

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: P332565-940

Luminaire Tested: **SA4XXDIP-C575D1035U940-4F0-1E-UDD-D**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332565-940  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXDIP-C575D1035U940-4F0-1E-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: 5797.2 lumens  
Efficiency: N/A  
Efficacy: 130.3 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

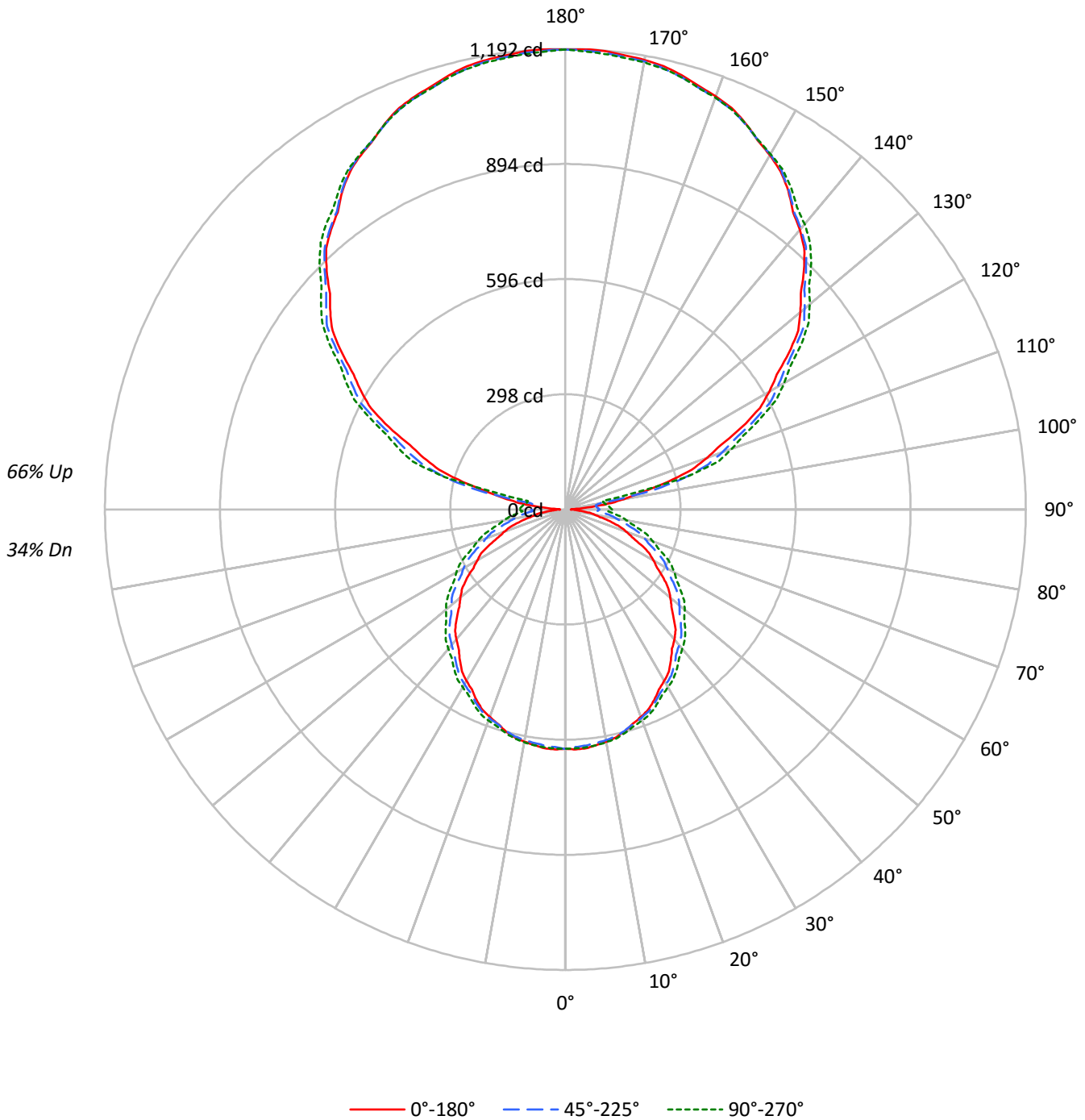
Input Watts (W): 44.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	5002	5002	5002
5°	5018	4889	4903
10°	4987	4809	4805
15°	4943	4717	4690
20°	4875	4614	4579
25°	4799	4500	4456
30°	4717	4386	4330
35°	4624	4269	4220
40°	4550	4158	4105
45°	4439	4056	4005
50°	4344	3938	3901
55°	4249	3827	3778
60°	4098	3685	3667
65°	3933	3533	3529
70°	3733	3359	3369
75°	3453	3169	3224
80°	3143	2984	3082
85°	2746	2820	2999



