

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: P332565-927

Luminaire Tested: **S124DIP-S575D1035U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332565-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S575D1035U927-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5150.2 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

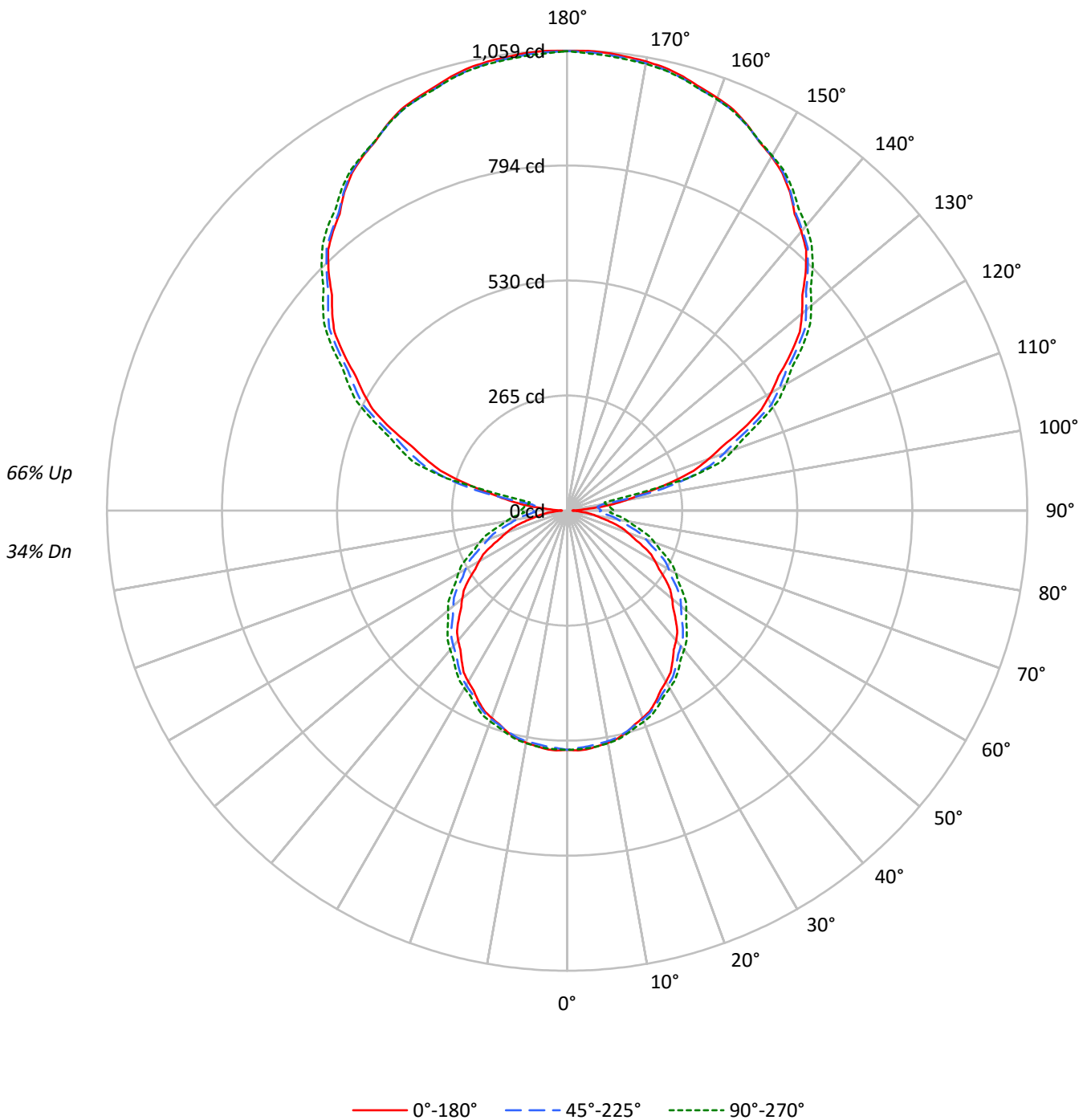
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332565-927

