

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: P333302-840

Luminaire Tested: **S125DIP-S1270D365U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333302-840
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: S125DIP-S1270D365U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6459.6 lumens
Efficiency: N/A
Efficacy: 129.7 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

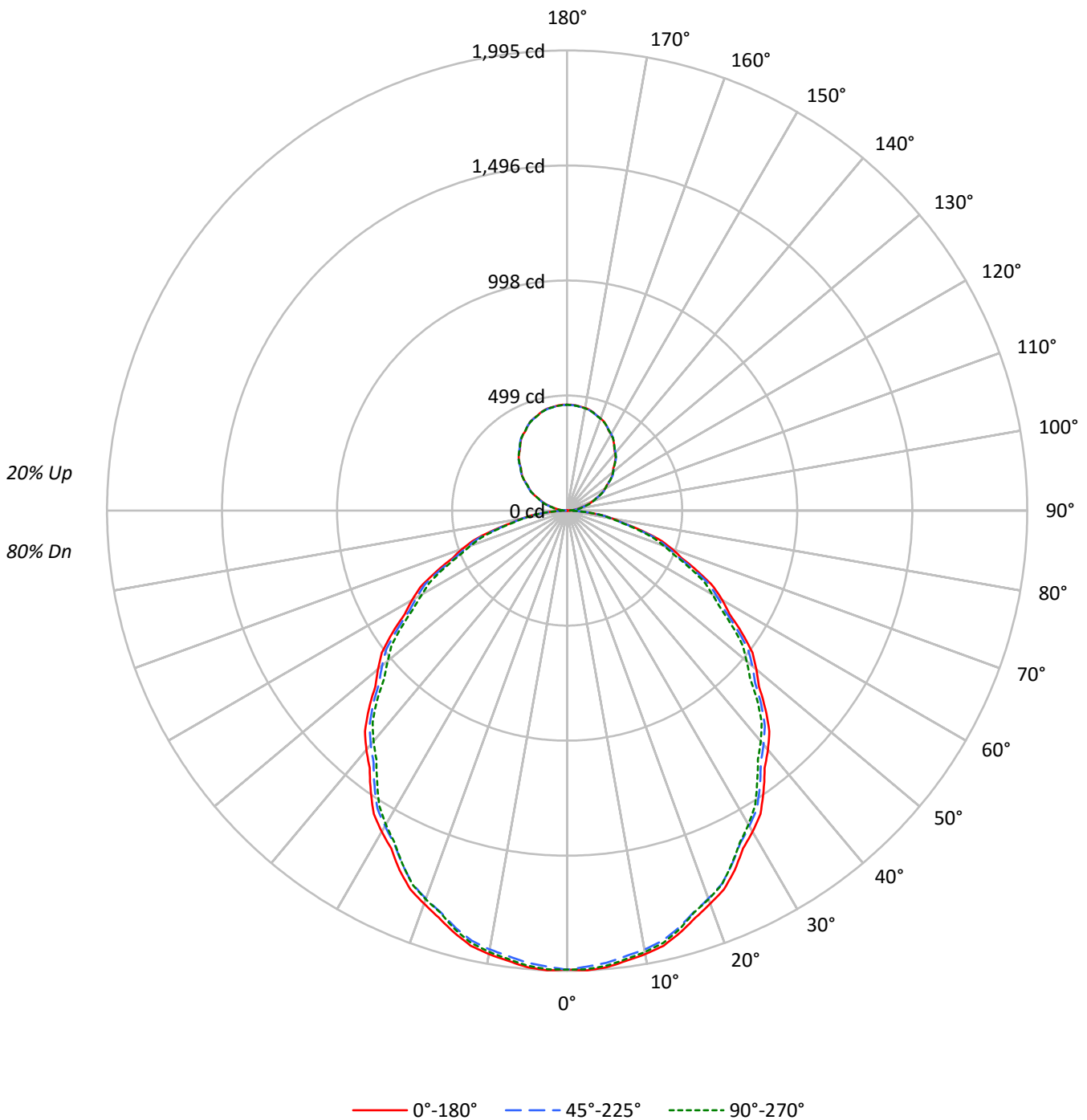
Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333302-840

