

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: P333316

Luminaire Tested: **S125DIP-S1270D810U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333316  
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: S125DIP-S1270D810U835-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

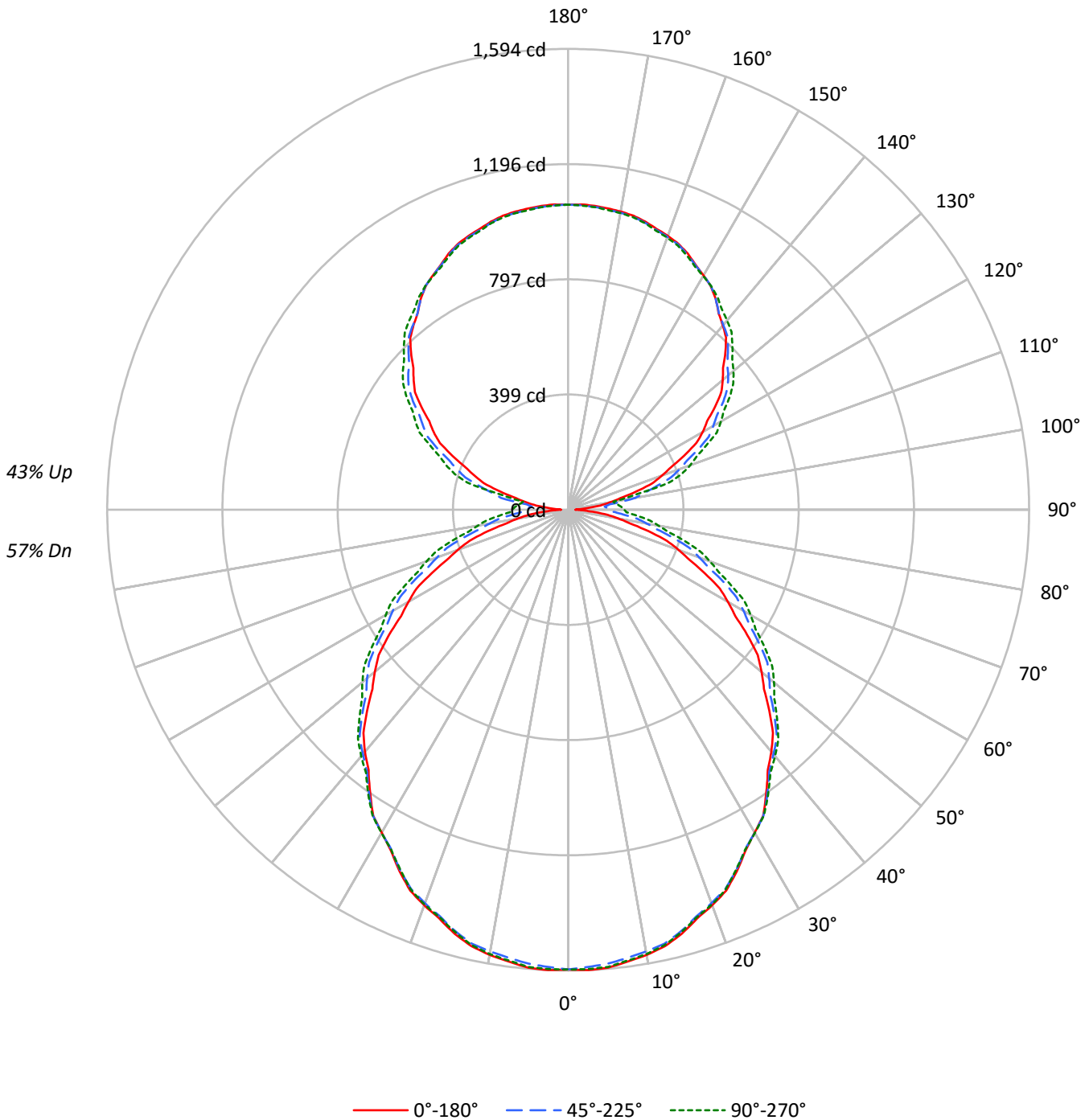
Lumens per Lamp: N/A  
Luminaire Lumens: 8167.5 lumens  
Efficiency: N/A  
Efficacy: 134.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

Input Watts (W): 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



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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57								
1	98	94	89	86	91	87	84	80	75	72	70	64	62	60	54	52	51	46								
2	89	81	75	69	83	76	70	65	65	61	57	56	52	49	47	44	42	38								
3	81	71	63	57	75	66	60	54	57	52	48	49	45	42	41	38	36	32								
4	74	63	55	48	69	59	51	46	51	45	40	43	39	35	37	33	30	27								
5	68	56	48	41	63	52	45	39	45	39	35	39	34	31	33	29	26	23								
6	63	50	42	36	58	47	39	34	41	35	30	35	30	27	30	26	23	20								
7	58	45	37	31	54	42	35	30	37	31	27	32	27	24	27	23	21	18								
8	54	41	33	28	50	39	31	26	34	28	24	29	24	21	25	21	18	16								
9	50	38	30	25	47	35	28	23	31	25	21	27	22	19	23	19	17	14								
10	47	34	27	22	44	32	26	21	29	23	19	25	20	17	21	18	15	13								

