

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: P333609-927

Luminaire Tested: **S125RDIP-S1090D1205U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333609-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S1090D1205U927-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6771.4 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

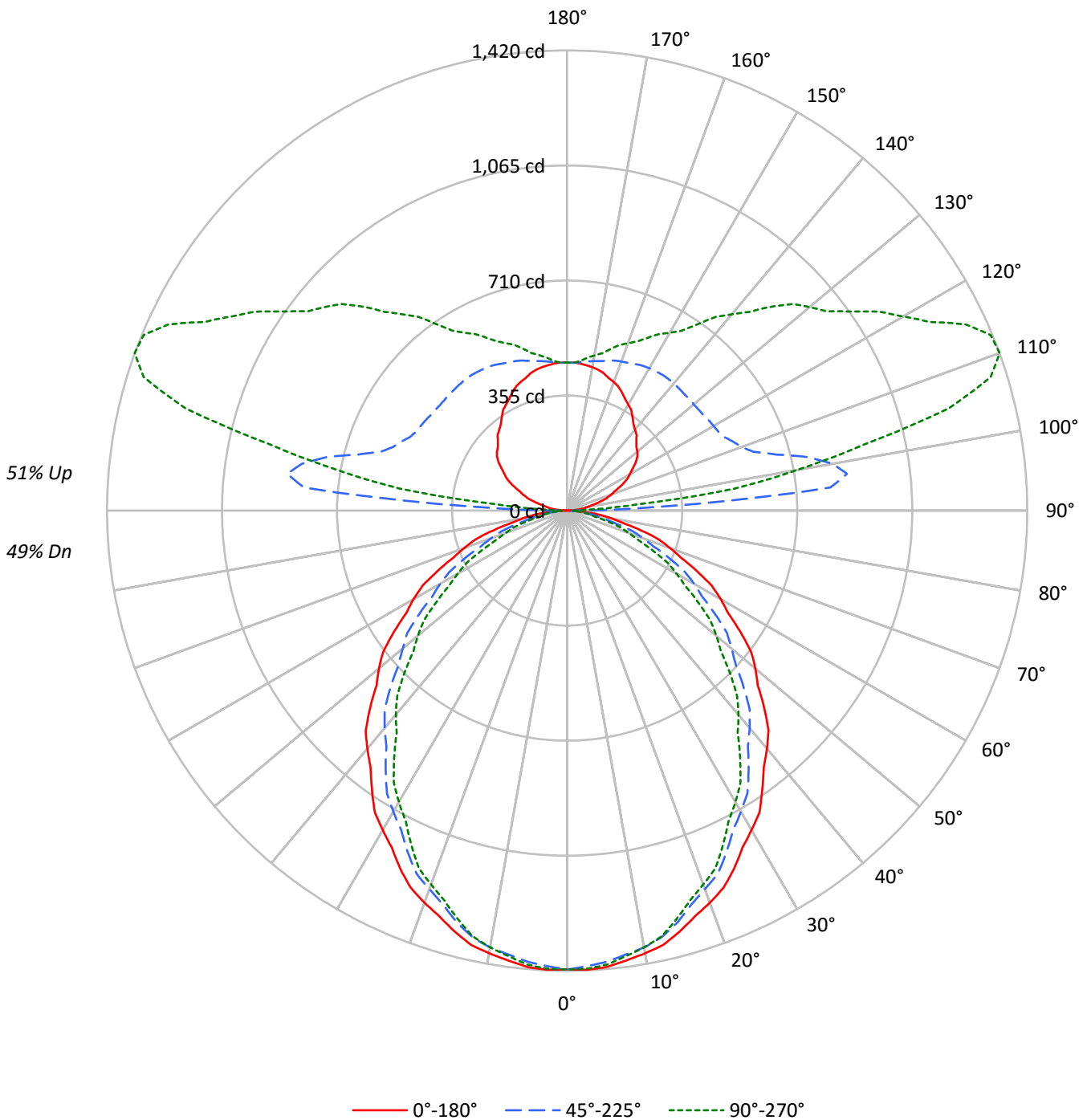
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: S125RDIP-S1090D1205U927-4F0-1E-UDD-F4

