

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: P333468

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333468
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-S1270D770U835-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7997.3 lumens
Efficiency: N/A
Efficacy: 133.7 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

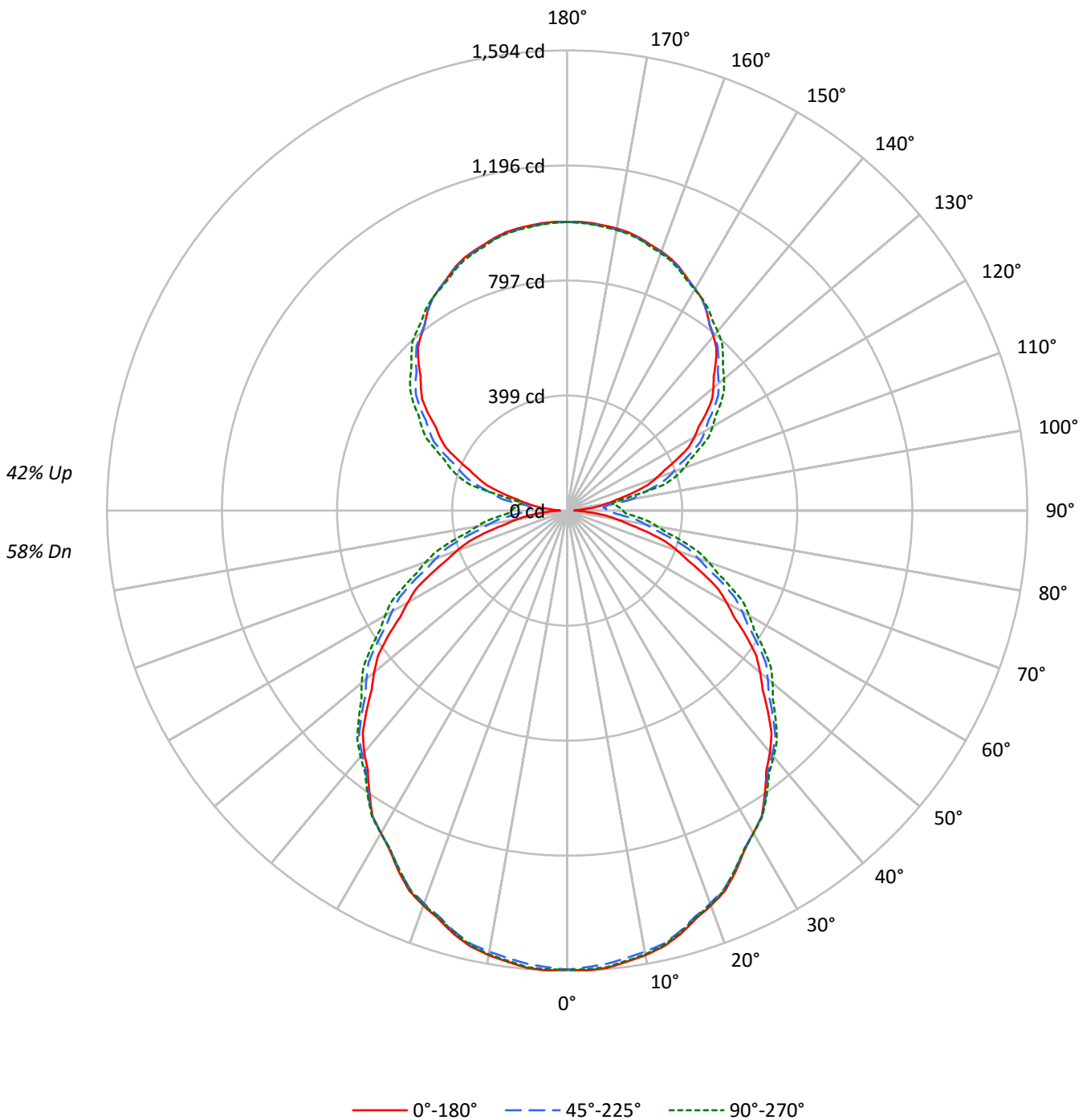
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333468

