

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: P332031-927

Luminaire Tested: **S123DIP-S1000D1025U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332031-927
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-S1000D1025U927-4F0-1E-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: 6118.1 lumens
Efficiency: N/A
Efficacy: 101.1 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

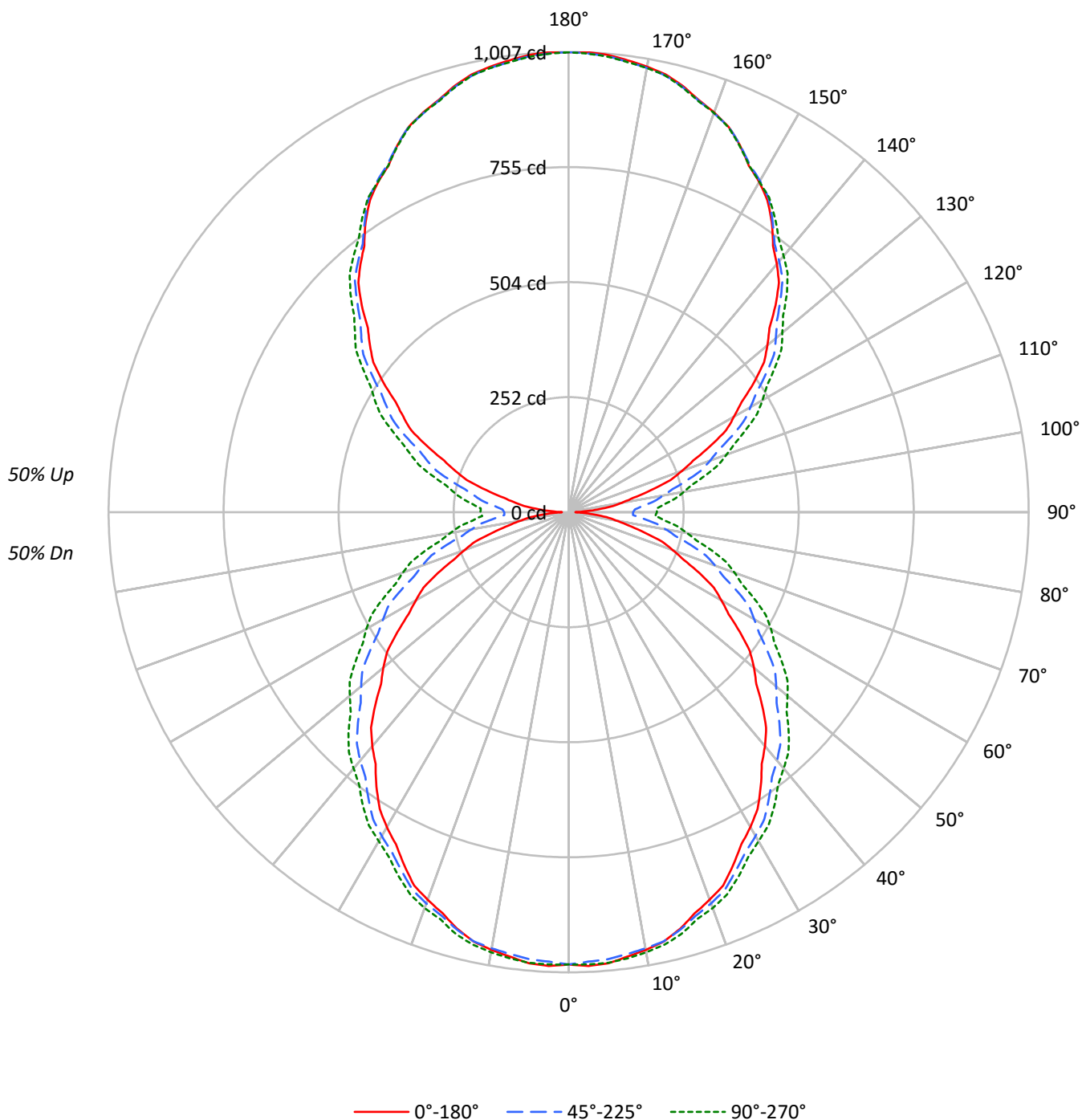
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332031-927

