

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: P332031-930

Luminaire Tested: **S123DIP-S1000D1025U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332031-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIP-S1000D1025U930-4F0-1E-UDD-D1
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1025 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6296.7 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.08')
CIE Type: General Diffuse

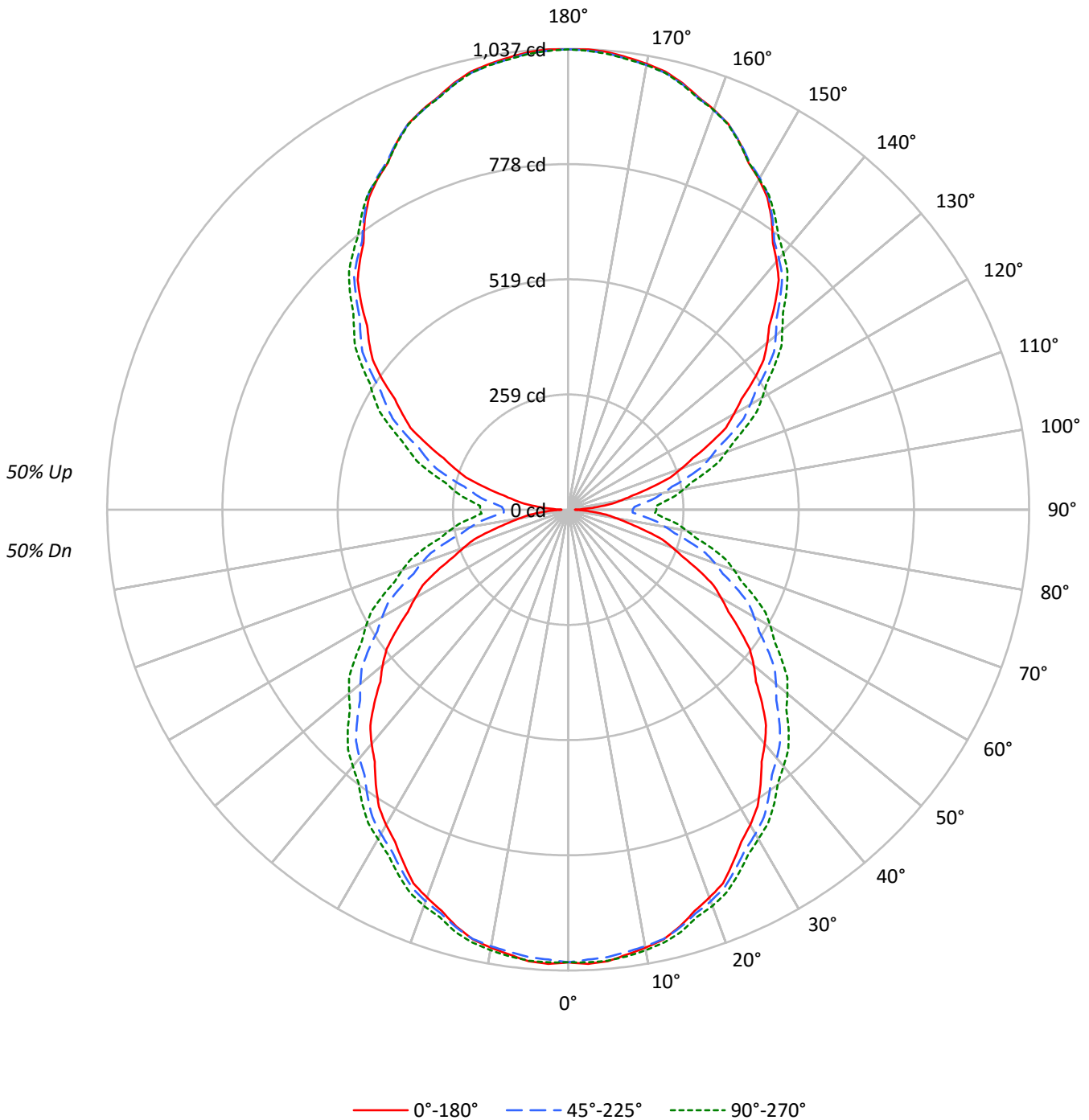
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332031-930

