

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: P333244-940

Luminaire Tested: **S125DIP-S850D1205U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333244-940
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: S125DIP-S850D1205U940-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7221.8 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-Indirect

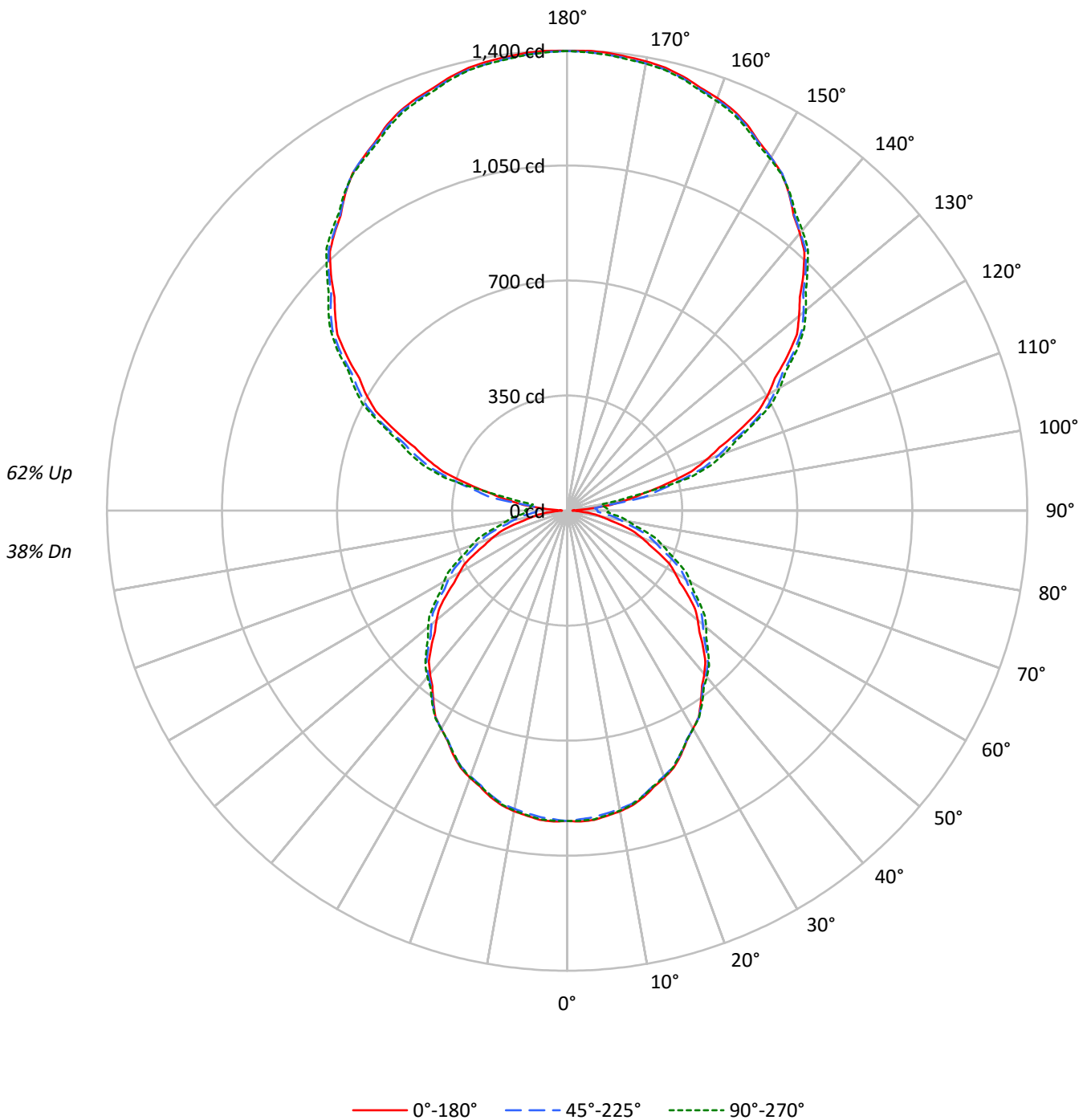
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333244-940

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Luminous Intensity Polar Plot