CATALOG NUMBER: S123DIP-S1000D1025U927-4F0-1E-UDD-D1

Luminous Intensity Polar Plot



TEST NUMBER: P332031-927

CATALOG NUMBER: S123DIP-S1000D1025U927-4F0-1E-UDD-D1

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	10654	10654	10654
5°	10687	10385	10392
10°	10592	10146	10095
15°	10455	9874	9773
20°	10260	9565	9418
25°	10019	9208	9043
30°	9772	8886	8665
35°	9496	8547	8362
40°	9231	8238	8039
45°	8938	7941	7779
50°	8650	7648	7494
55°	8332	7348	7238
60°	8020	7044	6974
65°	7702	6718	6661
70°	7222	6352	6341
75°	6614	5933	6016
80°	5915	5522	5642
85°	5267	5241	5428

TEST NUMBER: P332031-927

CATALOG NUMBER: S123DIP-S1000D1025U927-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.8	1.5
10°-20°	267.5	4.4
20°-30°	400.0	6.5
30°-40°	477.7	7.8
40°-50°	499.9	8.2
50°-60°	469.1	7.7
60°-70°	391.8	6.4
70°-80°	280.3	4.6
80°-90°	170.1	2.8
90°-100°	170.5	2.8
100°-110°	273.4	4.5
110°-120°	385.3	6.3
120°-130°	468.5	7.7
130°-140°	506.8	8.3
140°-150°	488.0	8.0
150°-160°	408.5	6.7
160°-170°	271.9	4.4
170°-180°	95.2	1.6
0°-30°	761.3	12.4
0°-40°	1239.1	20.3
0°-60°	2208.0	36.1
0°-90°	3050.2	49.9
90°-120°	829.1	13.6
90°-150°	2292.4	37.5
90°-180°	3068.0	50.1
0°-180°	6118.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	990	990	990	990	990	
5°	991	988	982	990	990	94
15°	943	946	946	956	955	266
25°	852	862	866	879	880	392
35°	733	750	764	780	785	458
45°	599	625	652	672	681	462
55°	457	493	532	560	569	409
65°	316	358	405	436	448	312
75°	171	222	276	310	325	183
85°	53	107	164	199	211	55
90°	15	76	141	179	193	12
95°	58	107	165	200	213	62
105°	187	215	268	297	309	199
115°	341	358	394	420	428	338
125°	495	499	527	546	551	442
135°	640	644	655	671	675	493
145°	775	776	778	786	787	484
155°	886	886	887	890	885	408
165°	966	963	963	967	962	272
175°	1004	1001	1001	1005	1000	95
180°	1007	1007	1007	1007	1007	