CATALOG NUMBER: S123DIP-S1000D1025U930-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P332031-930

CATALOG NUMBER: S123DIP-S1000D1025U930-4F0-1E-UDD-D1

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	81	78	71	69	66	59	57	55	48	46	45	40
2	88	80	73	68	80	74	68	63	62	58	54	51	48	45	41	39	37	33
3	80	70	62	56	73	64	58	52	54	49	45	45	41	38	36	34	31	27
4	73	61	53	47	67	57	50	44	48	42	38	40	36	32	32	29	27	23
5	67	55	46	40	61	51	43	37	43	37	33	36	31	28	29	26	23	20
6	61	49	41	35	56	45	38	32	39	33	28	32	28	24	26	23	20	17
7	57	44	36	30	52	41	34	28	35	29	25	29	25	21	24	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22	27	22	19	22	19	16	14
9	49	36	29	24	45	34	27	22	29	23	20	25	20	17	20	17	14	12
10	46	33	26	21	42	31	24	20	27	21	18	23	18	15	19	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10964	10964	10964
5°	10999	10689	10694
10°	10900	10443	10390
15°	10759	10162	10058
20°	10559	9844	9692
25°	10311	9476	9308
30°	10057	9145	8918
35°	9773	8796	8606
40°	9500	8479	8272
45°	9199	8172	8007
50°	8904	7871	7713
55°	8574	7562	7449
60°	8255	7248	7178
65°	7926	6915	6856
70°	7430	6538	6527
75°	6807	6107	6190
80°	6087	5683	5807
85°	5426	5394	5585



TEST NUMBER: P332031-930

CATALOG NUMBER: S123DIP-S1000D1025U930-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.6	1.5
10°-20°	275.3	4.4
20°-30°	411.7	6.5
30°-40°	491.7	7.8
40°-50°	514.4	8.2
50°-60°	482.8	7.7
60°-70°	403.2	6.4
70°-80°	288.5	4.6
80°-90°	175.1	2.8
90°-100°	175.4	2.8
100°-110°	281.3	4.5
110°-120°	396.5	6.3
120°-130°	482.2	7.7
130°-140°	521.5	8.3
140°-150°	502.2	8.0
150°-160°	420.4	6.7
160°-170°	279.8	4.4
170°-180°	98.0	1.6
0°-30°	783.6	12.4
0°-40°	1275.2	20.3
0°-60°	2272.4	36.1
0°-90°	3139.2	49.9
90°-120°	853.3	13.6
90°-150°	2359.3	37.5
90°-180°	3157.0	50.1
0°-180°	6296.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1019	1019	1019	1019	1019	
5°	1020	1017	1011	1019	1019	97
15°	971	974	973	984	983	273
25°	877	887	891	905	906	404
35°	755	772	787	803	808	472
45°	617	644	671	692	701	476
55°	470	507	547	576	586	421
65°	325	369	417	449	462	321
75°	176	229	284	319	334	188
85°	54	110	169	205	218	57
90°	15	78	145	184	199	13
95°	60	110	170	206	219	64
105°	192	222	275	305	318	205
115°	351	368	406	432	441	348
125°	510	514	542	562	567	455
135°	659	663	674	690	695	508
145°	798	798	801	808	810	498
155°	912	912	913	916	911	420
165°	994	991	991	996	990	280
175°	1034	1030	1030	1035	1030	98
180°	1036	1036	1036	1036	1036	



