

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: P333469

Luminaire Tested: **S125DIW-S1270D770U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333469
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-S1270D770U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7589.6 lumens
Efficiency: N/A
Efficacy: 126.9 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: Semi-Direct

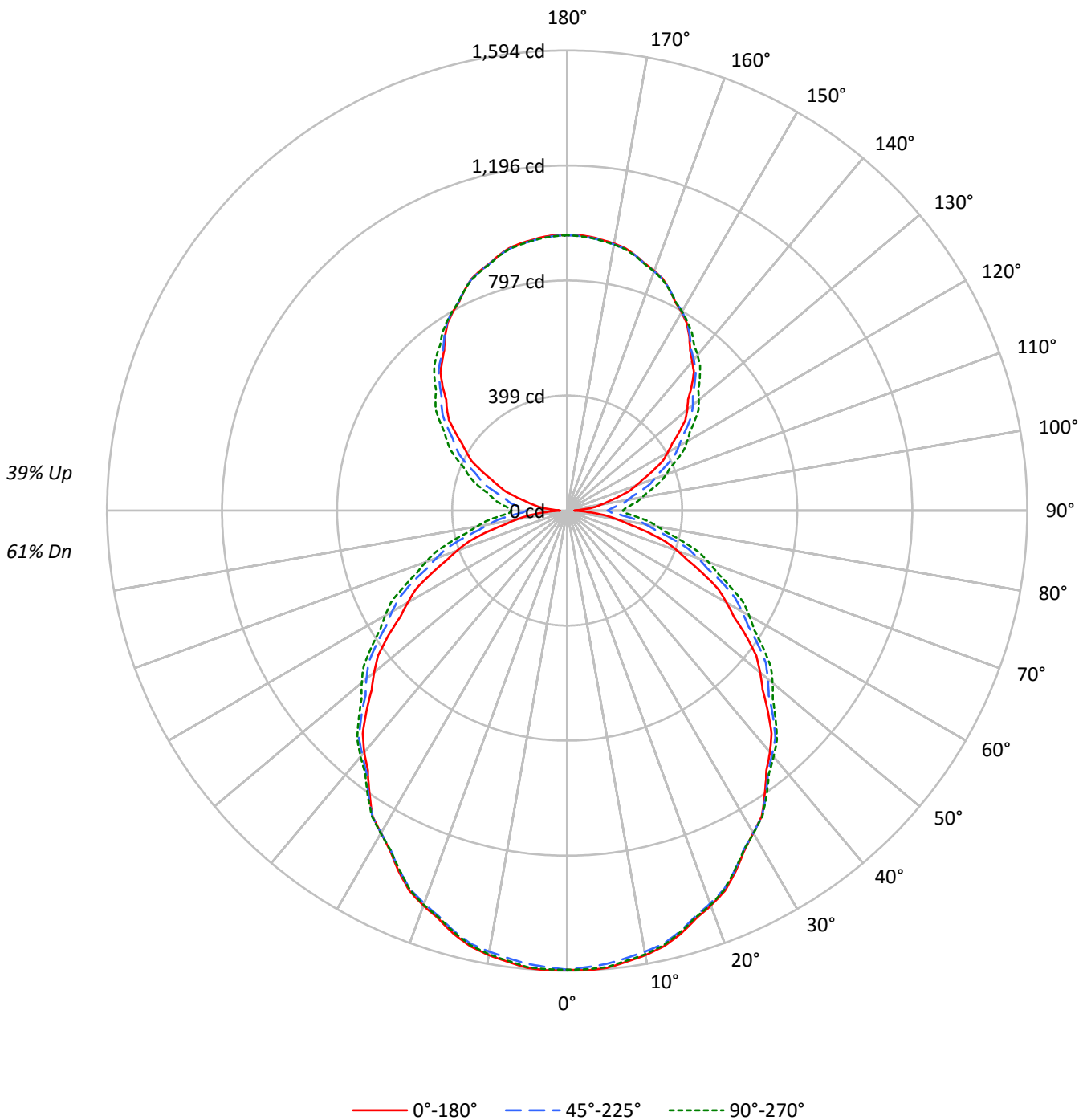
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333469

CATALOG NUMBER: S125DIW-S1270D770U835-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333469

CATALOG NUMBER: S125DIW-S1270D770U835-4F0-1E-UDD-D1

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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66	61
1	99	95	90	86	93	88	85	81	77	74	72	67	65	63	57	56	54	49
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	47	45	41
3	82	72	64	58	76	67	60	55	59	53	49	51	47	43	44	41	38	34
4	75	63	55	49	70	60	52	46	52	46	41	45	41	37	39	35	32	29
5	69	56	48	42	64	53	45	40	47	40	36	41	36	32	35	31	28	25
6	63	51	42	36	59	48	40	34	42	36	31	37	32	28	32	28	25	22
7	59	46	37	32	55	43	36	30	38	32	27	33	28	25	29	25	22	19
8	54	42	33	28	51	39	32	27	35	29	24	31	26	22	27	23	20	17
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	25	21	18	15
10	47	35	27	22	44	33	26	21	29	24	20	26	21	18	23	19	16	14