TEST NUMBER: P332031-927

CATALOG NUMBER: S123DIP-S1000D1025U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8
2.5°	994.1	993.6	992.9	992.4	991.8	990.7	989.2	987.7	986.1	984.6	986.1
5°	990.9	990.4	989.9	989.4	989.0	988.0	986.6	985.1	983.7	982.2	984.1
7.5°	981.1	981.3	981.4	981.4	981.5	980.9	979.5	978.1	976.7	975.3	977.7
10°	972.6	973.0	973.5	974.0	974.5	974.1	972.9	971.7	970.5	969.3	971.7
12.5°	962.2	962.8	963.5	964.2	964.9	964.8	964.0	963.1	962.3	961.6	963.8
15°	943.4	944.1	944.8	945.5	946.3	946.5	946.3	946.0	945.8	945.5	948.0
17.5°	919.7	921.1	922.6	924.0	925.4	926.1	926.1	925.9	925.8	925.7	927.9
20°	902.5	903.9	905.3	906.7	908.2	909.2	909.7	910.1	910.6	911.1	913.2
22.5°	884.3	885.7	887.2	888.7	890.1	891.1	891.8	892.5	893.2	893.8	896.5
25°	851.8	854.1	856.6	859.0	861.3	862.9	863.6	864.4	865.1	865.8	868.9
27.5°	819.0	821.7	824.4	827.2	829.9	832.0	833.6	835.1	836.6	838.2	840.9
30°	795.7	798.8	801.9	805.0	808.2	810.6	812.6	814.5	816.4	818.3	821.3
32.5°	769.8	773.3	776.8	780.3	783.8	786.8	789.3	791.8	794.3	796.8	799.9
35°	733.2	737.0	740.8	744.7	748.5	751.9	755.1	758.2	761.3	764.5	768.0
37.5°	694.3	698.7	703.0	707.3	711.6	715.7	719.5	723.3	727.1	731.0	735.1
40°	668.4	672.8	677.1	681.4	685.7	690.3	695.1	699.9	704.6	709.5	713.5
42.5°	640.0	645.3	650.5	655.8	661.1	666.2	671.2	676.2	681.2	686.2	690.6
45°	599.4	605.2	611.0	616.7	622.5	628.4	634.3	640.3	646.3	652.3	656.9
47.5°	557.0	563.5	570.1	576.6	583.0	589.8	596.6	603.5	610.3	617.2	622.3
50°	529.4	536.1	542.8	549.5	556.2	563.3	570.7	578.1	585.6	593.0	598.5
52.5°	500.0	507.2	514.3	521.3	528.5	536.1	544.3	552.5	560.6	568.9	574.6
55°	457.2	465.1	472.9	480.9	488.8	497.0	505.6	514.3	522.9	531.6	538.1
57.5°	415.3	423.6	431.8	440.1	448.3	457.2	466.6	476.0	485.4	494.9	501.4
60°	386.0	394.6	403.2	411.9	420.5	429.7	439.5	449.4	459.2	469.1	475.7
62.5°	358.4	367.2	376.0	384.8	393.6	403.3	413.7	424.1	434.4	444.9	451.5
65°	315.9	325.3	334.6	344.0	353.3	363.2	373.8	384.3	394.8	405.4	412.6
67.5°	272.7	282.7	292.6	302.5	312.4	322.8	333.5	344.3	355.0	365.8	373.6
70°	242.6	252.9	263.2	273.5	283.8	294.7	306.2	317.7	329.2	340.7	348.4
72.5°	215.0	225.3	235.6	245.9	256.2	267.3	279.2	291.0	302.9	314.8	322.7
75°	171.4	182.7	193.9	205.3	216.5	228.1	240.1	252.1	264.0	276.0	283.9
77.5°	133.5	144.8	156.2	167.5	178.9	190.6	202.7	214.8	226.9	238.9	247.2
80°	106.7	118.5	130.2	142.0	153.7	165.8	178.2	190.8	203.2	215.6	223.8
82.5°	83.4	95.4	107.3	119.2	131.2	143.5	156.1	168.7	181.4	194.1	202.2
85°	52.8	64.8	76.8	88.8	100.8	113.1	125.8	138.5	151.1	163.9	172.1
87.5°	28.8	41.1	53.4	65.7	78.0	90.5	103.1	115.8	128.5	141.2	149.4
90°	14.8	28.3	41.8	55.3	68.8	82.8	97.3	111.8	126.3	140.9	149.6
92.5°	32.3	44.0	55.8	67.7	79.5	92.0	105.3	118.7	132.0	145.3	153.8
95°	58.5	69.1	79.7	90.2	100.8	112.6	125.8	138.9	152.1	165.2	173.4
97.5°	93.5	102.8	112.2	121.4	130.8	141.6	153.8	166.1	178.3	190.5	198.5
100°	117.2	126.0	134.7	143.4	152.1	162.5	174.4	186.2	198.1	210.0	217.5
102.5°	144.9	152.4	159.9	167.5	175.0	184.7	196.7	208.7	220.7	232.7	240.0
105°	186.6	192.7	198.8	204.9	211.0	219.9	231.8	243.8	255.6	267.5	274.2
107.5°	233.9	239.1	244.2	249.3	254.4	262.1	272.5	283.0	293.3	303.7	310.7
110°	263.5	268.2	272.8	277.4	282.1	289.4	299.4	309.3	319.2	329.2	336.1

