

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: P333336-940

Luminaire Tested: **S125DIP-S1270D1205U940-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333336-940
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: S125DIP-S1270D1205U940-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8249.1 lumens
Efficiency: N/A
Efficacy: 115.1 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

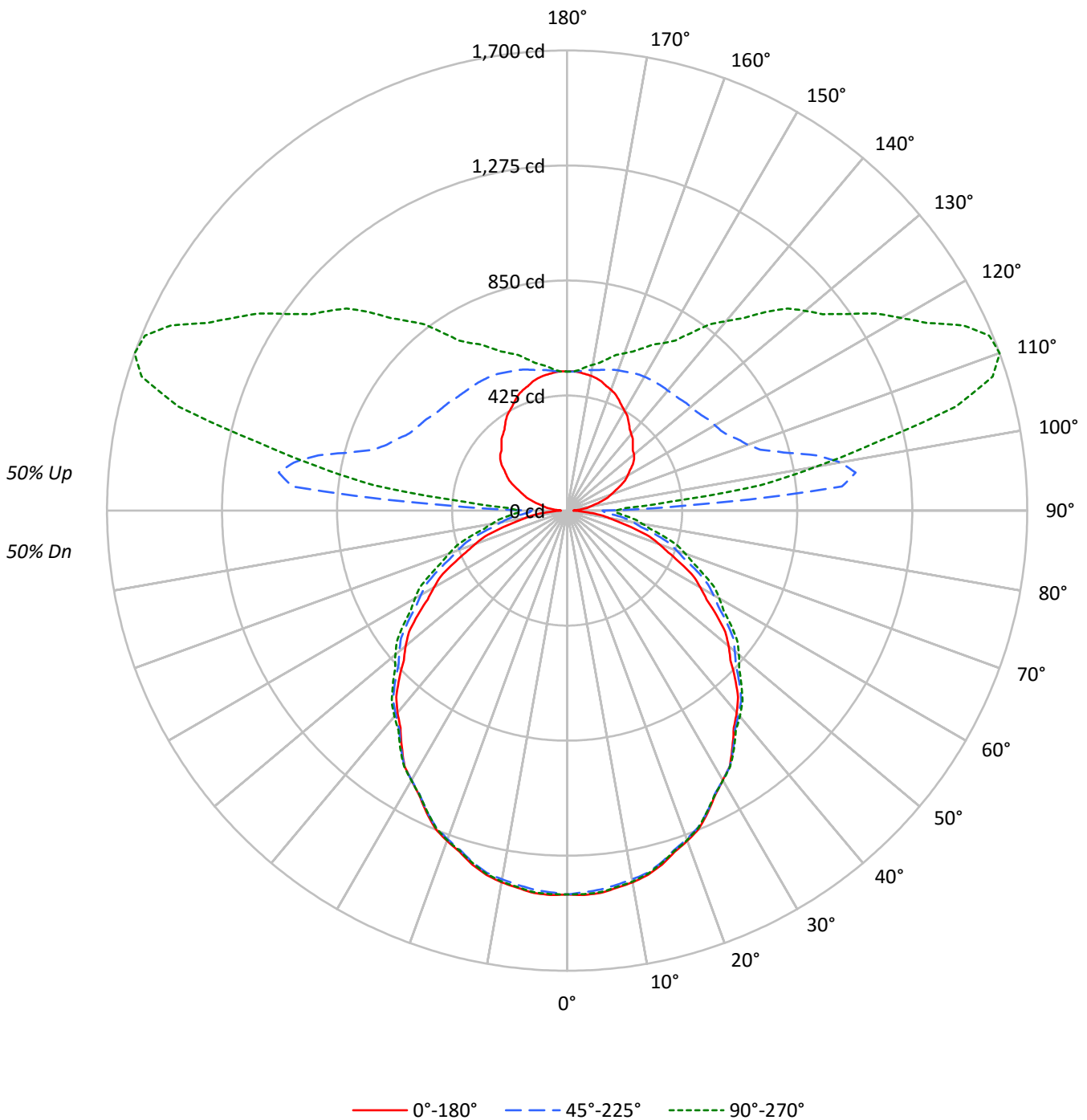
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	92	88	84	89	85	82	78	72	69	67	60	58	56	48	47	46	41
2	88	80	74	68	81	74	69	64	63	58	55	52	49	46	42	40	38	33
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	37	34	32	28
4	73	62	54	48	67	57	50	45	49	43	39	41	36	33	33	30	27	24
5	67	55	47	41	62	51	44	38	43	38	33	36	32	28	30	26	24	21
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21	18
7	57	45	36	31	52	41	34	29	35	30	25	30	25	22	25	21	18	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	19	23	19	17	14
9	49	37	29	24	45	34	27	23	30	24	20	25	21	17	21	17	15	13
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9159	9159	9159
5°	9177	8990	9018
10°	9112	8829	8816
15°	9004	8637	8558
20°	8857	8400	8301
25°	8683	8145	7984
30°	8473	7865	7696
35°	8276	7608	7432
40°	8075	7338	7167
45°	7849	7106	6931
50°	7633	6854	6723
55°	7373	6618	6478
60°	7089	6346	6229
65°	6792	6064	5947
70°	6457	5677	5658
75°	5923	5304	5304
80°	5225	4854	4918
85°	4578	4550	4797