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	0
RCR																		
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	49	48	47	42
2	89	82	76	71	82	76	71	66	64	60	57	54	51	48	44	42	40	36
3	82	72	65	59	75	67	61	56	57	52	48	48	44	41	39	37	34	30
4	75	64	56	50	69	59	53	47	51	45	41	43	39	35	35	32	30	26
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	32	29	26	23
6	63	51	43	38	58	48	41	35	41	35	31	35	30	27	29	26	23	20
7	59	46	38	33	54	43	36	31	37	32	28	32	27	24	26	23	21	18
8	54	42	34	29	50	39	32	28	34	28	25	29	25	21	24	21	18	16
9	51	38	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17	15
10	47	35	28	23	44	33	27	22	29	23	20	25	20	18	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9144	9144	9144
5°	9166	9061	9117
10°	9096	8977	8977
15°	8988	8795	8723
20°	8849	8541	8438
25°	8688	8292	8109
30°	8486	7999	7744
35°	8280	7698	7335
40°	8088	7384	6933
45°	7853	7033	6495
50°	7618	6650	6038
55°	7346	6286	5551
60°	7073	5842	5028
65°	6748	5327	4429
70°	6381	4685	3816
75°	5871	3950	3174
80°	5170	3102	2663
85°	4357	2534	2379



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CATALOG NUMBER: S125RDIP-S1090D1205U927-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	2.0
10°-20°	372.1	5.5
20°-30°	539.6	8.0
30°-40°	614.9	9.1
40°-50°	599.4	8.9
50°-60°	504.6	7.5
60°-70°	353.7	5.2
70°-80°	181.8	2.7
80°-90°	48.5	0.7
90°-100°	330.9	4.9
100°-110°	711.4	10.5
110°-120°	667.6	9.9
120°-130°	541.1	8.0
130°-140°	434.2	6.4
140°-150°	327.7	4.8
150°-160°	230.6	3.4
160°-170°	136.0	2.0
170°-180°	44.2	0.7
0°-30°	1044.8	15.4
0°-40°	1659.7	24.5
0°-60°	2763.6	40.8
0°-90°	3347.6	49.4
90°-120°	1710.0	25.3
90°-150°	3013.0	44.5
90°-180°	3424.0	50.6
0°-180°	6771.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1416	1416	1416	1416	1416	
5°	1414	1409	1398	1408	1406	134
15°	1344	1337	1315	1314	1305	379
25°	1219	1202	1164	1150	1138	561
35°	1050	1023	976	946	930	657
45°	860	827	770	729	711	663
55°	652	617	558	512	493	583
65°	442	404	349	307	290	437
75°	235	202	158	136	127	249
85°	59	40	34	33	32	66
90°	1	8	15	19	21	5
95°	30	90	816	370	216	32
105°	104	145	667	1314	1220	110
115°	186	224	536	1155	1359	183
125°	258	302	514	919	1071	229
135°	302	363	510	770	889	234
145°	352	403	512	637	701	220
155°	401	432	499	564	588	185
165°	438	450	479	508	516	123
175°	456	456	459	465	463	43
180°	456	456	456	456	456	



