

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: P333477

Luminaire Tested: **S125DIW-S1270D1050U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333477  
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-S1270D1050U835-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

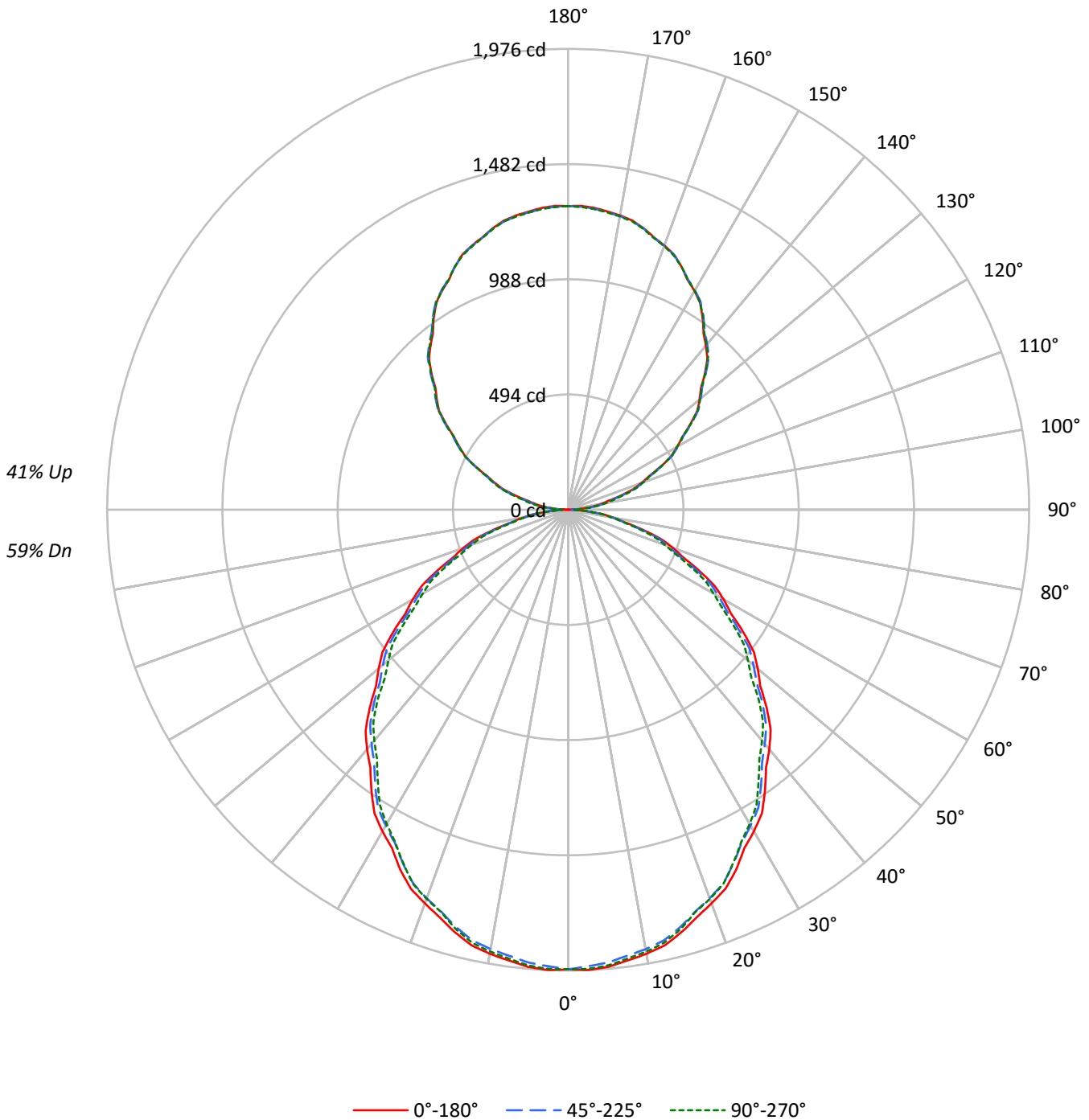
Lumens per Lamp: N/A  
Luminaire Lumens: 8764.3 lumens  
Efficiency: N/A  
Efficacy: 130.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 67.4  
Input Voltage (V): 120  
Input Current (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





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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	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	95	91	88	93	89	85	82	77	75	72	66	65	63	56	55	54	49
2	91	83	77	72	84	78	72	68	68	63	60	58	55	52	50	47	45	41
3	83	73	66	60	77	68	62	56	60	54	50	51	48	44	44	41	39	35
4	76	65	57	50	70	61	53	48	53	47	43	46	41	38	39	36	33	30
5	70	58	49	43	65	54	47	41	47	42	37	41	37	33	35	32	29	26
6	64	52	44	38	60	49	41	36	43	37	32	37	32	29	32	28	25	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	29	26	23	20
8	55	43	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	21	26	22	19	23	19	17	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12727	12727	12727
5°	12756	12635	12716
10°	12679	12545	12618
15°	12541	12395	12447
20°	12344	12183	12205
25°	12133	11932	11921
30°	11872	11662	11604
35°	11591	11371	11211
40°	11304	11054	10897
45°	10993	10766	10552
50°	10652	10417	10104
55°	10323	10025	9743
60°	9928	9627	9285
65°	9459	9149	8839
70°	9009	8597	8303
75°	8210	7938	7663
80°	7305	7189	7018
85°	6358	6469	6121



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.8	2.1
10°-20°	524.9	6.0
20°-30°	775.0	8.8
30°-40°	904.3	10.3
40°-50°	908.3	10.4
50°-60°	797.3	9.1
60°-70°	594.1	6.8
70°-80°	339.7	3.9
80°-90°	101.7	1.2
90°-100°	87.2	1.0
100°-110°	257.5	2.9
110°-120°	436.2	5.0
120°-130°	574.0	6.5
130°-140°	643.2	7.3
140°-150°	630.4	7.2
150°-160°	529.5	6.0
160°-170°	352.0	4.0
170°-180°	123.2	1.4
0°-30°	1485.7	17.0
0°-40°	2390.0	27.3
0°-60°	4095.6	46.7
0°-90°	5131.0	58.5