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.1	1.6
10°-20°	380.7	4.6
20°-30°	566.1	6.9
30°-40°	670.6	8.1
40°-50°	693.3	8.4
50°-60°	638.7	7.7
60°-70°	516.3	6.3
70°-80°	345.7	4.2
80°-90°	182.2	2.2
90°-100°	473.1	5.7
100°-110°	875.0	10.6
110°-120°	801.2	9.7
120°-130°	637.3	7.7
130°-140°	501.1	6.1
140°-150°	371.4	4.5
150°-160°	259.6	3.1
160°-170°	153.0	1.9
170°-180°	49.8	0.6
0°-30°	1080.9	13.1
0°-40°	1751.4	21.2
0°-60°	3083.4	37.4
0°-90°	4127.6	50.0
90°-120°	2149.3	26.1
90°-150°	3659.1	44.4
90°-180°	4122.0	50.0
0°-180°	8249.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1418	1415	1406	1416	1415	134
15°	1354	1355	1346	1353	1348	381
25°	1230	1234	1226	1231	1225	566
35°	1065	1074	1070	1074	1075	666
45°	877	892	900	909	911	677
55°	674	696	719	734	740	603
65°	464	496	530	550	556	461
75°	256	292	336	363	371	271
85°	76	123	171	201	213	81
90°	23	76	130	167	180	17
95°	52	156	1020	547	385	51
105°	130	200	828	1582	1487	137
115°	218	272	657	1378	1617	214
125°	296	346	610	1087	1266	262
135°	343	411	585	895	1037	266
145°	397	453	576	724	802	249
155°	452	486	562	635	662	208
165°	493	507	539	571	580	139
175°	513	513	517	523	521	49
180°	514	514	514	514	514	