TEST NUMBER: P332031-930

CATALOG NUMBER: S123DIP-S1000D1025U930-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1018.6	1018.6	1018.6	1018.6	1018.6	1018.6	1018.6	1018.6	1018.6	1018.6	1018.6
2.5°	1023.1	1022.5	1021.9	1021.3	1020.8	1019.6	1018.1	1016.5	1014.9	1013.3	1014.9
5°	1019.8	1019.3	1018.8	1018.3	1017.8	1016.8	1015.4	1013.8	1012.4	1010.9	1012.8
7.5°	1009.7	1009.9	1010.0	1010.1	1010.2	1009.5	1008.1	1006.7	1005.2	1003.8	1006.2
10°	1000.9	1001.4	1001.9	1002.4	1002.9	1002.5	1001.3	1000.0	998.8	997.6	1000.0
12.5°	990.3	990.9	991.6	992.3	993.0	993.0	992.1	991.2	990.4	989.6	991.9
15°	970.9	971.7	972.4	973.1	973.9	974.1	973.9	973.6	973.4	973.1	975.7
17.5°	946.6	948.0	949.5	951.0	952.4	953.2	953.1	952.9	952.8	952.8	955.0
20°	928.8	930.3	931.7	933.2	934.7	935.7	936.2	936.7	937.2	937.7	939.9
22.5°	910.1	911.6	913.1	914.6	916.1	917.1	917.9	918.5	919.2	919.9	922.7
25°	876.6	879.1	881.6	884.0	886.5	888.1	888.8	889.6	890.3	891.0	894.2
27.5°	842.9	845.7	848.5	851.3	854.1	856.3	857.9	859.5	861.0	862.7	865.4
30°	818.9	822.1	825.3	828.5	831.8	834.3	836.3	838.3	840.2	842.2	845.2
32.5°	792.3	795.9	799.5	803.1	806.7	809.8	812.4	814.9	817.5	820.0	823.2
35°	754.6	758.5	762.5	766.4	770.4	773.9	777.1	780.3	783.5	786.8	790.4
37.5°	714.6	719.1	723.5	727.9	732.4	736.5	740.5	744.4	748.4	752.4	756.5
40°	687.9	692.4	696.8	701.3	705.7	710.5	715.3	720.3	725.2	730.2	734.3
42.5°	658.7	664.1	669.5	675.0	680.4	685.7	690.8	695.9	701.1	706.2	710.8
45°	616.9	622.9	628.8	634.7	640.7	646.7	652.8	659.0	665.2	671.3	676.0
47.5°	573.2	579.9	586.7	593.4	600.1	607.0	614.0	621.1	628.1	635.2	640.4
50°	544.9	551.7	558.6	565.6	572.4	579.8	587.3	595.0	602.7	610.3	616.0
52.5°	514.6	522.0	529.3	536.5	543.9	551.7	560.2	568.6	577.0	585.5	591.3
55°	470.5	478.7	486.7	494.9	503.0	511.5	520.4	529.3	538.2	547.1	553.8
57.5°	427.5	435.9	444.4	452.9	461.4	470.5	480.2	489.9	499.6	509.3	516.0
60°	397.3	406.1	415.0	423.9	432.8	442.2	452.3	462.5	472.6	482.7	489.6
62.5°	368.8	377.9	387.0	396.1	405.1	415.1	425.7	436.4	447.1	457.9	464.7
65°	325.1	334.8	344.4	354.0	363.6	373.8	384.7	395.5	406.3	417.3	424.6
67.5°	280.7	291.0	301.2	311.4	321.6	332.2	343.2	354.3	365.3	376.4	384.5
70°	249.6	260.2	270.8	281.5	292.1	303.3	315.1	327.0	338.8	350.7	358.6
72.5°	221.3	231.9	242.5	253.1	263.7	275.1	287.3	299.5	311.8	324.0	332.1
75°	176.4	188.0	199.6	211.2	222.8	234.7	247.1	259.4	271.7	284.1	292.2
77.5°	137.4	149.0	160.8	172.4	184.1	196.2	208.6	221.0	233.5	245.9	254.5
80°	109.8	122.0	134.0	146.1	158.2	170.6	183.4	196.3	209.1	221.9	230.3
82.5°	85.9	98.2	110.5	122.7	135.0	147.7	160.7	173.7	186.7	199.7	208.1
85°	54.4	66.7	79.0	91.4	103.7	116.4	129.5	142.5	155.6	168.7	177.1
87.5°	29.7	42.3	55.0	67.6	80.2	93.1	106.2	119.2	132.2	145.3	153.8
90°	15.2	29.1	43.0	56.9	70.8	85.2	100.1	115.0	130.0	145.0	154.0
92.5°	33.3	45.3	57.5	69.6	81.8	94.7	108.4	122.1	135.8	149.5	158.3
95°	60.3	71.1	82.0	92.9	103.8	115.9	129.5	143.0	156.5	170.1	178.5
97.5°	96.2	105.8	115.4	125.0	134.6	145.8	158.3	171.0	183.5	196.1	204.3
100°	120.7	129.6	138.6	147.6	156.5	167.2	179.4	191.7	203.9	216.1	223.9
102.5°	149.1	156.9	164.6	172.4	180.1	190.1	202.4	214.8	227.1	239.5	247.0
105°	192.0	198.3	204.6	210.8	217.1	226.3	238.6	250.9	263.1	275.3	282.2
107.5°	240.8	246.1	251.3	256.6	261.8	269.8	280.5	291.2	301.9	312.6	319.8
110°	271.2	276.0	280.8	285.5	290.3	297.8	308.1	318.3	328.6	338.8	345.9



