

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: P333320-830

Luminaire Tested: **S125DIP-S1270D810U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333320-830
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-S1270D810U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7478.4 lumens
Efficiency: N/A
Efficacy: 123.2 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

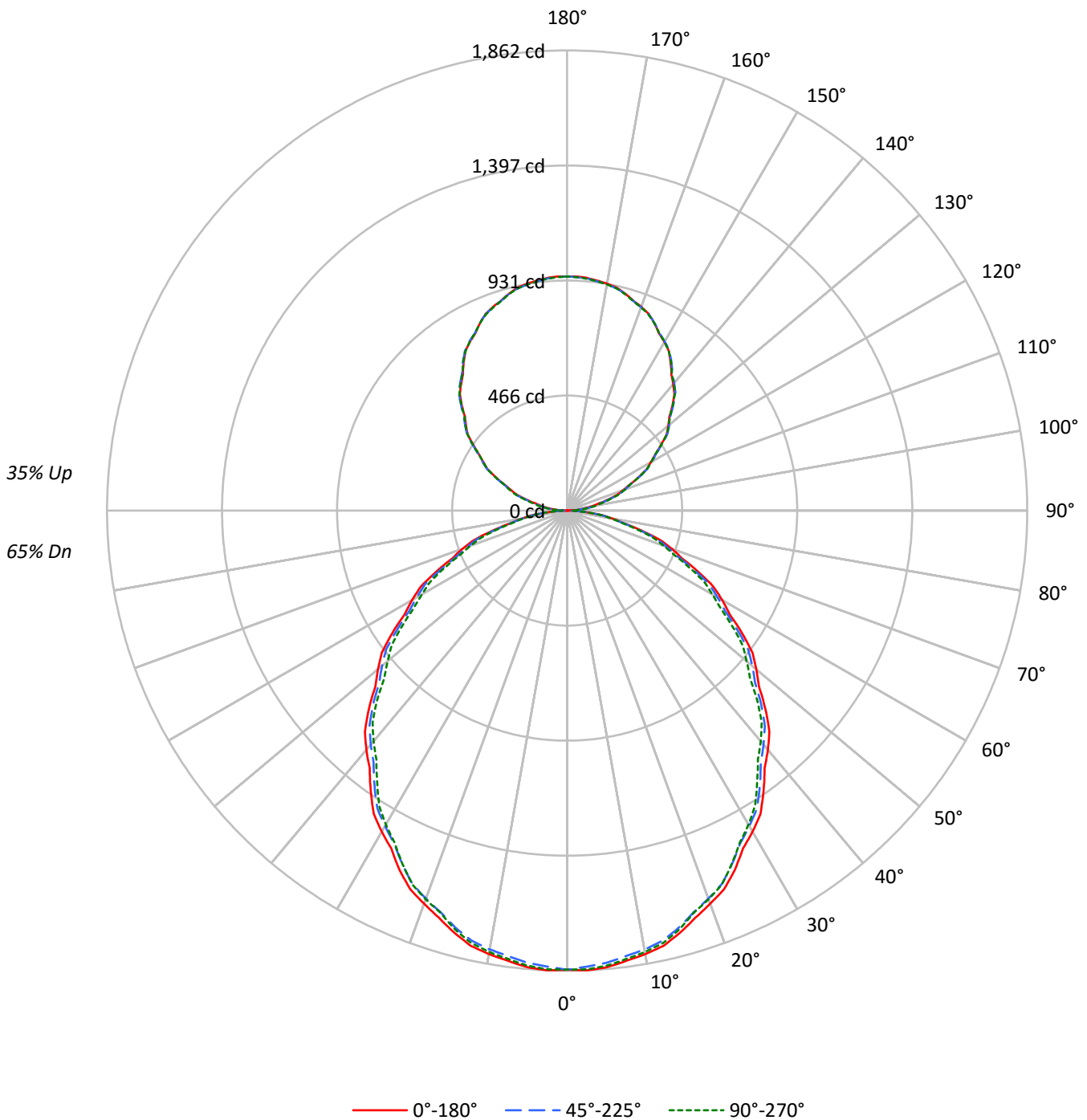
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333320-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333320-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-F1

