

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: P333246-935

Luminaire Tested: **S125DIP-S850D1205U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333246-935
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-S850D1205U935-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 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: 6549.0 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

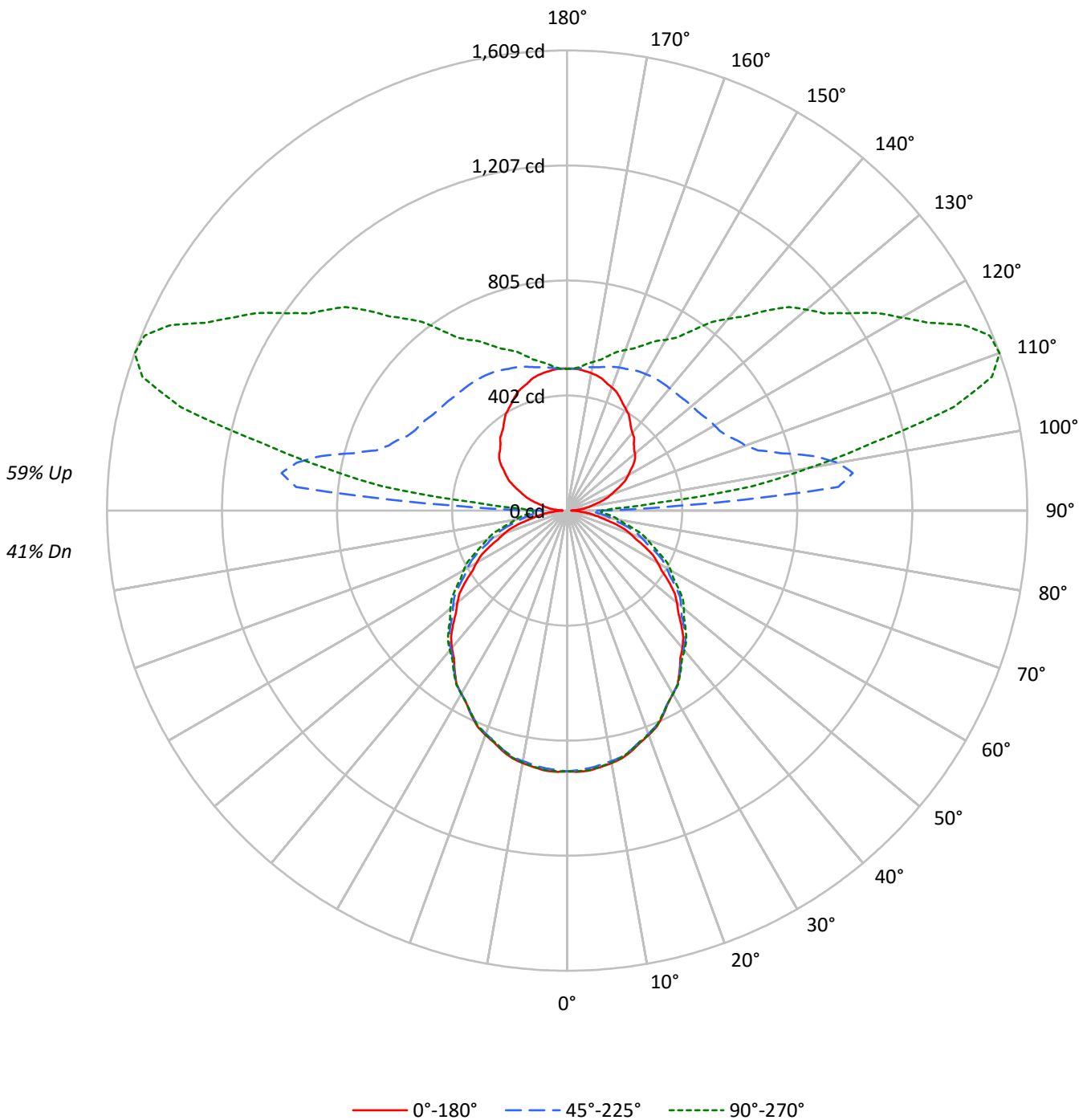
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333246-935