CATALOG NUMBER: S125DIP-S1270D365U840-4F0-1E-UDD-F1

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	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	80
1	104	100	96	92	100	96	92	89	88	85	82	81	78	76	74	72	71	67
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	59	56
3	87	77	69	63	83	74	67	61	68	62	57	63	58	54	58	54	51	48
4	80	68	60	53	76	65	58	52	60	54	49	56	51	46	52	47	44	41
5	73	61	52	46	70	59	51	45	54	48	42	50	45	40	46	42	38	35
6	68	55	46	40	64	53	45	39	49	42	37	45	40	35	42	37	34	31
7	63	50	41	35	60	48	40	34	45	38	33	41	36	31	39	34	30	28
8	58	45	37	31	56	44	36	31	41	34	29	38	32	28	35	30	27	25
9	54	41	34	28	52	40	33	28	37	31	26	35	29	25	33	28	24	22
10	51	38	31	26	49	37	30	25	35	28	24	32	27	23	30	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12853	12853	12853
5°	12882	12759	12841
10°	12804	12669	12742
15°	12664	12517	12570
20°	12466	12304	12325
25°	12252	12050	12039
30°	11989	11777	11718
35°	11706	11483	11321
40°	11415	11163	11005
45°	11102	10872	10656
50°	10758	10520	10203
55°	10424	10124	9839
60°	10026	9722	9376
65°	9553	9239	8926
70°	9098	8682	8384
75°	8289	8015	7738
80°	7375	7260	7089
85°	6417	6536	6180



TEST NUMBER: P333302-840

CATALOG NUMBER: S125DIP-S1270D365U840-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.6	2.9
10°-20°	530.1	8.2
20°-30°	782.7	12.1
30°-40°	913.3	14.1
40°-50°	917.2	14.2
50°-60°	805.1	12.5
60°-70°	599.9	9.3
70°-80°	343.0	5.3
80°-90°	100.8	1.6
90°-100°	30.7	0.5
100°-110°	90.7	1.4
110°-120°	153.6	2.4
120°-130°	202.2	3.1
130°-140°	226.6	3.5
140°-150°	222.1	3.4
150°-160°	186.5	2.9
160°-170°	124.0	1.9
170°-180°	43.4	0.7
0°-30°	1500.4	23.2
0°-40°	2413.6	37.4
0°-60°	4136.0	64.0
0°-90°	5179.8	80.2
90°-120°	275.1	4.3
90°-150°	925.9	14.3
90°-180°	1280.0	19.8
0°-180°	6459.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1990	1990	1990	1990	1990	
5°	1987	1983	1968	1981	1981	188
15°	1894	1889	1872	1880	1880	534
25°	1719	1711	1691	1694	1689	791
35°	1485	1478	1456	1448	1436	928
45°	1216	1208	1190	1172	1167	936
55°	926	920	899	885	874	826
65°	625	621	605	591	584	620
75°	332	329	321	316	310	354
85°	87	88	88	86	83	97
90°	0	3	6	7	9	6
95°	23	24	28	30	31	25
105°	81	83	85	87	89	87
115°	154	155	156	156	155	152
125°	224	227	227	226	226	201
135°	292	294	294	294	293	225
145°	354	355	356	356	355	221
155°	405	405	405	406	405	186
165°	440	439	440	441	439	124
175°	458	456	456	458	456	43
180°	459	459	459	459	459	



