

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: P333481

Luminaire Tested: **S125DIW-S1270D1340U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333481  
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-S1270D1340U835-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9580.6 lumens  
Efficiency: N/A  
Efficacy: 125.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

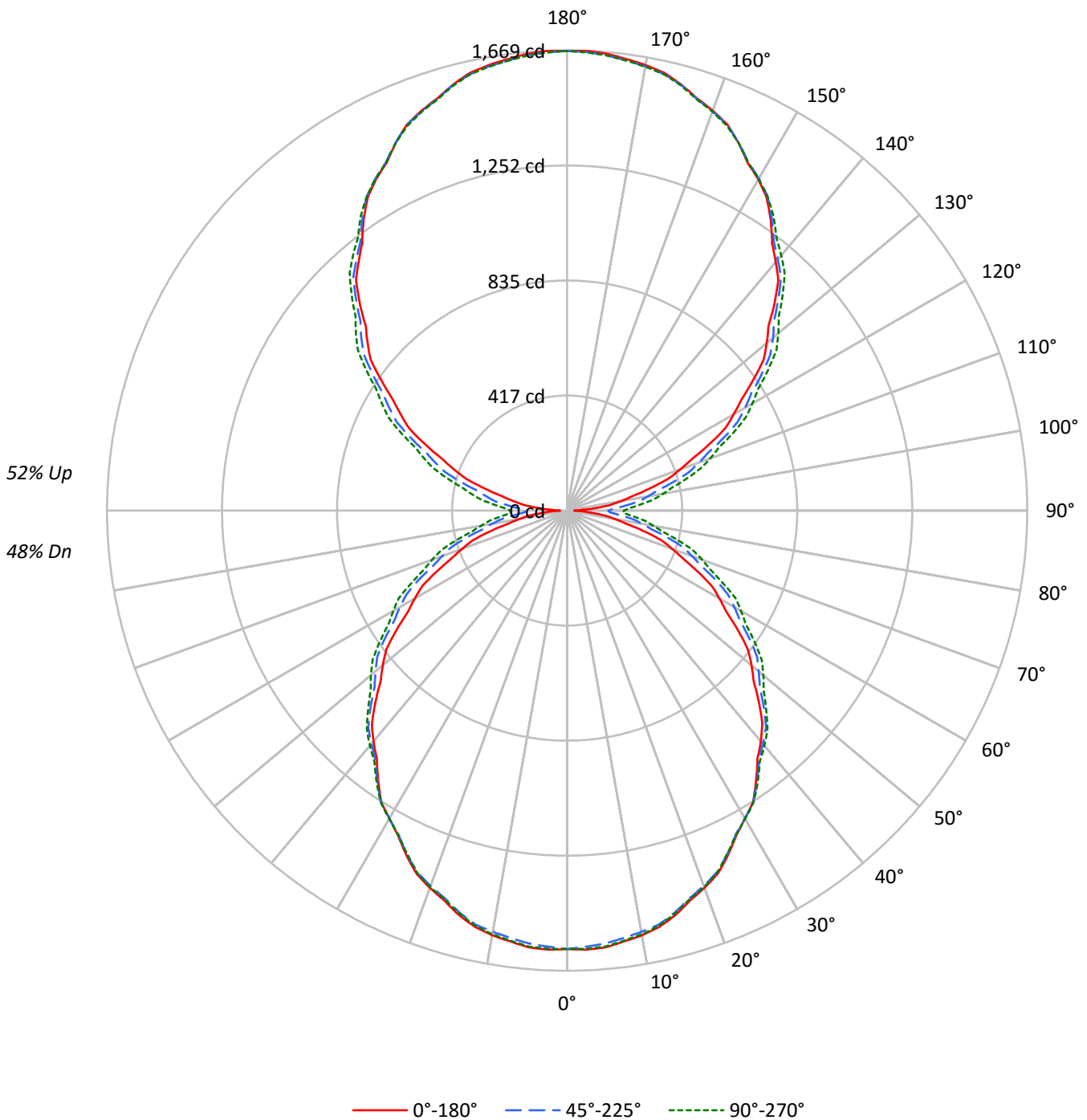
Input Watts (W): 76.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48					48			
1	97	92	88	84	89	85	81	78	71	69	66	59	57	55	47	46	45	39					39			
2	88	80	74	68	80	74	68	63	62	58	54	51	48	45	41	39	37	32					32			
3	80	70	62	56	73	65	58	53	54	49	45	45	41	38	36	33	31	27					27			
4	73	62	54	47	67	57	50	44	48	43	38	40	36	32	32	29	27	23					23			
5	67	55	47	41	61	51	43	38	43	37	33	36	31	28	29	26	23	20					20			
6	62	49	41	35	56	46	38	33	39	33	29	32	28	24	26	23	20	17					17			
7	57	44	36	31	52	41	34	29	35	29	25	29	25	22	24	21	18	15					15			
8	53	40	32	27	48	37	30	25	32	26	22	27	22	19	22	19	16	14					14			
9	49	37	29	24	45	34	27	23	29	24	20	25	20	17	20	17	14	12					12			
10	46	34	26	21	42	31	25	20	27	22	18	23	18	15	19	15	13	11					11			

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

	0°	45°	90°
0°	10271	10271	10271
5°	10291	10081	10113
10°	10218	9901	9886
15°	10097	9686	9597
20°	9933	9419	9309
25°	9738	9134	8953
30°	9501	8820	8630
35°	9281	8532	8335
40°	9056	8229	8036
45°	8802	7969	7773
50°	8560	7687	7539
55°	8269	7421	7265
60°	7950	7117	6985
65°	7617	6800	6669
70°	7241	6366	6346
75°	6643	5948	5948
80°	5861	5444	5515
85°	5135	5104	5378



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.4	1.6
10°-20°	426.9	4.5
20°-30°	634.8	6.6
30°-40°	752.0	7.8
40°-50°	777.5	8.1
50°-60°	716.2	7.5
60°-70°	579.0	6.0
70°-80°	387.7	4.0
80°-90°	204.7	2.1
90°-100°	224.5	2.3
100°-110°	412.9	4.3
110°-120°	614.2	6.4
120°-130°	766.5	8.0
130°-140°	837.3	8.7
140°-150°	809.9	8.5
150°-160°	677.9	7.1
160°-170°	450.6	4.7
170°-180°	157.7	1.6
0°-30°	1212.1	12.7
0°-40°	1964.1	20.5
0°-60°	3457.8	36.1
0°-90°	4629.2	48.3
90°-120°	1251.5	13.1
90°-150°	3665.2	38.3
90°-180°	4951.0	51.7