CATALOG NUMBER: S124DIP-S575D1035U927-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P332565-927

CATALOG NUMBER: S124DIP-S575D1035U927-4F0-1E-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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	93	89	85	81	84	80	77	74	64	62	59	49	47	46	35	34	33	27
2	85	77	71	66	76	70	64	60	56	52	49	43	40	38	31	29	28	22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	32	27	25	23	18
4	70	60	52	46	63	54	47	42	43	38	34	33	30	27	24	22	20	16
5	64	53	45	39	58	48	41	36	38	33	29	30	26	23	21	19	17	13
6	59	47	39	33	53	43	36	31	34	29	25	27	23	20	19	17	15	12
7	55	42	35	29	49	39	32	27	31	26	22	24	20	18	18	15	13	10
8	51	38	31	25	45	35	28	23	28	23	19	22	18	16	16	14	12	9
9	47	35	28	23	42	32	25	21	26	21	17	20	16	14	15	12	10	8
10	44	32	25	20	39	29	23	18	24	19	15	19	15	12	14	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4444	4444	4444
5°	4458	4343	4355
10°	4431	4273	4269
15°	4391	4190	4167
20°	4331	4099	4068
25°	4264	3998	3958
30°	4191	3896	3847
35°	4108	3792	3748
40°	4041	3694	3646
45°	3943	3603	3558
50°	3860	3498	3465
55°	3775	3400	3356
60°	3640	3274	3257
65°	3494	3139	3136
70°	3315	2985	2993
75°	3068	2814	2864
80°	2794	2652	2738
85°	2439	2507	2665



TEST NUMBER: P332565-927

CATALOG NUMBER: S124DIP-S575D1035U927-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	1.0
10°-20°	149.4	2.9
20°-30°	225.8	4.4
30°-40°	273.2	5.3
40°-50°	288.9	5.6
50°-60°	271.9	5.3
60°-70°	225.6	4.4
70°-80°	158.4	3.1
80°-90°	92.6	1.8
90°-100°	89.4	1.7
100°-110°	269.9	5.2
110°-120°	467.5	9.1
120°-130°	574.8	11.2
130°-140°	605.5	11.8
140°-150°	561.5	10.9
150°-160°	451.8	8.8
160°-170°	291.4	5.7
170°-180°	100.4	1.9
0°-30°	427.3	8.3
0°-40°	700.6	13.6
0°-60°	1261.3	24.5
0°-90°	1737.9	33.7
90°-120°	826.8	16.1
90°-150°	2568.7	49.9
90°-180°	3412.0	66.3
0°-180°	5150.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	551	549	545	550	549	52
15°	528	529	527	532	532	149
25°	483	487	489	495	496	223
35°	423	430	436	445	447	265
45°	353	364	376	386	390	272
55°	276	289	308	319	324	246
65°	191	211	232	247	252	189
75°	106	129	155	171	178	113
85°	33	59	86	104	111	35
90°	12	46	78	100	108	9
95°	52	47	71	92	99	62
105°	244	261	287	307	286	255
115°	448	457	475	490	494	441
125°	627	630	644	657	662	560
135°	776	776	783	794	800	598
145°	894	896	896	900	904	559
155°	980	980	978	981	979	452
165°	1034	1030	1030	1035	1029	292
175°	1057	1053	1053	1060	1051	101
180°	1057	1057	1057	1057	1057	