TEST NUMBER: P333302-840

CATALOG NUMBER: S125DIP-S1270D365U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1
2.5°	1995.2	1994.4	1993.6	1992.7	1991.9	1990.0	1987.2	1984.4	1981.7	1978.8	1981.7
5°	1987.0	1986.3	1985.6	1984.9	1984.2	1982.2	1978.6	1975.1	1971.7	1968.1	1971.3
7.5°	1968.7	1968.0	1967.3	1966.6	1965.9	1963.7	1959.8	1956.0	1952.2	1948.3	1951.4
10°	1952.4	1951.7	1951.0	1950.3	1949.5	1947.3	1943.5	1939.6	1935.7	1931.9	1934.7
12.5°	1932.2	1931.0	1929.8	1928.4	1927.2	1924.8	1921.2	1917.6	1914.1	1910.5	1912.8
15°	1894.1	1893.1	1892.0	1891.0	1890.0	1887.4	1883.6	1879.8	1875.9	1872.1	1873.8
17.5°	1850.4	1848.9	1847.2	1845.7	1844.2	1841.4	1837.4	1833.4	1829.5	1825.4	1827.7
20°	1813.8	1813.1	1812.4	1811.7	1811.0	1808.4	1803.8	1799.3	1794.7	1790.2	1792.6
22.5°	1777.3	1776.0	1774.7	1773.5	1772.2	1769.5	1765.2	1761.0	1756.7	1752.4	1754.0
25°	1719.4	1717.6	1715.9	1714.1	1712.3	1709.2	1704.7	1700.1	1695.6	1691.0	1691.7
27.5°	1651.6	1650.6	1649.5	1648.5	1647.5	1644.6	1639.9	1635.2	1630.5	1625.8	1626.0
30°	1607.6	1606.5	1605.5	1604.4	1603.4	1600.2	1595.0	1589.7	1584.5	1579.2	1578.5
32.5°	1559.7	1558.1	1556.5	1554.9	1553.3	1550.1	1545.4	1540.8	1536.0	1531.4	1530.1
35°	1484.7	1483.4	1482.0	1480.6	1479.1	1476.0	1471.1	1466.2	1461.3	1456.4	1454.7
37.5°	1406.9	1405.2	1403.5	1401.7	1400.0	1396.7	1392.2	1387.6	1382.9	1378.4	1375.7
40°	1354.0	1352.3	1350.6	1348.8	1347.1	1343.7	1338.9	1333.9	1329.1	1324.1	1321.0
42.5°	1297.4	1296.0	1294.4	1292.9	1291.5	1288.3	1283.4	1278.5	1273.6	1268.7	1265.9
45°	1215.5	1214.2	1212.7	1211.3	1209.9	1207.1	1203.0	1198.7	1194.6	1190.3	1186.1
47.5°	1127.3	1127.4	1127.5	1127.5	1127.6	1125.1	1120.1	1115.1	1110.0	1105.0	1100.8
50°	1070.7	1069.6	1068.5	1067.5	1066.4	1063.8	1059.7	1055.4	1051.3	1047.0	1042.5
52.5°	1012.7	1012.0	1011.2	1010.4	1009.7	1007.0	1002.5	998.0	993.6	989.1	985.1
55°	925.8	924.7	923.7	922.6	921.6	918.7	913.7	908.9	903.9	899.1	895.9
57.5°	834.1	833.6	833.0	832.5	831.9	829.6	825.5	821.3	817.2	813.0	809.0
60°	776.2	774.9	773.5	772.0	770.6	768.0	764.2	760.3	756.5	752.7	749.1
62.5°	715.8	714.7	713.6	712.4	711.2	709.1	705.8	702.5	699.2	695.9	692.2
65°	625.1	624.4	623.7	623.0	622.3	620.0	616.1	612.3	608.4	604.6	601.5
67.5°	537.2	535.7	534.3	532.8	531.4	529.2	526.3	523.4	520.6	517.7	515.0
70°	481.8	480.1	478.3	476.6	474.8	472.3	469.2	466.1	462.9	459.8	457.7
72.5°	421.3	420.1	419.0	417.8	416.6	415.0	412.9	410.9	408.9	406.9	404.5
75°	332.2	331.5	330.8	330.1	329.4	328.2	326.5	324.7	323.0	321.2	320.1
77.5°	250.0	249.7	249.4	249.2	248.9	248.3	247.3	246.3	245.3	244.4	243.8
80°	198.3	198.3	198.3	198.3	198.3	198.0	197.3	196.6	195.9	195.2	194.9
82.5°	153.0	152.5	151.9	151.4	150.8	150.5	150.3	150.2	150.1	149.9	149.3
85°	86.6	86.9	87.3	87.7	88.0	88.2	88.2	88.2	88.2	88.2	87.9
87.5°	34.0	34.2	34.3	34.4	34.6	34.5	34.4	34.2	34.0	33.9	33.9
90°	0.4	1.0	1.6	2.2	2.9	3.5	4.0	4.6	5.2	5.8	6.1
92.5°	8.7	9.1	9.5	10.0	10.4	11.0	11.6	12.3	13.0	13.7	14.2
95°	23.2	23.3	23.5	23.6	23.8	24.3	25.1	25.9	26.7	27.5	28.1
97.5°	38.6	38.6	38.7	38.8	38.8	39.4	40.5	41.6	42.6	43.7	44.3
100°	50.0	50.0	50.0	50.0	50.0	50.5	51.5	52.5	53.6	54.6	55.3
102.5°	62.2	62.6	62.9	63.2	63.5	63.9	64.4	64.9	65.5	66.0	66.9
105°	81.4	81.8	82.2	82.6	83.0	83.4	83.9	84.3	84.8	85.3	85.7
107.5°	102.5	102.9	103.3	103.7	104.1	104.5	104.8	105.2	105.5	105.9	106.1
110°	117.0	117.4	117.9	118.3	118.7	119.0	119.2	119.5	119.7	120.0	120.2



