

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: P333474

Luminaire Tested: **S125DIW-S1270D1050U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333474  
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-S1270D1050U835-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1050 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9118.2 lumens  
Efficiency: N/A  
Efficacy: 135.3 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

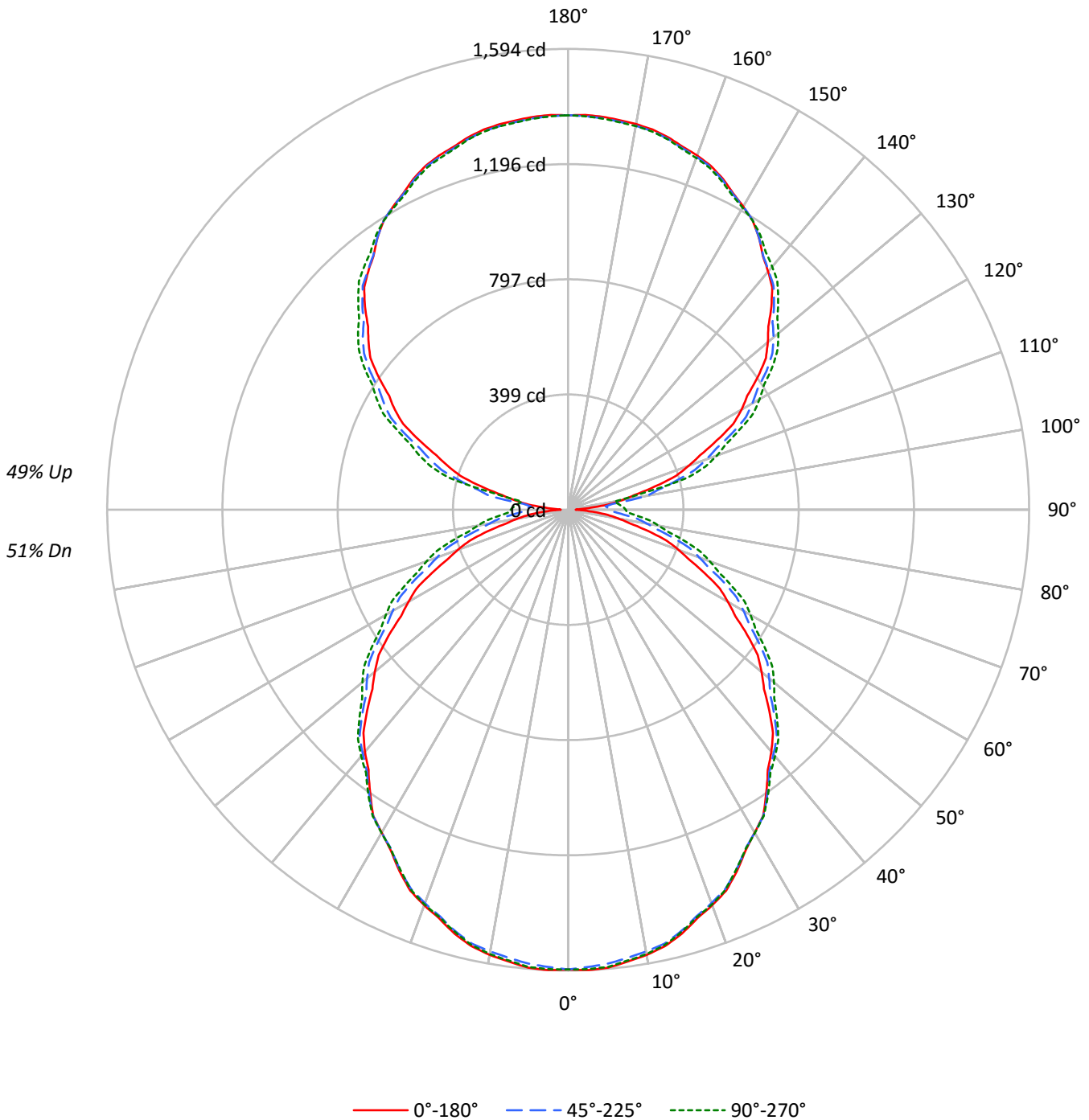
Input Watts (W): 67.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P333474

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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	99	99	99	99	84	84	84	70	70	70	57	57	57	51					51			
1	97	93	88	85	89	85	82	79	72	70	67	60	58	57	49	48	46	41					41			
2	88	80	74	68	81	74	69	64	63	59	55	52	49	47	43	41	39	34					34			
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	32	28					28			
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	33	30	28	24					24			
5	67	55	47	41	62	51	44	38	44	38	33	37	32	29	30	27	24	21					21			
6	62	50	41	35	57	46	39	33	39	33	29	33	29	25	27	24	21	18					18			
7	57	45	37	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16					16			
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14					14			
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	18	15	13					13			
10	46	34	27	22	43	32	25	20	27	22	18	23	19	16	19	16	14	12					12			