**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	1.8
10°-20°	426.9	5.2
20°-30°	634.8	7.8
30°-40°	752.0	9.2
40°-50°	777.5	9.5
50°-60°	716.2	8.8
60°-70°	579.0	7.1
70°-80°	387.7	4.7
80°-90°	203.3	2.5
90°-100°	151.2	1.9
100°-110°	319.5	3.9
110°-120°	484.3	5.9
120°-130°	581.6	7.1
130°-140°	605.4	7.4
140°-150°	558.0	6.8
150°-160°	449.2	5.5
160°-170°	290.5	3.6
170°-180°	100.2	1.2
0°-30°	1212.1	14.8
0°-40°	1964.1	24.0
0°-60°	3457.8	42.3
0°-90°	4627.8	56.7
90°-120°	954.9	11.7
90°-150°	2699.9	33.1
90°-180°	3540.0	43.3
0°-180°	8167.5	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	82	140	179	193	18
95°	65	102	126	163	176	73
105°	244	273	319	349	360	259
115°	441	457	497	521	527	437
125°	620	626	655	676	682	553
135°	769	772	781	799	803	592
145°	889	889	889	897	899	555
155°	978	973	974	976	970	450
165°	1032	1027	1028	1032	1026	291
175°	1055	1051	1051	1057	1050	100
180°	1055	1055	1055	1055	1055	



TEST NUMBER: P333316

CATALOG NUMBER: S125DIP-S1270D810U835-4F0-1E-UDD-D

**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	60.2	71.5	82.9	94.3	106.0	118.0	130.0	142.0	154.0	162.2
90°	25.7	38.2	50.7	63.2	75.6	88.4	101.4	114.4	127.4	140.4	149.2
92.5°	34.5	43.8	53.1	62.3	71.6	82.8	96.0	109.1	122.2	135.4	143.9
95°	64.8	73.3	81.8	90.3	98.8	105.6	110.8	116.0	121.2	126.3	134.8
97.5°	111.5	120.5	129.6	138.6	147.6	151.3	149.6	147.9	146.2	144.5	146.9
100°	147.8	155.5	163.3	171.1	178.9	188.7	200.5	212.3	224.1	235.9	217.2
102.5°	184.7	192.1	199.4	206.8	214.2	223.5	234.7	246.0	257.2	268.4	270.5
105°	244.0	250.2	256.4	262.7	268.9	277.2	287.6	298.0	308.4	318.8	325.7
107.5°	305.6	310.3	315.0	319.7	324.4	332.0	342.3	352.6	362.9	373.3	380.1
110°	345.6	349.8	353.9	358.1	362.3	369.4	379.4	389.5	399.5	409.6	415.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	384.4	388.2	391.9	395.6	399.4	406.1	415.7	425.3	435.0	444.6	450.3
115°	441.0	444.3	447.6	450.9	454.2	460.5	469.6	478.8	488.0	497.2	502.7
117.5°	499.7	501.3	502.8	504.4	505.9	511.3	520.5	529.7	538.9	548.0	553.0
120°	537.2	538.1	539.0	539.8	540.7	545.4	553.9	562.4	570.9	579.3	584.9
122.5°	569.2	570.3	571.4	572.6	573.7	578.3	586.2	594.1	602.1	610.0	615.3
125°	620.1	621.0	621.9	622.8	623.6	627.5	634.5	641.4	648.3	655.2	660.1
127.5°	667.5	668.1	668.6	669.1	669.6	672.7	678.3	683.8	689.4	695.0	699.7
130°	697.6	698.1	698.6	699.1	699.7	702.4	707.5	712.5	717.5	722.5	726.9
132.5°	726.4	727.3	728.2	729.2	730.1	732.3	735.6	739.0	742.3	745.7	750.4
135°	768.7	769.4	770.1	770.8	771.5	772.9	775.0	777.1	779.1	781.2	785.4
137.5°	807.7	808.3	808.9	809.6	810.2	810.9	811.8	812.7	813.5	814.4	818.6
140°	832.1	832.4	832.8	833.1	833.5	833.7	833.9	834.1	834.3	834.4	838.6
142.5°	855.2	855.2	855.1	855.0	855.0	855.1	855.4	855.7	856.0	856.3	859.7
145°	889.2	889.2	889.2	889.2	889.2	889.2	889.2	889.2	889.2	889.2	891.1
147.5°	917.3	917.3	917.2	917.1	917.1	917.1	917.3	917.5	917.8	918.0	918.7
150°	936.1	935.8	935.4	935.1	934.7	934.7	935.1	935.4	935.8	936.1	936.5
152.5°	954.3	953.5	952.7	952.0	951.2	951.0	951.3	951.7	952.0	952.4	952.7
155°	977.6	976.5	975.5	974.4	973.4	973.0	973.4	973.7	974.1	974.4	974.9
157.5°	995.5	994.9	994.3	993.7	993.0	992.7	992.8	992.8	992.8	992.9	993.4
160°	1008.1	1007.0	1006.0	1004.9	1003.9	1003.5	1003.6	1003.8	1004.0	1004.1	1004.8
162.5°	1018.1	1017.0	1016.0	1014.9	1013.9	1013.5	1013.6	1013.8	1014.0	1014.2	1015.1
165°	1031.5	1030.5	1029.4	1028.4	1027.3	1026.9	1027.1	1027.3	1027.4	1027.6	1028.7
167.5°	1041.5	1040.5	1039.4	1038.3	1037.2	1036.8	1036.9	1037.1	1037.3	1037.5	1038.7
170°	1047.2	1045.9	1044.7	1043.5	1042.3	1041.8	1041.9	1042.1	1042.3	1042.5	1043.9
172.5°	1050.9	1049.7	1048.5	1047.3	1046.0	1045.6	1045.9	1046.2	1046.5	1046.8	1048.1
175°	1055.0	1053.9	1052.9	1051.9	1050.8	1050.4	1050.5	1050.7	1050.9	1051.1	1052.5
177.5°	1056.9	1056.0	1055.2	1054.4	1053.5	1053.2	1053.3	1053.4	1053.6	1053.7	1054.7
180°	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0



