

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: P332040-927

Luminaire Tested: **S123DIP-S1000D1195U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332040-927
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-S1000D1195U927-4F0-1E-UDD-D1
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1195 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6575.9 lumens
Efficiency: N/A
Efficacy: 100.5 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

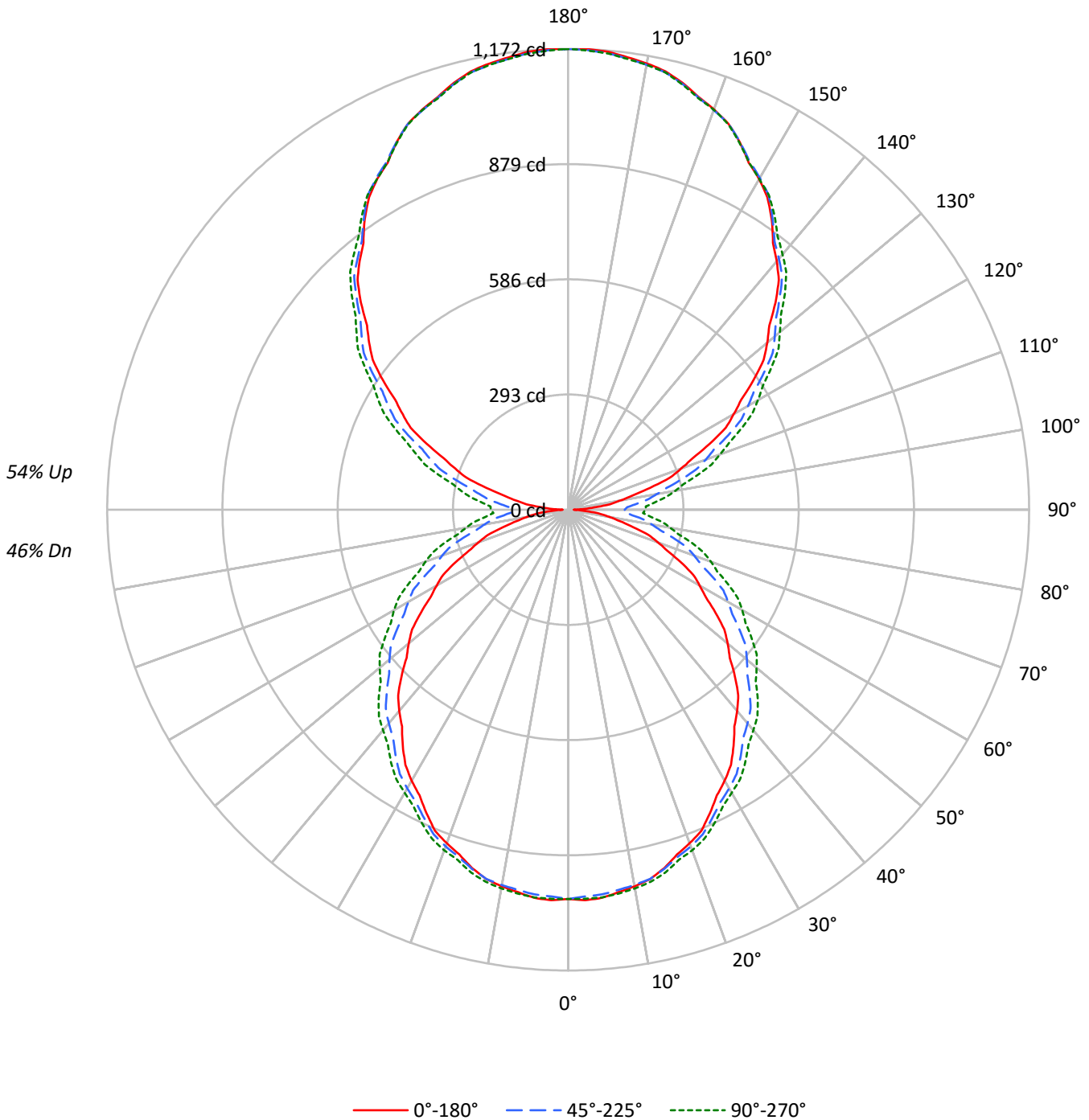
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	98	98	98	98	81	81	81		66	66	66		53	53	53	46
1	96	91	87	83	88	84	80	77	70	67	65		57	55	53		45	44	43	37
2	87	79	73	67	79	73	67	62	61	56	53		49	46	44		39	37	35	30
3	79	69	62	55	72	64	57	52	53	48	44		43	40	37		34	32	29	25
4	72	61	53	47	66	56	49	43	47	41	37		38	34	31		31	28	25	21
5	66	54	46	40	60	50	43	37	42	36	32		34	30	27		27	24	22	18
6	61	49	40	34	56	45	37	32	38	32	28		31	27	23		25	22	19	16
7	56	44	36	30	51	40	33	28	34	28	24		28	24	20		23	19	17	14
8	52	40	32	26	48	37	30	25	31	25	21		26	21	18		21	17	15	13
9	48	36	28	23	44	33	27	22	28	23	19		24	19	16		19	16	14	11
10	45	33	26	21	41	31	24	20	26	21	17		22	18	15		18	15	12	10

