

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: P333486-927

Luminaire Tested: **S125DIW-S1270D1560U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333486-927
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-S1270D1560U927-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8845.5 lumens
Efficiency: N/A
Efficacy: 106.7 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

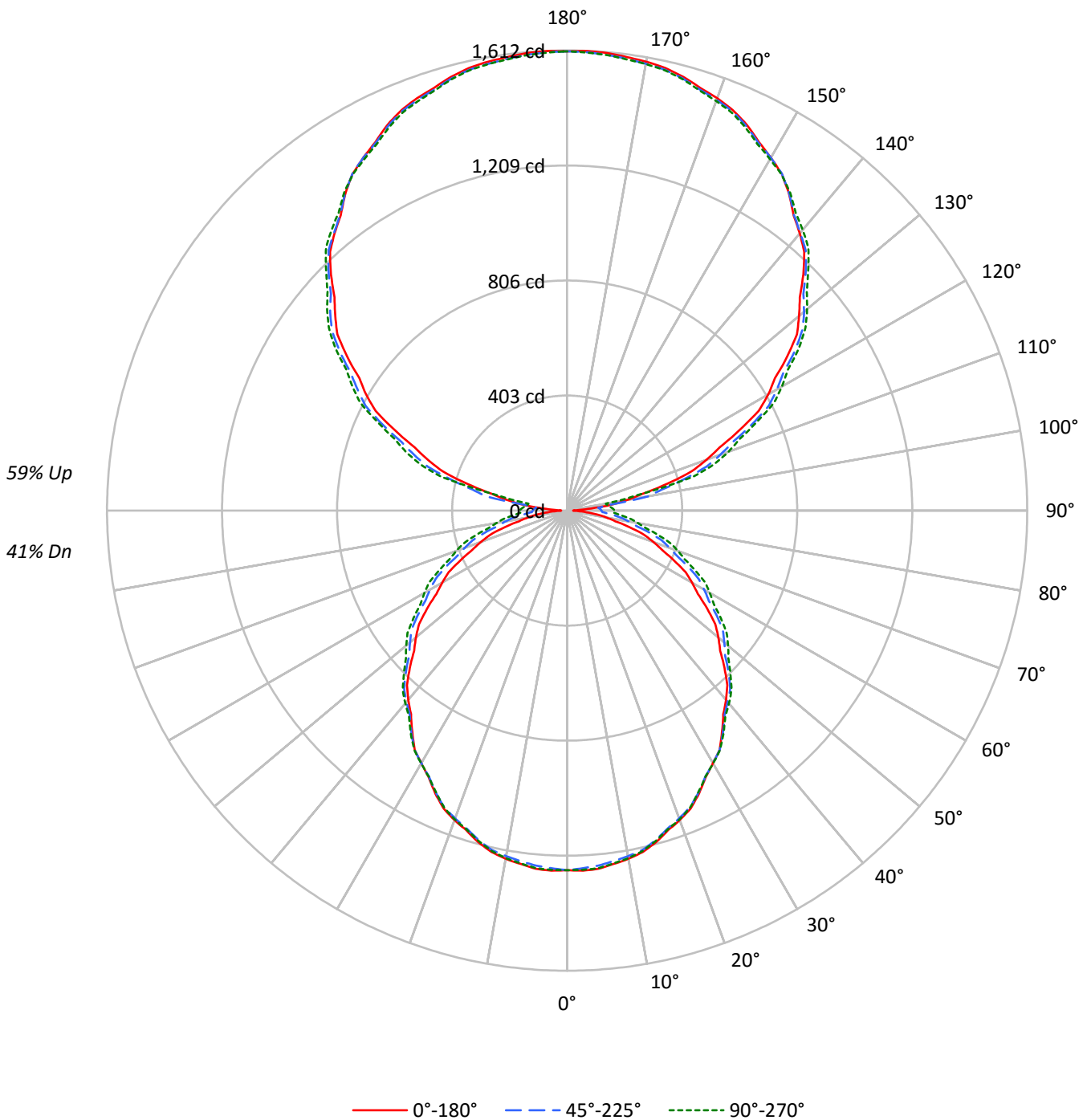
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333486-927

CATALOG NUMBER: S125DIW-S1270D1560U927-4F0-1E-UDD-D

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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	95	91	87	83	87	83	79	76	68	65	63	54	53	51	42	41	40	34
2	86	79	73	67	78	72	67	62	59	55	52	47	44	42	36	34	33	28
3	79	69	62	56	71	63	57	51	52	47	43	42	38	35	32	30	28	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	24	20
5	66	54	46	40	60	50	42	37	41	36	31	33	29	26	26	23	20	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12
9	48	36	29	23	44	33	26	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	30	24	20	26	20	17	21	17	14	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8136	8136	8136
5°	8152	7986	8012
10°	8094	7843	7832
15°	7999	7673	7603
20°	7869	7462	7374
25°	7714	7235	7092
30°	7527	6987	6837
35°	7352	6759	6602
40°	7174	6519	6367
45°	6972	6313	6157
50°	6781	6089	5972
55°	6550	5879	5755
60°	6298	5638	5533
65°	6034	5387	5283
70°	5737	5044	5027
75°	5263	4712	4712
80°	4643	4312	4369
85°	4070	4042	4260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.1	1.3
10°-20°	338.2	3.8
20°-30°	502.9	5.7
30°-40°	595.7	6.7
40°-50°	615.9	7.0
50°-60°	567.4	6.4
60°-70°	458.6	5.2
70°-80°	307.2	3.5
80°-90°	162.6	1.8
90°-100°	147.8	1.7
100°-110°	426.2	4.8
110°-120°	697.6	7.9
120°-130°	863.7	9.8
130°-140°	913.0	10.3
140°-150°	848.9	9.6
150°-160°	684.9	7.7
160°-170°	442.9	5.0
170°-180°	152.8	1.7
0°-30°	960.2	10.9
0°-40°	1555.9	17.6
0°-60°	2739.2	31.0
0°-90°	3667.7	41.5
90°-120°	1271.7	14.4
90°-150°	3897.2	44.1
90°-180°	5178.0	58.5
0°-180°	8845.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1260	1260	1260	1260	1260	
