

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: P333488-940

Luminaire Tested: **S125DIW-S1270D1560U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333488-940
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: S125DIW-S1270D1560U940-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10137.3 lumens
Efficiency: N/A
Efficacy: 122.3 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

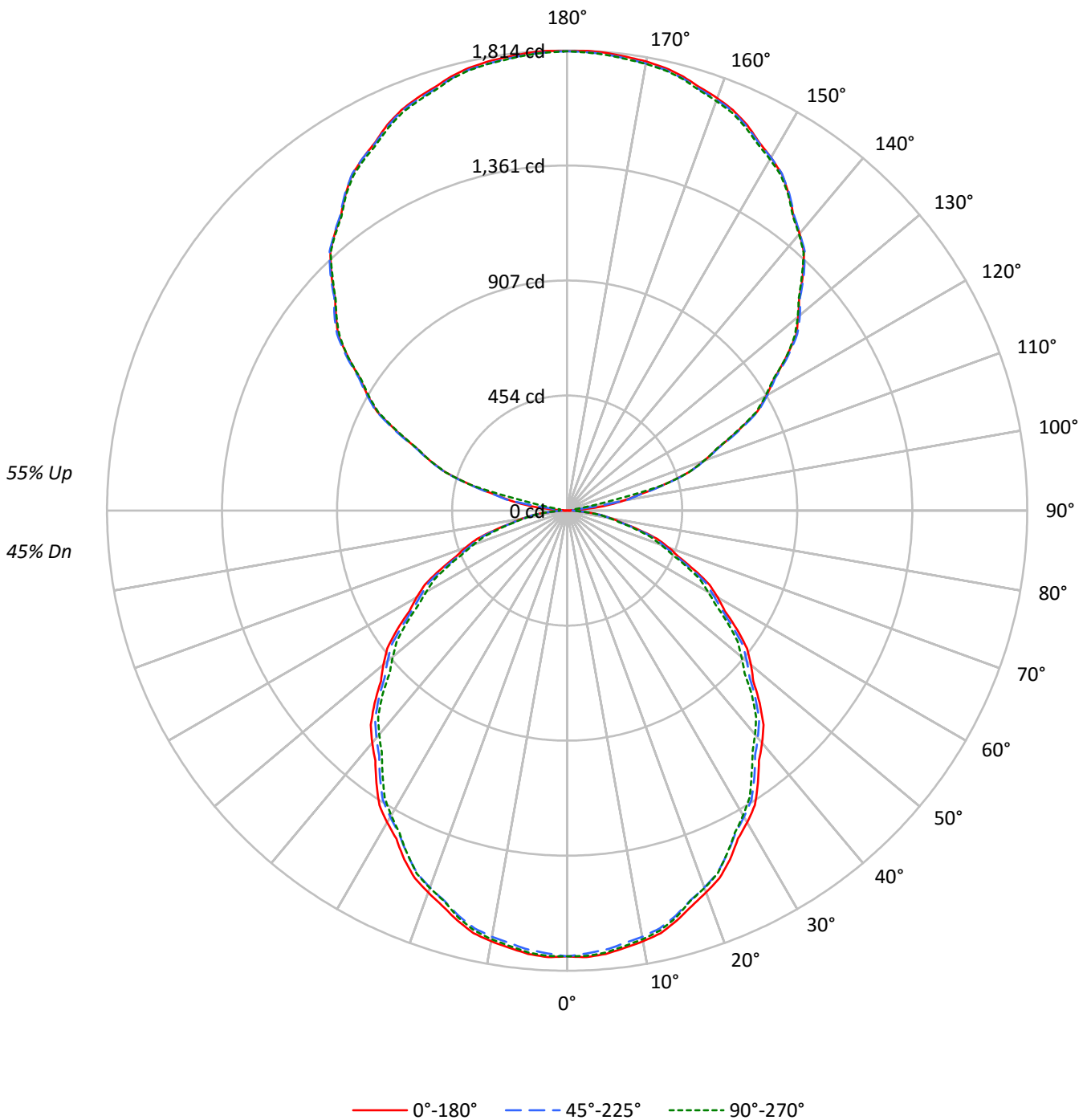
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	0		
RCR	0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45	45	45	45	45	45		
	1	97	92	88	85	88	85	81	78	71	68	66	58	56	54	46	44	43	38	38	38	38	38	38		
	2	88	81	74	69	80	74	69	64	62	58	55	50	48	45	40	38	37	32	32	32	32	32	32		
	3	80	71	63	58	73	65	59	54	54	50	46	45	41	38	35	33	31	27	27	27	27	27	27		
	4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23	23	23	23	23	23		
	5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20	20	20	20	20	20		
	6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	21	18	18	18	18	18	18		
	7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	16	16	16	16	16	16		
	8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16	14	14	14	14	14	14		
	9	49	37	30	25	45	35	28	23	29	24	20	25	20	18	20	17	15	13	13	13	13	13	13		
	10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	11	11	11	11	11	11		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11349	11349	11349
5°	11374	11267	11339
10°	11305	11187	11252
15°	11183	11053	11099
20°	11008	10864	10883
25°	10819	10641	10630
30°	10586	10399	10347
35°	10336	10139	9996
40°	10080	9857	9716
45°	9803	9600	9409
50°	9499	9289	9010
55°	9205	8939	8688
60°	8853	8584	8280
65°	8436	8159	7882
70°	8033	7666	7404
75°	7321	7079	6832
80°	6512	6412	6259
85°	5669	5765	5461



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.7	1.6
10°-20°	468.1	4.6
20°-30°	691.1	6.8
30°-40°	806.4	8.0
40°-50°	809.9	8.0
50°-60°	710.9	7.0
60°-70°	529.7	5.2
70°-80°	302.9	3.0
80°-90°	91.9	0.9
90°-100°	65.8	0.6
100°-110°	405.6	4.0
110°-120°	735.5	7.3
120°-130°	944.0	9.3
130°-140°	1015.3	10.0
140°-150°	953.0	9.4
150°-160°	770.9	7.6
160°-170°	498.6	4.9
170°-180°	172.0	1.7
