

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: P333731-930

Luminaire Tested: **S125RDIW-S1270D1050U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333731-930  
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-S1270D1050U930-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6940.5 lumens  
Efficiency: N/A  
Efficacy: 103.0 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

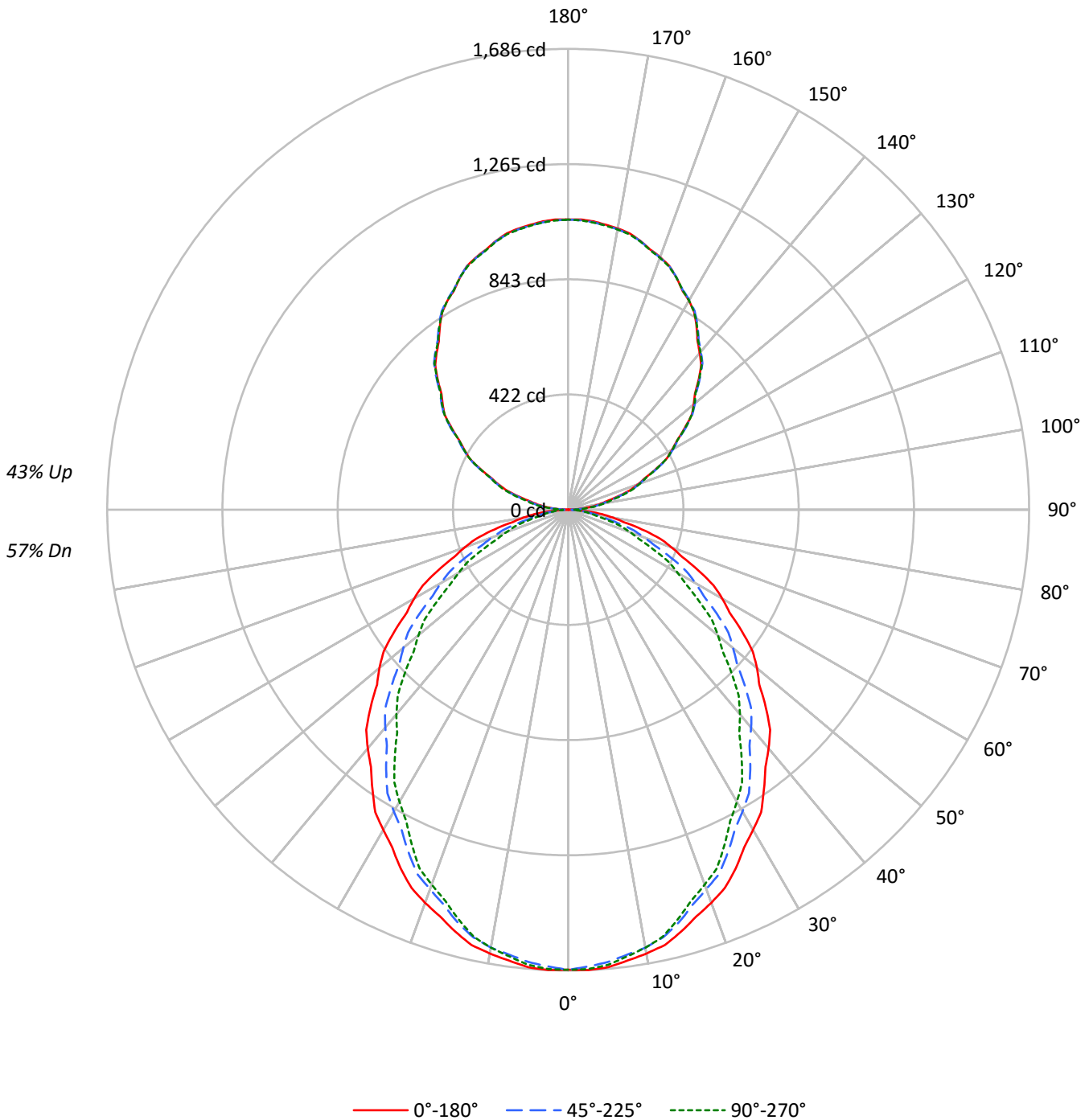
Input Watts (W): 67.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57
1	100	95	92	88	93	89	86	83	77	75	72	66	64	63	56	55	54	49
2	91	84	78	72	84	78	73	68	68	64	60	58	55	53	50	47	46	41
3	83	74	66	61	77	69	63	57	60	55	51	52	48	45	44	41	39	35
4	76	65	57	51	71	61	54	49	53	48	44	46	42	39	40	36	34	30
5	70	58	50	44	65	55	48	42	48	42	38	42	37	34	36	32	30	27
6	65	53	44	39	60	49	42	37	43	38	33	38	33	30	32	29	26	23
7	60	48	40	34	56	45	38	32	39	34	29	34	30	26	30	26	23	21
8	56	43	35	30	52	41	34	29	36	30	26	32	27	24	27	24	21	19
9	52	40	32	27	48	37	30	26	33	27	23	29	24	21	25	22	19	17
10	48	36	29	24	45	34	28	23	31	25	21	27	22	19	23	20	17	15