5°	1260	1257	1249	1258	1257	119
15°	1203	1204	1196	1202	1198	339
25°	1093	1096	1089	1094	1088	503
35°	946	954	951	954	955	592
45°	779	792	799	807	809	601
55°	599	619	639	652	657	535
65°	412	441	471	488	494	409
75°	227	260	299	323	330	241
85°	68	109	152	178	189	72
90°	21	70	120	154	167	16
95°	84	111	109	141	151	99
105°	362	387	423	447	455	383
115°	666	681	714	730	731	660
125°	941	949	973	987	990	840
135°	1170	1176	1182	1195	1195	902
145°	1355	1356	1356	1363	1361	847
155°	1491	1484	1486	1489	1480	686
165°	1573	1566	1567	1573	1565	444
175°	1609	1602	1603	1611	1602	153
180°	1609	1609	1609	1609	1609	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8
2.5°	1262.7	1262.3	1261.9	1261.5	1261.0	1260.0	1258.5	1257.0	1255.5	1253.9	1255.5
5°	1259.8	1259.3	1258.7	1258.1	1257.6	1256.4	1254.4	1252.5	1250.6	1248.7	1250.9
7.5°	1248.7	1248.5	1248.2	1248.0	1247.8	1246.7	1244.8	1242.8	1240.8	1238.8	1240.7
10°	1238.8	1238.8	1238.8	1238.8	1238.8	1237.7	1235.5	1233.3	1231.1	1228.9	1230.8
12.5°	1225.0	1225.2	1225.4	1225.7	1225.8	1225.1	1223.4	1221.5	1219.8	1218.1	1219.6
15°	1203.0	1203.2	1203.6	1203.8	1204.1	1203.2	1201.3	1199.4	1197.5	1195.6	1197.2
17.5°	1174.3	1174.9	1175.4	1176.0	1176.5	1175.8	1173.9	1172.0	1170.1	1168.2	1169.4
20°	1153.6	1154.1	1154.7	1155.2	1155.8	1155.1	1153.2	1151.3	1149.3	1147.4	1148.3
22.5°	1129.9	1130.8	1131.9	1132.8	1133.9	1133.2	1131.1	1128.9	1126.8	1124.7	1125.7
25°	1093.1	1093.9	1094.7	1095.5	1096.4	1096.0	1094.3	1092.7	1091.0	1089.3	1090.4
27.5°	1052.1	1053.3	1054.5	1055.7	1056.9	1056.5	1054.7	1052.8	1051.0	1049.1	1049.9
30°	1021.4	1023.1	1024.7	1026.4	1028.0	1028.0	1026.4	1024.7	1023.1	1021.4	1022.0
32.5°	993.8	995.2	996.6	998.1	999.5	999.6	998.4	997.2	995.9	994.7	995.3
35°	946.1	948.0	949.9	951.9	953.8	954.3	953.5	952.7	951.9	951.0	951.9
37.5°	898.4	900.2	901.9	903.7	905.5	906.2	905.9	905.6	905.4	905.1	906.2
40°	865.8	868.0	870.2	872.4	874.6	875.5	875.3	875.0	874.7	874.5	875.5
42.5°	830.2	833.1	835.9	838.8	841.7	843.4	844.0	844.6	845.2	845.8	847.1
45°	779.3	782.4	785.4	788.4	791.4	793.6	795.0	796.4	797.7	799.1	801.1