0°-30°	1324.8	13.1
0°-40°	2131.2	21.0
0°-60°	3652.1	36.0
0°-90°	4576.6	45.1
90°-120°	1206.9	11.9
90°-150°	4119.2	40.6
90°-180°	5561.0	54.9
0°-180°	10137.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1757	1757	1757	1757	1757	
5°	1754	1751	1738	1750	1749	166
15°	1672	1668	1653	1660	1660	471
25°	1518	1511	1493	1496	1492	698
35°	1311	1305	1286	1279	1268	820
45°	1073	1067	1051	1035	1030	827
55°	818	812	794	781	772	730
65°	552	548	534	522	516	548
75°	293	290	284	279	274	313
85°	76	78	78	76	74	85
90°	1	12	22	28	32	7
95°	76	70	22	28	28	97
105°	395	400	400	400	399	418
115°	741	747	749	744	736	734
125°	1054	1063	1063	1058	1054	941
135°	1314	1322	1320	1316	1309	1013
145°	1524	1526	1526	1527	1520	952
155°	1678	1670	1673	1676	1666	773
165°	1771	1763	1764	1771	1761	500
175°	1811	1803	1804	1814	1803	172
180°	1811	1811	1811	1811	1811	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3
2.5°	1761.8	1761.0	1760.3	1759.5	1758.8	1757.2	1754.7	1752.2	1749.8	1747.3	1749.8
5°	1754.5	1753.9	1753.3	1752.7	1752.0	1750.2	1747.1	1744.0	1741.0	1737.9	1740.6
7.5°	1738.4	1737.8	1737.1	1736.5	1735.9	1733.9	1730.5	1727.2	1723.8	1720.4	1723.1
10°	1723.9	1723.3	1722.7	1722.1	1721.4	1719.5	1716.1	1712.7	1709.2	1705.8	1708.3
12.5°	1706.1	1705.0	1704.0	1702.8	1701.7	1699.6	1696.4	1693.3	1690.1	1686.9	1689.0
15°	1672.5	1671.6	1670.6	1669.7	1668.8	1666.6	1663.2	1659.8	1656.4	1653.1	1654.6
17.5°	1633.9	1632.5	1631.1	1629.8	1628.4	1625.9	1622.5	1618.9	1615.4	1611.9	1613.8
20°	1601.6	1601.0	1600.4	1599.7	1599.1	1596.8	1592.8	1588.8	1584.7	1580.7	1582.9
22.5°	1569.3	1568.3	1567.1	1566.0	1564.9	1562.5	1558.7	1555.0	1551.1	1547.4	1548.8
25°	1518.2	1516.6	1515.1	1513.6	1512.0	1509.2	1505.2	1501.2	1497.2	1493.2	1493.8
27.5°	1458.4	1457.5	1456.5	1455.6	1454.7	1452.2	1448.0	1443.9	1439.8	1435.6	1435.7
30°	1419.5	1418.5	1417.6	1416.7	1415.8	1413.0	1408.4	1403.7	1399.1	1394.5	1393.8
32.5°	1377.2	1375.8	1374.4	1373.0	1371.5	1368.8	1364.6	1360.5	1356.3	1352.2	1351.1
35°	1311.0	1309.8	1308.6	1307.3	1306.1	1303.3	1299.0	1294.7	1290.3	1286.0	1284.5
37.5°	1242.3	1240.8	1239.3	1237.7	1236.2	1233.3	1229.3	1225.2	1221.1	1217.1	1214.8