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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	70	70	70	65
1	101	97	93	89	95	91	87	84	80	78	75	70	68	67	61	60	59	54
2	92	84	78	73	86	79	74	69	70	66	62	62	58	56	54	52	49	45
3	84	74	67	60	78	70	63	58	62	57	52	55	50	47	48	45	42	38
4	77	66	57	51	72	62	55	49	55	49	45	49	44	40	43	39	36	33
5	71	59	50	44	66	55	48	42	49	43	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	25
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25	22
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	22	28	23	20	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11996	11996	11996
5°	12023	11909	11985
10°	11950	11825	11893
15°	11820	11683	11732
20°	11635	11483	11504
25°	11436	11247	11236
30°	11189	10992	10937
35°	10925	10717	10566
40°	10655	10420	10270
45°	10361	10147	9945
50°	10040	9818	9523
55°	9730	9448	9183
60°	9357	9074	8751
65°	8915	8623	8332
70°	8492	8103	7825
75°	7738	7481	7224
80°	6884	6776	6616
85°	5995	6099	5772



TEST NUMBER: P333320-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.1	2.3
10°-20°	494.7	6.6
20°-30°	730.5	9.8
30°-40°	852.4	11.4
40°-50°	856.1	11.4
50°-60°	751.5	10.0
60°-70°	559.9	7.5
70°-80°	320.2	4.3
80°-90°	95.2	1.3
90°-100°	63.4	0.8
100°-110°	187.3	2.5
110°-120°	317.3	4.2
120°-130°	417.5	5.6
130°-140°	467.9	6.3
140°-150°	458.6	6.1
150°-160°	385.1	5.2
160°-170°	256.0	3.4
170°-180°	89.6	1.2
0°-30°	1400.3	18.7
0°-40°	2252.7	30.1
0°-60°	3860.3	51.6
0°-90°	4835.6	64.7
90°-120°	568.0	7.6
90°-150°	1912.0	25.6
90°-180°	2643.0	35.3
0°-180°	7478.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1858	1858	1858	1858	1858	
5°	1854	1851	1837	1849	1849	176
15°	1768	1763	1747	1754	1755	498
25°	1605	1597	1578	1581	1577	738
35°	1386	1379	1359	1352	1340	866
45°	1134	1128	1111	1094	1089	874
55°	864	859	839	826	816	771
65°	583	580	564	551	545	579
75°	310	307	300	295	290	331
85°	81	82	82	81	78	90
90°	1	7	12	15	18	7
95°	48	50	57	62	63	51
105°	168	172	176	180	183	180
115°	318	320	322	321	321	314
125°	464	468	469	467	467	415
135°	603	607	608	608	605	465
145°	730	733	736	735	733	456
155°	836	836	836	839	836	385
165°	909	907	908	911	906	256
175°	945	942	942	946	941	90
180°	947	947	947	947	947	