TEST NUMBER: P332565-927

CATALOG NUMBER: S124DIP-S575D1035U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5
2.5°	552.5	552.2	551.8	551.4	551.1	550.6	549.7	548.8	547.9	547.0	547.8
5°	551.1	550.7	550.2	549.9	549.5	548.7	547.8	546.8	545.9	544.9	546.1
7.5°	546.4	546.1	545.9	545.7	545.4	544.9	544.2	543.4	542.5	541.7	543.0
10°	542.5	542.3	542.2	542.1	541.9	541.5	540.8	540.1	539.5	538.8	540.0
12.5°	537.0	537.0	537.0	536.9	536.9	536.7	536.2	535.8	535.3	534.8	535.9
15°	528.3	528.5	528.5	528.7	528.9	528.7	528.3	527.9	527.4	527.0	528.3
17.5°	516.3	516.7	517.1	517.5	518.0	518.2	518.1	518.0	517.9	517.8	519.0
20°	507.9	508.3	508.7	509.2	509.6	509.8	510.0	510.2	510.2	510.4	511.7
22.5°	498.6	499.1	499.6	500.1	500.7	501.1	501.3	501.5	501.8	502.0	503.4
25°	483.3	484.1	485.0	485.8	486.6	487.2	487.6	488.0	488.5	488.9	490.4
27.5°	466.3	467.5	468.7	469.9	471.1	472.0	472.6	473.2	473.9	474.5	475.9
30°	455.0	456.1	457.1	458.2	459.3	460.3	461.3	462.2	463.2	464.2	465.7
32.5°	442.6	443.9	445.2	446.6	447.9	449.1	450.1	451.2	452.3	453.4	455.0
35°	422.9	424.5	426.2	427.8	429.4	430.9	432.3	433.7	435.1	436.4	438.4
37.5°	403.1	404.9	406.8	408.7	410.6	412.4	414.1	415.8	417.5	419.1	421.1
40°	390.2	392.0	393.8	395.5	397.4	399.2	401.1	403.0	405.0	406.9	408.9
42.5°	375.4	377.4	379.4	381.4	383.4	385.6	387.8	390.0	392.3	394.5	396.8
45°	352.6	355.2	357.8	360.4	363.0	365.6	368.2	370.8	373.4	376.0	378.3
47.5°	330.8	333.4	336.1	338.8	341.5	344.4	347.4	350.4	353.4	356.4	358.9
50°	315.0	318.0	321.0	324.1	327.1	330.1	333.1	336.1	339.1	342.1	344.8
52.5°	299.2	302.2	305.2	308.2	311.2	314.5	318.0	321.4	324.9	328.3	331.1
55°	276.2	279.0	281.9	284.8	287.6	291.1	295.2	299.4	303.5	307.6	310.4
57.5°	250.4	254.0	257.5	261.1	264.7	268.5	272.5	276.6	280.7	284.8	288.0
60°	233.6	237.2	240.7	244.3	247.9	251.9	256.4	260.9	265.5	270.0	273.1
62.5°	217.4	221.3	225.1	229.0	232.9	237.1	241.6	246.1	250.7	255.2	258.3
65°	191.1	195.5	199.9	204.2	208.7	213.2	217.8	222.4	227.1	231.8	235.2
67.5°	165.8	170.5	175.2	179.8	184.4	189.3	194.2	199.2	204.2	209.2	212.7
70°	148.5	153.2	157.9	162.6	167.2	172.1	177.3	182.5	187.7	193.0	196.6
72.5°	131.8	136.6	141.3	146.1	150.8	156.0	161.5	167.1	172.6	178.2	181.7
75°	106.0	111.1	116.1	121.2	126.3	131.7	137.4	143.2	149.0	154.7	158.6
77.5°	82.0	87.4	92.8	98.1	103.5	109.2	115.2	121.2	127.2	133.2	137.1
80°	67.2	72.6	78.2	83.7	89.1	94.8	100.9	106.9	113.0	119.0	123.1
82.5°	52.4	58.1	63.8	69.5	75.2	81.0	87.1	93.1	99.1	105.2	109.4
85°	32.6	38.4	44.2	49.9	55.7	61.6	67.8	74.0	80.2	86.3	90.4
87.5°	18.7	24.7	30.7	36.7	42.6	48.7	55.1	61.3	67.6	73.9	78.0
90°	12.2	19.6	27.1	34.5	41.9	49.3	56.6	63.8	71.1	78.4	83.4
92.5°	19.3	24.4	29.4	34.5	39.5	45.6	52.9	60.2	67.6	74.9	79.8
95°	51.5	50.1	48.6	47.1	45.7	47.8	53.6	59.4	65.2	71.1	75.8
97.5°	99.7	107.3	114.9	122.5	130.1	126.9	112.8	98.8	84.8	70.7	74.4
100°	136.5	143.2	150.0	156.6	163.3	157.2	138.4	119.5	100.5	81.7	82.4
102.5°	178.2	183.7	189.1	194.6	200.0	203.7	205.8	207.9	209.9	212.1	183.4
105°	243.6	247.4	251.2	255.0	258.7	263.6	269.6	275.5	281.5	287.4	292.4
107.5°	305.3	308.1	310.9	313.6	316.4	320.8	326.8	332.8	338.7	344.8	348.9
110°	346.6	349.0	351.5	353.9	356.3	360.5	366.3	372.2	378.0	383.9	387.4