40°	1195.6	1194.1	1192.6	1191.0	1189.5	1186.5	1182.2	1177.9	1173.6	1169.2	1166.4
42.5°	1145.6	1144.3	1143.0	1141.7	1140.4	1137.6	1133.3	1128.9	1124.6	1120.3	1117.8
45°	1073.3	1072.1	1070.9	1069.6	1068.4	1065.9	1062.2	1058.5	1054.8	1051.1	1047.3
47.5°	995.4	995.5	995.6	995.6	995.7	993.5	989.1	984.6	980.2	975.7	972.0
50°	945.4	944.5	943.5	942.6	941.6	939.3	935.7	931.9	928.3	924.5	920.5
52.5°	894.2	893.6	892.9	892.2	891.5	889.2	885.2	881.3	877.4	873.3	869.9
55°	817.5	816.5	815.6	814.7	813.8	811.2	806.8	802.5	798.2	793.9	791.0
57.5°	736.6	736.1	735.6	735.1	734.6	732.5	728.9	725.2	721.6	717.9	714.3
60°	685.4	684.2	683.0	681.7	680.5	678.1	674.8	671.4	668.0	664.6	661.5
62.5°	632.0	631.1	630.1	629.0	628.0	626.2	623.2	620.3	617.4	614.5	611.2
65°	552.0	551.3	550.7	550.1	549.5	547.4	544.0	540.6	537.3	533.9	531.1
67.5°	474.4	473.1	471.8	470.5	469.2	467.3	464.8	462.2	459.7	457.1	454.8
70°	425.4	423.9	422.3	420.8	419.3	417.1	414.3	411.5	408.8	406.0	404.1
72.5°	372.0	371.0	370.0	368.9	367.8	366.4	364.6	362.8	361.1	359.3	357.1
75°	293.4	292.7	292.1	291.5	290.9	289.8	288.3	286.7	285.2	283.7	282.7
77.5°	220.8	220.5	220.3	220.1	219.8	219.3	218.4	217.5	216.6	215.8	215.3
80°	175.1	175.1	175.1	175.1	175.1	174.9	174.2	173.6	173.0	172.4	172.1
82.5°	135.1	134.6	134.1	133.7	133.1	132.9	132.7	132.6	132.5	132.3	131.8
85°	76.5	76.8	77.0	77.4	77.7	77.8	77.8	77.8	77.8	77.8	77.6
87.5°	30.3	30.8	31.2	31.7	32.2	32.5	32.7	32.9	33.1	33.2	33.5
90°	1.3	3.7	6.2	8.5	10.9	13.1	15.2	17.3	19.4	21.5	23.0
92.5°	20.7	19.0	17.3	15.7	14.0	14.1	16.0	17.7	19.6	21.5	23.0
95°	76.5	75.6	74.7	73.8	72.9	66.8	55.5	44.1	32.8	21.5	23.0
97.5°	159.7	161.3	162.9	164.6	166.2	155.8	133.3	110.9	88.5	66.1	57.6
100°	224.2	225.1	226.0	226.9	227.7	228.8	230.0	231.2	232.4	233.5	189.1
102.5°	289.7	290.8	291.9	293.1	294.2	295.2	295.9	296.6	297.3	298.0	289.6
105°	394.7	395.8	397.1	398.2	399.4	400.0	400.0	400.0	400.0	400.0	400.0
107.5°	503.6	503.6	503.6	503.6	503.6	503.9	504.5	505.2	505.8	506.3	506.4
110°	574.5	574.5	574.5	574.5	574.5	574.8	575.4	576.0	576.6	577.2	576.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	641.1	641.9	642.6	643.3	644.0	644.5	644.9	645.2	645.6	646.0	644.8