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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	102	102	102	102	88	88	88	75	75	75	63	63	63	58								
1	99	94	90	86	92	88	84	80	76	73	70	65	63	61	55	53	52	47								
2	90	82	75	69	83	76	70	65	66	61	58	56	53	50	48	45	43	39								
3	81	71	64	57	75	67	60	54	58	52	48	50	45	42	42	39	36	32								
4	74	63	55	48	69	59	52	46	51	45	41	44	39	36	37	34	31	28								
5	68	56	48	41	63	53	45	39	46	40	35	39	35	31	34	30	27	24								
6	63	50	42	36	58	47	40	34	41	35	30	36	31	27	30	27	24	21								
7	58	45	37	31	54	43	35	30	37	31	27	32	27	24	28	24	21	18								
8	54	41	33	28	50	39	31	26	34	28	24	30	25	21	25	22	19	16								
9	50	38	30	25	47	35	28	24	31	25	21	27	22	19	23	20	17	15								
10	47	35	27	22	44	33	26	21	29	23	19	25	21	17	22	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	1.9
10°-20°	426.9	5.3
20°-30°	634.8	7.9
30°-40°	752.0	9.4
40°-50°	777.5	9.7
50°-60°	716.2	9.0
60°-70°	579.0	7.2
70°-80°	387.7	4.8
80°-90°	203.2	2.5
90°-100°	149.1	1.9
100°-110°	307.1	3.8
110°-120°	461.8	5.8
120°-130°	552.7	6.9
130°-140°	574.3	7.2
140°-150°	528.9	6.6
150°-160°	425.6	5.3
160°-170°	275.2	3.4
170°-180°	94.9	1.2
0°-30°	1212.1	15.2
0°-40°	1964.1	24.6
0°-60°	3457.8	43.2
0°-90°	4627.7	57.9
90°-120°	918.0	11.5
90°-150°	2573.9	32.2
90°-180°	3370.0	42.1
0°-180°	7997.3	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	18
95°	62	100	126	162	175	70
105°	232	261	307	337	348	246
115°	418	434	474	498	504	415
125°	588	593	623	644	650	525
135°	728	732	741	759	763	561
145°	843	842	842	851	853	526
155°	926	922	923	925	920	427
165°	977	973	974	978	972	276
175°	1000	995	996	1001	995	95
180°	1000	1000	1000	1000	1000	



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CATALOG NUMBER: S125DIW-S1270D770U835-4F0-1E-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	60.1	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	113.8	126.8	139.7	148.5
92.5°	33.9	43.2	52.5	61.9	71.2	82.4	95.5	108.6	121.6	134.7	143.2
95°	62.5	71.0	79.5	88.0	96.6	103.6	109.1	114.6	120.1	125.7	134.1
97.5°	106.6	115.6	124.6	133.6	142.6	146.5	145.5	144.5	143.5	142.5	145.1
100°	140.9	148.7	156.4	164.2	172.0	181.7	193.5	205.2	217.0	228.7	211.5
102.5°	175.8	183.2	190.5	197.8	205.2	214.5	225.7	236.9	248.1	259.3	261.6
105°	231.9	238.1	244.3	250.5	256.7	265.0	275.4	285.8	296.2	306.6	313.5
107.5°	290.2	294.9	299.6	304.3	309.0	316.5	326.8	337.1	347.5	357.8	364.7
110°	328.0	332.2	336.4	340.5	344.7	351.8	361.8	371.8	381.9	391.9	398.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	364.8	368.5	372.2	376.0	379.7	386.4	396.0	405.6	415.2	424.8	430.5
115°	418.4	421.6	424.9	428.1	431.4	437.6	446.7	455.9	465.1	474.3	479.8
117.5°	473.9	475.4	477.0	478.5	480.1	485.5	494.6	503.8	512.9	522.1	527.1
120°	509.4	510.3	511.2	512.1	512.9	517.6	526.1	534.5	543.0	551.4	557.0
122.5°	539.6	540.7	541.8	542.9	544.0	548.6	556.5	564.4	572.3	580.2	585.5
125°	587.9	588.7	589.5	590.3	591.1	595.0	601.9	608.8	615.8	622.7	627.6
127.5°	632.7	633.2	633.7	634.1	634.6	637.7	643.2	648.8	654.4	660.0	664.8
130°	661.2	661.6	662.1	662.6	663.1	665.8	670.8	675.9	680.9	685.9	690.2
132.5°	688.4	689.3	690.1	691.0	691.9	694.1	697.4	700.8	704.2	707.6	712.3
135°	728.5	729.2	729.8	730.4	731.1	732.5	734.6	736.6	738.7	740.8	745.0
137.5°	765.4	766.0	766.6	767.1	767.7	768.5	769.3	770.2	771.1	772.0	776.1
140°	788.5	788.8	789.1	789.5	789.8	790.0	790.2	790.4	790.6	790.8	794.9
142.5°	810.4	810.3	810.2	810.2	810.1	810.2	810.5	810.8	811.1	811.4	814.7
145°	842.6	842.5	842.5	842.5	842.5	842.5	842.5	842.5	842.5	842.5	844.4
147.5°	869.2	869.1	869.0	869.0	868.9	869.0	869.2	869.3	869.5	869.7	870.5
150°	886.9	886.6	886.3	885.9	885.6	885.6	885.9	886.3	886.6	886.9	887.3
152.5°	904.1	903.4	902.7	902.0	901.2	901.0	901.4	901.7	902.0	902.3	902.7
155°	926.2	925.2	924.2	923.2	922.3	921.9	922.3	922.6	922.9	923.2	923.7
157.5°	943.2	942.7	942.1	941.5	940.9	940.6	940.6	940.7	940.7	940.7	941.3
160°	955.1	954.1	953.1	952.1	951.2	950.7	950.9	951.1	951.2	951.4	952.1
162.5°	964.6	963.6	962.6	961.6	960.6	960.2	960.4	960.6	960.7	960.9	961.8
165°	977.3	976.3	975.4	974.4	973.4	973.0	973.1	973.3	973.5	973.6	974.6
167.5°	986.8	985.8	984.8	983.8	982.7	982.3	982.5	982.6	982.8	983.0	984.1
170°	992.2	991.0	989.8	988.7	987.5	987.0	987.2	987.4	987.5	987.7	989.0
172.5°	995.7	994.6	993.4	992.2	991.1	990.7	991.0	991.3	991.6	991.9	993.0
175°	999.6	998.6	997.6	996.6	995.6	995.2	995.4	995.5	995.7	995.9	997.2
177.5°	1001.3	1000.5	999.8	999.0	998.2	997.8	998.0	998.1	998.2	998.4	999.3
180°	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6