TEST NUMBER: P333336-940

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1421.4	1420.9	1420.4	1420.0	1419.4	1418.4	1416.6	1414.9	1413.2	1411.4	1413.2
5°	1418.1	1417.5	1416.8	1416.2	1415.6	1414.3	1412.0	1409.9	1407.7	1405.6	1408.0
7.5°	1405.6	1405.3	1405.1	1404.8	1404.6	1403.4	1401.1	1398.9	1396.7	1394.5	1396.6
10°	1394.5	1394.5	1394.5	1394.5	1394.5	1393.2	1390.7	1388.3	1385.8	1383.3	1385.5
12.5°	1378.9	1379.1	1379.4	1379.7	1379.8	1379.0	1377.1	1375.0	1373.1	1371.1	1372.8
15°	1354.2	1354.4	1354.8	1355.0	1355.4	1354.4	1352.3	1350.1	1348.0	1345.8	1347.6
17.5°	1321.9	1322.5	1323.1	1323.7	1324.4	1323.6	1321.4	1319.3	1317.1	1314.9	1316.3
20°	1298.5	1299.1	1299.8	1300.4	1301.0	1300.2	1298.1	1295.9	1293.7	1291.6	1292.5
22.5°	1271.8	1272.9	1274.1	1275.1	1276.3	1275.6	1273.2	1270.8	1268.4	1266.0	1267.1
25°	1230.4	1231.4	1232.3	1233.1	1234.1	1233.7	1231.8	1229.9	1228.1	1226.2	1227.4
27.5°	1184.3	1185.6	1187.0	1188.3	1189.7	1189.3	1187.2	1185.1	1183.0	1180.9	1181.8
30°	1149.8	1151.6	1153.4	1155.3	1157.2	1157.2	1155.3	1153.4	1151.6	1149.8	1150.4
32.5°	1118.7	1120.3	1121.9	1123.5	1125.1	1125.2	1123.8	1122.5	1121.1	1119.7	1120.3
35°	1065.0	1067.1	1069.3	1071.5	1073.6	1074.2	1073.3	1072.4	1071.5	1070.5	1071.5
37.5°	1011.3	1013.3	1015.2	1017.3	1019.2	1020.0	1019.8	1019.4	1019.1	1018.8	1020.0
40°	974.6	977.0	979.5	982.0	984.4	985.5	985.3	984.9	984.6	984.4	985.5
42.5°	934.5	937.7	940.9	944.1	947.4	949.3	950.0	950.7	951.4	952.1	953.5
45°	877.3	880.7	884.0	887.4	890.8	893.3	894.9	896.4	898.0	899.5	901.7
47.5°	818.6	821.7	824.9	828.0	831.2	834.1	836.8	839.5	842.0	844.7	847.9
50°	778.6	781.9	785.3	788.7	792.2	795.6	799.0	802.4	805.7	809.1	812.5
52.5°	736.3	740.5	744.6	748.7	752.9	757.0	761.2	765.3	769.4	773.6	777.2
55°	674.3	679.2	684.2	689.1	694.0	699.0	703.9	708.9	713.8	718.8	722.2
57.5°	610.9	616.8	622.8	628.7	634.6	640.4	646.1	651.8	657.5	663.2	667.1
60°	568.6	574.8	580.9	587.2	593.3	599.5	605.7	611.9	618.0	624.2	628.8
62.5°	527.4	533.7	539.8	546.0	552.1	558.7	565.3	571.9	578.6	585.3	590.4
65°	464.3	471.4	478.6	485.7	492.8	500.1	507.5	514.9	522.3	529.7	534.3
67.5°	404.8	411.7	418.6	425.4	432.3	439.5	447.0	454.6	462.1	469.7	475.3
70°	361.5	368.5	375.7	382.8	389.9	397.4	405.5	413.6	421.6	429.6	435.5
72.5°	319.2	326.5	333.9	341.3	348.7	356.7	365.4	374.3	383.0	391.8	398.1
75°	255.8	263.9	271.9	279.9	287.9	296.9	306.7	316.6	326.5	336.4	342.6
77.5°	194.9	204.2	213.5	222.7	232.0	241.4	250.9	260.4	269.9	279.5	286.2
80°	157.1	166.4	175.7	184.9	194.2	204.0	214.5	225.1	235.6	246.1	252.9
82.5°	122.6	132.4	142.1	151.9	161.7	171.9	182.7	193.4	204.2	214.9	221.5
85°	76.5	86.7	96.8	107.1	117.3	127.8	138.6	149.4	160.2	171.0	177.8
87.5°	43.6	53.7	63.9	74.3	84.6	95.2	105.9	116.8	127.5	138.5	145.8
90°	23.3	34.2	46.2	58.1	70.1	82.3	93.9	106.5	118.0	130.5	138.8
92.5°	32.6	44.5	62.3	84.4	111.3	151.5	218.8	324.5	438.3	443.6	386.8
95°	52.3	61.3	77.7	97.1	127.9	183.8	305.1	543.7	840.1	1019.5	1006.7
97.5°	73.2	81.7	94.7	113.3	141.1	183.3	266.8	444.0	753.3	1075.0	1237.7
100°	87.8	96.4	107.0	124.9	151.1	190.4	260.3	404.9	675.9	1024.6	1290.1
102.5°	104.2	111.4	120.6	138.8	162.9	201.0	264.1	386.8	617.0	941.4	1250.6
105°	129.6	134.6	144.6	160.0	181.5	217.6	272.5	374.0	556.2	827.7	1131.2
107.5°	154.4	160.7	169.9	182.6	204.0	236.7	289.7	377.6	527.5	748.2	1010.9
110°	172.4	178.2	186.0	199.0	218.3	251.5	302.6	382.7	516.7	709.8	941.6