47.5°	727.2	730.0	732.8	735.6	738.4	741.0	743.4	745.8	748.1	750.4	753.3
50°	691.7	694.7	697.7	700.7	703.8	706.8	709.8	712.8	715.8	718.8	721.8
52.5°	654.1	657.8	661.5	665.1	668.8	672.5	676.2	679.9	683.5	687.2	690.5
55°	599.0	603.4	607.8	612.2	616.6	621.0	625.3	629.8	634.1	638.6	641.6
57.5°	542.7	548.0	553.3	558.5	563.8	568.9	574.0	579.0	584.1	589.1	592.6
60°	505.2	510.6	516.1	521.7	527.1	532.6	538.1	543.6	549.1	554.5	558.6
62.5°	468.6	474.1	479.6	485.1	490.5	496.3	502.2	508.1	514.0	520.0	524.5
65°	412.5	418.8	425.2	431.5	437.8	444.3	450.8	457.4	464.0	470.6	474.7
67.5°	359.7	365.8	371.9	378.0	384.0	390.5	397.1	403.9	410.5	417.2	422.2
70°	321.2	327.4	333.7	340.1	346.3	353.1	360.2	367.4	374.5	381.7	386.9
72.5°	283.6	290.1	296.7	303.2	309.7	316.9	324.6	332.5	340.2	348.1	353.7
75°	227.3	234.4	241.5	248.7	255.8	263.8	272.5	281.3	290.1	298.9	304.4
77.5°	173.2	181.4	189.6	197.9	206.1	214.4	222.9	231.3	239.8	248.3	254.3
80°	139.6	147.8	156.1	164.3	172.5	181.3	190.6	199.9	209.3	218.6	224.7
82.5°	108.9	117.6	126.3	135.0	143.6	152.7	162.3	171.8	181.4	190.9	196.8
85°	68.0	77.0	86.0	95.1	104.2	113.5	123.1	132.7	142.3	151.9	158.0
87.5°	38.7	48.0	57.2	66.4	75.6	85.1	94.7	104.5	114.2	123.9	130.5
90°	21.0	31.8	42.8	53.6	64.6	75.6	86.8	98.0	109.2	120.3	128.0
92.5°	36.1	42.8	49.4	56.1	62.7	71.6	82.9	94.0	105.2	116.4	123.8
95°	84.1	90.4	96.7	103.1	109.4	112.2	111.5	110.7	110.0	109.2	116.6
97.5°	156.5	164.3	172.2	180.1	187.9	186.4	175.5	164.5	153.6	142.7	140.9
100°	212.7	219.3	225.9	232.4	239.0	247.2	257.0	266.9	276.7	286.5	252.8
102.5°	270.0	276.3	282.6	288.9	295.2	303.0	312.2	321.5	330.7	339.8	337.9
105°	361.7	367.2	372.6	378.1	383.5	390.4	398.6	406.9	415.1	423.3	428.8
107.5°	457.1	460.8	464.5	468.3	472.0	478.1	486.5	495.0	503.4	511.8	517.3
110°	519.0	522.4	525.6	528.9	532.2	538.0	546.2	554.4	562.6	570.8	575.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	578.2	581.5	584.7	588.0	591.3	596.8	604.6	612.4	620.1	628.0	631.9
115°	665.7	668.9	672.2	675.4	678.7	684.0	691.4	698.8	706.2	713.6	717.5
117.5°	756.3	757.5	758.7	759.9	761.1	765.6	773.3	781.1	788.9	796.6	799.9