**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	4.7
20°-30°	634.8	7.0
30°-40°	752.0	8.2
40°-50°	777.5	8.5
50°-60°	716.2	7.9
60°-70°	579.0	6.3
70°-80°	387.7	4.3
80°-90°	203.9	2.2
90°-100°	162.4	1.8
100°-110°	388.8	4.3
110°-120°	609.9	6.7
120°-130°	742.9	8.1
130°-140°	778.8	8.5
140°-150°	720.9	7.9
150°-160°	580.9	6.4
160°-170°	375.7	4.1
170°-180°	129.6	1.4
0°-30°	1212.1	13.3
0°-40°	1964.1	21.5
0°-60°	3457.8	37.9
0°-90°	4628.4	50.8
90°-120°	1161.1	12.7
90°-150°	3403.7	37.3
90°-180°	4490.0	49.2
0°-180°	9118.2	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	84	144	183	199	19
95°	78	114	130	168	180	89
105°	311	341	387	417	428	330
115°	568	585	625	648	652	562
125°	800	807	837	857	862	714
135°	993	998	1007	1024	1027	765
145°	1150	1150	1150	1158	1159	718
155°	1264	1259	1260	1263	1255	582
165°	1334	1328	1329	1334	1327	377
175°	1364	1359	1359	1366	1358	130
180°	1364	1364	1364	1364	1364	



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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°	48.8	60.3	71.7	83.2	94.6	106.4	118.5	130.6	142.7	154.8	163.0
90°	26.0	38.8	51.7	64.6	77.5	90.6	104.0	117.3	130.7	144.0	153.1
92.5°	38.0	47.0	56.0	65.0	74.0	85.2	98.7	112.1	125.6	139.0	147.9
95°	77.9	86.3	94.6	102.9	111.3	117.0	120.3	123.5	126.8	130.0	138.7
97.5°	138.8	148.1	157.4	166.7	176.0	177.9	172.4	166.9	161.3	155.8	156.7
100°	186.0	194.0	201.9	209.9	217.9	227.8	239.8	251.8	263.8	275.8	249.6
102.5°	234.2	241.7	249.3	256.9	264.5	273.9	285.3	296.6	308.0	319.3	320.0
105°	311.4	317.8	324.3	330.7	337.1	345.6	356.0	366.4	376.7	387.1	394.1
107.5°	391.6	396.3	401.1	405.8	410.5	418.0	428.5	438.9	449.3	459.8	466.7
110°	443.8	447.9	452.1	456.3	460.4	467.6	477.7	487.9	498.0	508.2	514.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	493.9	497.8	501.7	505.5	509.4	516.2	525.9	535.6	545.3	555.0	560.4
115°	567.6	571.2	574.7	578.3	581.8	588.2	597.5	606.7	615.9	625.2	630.5
117.5°	643.9	645.5	647.0	648.6	650.1	655.6	665.0	674.4	683.7	693.1	697.8
120°	692.5	693.3	694.1	694.9	695.8	700.5	709.1	717.8	726.4	735.1	740.5
122.5°	734.1	735.5	736.8	738.1	739.5	744.2	752.2	760.2	768.2	776.2	781.3
125°	800.2	801.4	802.6	803.8	805.1	809.1	816.1	823.0	829.9	836.9	841.5
127.5°	861.9	862.7	863.5	864.2	865.0	868.2	873.7	879.3	884.8	890.4	895.0
130°	900.8	901.5	902.3	903.1	903.9	906.8	911.9	916.9	922.0	927.1	931.3
132.5°	938.3	939.6	940.8	942.0	943.3	945.5	948.8	952.0	955.3	958.5	963.2
135°	993.3	994.3	995.3	996.3	997.3	998.7	1000.7	1002.7	1004.7	1006.7	1010.7
137.5°	1043.7	1044.6	1045.5	1046.4	1047.3	1048.1	1048.9	1049.7	1050.4	1051.2	1055.4
140°	1075.6	1076.1	1076.5	1077.0	1077.4	1077.7	1077.8	1078.0	1078.1	1078.2	1082.5
142.5°	1105.6	1105.6	1105.6	1105.6	1105.5	1105.7	1106.1	1106.5	1106.9	1107.3	1110.6
145°	1149.5	1149.6	1149.7	1149.8	1149.9	1149.9	1149.9	1149.9	1149.9	1149.9	1151.9
147.5°	1186.3	1186.3	1186.2	1186.1	1186.0	1186.1	1186.3	1186.6	1186.9	1187.1	1188.0
150°	1210.6	1210.2	1209.7	1209.3	1208.8	1208.8	1209.3	1209.7	1210.2	1210.6	1211.1
152.5°	1234.1	1233.1	1232.1	1231.1	1230.1	1229.9	1230.3	1230.8	1231.2	1231.6	1232.1
155°	1264.2	1262.9	1261.5	1260.2	1258.8	1258.4	1258.8	1259.3	1259.7	1260.2	1260.8
157.5°	1287.5	1286.7	1285.9	1285.1	1284.2	1283.9	1283.9	1283.9	1284.0	1284.0	1284.8
160°	1303.7	1302.3	1301.0	1299.6	1298.3	1297.7	1297.9	1298.2	1298.4	1298.6	1299.5
162.5°	1316.6	1315.3	1313.9	1312.6	1311.2	1310.6	1310.9	1311.1	1311.3	1311.5	1312.8
165°	1334.0	1332.7	1331.3	1330.0	1328.6	1328.0	1328.3	1328.5	1328.7	1328.9	1330.3
167.5°	1346.9	1345.6	1344.2	1342.8	1341.4	1340.8	1341.0	1341.2	1341.5	1341.7	1343.3
170°	1354.2	1352.7	1351.1	1349.5	1347.9	1347.3	1347.5	1347.7	1347.9	1348.2	1350.0
172.5°	1359.1	1357.5	1355.9	1354.4	1352.8	1352.2	1352.6	1353.0	1353.4	1353.8	1355.4
175°	1364.3	1363.0	1361.6	1360.3	1358.9	1358.4	1358.6	1358.8	1359.1	1359.3	1361.1
177.5°	1366.8	1365.7	1364.6	1363.5	1362.5	1362.0	1362.2	1362.4	1362.5	1362.7	1364.0
180°	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3