TEST NUMBER: P333336-940

CATALOG NUMBER: S125DIP-S1270D1205U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	191.5	196.5	202.8	215.1	233.6	265.4	314.6	390.4	512.6	685.5	888.8
115°	217.7	221.9	227.1	238.6	256.4	287.3	333.7	401.8	509.3	657.3	829.6
117.5°	241.1	245.7	250.4	261.1	280.2	309.8	353.7	415.9	510.0	640.0	791.4
120°	257.7	261.7	266.8	277.1	295.6	325.5	368.9	425.7	512.6	630.6	769.5
122.5°	274.0	276.7	280.4	290.3	309.9	339.5	382.5	436.7	514.2	622.0	749.8
125°	295.7	297.5	302.3	311.3	330.7	360.6	400.9	451.7	518.0	610.1	722.8
127.5°	311.5	314.3	320.6	332.1	352.8	382.0	420.1	466.2	523.7	601.3	697.4
130°	322.3	325.0	333.1	346.2	367.7	396.6	433.0	476.7	527.7	596.3	681.4
132.5°	329.4	333.3	343.2	358.3	380.8	409.4	444.8	485.1	531.7	591.8	667.0
135°	342.6	346.4	358.6	374.9	396.3	425.3	459.5	495.9	536.4	585.1	648.2
137.5°	359.4	362.2	373.5	389.9	411.0	440.2	470.5	504.3	541.8	581.4	632.3
140°	368.2	371.3	383.7	400.3	420.0	448.1	478.5	509.9	543.3	578.9	623.8
142.5°	379.8	381.8	393.2	409.5	428.1	454.3	482.8	512.3	543.9	577.5	616.9
145°	397.2	399.0	409.0	423.2	441.6	465.2	492.1	518.1	546.1	576.0	608.7
147.5°	414.0	415.3	424.2	437.7	453.8	474.7	498.4	521.8	547.1	573.4	601.3
150°	424.8	426.9	434.2	447.6	462.1	479.7	502.5	524.3	547.1	570.9	595.8
152.5°	436.4	437.7	444.1	455.9	469.6	485.5	506.7	525.9	546.3	567.6	590.0
155°	451.7	451.7	458.0	468.3	478.7	493.2	510.8	527.4	543.9	561.6	580.2
157.5°	465.5	465.2	470.2	479.1	488.2	499.2	514.3	528.4	541.3	555.4	571.1
160°	474.6	473.5	477.7	484.9	493.2	502.5	516.0	528.4	538.8	551.3	563.7
162.5°	482.0	481.0	485.1	491.5	498.2	505.9	517.6	527.6	536.3	546.3	557.1
165°	493.2	491.2	494.3	499.4	503.5	509.8	518.1	526.4	532.5	538.8	547.1
167.5°	500.7	499.6	501.5	504.4	507.3	511.2	518.1	523.9	526.7	531.5	537.3
170°	505.6	504.6	505.6	507.7	509.8	512.9	518.1	522.2	524.3	527.4	531.5
172.5°	509.0	507.1	508.1	510.1	511.4	512.9	517.2	520.6	520.9	522.5	525.8
175°	512.9	510.8	511.8	512.9	512.9	512.9	516.0	518.1	517.0	517.0	518.1
177.5°	514.8	513.1	513.1	513.9	513.1	513.1	514.8	515.6	513.9	513.9	514.8
180°	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9