CATALOG NUMBER: S125DIP-S850D1205U935-4F0-1E-UDD-D4

Luminous Intensity Polar Plot





TEST NUMBER: P333246-935

CATALOG NUMBER: S125DIP-S850D1205U935-4F0-1E-UDD-D4

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	78	78	78		62	62	62		47	47	47	41
1	95	91	86	83	86	83	79	76	67	65	63		54	52	50		41	40	39	33
2	86	79	72	67	78	72	66	62	59	55	51		47	44	42		36	34	32	27
3	79	69	61	56	71	63	56	51	52	47	43		41	38	35		31	29	27	23
4	72	61	53	47	65	56	49	43	46	40	36		37	33	30		28	25	23	19
5	66	54	46	40	60	49	42	37	41	35	31		33	29	26		25	22	20	17
6	60	48	40	34	55	44	37	32	37	31	27		29	25	22		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	39	32	26	47	36	29	25	30	25	21		24	20	17		19	16	14	11
9	48	36	28	23	44	33	26	22	28	22	19		22	18	16		18	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17		21	17	14		16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5891	5891	5891
5°	5902	5782	5800
10°	5860	5679	5670
15°	5791	5555	5505
20°	5697	5402	5339
25°	5585	5239	5135
30°	5449	5059	4950
35°	5322	4893	4780
40°	5194	4719	4609
45°	5048	4570	4458
50°	4910	4408	4325
55°	4742	4256	4166
60°	4560	4082	4006
65°	4369	3900	3826
70°	4153	3651	3640
75°	3809	3412	3412
80°	3363	3122	3163
85°	2945	2924	3085



TEST NUMBER: P333246-935

CATALOG NUMBER: S125DIP-S850D1205U935-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.2	1.3
10°-20°	244.8	3.7
20°-30°	364.1	5.6
30°-40°	431.3	6.6
40°-50°	445.9	6.8
50°-60°	410.8	6.3
60°-70°	332.0	5.1
70°-80°	222.4	3.4
80°-90°	118.1	1.8
90°-100°	424.4	6.5
100°-110°	820.9	12.5
110°-120°	757.6	11.6
120°-130°	606.2	9.3
130°-140°	479.9	7.3
140°-150°	357.8	5.5
150°-160°	250.7	3.8
160°-170°	147.8	2.3
170°-180°	48.1	0.7
0°-30°	695.2	10.6
0°-40°	1126.5	17.2
0°-60°	1983.2	30.3
0°-90°	2655.7	40.6
90°-120°	2002.9	30.6
90°-150°	3446.8	52.6
90°-180°	3893.0	59.4
0°-180°	6549.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	912	912	912	912	912	
5°	912	910	904	911	910	86
15°	871	872	866	870	867	245
25°	791	794	789	792	788	364
35°	685	691	688	691	691	428
45°	564	574	578	584	586	435
55°	434	448	462	472	476	388
65°	299	319	341	354	358	296
75°	164	188	216	234	239	175
85°	49	79	110	129	137	52
90°	15	52	89	114	123	11
95°	45	133	952	486	326	44
105°	121	181	774	1495	1399	128
115°	207	256	617	1305	1533	204
125°	284	332	579	1033	1203	252
135°	330	396	561	855	990	256
145°	383	438	556	697	770	240
155°	436	469	542	613	639	201
165°	476	489	520	552	560	134
175°	495	495	499	505	503	47
180°	496	496	496	496	496	