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



TEST NUMBER: P333469

CATALOG NUMBER: S125DIW-S1270D770U835-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.4	2.0
10°-20°	426.9	5.6
20°-30°	634.8	8.4
30°-40°	752.0	9.9
40°-50°	777.5	10.2
50°-60°	716.2	9.4
60°-70°	579.0	7.6
70°-80°	387.7	5.1
80°-90°	203.2	2.7
90°-100°	176.7	2.3
100°-110°	271.9	3.6
110°-120°	375.3	4.9
120°-130°	452.2	6.0
130°-140°	485.1	6.4
140°-150°	464.7	6.1
150°-160°	387.9	5.1
160°-170°	257.9	3.4
170°-180°	90.2	1.2
0°-30°	1212.1	16.0
0°-40°	1964.1	25.9
0°-60°	3457.8	45.6
0°-90°	4627.7	61.0
90°-120°	823.9	10.9
90°-150°	2225.9	29.3
90°-180°	2962.0	39.0
0°-180°	7589.6	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	82	140	178	192	19
95°	68	112	171	209	223	67
105°	183	213	263	298	312	196
115°	329	345	385	412	421	326
125°	473	478	508	530	538	423
135°	610	614	625	644	650	470
145°	737	739	741	748	753	460
155°	842	842	843	845	842	388
165°	915	914	915	917	913	258
175°	952	949	949	953	948	90
180°	954	954	954	954	954	



TEST NUMBER: P333469

CATALOG NUMBER: S125DIW-S1270D770U835-4F0-1E-UDD-D1

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	60.1	71.5	82.8	94.2	105.9	117.9	129.9	141.9	153.9	162.1
90°	25.7	38.1	50.5	62.9	75.3	88.0	100.9	113.9	126.8	139.7	148.5
92.5°	40.4	51.6	62.8	74.0	85.1	97.5	110.9	124.4	137.9	151.4	160.1
95°	68.5	77.9	87.2	96.5	105.9	117.3	130.7	144.1	157.5	171.0	179.8
97.5°	98.6	106.8	115.0	123.3	131.5	142.5	156.1	169.8	183.4	197.0	205.4
100°	121.1	128.4	135.6	142.9	150.2	160.4	173.7	186.9	200.1	213.4	222.1
102.5°	145.4	152.7	160.1	167.5	174.9	184.5	196.4	208.3	220.2	232.1	240.7
105°	183.3	189.7	196.0	202.4	208.8	217.6	229.0	240.4	251.8	263.2	271.1
107.5°	225.4	230.9	236.4	242.0	247.5	255.6	266.4	277.1	287.9	298.6	306.0
110°	254.4	259.4	264.4	269.4	274.3	281.9	292.1	302.3	312.5	322.7	329.8



TEST NUMBER: P333469

CATALOG NUMBER: S125DIW-S1270D770U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	285.3	289.0	292.8	296.6	300.3	307.2	317.3	327.3	337.4	347.4	353.9
115°	329.3	332.4	335.5	338.6	341.6	347.9	357.2	366.5	375.9	385.2	391.3
117.5°	373.5	375.4	377.3	379.1	381.0	386.4	395.2	404.0	412.9	421.7	427.7
120°	402.0	403.8	405.7	407.6	409.4	414.4	422.6	430.7	438.8	447.0	452.9
122.5°	431.6	432.4	433.2	434.0	434.7	439.2	447.3	455.4	463.6	471.7	477.2
125°	473.2	473.8	474.5	475.1	475.7	479.6	486.7	493.8	500.9	508.0	513.2
127.5°	516.2	516.4	516.6	516.8	517.0	520.1	525.9	531.8	537.7	543.6	548.5
130°	542.9	543.4	543.8	544.3	544.8	547.6	552.8	558.0	563.2	568.3	573.0
132.5°	568.4	569.6	570.9	572.2	573.5	576.0	579.6	583.3	587.0	590.7	595.4
135°	610.4	611.0	611.6	612.3	612.9	614.5	617.1	619.7	622.3	624.9	629.4
137.5°	649.8	650.5	651.2	651.9	652.6	653.7	655.2	656.7	658.3	659.8	664.1
140°	674.1	675.0	675.8	676.6	677.4	678.3	679.1	679.9	680.8	681.6	685.8
142.5°	699.7	700.1	700.5	700.9	701.3	701.9	702.6	703.3	704.0	704.7	708.1
145°	737.2	737.5	737.9	738.2	738.5	738.9	739.4	739.9	740.4	740.9	742.6
147.5°	770.4	770.8	771.1	771.5	771.9	772.2	772.6	773.0	773.4	773.8	774.8
150°	793.6	793.4	793.2	793.1	792.9	793.2	793.8	794.5	795.1	795.8	795.8
152.5°	812.6	812.8	813.0	813.3	813.5	813.7	814.0	814.3	814.5	814.8	815.2
155°	841.8	841.8	841.8	841.8	841.8	841.9	842.1	842.2	842.4	842.6	843.2
157.5°	868.0	867.6	867.2	866.9	866.5	866.4	866.6	866.7	866.9	867.1	867.7
160°	883.4	882.9	882.4	881.9	881.4	881.2	881.4	881.6	881.7	881.9	882.6
162.5°	897.1	896.7	896.3	896.0	895.6	895.4	895.5	895.5	895.5	895.6	896.4
165°	915.3	915.0	914.7	914.3	914.0	913.9	914.1	914.2	914.4	914.6	915.2
167.5°	930.8	930.1	929.4	928.8	928.1	927.8	927.8	927.8	927.8	927.8	928.8
170°	939.1	938.4	937.7	937.1	936.4	936.1	936.1	936.1	936.1	936.1	937.1
172.5°	945.0	944.3	943.7	943.0	942.4	942.0	942.0	942.0	942.0	942.0	943.0
175°	951.7	951.0	950.4	949.7	949.0	948.7	948.7	948.7	948.7	948.7	949.7
177.5°	955.1	954.6	954.0	953.5	953.0	952.7	952.5	952.4	952.3	952.1	952.9
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9