TEST NUMBER: P333609-927

CATALOG NUMBER: S125RDIP-S1090D1205U927-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1418.5	1417.9	1417.4	1416.7	1416.2	1415.0	1413.1	1411.2	1409.3	1407.4	1409.3
5°	1413.8	1412.9	1411.9	1411.0	1410.0	1408.2	1405.6	1403.0	1400.3	1397.7	1400.1
7.5°	1399.9	1399.0	1398.0	1397.2	1396.2	1394.2	1391.1	1388.0	1384.8	1381.7	1383.4
10°	1387.0	1386.3	1385.6	1384.9	1384.2	1382.2	1378.9	1375.5	1372.2	1368.9	1369.6
12.5°	1372.5	1371.6	1370.7	1369.8	1368.9	1366.2	1361.8	1357.2	1352.8	1348.3	1348.8
15°	1344.3	1342.8	1341.4	1340.0	1338.6	1335.4	1330.4	1325.4	1320.4	1315.4	1315.2
17.5°	1312.4	1310.2	1308.1	1305.8	1303.6	1299.4	1293.2	1286.9	1280.6	1274.3	1273.1
20°	1287.6	1285.2	1282.9	1280.5	1278.1	1273.1	1265.5	1257.9	1250.3	1242.7	1241.5
22.5°	1260.2	1257.8	1255.5	1253.1	1250.7	1245.5	1237.5	1229.5	1221.5	1213.5	1211.2
25°	1219.2	1215.6	1212.0	1208.5	1204.9	1198.7	1189.9	1181.1	1172.4	1163.6	1160.5
27.5°	1172.1	1167.8	1163.4	1159.1	1154.8	1148.0	1138.5	1129.1	1119.7	1110.2	1106.0
30°	1137.9	1133.4	1128.9	1124.3	1119.8	1112.5	1102.6	1092.6	1082.6	1072.6	1067.1
32.5°	1104.5	1099.2	1093.9	1088.7	1083.4	1075.7	1065.5	1055.3	1045.1	1035.0	1029.0
35°	1050.2	1044.5	1038.8	1033.1	1027.4	1019.1	1008.4	997.8	987.1	976.4	969.5
37.5°	996.9	990.0	983.0	976.1	969.2	960.2	949.1	938.1	927.1	916.1	907.8
40°	959.3	952.1	945.0	937.9	930.7	921.5	910.1	898.7	887.2	875.8	866.8
42.5°	919.9	912.6	905.3	897.9	890.7	881.1	869.3	857.5	845.7	833.9	825.3
45°	859.8	852.9	846.1	839.2	832.3	822.3	809.2	796.1	783.1	770.0	760.5
47.5°	797.6	790.3	783.0	775.8	768.5	758.3	745.1	731.9	718.7	705.6	695.8
50°	758.2	750.4	742.5	734.7	726.8	716.1	702.6	689.0	675.5	661.9	652.0
52.5°	715.4	707.4	699.3	691.3	683.3	672.9	660.1	647.3	634.5	621.8	611.0
55°	652.4	644.8	637.2	629.5	621.9	611.5	598.2	584.9	571.6	558.3	547.6
57.5°	588.6	580.5	572.4	564.2	556.1	545.7	532.8	520.0	507.2	494.3	483.9
60°	547.6	539.2	530.9	522.6	514.3	503.7	490.8	478.0	465.2	452.3	441.9
62.5°	503.9	496.0	488.1	480.1	472.1	461.7	448.7	435.6	422.6	409.6	399.9
65°	441.6	433.6	425.5	417.4	409.3	399.0	386.4	373.8	361.2	348.6	339.1
67.5°	379.9	371.8	363.7	355.6	347.5	337.5	325.3	313.3	301.3	289.1	280.5
70°	337.9	329.9	321.8	313.7	305.6	295.6	283.8	271.9	260.0	248.1	240.7
72.5°	296.9	289.0	281.1	273.2	265.3	255.8	244.7	233.5	222.4	211.4	204.5
75°	235.3	228.1	221.0	213.9	206.8	198.2	188.2	178.2	168.3	158.3	153.0
77.5°	174.1	168.4	162.7	157.0	151.3	144.4	136.5	128.5	120.5	112.5	108.8
80°	139.0	133.3	127.6	121.9	116.2	110.0	103.4	96.7	90.1	83.4	81.3
82.5°	104.8	99.7	94.5	89.4	84.3	79.5	74.9	70.3	65.8	61.2	60.2
85°	58.8	54.5	50.2	45.9	41.7	39.0	37.8	36.6	35.4	34.2	34.0
87.5°	19.9	18.7	17.7	16.8	15.8	15.4	15.4	15.6	15.6	15.8	16.0
90°	1.0	1.8	3.6	5.5	7.4	9.2	10.1	12.0	12.9	14.7	15.7
92.5°	11.2	13.6	21.4	32.8	48.6	75.5	125.7	210.1	301.6	296.8	240.3
95°	30.3	31.3	38.7	48.8	69.0	110.4	209.0	411.5	665.5	815.6	798.0
97.5°	50.5	51.6	56.7	66.9	85.1	114.9	180.1	328.4	594.3	870.9	1009.8
100°	64.4	66.3	69.9	80.1	97.6	125.2	178.6	298.3	530.2	831.2	1061.3
102.5°	79.9	81.0	84.0	94.8	110.8	137.7	185.2	285.7	481.6	761.2	1030.4
105°	104.0	104.0	108.6	117.8	132.5	158.4	198.8	280.7	434.4	667.3	931.5
107.5°	127.5	129.4	133.8	141.4	156.7	179.8	219.0	289.2	414.5	602.7	830.7
110°	144.5	146.4	150.0	158.4	172.1	196.1	233.8	297.3	408.7	572.5	773.2