120°	813.5	814.0	814.6	815.2	815.7	819.6	826.7	833.8	840.9	848.0	852.2
122.5°	863.1	864.5	865.9	867.3	868.6	872.6	879.0	885.5	892.0	898.4	902.4
125°	941.0	942.6	944.2	945.8	947.4	950.9	956.4	961.9	967.4	972.9	976.2
127.5°	1014.5	1015.5	1016.6	1017.6	1018.7	1021.4	1025.7	1030.1	1034.4	1038.7	1042.2
130°	1060.3	1061.3	1062.4	1063.4	1064.5	1067.1	1071.2	1075.3	1079.3	1083.5	1086.6
132.5°	1105.1	1106.5	1108.0	1109.5	1111.0	1112.9	1115.3	1117.7	1120.1	1122.4	1126.2
135°	1170.0	1171.2	1172.6	1173.9	1175.2	1176.5	1178.0	1179.3	1180.7	1182.1	1185.2
137.5°	1229.5	1230.7	1231.8	1233.0	1234.2	1235.0	1235.5	1235.9	1236.4	1236.8	1240.2
140°	1267.7	1268.2	1268.8	1269.3	1269.8	1270.1	1270.1	1270.1	1270.1	1270.1	1273.7
142.5°	1303.0	1303.1	1303.2	1303.3	1303.4	1303.6	1304.1	1304.5	1304.9	1305.4	1308.1
145°	1354.7	1355.0	1355.3	1355.5	1355.7	1355.9	1355.9	1355.9	1355.9	1355.9	1357.6
147.5°	1398.8	1398.7	1398.6	1398.5	1398.4	1398.5	1398.8	1399.2	1399.5	1399.8	1400.5
150°	1427.4	1426.9	1426.4	1425.8	1425.3	1425.3	1425.8	1426.4	1426.9	1427.4	1428.0
152.5°	1455.1	1454.0	1452.8	1451.6	1450.4	1450.1	1450.6	1451.2	1451.8	1452.2	1452.8
155°	1490.6	1489.1	1487.5	1485.9	1484.3	1483.8	1484.3	1484.8	1485.3	1485.9	1486.7
157.5°	1518.1	1517.1	1516.2	1515.2	1514.3	1513.8	1513.9	1513.9	1513.9	1514.0	1514.9
160°	1537.2	1535.6	1534.0	1532.4	1530.8	1530.1	1530.4	1530.7	1530.9	1531.2	1532.2
162.5°	1552.4	1550.9	1549.3	1547.6	1546.0	1545.4	1545.6	1545.9	1546.2	1546.4	1547.9
165°	1573.0	1571.4	1569.7	1568.1	1566.5	1565.9	1566.1	1566.5	1566.7	1566.9	1568.5
167.5°	1588.2	1586.6	1584.9	1583.3	1581.6	1581.0	1581.2	1581.4	1581.8	1582.0	1583.9
170°	1596.8	1594.9	1593.1	1591.2	1589.4	1588.6	1588.8	1589.1	1589.4	1589.6	1591.7
172.5°	1602.5	1600.7	1598.8	1597.0	1595.1	1594.4	1594.9	1595.4	1595.9	1596.3	1598.2
175°	1608.7	1607.1	1605.5	1603.9	1602.3	1601.7	1602.0	1602.2	1602.5	1602.7	1604.9
177.5°	1611.5	1610.3	1609.0	1607.7	1606.5	1605.9	1606.1	1606.4	1606.5	1606.8	1608.3
180°	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8
2.5°	1257.0	1258.5	1260.0	1260.7	1260.4	1260.3	1260.0	1259.8