0°-180°	9580.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1590	1587	1576	1588	1587	151
15°	1519	1519	1509	1518	1512	428
25°	1380	1384	1375	1381	1374	635
35°	1194	1204	1200	1205	1205	747
45°	984	1000	1009	1019	1021	759
55°	756	781	806	823	830	676
65°	521	557	594	616	624	517
75°	287	328	377	407	416	304
85°	86	137	192	225	238	91
90°	26	87	149	189	206	21
95°	105	149	214	255	271	106
105°	310	342	396	433	450	331
115°	568	586	628	653	662	562
125°	822	830	861	882	890	736
135°	1064	1071	1083	1102	1106	820
145°	1287	1291	1295	1302	1305	804
155°	1471	1471	1472	1477	1471	677
165°	1599	1597	1598	1603	1596	451
175°	1663	1658	1658	1665	1656	158
180°	1667	1667	1667	1667	1667	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3
2.5°	1594.0	1593.5	1592.9	1592.4	1591.8	1590.6	1588.6	1586.7	1584.8	1582.8	1584.8
5°	1590.3	1589.6	1588.9	1588.2	1587.5	1586.0	1583.5	1581.1	1578.7	1576.3	1579.0
7.5°	1576.3	1576.0	1575.7	1575.4	1575.2	1573.8	1571.3	1568.8	1566.3	1563.8	1566.2
10°	1563.8	1563.8	1563.8	1563.8	1563.8	1562.4	1559.6	1556.9	1554.1	1551.3	1553.7
12.5°	1546.3	1546.6	1546.9	1547.2	1547.4	1546.5	1544.3	1542.0	1539.8	1537.6	1539.5
15°	1518.6	1518.9	1519.3	1519.6	1520.0	1518.9	1516.5	1514.1	1511.7	1509.2	1511.3
17.5°	1482.4	1483.1	1483.8	1484.5	1485.2	1484.3	1481.9	1479.5	1477.0	1474.6	1476.2
20°	1456.2	1456.9	1457.6	1458.3	1459.0	1458.1	1455.7	1453.3	1450.8	1448.4	1449.5
22.5°	1426.3	1427.5	1428.8	1430.0	1431.3	1430.5	1427.8	1425.1	1422.4	1419.7	1421.0
25°	1379.8	1380.9	1381.9	1382.9	1384.0	1383.5	1381.4	1379.3	1377.2	1375.1	1376.5
27.5°	1328.1	1329.6	1331.1	1332.6	1334.2	1333.7	1331.4	1329.0	1326.7	1324.3	1325.3
30°	1289.4	1291.5	1293.5	1295.6	1297.7	1297.7	1295.6	1293.5	1291.5	1289.4	1290.1
32.5°	1254.5	1256.3	1258.1	1259.9	1261.7	1261.8	1260.3	1258.8	1257.2	1255.7	1256.4
35°	1194.3	1196.7	1199.1	1201.6	1204.0	1204.7	1203.6	1202.6	1201.6	1200.5	1201.6
37.5°	1134.1	1136.3	1138.5	1140.8	1143.0	1143.9	1143.6	1143.2	1142.9	1142.5	1143.9
40°	1092.9	1095.7	1098.5	1101.3	1104.0	1105.2	1104.9	1104.5	1104.2	1103.9	1105.2
42.5°	1048.0	1051.6	1055.2	1058.8	1062.5	1064.6	1065.4	1066.2	1066.9	1067.7	1069.3
