

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: P333319

Luminaire Tested: **S125DIP-S1270D810U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333319
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: S125DIP-S1270D810U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8370.0 lumens
Efficiency: N/A
Efficacy: 137.9 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: Semi-Direct

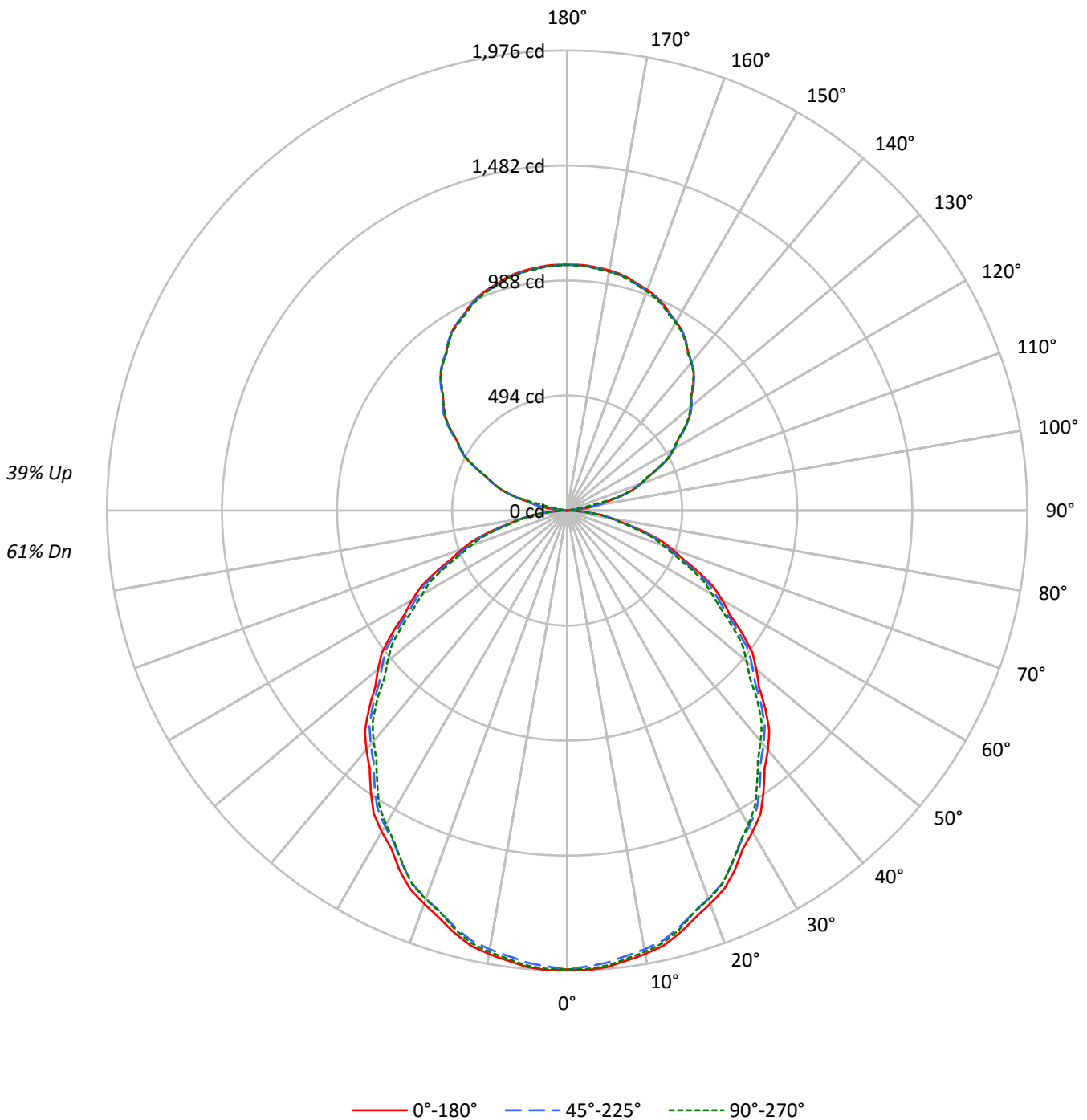
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	66	66	66	61
1	100	96	92	88	94	90	86	83	79	76	74	68	66	65	59	57	56	51
2	91	84	77	72	85	78	73	68	69	65	61	60	57	54	52	49	47	43
3	83	74	66	60	78	69	62	57	61	55	51	53	49	46	46	43	40	36
4	76	65	57	51	71	61	54	48	54	48	44	47	43	39	41	37	35	31
5	70	58	50	44	65	55	47	42	48	42	38	42	38	34	37	33	30	27
6	65	52	44	38	60	49	42	36	44	37	33	38	33	30	33	30	27	24
7	60	47	39	33	56	45	37	32	40	33	29	35	30	26	30	27	24	21
8	55	43	35	30	52	41	33	28	36	30	26	32	27	23	28	24	21	19
9	52	39	32	26	48	37	30	25	33	27	23	29	25	21	26	22	19	17
10	48	36	29	24	45	34	27	23	31	25	21	27	22	19	24	20	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	2.2
10°-20°	524.9	6.3
20°-30°	775.0	9.3
30°-40°	904.3	10.8
40°-50°	908.3	10.9
50°-60°	797.3	9.5
60°-70°	594.1	7.1
70°-80°	339.7	4.1
80°-90°	101.0	1.2
90°-100°	38.3	0.5
100°-110°	236.3	2.8
110°-120°	428.5	5.1
120°-130°	550.0	6.6
130°-140°	591.5	7.1
140°-150°	555.2	6.6
150°-160°	449.1	5.4
160°-170°	290.5	3.5
170°-180°	100.2	1.2
0°-30°	1485.7	17.8
0°-40°	2390.0	28.6
0°-60°	4095.6	48.9
0°-90°	5130.4	61.3
90°-120°	703.1	8.4
90°-150°	2399.9	28.7
90°-180°	3240.0	38.7
0°-180°	8370.0	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	7	12	16	19	6
95°	45	41	12	16	16	57
105°	230	233	233	233	232	244
115°	432	435	436	433	429	428
125°	614	619	619	616	614	548
135°	766	770	769	767	762	590
145°	888	889	889	890	885	555
155°	978	973	974	976	970	450
165°	1032	1027	1028	1032	1026	291
175°	1055	1051	1051	1057	1050	100
180°	1055	1055	1055	1055	1055	



