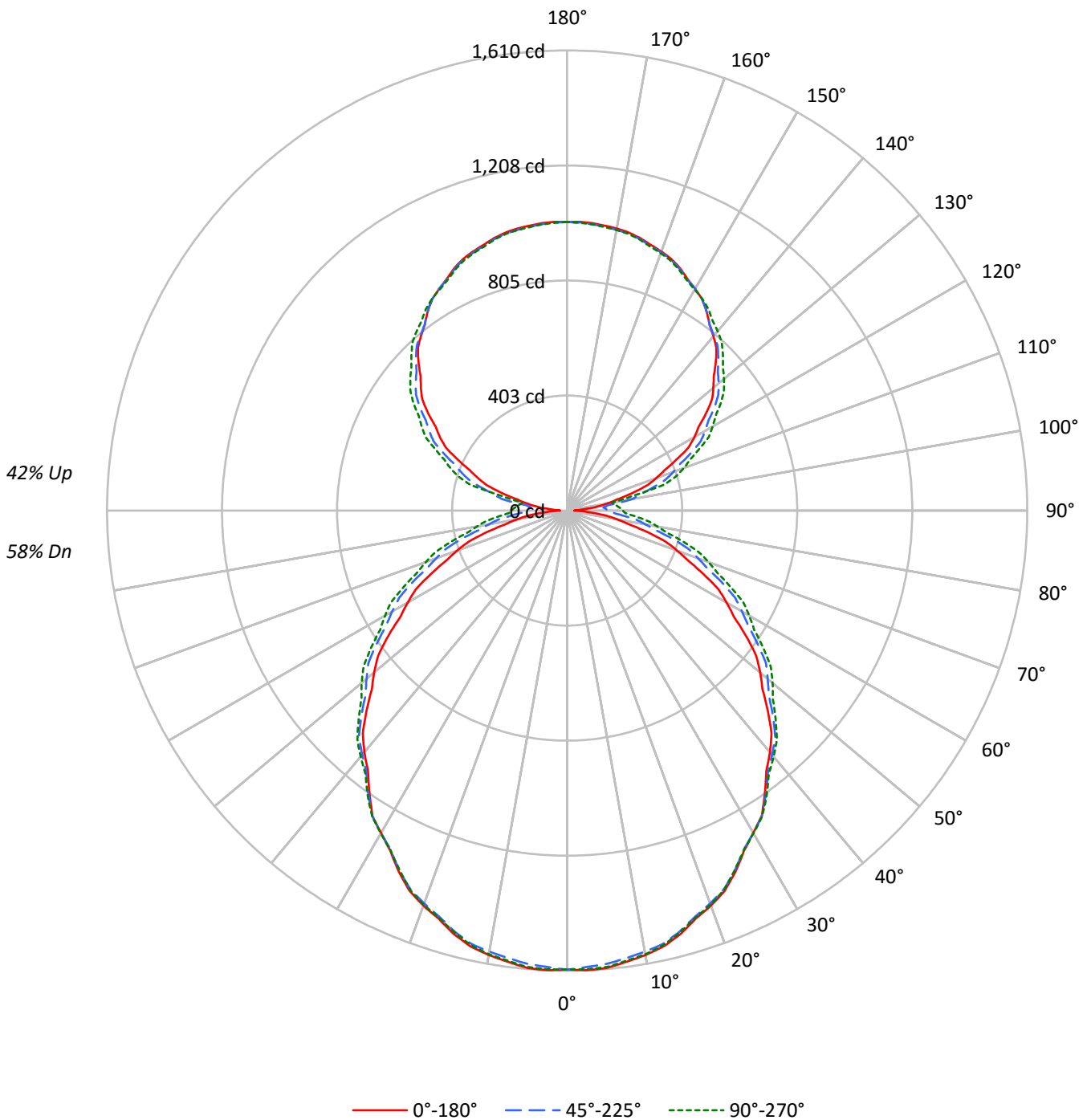
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333468-840

CATALOG NUMBER: S125DIW-S1270D770U840-4F0-1E-UDD-D

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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	99	94	90	86	92	88	84	80	76	73	70	65	63	61	55	53	52	47
2	90	82	75	69	83	76	70	65	66	61	58	56	53	50	48	45	43	39
3	81	71	64	57	75	67	60	54	58	52	48	50	45	42	42	39	36	32
4	74	63	55	48	69	59	52	46	51	45	41	44	39	36	37	34	31	28
5	68	56	48	41	63	53	45	39	46	40	35	39	35	31	34	30	27	24
6	63	50	42	36	58	47	40	34	41	35	30	36	31	27	30	27	24	21
7	58	45	37	31	54	43	35	30	37	31	27	32	27	24	28	24	21	18
8	54	41	33	28	50	39	31	26	34	28	24	30	25	21	25	22	19	16
9	50	38	30	25	47	35	28	24	31	25	21	27	22	19	23	20	17	15
10	47	35	27	22	44	33	26	21	29	23	19	25	21	17	22	18	15	13