TEST NUMBER: P333244-940

CATALOG NUMBER: S125DIP-S850D1205U940-4F0-1E-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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	95	90	86	82	86	82	78	75	66	64	62	52	50	49	39	38	37	31
2	86	78	72	67	78	71	66	61	58	54	51	45	43	40	34	32	31	25
3	78	69	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21
4	71	61	53	47	64	55	48	43	45	40	36	35	32	29	27	24	22	18
5	65	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	55	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	51	39	31	26	46	36	29	24	30	24	21	24	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	25	21	40	30	24	19	25	20	16	20	16	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6101	6101	6101
5°	6113	5988	6007
10°	6069	5881	5872
15°	5998	5753	5701
20°	5900	5595	5529
25°	5784	5425	5318
30°	5644	5239	5126
35°	5513	5068	4951
40°	5379	4888	4773
45°	5228	4733	4617
50°	5084	4566	4479
55°	4912	4408	4315
60°	4722	4227	4149
65°	4525	4039	3961
70°	4301	3780	3769
75°	3945	3533	3533
80°	3483	3233	3276
85°	3046	3031	3195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	1.2
10°-20°	253.6	3.5
20°-30°	377.1	5.2
30°-40°	446.7	6.2
40°-50°	461.8	6.4
50°-60°	425.4	5.9
60°-70°	343.9	4.8
70°-80°	230.3	3.2
80°-90°	122.4	1.7
90°-100°	117.8	1.6
100°-110°	362.5	5.0
110°-120°	601.0	8.3
120°-130°	747.6	10.4
130°-140°	792.1	11.0
140°-150°	737.4	10.2
150°-160°	595.2	8.2
160°-170°	384.9	5.3
170°-180°	132.8	1.8
0°-30°	720.0	10.0
0°-40°	1166.7	16.2
0°-60°	2053.9	28.4
0°-90°	2750.5	38.1
90°-120°	1081.3	15.0
90°-150°	3358.4	46.5
90°-180°	4471.0	61.9
0°-180°	7221.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	945	942	936	943	943	90
15°	902	903	896	902	898	254
25°	820	822	817	820	816	377
35°	709	715	713	716	716	444
45°	584	594	599	605	607	451
55°	449	464	479	489	493	401
65°	309	331	353	366	370	307
75°	170	195	224	242	247	181
85°	51	82	114	134	142	54
90°	16	54	93	118	129	12
95°	71	90	84	109	116	85
105°	313	332	360	378	384	332
115°	578	590	614	626	626	572
125°	817	824	842	852	854	730
135°	1016	1022	1026	1035	1034	783
145°	1177	1178	1178	1184	1181	736
155°	1295	1290	1291	1294	1286	597
165°	1367	1361	1362	1367	1360	386
175°	1398	1392	1393	1400	1392	133
180°	1398	1398	1398	1398	1398	