TEST NUMBER: P333302-840

CATALOG NUMBER: S125DIP-S1270D365U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	131.9	132.1	132.3	132.5	132.7	133.0	133.3	133.6	133.9	134.2	134.3
115°	153.8	154.1	154.5	154.8	155.1	155.3	155.5	155.6	155.8	156.0	155.9
117.5°	175.8	175.9	176.1	176.2	176.4	176.5	176.7	176.8	176.9	177.1	177.1
120°	189.6	190.0	190.4	190.8	191.1	191.4	191.5	191.5	191.6	191.7	191.7
122.5°	204.4	204.5	204.7	204.8	204.9	205.1	205.3	205.5	205.7	205.9	205.9
125°	224.5	225.0	225.5	225.9	226.4	226.7	226.8	226.8	226.9	227.0	226.8
127.5°	245.9	246.2	246.5	246.7	247.0	247.2	247.3	247.4	247.5	247.5	247.5
130°	258.7	259.1	259.5	259.9	260.3	260.6	260.7	260.9	261.2	261.3	261.2
132.5°	271.7	272.3	273.0	273.6	274.2	274.6	274.5	274.5	274.5	274.4	274.3
135°	292.0	292.5	293.0	293.4	293.9	294.2	294.3	294.3	294.4	294.5	294.5
137.5°	311.1	311.5	312.0	312.5	313.0	313.3	313.5	313.6	313.8	314.0	314.1
140°	323.4	323.8	324.2	324.6	325.0	325.3	325.5	325.8	326.0	326.2	326.4
142.5°	335.7	336.0	336.3	336.7	337.0	337.3	337.6	337.9	338.2	338.5	338.6
145°	353.8	354.1	354.4	354.7	355.0	355.3	355.5	355.8	356.0	356.2	356.2
147.5°	370.4	370.6	370.7	370.9	371.1	371.3	371.5	371.7	371.8	372.0	372.2
150°	381.5	381.5	381.4	381.3	381.2	381.3	381.6	382.0	382.3	382.6	382.6
152.5°	390.7	390.8	390.9	391.0	391.1	391.2	391.4	391.5	391.6	391.7	391.9
155°	404.8	404.8	404.8	404.8	404.8	404.8	404.9	405.0	405.1	405.2	405.5
157.5°	417.3	417.2	417.0	416.8	416.7	416.6	416.7	416.8	416.8	416.9	417.2
160°	424.7	424.5	424.2	424.0	423.8	423.7	423.8	423.8	423.9	424.0	424.3
162.5°	431.3	431.1	431.0	430.8	430.6	430.5	430.5	430.6	430.6	430.6	431.0
165°	440.1	439.9	439.8	439.6	439.5	439.4	439.5	439.6	439.7	439.7	440.1
167.5°	447.5	447.2	446.9	446.6	446.3	446.1	446.1	446.1	446.1	446.1	446.6
170°	451.5	451.2	450.9	450.6	450.2	450.1	450.1	450.1	450.1	450.1	450.6
172.5°	454.3	454.0	453.7	453.4	453.1	452.9	452.9	452.9	452.9	452.9	453.4
175°	457.6	457.3	457.0	456.7	456.4	456.2	456.2	456.2	456.2	456.2	456.7
177.5°	459.2	459.0	458.7	458.5	458.2	458.1	458.0	458.0	457.9	457.8	458.2
180°	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7