TEST NUMBER: P333320-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5
2.5°	1862.2	1861.4	1860.7	1859.8	1859.1	1857.4	1854.7	1852.1	1849.6	1846.9	1849.6
5°	1854.5	1853.9	1853.2	1852.6	1851.9	1850.0	1846.7	1843.4	1840.2	1836.9	1839.8
7.5°	1837.5	1836.8	1836.2	1835.5	1834.8	1832.8	1829.2	1825.6	1822.0	1818.4	1821.3
10°	1822.2	1821.6	1820.9	1820.2	1819.6	1817.5	1813.9	1810.3	1806.7	1803.1	1805.7
12.5°	1803.4	1802.2	1801.1	1799.9	1798.7	1796.5	1793.1	1789.8	1786.5	1783.1	1785.3
15°	1767.8	1766.9	1765.9	1764.9	1764.0	1761.6	1758.0	1754.4	1750.9	1747.3	1748.9
17.5°	1727.0	1725.6	1724.1	1722.7	1721.3	1718.6	1715.0	1711.2	1707.5	1703.7	1705.8
20°	1692.9	1692.2	1691.6	1690.9	1690.3	1687.8	1683.6	1679.3	1675.1	1670.8	1673.1
22.5°	1658.8	1657.6	1656.4	1655.3	1654.1	1651.5	1647.6	1643.6	1639.6	1635.6	1637.1
25°	1604.8	1603.1	1601.5	1599.9	1598.2	1595.3	1591.0	1586.8	1582.5	1578.3	1578.9
27.5°	1541.5	1540.6	1539.5	1538.6	1537.7	1534.9	1530.6	1526.2	1521.8	1517.4	1517.6
30°	1500.4	1499.4	1498.5	1497.4	1496.5	1493.6	1488.7	1483.8	1478.8	1473.9	1473.3
32.5°	1455.8	1454.2	1452.7	1451.2	1449.7	1446.8	1442.4	1438.0	1433.6	1429.3	1428.1
35°	1385.7	1384.5	1383.2	1381.9	1380.5	1377.6	1373.0	1368.5	1363.9	1359.3	1357.7
37.5°	1313.2	1311.5	1309.9	1308.2	1306.6	1303.6	1299.4	1295.1	1290.7	1286.5	1284.0
40°	1263.8	1262.2	1260.6	1258.9	1257.3	1254.1	1249.6	1245.0	1240.5	1235.9	1232.9
42.5°	1210.9	1209.6	1208.2	1206.7	1205.4	1202.4	1197.9	1193.3	1188.7	1184.1	1181.5
45°	1134.4	1133.2	1131.9	1130.6	1129.3	1126.6	1122.8	1118.8	1114.9	1111.0	1107.0
47.5°	1052.2	1052.3	1052.3	1052.3	1052.4	1050.1	1045.5	1040.8	1036.0	1031.3	1027.4
50°	999.3	998.3	997.3	996.4	995.3	992.9	989.0	985.1	981.2	977.2	973.0
52.5°	945.2	944.5	943.8	943.0	942.4	939.9	935.7	931.5	927.4	923.1	919.5
55°	864.1	863.1	862.1	861.1	860.2	857.4	852.8	848.3	843.7	839.1	836.1
57.5°	778.5	778.1	777.5	777.0	776.5	774.3	770.4	766.6	762.7	758.8	755.1
60°	724.4	723.2	721.9	720.6	719.3	716.8	713.2	709.6	706.1	702.5	699.2
62.5°	668.1	667.0	666.0	664.9	663.8	661.9	658.7	655.6	652.6	649.5	646.0
65°	583.4	582.8	582.1	581.5	580.8	578.6	575.0	571.5	567.9	564.3	561.4
67.5°	501.4	500.0	498.7	497.3	496.0	493.9	491.3	488.5	485.9	483.1	480.7
70°	449.7	448.1	446.4	444.8	443.2	440.8	437.9	435.0	432.1	429.1	427.2
72.5°	393.2	392.1	391.1	389.9	388.8	387.3	385.4	383.5	381.6	379.8	377.5
75°	310.1	309.4	308.8	308.1	307.5	306.3	304.7	303.0	301.4	299.8	298.8
77.5°	233.4	233.1	232.8	232.6	232.3	231.8	230.8	229.9	228.9	228.1	227.5
80°	185.1	185.1	185.1	185.1	185.1	184.8	184.2	183.5	182.9	182.2	181.9
82.5°	142.8	142.3	141.8	141.3	140.7	140.4	140.3	140.2	140.1	139.9	139.3
85°	80.9	81.2	81.4	81.8	82.1	82.3	82.3	82.3	82.3	82.3	82.0
87.5°	31.9	32.1	32.4	32.7	32.9	33.1	33.0	33.0	33.0	32.9	33.1
90°	0.8	2.1	3.4	4.7	5.9	7.2	8.4	9.5	10.7	11.8	12.6
92.5°	17.8	18.8	19.7	20.5	21.5	22.6	24.0	25.4	26.9	28.3	29.4
95°	47.9	48.3	48.5	48.9	49.2	50.2	51.8	53.4	55.1	56.7	57.9
97.5°	79.6	79.7	79.8	80.0	80.1	81.3	83.6	85.9	88.1	90.4	91.4
100°	103.2	103.2	103.2	103.2	103.2	104.2	106.4	108.5	110.7	112.7	114.2
102.5°	128.6	129.2	129.9	130.5	131.2	132.1	133.1	134.2	135.3	136.4	138.0
105°	168.1	168.9	169.7	170.5	171.4	172.2	173.2	174.2	175.1	176.2	177.1
107.5°	211.7	212.4	213.3	214.1	215.0	215.7	216.5	217.3	218.0	218.8	219.2
110°	241.8	242.6	243.4	244.2	245.1	245.7	246.2	246.7	247.1	247.6	248.2