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CATALOG NUMBER: S125DIP-S850D1205U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6
2.5°	946.8	946.6	946.2	945.8	945.5	944.8	943.6	942.4	941.3	940.1	941.3
5°	944.6	944.2	943.8	943.3	943.0	942.0	940.6	939.1	937.7	936.3	937.9
7.5°	936.3	936.1	935.9	935.8	935.6	934.8	933.4	931.8	930.3	928.9	930.3
10°	928.9	928.9	928.9	928.9	928.9	928.1	926.4	924.8	923.1	921.5	922.9
12.5°	918.5	918.6	918.8	919.0	919.2	918.6	917.3	916.0	914.6	913.3	914.4
15°	902.1	902.2	902.4	902.6	902.9	902.2	900.8	899.4	897.9	896.4	897.7
17.5°	880.6	880.9	881.4	881.7	882.2	881.6	880.2	878.8	877.4	875.9	876.8
20°	865.0	865.4	865.8	866.2	866.7	866.1	864.7	863.3	861.7	860.3	860.9
22.5°	847.2	847.9	848.6	849.4	850.2	849.7	848.1	846.5	844.9	843.3	844.1
25°	819.6	820.2	820.8	821.4	822.1	821.7	820.6	819.3	818.1	816.8	817.6
27.5°	788.8	789.8	790.7	791.6	792.5	792.2	790.9	789.4	788.0	786.7	787.2
30°	765.9	767.1	768.4	769.5	770.8	770.8	769.5	768.4	767.1	765.9	766.3
32.5°	745.1	746.2	747.3	748.3	749.4	749.5	748.6	747.7	746.8	745.9	746.3
35°	709.4	710.9	712.3	713.7	715.2	715.6	715.0	714.3	713.7	713.1	713.7
37.5°	673.6	674.9	676.3	677.6	678.9	679.5	679.2	679.0	678.9	678.7	679.5
40°	649.2	650.9	652.5	654.2	655.8	656.5	656.3	656.1	655.9	655.7	656.5
42.5°	622.5	624.6	626.8	628.9	631.1	632.4	632.8	633.3	633.7	634.2	635.2
45°	584.3	586.7	588.9	591.1	593.4	595.0	596.1	597.1	598.2	599.1	600.7
47.5°	545.3	547.4	549.5	551.6	553.7	555.6	557.4	559.2	560.9	562.7	564.8
50°	518.6	520.8	523.2	525.4	527.6	529.9	532.2	534.5	536.7	539.0	541.3
52.5°	490.4	493.2	496.0	498.7	501.5	504.3	507.0	509.8	512.6	515.3	517.7
55°	449.2	452.5	455.8	459.1	462.4	465.7	469.0	472.3	475.5	478.8	481.1
57.5°	406.9	410.9	414.8	418.7	422.8	426.6	430.4	434.2	437.9	441.8	444.3
60°	378.8	382.9	387.0	391.1	395.2	399.4	403.5	407.6	411.7	415.8	418.9
62.5°	351.3	355.4	359.6	363.7	367.8	372.1	376.6	381.0	385.4	389.9	393.3
65°	309.3	314.1	318.8	323.5	328.2	333.1	338.0	343.0	347.9	352.8	356.0
67.5°	269.7	274.3	278.8	283.4	287.9	292.7	297.7	302.8	307.8	312.8	316.6
70°	240.8	245.5	250.2	255.0	259.8	264.7	270.1	275.4	280.8	286.1	290.1
72.5°	212.7	217.5	222.4	227.3	232.2	237.6	243.4	249.3	255.1	261.0	265.2
75°	170.4	175.8	181.1	186.5	191.8	197.8	204.4	211.0	217.5	224.1	228.2
77.5°	129.8	136.0	142.2	148.4	154.5	160.8	167.1	173.4	179.8	186.2	190.6
80°	104.7	110.8	117.0	123.1	129.4	135.9	142.9	149.9	156.9	163.9	168.4
82.5°	81.7	88.2	94.7	101.2	107.7	114.5	121.7	128.9	136.0	143.2	147.6
85°	50.9	57.7	64.6	71.3	78.1	85.1	92.3	99.5	106.7	113.9	118.4
87.5°	29.1	36.0	43.0	49.9	56.9	64.0	71.3	78.7	86.1	93.4	98.3
90°	15.9	24.3	32.7	41.1	49.6	58.1	66.7	75.3	83.9	92.6	98.4
92.5°	29.3	34.1	38.9	43.7	48.5	55.2	63.8	72.4	81.0	89.5	95.2
95°	71.1	75.8	80.4	85.1	89.7	91.2	89.4	87.7	86.0	84.2	89.9
97.5°	134.3	140.3	146.3	152.4	158.5	156.2	145.7	135.1	124.6	114.0	111.8
100°	183.2	188.2	193.3	198.3	203.3	209.6	217.0	224.6	232.1	239.6	209.6
102.5°	233.1	238.0	242.8	247.7	252.5	258.5	265.5	272.4	279.4	286.3	284.0
105°	313.0	317.3	321.5	325.7	329.8	335.1	341.3	347.4	353.6	359.8	363.9
107.5°	396.1	398.9	401.6	404.5	407.2	411.9	418.2	424.6	431.0	437.4	441.5
110°	450.0	452.5	455.0	457.4	459.9	464.2	470.5	476.7	483.0	489.2	492.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	501.4	504.0	506.5	509.0	511.6	515.8	521.7	527.5	533.3	539.2	542.2
115°	577.7	580.2	582.8	585.4	588.0	592.1	597.6	603.2	608.8	614.4	617.2
117.5°	656.5	657.4	658.3	659.2	660.0	663.5	669.4	675.4	681.4	687.2	689.6
120°	706.2	706.6	707.0	707.4	707.8	710.7	716.1	721.6	726.9	732.4	735.4
122.5°	749.4	750.6	751.7	752.9	754.1	757.1	762.0	766.9	771.8	776.7	779.5
125°	817.3	818.6	820.0	821.4	822.9	825.6	829.7	833.8	837.9	842.0	844.5
127.5°	881.2	882.1	883.1	884.0	884.9	887.1	890.3	893.5	896.8	900.0	902.5
130°	921.0	921.9	922.8	923.8	924.8	926.8	929.9	933.0	936.1	939.2	941.4
132.5°	960.0	961.4	962.6	963.9	965.2	966.7	968.4	970.2	971.9	973.6	976.3