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	1.9
10°-20°	431.1	5.3
20°-30°	641.1	7.9
30°-40°	759.4	9.4
40°-50°	785.2	9.7
50°-60°	723.3	9.0
60°-70°	584.7	7.2
70°-80°	391.6	4.8
80°-90°	205.2	2.5
90°-100°	150.6	1.9
100°-110°	310.1	3.8
110°-120°	466.3	5.8
120°-130°	558.2	6.9
130°-140°	579.9	7.2
140°-150°	534.1	6.6
150°-160°	429.8	5.3
160°-170°	277.9	3.4
170°-180°	95.9	1.2
0°-30°	1224.1	15.2
0°-40°	1983.5	24.6
0°-60°	3491.9	43.2
0°-90°	4673.3	57.9
90°-120°	927.0	11.5
90°-150°	2599.3	32.2
90°-180°	3403.0	42.1
0°-180°	8076.2	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°	63	101	127	164	176	70
105°	234	263	310	340	351	248
115°	422	439	479	503	509	419
125°	594	599	629	650	657	530
135°	736	739	748	766	770	567
145°	851	851	851	859	861	532
155°	935	931	932	934	929	431
165°	987	983	983	987	982	279
175°	1010	1005	1006	1011	1005	96
180°	1010	1010	1010	1010	1010	



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CATALOG NUMBER: S125DIW-S1270D770U840-4F0-1E-UDD-D

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	114.9	128.1	141.1	150.0
92.5°	34.2	43.6	53.0	62.5	71.9	83.2	96.4	109.7	122.8	136.0	144.6
95°	63.1	71.7	80.3	88.9	97.6	104.6	110.2	115.7	121.3	126.9	135.4
97.5°	107.7	116.7	125.8	134.9	144.0	147.9	146.9	145.9	144.9	143.9	146.5
100°	142.3	150.2	157.9	165.8	173.7	183.5	195.4	207.2	219.1	231.0	213.6
102.5°	177.5	185.0	192.4	199.8	207.2	216.6	227.9	239.2	250.5	261.9	264.2
105°	234.2	240.4	246.7	253.0	259.2	267.6	278.1	288.6	299.1	309.6	316.6
107.5°	293.1	297.8	302.6	307.3	312.0	319.6	330.0	340.4	350.9	361.3	368.3
110°	331.2	335.5	339.7	343.9	348.1	355.3	365.4	375.5	385.7	395.8	401.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	368.4	372.1	375.9	379.7	383.4	390.2	399.9	409.6	419.3	429.0	434.7
115°	422.5	425.8	429.1	432.3	435.7	441.9	451.1	460.4	469.7	479.0	484.5
117.5°	478.6	480.1	481.7	483.2	484.8	490.3	499.5	508.8	518.0	527.3	532.3
120°	514.4	515.3	516.2	517.2	518.0	522.7	531.3	539.8	548.4	556.8	562.5
122.5°	544.9	546.0	547.1	548.3	549.4	554.0	562.0	570.0	577.9	585.9	591.3
125°	593.7	594.5	595.3	596.1	596.9	600.9	607.8	614.8	621.9	628.8	633.8
127.5°	638.9	639.4	640.0	640.4	640.9	644.0	649.5	655.2	660.9	666.5	671.4
130°	667.7	668.1	668.6	669.1	669.6	672.4	677.4	682.6	687.6	692.7	697.0
132.5°	695.2	696.1	696.9	697.8	698.7	700.9	704.3	707.7	711.1	714.6	719.3
135°	735.7	736.4	737.0	737.6	738.3	739.7	741.8	743.9	746.0	748.1	752.3
137.5°	773.0	773.6	774.2	774.7	775.3	776.1	776.9	777.8	778.7	779.6	783.8
140°	796.3	796.6	796.9	797.3	797.6	797.8	798.0	798.2	798.4	798.6	802.7
142.5°	818.4	818.3	818.2	818.2	818.1	818.2	818.5	818.8	819.1	819.4	822.7
145°	850.9	850.8	850.8	850.8	850.8	850.8	850.8	850.8	850.8	850.8	852.7
147.5°	877.8	877.7	877.6	877.6	877.5	877.6	877.8	877.9	878.1	878.3	879.1
150°	895.6	895.3	895.0	894.6	894.3	894.3	894.6	895.0	895.3	895.6	896.1
152.5°	913.0	912.3	911.6	910.9	910.1	909.9	910.3	910.6	910.9	911.2	911.6
155°	935.3	934.3	933.3	932.3	931.4	931.0	931.4	931.7	932.0	932.3	932.8
157.5°	952.5	952.0	951.4	950.8	950.2	949.9	949.9	950.0	950.0	950.0	950.6
160°	964.5	963.5	962.5	961.5	960.6	960.1	960.3	960.5	960.6	960.8	961.5
162.5°	974.1	973.1	972.1	971.1	970.1	969.7	969.9	970.1	970.2	970.4	971.3
165°	986.9	985.9	985.0	984.0	983.0	982.6	982.7	982.9	983.1	983.2	984.2
167.5°	996.5	995.5	994.5	993.5	992.4	992.0	992.2	992.3	992.5	992.7	993.8
170°	1002.0	1000.8	999.6	998.5	997.2	996.7	996.9	997.1	997.2	997.4	998.8
172.5°	1005.5	1004.4	1003.2	1002.0	1000.9	1000.5	1000.8	1001.1	1001.4	1001.7	1002.8
175°	1009.5	1008.5	1007.4	1006.4	1005.4	1005.0	1005.2	1005.3	1005.5	1005.7	1007.0
177.5°	1011.2	1010.4	1009.7	1008.9	1008.0	1007.6	1007.8	1007.9	1008.0	1008.2	1009.2
180°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5