**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	2.3
10°-20°	442.3	6.4
20°-30°	641.3	9.2
30°-40°	730.9	10.5
40°-50°	712.5	10.3
50°-60°	599.7	8.6
60°-70°	420.4	6.1
70°-80°	216.1	3.1
80°-90°	56.9	0.8
90°-100°	71.1	1.0
100°-110°	210.0	3.0
110°-120°	355.6	5.1
120°-130°	468.0	6.7
130°-140°	524.4	7.6
140°-150°	514.0	7.4
150°-160°	431.7	6.2
160°-170°	287.0	4.1
170°-180°	100.4	1.4
0°-30°	1241.9	17.9
0°-40°	1972.8	28.4
0°-60°	3284.9	47.3
0°-90°	3978.3	57.3
90°-120°	636.7	9.2
90°-150°	2143.1	30.9
90°-180°	2962.0	42.7
0°-180°	6940.5	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	7	13	17	20	6
95°	54	56	64	69	71	57
105°	188	193	198	202	205	201
115°	356	359	361	360	359	352
125°	520	524	525	524	523	465
135°	676	680	682	681	678	521
145°	819	822	824	824	822	512
155°	937	937	938	940	937	431
165°	1019	1017	1018	1021	1016	287
175°	1059	1056	1056	1060	1055	101
180°	1062	1062	1062	1062	1062	



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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°	23.6	22.3	21.0	19.7	18.4	17.8	17.8	17.9	17.9	17.9	18.1
90°	0.8	2.3	3.8	5.2	6.7	8.1	9.4	10.7	11.9	13.2	14.1
92.5°	20.0	21.0	22.0	23.1	24.1	25.4	27.0	28.5	30.2	31.7	32.9
95°	53.7	54.1	54.5	54.8	55.2	56.3	58.1	59.9	61.8	63.6	64.9
97.5°	89.2	89.4	89.5	89.7	89.8	91.2	93.7	96.2	98.7	101.3	102.5
100°	115.7	115.7	115.7	115.7	115.7	116.8	119.2	121.6	124.0	126.4	128.1
102.5°	144.1	144.8	145.5	146.3	147.0	148.0	149.2	150.4	151.6	152.9	154.7
105°	188.3	189.2	190.2	191.1	192.0	193.1	194.1	195.3	196.3	197.5	198.5
107.5°	237.3	238.1	239.1	240.0	240.9	241.8	242.6	243.5	244.3	245.2	245.7
110°	270.9	271.9	272.8	273.7	274.7	275.4	275.9	276.5	277.0	277.6	278.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	305.3	305.8	306.3	306.8	307.2	307.9	308.5	309.2	309.9	310.6	310.9
115°	356.0	356.8	357.5	358.2	359.0	359.5	359.9	360.3	360.6	361.0	360.9
117.5°	406.9	407.2	407.6	407.9	408.3	408.6	409.0	409.3	409.6	409.9	410.1
120°	438.6	439.6	440.5	441.4	442.3	442.9	443.0	443.3	443.4	443.6	443.6
122.5°	473.0	473.4	473.7	474.0	474.3	474.7	475.2	475.7	476.2	476.7	476.5
125°	519.6	520.7	521.8	522.9	524.0	524.6	524.9	525.1	525.2	525.4	525.1
127.5°	569.2	569.8	570.5	571.0	571.7	572.1	572.3	572.6	572.7	573.0	572.8
130°	598.9	599.8	600.8	601.7	602.6	603.2	603.6	604.0	604.4	604.7	604.5
132.5°	628.7	630.1	631.7	633.2	634.7	635.4	635.4	635.3	635.2	635.1	635.0
135°	675.7	676.9	677.9	679.1	680.2	680.8	681.0	681.2	681.3	681.5	681.5
137.5°	720.1	721.1	722.2	723.3	724.3	725.0	725.5	725.9	726.3	726.7	726.8
140°	748.4	749.3	750.3	751.2	752.1	752.8	753.4	754.0	754.5	755.0	755.5
142.5°	776.9	777.6	778.4	779.2	780.0	780.7	781.4	782.1	782.8	783.5	783.7
145°	818.6	819.4	820.1	820.8	821.6	822.2	822.8	823.4	823.9	824.4	824.4
147.5°	857.4	857.8	858.2	858.5	858.9	859.4	859.8	860.2	860.7	861.1	861.6
150°	883.1	883.0	882.7	882.6	882.4	882.6	883.4	884.1	884.8	885.6	885.6
152.5°	904.2	904.5	904.7	905.1	905.3	905.6	905.9	906.1	906.4	906.8	907.2
155°	936.8	936.8	936.8	936.8	936.8	936.9	937.1	937.3	937.4	937.7	938.4
157.5°	965.9	965.5	965.1	964.7	964.3	964.2	964.3	964.5	964.7	964.9	965.6
160°	983.1	982.5	981.9	981.5	980.9	980.7	980.9	981.0	981.2	981.5	982.2
162.5°	998.3	997.8	997.4	997.0	996.6	996.5	996.5	996.5	996.6	996.6	997.5
165°	1018.6	1018.2	1017.8	1017.5	1017.1	1017.0	1017.2	1017.4	1017.6	1017.7	1018.5
167.5°	1035.8	1035.0	1034.3	1033.6	1032.8	1032.5	1032.5	1032.5	1032.5	1032.5	1033.6
170°	1045.1	1044.3	1043.6	1042.8	1042.1	1041.7	1041.7	1041.7	1041.7	1041.7	1042.8
172.5°	1051.7	1050.9	1050.2	1049.5	1048.7	1048.3	1048.3	1048.3	1048.3	1048.3	1049.5
175°	1059.1	1058.3	1057.6	1056.9	1056.1	1055.7	1055.7	1055.7	1055.7	1055.7	1056.9
177.5°	1062.9	1062.3	1061.7	1061.1	1060.5	1060.1	1060.0	1059.9	1059.7	1059.6	1060.5
180°	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5