90°-120°	780.9	8.9
90°-150°	2628.6	30.0
90°-180°	3633.0	41.5
0°-180°	8764.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1971	1971	1971	1971	1971	
5°	1968	1964	1949	1962	1961	187
15°	1876	1870	1854	1861	1862	528
25°	1703	1694	1674	1677	1673	783
35°	1470	1463	1442	1434	1422	919
45°	1204	1197	1179	1161	1155	927
55°	917	911	890	876	865	818
65°	619	615	599	585	578	614
75°	329	326	318	313	307	351
85°	86	87	87	86	83	96
90°	1	9	16	21	24	8
95°	66	68	78	85	87	70
105°	231	236	242	248	251	247
115°	437	441	443	442	441	432
125°	637	643	644	642	641	571
135°	829	835	836	836	832	639
145°	1004	1008	1011	1011	1008	627
155°	1149	1149	1150	1154	1149	529
165°	1249	1247	1248	1252	1246	352
175°	1299	1295	1295	1300	1294	123
180°	1302	1302	1302	1302	1302	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1975.7	1974.9	1974.1	1973.2	1972.4	1970.6	1967.8	1965.0	1962.3	1959.5	1962.3
5°	1967.6	1966.9	1966.2	1965.5	1964.8	1962.8	1959.3	1955.8	1952.4	1948.9	1952.0
7.5°	1949.5	1948.8	1948.1	1947.4	1946.7	1944.5	1940.7	1936.9	1933.1	1929.3	1932.3
10°	1933.3	1932.6	1931.9	1931.2	1930.5	1928.3	1924.5	1920.7	1916.8	1913.0	1915.8
12.5°	1913.3	1912.1	1910.9	1909.6	1908.4	1906.0	1902.4	1898.9	1895.4	1891.8	1894.1
15°	1875.6	1874.6	1873.5	1872.5	1871.5	1869.0	1865.2	1861.4	1857.6	1853.8	1855.5
17.5°	1832.3	1830.8	1829.2	1827.7	1826.2	1823.4	1819.5	1815.5	1811.6	1807.6	1809.8
20°	1796.1	1795.4	1794.7	1794.0	1793.3	1790.7	1786.2	1781.7	1777.2	1772.7	1775.1
22.5°	1759.9	1758.7	1757.4	1756.2	1754.9	1752.2	1748.0	1743.8	1739.5	1735.3	1736.9
25°	1702.6	1700.8	1699.1	1697.4	1695.6	1692.5	1688.0	1683.5	1679.0	1674.5	1675.2
27.5°	1635.5	1634.5	1633.4	1632.4	1631.4	1628.5	1623.9	1619.2	1614.6	1609.9	1610.1
30°	1591.9	1590.8	1589.8	1588.7	1587.7	1584.6	1579.4	1574.2	1569.0	1563.8	1563.1
32.5°	1544.5	1542.9	1541.3	1539.7	1538.1	1535.0	1530.3	1525.7	1521.0	1516.4	1515.2
35°	1470.2	1468.9	1467.5	1466.1	1464.7	1461.6	1456.7	1451.9	1447.0	1442.2	1440.5
37.5°	1393.2	1391.5	1389.8	1388.0	1386.3	1383.1	1378.6	1374.0	1369.4	1364.9	1362.3
40°	1340.8	1339.1	1337.4	1335.6	1333.9	1330.6	1325.8	1320.9	1316.1	1311.2	1308.1