45°	983.8	987.6	991.4	995.2	999.0	1001.8	1003.6	1005.3	1007.0	1008.7	1011.2
47.5°	918.0	921.5	925.1	928.6	932.1	935.4	938.4	941.4	944.3	947.3	950.9
50°	873.1	876.9	880.7	884.5	888.4	892.2	896.0	899.8	903.6	907.4	911.2
52.5°	825.7	830.4	835.0	839.6	844.3	848.9	853.6	858.2	862.8	867.5	871.6
55°	756.2	761.7	767.3	772.8	778.3	783.9	789.4	795.0	800.5	806.1	809.9
57.5°	685.1	691.7	698.4	705.0	711.7	718.2	724.6	730.9	737.3	743.7	748.1
60°	637.7	644.6	651.5	658.5	665.4	672.3	679.3	686.2	693.1	700.0	705.2
62.5°	591.5	598.5	605.4	612.3	619.2	626.5	633.9	641.4	648.9	656.4	662.1
65°	520.7	528.7	536.7	544.7	552.6	560.8	569.1	577.4	585.7	594.0	599.2
67.5°	454.0	461.7	469.4	477.1	484.8	492.9	501.3	509.8	518.2	526.7	533.0
70°	405.4	413.3	421.3	429.3	437.2	445.7	454.7	463.8	472.8	481.8	488.4
72.5°	358.0	366.2	374.5	382.7	391.0	400.0	409.8	419.7	429.5	439.4	446.5
75°	286.9	295.9	304.9	313.9	322.9	333.0	344.0	355.1	366.2	377.3	384.2
77.5°	218.6	229.0	239.4	249.8	260.2	270.7	281.4	292.0	302.7	313.4	321.0
80°	176.2	186.6	197.0	207.4	217.8	228.8	240.6	252.4	264.2	276.0	283.6
82.5°	137.5	148.5	159.4	170.4	181.3	192.8	204.9	216.9	229.0	241.0	248.4
85°	85.8	97.2	108.6	120.1	131.5	143.3	155.4	167.5	179.6	191.8	199.4
87.5°	48.9	60.5	72.0	83.5	95.1	107.0	119.1	131.3	143.5	155.7	164.0
90°	26.2	39.6	53.0	66.4	79.8	93.4	107.2	121.0	134.8	148.6	158.0
92.5°	53.8	65.7	77.6	89.5	101.3	114.5	129.1	143.6	158.1	172.7	182.3
95°	104.6	114.2	123.8	133.3	142.9	155.0	169.7	184.4	199.0	213.7	223.3
97.5°	158.5	166.8	175.2	183.5	191.8	203.7	219.0	234.4	249.7	265.1	274.2
100°	198.8	206.0	213.3	220.6	227.9	238.9	253.7	268.6	283.4	298.2	308.1
102.5°	242.1	250.0	257.9	265.8	273.6	283.9	296.6	309.3	322.1	334.8	344.6
105°	309.8	316.8	323.8	330.7	337.7	347.3	359.4	371.5	383.6	395.8	404.4
107.5°	384.7	390.9	397.0	403.2	409.3	418.0	429.4	440.7	452.0	463.3	471.0
110°	436.4	442.0	447.6	453.2	458.8	466.9	477.4	488.0	498.6	509.1	516.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	490.3	494.4	498.5	502.6	506.6	513.9	524.5	535.0	545.5	556.0	562.7
115°	568.4	572.0	575.6	579.2	582.7	589.3	598.9	608.5	618.1	627.7	633.6