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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	182.5	185.4	188.4	191.4	194.3
92.5°	153.2	161.9	170.5	176.1	178.7	181.5	184.1	186.8
95°	144.0	152.5	161.1	166.5	169.0	171.4	173.9	176.3
97.5°	149.2	151.9	154.5	157.0	159.5	161.8	164.2	166.5
100°	196.1	178.6	161.3	153.3	154.7	156.1	157.5	159.0
102.5°	266.6	269.0	271.4	267.9	258.7	249.5	240.3	231.2
105°	323.6	330.5	337.6	342.2	344.5	346.8	349.1	351.3
107.5°	375.2	382.1	389.1	393.4	395.2	396.8	398.5	400.1
110°	408.1	414.2	420.3	424.7	427.4	430.0	432.6	435.2



TEST NUMBER: P333468-840

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	440.5	446.3	452.0	456.0	458.2	460.4	462.6	464.8
115°	490.2	495.8	501.5	504.8	505.9	507.1	508.2	509.3
117.5°	537.3	542.5	547.5	551.1	553.0	554.9	556.9	558.9
120°	568.2	573.7	579.4	582.8	584.1	585.3	586.6	587.8
122.5°	596.6	602.0	607.3	610.6	611.7	612.8	614.0	615.1
125°	638.7	643.7	648.5	651.7	652.9	654.2	655.4	656.7
127.5°	676.1	681.0	685.8	688.5	689.3	690.1	690.9	691.8
130°	701.5	705.9	710.2	712.9	713.9	714.8	715.7	716.6
132.5°	724.2	728.9	733.8	736.5	737.1	737.7	738.4	739.0
135°	756.6	760.8	765.0	767.5	768.2	769.0	769.7	770.5
137.5°	788.0	792.1	796.4	798.7	799.3	799.8	800.3	800.9
140°	806.9	811.1	815.3	817.6	818.0	818.4	818.8	819.2
142.5°	826.1	829.5	832.8	834.7	835.1	835.5	835.9	836.3
145°	854.6	856.6	858.5	859.6	860.0	860.4	860.8	861.2
147.5°	879.8	880.6	881.4	881.4	880.9	880.3	879.8	879.2
150°	896.4	896.7	897.1	896.7	895.8	894.7	893.7	892.7
152.5°	911.9	912.2	912.6	912.2	911.1	909.9	908.8	907.7
155°	933.3	933.8	934.3	933.9	932.6	931.3	930.0	928.6
157.5°	951.1	951.6	952.1	951.7	950.4	949.1	947.8	946.4
160°	962.1	962.8	963.4	963.1	961.8	960.5	959.2	957.8
162.5°	972.2	973.1	974.1	973.8	972.4	970.9	969.5	968.0
165°	985.2	986.2	987.2	987.0	985.7	984.4	983.1	981.7
167.5°	995.0	996.2	997.4	997.3	995.8	994.3	992.8	991.3
170°	1000.1	1001.5	1002.8	1002.7	1001.2	999.7	998.2	996.7
172.5°	1004.0	1005.2	1006.4	1006.2	1004.8	1003.3	1001.8	1000.3
175°	1008.4	1009.7	1011.0	1010.9	1009.5	1007.9	1006.4	1004.9
177.5°	1010.1	1011.0	1012.0	1011.9	1010.8	1009.8	1008.7	1007.6
180°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5

(END OF REPORT)