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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°	171.2	179.4	187.6	192.9	195.5	198.1	200.6	203.2
90°	162.2	171.3	180.4	186.5	189.6	192.7	195.8	198.9
92.5°	156.7	165.5	174.3	180.1	182.8	185.6	188.3	191.0
95°	147.5	156.2	165.0	170.6	173.0	175.4	177.8	180.3
97.5°	157.7	158.6	159.5	161.2	163.5	165.9	168.2	170.6
100°	223.3	197.1	170.9	158.4	159.6	160.8	161.9	163.1
102.5°	320.6	321.3	322.0	315.7	302.5	289.3	276.1	262.9
105°	401.0	407.9	414.9	419.4	421.6	423.8	426.0	428.2
107.5°	473.6	480.5	487.4	491.6	493.0	494.5	496.0	497.5
110°	520.0	525.9	531.8	536.1	538.7	541.4	544.0	546.7





TEST NUMBER: P333474

CATALOG NUMBER: S125DIW-S1270D1050U835-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	565.9	571.3	576.8	580.5	582.7	584.8	586.9	589.0
115°	635.8	641.2	646.5	649.5	650.3	651.0	651.7	652.5
117.5°	702.6	707.3	712.0	715.2	717.0	718.8	720.6	722.3
120°	745.9	751.4	756.8	760.0	761.0	761.9	762.9	763.8
122.5°	786.5	791.7	796.8	799.8	800.6	801.4	802.1	802.9
125°	846.2	850.8	855.4	858.3	859.4	860.4	861.5	862.5
127.5°	899.6	904.3	908.9	911.4	911.7	912.1	912.4	912.8
130°	935.4	939.6	943.8	946.2	946.8	947.4	948.0	948.6
132.5°	967.9	972.7	977.4	979.9	980.2	980.6	980.9	981.2
135°	1014.8	1018.8	1022.9	1025.1	1025.5	1025.9	1026.2	1026.6
137.5°	1059.6	1063.7	1067.9	1070.1	1070.3	1070.5	1070.8	1071.0
140°	1086.7	1091.0	1095.3	1097.4	1097.4	1097.5	1097.5	1097.5
142.5°	1114.0	1117.3	1120.7	1122.3	1122.4	1122.4	1122.5	1122.5
145°	1153.8	1155.8	1157.8	1158.8	1158.8	1158.8	1158.9	1158.9
147.5°	1188.8	1189.6	1190.4	1190.4	1189.4	1188.4	1187.4	1186.4
150°	1211.5	1212.0	1212.4	1211.9	1210.5	1209.0	1207.6	1206.1
152.5°	1232.5	1233.0	1233.4	1232.9	1231.3	1229.8	1228.3	1226.7
155°	1261.5	1262.2	1262.9	1262.3	1260.5	1258.7	1256.9	1255.1
157.5°	1285.5	1286.2	1286.9	1286.4	1284.6	1282.8	1281.0	1279.2
160°	1300.4	1301.3	1302.2	1301.7	1300.0	1298.2	1296.4	1294.6
162.5°	1314.1	1315.3	1316.6	1316.2	1314.2	1312.3	1310.3	1308.3
165°	1331.6	1333.0	1334.3	1334.1	1332.3	1330.5	1328.7	1326.9
167.5°	1344.9	1346.5	1348.2	1348.0	1345.9	1343.9	1341.9	1339.9
170°	1351.8	1353.6	1355.4	1355.2	1353.2	1351.2	1349.2	1347.1
172.5°	1357.1	1358.7	1360.3	1360.1	1358.1	1356.0	1354.0	1352.0
175°	1362.9	1364.7	1366.5	1366.4	1364.3	1362.3	1360.3	1358.3
177.5°	1365.2	1366.5	1367.8	1367.7	1366.2	1364.8	1363.4	1361.9
180°	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3

(END OF REPORT)