TEST NUMBER: P333302-840

CATALOG NUMBER: S125DIP-S1270D365U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1
2.5°	1984.4	1987.2	1990.0	1991.3	1991.0	1990.7	1990.4	1990.1
5°	1974.4	1977.6	1980.7	1982.2	1981.8	1981.5	1981.1	1980.7
7.5°	1954.4	1957.5	1960.6	1962.0	1961.7	1961.3	1961.0	1960.6
10°	1937.5	1940.4	1943.1	1944.3	1944.0	1943.6	1943.3	1943.0
12.5°	1915.0	1917.2	1919.5	1920.6	1920.5	1920.4	1920.4	1920.3
15°	1875.6	1877.3	1879.1	1880.0	1880.0	1880.0	1880.0	1880.0
17.5°	1829.8	1832.0	1834.1	1834.3	1832.6	1830.9	1829.1	1827.4
20°	1795.1	1797.6	1800.0	1800.4	1798.6	1796.9	1795.1	1793.3
22.5°	1755.7	1757.3	1758.9	1759.1	1757.9	1756.7	1755.4	1754.3
25°	1692.4	1693.1	1693.8	1693.6	1692.6	1691.5	1690.5	1689.4
27.5°	1626.1	1626.3	1626.4	1625.9	1624.9	1623.9	1622.8	1621.7
30°	1577.8	1577.1	1576.4	1575.6	1574.5	1573.5	1572.4	1571.3
32.5°	1528.8	1527.6	1526.3	1524.7	1522.9	1521.0	1519.0	1517.2
35°	1452.9	1451.2	1449.5	1447.1	1444.3	1441.6	1438.8	1435.9
37.5°	1373.1	1370.6	1368.0	1365.8	1364.2	1362.6	1361.0	1359.4
40°	1317.9	1314.7	1311.5	1309.5	1308.4	1307.4	1306.3	1305.3
42.5°	1263.0	1260.1	1257.3	1255.1	1253.4	1251.8	1250.2	1248.6
45°	1181.9	1177.7	1173.6	1170.9	1169.8	1168.8	1167.7	1166.7
47.5°	1096.4	1092.2	1087.9	1084.6	1082.1	1079.6	1077.2	1074.8
50°	1037.9	1033.4	1028.9	1025.3	1022.9	1020.5	1018.0	1015.5
52.5°	981.1	977.1	973.1	969.8	967.0	964.3	961.6	958.9
55°	892.7	889.6	886.5	883.6	881.2	878.8	876.3	873.8
57.5°	805.0	800.9	796.9	794.2	792.8	791.5	790.1	788.8
60°	745.6	742.1	738.6	735.7	733.2	730.7	728.3	725.9
62.5°	688.3	684.6	680.9	678.0	676.1	674.2	672.3	670.4
65°	598.3	595.1	592.0	589.8	588.3	586.9	585.5	584.1
67.5°	512.4	509.7	507.1	505.3	504.4	503.6	502.8	501.9
70°	455.6	453.4	451.3	449.6	448.2	446.8	445.5	444.0
72.5°	402.1	399.7	397.4	395.5	394.0	392.6	391.2	389.8
75°	319.1	318.0	317.0	315.8	314.4	313.0	311.5	310.1
77.5°	243.1	242.5	241.9	241.1	240.0	239.0	238.1	237.1
80°	194.5	194.2	193.8	193.3	192.6	191.9	191.2	190.6
82.5°	148.7	148.0	147.3	147.0	146.8	146.7	146.5	146.4
85°	87.5	87.2	86.7	86.2	85.5	84.8	84.1	83.4
87.5°	34.0	34.1	34.2	34.0	33.5	32.9	32.4	31.9
90°	6.5	6.9	7.3	7.6	7.9	8.1	8.3	8.6
92.5°	14.7	15.2	15.8	16.2	16.4	16.5	16.7	16.9
95°	28.6	29.2	29.7	30.1	30.2	30.4	30.5	30.7
97.5°	44.8	45.3	45.8	46.2	46.3	46.4	46.5	46.6
100°	56.0	56.8	57.5	57.9	58.1	58.3	58.4	58.6
102.5°	67.6	68.4	69.2	69.7	69.9	70.1	70.3	70.5
105°	86.2	86.7	87.3	87.6	87.8	88.1	88.3	88.6
107.5°	106.4	106.6	106.8	107.0	106.9	106.9	106.9	106.9
110°	120.4	120.7	120.9	121.0	120.9	120.8	120.7	120.7