5°	1253.1	1255.3	1257.5	1258.5	1258.1	1257.9	1257.6	1257.4
7.5°	1242.6	1244.6	1246.5	1247.3	1247.1	1246.7	1246.5	1246.2
10°	1232.8	1234.7	1236.6	1237.5	1237.2	1236.9	1236.6	1236.4
12.5°	1221.0	1222.5	1224.0	1224.4	1223.7	1223.0	1222.3	1221.5
15°	1198.9	1200.6	1202.1	1202.5	1201.3	1200.2	1199.1	1198.0
17.5°	1170.7	1172.0	1173.2	1173.5	1172.8	1172.2	1171.6	1170.8
20°	1149.1	1149.9	1150.7	1151.1	1151.1	1151.1	1151.1	1151.1
22.5°	1126.8	1127.8	1128.9	1129.0	1128.4	1127.8	1127.0	1126.4
25°	1091.5	1092.7	1093.8	1093.6	1092.3	1090.8	1089.5	1088.1
27.5°	1050.7	1051.4	1052.2	1052.3	1051.8	1051.3	1050.8	1050.4
30°	1022.5	1023.1	1023.7	1023.7	1023.5	1023.2	1022.9	1022.6
32.5°	995.9	996.4	997.0	997.1	996.8	996.6	996.2	996.0
35°	952.7	953.5	954.3	954.7	954.7	954.7	954.7	954.7
37.5°	907.3	908.4	909.5	910.0	909.8	909.7	909.7	909.5
40°	876.6	877.7	878.8	879.6	880.2	880.7	881.3	881.9
42.5°	848.4	849.8	851.0	851.8	851.9	852.0	852.2	852.2
45°	803.0	804.9	806.8	807.9	808.2	808.4	808.7	809.0
47.5°	756.1	758.8	761.7	763.3	764.0	764.5	765.2	765.8
50°	724.8	727.9	730.9	732.8	733.6	734.5	735.3	736.1
52.5°	693.7	697.0	700.1	702.1	702.7	703.3	703.9	704.5
55°	644.6	647.6	650.6	652.7	653.8	654.9	656.0	657.1
57.5°	596.0	599.5	603.0	605.1	605.9	606.7	607.6	608.4
60°	562.8	566.9	571.0	573.5	574.3	575.1	576.0	576.8
62.5°	529.1	533.6	538.2	541.0	542.0	543.1	544.2	545.2
65°	478.8	482.9	487.0	489.6	490.8	491.9	493.0	494.0
67.5°	427.2	432.2	437.2	440.4	441.8	443.2	444.7	446.2
70°	392.1	397.3	402.5	405.9	407.6	409.2	410.9	412.5
72.5°	359.3	365.0	370.7	374.1	375.3	376.5	377.7	378.9
75°	309.9	315.4	320.8	324.3	325.7	327.0	328.4	329.8
77.5°	260.3	266.3	272.4	276.0	277.1	278.1	279.2	280.4
80°	230.7	236.7	242.8	246.4	247.4	248.5	249.6	250.7
82.5°	202.6	208.4	214.2	218.1	220.1	222.0	224.0	226.0
85°	164.0	170.0	176.1	180.2	182.4	184.6	186.8	188.9
87.5°	137.0	143.6	150.2	154.5	156.6	158.7	160.7	162.8
90°	135.6	143.3	150.9	156.1	158.8	161.5	164.2	166.9
92.5°	131.3	138.6	146.1	150.9	153.2	155.5	157.8	160.1
95°	124.0	131.3	138.7	143.3	145.3	147.2	149.1	151.0
97.5°	139.3	137.5	135.9	135.9	137.8	139.7	141.5	143.4