117.5°	646.8	648.9	651.0	653.1	655.2	660.8	669.8	678.9	687.9	697.0	703.1
120°	696.6	699.1	701.6	704.0	706.5	711.9	720.1	728.4	736.7	744.9	750.8
122.5°	749.3	750.3	751.3	752.3	753.3	758.0	766.5	774.9	783.4	791.8	797.2
125°	822.2	823.5	824.9	826.3	827.7	832.0	839.2	846.4	853.6	860.9	865.8
127.5°	898.4	899.1	899.7	900.3	901.0	904.3	910.3	916.3	922.4	928.4	933.2
130°	945.1	946.2	947.3	948.4	949.5	952.8	958.2	963.6	969.0	974.5	979.0
132.5°	990.6	992.9	995.2	997.5	999.7	1002.7	1006.3	1010.0	1013.6	1017.2	1021.8
135°	1064.2	1065.6	1067.0	1068.3	1069.7	1071.8	1074.5	1077.2	1079.9	1082.6	1087.1
137.5°	1133.4	1134.8	1136.2	1137.6	1139.0	1140.6	1142.4	1144.2	1146.0	1147.8	1152.3
140°	1176.8	1178.2	1179.7	1181.1	1182.6	1183.9	1185.1	1186.3	1187.5	1188.7	1193.1
142.5°	1221.4	1222.3	1223.3	1224.2	1225.1	1226.2	1227.4	1228.5	1229.7	1230.9	1234.5
145°	1287.0	1287.9	1288.7	1289.5	1290.3	1291.1	1292.0	1292.8	1293.7	1294.6	1296.3
147.5°	1346.2	1346.8	1347.5	1348.1	1348.7	1349.4	1350.1	1350.8	1351.5	1352.2	1353.4
150°	1386.7	1386.4	1386.1	1385.8	1385.5	1385.9	1387.1	1388.3	1389.4	1390.6	1390.6
152.5°	1419.9	1420.3	1420.7	1421.1	1421.5	1421.9	1422.4	1422.8	1423.3	1423.8	1424.5
155°	1471.0	1471.0	1471.0	1471.0	1471.0	1471.1	1471.4	1471.7	1472.0	1472.3	1473.4
157.5°	1516.6	1516.0	1515.4	1514.7	1514.1	1513.9	1514.2	1514.5	1514.8	1515.1	1516.2
160°	1543.6	1542.8	1541.9	1541.0	1540.2	1539.9	1540.2	1540.5	1540.7	1541.0	1542.2
162.5°	1567.5	1566.9	1566.2	1565.6	1565.0	1564.7	1564.7	1564.8	1564.8	1564.9	1566.3
165°	1599.4	1598.8	1598.2	1597.7	1597.1	1597.0	1597.2	1597.5	1597.8	1598.1	1599.3
167.5°	1626.4	1625.2	1624.1	1622.9	1621.8	1621.2	1621.2	1621.2	1621.2	1621.2	1622.9
170°	1640.9	1639.8	1638.6	1637.5	1636.3	1635.7	1635.7	1635.7	1635.7	1635.7	1637.5
172.5°	1651.3	1650.1	1649.0	1647.8	1646.7	1646.1	1646.1	1646.1	1646.1	1646.1	1647.8
175°	1663.0	1661.8	1660.7	1659.5	1658.4	1657.8	1657.8	1657.8	1657.8	1657.8	1659.5
177.5°	1668.9	1668.0	1667.1	1666.2	1665.2	1664.7	1664.4	1664.2	1664.0	1663.7	1665.1
180°	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3
2.5°	1586.7	1588.6	1590.6	1591.4	1591.1	1590.9	1590.6	1590.3