TEST NUMBER: P332031-930

CATALOG NUMBER: S123DIP-S1000D1025U930-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	303.7	307.6	311.4	315.3	319.2	325.9	335.4	345.0	354.5	364.0	371.1
115°	351.4	354.9	358.4	361.9	365.4	371.5	379.9	388.5	397.0	405.5	411.6
117.5°	400.4	402.5	404.7	406.9	409.1	414.2	422.0	429.8	437.7	445.6	451.4
120°	430.1	432.4	434.7	437.0	439.4	444.1	451.3	458.6	465.9	473.0	478.6
122.5°	461.9	463.4	464.9	466.3	467.7	472.1	479.3	486.7	493.9	501.2	506.1
125°	509.6	510.1	510.6	511.2	511.7	515.4	522.2	529.0	535.7	542.5	547.0
127.5°	554.5	555.4	556.3	557.2	558.1	561.3	566.9	572.3	577.9	583.4	587.3
130°	584.4	585.6	586.8	588.0	589.2	592.0	596.4	600.8	605.2	609.6	613.5
132.5°	613.4	614.9	616.3	617.7	619.1	621.5	625.1	628.6	632.2	635.7	639.4
135°	659.0	659.8	660.6	661.5	662.3	664.1	666.6	669.1	671.6	674.2	677.8
137.5°	701.1	701.8	702.5	703.2	703.9	705.2	707.3	709.2	711.3	713.2	716.4
140°	729.5	730.4	731.3	732.2	733.1	734.0	734.9	735.9	736.8	737.7	741.2
142.5°	756.2	756.9	757.6	758.3	759.0	759.6	760.1	760.6	761.0	761.5	764.6
145°	797.9	797.9	798.1	798.2	798.3	798.7	799.2	799.7	800.3	800.8	802.6
147.5°	833.2	833.9	834.5	835.2	835.8	836.4	836.9	837.4	837.9	838.5	839.0
150°	858.6	859.0	859.3	859.7	860.1	860.4	860.8	861.1	861.5	861.9	861.9
152.5°	879.5	880.0	880.4	880.9	881.4	881.8	882.1	882.2	882.5	882.7	883.0
155°	912.3	912.3	912.3	912.3	912.3	912.4	912.6	912.7	913.0	913.1	913.9
157.5°	940.3	940.1	939.9	939.6	939.5	939.4	939.6	939.7	939.9	940.0	940.8
160°	957.9	957.5	957.2	956.8	956.4	956.3	956.3	956.3	956.3	956.3	957.2
162.5°	973.5	973.0	972.5	972.0	971.5	971.3	971.4	971.6	971.8	971.9	972.8
165°	993.7	993.1	992.6	992.1	991.6	991.2	991.2	991.2	991.2	991.2	992.3
167.5°	1009.8	1009.1	1008.4	1007.6	1006.9	1006.7	1006.8	1006.9	1007.1	1007.2	1008.4
170°	1019.0	1018.2	1017.5	1016.8	1016.0	1015.7	1015.7	1015.7	1015.7	1015.7	1016.9
172.5°	1026.1	1025.4	1024.7	1023.9	1023.2	1022.8	1022.8	1022.8	1022.8	1022.8	1023.9
175°	1033.6	1032.8	1032.1	1031.4	1030.7	1030.3	1030.3	1030.3	1030.3	1030.3	1031.4
177.5°	1036.7	1036.1	1035.5	1034.9	1034.4	1034.0	1034.0	1034.0	1034.0	1034.0	1034.9
180°	1036.0	1036.0	1036.0	1036.0	1036.0	1036.0	1036.0	1036.0	1036.0	1036.0	1036.0