100°	219.1	185.4	151.6	135.1	135.7	136.3	136.9	137.4
102.5°	336.0	334.1	332.1	323.0	306.6	290.3	273.9	257.5
105°	434.3	439.7	445.3	448.9	450.5	452.2	453.8	455.4
107.5°	522.8	528.3	533.8	536.9	537.9	538.8	539.7	540.6
110°	579.6	584.1	588.5	591.8	594.0	596.2	598.3	600.6



TEST NUMBER: P333486-927

CATALOG NUMBER: S125DIW-S1270D1560U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	635.9	639.9	643.9	646.7	648.2	649.7	651.3	652.8
115°	721.4	725.2	729.1	731.1	731.1	731.2	731.3	731.3
117.5°	803.2	806.5	809.8	812.0	813.2	814.4	815.6	816.7
120°	856.3	860.4	864.6	866.8	867.1	867.4	867.8	868.1
122.5°	906.3	910.2	914.1	916.1	916.2	916.3	916.5	916.6
125°	979.5	982.9	986.2	988.2	988.7	989.3	989.9	990.5
127.5°	1045.7	1049.2	1052.7	1054.2	1053.8	1053.4	1053.1	1052.7
130°	1089.6	1092.7	1095.7	1097.3	1097.3	1097.3	1097.3	1097.4
132.5°	1129.8	1133.5	1137.2	1138.9	1138.8	1138.6	1138.4	1138.3
135°	1188.2	1191.2	1194.3	1195.7	1195.5	1195.2	1195.0	1194.8
137.5°	1243.5	1246.9	1250.2	1251.7	1251.5	1251.2	1250.9	1250.6
140°	1277.2	1280.7	1284.3	1285.9	1285.3	1284.8	1284.4	1283.9
142.5°	1310.7	1313.4	1316.1	1317.2	1316.7	1316.2	1315.7	1315.2
145°	1359.1	1360.8	1362.5	1363.0	1362.6	1362.0	1361.5	1361.0
147.5°	1401.3	1402.1	1402.8	1402.5	1401.1	1399.6	1398.2	1396.9
150°	1428.5	1429.0	1429.6	1428.9	1427.0	1425.2	1423.4	1421.5
152.5°	1453.3	1453.8	1454.4	1453.7	1451.8	1450.0	1448.1	1446.3
155°	1487.5	1488.3	1489.1	1488.4	1486.3	1484.2	1482.0	1479.9
157.5°	1515.7	1516.6	1517.4	1516.8	1514.7	1512.5	1510.4	1508.3
160°	1533.3	1534.4	1535.4	1534.9	1532.8	1530.7	1528.5	1526.5
162.5°	1549.4	1550.9	1552.4	1552.0	1549.7	1547.3	1545.0	1542.6
165°	1570.1	1571.8	1573.4	1573.0	1571.0	1568.8	1566.7	1564.6
167.5°	1585.8	1587.7	1589.6	1589.4	1587.0	1584.6	1582.2	1579.8
170°	1593.9	1596.0	1598.1	1598.0	1595.6	1593.2	1590.8	1588.4
172.5°	1600.1	1602.0	1603.9	1603.7	1601.3	1598.9	1596.6	1594.2
175°	1606.9	1609.1	1611.2	1611.1	1608.7	1606.3	1603.9	1601.6
177.5°	1609.8	1611.2	1612.7	1612.6	1610.9	1609.2	1607.5	1605.8
180°	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7

(END OF REPORT)