5°	1581.8	1584.6	1587.4	1588.6	1588.2	1587.9	1587.5	1587.2
7.5°	1568.6	1571.1	1573.5	1574.5	1574.2	1573.8	1573.5	1573.1
10°	1556.2	1558.6	1561.0	1562.1	1561.7	1561.4	1561.0	1560.7
12.5°	1541.3	1543.2	1545.1	1545.6	1544.7	1543.8	1542.9	1542.0
15°	1513.4	1515.5	1517.5	1517.9	1516.5	1515.1	1513.7	1512.3
17.5°	1477.8	1479.4	1481.0	1481.4	1480.5	1479.7	1478.9	1478.0
20°	1450.5	1451.5	1452.6	1453.1	1453.1	1453.1	1453.1	1453.1
22.5°	1422.4	1423.7	1425.0	1425.2	1424.4	1423.6	1422.7	1421.9
25°	1377.9	1379.3	1380.7	1380.5	1378.8	1377.0	1375.3	1373.6
27.5°	1326.3	1327.2	1328.2	1328.4	1327.7	1327.1	1326.5	1325.9
30°	1290.8	1291.5	1292.2	1292.3	1292.0	1291.6	1291.3	1290.9
32.5°	1257.1	1257.8	1258.5	1258.7	1258.3	1258.0	1257.6	1257.3
35°	1202.6	1203.6	1204.7	1205.2	1205.2	1205.2	1205.2	1205.2
37.5°	1145.3	1146.7	1148.1	1148.7	1148.5	1148.4	1148.3	1148.1
40°	1106.6	1108.0	1109.4	1110.4	1111.1	1111.8	1112.5	1113.2
42.5°	1071.0	1072.7	1074.3	1075.2	1075.4	1075.5	1075.7	1075.8
45°	1013.6	1016.0	1018.4	1019.8	1020.2	1020.5	1020.9	1021.2
47.5°	954.4	957.9	961.5	963.6	964.4	965.1	965.9	966.7
50°	915.0	918.8	922.7	925.1	926.1	927.2	928.2	929.2
52.5°	875.7	879.8	883.8	886.3	887.0	887.8	888.6	889.3
55°	813.7	817.5	821.3	823.9	825.3	826.7	828.1	829.5
57.5°	752.4	756.8	761.2	763.9	764.9	765.9	767.0	768.0
60°	710.4	715.6	720.8	723.9	725.0	726.0	727.1	728.1
62.5°	667.9	673.6	679.4	682.9	684.2	685.6	686.9	688.2
65°	604.4	609.6	614.8	618.1	619.5	620.9	622.3	623.6
67.5°	539.3	545.6	551.9	555.9	557.7	559.5	561.4	563.2
70°	494.9	501.5	508.1	512.4	514.5	516.6	518.7	520.7
72.5°	453.6	460.8	467.9	472.2	473.8	475.3	476.8	478.3
75°	391.2	398.1	405.0	409.4	411.1	412.8	414.6	416.3
77.5°	328.6	336.2	343.9	348.4	349.8	351.1	352.5	353.9
80°	291.2	298.8	306.5	311.0	312.3	313.7	315.1	316.5
82.5°	255.7	263.1	270.4	275.3	277.8	280.3	282.8	285.3
85°	207.0	214.6	222.3	227.5	230.2	233.0	235.8	238.5
87.5°	172.2	180.5	188.7	194.2	196.8	199.3	201.9	204.5
90°	167.4	176.8	186.2	192.6	195.9	199.2	202.5	205.8
92.5°	191.9	201.5	211.0	217.4	220.4	223.5	226.6	229.6
95°	233.0	242.6	252.3	258.6	261.6	264.6	267.6	270.6