TEST NUMBER: P333609-927

CATALOG NUMBER: S125RDIP-S1090D1205U927-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	161.4	163.3	166.2	174.5	188.3	211.5	247.8	307.6	408.7	554.8	730.5
115°	185.9	187.7	190.5	198.8	212.6	235.7	269.7	323.1	411.5	535.8	683.9
117.5°	208.0	210.8	213.7	222.0	237.7	259.9	292.2	340.8	417.6	526.3	656.1
120°	222.8	225.5	229.2	237.5	253.1	276.2	308.4	352.5	423.4	521.9	640.6
122.5°	238.2	240.3	243.2	251.4	268.6	291.6	323.8	365.8	428.6	518.2	627.4
125°	257.7	259.6	264.2	272.4	289.9	313.9	344.3	383.8	437.2	513.7	609.3
127.5°	273.0	275.8	281.7	292.2	310.8	334.7	363.9	400.4	446.9	511.4	592.8
130°	282.6	285.3	292.7	304.7	324.0	347.9	376.4	411.5	452.9	509.9	581.8
132.5°	289.9	293.4	302.3	315.8	335.8	359.7	388.2	421.0	459.5	509.9	572.9
135°	301.9	305.6	316.6	331.4	350.7	375.6	404.1	434.4	468.5	509.9	562.4
137.5°	317.0	319.8	330.1	344.8	363.8	389.4	415.3	444.4	476.8	511.0	553.0
140°	325.8	328.6	339.7	354.4	371.9	396.7	423.4	451.1	480.5	511.7	548.6
142.5°	336.1	338.2	348.5	363.2	380.0	403.4	428.6	454.7	482.7	512.5	544.9
145°	351.6	353.5	362.7	375.6	392.1	413.3	437.2	460.3	485.1	511.7	539.4
147.5°	367.8	368.9	376.8	388.8	403.1	421.8	442.8	463.6	486.0	509.4	533.7
150°	377.4	379.2	385.7	397.7	410.5	426.2	446.4	465.8	486.0	507.2	529.3
152.5°	387.7	388.8	394.5	405.0	417.2	431.3	450.1	467.2	485.3	504.2	524.1
155°	401.3	401.3	406.9	416.1	425.2	438.2	453.8	468.5	483.2	498.9	515.5
157.5°	413.5	413.3	417.7	425.6	433.7	443.5	456.9	469.4	480.9	493.4	507.4
160°	421.6	420.6	424.4	430.8	438.2	446.4	458.4	469.4	478.6	489.7	500.7
162.5°	428.2	427.3	430.9	436.7	442.6	449.4	459.9	468.7	476.4	485.3	494.9
165°	438.2	436.3	439.1	443.7	447.3	452.9	460.3	467.6	473.1	478.6	486.0
167.5°	444.8	443.9	445.5	448.1	450.7	454.2	460.3	465.4	467.9	472.2	477.4
170°	449.2	448.3	449.2	451.1	452.9	455.7	460.3	463.9	465.8	468.5	472.2
172.5°	452.2	450.5	451.4	453.2	454.3	455.7	459.5	462.5	462.8	464.1	467.1
175°	455.7	453.8	454.7	455.7	455.7	455.7	458.4	460.3	459.3	459.3	460.3
177.5°	457.3	455.8	455.8	456.5	455.8	455.8	457.3	458.0	456.5	456.5	457.3
180°	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5