TEST NUMBER: P333469

CATALOG NUMBER: S125DIW-S1270D770U835-4F0-1E-UDD-D1

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°	170.2	178.3	186.5	191.8	194.3	196.8	199.4	201.9
90°	157.3	166.1	174.9	180.8	183.7	186.6	189.5	192.4
92.5°	168.9	177.7	186.5	192.3	195.1	197.8	200.6	203.4
95°	188.5	197.3	206.1	211.9	214.6	217.4	220.1	222.9
97.5°	213.8	222.1	230.5	235.9	238.5	241.1	243.6	246.2
100°	230.9	239.6	248.4	254.0	256.4	258.8	261.2	263.6
102.5°	249.4	258.0	266.6	272.2	274.7	277.2	279.8	282.3
105°	279.0	286.9	294.8	300.3	303.2	306.1	309.0	311.9
107.5°	313.3	320.7	328.0	332.8	334.9	337.0	339.1	341.2
110°	336.9	343.9	351.0	355.7	357.9	360.2	362.5	364.7



TEST NUMBER: P333469

CATALOG NUMBER: S125DIW-S1270D770U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	360.5	367.0	373.6	377.9	380.0	382.1	384.3	386.4
115°	397.4	403.4	409.5	413.5	415.4	417.3	419.2	421.1
117.5°	433.7	439.7	445.8	449.6	451.3	453.0	454.7	456.4
120°	458.8	464.6	470.5	474.2	475.6	477.0	478.4	479.9
122.5°	482.6	488.1	493.6	497.1	498.7	500.2	501.8	503.3
125°	518.4	523.6	528.8	532.2	533.8	535.4	536.9	538.5
127.5°	553.5	558.5	563.4	566.8	568.4	570.1	571.8	573.5
130°	577.7	582.4	587.1	590.1	591.5	592.9	594.3	595.7
132.5°	600.0	604.7	609.4	612.3	613.2	614.2	615.2	616.2
135°	633.9	638.4	642.9	645.7	646.8	647.9	648.9	650.0
137.5°	668.4	672.7	677.0	679.4	680.0	680.5	681.1	681.6
140°	689.9	694.0	698.2	700.5	701.1	701.7	702.2	702.8
142.5°	711.6	715.0	718.5	720.5	721.1	721.6	722.2	722.7
145°	744.3	746.1	747.8	749.1	750.0	750.9	751.8	752.7
147.5°	775.7	776.7	777.6	777.8	777.4	776.9	776.4	775.9
150°	795.8	795.8	795.8	795.8	795.8	795.8	795.9	795.9
152.5°	815.6	816.0	816.4	816.3	815.8	815.3	814.7	814.2
155°	843.9	844.5	845.2	845.1	844.3	843.5	842.6	841.8
157.5°	868.4	869.0	869.7	869.5	868.4	867.3	866.2	865.1
160°	883.2	883.9	884.5	884.5	883.6	882.8	882.0	881.2
162.5°	897.2	897.9	898.7	898.7	897.7	896.7	895.8	894.8
165°	915.9	916.6	917.2	917.0	916.1	915.1	914.1	913.1
167.5°	929.8	930.8	931.7	931.7	930.7	929.7	928.7	927.6
170°	938.1	939.1	940.1	940.0	938.8	937.7	936.5	935.4
172.5°	944.0	945.0	946.0	946.0	945.0	943.9	942.9	941.9
175°	950.7	951.7	952.7	952.6	951.4	950.3	949.1	948.0
177.5°	953.7	954.5	955.3	955.2	954.3	953.4	952.5	951.5
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9

(END OF REPORT)