TEST NUMBER: P332565-927

CATALOG NUMBER: S124DIP-S575D1035U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	386.6	389.2	391.9	394.5	397.1	401.0	406.1	411.1	416.2	421.3	424.2
115°	448.1	449.9	451.6	453.4	455.2	458.2	462.4	466.6	470.8	475.0	478.3
117.5°	504.1	505.6	507.1	508.5	509.9	512.9	517.4	521.8	526.3	530.8	533.5
120°	541.6	542.7	543.8	544.9	546.1	548.5	552.3	556.1	559.9	563.7	566.8
122.5°	577.0	577.6	578.1	578.5	579.1	581.3	585.3	589.3	593.3	597.3	600.2
125°	627.2	627.8	628.4	628.9	629.5	631.3	634.4	637.5	640.5	643.6	646.7
127.5°	675.2	675.2	675.3	675.3	675.3	677.1	680.5	684.0	687.4	690.8	693.2
130°	705.7	705.7	705.8	705.8	705.8	707.2	710.0	712.6	715.3	718.1	720.7
132.5°	734.1	734.4	734.5	734.7	734.8	736.2	738.6	741.0	743.4	745.8	748.4
135°	776.3	776.0	775.9	775.7	775.5	776.3	777.9	779.6	781.3	782.9	785.4
137.5°	814.0	814.0	813.9	813.8	813.7	814.4	815.6	816.8	818.1	819.3	821.7
140°	838.7	838.9	839.2	839.3	839.6	840.0	840.4	840.9	841.4	841.9	844.1
142.5°	860.4	860.9	861.6	862.1	862.8	863.2	863.2	863.4	863.6	863.6	865.6
145°	894.2	894.6	895.0	895.4	895.8	896.0	896.0	896.0	896.0	896.0	897.0
147.5°	921.3	922.1	923.0	923.8	924.6	925.0	924.8	924.6	924.5	924.3	924.6
150°	940.9	941.4	942.0	942.6	943.2	943.3	943.2	943.0	942.9	942.6	942.6
152.5°	956.9	957.4	957.9	958.5	959.0	959.1	958.8	958.5	958.1	957.8	958.1
155°	979.9	980.0	980.2	980.3	980.5	980.3	979.9	979.3	978.7	978.3	978.9
157.5°	999.3	999.2	999.0	998.9	998.9	998.5	997.9	997.3	996.7	996.1	997.0
160°	1010.7	1010.1	1009.6	1009.1	1008.5	1008.2	1008.1	1007.8	1007.7	1007.5	1008.5
162.5°	1020.8	1020.1	1019.5	1018.7	1018.1	1017.7	1017.5	1017.3	1017.2	1017.0	1018.0
165°	1033.6	1032.7	1031.8	1030.9	1030.1	1029.6	1029.6	1029.6	1029.6	1029.6	1031.0
167.5°	1043.7	1042.8	1041.9	1041.0	1040.1	1039.6	1039.4	1039.3	1039.3	1039.1	1040.7
170°	1049.4	1048.4	1047.3	1046.2	1045.2	1044.7	1044.9	1045.1	1045.3	1045.4	1046.9
172.5°	1053.2	1052.2	1051.1	1050.0	1049.0	1048.5	1048.7	1048.9	1049.1	1049.2	1050.7
175°	1057.3	1056.3	1055.2	1054.2	1053.1	1052.7	1052.8	1053.0	1053.2	1053.4	1054.9
177.5°	1059.2	1058.2	1057.2	1056.3	1055.3	1054.9	1055.2	1055.5	1055.7	1056.1	1057.2
180°	1057.3	1057.3	1057.3	1057.3	1057.3	1057.3	1057.3	1057.3	1057.3	1057.3	1057.3