TEST NUMBER: P333302-840

CATALOG NUMBER: S125DIP-S1270D365U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	134.4	134.5	134.6	134.6	134.5	134.3	134.2	134.1
115°	155.8	155.7	155.6	155.6	155.5	155.4	155.3	155.2
117.5°	177.2	177.3	177.3	177.2	176.9	176.6	176.3	175.9
120°	191.7	191.7	191.7	191.5	191.2	190.9	190.6	190.3
122.5°	205.8	205.7	205.7	205.5	205.3	205.0	204.8	204.5
125°	226.7	226.5	226.4	226.2	226.2	226.1	226.0	225.9
127.5°	247.4	247.3	247.2	247.1	247.0	246.8	246.6	246.5
130°	261.2	261.1	260.9	260.8	260.6	260.5	260.3	260.2
132.5°	274.3	274.2	274.1	274.0	273.7	273.5	273.3	273.1
135°	294.5	294.5	294.5	294.3	294.0	293.7	293.4	293.1
137.5°	314.2	314.3	314.4	314.2	313.8	313.4	313.0	312.6
140°	326.6	326.7	326.9	326.8	326.4	326.0	325.6	325.2
142.5°	338.7	338.8	338.9	338.7	338.3	337.9	337.6	337.2
145°	356.2	356.2	356.2	356.1	355.9	355.6	355.4	355.2
147.5°	372.4	372.6	372.8	372.6	372.1	371.5	371.0	370.5
150°	382.6	382.6	382.6	382.5	382.4	382.2	382.0	381.9
152.5°	392.1	392.3	392.5	392.4	392.2	391.9	391.6	391.3
155°	405.8	406.1	406.4	406.4	406.0	405.6	405.2	404.8
157.5°	417.5	417.9	418.2	418.1	417.6	417.0	416.5	416.0
160°	424.6	425.0	425.3	425.3	424.9	424.4	424.0	423.6
162.5°	431.3	431.7	432.1	432.1	431.6	431.1	430.7	430.2
165°	440.4	440.7	441.0	440.9	440.4	440.0	439.5	439.0
167.5°	447.1	447.5	448.0	448.0	447.5	447.0	446.5	446.1
170°	451.0	451.5	452.0	451.9	451.4	450.8	450.3	449.7
172.5°	453.9	454.3	454.8	454.8	454.3	453.8	453.3	452.8
175°	457.1	457.6	458.1	458.0	457.5	456.9	456.4	455.8
177.5°	458.6	459.0	459.3	459.3	458.9	458.4	458.0	457.5
180°	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7

(END OF REPORT)