135°	1016.5	1017.6	1018.8	1019.9	1021.1	1022.2	1023.1	1024.1	1025.1	1026.1	1028.3
137.5°	1068.3	1069.3	1070.3	1071.4	1072.4	1073.1	1073.4	1073.6	1073.9	1074.2	1076.7
140°	1101.5	1102.0	1102.4	1102.9	1103.3	1103.6	1103.6	1103.5	1103.5	1103.5	1106.2
142.5°	1132.2	1132.3	1132.4	1132.6	1132.7	1132.8	1133.3	1133.6	1134.0	1134.3	1136.3
145°	1177.1	1177.4	1177.7	1177.9	1178.2	1178.3	1178.3	1178.3	1178.3	1178.3	1179.6
147.5°	1215.6	1215.5	1215.4	1215.3	1215.2	1215.3	1215.6	1215.8	1216.2	1216.5	1217.0
150°	1240.5	1240.0	1239.6	1239.1	1238.7	1238.7	1239.1	1239.6	1240.0	1240.5	1240.9
152.5°	1264.5	1263.6	1262.5	1261.5	1260.4	1260.2	1260.7	1261.1	1261.6	1262.0	1262.5
155°	1295.4	1294.1	1292.6	1291.3	1289.9	1289.4	1289.9	1290.3	1290.8	1291.3	1292.0
157.5°	1319.3	1318.4	1317.6	1316.8	1315.9	1315.5	1315.6	1315.6	1315.7	1315.7	1316.4
160°	1335.9	1334.4	1333.1	1331.7	1330.3	1329.7	1330.0	1330.2	1330.4	1330.6	1331.6
162.5°	1349.1	1347.7	1346.3	1345.0	1343.5	1343.0	1343.2	1343.5	1343.7	1343.9	1345.2
165°	1366.9	1365.6	1364.1	1362.8	1361.4	1360.8	1361.0	1361.3	1361.5	1361.7	1363.2
167.5°	1380.2	1378.8	1377.3	1375.9	1374.5	1373.9	1374.1	1374.3	1374.6	1374.8	1376.4
170°	1387.7	1386.1	1384.4	1382.8	1381.2	1380.5	1380.7	1381.0	1381.2	1381.4	1383.3
172.5°	1392.6	1391.0	1389.4	1387.8	1386.2	1385.5	1386.0	1386.4	1386.8	1387.2	1388.9
175°	1398.0	1396.6	1395.3	1393.8	1392.5	1391.9	1392.1	1392.4	1392.6	1392.9	1394.6
177.5°	1400.5	1399.4	1398.3	1397.2	1396.1	1395.6	1395.8	1396.0	1396.2	1396.3	1397.7
180°	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6
2.5°	942.4	943.6	944.8	945.3	945.1	944.9	944.8	944.6
5°	939.6	941.2	942.9	943.6	943.3	943.2	943.0	942.8
7.5°	931.7	933.2	934.6	935.2	935.0	934.9	934.6	934.4
10°	924.3	925.8	927.2	927.8	927.6	927.5	927.2	927.0
12.5°	915.5	916.7	917.7	918.0	917.5	916.9	916.4	915.9
15°	898.9	900.2	901.4	901.6	900.8	899.9	899.1	898.3
17.5°	877.8	878.8	879.7	879.9	879.4	879.0	878.4	878.0
20°	861.6	862.2	862.8	863.1	863.1	863.1	863.1	863.1
22.5°	844.9	845.6	846.4	846.6	846.1	845.6	845.1	844.6
25°	818.5	819.3	820.1	820.0	818.9	818.0	816.9	815.9
27.5°	787.7	788.4	788.9	789.1	788.6	788.3	787.9	787.6
30°	766.7	767.1	767.5	767.7	767.4	767.2	767.0	766.8
32.5°	746.7	747.1	747.5	747.6	747.4	747.3	747.0	746.8
35°	714.3	715.0	715.6	715.9	715.9	715.9	715.9	715.9
37.5°	680.3	681.1	681.9	682.3	682.2	682.2	682.1	682.0
40°	657.3	658.2	659.0	659.6	660.0	660.4	660.8	661.2
42.5°	636.1	637.1	638.1	638.6	638.7	638.8	638.9	639.0
45°	602.1	603.5	604.9	605.7	606.0	606.2	606.4	606.6
47.5°	566.9	569.0	571.1	572.4	572.8	573.3	573.7	574.2
50°	543.5	545.8	548.0	549.5	550.1	550.7	551.3	552.0
52.5°	520.1	522.5	525.0	526.5	526.9	527.4	527.8	528.2
55°	483.3	485.6	487.9	489.4	490.2	491.1	491.9	492.7
57.5°	446.9	449.5	452.1	453.7	454.3	455.0	455.6	456.2
60°	422.0	425.1	428.2	430.0	430.6	431.2	431.9	432.5
62.5°	396.7	400.1	403.6	405.6	406.4	407.2	408.0	408.8
65°	359.0	362.1	365.2	367.1	368.0	368.8	369.6	370.4
67.5°	320.3	324.0	327.8	330.2	331.3	332.3	333.4	334.5
70°	294.0	297.9	301.8	304.3	305.6	306.8	308.1	309.3
72.5°	269.5	273.7	277.9	280.5	281.4	282.3	283.2	284.1
75°	232.4	236.5	240.6	243.2	244.2	245.2	246.2	247.3
77.5°	195.2	199.7	204.3	207.0	207.8	208.6	209.4	210.3
80°	173.0	177.5	182.0	184.7	185.6	186.4	187.2	188.0
82.5°	151.9	156.2	160.6	163.5	165.1	166.5	168.0	169.5
85°	123.0	127.5	132.1	135.1	136.8	138.4	140.1	141.7
87.5°	103.3	108.3	113.2	116.5	118.1	119.6	121.2	122.8
90°	104.3	110.2	116.1	120.0	122.2	124.3	126.4	128.6
92.5°	101.0	106.7	112.4	116.2	118.0	119.7	121.5	123.2
95°	95.5	101.2	106.9	110.5	111.9	113.3	114.8	116.2
97.5°	109.6	107.5	105.3	104.9	106.3	107.7	109.1	110.5
100°	179.6	149.6	119.6	104.8	105.1	105.4	105.8	106.0
102.5°	281.7	279.4	277.1	268.7	254.2	239.8	225.3	211.0
105°	368.0	372.1	376.2	378.9	380.1	381.3	382.5	383.7
107.5°	445.7	449.8	453.9	456.2	456.8	457.4	458.0	458.6
110°	495.6	498.8	502.0	504.4	506.1	507.8	509.5	511.1