42.5°	1284.7	1283.3	1281.8	1280.3	1278.9	1275.7	1270.9	1266.0	1261.2	1256.3	1253.5
45°	1203.6	1202.3	1200.9	1199.5	1198.1	1195.3	1191.2	1187.0	1182.9	1178.7	1174.5
47.5°	1116.3	1116.4	1116.5	1116.5	1116.6	1114.1	1109.2	1104.2	1099.2	1094.2	1090.0
50°	1060.2	1059.2	1058.1	1057.1	1056.0	1053.4	1049.3	1045.1	1041.0	1036.8	1032.3
52.5°	1002.8	1002.1	1001.3	1000.5	999.8	997.2	992.7	988.3	983.9	979.4	975.5
55°	916.8	915.7	914.7	913.6	912.6	909.7	904.8	900.0	895.1	890.3	887.1
57.5°	826.0	825.5	824.9	824.4	823.8	821.5	817.4	813.3	809.2	805.1	801.1
60°	768.6	767.3	765.9	764.5	763.1	760.5	756.7	752.9	749.1	745.3	741.8
62.5°	708.8	707.7	706.6	705.4	704.3	702.2	698.9	695.6	692.4	689.1	685.4
65°	619.0	618.3	617.6	616.9	616.2	613.9	610.1	606.3	602.5	598.7	595.6
67.5°	532.0	530.5	529.1	527.6	526.2	524.0	521.2	518.3	515.5	512.6	510.0
70°	477.1	475.4	473.6	471.9	470.2	467.7	464.6	461.5	458.4	455.3	453.2
72.5°	417.2	416.0	414.9	413.7	412.5	410.9	408.9	406.9	404.9	402.9	400.5
75°	329.0	328.3	327.6	326.9	326.2	325.0	323.3	321.5	319.8	318.1	317.0
77.5°	247.6	247.3	247.0	246.8	246.5	245.9	244.9	243.9	242.9	242.0	241.4
80°	196.4	196.4	196.4	196.4	196.4	196.1	195.4	194.7	194.0	193.3	193.0
82.5°	151.5	151.0	150.4	149.9	149.3	149.0	148.8	148.7	148.6	148.4	147.8
85°	85.8	86.1	86.4	86.8	87.1	87.3	87.3	87.3	87.3	87.3	87.0
87.5°	33.9	34.2	34.6	35.0	35.3	35.5	35.6	35.6	35.6	35.7	35.9
90°	1.0	2.8	4.6	6.4	8.2	9.9	11.5	13.1	14.6	16.2	17.3
92.5°	24.5	25.8	27.0	28.3	29.6	31.2	33.1	35.0	37.0	38.9	40.4
95°	65.9	66.3	66.8	67.2	67.7	69.0	71.3	73.5	75.8	78.0	79.6
97.5°	109.4	109.6	109.8	110.0	110.2	111.8	114.9	118.0	121.1	124.2	125.7
100°	141.9	141.9	141.9	141.9	141.9	143.3	146.2	149.2	152.1	155.0	157.1
102.5°	176.7	177.6	178.5	179.4	180.3	181.5	183.0	184.5	186.0	187.5	189.7
105°	231.0	232.1	233.3	234.4	235.5	236.8	238.1	239.5	240.8	242.2	243.5
107.5°	291.0	292.1	293.3	294.4	295.5	296.6	297.6	298.7	299.7	300.7	301.4
110°	332.3	333.5	334.6	335.7	336.9	337.8	338.4	339.1	339.8	340.5	341.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	374.5	375.1	375.7	376.3	376.8	377.6	378.4	379.3	380.1	381.0	381.3