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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°	33.8	34.1	34.4	34.7	34.9	35.1	35.0	35.0	35.0	34.9	35.1
90°	0.8	2.2	3.6	5.0	6.3	7.6	8.9	10.1	11.3	12.5	13.4
92.5°	12.0	11.1	10.1	9.1	8.2	8.2	9.3	10.4	11.4	12.5	13.4
95°	44.6	44.1	43.5	43.0	42.5	38.9	32.3	25.7	19.1	12.5	13.4
97.5°	93.1	94.0	94.9	95.9	96.8	90.8	77.7	64.6	51.5	38.5	33.6
100°	130.6	131.1	131.6	132.2	132.7	133.3	134.0	134.7	135.4	136.1	110.2
102.5°	168.8	169.4	170.1	170.7	171.4	171.9	172.4	172.8	173.2	173.6	168.7
105°	229.9	230.6	231.3	232.0	232.7	233.0	233.0	233.0	233.0	233.0	233.0
107.5°	293.4	293.4	293.4	293.4	293.4	293.6	293.9	294.3	294.6	295.0	295.0
110°	334.7	334.7	334.7	334.7	334.7	334.9	335.2	335.6	335.9	336.3	335.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	373.5	373.9	374.3	374.8	375.2	375.5	375.7	375.9	376.1	376.3	375.7
115°	431.7	432.6	433.4	434.3	435.2	435.7	435.9	436.0	436.2	436.4	435.7
117.5°	491.9	491.9	491.8	491.8	491.8	492.1	492.7	493.4	494.1	494.7	493.8
120°	529.4	529.3	529.1	528.9	528.7	528.9	529.4	530.0	530.5	531.0	530.7
122.5°	562.6	563.3	563.9	564.6	565.2	565.7	565.9	566.2	566.4	566.7	566.3
125°	613.9	615.1	616.3	617.6	618.8	619.4	619.4	619.4	619.4	619.4	618.7
127.5°	662.9	663.7	664.6	665.5	666.3	666.7	666.6	666.5	666.4	666.3	665.9
130°	692.9	693.8	694.6	695.5	696.4	696.9	697.1	697.2	697.4	697.6	697.1
132.5°	722.9	723.9	724.9	725.9	727.0	727.3	726.9	726.5	726.1	725.7	725.6
135°	765.6	766.7	767.7	768.8	769.8	770.1	769.8	769.4	769.1	768.8	768.4
137.5°	804.9	805.8	806.7	807.6	808.5	808.8	808.5	808.2	807.9	807.5	807.6
140°	830.5	830.9	831.2	831.6	831.9	832.0	831.8	831.7	831.5	831.3	831.7
142.5°	853.7	853.9	854.1	854.3	854.5	854.7	855.0	855.2	855.5	855.7	855.8
145°	887.6	888.0	888.3	888.7	889.0	889.2	889.2	889.2	889.2	889.2	889.4
147.5°	917.3	917.3	917.2	917.1	917.1	917.1	917.3	917.5	917.8	918.0	918.2
150°	936.1	935.8	935.4	935.1	934.7	934.7	935.1	935.4	935.8	936.1	936.5
152.5°	954.3	953.5	952.7	952.0	951.2	951.0	951.3	951.7	952.0	952.4	952.7
155°	977.6	976.5	975.5	974.4	973.4	973.0	973.4	973.7	974.1	974.4	974.9
157.5°	995.5	994.9	994.3	993.7	993.0	992.7	992.8	992.8	992.8	992.9	993.4
160°	1008.1	1007.0	1006.0	1004.9	1003.9	1003.5	1003.6	1003.8	1004.0	1004.1	1004.8
162.5°	1018.1	1017.0	1016.0	1014.9	1013.9	1013.5	1013.6	1013.8	1014.0	1014.2	1015.1
165°	1031.5	1030.5	1029.4	1028.4	1027.3	1026.9	1027.1	1027.3	1027.4	1027.6	1028.7
167.5°	1041.5	1040.5	1039.4	1038.3	1037.2	1036.8	1036.9	1037.1	1037.3	1037.5	1038.7
170°	1047.2	1045.9	1044.7	1043.5	1042.3	1041.8	1041.9	1042.1	1042.3	1042.5	1043.9
172.5°	1050.9	1049.7	1048.5	1047.3	1046.0	1045.6	1045.9	1046.2	1046.5	1046.8	1048.1
175°	1055.0	1053.9	1052.9	1051.9	1050.8	1050.4	1050.5	1050.7	1050.9	1051.1	1052.5
177.5°	1056.9	1056.0	1055.2	1054.4	1053.5	1053.2	1053.3	1053.4	1053.6	1053.7	1054.7
180°	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0