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.8	1.4
10°-20°	267.5	4.1
20°-30°	400.0	6.1
30°-40°	477.7	7.3
40°-50°	499.9	7.6
50°-60°	469.1	7.1
60°-70°	391.8	6.0
70°-80°	280.3	4.3
80°-90°	170.6	2.6
90°-100°	181.2	2.8
100°-110°	305.5	4.6
110°-120°	440.0	6.7
120°-130°	540.5	8.2
130°-140°	587.7	8.9
140°-150°	567.5	8.6
150°-160°	475.4	7.2
160°-170°	316.5	4.8
170°-180°	110.8	1.7
0°-30°	761.3	11.6
0°-40°	1239.1	18.8
0°-60°	2208.0	33.6
0°-90°	3050.7	46.4
90°-120°	926.8	14.1
90°-150°	2622.5	39.9
90°-180°	3525.0	53.6
0°-180°	6575.9	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	77	144	183	197	13
95°	66	115	175	211	223	70
105°	216	245	298	327	340	231
115°	397	413	449	475	484	392
125°	576	580	608	626	631	514
135°	745	750	760	775	780	574
145°	902	903	906	913	914	563
155°	1032	1032	1033	1036	1030	475
165°	1124	1121	1121	1126	1120	317
175°	1169	1165	1165	1170	1164	111
180°	1172	1172	1172	1172	1172	



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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	41.2	53.6	65.9	78.3	90.8	103.5	116.3	129.0	141.8	150.1
90°	15.0	28.8	42.5	56.3	70.1	84.4	99.3	114.2	129.0	143.9	152.9
92.5°	35.4	47.4	59.4	71.4	83.3	96.1	109.6	123.2	136.7	150.3	158.9
95°	66.1	76.9	87.7	98.5	109.2	121.4	134.8	148.1	161.4	174.8	183.1
97.5°	107.0	116.5	126.0	135.5	145.0	156.0	168.3	180.8	193.1	205.6	213.7
100°	134.9	143.8	152.7	161.5	170.5	180.9	193.0	205.0	217.1	229.1	236.7
102.5°	167.2	174.8	182.4	190.0	197.7	207.6	219.8	232.0	244.2	256.4	263.7
105°	215.7	221.9	228.1	234.2	240.3	249.5	261.7	273.8	286.0	298.1	304.8
107.5°	271.2	276.2	281.4	286.5	291.7	299.4	310.0	320.5	331.1	341.5	348.6
110°	305.6	310.3	315.1	319.8	324.5	331.8	341.8	351.8	361.9	371.9	378.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	342.5	346.2	350.0	353.8	357.6	364.1	373.4	382.7	392.0	401.2	408.3
115°	396.6	400.1	403.5	407.0	410.5	416.4	424.6	432.8	441.0	449.2	455.2
117.5°	451.9	454.2	456.3	458.5	460.7	465.6	473.1	480.7	488.2	495.8	501.5
120°	485.7	488.1	490.5	493.0	495.4	500.0	506.9	513.8	520.7	527.6	532.9
122.5°	521.8	523.3	524.8	526.3	527.8	532.1	539.1	546.1	553.1	560.1	564.9
125°	575.8	576.3	576.9	577.6	578.2	581.8	588.3	594.8	601.4	607.9	612.1
127.5°	626.5	627.6	628.7	629.8	630.8	634.0	639.3	644.6	649.9	655.2	658.8
130°	660.4	661.8	663.2	664.6	666.0	668.8	673.0	677.2	681.4	685.5	689.2
132.5°	693.4	695.0	696.6	698.2	699.8	702.3	705.7	709.0	712.4	715.8	719.1
135°	745.0	745.9	746.9	747.9	748.8	750.6	753.0	755.4	757.9	760.3	763.8
137.5°	792.6	793.4	794.2	795.1	795.9	797.3	799.3	801.4	803.4	805.4	808.3
140°	824.8	825.9	826.9	827.9	828.9	829.9	830.8	831.8	832.7	833.6	837.0
142.5°	855.1	855.9	856.7	857.5	858.4	859.0	859.5	860.1	860.5	861.1	864.1
145°	902.1	902.4	902.5	902.7	902.9	903.2	903.9	904.4	905.1	905.7	907.4
147.5°	942.3	943.1	943.8	944.5	945.3	945.9	946.5	947.1	947.6	948.2	948.8
150°	971.1	971.5	971.8	972.2	972.7	973.1	973.5	973.9	974.3	974.7	974.7
152.5°	994.6	995.2	995.8	996.3	996.9	997.3	997.5	997.8	998.1	998.3	998.6
155°	1031.8	1031.8	1031.8	1031.8	1031.8	1031.9	1032.1	1032.3	1032.5	1032.7	1033.6
157.5°	1063.4	1063.2	1063.0	1062.7	1062.5	1062.4	1062.6	1062.8	1063.0	1063.1	1064.0
160°	1083.3	1082.9	1082.5	1082.1	1081.7	1081.5	1081.5	1081.5	1081.5	1081.5	1082.5
162.5°	1101.0	1100.4	1099.9	1099.3	1098.8	1098.5	1098.7	1098.8	1099.0	1099.2	1100.2
165°	1123.9	1123.2	1122.6	1122.0	1121.4	1121.1	1121.1	1121.1	1121.1	1121.1	1122.3
167.5°	1142.1	1141.2	1140.4	1139.6	1138.8	1138.4	1138.6	1138.8	1138.9	1139.1	1140.3
170°	1152.4	1151.5	1150.7	1149.9	1149.1	1148.7	1148.7	1148.7	1148.7	1148.7	1150.1
172.5°	1160.5	1159.7	1158.8	1158.0	1157.2	1156.8	1156.8	1156.8	1156.8	1156.8	1158.1
175°	1168.9	1168.2	1167.3	1166.5	1165.7	1165.2	1165.2	1165.2	1165.2	1165.2	1166.5
177.5°	1172.4	1171.8	1171.2	1170.4	1169.8	1169.5	1169.5	1169.5	1169.5	1169.5	1170.4
180°	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7