TEST NUMBER: P333320-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	272.4	272.9	273.2	273.7	274.1	274.7	275.2	275.9	276.5	277.1	277.4
115°	317.6	318.3	319.0	319.6	320.3	320.7	321.1	321.4	321.8	322.1	321.9
117.5°	363.1	363.4	363.6	363.9	364.2	364.6	364.9	365.1	365.4	365.7	365.8
120°	391.3	392.2	393.0	393.8	394.6	395.1	395.3	395.5	395.6	395.8	395.8
122.5°	422.0	422.4	422.6	422.9	423.2	423.6	424.0	424.4	424.8	425.3	425.1
125°	463.5	464.6	465.5	466.6	467.5	468.1	468.3	468.4	468.5	468.7	468.4
127.5°	507.8	508.4	508.9	509.4	510.0	510.4	510.6	510.8	511.0	511.2	511.0
130°	534.3	535.2	536.0	536.8	537.6	538.2	538.5	538.9	539.1	539.5	539.3
132.5°	560.9	562.2	563.5	564.9	566.3	566.8	566.8	566.8	566.7	566.7	566.5
135°	602.9	603.9	604.8	605.9	606.8	607.4	607.6	607.8	607.8	608.0	608.0
137.5°	642.4	643.4	644.3	645.3	646.2	646.9	647.2	647.5	647.9	648.3	648.5
140°	667.8	668.5	669.4	670.2	671.0	671.7	672.1	672.7	673.2	673.6	674.0
142.5°	693.1	693.8	694.5	695.1	695.9	696.5	697.1	697.8	698.3	699.0	699.2
145°	730.4	731.0	731.7	732.4	733.0	733.6	734.1	734.5	735.1	735.6	735.6
147.5°	764.9	765.3	765.6	766.0	766.3	766.7	767.1	767.5	767.9	768.3	768.6
150°	787.9	787.7	787.6	787.4	787.2	787.5	788.2	788.8	789.5	790.1	790.1
152.5°	806.7	807.0	807.2	807.5	807.7	807.9	808.1	808.4	808.7	809.0	809.4
155°	835.8	835.8	835.8	835.8	835.8	835.8	836.0	836.2	836.3	836.5	837.2
157.5°	861.8	861.4	861.0	860.6	860.3	860.2	860.4	860.5	860.6	860.8	861.5
160°	877.0	876.6	876.1	875.6	875.1	875.0	875.1	875.2	875.4	875.6	876.3
162.5°	890.6	890.2	889.9	889.6	889.2	889.0	889.0	889.1	889.1	889.2	889.9
165°	908.8	908.4	908.1	907.8	907.5	907.4	907.5	907.7	907.9	908.0	908.7
167.5°	924.1	923.4	922.7	922.1	921.4	921.1	921.1	921.1	921.1	921.1	922.1
170°	932.4	931.7	931.0	930.4	929.7	929.3	929.3	929.3	929.3	929.3	930.4
172.5°	938.2	937.5	936.9	936.2	935.6	935.3	935.3	935.3	935.3	935.3	936.2
175°	944.9	944.2	943.6	942.9	942.3	941.9	941.9	941.9	941.9	941.9	942.9
177.5°	948.3	947.7	947.3	946.7	946.1	945.8	945.7	945.6	945.5	945.3	946.1
180°	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1



TEST NUMBER: P333320-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5
2.5°	1852.1	1854.7	1857.4	1858.5	1858.3	1858.0	1857.8	1857.5
5°	1842.8	1845.8	1848.7	1850.0	1849.6	1849.4	1849.0	1848.7
7.5°	1824.1	1827.0	1829.9	1831.2	1830.9	1830.5	1830.2	1829.9
10°	1808.4	1811.0	1813.5	1814.7	1814.4	1814.0	1813.7	1813.5
12.5°	1787.3	1789.4	1791.5	1792.5	1792.4	1792.3	1792.3	1792.2
15°	1750.6	1752.2	1753.8	1754.6	1754.6	1754.6	1754.6	1754.6
17.5°	1707.8	1709.9	1711.8	1712.0	1710.4	1708.8	1707.1	1705.5
20°	1675.5	1677.7	1680.0	1680.4	1678.7	1677.1	1675.5	1673.8
22.5°	1638.6	1640.1	1641.6	1641.8	1640.7	1639.6	1638.4	1637.4
25°	1579.6	1580.3	1580.9	1580.7	1579.8	1578.8	1577.8	1576.8
27.5°	1517.7	1517.9	1518.0	1517.5	1516.6	1515.6	1514.6	1513.6
30°	1472.6	1472.0	1471.3	1470.6	1469.5	1468.6	1467.5	1466.6
32.5°	1426.9	1425.8	1424.6	1423.1	1421.4	1419.6	1417.8	1416.1
35°	1356.0	1354.4	1352.8	1350.7	1348.0	1345.5	1342.8	1340.2
37.5°	1281.6	1279.2	1276.8	1274.8	1273.3	1271.8	1270.3	1268.8
40°	1230.0	1227.1	1224.1	1222.2	1221.2	1220.2	1219.2	1218.2
42.5°	1178.8	1176.1	1173.5	1171.4	1169.9	1168.4	1166.9	1165.4
45°	1103.2	1099.2	1095.3	1092.9	1091.8	1090.9	1089.9	1088.9
47.5°	1023.3	1019.4	1015.4	1012.3	1009.9	1007.7	1005.4	1003.1
50°	968.7	964.5	960.3	957.0	954.7	952.4	950.2	947.8
52.5°	915.7	912.0	908.2	905.1	902.6	900.0	897.5	894.9
55°	833.2	830.3	827.4	824.7	822.5	820.2	817.8	815.6
57.5°	751.3	747.5	743.8	741.2	740.0	738.8	737.4	736.2
60°	695.9	692.7	689.4	686.6	684.3	682.0	679.8	677.5
62.5°	642.4	638.9	635.5	632.8	631.0	629.2	627.5	625.8
65°	558.5	555.4	552.5	550.4	549.1	547.8	546.5	545.2
67.5°	478.2	475.7	473.3	471.6	470.8	470.0	469.3	468.4
70°	425.2	423.2	421.2	419.6	418.3	417.0	415.8	414.4
72.5°	375.3	373.1	370.9	369.1	367.8	366.5	365.1	363.8
75°	297.8	296.8	295.9	294.7	293.4	292.1	290.8	289.5
77.5°	226.9	226.3	225.7	225.0	224.0	223.1	222.3	221.3
80°	181.5	181.3	180.9	180.4	179.7	179.1	178.4	177.9
82.5°	138.7	138.2	137.5	137.2	137.0	137.0	136.8	136.7
85°	81.6	81.3	81.0	80.5	79.8	79.2	78.5	77.9
87.5°	33.3	33.5	33.6	33.5	33.0	32.6	32.1	31.8
90°	13.4	14.2	15.1	15.7	16.2	16.7	17.2	17.7
92.5°	30.4	31.6	32.6	33.4	33.7	34.0	34.4	34.8
95°	59.0	60.2	61.4	62.1	62.4	62.8	63.1	63.3
97.5°	92.6	93.6	94.7	95.3	95.5	95.7	96.0	96.1
100°	115.7	117.2	118.7	119.6	119.9	120.2	120.6	120.8
102.5°	139.6	141.2	142.8	143.8	144.3	144.7	145.2	145.6
105°	178.1	179.1	180.1	180.8	181.3	181.8	182.3	182.8
107.5°	219.7	220.2	220.7	220.9	220.9	220.8	220.8	220.8
110°	248.6	249.1	249.6	249.8	249.6	249.4	249.3	249.1