TEST NUMBER: P333609-927

CATALOG NUMBER: S125RDIP-S1090D1205U927-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1411.2	1413.1	1415.0	1415.8	1415.6	1415.5	1415.2	1415.1
5°	1402.5	1404.9	1407.2	1408.2	1407.7	1407.2	1406.8	1406.3
7.5°	1385.1	1386.7	1388.4	1388.9	1388.4	1387.9	1387.3	1386.8
10°	1370.3	1371.0	1371.7	1371.7	1371.0	1370.3	1369.6	1368.9
12.5°	1349.4	1349.9	1350.4	1350.1	1349.0	1348.0	1346.9	1345.8
15°	1314.9	1314.7	1314.5	1313.3	1311.1	1309.0	1306.9	1304.7
17.5°	1271.9	1270.7	1269.6	1268.1	1266.3	1264.6	1262.8	1261.1
20°	1240.3	1239.1	1237.9	1236.3	1234.1	1232.0	1229.9	1227.7
22.5°	1208.9	1206.6	1204.3	1202.2	1200.5	1198.7	1196.9	1195.2
25°	1157.4	1154.3	1151.2	1148.3	1145.7	1143.1	1140.5	1137.9
27.5°	1101.6	1097.3	1093.0	1089.6	1087.0	1084.5	1082.0	1079.5
30°	1061.7	1056.2	1050.8	1046.9	1044.8	1042.7	1040.5	1038.4
32.5°	1022.9	1016.8	1010.8	1006.5	1003.8	1001.1	998.3	995.6
35°	962.6	955.7	948.8	943.7	940.4	937.1	933.7	930.4
37.5°	899.5	891.3	883.0	877.3	874.0	870.8	867.5	864.3
40°	857.8	848.7	839.7	833.8	830.9	828.1	825.2	822.4
42.5°	816.7	807.9	799.3	792.9	788.7	784.6	780.4	776.2
45°	751.0	741.5	732.0	725.4	721.8	718.3	714.7	711.1
47.5°	686.0	676.2	666.5	659.6	655.6	651.6	647.8	643.8
50°	642.0	632.0	622.0	615.3	611.7	608.2	604.6	601.0
52.5°	600.3	589.5	578.8	571.6	568.1	564.5	560.9	557.4
55°	536.9	526.2	515.5	508.2	504.4	500.6	496.8	493.0
57.5°	473.4	463.0	452.5	445.5	442.2	438.8	435.4	432.1
60°	431.4	421.0	410.5	403.5	400.0	396.4	392.8	389.3
62.5°	390.2	380.5	370.8	364.2	360.6	357.0	353.5	349.9
65°	329.6	320.1	310.6	304.0	300.5	296.9	293.3	289.8
67.5°	271.8	263.1	254.4	248.6	245.7	242.9	240.0	237.2
70°	233.4	226.0	218.6	213.5	210.6	207.8	204.9	202.1
72.5°	197.7	190.9	184.1	179.7	177.8	175.9	174.0	172.1
75°	147.8	142.6	137.4	133.9	132.2	130.6	128.9	127.2
77.5°	105.2	101.6	97.8	95.4	94.2	92.9	91.7	90.5
80°	79.1	77.0	74.9	73.5	73.0	72.6	72.1	71.6
82.5°	59.2	58.1	57.2	56.6	56.2	55.9	55.7	55.4
85°	33.7	33.5	33.3	33.0	32.8	32.6	32.3	32.1
87.5°	16.2	16.3	16.5	16.8	16.6	16.4	16.4	16.2
90°	16.6	17.5	18.4	20.3	20.3	20.3	21.2	21.2
92.5°	163.1	118.4	89.1	75.5	63.7	61.5	60.2	58.7
95°	661.8	521.9	408.7	331.4	266.0	238.4	231.1	216.3
97.5°	985.6	887.6	777.3	669.7	612.8	561.3	534.6	522.8
100°	1132.2	1087.1	992.3	896.5	833.1	766.8	732.7	718.0
102.5°	1181.5	1209.3	1163.9	1099.1	1031.1	984.0	947.0	936.0
105°	1152.5	1278.6	1319.1	1308.9	1279.5	1249.1	1230.7	1219.6
107.5°	1048.6	1216.9	1320.9	1369.0	1383.9	1383.7	1377.6	1370.2
110°	972.0	1146.9	1276.7	1354.9	1396.4	1413.9	1420.3	1420.3