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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°	170.3	178.5	186.6	192.0	194.5	197.0	199.5	202.1
90°	158.0	166.9	175.7	181.6	184.6	187.5	190.4	193.4
92.5°	152.5	161.1	169.6	175.2	177.9	180.6	183.2	185.9
95°	143.3	151.8	160.3	165.8	168.2	170.6	173.0	175.5
97.5°	149.2	151.6	154.0	156.4	158.7	161.1	163.4	165.8
100°	198.6	180.0	161.4	152.8	154.2	155.5	156.9	158.3
102.5°	272.6	274.7	276.8	273.0	263.2	253.5	243.8	234.0
105°	332.7	339.6	346.5	351.1	353.4	355.6	357.9	360.1
107.5°	387.0	393.9	400.8	405.1	406.7	408.3	410.0	411.6
110°	421.7	427.7	433.8	438.1	440.7	443.3	445.9	448.5





TEST NUMBER: P333316

CATALOG NUMBER: S125DIP-S1270D810U835-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	455.9	461.5	467.2	471.1	473.3	475.5	477.7	479.8
115°	508.3	513.8	519.4	522.6	523.7	524.7	525.7	526.8
117.5°	558.0	563.0	568.0	571.4	573.3	575.2	577.1	579.1
120°	590.4	596.0	601.5	604.9	606.1	607.3	608.5	609.7
122.5°	620.5	625.8	631.1	634.2	635.3	636.4	637.5	638.5
125°	664.9	669.8	674.6	677.7	678.9	680.1	681.3	682.5
127.5°	704.5	709.2	714.0	716.7	717.4	718.2	718.9	719.6
130°	731.2	735.5	739.8	742.4	743.3	744.2	745.0	745.9
132.5°	755.2	759.9	764.7	767.3	767.9	768.5	769.1	769.7
135°	789.5	793.7	797.8	800.3	801.0	801.7	802.3	803.0
137.5°	822.7	826.9	831.0	833.4	833.8	834.3	834.8	835.3
140°	842.7	846.9	851.1	853.3	853.7	854.0	854.3	854.7
142.5°	863.0	866.3	869.6	871.5	871.8	872.2	872.5	872.9
145°	893.0	894.9	896.8	897.9	898.3	898.6	899.0	899.3
147.5°	919.5	920.3	921.0	921.1	920.5	919.8	919.2	918.6
150°	936.8	937.2	937.5	937.2	936.1	935.1	934.0	933.0
152.5°	953.1	953.4	953.8	953.3	952.2	951.0	949.8	948.6
155°	975.5	976.0	976.5	976.1	974.7	973.3	971.9	970.5
157.5°	994.0	994.6	995.1	994.7	993.3	991.9	990.5	989.1
160°	1005.5	1006.2	1006.9	1006.6	1005.2	1003.8	1002.4	1001.0
162.5°	1016.1	1017.1	1018.0	1017.8	1016.2	1014.7	1013.2	1011.7
165°	1029.7	1030.7	1031.8	1031.6	1030.2	1028.8	1027.4	1026.0
167.5°	1040.0	1041.2	1042.5	1042.3	1040.7	1039.2	1037.6	1036.1
170°	1045.2	1046.6	1048.0	1047.9	1046.4	1044.8	1043.2	1041.7
172.5°	1049.3	1050.6	1051.9	1051.7	1050.1	1048.6	1047.0	1045.4
175°	1053.8	1055.2	1056.6	1056.5	1055.0	1053.4	1051.9	1050.3
177.5°	1055.7	1056.6	1057.6	1057.6	1056.4	1055.3	1054.2	1053.1
180°	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0

(END OF REPORT)