TEST NUMBER: P333320-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	277.6	277.8	278.1	278.1	277.7	277.4	277.1	276.8
115°	321.8	321.6	321.4	321.2	321.1	320.9	320.7	320.7
117.5°	366.0	366.1	366.3	366.0	365.3	364.7	364.0	363.4
120°	395.8	395.8	395.8	395.5	394.8	394.2	393.5	392.9
122.5°	425.0	424.9	424.7	424.4	423.9	423.4	422.8	422.4
125°	468.1	467.8	467.4	467.2	467.0	466.8	466.7	466.6
127.5°	510.9	510.7	510.6	510.3	510.0	509.6	509.3	509.0
130°	539.1	539.0	538.9	538.6	538.3	537.9	537.6	537.2
132.5°	566.3	566.1	566.0	565.6	565.2	564.8	564.3	563.8
135°	608.0	608.0	608.0	607.8	607.1	606.4	605.8	605.1
137.5°	648.7	648.8	649.0	648.8	647.9	647.1	646.3	645.5
140°	674.3	674.6	675.0	674.7	673.9	673.1	672.2	671.5
142.5°	699.4	699.6	699.7	699.5	698.6	697.9	697.0	696.2
145°	735.6	735.6	735.6	735.3	734.8	734.3	733.9	733.3
147.5°	769.0	769.5	769.9	769.5	768.4	767.2	766.2	765.1
150°	790.1	790.1	790.1	789.9	789.6	789.3	788.9	788.6
152.5°	809.7	810.1	810.5	810.4	809.8	809.3	808.7	808.0
155°	837.8	838.5	839.1	839.1	838.2	837.4	836.6	835.8
157.5°	862.1	862.8	863.5	863.3	862.1	861.1	860.0	858.9
160°	876.9	877.5	878.2	878.2	877.3	876.5	875.6	874.9
162.5°	890.7	891.6	892.3	892.2	891.3	890.3	889.4	888.4
165°	909.4	910.0	910.6	910.5	909.5	908.5	907.5	906.5
167.5°	923.1	924.1	925.1	925.0	924.1	923.0	922.0	921.0
170°	931.3	932.4	933.3	933.2	932.1	930.9	929.8	928.7
172.5°	937.3	938.2	939.2	939.2	938.2	937.2	936.1	935.1
175°	943.9	944.9	945.8	945.7	944.6	943.5	942.4	941.2
177.5°	946.9	947.6	948.5	948.4	947.4	946.6	945.7	944.7
180°	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1

(END OF REPORT)