TEST NUMBER: P333336-940

CATALOG NUMBER: S125DIP-S1270D1205U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1414.9	1416.6	1418.4	1419.1	1418.8	1418.6	1418.4	1418.1
5°	1410.5	1413.0	1415.5	1416.6	1416.2	1415.9	1415.6	1415.3
7.5°	1398.7	1401.0	1403.1	1404.0	1403.7	1403.4	1403.1	1402.8
10°	1387.7	1389.8	1392.0	1392.9	1392.6	1392.3	1392.0	1391.7
12.5°	1374.4	1376.1	1377.8	1378.2	1377.4	1376.6	1375.8	1375.0
15°	1349.5	1351.4	1353.2	1353.5	1352.3	1351.0	1349.8	1348.5
17.5°	1317.8	1319.2	1320.6	1321.0	1320.2	1319.5	1318.8	1317.9
20°	1293.4	1294.3	1295.3	1295.7	1295.7	1295.7	1295.7	1295.7
22.5°	1268.4	1269.5	1270.7	1270.9	1270.2	1269.4	1268.6	1267.9
25°	1228.7	1229.9	1231.2	1231.0	1229.5	1227.9	1226.4	1224.9
27.5°	1182.7	1183.5	1184.4	1184.5	1183.9	1183.4	1182.9	1182.3
30°	1151.0	1151.6	1152.3	1152.4	1152.1	1151.7	1151.5	1151.1
32.5°	1121.0	1121.6	1122.2	1122.4	1122.0	1121.8	1121.4	1121.1
35°	1072.4	1073.3	1074.2	1074.7	1074.7	1074.7	1074.7	1074.7
37.5°	1021.3	1022.5	1023.8	1024.3	1024.1	1024.0	1024.0	1023.8
40°	986.8	988.0	989.3	990.2	990.8	991.4	992.0	992.7
42.5°	955.0	956.5	958.0	958.8	958.9	959.0	959.2	959.3
45°	903.8	906.0	908.1	909.4	909.7	910.0	910.3	910.6
47.5°	851.0	854.2	857.4	859.3	860.0	860.6	861.3	862.0
50°	815.9	819.3	822.8	824.9	825.8	826.8	827.7	828.6
52.5°	780.9	784.5	788.1	790.3	790.9	791.7	792.4	793.0
55°	725.6	729.0	732.4	734.7	735.9	737.2	738.4	739.7
57.5°	670.9	674.8	678.8	681.2	682.1	683.0	683.9	684.8
60°	633.5	638.1	642.7	645.5	646.5	647.4	648.4	649.3
62.5°	595.6	600.7	605.8	608.9	610.1	611.4	612.5	613.7
65°	539.0	543.6	548.2	551.2	552.4	553.7	554.9	556.1
67.5°	480.9	486.5	492.1	495.7	497.3	498.9	500.6	502.2
70°	441.3	447.2	453.1	456.9	458.8	460.7	462.5	464.3
72.5°	404.5	410.9	417.2	421.1	422.5	423.8	425.2	426.5
75°	348.8	355.0	361.1	365.1	366.6	368.1	369.7	371.2
77.5°	293.0	299.8	306.7	310.7	311.9	313.1	314.3	315.6
80°	259.7	266.4	273.3	277.3	278.5	279.7	281.0	282.2
82.5°	228.0	234.6	241.1	245.5	247.7	249.9	252.2	254.4
85°	184.6	191.4	198.2	202.9	205.3	207.8	210.3	212.7
87.5°	153.1	160.4	167.7	172.7	175.0	177.1	179.4	181.6
90°	146.9	155.0	163.2	169.9	172.0	174.2	177.4	179.5
92.5°	306.8	263.4	237.3	226.5	215.3	215.1	215.8	216.2
95°	860.1	709.4	588.7	506.1	434.8	405.8	399.8	385.3
97.5°	1217.0	1113.0	995.4	878.7	816.7	760.8	732.9	721.8
100°	1376.4	1332.1	1231.9	1128.3	1058.6	985.9	949.4	934.7
102.5°	1427.0	1464.5	1419.6	1350.7	1276.0	1224.9	1185.1	1174.5
105°	1386.1	1534.2	1586.0	1578.7	1547.7	1515.7	1497.2	1486.8
107.5°	1262.4	1457.9	1581.1	1639.2	1657.9	1659.7	1654.7	1648.3
110°	1171.3	1373.9	1525.9	1618.0	1666.8	1688.6	1698.1	1700.2