115°	741.0	742.4	744.0	745.5	746.9	747.8	748.1	748.4	748.8	749.0	747.8
117.5°	844.4	844.3	844.2	844.2	844.1	844.6	845.8	846.9	848.0	849.2	847.6
120°	908.7	908.5	908.2	907.9	907.6	907.9	908.7	909.6	910.5	911.4	910.9
122.5°	965.7	966.8	968.0	969.1	970.2	971.0	971.4	971.8	972.2	972.7	972.1
125°	1053.7	1055.8	1057.9	1060.0	1062.1	1063.1	1063.1	1063.1	1063.1	1063.1	1061.9
127.5°	1137.7	1139.2	1140.8	1142.3	1143.7	1144.4	1144.2	1144.1	1143.9	1143.7	1143.0
130°	1189.3	1190.8	1192.3	1193.8	1195.2	1196.1	1196.5	1196.8	1197.0	1197.4	1196.5
132.5°	1240.8	1242.6	1244.3	1246.1	1247.8	1248.3	1247.7	1247.0	1246.3	1245.7	1245.5
135°	1314.1	1315.9	1317.8	1319.6	1321.3	1321.9	1321.3	1320.7	1320.1	1319.6	1318.9
137.5°	1381.5	1383.0	1384.6	1386.2	1387.8	1388.2	1387.7	1387.1	1386.6	1386.1	1386.3
140°	1425.6	1426.2	1426.7	1427.4	1428.0	1428.1	1427.8	1427.5	1427.2	1426.9	1427.5
142.5°	1465.3	1465.6	1466.0	1466.3	1466.7	1467.1	1467.6	1467.9	1468.4	1468.8	1468.9
145°	1523.6	1524.1	1524.7	1525.4	1526.0	1526.3	1526.3	1526.3	1526.3	1526.3	1526.5
147.5°	1574.6	1574.4	1574.3	1574.2	1574.0	1574.2	1574.6	1574.9	1575.3	1575.7	1576.0
150°	1606.8	1606.1	1605.6	1605.0	1604.4	1604.4	1605.0	1605.6	1606.1	1606.8	1607.4
152.5°	1637.9	1636.6	1635.3	1634.0	1632.6	1632.3	1632.9	1633.5	1634.1	1634.7	1635.3
155°	1677.9	1676.1	1674.4	1672.6	1670.8	1670.2	1670.8	1671.3	1672.0	1672.6	1673.5
157.5°	1708.8	1707.7	1706.6	1705.6	1704.5	1704.0	1704.1	1704.1	1704.1	1704.2	1705.2
160°	1730.3	1728.5	1726.7	1724.9	1723.1	1722.3	1722.7	1723.0	1723.2	1723.6	1724.7
162.5°	1747.5	1745.7	1743.9	1742.0	1740.3	1739.5	1739.8	1740.2	1740.4	1740.7	1742.4
165°	1770.6	1768.8	1766.9	1765.1	1763.4	1762.6	1762.9	1763.3	1763.5	1763.8	1765.6
167.5°	1787.7	1785.9	1784.0	1782.2	1780.3	1779.6	1779.9	1780.1	1780.5	1780.7	1782.9
170°	1797.4	1795.3	1793.2	1791.1	1789.0	1788.1	1788.4	1788.8	1789.0	1789.3	1791.7
172.5°	1803.8	1801.8	1799.7	1797.6	1795.5	1794.7	1795.3	1795.8	1796.4	1796.9	1799.0
175°	1810.8	1809.0	1807.2	1805.4	1803.7	1803.0	1803.2	1803.5	1803.8	1804.1	1806.5
177.5°	1814.0	1812.6	1811.2	1809.7	1808.3	1807.7	1807.9	1808.2	1808.4	1808.7	1810.4