TEST NUMBER: P333244-940

CATALOG NUMBER: S125DIP-S850D1205U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	545.0	547.9	550.7	552.7	553.8	555.0	556.1	557.2
115°	619.9	622.8	625.5	626.9	626.7	626.5	626.4	626.2
117.5°	691.9	694.2	696.4	698.0	698.8	699.6	700.4	701.2
120°	738.4	741.5	744.5	746.1	746.2	746.3	746.4	746.5
122.5°	782.4	785.3	788.2	789.5	789.4	789.3	789.3	789.2
125°	846.9	849.2	851.6	852.9	853.3	853.6	853.9	854.3
127.5°	905.1	907.6	910.2	911.2	910.6	910.2	909.6	909.1
130°	943.6	945.8	948.0	949.0	948.9	948.8	948.7	948.5
132.5°	979.1	981.8	984.5	985.8	985.5	985.2	984.9	984.6
135°	1030.6	1032.8	1035.0	1035.9	1035.5	1035.2	1034.8	1034.5
137.5°	1079.2	1081.7	1084.2	1085.3	1084.9	1084.6	1084.2	1083.9
140°	1108.9	1111.6	1114.4	1115.4	1114.9	1114.4	1113.7	1113.2
142.5°	1138.4	1140.4	1142.5	1143.2	1142.6	1142.0	1141.5	1140.9
145°	1180.8	1182.1	1183.4	1183.7	1183.1	1182.6	1182.1	1181.4
147.5°	1217.6	1218.3	1218.9	1218.5	1217.3	1215.9	1214.7	1213.4
150°	1241.4	1241.9	1242.3	1241.7	1240.1	1238.5	1236.8	1235.2
152.5°	1262.9	1263.5	1263.9	1263.3	1261.7	1260.1	1258.5	1256.9
155°	1292.6	1293.3	1294.1	1293.4	1291.6	1289.8	1287.9	1286.1
157.5°	1317.2	1317.9	1318.7	1318.1	1316.3	1314.5	1312.6	1310.7
160°	1332.5	1333.4	1334.4	1333.9	1332.0	1330.2	1328.4	1326.5
162.5°	1346.5	1347.8	1349.1	1348.7	1346.7	1344.6	1342.6	1340.6
165°	1364.5	1365.9	1367.3	1367.0	1365.2	1363.3	1361.5	1359.7
167.5°	1378.1	1379.7	1381.4	1381.3	1379.1	1377.1	1375.0	1373.0
170°	1385.1	1387.0	1388.8	1388.7	1386.6	1384.6	1382.5	1380.4
172.5°	1390.5	1392.2	1393.8	1393.7	1391.6	1389.6	1387.4	1385.4
175°	1396.5	1398.4	1400.2	1400.1	1398.0	1396.0	1393.8	1391.8
177.5°	1398.9	1400.3	1401.5	1401.4	1400.0	1398.5	1397.0	1395.5
180°	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0

(END OF REPORT)