TEST NUMBER: P332031-927

CATALOG NUMBER: S123DIP-S1000D1025U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	295.1	298.9	302.6	306.3	310.1	316.6	325.9	335.2	344.4	353.7	360.6
115°	341.4	344.8	348.2	351.6	355.1	360.9	369.2	377.5	385.7	394.0	400.0
117.5°	389.0	391.1	393.2	395.4	397.5	402.4	410.0	417.6	425.3	432.9	438.6
120°	417.9	420.2	422.4	424.6	426.9	431.5	438.6	445.6	452.7	459.6	465.0
122.5°	448.9	450.3	451.7	453.0	454.5	458.7	465.7	472.9	479.9	487.0	491.8
125°	495.1	495.6	496.1	496.7	497.2	500.7	507.4	514.0	520.5	527.1	531.5
127.5°	538.8	539.6	540.5	541.4	542.2	545.4	550.8	556.1	561.5	566.9	570.6
130°	567.8	569.0	570.1	571.3	572.5	575.2	579.5	583.8	588.0	592.3	596.1
132.5°	596.0	597.5	598.8	600.2	601.5	603.9	607.4	610.8	614.3	617.7	621.2
135°	640.3	641.1	641.9	642.8	643.6	645.2	647.7	650.1	652.6	655.1	658.6
137.5°	681.2	681.9	682.5	683.3	684.0	685.2	687.2	689.1	691.1	693.0	696.1
140°	708.8	709.7	710.6	711.5	712.3	713.2	714.1	715.0	715.9	716.8	720.2
142.5°	734.7	735.5	736.1	736.8	737.5	738.1	738.6	739.0	739.4	739.9	742.9
145°	775.2	775.3	775.5	775.5	775.7	776.0	776.5	777.1	777.6	778.1	779.8
147.5°	809.6	810.2	810.9	811.5	812.1	812.7	813.2	813.7	814.1	814.7	815.2
150°	834.2	834.6	835.0	835.3	835.7	836.0	836.4	836.7	837.1	837.4	837.4
152.5°	854.5	855.0	855.5	856.0	856.4	856.8	857.1	857.2	857.5	857.7	857.9
155°	886.5	886.5	886.5	886.5	886.5	886.5	886.7	886.8	887.1	887.2	888.0
157.5°	913.6	913.5	913.2	913.0	912.8	912.8	912.9	913.1	913.2	913.3	914.1
160°	930.7	930.3	930.0	929.7	929.3	929.2	929.2	929.2	929.2	929.2	930.0
162.5°	945.9	945.4	944.9	944.4	944.0	943.8	943.9	944.0	944.2	944.4	945.2
165°	965.5	965.0	964.5	963.9	963.5	963.1	963.1	963.1	963.1	963.1	964.2
167.5°	981.2	980.5	979.8	979.1	978.3	978.1	978.3	978.3	978.5	978.7	979.8
170°	990.1	989.4	988.6	987.9	987.2	986.9	986.9	986.9	986.9	986.9	988.1
172.5°	997.0	996.3	995.6	994.9	994.2	993.8	993.8	993.8	993.8	993.8	994.9
175°	1004.2	1003.5	1002.8	1002.2	1001.5	1001.1	1001.1	1001.1	1001.1	1001.1	1002.2
177.5°	1007.3	1006.7	1006.2	1005.6	1005.0	1004.7	1004.7	1004.7	1004.7	1004.7	1005.6
180°	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6

TEST NUMBER: P332031-927

CATALOG NUMBER: S123DIP-S1000D1025U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	989.8	989.8	989.8	989.8	989.8	989.8	989.8	989.8
2.5°	987.7	989.2	990.7	991.4	991.2	991.0	990.9	990.6
5°	986.0	988.0	989.9	990.7	990.5	990.2	990.0	989.8
7.5°	980.1	982.5	984.9	986.0	985.7	985.4	985.1	984.8
10°	974.1	976.4	978.9	979.9	979.4	978.9	978.4	977.9
12.5°	965.9	968.1	970.3	971.2	970.7	970.3	969.8	969.3
15°	950.4	952.8	955.1	956.2	956.0	955.8	955.5	955.3
17.5°	930.0	932.2	934.4	935.3	934.9	934.6	934.3	933.9
20°	915.4	917.5	919.7	920.9	921.1	921.4	921.6	921.9
22.5°	899.3	902.0	904.8	906.0	905.9	905.8	905.6	905.5
25°	872.0	875.1	878.2	879.8	879.8	879.8	879.8	879.8
27.5°	843.5	846.2	848.9	850.3	850.6	850.7	851.0	851.1
30°	824.1	827.0	829.8	831.3	831.3	831.3	831.3	831.3
32.5°	803.0	806.0	809.1	810.9	811.4	812.0	812.6	813.2
35°	771.6	775.2	778.8	781.1	782.0	783.0	783.9	784.9
37.5°	739.2	743.2	747.3	749.7	750.5	751.2	752.0	752.8
40°	717.6	721.7	725.7	728.3	729.2	730.2	731.1	732.1
42.5°	695.1	699.5	704.0	706.9	708.2	709.6	710.9	712.3
45°	661.4	666.0	670.5	673.8	675.7	677.6	679.5	681.4
47.5°	627.4	632.6	637.6	641.0	642.5	644.0	645.4	646.9
50°	604.0	609.5	615.1	618.6	620.4	622.0	623.7	625.3
52.5°	580.3	586.0	591.7	595.6	597.6	599.7	601.7	603.8
55°	544.5	551.0	557.5	561.6	563.6	565.5	567.4	569.3
57.5°	507.9	514.4	520.9	525.4	527.6	529.8	532.1	534.3
60°	482.4	489.2	495.8	500.5	503.2	505.8	508.4	511.0
62.5°	458.3	465.0	471.7	476.3	478.7	481.2	483.6	486.1
65°	419.8	427.0	434.1	438.9	441.3	443.7	446.2	448.5
67.5°	381.4	389.3	397.1	402.1	404.1	406.2	408.1	410.1
70°	356.0	363.7	371.4	376.4	378.8	381.2	383.6	386.0
72.5°	330.6	338.4	346.3	351.4	353.8	356.2	358.6	361.0
75°	291.8	299.8	307.6	313.1	315.9	318.8	321.6	324.6
77.5°	255.6	264.0	272.3	277.6	279.7	281.9	284.2	286.4
80°	232.0	240.1	248.2	253.5	255.9	258.3	260.7	263.1
82.5°	210.4	218.5	226.6	232.0	234.3	236.7	239.1	241.5
85°	180.1	188.3	196.5	201.8	204.1	206.5	208.9	211.4
87.5°	157.7	166.0	174.3	179.7	182.1	184.6	187.1	189.6
90°	158.5	167.4	176.2	182.0	184.7	187.5	190.3	193.0
92.5°	162.3	170.9	179.4	184.7	186.6	188.6	190.6	192.6
95°	181.5	189.6	197.8	203.0	205.4	207.9	210.2	212.6
97.5°	206.4	214.4	222.4	227.5	229.8	232.1	234.5	236.8
100°	225.0	232.5	240.0	245.0	247.8	250.6	253.3	256.0
102.5°	247.2	254.5	261.8	266.6	268.9	271.3	273.6	275.9
105°	280.9	287.6	294.3	298.9	301.4	304.0	306.4	309.0
107.5°	317.7	324.7	331.7	336.1	338.0	339.9	341.8	343.7
110°	343.0	350.0	356.9	361.2	362.7	364.2	365.8	367.4