TEST NUMBER: P332565-927

CATALOG NUMBER: S124DIP-S575D1035U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5
2.5°	548.6	549.3	550.1	550.4	550.3	550.2	550.1	550.0
5°	547.2	548.2	549.3	549.8	549.7	549.5	549.4	549.2
7.5°	544.2	545.4	546.7	547.2	547.1	546.9	546.8	546.7
10°	541.2	542.5	543.7	544.2	544.2	544.0	543.8	543.7
12.5°	537.1	538.2	539.3	539.9	539.9	539.8	539.8	539.8
15°	529.5	530.8	532.0	532.5	532.4	532.3	532.1	532.0
17.5°	520.3	521.6	522.8	523.4	523.3	523.2	523.1	523.0
20°	513.2	514.5	515.9	516.6	516.6	516.6	516.6	516.6
22.5°	504.8	506.1	507.5	508.3	508.5	508.7	509.0	509.2
25°	491.9	493.4	494.9	495.7	495.8	496.0	496.1	496.2
27.5°	477.4	478.7	480.1	480.9	481.1	481.3	481.4	481.6
30°	467.2	468.7	470.2	471.1	471.3	471.7	471.9	472.2
32.5°	456.8	458.5	460.3	461.2	461.5	461.8	462.1	462.3
35°	440.3	442.2	444.1	445.3	445.7	446.1	446.5	446.9
37.5°	423.1	425.0	427.0	428.2	428.6	429.0	429.4	429.9
40°	411.0	413.0	415.1	416.4	416.9	417.5	418.0	418.6
42.5°	399.1	401.3	403.6	405.0	405.4	405.8	406.3	406.7
45°	380.7	383.0	385.3	386.8	387.5	388.2	388.9	389.6
47.5°	361.2	363.7	366.1	367.7	368.5	369.3	370.2	371.0
50°	347.6	350.4	353.1	354.9	355.7	356.5	357.4	358.1
52.5°	333.8	336.5	339.3	341.0	341.9	342.7	343.5	344.4
55°	313.1	315.8	318.5	320.4	321.2	322.0	322.8	323.6
57.5°	291.3	294.6	297.9	299.8	300.6	301.3	302.1	302.9
60°	276.3	279.5	282.6	284.7	285.8	286.9	288.0	289.1
62.5°	261.5	264.7	267.8	269.9	271.0	272.1	273.2	274.3
65°	238.6	242.1	245.5	247.7	248.8	249.9	251.0	252.2
67.5°	216.2	219.7	223.2	225.4	226.5	227.5	228.6	229.7
70°	200.3	204.1	207.7	210.1	211.0	212.0	212.9	213.9
72.5°	185.3	188.9	192.5	194.8	195.9	196.9	198.0	199.1
75°	162.4	166.2	170.1	172.6	173.8	175.1	176.3	177.5
77.5°	141.1	145.0	148.9	151.5	152.7	154.1	155.3	156.7
80°	127.2	131.3	135.4	138.0	139.1	140.2	141.3	142.4
82.5°	113.6	117.8	122.1	124.8	126.0	127.1	128.3	129.6
85°	94.5	98.6	102.7	105.5	106.9	108.2	109.6	111.0
87.5°	82.2	86.4	90.6	93.3	94.6	95.9	97.2	98.5
90°	88.5	93.5	98.5	101.8	103.2	104.6	106.2	107.6
92.5°	84.7	89.6	94.5	97.5	98.7	99.9	101.1	102.2
95°	80.6	85.3	90.1	93.2	94.5	95.9	97.4	98.8
97.5°	78.1	81.8	85.5	88.0	89.4	90.7	92.1	93.4
100°	83.1	83.8	84.5	85.4	86.6	87.7	88.8	89.9
102.5°	154.8	126.1	97.4	83.7	84.8	85.9	87.0	88.1
105°	297.5	302.5	307.4	307.4	302.1	296.9	291.6	286.4
107.5°	353.0	357.2	361.3	364.2	365.8	367.5	369.2	370.8
110°	390.9	394.4	397.9	400.4	402.1	403.7	405.4	406.9