TEST NUMBER: P332031-930

CATALOG NUMBER: S123DIP-S1000D1025U930-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1018.6	1018.6	1018.6	1018.6	1018.6	1018.6	1018.6	1018.6
2.5°	1016.5	1018.1	1019.6	1020.3	1020.1	1019.9	1019.8	1019.5
5°	1014.8	1016.8	1018.8	1019.6	1019.4	1019.1	1018.9	1018.6
7.5°	1008.7	1011.2	1013.7	1014.7	1014.5	1014.2	1013.8	1013.6
10°	1002.5	1004.9	1007.5	1008.4	1008.0	1007.5	1007.0	1006.5
12.5°	994.1	996.4	998.7	999.6	999.1	998.6	998.1	997.6
15°	978.1	980.6	983.0	984.1	983.9	983.7	983.4	983.2
17.5°	957.2	959.4	961.6	962.5	962.2	961.9	961.6	961.2
20°	942.1	944.3	946.6	947.8	948.0	948.3	948.5	948.8
22.5°	925.5	928.3	931.2	932.5	932.3	932.2	932.1	931.9
25°	897.5	900.7	903.8	905.5	905.5	905.5	905.5	905.5
27.5°	868.1	870.9	873.7	875.1	875.4	875.5	875.8	876.0
30°	848.2	851.1	854.0	855.6	855.6	855.6	855.6	855.6
32.5°	826.4	829.5	832.7	834.5	835.1	835.7	836.3	836.9
35°	794.1	797.9	801.5	803.9	804.9	805.8	806.8	807.8
37.5°	760.8	764.9	769.2	771.6	772.4	773.1	774.0	774.8
40°	738.5	742.7	746.9	749.5	750.5	751.5	752.4	753.4
42.5°	715.3	719.9	724.6	727.5	728.9	730.3	731.6	733.0
45°	680.7	685.4	690.1	693.4	695.4	697.3	699.4	701.3
47.5°	645.7	651.0	656.2	659.7	661.2	662.8	664.2	665.8
50°	621.7	627.3	633.0	636.7	638.5	640.2	641.9	643.6
52.5°	597.2	603.1	608.9	612.9	615.1	617.2	619.3	621.4
55°	560.4	567.0	573.7	578.0	580.0	582.0	583.9	585.9
57.5°	522.8	529.5	536.1	540.7	543.0	545.3	547.6	549.9
60°	496.5	503.4	510.3	515.1	517.9	520.6	523.3	525.9
62.5°	471.7	478.6	485.4	490.2	492.7	495.2	497.7	500.3
65°	432.0	439.4	446.8	451.8	454.2	456.6	459.2	461.6
67.5°	392.6	400.6	408.7	413.8	415.9	418.0	420.0	422.1
70°	366.4	374.3	382.2	387.4	389.9	392.3	394.8	397.3
72.5°	340.2	348.3	356.4	361.7	364.1	366.6	369.1	371.5
75°	300.4	308.5	316.6	322.2	325.1	328.1	331.0	334.0
77.5°	263.1	271.7	280.2	285.7	287.9	290.2	292.4	294.7
80°	238.7	247.1	255.4	260.9	263.3	265.8	268.3	270.8
82.5°	216.5	224.9	233.3	238.7	241.2	243.6	246.1	248.6
85°	185.4	193.8	202.2	207.7	210.1	212.5	215.0	217.5
87.5°	162.3	170.9	179.4	184.9	187.4	190.0	192.6	195.1
90°	163.1	172.3	181.3	187.4	190.1	193.0	195.8	198.6
92.5°	167.1	175.9	184.6	190.0	192.1	194.1	196.2	198.2
95°	186.8	195.2	203.6	209.0	211.4	213.9	216.4	218.8
97.5°	212.5	220.6	228.9	234.2	236.5	238.9	241.3	243.7
100°	231.5	239.3	247.0	252.2	255.0	257.9	260.7	263.5
102.5°	254.5	262.0	269.5	274.4	276.8	279.2	281.6	284.0
105°	289.1	296.0	302.9	307.6	310.2	312.8	315.4	318.0
107.5°	327.0	334.2	341.4	345.9	347.9	349.8	351.8	353.8
110°	353.0	360.2	367.3	371.7	373.3	374.9	376.5	378.1