TEST NUMBER: P333246-935

CATALOG NUMBER: S125DIP-S850D1205U935-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	914.2	914.0	913.6	913.3	912.9	912.2	911.1	910.0	908.9	907.8	908.9
5°	912.1	911.7	911.3	910.9	910.5	909.6	908.2	906.8	905.4	904.0	905.6
7.5°	904.0	903.9	903.7	903.5	903.4	902.6	901.2	899.7	898.3	896.9	898.3
10°	896.9	896.9	896.9	896.9	896.9	896.1	894.5	892.9	891.3	889.8	891.1
12.5°	886.8	887.0	887.2	887.3	887.5	886.9	885.7	884.4	883.1	881.8	883.0
15°	871.0	871.2	871.3	871.5	871.8	871.2	869.8	868.4	866.9	865.6	866.8
17.5°	850.2	850.6	851.0	851.4	851.8	851.3	849.9	848.5	847.1	845.8	846.6
20°	835.2	835.6	835.9	836.4	836.8	836.3	834.9	833.5	832.1	830.7	831.3
22.5°	818.0	818.7	819.4	820.2	820.9	820.4	818.9	817.3	815.8	814.2	815.0
25°	791.3	791.9	792.6	793.2	793.8	793.4	792.3	791.1	789.9	788.7	789.5
27.5°	761.6	762.6	763.4	764.3	765.2	764.9	763.6	762.2	760.9	759.6	760.1
30°	739.5	740.7	741.9	743.0	744.2	744.2	743.0	741.9	740.7	739.5	739.9
32.5°	719.5	720.5	721.5	722.6	723.6	723.7	722.8	721.9	721.1	720.2	720.6
35°	684.9	686.4	687.8	689.1	690.5	691.0	690.3	689.7	689.1	688.5	689.1
37.5°	650.4	651.7	653.0	654.3	655.6	656.1	655.8	655.7	655.5	655.3	656.1
40°	626.8	628.4	630.0	631.6	633.2	633.9	633.7	633.5	633.3	633.1	633.9
42.5°	601.1	603.1	605.2	607.3	609.3	610.6	611.1	611.5	611.9	612.3	613.3
45°	564.2	566.5	568.6	570.8	573.0	574.5	575.6	576.5	577.6	578.5	580.0
47.5°	526.5	528.6	530.5	532.6	534.6	536.5	538.2	539.9	541.6	543.3	545.4
50°	500.8	502.9	505.1	507.3	509.5	511.7	513.8	516.1	518.2	520.4	522.6
52.5°	473.6	476.2	478.9	481.6	484.2	486.9	489.6	492.2	494.9	497.6	499.9
55°	433.7	436.9	440.1	443.2	446.4	449.6	452.8	456.0	459.1	462.3	464.5
57.5°	392.9	396.7	400.5	404.3	408.2	411.9	415.6	419.2	422.8	426.5	429.0
60°	365.8	369.7	373.7	377.6	381.6	385.6	389.6	393.6	397.5	401.5	404.5
62.5°	339.2	343.2	347.2	351.2	355.2	359.3	363.6	367.9	372.1	376.4	379.8
65°	298.7	303.2	307.8	312.4	316.9	321.6	326.4	331.1	336.0	340.7	343.7
67.5°	260.4	264.8	269.2	273.6	278.0	282.7	287.5	292.4	297.2	302.0	305.7
70°	232.5	237.0	241.6	246.2	250.8	255.6	260.8	266.0	271.1	276.3	280.1
72.5°	205.3	210.0	214.7	219.5	224.2	229.4	235.1	240.7	246.3	252.0	256.1
75°	164.5	169.7	174.9	180.0	185.2	191.0	197.3	203.7	210.0	216.4	220.3
77.5°	125.4	131.3	137.3	143.3	149.2	155.2	161.4	167.5	173.6	179.8	184.1
80°	101.1	107.0	113.0	118.9	124.9	131.2	138.0	144.7	151.5	158.3	162.6
82.5°	78.9	85.2	91.4	97.7	104.0	110.6	117.5	124.4	131.3	138.3	142.5
85°	49.2	55.7	62.3	68.9	75.4	82.1	89.1	96.1	103.1	109.9	114.3
87.5°	28.1	34.7	41.4	48.2	54.9	61.9	68.9	76.0	83.0	90.1	94.9
90°	15.3	22.6	31.0	39.3	47.8	56.3	64.1	72.8	80.6	89.4	94.9
92.5°	25.1	33.6	47.9	66.1	89.2	124.8	186.4	284.9	391.3	393.0	336.0
95°	44.6	50.8	64.0	80.2	107.4	158.3	272.1	498.9	781.9	951.7	937.0
97.5°	65.3	71.2	81.5	97.1	121.6	159.6	236.9	404.8	700.2	1007.5	1162.4
100°	79.9	86.0	94.2	109.4	132.6	167.9	232.2	368.7	627.2	960.6	1215.0
102.5°	96.0	101.0	108.1	123.7	145.0	179.3	237.0	352.5	571.6	881.8	1178.3
105°	121.1	124.2	132.4	145.7	164.8	197.4	247.4	342.4	515.4	774.5	1065.6
107.5°	145.6	150.3	157.8	168.8	188.0	217.5	265.8	347.8	489.7	700.0	951.7
110°	163.3	167.7	174.1	185.5	202.9	232.9	279.5	354.0	480.7	664.3	886.1