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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°	170.2	178.3	186.5	191.8	194.3	196.8	199.4	201.9
90°	157.3	166.1	174.9	180.7	183.6	186.6	189.5	192.4
92.5°	151.7	160.3	168.8	174.4	177.0	179.7	182.3	185.0
95°	142.6	151.0	159.5	164.9	167.3	169.7	172.2	174.6
97.5°	147.7	150.4	153.0	155.5	157.9	160.2	162.6	164.9
100°	194.2	176.9	159.7	151.8	153.2	154.6	156.0	157.4
102.5°	264.0	266.4	268.7	265.3	256.2	247.1	238.0	228.9
105°	320.4	327.3	334.3	338.9	341.1	343.4	345.7	347.9
107.5°	371.5	378.4	385.3	389.6	391.3	392.9	394.6	396.2
110°	404.1	410.2	416.2	420.6	423.2	425.8	428.4	430.9



TEST NUMBER: P333468

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	436.2	441.9	447.6	451.5	453.7	455.9	458.1	460.3
115°	485.4	491.0	496.6	499.9	501.0	502.1	503.2	504.3
117.5°	532.1	537.2	542.2	545.7	547.6	549.5	551.5	553.4
120°	562.6	568.1	573.7	577.1	578.4	579.6	580.9	582.1
122.5°	590.8	596.1	601.4	604.6	605.7	606.8	608.0	609.1
125°	632.5	637.4	642.2	645.3	646.5	647.8	649.0	650.3
127.5°	669.5	674.3	679.1	681.8	682.6	683.4	684.2	685.0
130°	694.6	699.0	703.3	705.9	706.9	707.8	708.7	709.6
132.5°	717.1	721.8	726.6	729.3	729.9	730.5	731.2	731.8
135°	749.2	753.4	757.5	760.0	760.7	761.5	762.2	763.0
137.5°	780.3	784.4	788.6	790.9	791.5	792.0	792.5	793.1
140°	799.0	803.2	807.3	809.6	810.0	810.4	810.8	811.2
142.5°	818.0	821.4	824.7	826.5	826.9	827.3	827.7	828.1
145°	846.3	848.2	850.1	851.2	851.6	852.0	852.4	852.8
147.5°	871.2	872.0	872.8	872.8	872.3	871.7	871.2	870.6
150°	887.6	887.9	888.3	887.9	887.0	886.0	885.0	884.0
152.5°	903.0	903.3	903.7	903.3	902.2	901.0	899.9	898.8
155°	924.2	924.7	925.2	924.8	923.5	922.2	920.9	919.5
157.5°	941.8	942.3	942.8	942.4	941.1	939.8	938.5	937.2
160°	952.7	953.4	954.0	953.7	952.4	951.1	949.8	948.4
162.5°	962.7	963.6	964.6	964.3	962.9	961.4	960.0	958.5
165°	975.6	976.6	977.6	977.4	976.1	974.8	973.5	972.1
167.5°	985.3	986.5	987.7	987.6	986.1	984.6	983.1	981.6
170°	990.3	991.7	993.0	992.9	991.4	989.9	988.4	987.0
172.5°	994.2	995.4	996.6	996.4	995.0	993.5	992.0	990.5
175°	998.5	999.8	1001.1	1001.0	999.6	998.1	996.6	995.1
177.5°	1000.2	1001.1	1002.1	1002.0	1000.9	999.9	998.8	997.8
180°	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6

(END OF REPORT)