115°	436.7	437.6	438.5	439.4	440.3	441.0	441.4	441.9	442.3	442.8	442.6
117.5°	499.1	499.5	499.9	500.3	500.8	501.2	501.6	502.0	502.4	502.8	503.0
120°	538.0	539.2	540.3	541.4	542.5	543.2	543.4	543.7	543.9	544.1	544.1
122.5°	580.2	580.6	581.0	581.4	581.8	582.3	582.9	583.5	584.1	584.7	584.5
125°	637.3	638.7	640.0	641.4	642.7	643.5	643.8	644.0	644.2	644.4	644.0
127.5°	698.1	698.9	699.7	700.4	701.2	701.7	702.0	702.3	702.5	702.8	702.6
130°	734.6	735.7	736.9	738.0	739.1	739.9	740.4	740.8	741.3	741.7	741.5
132.5°	771.1	772.9	774.8	776.6	778.5	779.4	779.3	779.2	779.1	779.0	778.8
135°	828.8	830.2	831.5	832.9	834.3	835.0	835.3	835.5	835.7	835.9	835.9
137.5°	883.2	884.5	885.8	887.1	888.4	889.3	889.8	890.3	890.8	891.3	891.5
140°	918.0	919.1	920.3	921.4	922.5	923.4	924.1	924.8	925.4	926.1	926.6
142.5°	952.9	953.8	954.8	955.7	956.7	957.6	958.4	959.3	960.1	961.0	961.2
145°	1004.1	1005.0	1005.9	1006.8	1007.7	1008.5	1009.2	1009.9	1010.6	1011.2	1011.2
147.5°	1051.6	1052.1	1052.6	1053.0	1053.5	1054.1	1054.6	1055.1	1055.7	1056.2	1056.8
150°	1083.2	1083.0	1082.7	1082.5	1082.3	1082.6	1083.5	1084.4	1085.3	1086.2	1086.2
152.5°	1109.1	1109.4	1109.7	1110.1	1110.4	1110.7	1111.1	1111.4	1111.8	1112.2	1112.7
155°	1149.0	1149.0	1149.0	1149.0	1149.0	1149.1	1149.4	1149.6	1149.8	1150.1	1151.0
157.5°	1184.7	1184.2	1183.7	1183.2	1182.7	1182.6	1182.8	1183.0	1183.3	1183.5	1184.4
160°	1205.8	1205.1	1204.4	1203.8	1203.1	1202.9	1203.1	1203.3	1203.5	1203.8	1204.7
162.5°	1224.4	1223.9	1223.4	1222.9	1222.4	1222.2	1222.3	1222.3	1222.4	1222.4	1223.5
165°	1249.4	1248.9	1248.4	1248.0	1247.5	1247.4	1247.7	1247.9	1248.1	1248.3	1249.2
167.5°	1270.4	1269.5	1268.6	1267.7	1266.8	1266.4	1266.4	1266.4	1266.4	1266.4	1267.7
170°	1281.8	1280.9	1280.0	1279.1	1278.2	1277.7	1277.7	1277.7	1277.7	1277.7	1279.1
172.5°	1289.9	1289.0	1288.1	1287.2	1286.3	1285.8	1285.8	1285.8	1285.8	1285.8	1287.2
175°	1299.0	1298.1	1297.2	1296.3	1295.4	1294.9	1294.9	1294.9	1294.9	1294.9	1296.3
177.5°	1303.7	1302.9	1302.2	1301.5	1300.8	1300.3	1300.1	1300.0	1299.8	1299.6	1300.7
180°	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1965.0	1967.8	1970.6	1971.8	1971.6	1971.3	1971.0	1970.7