TEST NUMBER: P333609-927

CATALOG NUMBER: S125RDIP-S1090D1205U927-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	911.6	1077.7	1208.9	1301.2	1361.8	1391.8	1407.8	1414.4
115°	835.8	978.5	1104.5	1204.9	1276.7	1320.9	1346.6	1358.6
117.5°	786.8	909.8	1018.4	1110.5	1182.3	1228.0	1253.5	1260.8
120°	760.3	870.8	972.0	1053.0	1121.2	1165.3	1190.2	1197.5
122.5°	740.5	842.8	933.0	1008.8	1069.6	1110.1	1135.0	1141.6
125°	711.5	805.4	885.5	951.8	1003.3	1041.1	1061.3	1070.6
127.5°	682.1	769.7	844.5	906.5	953.2	986.6	1005.8	1009.8
130°	663.7	744.7	816.5	876.3	922.3	952.7	971.1	976.6
132.5°	645.2	721.1	786.2	843.9	889.9	920.3	937.2	943.5
135°	621.3	684.8	743.8	796.2	836.7	867.1	883.7	889.2
137.5°	601.1	652.4	701.4	746.0	782.2	809.8	825.1	831.2
140°	590.0	633.3	675.7	714.3	748.4	772.3	786.1	790.7
142.5°	580.4	617.1	653.6	687.1	716.0	736.2	749.2	753.1
145°	567.9	596.4	625.0	649.8	671.9	687.6	697.8	701.4
147.5°	556.2	579.3	601.3	620.0	637.5	650.1	655.9	657.6
150°	549.5	569.8	587.2	603.8	617.7	628.7	632.4	633.3
152.5°	542.2	560.2	576.2	589.1	600.7	609.5	613.2	614.2
155°	531.1	545.8	558.7	568.9	578.1	584.5	587.2	588.2
157.5°	520.1	532.2	542.2	550.1	557.2	562.6	565.1	565.0
160°	512.7	521.9	531.1	537.6	544.0	548.6	550.5	549.5
162.5°	504.6	513.1	520.8	526.5	531.5	535.4	535.8	535.5
165°	493.4	499.8	505.3	509.9	513.7	515.5	515.5	515.5
167.5°	482.7	487.0	491.2	494.5	496.3	498.0	497.3	497.1
170°	476.8	479.6	482.4	484.2	486.0	487.0	487.0	486.0
172.5°	470.2	472.9	475.0	476.1	476.4	478.1	476.7	475.7
175°	463.0	463.0	464.9	464.9	464.9	465.8	463.9	463.0
177.5°	458.0	458.8	458.8	458.8	458.0	458.8	456.5	456.5
180°	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5

(END OF REPORT)