TEST NUMBER: P333246-935

CATALOG NUMBER: S125DIP-S850D1205U935-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	181.8	185.6	190.8	201.6	218.6	247.5	292.3	362.7	477.9	642.2	836.7
115°	207.4	210.9	215.2	225.7	242.0	270.4	312.5	375.7	476.9	617.2	781.8
117.5°	230.6	234.5	238.6	248.5	266.5	293.5	333.5	391.2	479.5	602.6	747.1
120°	246.6	250.2	254.8	264.4	282.0	309.5	349.1	401.7	483.4	595.0	727.4
122.5°	262.7	265.2	268.6	277.9	296.8	324.2	363.6	413.6	486.3	588.1	710.0
125°	283.7	285.5	290.3	299.1	317.9	345.9	382.8	429.8	491.8	578.9	686.0
127.5°	299.5	302.2	308.4	319.6	339.7	367.2	402.3	445.1	499.0	572.3	663.7
130°	309.8	312.6	320.5	333.2	354.0	381.3	415.2	455.9	503.8	568.5	649.4
132.5°	317.1	320.9	330.5	345.0	366.8	393.8	427.0	464.8	508.8	565.7	636.9
135°	329.9	333.7	345.5	361.4	382.2	409.7	442.2	476.6	515.0	561.4	621.0
137.5°	346.1	349.0	360.1	375.9	396.3	424.4	453.3	485.6	521.5	559.4	607.3
140°	355.1	358.1	370.1	386.1	405.1	432.2	461.4	491.6	523.8	558.0	600.2
142.5°	366.3	368.3	379.4	395.2	413.3	438.6	466.1	494.5	525.0	557.4	594.5
145°	383.1	384.9	394.7	408.5	426.3	449.2	475.2	500.2	527.3	556.2	587.3
147.5°	399.8	401.0	409.6	422.6	438.2	458.4	481.2	503.9	528.2	553.6	580.4
150°	410.2	412.2	419.2	432.2	446.2	463.2	485.2	506.3	528.2	551.2	575.2
152.5°	421.4	422.6	428.8	440.2	453.4	468.8	489.2	507.8	527.4	548.0	569.6
155°	436.2	436.2	442.2	452.2	462.2	476.2	493.2	509.2	525.2	542.3	560.3
157.5°	449.4	449.2	454.0	462.6	471.4	482.0	496.6	510.2	522.6	536.2	551.5
160°	458.2	457.2	461.2	468.2	476.2	485.2	498.3	510.2	520.2	532.3	544.2
162.5°	465.4	464.4	468.4	474.6	481.0	488.4	499.8	509.5	517.8	527.4	537.9
165°	476.2	474.2	477.3	482.2	486.2	492.2	500.2	508.2	514.2	520.2	528.2
167.5°	483.5	482.4	484.2	487.0	489.8	493.6	500.2	505.8	508.6	513.2	518.8
170°	488.2	487.2	488.2	490.3	492.2	495.2	500.2	504.2	506.3	509.2	513.2
172.5°	491.5	489.7	490.6	492.6	493.8	495.2	499.4	502.7	503.0	504.5	507.6
175°	495.2	493.2	494.2	495.2	495.2	495.2	498.3	500.2	499.2	499.2	500.2
177.5°	497.1	495.4	495.4	496.2	495.4	495.4	497.1	497.8	496.2	496.2	497.1
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2



TEST NUMBER: P333246-935

CATALOG NUMBER: S125DIP-S850D1205U935-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	910.0	911.1	912.2	912.7	912.6	912.4	912.2	912.1
5°	907.2	908.8	910.4	911.1	910.9	910.7	910.5	910.3
7.5°	899.7	901.0	902.4	903.0	902.8	902.7	902.4	902.2
10°	892.5	893.9	895.3	895.9	895.7	895.5	895.3	895.1
12.5°	884.0	885.1	886.1	886.4	885.9	885.4	884.8	884.3
15°	868.0	869.2	870.4	870.6	869.8	868.9	868.1	867.4
17.5°	847.6	848.5	849.4	849.6	849.1	848.7	848.2	847.7
20°	831.9	832.5	833.1	833.4	833.4	833.4	833.4	833.4
22.5°	815.8	816.5	817.3	817.4	816.9	816.5	816.0	815.5
25°	790.3	791.1	791.9	791.8	790.7	789.8	788.8	787.8
27.5°	760.6	761.2	761.7	761.9	761.5	761.1	760.8	760.4
30°	740.3	740.7	741.1	741.2	741.0	740.8	740.6	740.4
32.5°	721.0	721.3	721.8	721.9	721.7	721.5	721.3	721.1
35°	689.7	690.3	691.0	691.2	691.2	691.2	691.2	691.2
37.5°	656.9	657.6	658.4	658.8	658.8	658.7	658.6	658.5
40°	634.6	635.5	636.3	636.9	637.2	637.7	638.1	638.4
42.5°	614.2	615.2	616.1	616.6	616.7	616.8	616.9	617.0
45°	581.3	582.7	584.1	584.9	585.1	585.3	585.5	585.7
47.5°	547.3	549.4	551.4	552.7	553.1	553.5	554.0	554.4
50°	524.8	527.0	529.2	530.5	531.2	531.8	532.4	533.0
52.5°	502.2	504.5	506.9	508.3	508.8	509.2	509.6	510.1
55°	466.7	468.9	471.1	472.5	473.3	474.2	474.9	475.7
57.5°	431.5	434.0	436.5	438.1	438.7	439.3	439.9	440.5
60°	407.4	410.4	413.5	415.2	415.8	416.4	417.0	417.6
62.5°	383.1	386.3	389.7	391.7	392.4	393.2	393.9	394.7
65°	346.6	349.7	352.6	354.5	355.3	356.1	356.9	357.7
67.5°	309.3	312.9	316.5	318.8	319.9	320.9	321.9	323.0
70°	283.9	287.7	291.4	293.9	295.1	296.3	297.5	298.7
72.5°	260.2	264.2	268.4	270.9	271.7	272.6	273.5	274.3
75°	224.4	228.3	232.3	234.8	235.7	236.8	237.7	238.8
77.5°	188.5	192.9	197.3	199.8	200.6	201.4	202.2	203.0
80°	167.0	171.4	175.7	178.3	179.2	179.9	180.7	181.5
82.5°	146.6	150.8	155.1	157.9	159.4	160.7	162.2	163.7
85°	118.7	123.1	127.5	130.4	132.1	133.6	135.3	136.8
87.5°	99.6	104.4	109.2	112.6	114.0	115.4	116.9	118.3
90°	100.5	106.1	111.6	116.6	118.0	119.4	121.7	123.1
92.5°	256.6	212.3	184.9	173.1	161.6	160.7	160.6	160.4
95°	793.3	645.7	526.9	445.8	376.2	347.5	341.0	326.3
97.5°	1140.4	1037.9	922.3	808.2	747.7	693.0	665.4	653.9
100°	1296.1	1251.3	1152.4	1051.0	983.2	912.3	876.5	861.7
102.5°	1346.6	1380.8	1335.4	1267.6	1194.9	1144.9	1105.9	1095.0
105°	1309.7	1450.7	1498.7	1490.4	1459.7	1428.1	1409.5	1399.0
107.5°	1192.5	1379.3	1496.2	1551.1	1568.5	1569.5	1564.2	1557.4
110°	1106.0	1299.9	1444.8	1532.4	1578.8	1599.2	1607.6	1609.0