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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°	158.4	166.7	175.0	180.4	182.9	185.4	187.8	190.4
90°	161.8	170.8	179.7	185.7	188.5	191.3	194.1	196.9
92.5°	167.5	176.1	184.7	190.0	191.9	193.9	195.9	197.8
95°	191.3	199.6	207.9	213.2	215.6	217.9	220.3	222.8
97.5°	221.7	229.8	237.9	243.1	245.4	247.7	250.0	252.3
100°	244.2	251.8	259.4	264.5	267.4	270.1	273.0	275.8
102.5°	271.1	278.5	285.8	290.7	292.9	295.2	297.6	299.9
105°	311.5	318.2	325.0	329.5	332.1	334.7	337.2	339.8
107.5°	355.7	362.7	369.9	374.3	376.1	378.0	379.9	381.8
110°	386.0	393.0	400.1	404.3	405.8	407.3	408.8	410.4



TEST NUMBER: P332040-927

CATALOG NUMBER: S123DIP-S1000D1195U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	415.3	422.3	429.4	433.9	435.9	437.9	439.9	442.0
115°	461.1	467.1	473.1	476.9	478.6	480.3	482.0	483.7
117.5°	507.2	512.8	518.5	522.0	523.2	524.5	525.9	527.1
120°	538.2	543.5	548.8	552.1	553.3	554.6	555.9	557.1
122.5°	569.7	574.5	579.2	582.2	583.3	584.4	585.5	586.6
125°	616.3	620.6	624.8	627.3	628.2	629.1	629.9	630.7
127.5°	662.4	666.0	669.6	671.8	672.4	673.1	673.8	674.5
130°	693.0	696.7	700.4	702.3	702.3	702.3	702.3	702.3
132.5°	722.5	726.0	729.3	731.3	731.8	732.3	732.8	733.4
135°	767.3	770.8	774.3	776.4	777.2	778.0	778.8	779.6
137.5°	811.3	814.2	817.1	818.8	819.2	819.6	820.1	820.5
140°	840.4	843.8	847.2	848.7	848.5	848.3	848.0	847.8
142.5°	867.1	870.1	873.1	874.6	874.7	874.9	875.0	875.0
145°	909.1	910.9	912.5	913.5	913.6	913.8	913.9	914.0
147.5°	949.4	949.9	950.5	950.6	950.2	949.9	949.5	949.2
150°	974.7	974.7	974.7	974.4	973.6	972.9	972.1	971.4
152.5°	998.9	999.3	999.6	999.3	998.3	997.4	996.4	995.4
155°	1034.4	1035.1	1036.0	1035.7	1034.3	1032.8	1031.4	1029.9
157.5°	1064.8	1065.6	1066.5	1066.4	1065.2	1064.1	1063.0	1061.8
160°	1083.5	1084.6	1085.6	1085.7	1084.9	1084.0	1083.2	1082.4
162.5°	1101.2	1102.2	1103.3	1103.1	1101.8	1100.5	1099.2	1097.9
165°	1123.6	1124.7	1126.0	1125.8	1124.4	1123.0	1121.6	1120.1
167.5°	1141.6	1142.9	1144.1	1144.1	1142.9	1141.6	1140.3	1139.1
170°	1151.5	1153.0	1154.4	1154.4	1153.0	1151.5	1150.1	1148.7
172.5°	1159.4	1160.6	1161.9	1161.8	1160.3	1158.9	1157.5	1156.0
175°	1167.7	1168.9	1170.1	1170.1	1168.6	1167.2	1165.8	1164.3
177.5°	1171.5	1172.4	1173.4	1173.3	1172.2	1171.0	1169.9	1168.8
180°	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7

(END OF REPORT)