5°	1955.1	1958.3	1961.4	1962.8	1962.4	1962.1	1961.7	1961.4
7.5°	1935.3	1938.4	1941.4	1942.8	1942.5	1942.1	1941.8	1941.4
10°	1918.6	1921.4	1924.1	1925.3	1925.0	1924.6	1924.3	1924.0
12.5°	1896.3	1898.5	1900.7	1901.8	1901.7	1901.6	1901.6	1901.5
15°	1857.3	1859.0	1860.7	1861.6	1861.6	1861.6	1861.6	1861.6
17.5°	1811.9	1814.1	1816.2	1816.4	1814.7	1813.0	1811.2	1809.5
20°	1777.6	1780.0	1782.4	1782.8	1781.0	1779.3	1777.6	1775.8
22.5°	1738.5	1740.1	1741.7	1741.9	1740.7	1739.5	1738.3	1737.2
25°	1675.9	1676.6	1677.3	1677.1	1676.1	1675.0	1674.0	1672.9
27.5°	1610.2	1610.4	1610.5	1610.0	1609.0	1608.0	1606.9	1605.9
30°	1562.4	1561.7	1561.0	1560.2	1559.1	1558.1	1557.0	1556.0
32.5°	1513.9	1512.7	1511.4	1509.8	1508.0	1506.1	1504.2	1502.4
35°	1438.7	1437.0	1435.3	1433.0	1430.2	1427.5	1424.7	1421.9
37.5°	1359.7	1357.2	1354.6	1352.5	1350.9	1349.3	1347.7	1346.1
40°	1305.0	1301.9	1298.7	1296.7	1295.6	1294.6	1293.5	1292.5
42.5°	1250.7	1247.8	1245.0	1242.8	1241.2	1239.6	1238.0	1236.4
45°	1170.4	1166.2	1162.1	1159.5	1158.4	1157.4	1156.3	1155.3
47.5°	1085.7	1081.5	1077.3	1074.0	1071.5	1069.1	1066.7	1064.3
50°	1027.8	1023.3	1018.8	1015.3	1012.9	1010.5	1008.1	1005.6
52.5°	971.5	967.6	963.6	960.3	957.6	954.9	952.2	949.5
55°	884.0	880.9	877.8	875.0	872.6	870.2	867.7	865.3
57.5°	797.1	793.1	789.1	786.4	785.1	783.8	782.4	781.1
60°	738.3	734.9	731.4	728.5	726.0	723.6	721.2	718.8
62.5°	681.6	677.9	674.2	671.4	669.5	667.6	665.7	663.9
65°	592.5	589.3	586.2	584.0	582.6	581.2	579.8	578.4
67.5°	507.4	504.7	502.1	500.4	499.5	498.7	497.9	497.0
70°	451.1	449.0	446.9	445.2	443.8	442.4	441.1	439.7
72.5°	398.2	395.8	393.5	391.6	390.2	388.8	387.4	386.0
75°	316.0	314.9	313.9	312.7	311.3	309.9	308.5	307.1
77.5°	240.7	240.1	239.5	238.7	237.7	236.7	235.8	234.8
80°	192.6	192.3	191.9	191.4	190.7	190.0	189.3	188.7
82.5°	147.2	146.6	145.9	145.6	145.4	145.3	145.1	145.0
85°	86.6	86.3	85.9	85.4	84.7	84.0	83.3	82.6
87.5°	36.1	36.3	36.6	36.5	36.1	35.6	35.2	34.8
90°	18.5	19.6	20.7	21.6	22.3	23.0	23.6	24.3
92.5°	41.9	43.4	44.9	45.8	46.3	46.8	47.3	47.8
95°	81.2	82.7	84.3	85.3	85.8	86.2	86.7	87.1