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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°	18.3	18.4	18.7	18.7	18.6	18.4	18.3	18.2
90°	15.1	16.0	16.9	17.6	18.2	18.8	19.2	19.8
92.5°	34.2	35.4	36.6	37.3	37.7	38.2	38.6	39.0
95°	66.2	67.4	68.7	69.5	70.0	70.3	70.7	71.0
97.5°	103.7	104.9	106.2	106.8	107.0	107.3	107.5	107.7
100°	129.7	131.3	133.0	134.0	134.4	134.8	135.1	135.5
102.5°	156.5	158.2	160.0	161.2	161.7	162.2	162.7	163.2
105°	199.7	200.7	201.9	202.7	203.3	203.7	204.3	204.9
107.5°	246.3	246.9	247.4	247.7	247.6	247.6	247.5	247.5
110°	278.7	279.2	279.8	280.0	279.8	279.6	279.4	279.2





TEST NUMBER: P333731-930

CATALOG NUMBER: S125RDIW-S1270D1050U930-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	311.1	311.4	311.6	311.6	311.3	311.0	310.6	310.3
115°	360.6	360.4	360.3	360.1	359.9	359.7	359.5	359.4
117.5°	410.2	410.3	410.5	410.2	409.4	408.7	408.0	407.2
120°	443.6	443.6	443.6	443.3	442.5	441.8	441.1	440.3
122.5°	476.4	476.2	476.1	475.7	475.2	474.5	473.9	473.4
125°	524.6	524.3	523.9	523.7	523.5	523.3	523.1	522.9
127.5°	572.6	572.4	572.3	572.0	571.6	571.3	570.9	570.5
130°	604.4	604.1	604.0	603.7	603.3	603.0	602.6	602.3
132.5°	634.7	634.5	634.4	634.1	633.5	633.0	632.5	631.9
135°	681.5	681.5	681.5	681.2	680.4	679.7	679.0	678.2
137.5°	727.1	727.3	727.5	727.2	726.3	725.4	724.4	723.5
140°	755.8	756.2	756.5	756.3	755.4	754.4	753.5	752.6
142.5°	783.9	784.2	784.4	784.0	783.1	782.2	781.3	780.3
145°	824.4	824.4	824.4	824.2	823.6	823.0	822.6	822.0
147.5°	862.0	862.4	862.9	862.5	861.3	860.0	858.8	857.5
150°	885.6	885.6	885.6	885.4	885.0	884.7	884.3	883.9
152.5°	907.6	908.1	908.5	908.4	907.8	907.1	906.4	905.7
155°	939.1	939.9	940.6	940.4	939.6	938.7	937.8	936.8
157.5°	966.4	967.1	967.8	967.6	966.4	965.2	963.9	962.8
160°	982.9	983.7	984.4	984.2	983.3	982.4	981.5	980.6
162.5°	998.4	999.2	1000.1	1000.0	999.0	997.9	996.9	995.8
165°	1019.2	1019.9	1020.7	1020.5	1019.5	1018.3	1017.2	1016.1
167.5°	1034.7	1035.8	1036.9	1036.9	1035.8	1034.6	1033.5	1032.3
170°	1043.9	1045.1	1046.1	1046.0	1044.7	1043.5	1042.2	1040.9
172.5°	1050.5	1051.7	1052.7	1052.7	1051.6	1050.4	1049.3	1048.1
175°	1057.9	1059.1	1060.2	1060.1	1058.8	1057.5	1056.2	1054.9
177.5°	1061.4	1062.3	1063.1	1063.0	1062.0	1060.9	1060.0	1058.9
180°	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5

(END OF REPORT)