TEST NUMBER: P332031-930

CATALOG NUMBER: S123DIP-S1000D1025U930-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	378.2	385.3	392.4	397.0	399.1	401.1	403.2	405.4
115°	417.7	423.8	429.9	433.8	435.6	437.4	439.2	441.0
117.5°	457.2	463.1	469.0	472.5	473.9	475.4	476.8	478.3
120°	484.0	489.5	495.0	498.5	499.8	501.2	502.6	503.9
122.5°	511.2	516.2	521.2	524.3	525.5	526.8	528.0	529.2
125°	551.5	555.9	560.4	563.0	564.1	565.1	566.1	567.1
127.5°	591.2	595.0	598.9	601.2	602.1	602.9	603.8	604.6
130°	617.5	621.4	625.4	627.5	627.7	627.9	628.1	628.4
132.5°	642.9	646.6	650.2	652.4	653.1	653.8	654.4	655.2
135°	681.6	685.3	689.0	691.3	692.2	693.1	693.9	694.8
137.5°	719.5	722.7	725.8	727.7	728.2	728.7	729.3	729.9
140°	744.8	748.3	751.8	753.5	753.5	753.4	753.4	753.4
142.5°	767.8	770.9	774.0	775.7	775.9	776.2	776.5	776.7
145°	804.4	806.2	808.0	809.0	809.3	809.5	809.8	810.1
147.5°	839.6	840.2	840.8	841.0	840.8	840.6	840.4	840.2
150°	861.9	861.9	861.9	861.5	861.0	860.4	859.8	859.2
152.5°	883.3	883.5	883.9	883.5	882.7	881.9	881.0	880.2
155°	914.6	915.3	916.0	915.7	914.5	913.2	911.9	910.7
157.5°	941.5	942.2	943.1	942.9	941.9	940.9	939.9	938.8
160°	958.1	959.0	959.9	959.9	959.3	958.5	957.8	957.1
162.5°	973.7	974.6	975.5	975.3	974.2	973.1	971.9	970.8
165°	993.4	994.5	995.6	995.5	994.3	993.0	991.7	990.4
167.5°	1009.4	1010.6	1011.7	1011.7	1010.6	1009.4	1008.4	1007.2
170°	1018.2	1019.5	1020.8	1020.8	1019.5	1018.2	1016.9	1015.7
172.5°	1025.1	1026.2	1027.3	1027.3	1026.0	1024.7	1023.4	1022.1
175°	1032.5	1033.6	1034.7	1034.5	1033.3	1032.0	1030.8	1029.5
177.5°	1035.8	1036.7	1037.5	1037.5	1036.5	1035.4	1034.5	1033.4
180°	1036.0	1036.0	1036.0	1036.0	1036.0	1036.0	1036.0	1036.0

(END OF REPORT)