TEST NUMBER: P332565-927

CATALOG NUMBER: S124DIP-S575D1035U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	427.2	430.2	433.2	435.5	437.3	439.0	440.8	442.6
115°	481.7	485.1	488.5	490.6	491.5	492.5	493.5	494.5
117.5°	536.3	539.1	541.9	543.8	544.8	545.8	546.8	547.9
120°	569.9	573.0	576.1	578.0	578.8	579.5	580.3	581.0
122.5°	603.2	606.2	609.1	610.9	611.6	612.2	612.8	613.5
125°	649.8	653.0	656.1	658.1	659.2	660.1	661.2	662.2
127.5°	695.5	697.9	700.3	701.8	702.6	703.4	704.2	705.0
130°	723.3	726.0	728.6	730.4	731.2	732.1	732.8	733.6
132.5°	750.9	753.4	756.0	757.6	758.3	758.9	759.6	760.3
135°	788.0	790.5	793.1	795.0	796.1	797.3	798.4	799.6
137.5°	824.1	826.5	828.9	830.4	830.9	831.5	832.1	832.7
140°	846.4	848.8	851.1	852.7	853.6	854.4	855.2	856.1
142.5°	867.5	869.5	871.5	872.7	873.3	873.9	874.6	875.2
145°	898.0	899.0	900.0	900.9	901.8	902.7	903.6	904.5
147.5°	924.8	925.0	925.3	925.7	926.4	926.9	927.6	928.2
150°	942.6	942.6	942.6	942.7	942.9	943.1	943.3	943.4
152.5°	958.4	958.7	958.9	959.0	958.9	958.9	958.7	958.6
155°	979.6	980.3	981.0	981.1	980.6	980.1	979.5	979.1
157.5°	997.9	998.9	999.7	999.7	998.9	997.9	997.0	996.1
160°	1009.6	1010.7	1011.7	1011.7	1010.7	1009.6	1008.5	1007.5
162.5°	1019.1	1020.2	1021.2	1021.1	1019.9	1018.7	1017.6	1016.4
165°	1032.5	1033.9	1035.2	1035.1	1033.6	1032.0	1030.4	1028.8
167.5°	1042.2	1043.8	1045.3	1045.2	1043.5	1041.7	1039.9	1038.2
170°	1048.3	1049.6	1051.1	1050.9	1049.2	1047.4	1045.6	1043.9
172.5°	1052.1	1053.4	1054.9	1054.6	1052.7	1050.8	1048.9	1047.0
175°	1056.5	1058.1	1059.7	1059.4	1057.3	1055.2	1053.1	1051.0
177.5°	1058.3	1059.4	1060.6	1060.3	1058.6	1056.9	1055.2	1053.5
180°	1057.3	1057.3	1057.3	1057.3	1057.3	1057.3	1057.3	1057.3

(END OF REPORT)