97.5°	283.4	292.6	301.8	307.7	310.4	313.1	315.8	318.5
100°	318.0	327.9	337.7	344.0	346.6	349.3	352.0	354.6
102.5°	354.4	364.2	374.1	380.4	383.3	386.2	389.1	392.0
105°	413.1	421.8	430.4	436.4	439.7	443.0	446.3	449.5
107.5°	478.7	486.4	494.2	499.1	501.2	503.3	505.3	507.4
110°	524.0	531.5	538.9	543.7	545.8	548.0	550.1	552.3





TEST NUMBER: P333481

CATALOG NUMBER: S125DIW-S1270D1340U835-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	569.4	576.2	582.9	587.2	589.1	591.0	592.9	594.8
115°	639.6	645.5	651.5	655.3	657.1	658.9	660.7	662.5
117.5°	709.2	715.3	721.5	725.1	726.3	727.5	728.7	729.9
120°	756.7	762.6	768.5	771.9	772.8	773.7	774.7	775.6
122.5°	802.6	808.0	813.3	816.6	817.8	818.9	820.1	821.2
125°	870.8	875.8	880.7	883.9	885.4	886.8	888.3	889.7
127.5°	938.1	942.9	947.8	950.9	952.3	953.8	955.2	956.6
130°	983.6	988.2	992.7	995.6	996.7	997.9	999.0	1000.2
132.5°	1026.3	1030.9	1035.5	1038.1	1038.7	1039.4	1040.0	1040.7
135°	1091.6	1096.1	1100.6	1103.2	1103.8	1104.3	1104.9	1105.5
137.5°	1156.7	1161.1	1165.6	1167.8	1167.7	1167.7	1167.6	1167.5
140°	1197.5	1201.9	1206.3	1208.4	1208.4	1208.3	1208.3	1208.2
142.5°	1238.1	1241.7	1245.3	1247.0	1247.0	1246.9	1246.9	1246.8
145°	1298.0	1299.8	1301.5	1302.6	1303.1	1303.7	1304.2	1304.7
147.5°	1354.7	1355.9	1357.1	1357.1	1355.8	1354.4	1353.1	1351.8
150°	1390.6	1390.6	1390.6	1390.4	1390.2	1390.0	1389.8	1389.5
152.5°	1425.1	1425.8	1426.5	1426.4	1425.4	1424.5	1423.5	1422.5
155°	1474.6	1475.7	1476.9	1476.7	1475.3	1473.9	1472.4	1471.0
157.5°	1517.4	1518.5	1519.7	1519.3	1517.4	1515.5	1513.6	1511.7
160°	1543.3	1544.5	1545.6	1545.5	1544.1	1542.6	1541.2	1539.7
162.5°	1567.7	1569.0	1570.4	1570.3	1568.6	1566.9	1565.3	1563.6
165°	1600.4	1601.6	1602.7	1602.4	1600.7	1599.0	1597.2	1595.5
167.5°	1624.7	1626.4	1628.1	1628.1	1626.3	1624.5	1622.7	1620.9
170°	1639.2	1640.9	1642.6	1642.5	1640.5	1638.5	1636.4	1634.4
172.5°	1649.6	1651.3	1653.0	1653.0	1651.2	1649.4	1647.6	1645.8
175°	1661.2	1663.0	1664.7	1664.5	1662.5	1660.5	1658.5	1656.5
177.5°	1666.5	1667.9	1669.3	1669.2	1667.5	1665.9	1664.3	1662.7
180°	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9

(END OF REPORT)