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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°	35.3	35.5	35.6	35.5	35.0	34.6	34.1	33.7
90°	14.3	15.1	16.0	16.7	17.2	17.7	18.2	18.8
92.5°	14.3	15.1	16.0	16.5	16.8	17.0	17.3	17.5
95°	14.3	15.1	16.0	16.4	16.4	16.4	16.4	16.4
97.5°	28.7	23.8	18.9	16.4	16.4	16.4	16.4	16.4
100°	84.3	58.4	32.5	19.2	18.5	17.8	17.1	16.4
102.5°	163.8	158.9	154.0	145.7	133.8	122.0	110.2	98.4
105°	233.0	233.0	233.0	233.0	232.8	232.6	232.4	232.3
107.5°	295.1	295.1	295.1	294.9	294.4	293.8	293.3	292.8
110°	335.2	334.7	334.2	334.0	334.2	334.4	334.5	334.7



TEST NUMBER: P333319

CATALOG NUMBER: S125DIP-S1270D810U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	375.0	374.3	373.7	373.2	373.0	372.7	372.5	372.3
115°	435.0	434.3	433.6	432.7	431.7	430.6	429.6	428.6
117.5°	492.9	492.0	491.1	490.4	490.0	489.5	489.1	488.6
120°	530.3	530.0	529.6	529.0	528.1	527.3	526.4	525.5
122.5°	566.0	565.6	565.3	564.6	563.6	562.6	561.6	560.6
125°	618.0	617.3	616.6	616.0	615.5	614.9	614.4	613.9
127.5°	665.5	665.2	664.8	663.9	662.7	661.4	660.1	658.8
130°	696.5	696.0	695.5	694.8	693.9	693.1	692.2	691.3
132.5°	725.5	725.4	725.3	724.8	724.0	723.1	722.2	721.4
135°	768.1	767.7	767.4	766.7	765.6	764.6	763.5	762.5
137.5°	807.7	807.7	807.8	807.4	806.5	805.6	804.7	803.8
140°	832.0	832.4	832.7	832.4	831.3	830.3	829.2	828.2
142.5°	855.9	855.9	856.0	855.5	854.5	853.4	852.4	851.3
145°	889.5	889.7	889.9	889.4	888.4	887.4	886.3	885.3
147.5°	918.4	918.6	918.8	918.3	917.0	915.8	914.5	913.3
150°	936.8	937.2	937.5	937.0	935.6	934.2	932.8	931.4
152.5°	953.1	953.4	953.8	953.3	952.1	950.8	949.6	948.3
155°	975.5	976.0	976.5	976.1	974.7	973.3	971.9	970.5
157.5°	994.0	994.6	995.1	994.7	993.3	991.9	990.5	989.1
160°	1005.5	1006.2	1006.9	1006.6	1005.2	1003.8	1002.4	1001.0
162.5°	1016.1	1017.1	1018.0	1017.8	1016.2	1014.7	1013.2	1011.7
165°	1029.7	1030.7	1031.8	1031.6	1030.2	1028.8	1027.4	1026.0
167.5°	1040.0	1041.2	1042.5	1042.3	1040.7	1039.2	1037.6	1036.1
170°	1045.2	1046.6	1048.0	1047.9	1046.4	1044.8	1043.2	1041.7
172.5°	1049.3	1050.6	1051.9	1051.7	1050.1	1048.6	1047.0	1045.4
175°	1053.8	1055.2	1056.6	1056.5	1055.0	1053.4	1051.9	1050.3
177.5°	1055.7	1056.6	1057.6	1057.6	1056.4	1055.3	1054.2	1053.1
180°	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0

(END OF REPORT)