TEST NUMBER: P333336-940

CATALOG NUMBER: S125DIP-S1270D1205U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1098.3	1290.8	1444.2	1551.9	1622.3	1658.2	1678.5	1688.0
115°	1006.1	1172.3	1319.8	1436.5	1519.1	1570.7	1601.6	1616.9
117.5°	943.7	1087.4	1215.0	1322.2	1405.2	1458.7	1489.5	1499.9
120°	909.5	1039.0	1158.2	1253.0	1331.5	1383.1	1412.9	1423.1
122.5°	882.1	1002.4	1108.9	1197.7	1267.9	1315.4	1345.2	1354.5
125°	842.8	953.4	1048.5	1126.3	1185.9	1229.9	1254.3	1266.2
127.5°	802.5	905.7	994.4	1067.5	1121.9	1161.2	1184.5	1190.9
130°	777.9	873.4	958.6	1028.9	1082.3	1117.9	1140.2	1148.0
132.5°	752.8	842.5	920.2	987.8	1040.9	1076.4	1096.8	1105.1
135°	718.5	794.1	864.4	926.2	973.4	1009.1	1029.3	1037.1
137.5°	690.0	751.4	810.2	862.8	904.9	937.2	955.6	963.7
140°	673.8	725.9	776.9	822.7	862.3	890.5	907.2	913.6
142.5°	659.8	703.9	747.8	787.6	821.4	845.4	861.4	866.9
145°	642.4	676.0	709.7	739.0	765.2	784.0	796.7	802.0
147.5°	627.1	653.6	678.8	700.4	720.7	735.3	742.5	744.9
150°	618.6	641.4	661.0	679.8	695.7	708.5	712.9	714.3
152.5°	610.3	630.6	648.6	663.2	676.3	686.3	690.5	691.6
155°	597.8	614.4	628.9	640.3	650.7	657.9	661.0	662.1
157.5°	585.4	599.1	610.3	619.2	627.2	633.3	636.1	636.0
160°	577.1	587.5	597.8	605.1	612.3	617.5	619.6	618.6
162.5°	568.0	577.6	586.2	592.6	598.2	602.6	603.1	602.8
165°	555.4	562.6	568.8	574.0	578.2	580.2	580.2	580.2
167.5°	543.3	548.1	552.9	556.6	558.7	560.5	559.7	559.5
170°	536.7	539.8	543.0	545.0	547.1	548.1	548.1	547.1
172.5°	529.2	532.4	534.7	535.9	536.3	538.1	536.5	535.5
175°	521.2	521.2	523.3	523.3	523.3	524.3	522.2	521.2
177.5°	515.6	516.4	516.4	516.4	515.6	516.4	513.9	513.9
180°	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9

(END OF REPORT)