TEST NUMBER: P332031-927

CATALOG NUMBER: S123DIP-S1000D1025U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	367.5	374.4	381.3	385.7	387.8	389.8	391.8	393.9
115°	405.8	411.8	417.7	421.5	423.3	425.0	426.7	428.5
117.5°	444.3	450.0	455.7	459.1	460.5	461.9	463.3	464.7
120°	470.3	475.6	481.0	484.3	485.6	487.0	488.3	489.6
122.5°	496.7	501.5	506.4	509.5	510.6	511.8	513.0	514.2
125°	535.8	540.1	544.5	547.1	548.1	549.1	550.0	551.0
127.5°	574.4	578.1	581.9	584.2	585.0	585.8	586.7	587.5
130°	600.0	603.8	607.7	609.7	609.9	610.1	610.3	610.5
132.5°	624.7	628.3	631.8	633.9	634.5	635.3	635.9	636.6
135°	662.3	665.8	669.5	671.7	672.6	673.4	674.2	675.1
137.5°	699.1	702.2	705.2	707.0	707.6	708.1	708.6	709.2
140°	723.7	727.1	730.5	732.1	732.1	732.1	732.1	732.1
142.5°	746.0	749.0	752.0	753.7	753.9	754.2	754.5	754.7
145°	781.6	783.3	785.1	786.1	786.3	786.6	786.9	787.1
147.5°	815.8	816.3	817.0	817.1	817.0	816.7	816.6	816.3
150°	837.4	837.4	837.4	837.1	836.5	836.0	835.4	834.8
152.5°	858.3	858.5	858.8	858.5	857.7	856.9	856.0	855.2
155°	888.7	889.4	890.0	889.8	888.6	887.3	886.1	884.9
157.5°	914.8	915.5	916.3	916.2	915.2	914.2	913.2	912.2
160°	930.9	931.8	932.6	932.7	932.1	931.4	930.7	929.9
162.5°	946.1	947.0	947.8	947.7	946.6	945.5	944.4	943.3
165°	965.3	966.3	967.3	967.3	966.1	964.8	963.6	962.3
167.5°	980.8	981.9	983.0	983.0	981.9	980.8	979.8	978.7
170°	989.4	990.5	991.8	991.8	990.5	989.4	988.1	986.9
172.5°	996.0	997.1	998.1	998.1	996.9	995.7	994.4	993.2
175°	1003.2	1004.2	1005.4	1005.2	1004.0	1002.7	1001.6	1000.3
177.5°	1006.5	1007.3	1008.1	1008.1	1007.1	1006.1	1005.1	1004.1
180°	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6

(END OF REPORT)