180°	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3
2.5°	1752.2	1754.7	1757.2	1758.3	1758.1	1757.8	1757.6	1757.3
5°	1743.4	1746.2	1749.0	1750.2	1749.9	1749.6	1749.3	1749.0
7.5°	1725.7	1728.5	1731.2	1732.4	1732.1	1731.8	1731.5	1731.2
10°	1710.8	1713.3	1715.7	1716.8	1716.5	1716.2	1715.9	1715.7
12.5°	1691.0	1692.9	1694.9	1695.9	1695.8	1695.7	1695.7	1695.6
15°	1656.2	1657.7	1659.2	1660.0	1660.0	1660.0	1660.0	1660.0
17.5°	1615.7	1617.7	1619.5	1619.7	1618.2	1616.7	1615.1	1613.6
20°	1585.1	1587.2	1589.4	1589.7	1588.1	1586.6	1585.1	1583.5
22.5°	1550.2	1551.7	1553.1	1553.3	1552.2	1551.1	1550.1	1549.1
25°	1494.4	1495.0	1495.7	1495.5	1494.6	1493.6	1492.7	1491.7
27.5°	1435.8	1436.0	1436.1	1435.7	1434.8	1433.9	1432.9	1432.0
30°	1393.2	1392.6	1392.0	1391.2	1390.3	1389.4	1388.4	1387.5
32.5°	1350.0	1348.9	1347.7	1346.3	1344.7	1343.0	1341.3	1339.7
35°	1282.9	1281.4	1279.9	1277.8	1275.3	1272.9	1270.4	1267.9
37.5°	1212.5	1210.2	1207.9	1206.0	1204.6	1203.2	1201.8	1200.3
40°	1163.7	1160.9	1158.1	1156.3	1155.3	1154.4	1153.4	1152.5
42.5°	1115.3	1112.7	1110.2	1108.2	1106.8	1105.4	1103.9	1102.5
45°	1043.7	1039.9	1036.3	1033.9	1033.0	1032.1	1031.1	1030.2
47.5°	968.1	964.4	960.6	957.7	955.5	953.3	951.2	949.0
50°	916.5	912.5	908.5	905.4	903.2	901.1	898.9	896.7
52.5°	866.3	862.8	859.3	856.3	853.9	851.5	849.1	846.7
55°	788.3	785.5	782.7	780.2	778.1	776.0	773.7	771.6
57.5°	710.8	707.2	703.6	701.2	700.1	698.9	697.7	696.5
60°	658.4	655.3	652.2	649.6	647.4	645.2	643.1	641.0
62.5°	607.8	604.5	601.2	598.7	597.0	595.3	593.6	592.0
65°	528.3	525.5	522.7	520.8	519.5	518.3	517.0	515.8
67.5°	452.5	450.0	447.7	446.2	445.4	444.7	444.0	443.2
70°	402.3	400.4	398.5	397.0	395.7	394.5	393.3	392.1
72.5°	355.1	352.9	350.9	349.2	347.9	346.7	345.4	344.2
75°	281.8	280.8	279.9	278.8	277.6	276.3	275.1	273.8
77.5°	214.6	214.1	213.6	212.9	212.0	211.1	210.3	209.4
80°	171.7	171.5	171.1	170.7	170.0	169.4	168.8	168.3
82.5°	131.3	130.7	130.1	129.8	129.7	129.6	129.4	129.3
85°	77.2	77.0	76.6	76.2	75.5	74.9	74.3	73.7
87.5°	33.8	34.2	34.4	34.4	34.1	33.8	33.4	33.2
90°	24.4	25.9	27.5	28.6	29.5	30.4	31.3	32.2
92.5°	24.4	25.9	27.5	28.4	28.8	29.2	29.7	30.1
95°	24.4	25.9	27.5	28.2	28.2	28.2	28.2	28.2