97.5°	127.2	128.7	130.2	131.0	131.3	131.6	131.9	132.1
100°	159.1	161.1	163.1	164.4	164.8	165.3	165.7	166.2
102.5°	191.9	194.1	196.3	197.7	198.3	199.0	199.6	200.2
105°	244.9	246.2	247.6	248.6	249.3	249.9	250.6	251.3
107.5°	302.1	302.8	303.4	303.8	303.7	303.7	303.6	303.6
110°	341.8	342.5	343.2	343.4	343.2	342.9	342.7	342.5





TEST NUMBER: P333477

CATALOG NUMBER: S125DIW-S1270D1050U835-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	381.6	381.9	382.2	382.2	381.8	381.4	381.0	380.6
115°	442.3	442.1	441.9	441.7	441.4	441.2	441.0	440.8
117.5°	503.1	503.3	503.5	503.1	502.2	501.3	500.4	499.5
120°	544.1	544.1	544.1	543.7	542.8	541.9	541.0	540.1
122.5°	584.3	584.1	583.9	583.5	582.8	582.0	581.3	580.6
125°	643.5	643.1	642.6	642.3	642.1	641.8	641.6	641.4
127.5°	702.3	702.1	701.9	701.6	701.1	700.7	700.2	699.8
130°	741.3	741.0	740.8	740.5	740.0	739.6	739.1	738.7
132.5°	778.5	778.3	778.1	777.7	777.0	776.4	775.8	775.1
135°	835.9	835.9	835.9	835.5	834.6	833.7	832.8	831.9
137.5°	891.8	892.1	892.3	891.9	890.8	889.7	888.5	887.4
140°	927.0	927.5	927.9	927.6	926.5	925.3	924.2	923.1
142.5°	961.5	961.8	962.1	961.6	960.5	959.4	958.3	957.1
145°	1011.2	1011.2	1011.2	1010.9	1010.2	1009.5	1008.9	1008.2
147.5°	1057.3	1057.8	1058.4	1057.9	1056.4	1054.8	1053.3	1051.8
150°	1086.2	1086.2	1086.2	1086.0	1085.5	1085.1	1084.6	1084.2
152.5°	1113.2	1113.8	1114.3	1114.2	1113.4	1112.6	1111.7	1110.9
155°	1151.9	1152.8	1153.7	1153.5	1152.4	1151.3	1150.2	1149.0
157.5°	1185.3	1186.2	1187.1	1186.8	1185.3	1183.8	1182.3	1180.9
160°	1205.6	1206.5	1207.4	1207.2	1206.1	1205.0	1203.9	1202.7
162.5°	1224.6	1225.6	1226.7	1226.6	1225.3	1224.0	1222.7	1221.4
165°	1250.1	1251.0	1251.9	1251.7	1250.4	1249.0	1247.7	1246.3
167.5°	1269.1	1270.4	1271.8	1271.8	1270.4	1269.0	1267.6	1266.2
170°	1280.4	1281.8	1283.1	1283.0	1281.4	1279.9	1278.3	1276.7
172.5°	1288.5	1289.9	1291.2	1291.2	1289.8	1288.4	1287.0	1285.6
175°	1297.6	1299.0	1300.4	1300.2	1298.7	1297.1	1295.5	1293.9
177.5°	1301.8	1302.9	1303.9	1303.8	1302.6	1301.3	1300.1	1298.8
180°	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0

(END OF REPORT)