TEST NUMBER: P333246-935

CATALOG NUMBER: S125DIP-S850D1205U935-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1037.2	1221.3	1367.6	1470.3	1537.6	1571.6	1590.4	1599.0
115°	950.5	1109.1	1249.7	1361.2	1440.4	1489.6	1518.8	1533.0
117.5°	892.5	1029.6	1151.0	1253.4	1332.7	1383.7	1412.9	1422.3
120°	860.8	984.3	1097.7	1188.0	1263.3	1312.5	1340.7	1349.9
122.5°	836.0	950.5	1051.8	1136.4	1203.7	1248.9	1277.0	1285.5
125°	800.3	905.5	995.7	1069.8	1126.9	1168.9	1191.9	1202.9
127.5°	763.7	861.9	946.1	1015.5	1067.5	1104.8	1126.8	1132.4
130°	741.2	832.0	912.8	979.7	1030.8	1064.8	1085.8	1092.8
132.5°	718.3	803.6	877.2	941.6	992.5	1026.3	1045.5	1053.2
135°	687.6	759.2	825.9	884.7	929.7	963.7	982.7	989.7
137.5°	661.9	720.1	775.7	825.6	865.8	896.6	914.0	921.4
140°	647.5	696.6	744.9	788.3	826.2	853.0	868.7	874.6
142.5°	635.0	676.7	718.2	755.9	788.1	810.9	825.9	830.9
145°	619.2	651.3	683.3	711.2	736.0	753.8	765.6	770.4
147.5°	605.1	630.6	654.8	675.5	694.9	708.9	715.6	717.7
150°	597.3	619.3	638.3	656.4	671.6	683.8	688.0	689.2
152.5°	589.3	608.9	626.3	640.3	653.0	662.6	666.7	667.7
155°	577.2	593.2	607.3	618.3	628.3	635.2	638.3	639.3
157.5°	565.2	578.4	589.3	597.9	605.6	611.5	614.2	614.1
160°	557.2	567.2	577.2	584.3	591.2	596.2	598.3	597.3
162.5°	548.5	557.7	566.0	572.2	577.6	581.9	582.3	582.0
165°	536.2	543.2	549.2	554.2	558.3	560.3	560.3	560.3
167.5°	524.6	529.3	533.8	537.4	539.4	541.2	540.4	540.3
170°	518.2	521.2	524.3	526.2	528.2	529.3	529.3	528.2
172.5°	511.0	514.0	516.3	517.5	517.8	519.6	518.1	517.0
175°	503.3	503.3	505.2	505.2	505.2	506.3	504.2	503.3
177.5°	497.8	498.6	498.6	498.6	497.8	498.6	496.2	496.2
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2

(END OF REPORT)