97.5°	49.2	40.8	32.4	28.2	28.2	28.2	28.2	28.2
100°	144.6	100.2	55.8	33.0	31.7	30.6	29.4	28.2
102.5°	281.2	272.8	264.4	250.0	229.7	209.5	189.1	168.9
105°	400.0	400.0	400.0	399.8	399.6	399.3	399.0	398.7
107.5°	506.5	506.5	506.6	506.1	505.2	504.4	503.5	502.6
110°	575.4	574.5	573.6	573.4	573.6	573.9	574.3	574.5



TEST NUMBER: P333488-940

CATALOG NUMBER: S125DIW-S1270D1560U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	643.6	642.6	641.4	640.6	640.2	639.8	639.4	638.9
115°	746.6	745.5	744.2	742.8	741.0	739.1	737.4	735.6
117.5°	846.1	844.5	842.9	841.8	841.1	840.3	839.5	838.7
120°	910.3	909.6	909.1	908.0	906.5	905.0	903.6	902.1
122.5°	971.4	970.9	970.3	969.1	967.4	965.6	963.9	962.2
125°	1060.8	1059.5	1058.4	1057.3	1056.4	1055.5	1054.6	1053.7
127.5°	1142.4	1141.7	1141.0	1139.6	1137.4	1135.2	1133.0	1130.8
130°	1195.6	1194.7	1193.8	1192.6	1191.1	1189.6	1188.1	1186.6
132.5°	1245.4	1245.2	1245.0	1244.1	1242.7	1241.2	1239.7	1238.1
135°	1318.3	1317.8	1317.1	1315.9	1314.1	1312.3	1310.5	1308.8
137.5°	1386.3	1386.4	1386.6	1385.9	1384.3	1382.8	1381.2	1379.7
140°	1428.1	1428.7	1429.3	1428.7	1426.9	1425.1	1423.3	1421.6
142.5°	1469.0	1469.2	1469.3	1468.5	1466.6	1464.8	1463.0	1461.2
145°	1526.9	1527.1	1527.4	1526.7	1524.9	1523.1	1521.3	1519.6
147.5°	1576.4	1576.7	1577.1	1576.2	1574.0	1571.9	1569.8	1567.6
150°	1607.9	1608.6	1609.2	1608.3	1605.9	1603.5	1601.2	1598.7
152.5°	1635.9	1636.5	1637.1	1636.3	1634.1	1632.0	1629.9	1627.7
155°	1674.4	1675.3	1676.1	1675.3	1673.0	1670.6	1668.2	1665.8
157.5°	1706.1	1707.1	1708.1	1707.4	1705.0	1702.5	1700.1	1697.8
160°	1725.9	1727.2	1728.3	1727.8	1725.4	1723.0	1720.6	1718.2
162.5°	1744.1	1745.8	1747.4	1747.0	1744.4	1741.7	1739.1	1736.4
165°	1767.4	1769.2	1771.0	1770.7	1768.4	1765.9	1763.5	1761.1
167.5°	1785.0	1787.2	1789.3	1789.0	1786.4	1783.7	1781.0	1778.3
170°	1794.1	1796.5	1798.8	1798.8	1796.1	1793.4	1790.6	1788.0
172.5°	1801.2	1803.3	1805.4	1805.2	1802.5	1799.8	1797.2	1794.5
175°	1808.8	1811.2	1813.7	1813.5	1810.8	1808.1	1805.4	1802.8
177.5°	1812.0	1813.7	1815.3	1815.3	1813.3	1811.4	1809.5	1807.6
180°	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8

(END OF REPORT)