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.7	1.0
10°-20°	168.1	2.9
20°-30°	254.2	4.4
30°-40°	307.6	5.3
40°-50°	325.2	5.6
50°-60°	306.0	5.3
60°-70°	253.9	4.4
70°-80°	178.3	3.1
80°-90°	104.3	1.8
90°-100°	100.6	1.7
100°-110°	303.9	5.2
110°-120°	526.2	9.1
120°-130°	647.0	11.2
130°-140°	681.6	11.8
140°-150°	632.1	10.9
150°-160°	508.5	8.8
160°-170°	328.0	5.7
170°-180°	113.0	1.9
0°-30°	481.0	8.3
0°-40°	788.6	13.6
0°-60°	1419.8	24.5
0°-90°	1956.3	33.7
90°-120°	930.7	16.1
90°-150°	2891.4	49.9
90°-180°	3841.0	66.3
0°-180°	5797.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	620	618	613	619	618	59
15°	595	595	593	599	599	167
25°	544	548	550	558	559	250
35°	476	484	491	501	503	298
45°	397	410	423	435	438	307
55°	311	326	346	360	364	277
65°	215	237	261	278	284	213
75°	119	145	174	193	200	127
85°	37	66	97	117	125	39
90°	14	51	88	113	121	10
95°	58	53	80	103	111	70
105°	274	294	324	346	322	287
115°	504	514	535	551	557	497
125°	706	710	724	740	745	630
135°	874	873	881	894	900	673
145°	1007	1008	1008	1014	1018	629
155°	1103	1104	1101	1104	1102	508
165°	1163	1159	1159	1165	1158	329
175°	1190	1185	1186	1193	1183	113
180°	1190	1190	1190	1190	1190	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6
2.5°	621.9	621.5	621.2	620.7	620.4	619.7	618.8	617.8	616.7	615.7	616.6
5°	620.4	619.9	619.4	618.9	618.5	617.7	616.6	615.5	614.5	613.4	614.7
7.5°	615.1	614.7	614.5	614.2	613.9	613.4	612.5	611.6	610.6	609.8	611.2
10°	610.6	610.5	610.3	610.2	610.0	609.6	608.8	608.0	607.3	606.5	607.9
12.5°	604.5	604.5	604.5	604.4	604.4	604.1	603.6	603.1	602.5	602.0	603.2
15°	594.7	594.9	594.9	595.1	595.3	595.1	594.7	594.2	593.7	593.3	594.7
17.5°	581.2	581.7	582.1	582.6	583.1	583.3	583.2	583.1	583.0	582.9	584.2
20°	571.8	572.2	572.7	573.2	573.6	573.9	574.1	574.3	574.4	574.5	576.0
22.5°	561.2	561.8	562.4	562.9	563.6	564.0	564.3	564.5	564.8	565.1	566.7
25°	544.0	544.9	545.9	546.8	547.7	548.4	548.8	549.3	549.8	550.3	552.0
27.5°	524.9	526.2	527.5	529.0	530.3	531.3	532.0	532.7	533.4	534.1	535.7
30°	512.1	513.4	514.5	515.8	517.0	518.2	519.2	520.3	521.4	522.5	524.2
32.5°	498.2	499.7	501.1	502.7	504.2	505.5	506.7	507.9	509.1	510.3	512.2
35°	476.0	477.9	479.7	481.5	483.4	485.1	486.6	488.2	489.7	491.2	493.5
37.5°	453.7	455.8	457.9	460.0	462.2	464.2	466.1	468.1	469.9	471.8	474.0
40°	439.3	441.2	443.3	445.2	447.3	449.3	451.5	453.6	455.8	458.0	460.3
42.5°	422.6	424.8	427.0	429.4	431.6	434.0	436.5	439.0	441.6	444.1	446.7
45°	396.9	399.8	402.8	405.7	408.6	411.5	414.5	417.4	420.4	423.3	425.9
47.5°	372.4	375.3	378.4	381.4	384.4	387.6	391.0	394.4	397.8	401.2	403.9
50°	354.5	357.9	361.3	364.8	368.2	371.6	375.0	378.4	381.7	385.1	388.2
52.5°	336.8	340.2	343.6	347.0	350.4	354.0	357.9	361.8	365.7	369.5	372.6
55°	310.9	314.1	317.4	320.6	323.8	327.7	332.3	337.0	341.6	346.3	349.4
57.5°	281.9	285.9	289.9	293.9	297.9	302.2	306.7	311.4	316.0	320.6	324.2
60°	263.0	267.0	271.0	275.0	279.0	283.6	288.6	293.7	298.8	303.9	307.5
62.5°	244.7	249.1	253.4	257.8	262.2	266.9	272.0	277.1	282.2	287.3	290.8
65°	215.1	220.1	225.0	229.9	234.9	240.0	245.1	250.4	255.7	260.9	264.7
67.5°	186.6	191.9	197.2	202.4	207.6	213.0	218.6	224.3	229.9	235.5	239.4
70°	167.2	172.5	177.7	183.0	188.2	193.8	199.6	205.5	211.3	217.2	221.3
72.5°	148.4	153.7	159.1	164.4	169.8	175.6	181.8	188.1	194.3	200.5	204.6
75°	119.3	125.0	130.7	136.4	142.1	148.3	154.7	161.2	167.7	174.2	178.5
77.5°	92.3	98.4	104.4	110.4	116.5	122.9	129.7	136.4	143.2	150.0	154.4
80°	75.6	81.8	88.0	94.2	100.3	106.7	113.6	120.4	127.2	133.9	138.6
82.5°	58.9	65.4	71.8	78.2	84.6	91.2	98.0	104.8	111.6	118.4	123.1
85°	36.7	43.2	49.8	56.2	62.7	69.4	76.3	83.3	90.2	97.1	101.7
87.5°	21.0	27.8	34.5	41.3	48.0	54.8	62.0	69.0	76.1	83.2	87.8
90°	13.7	22.1	30.5	38.8	47.2	55.5	63.7	71.9	80.1	88.3	93.9
92.5°	21.8	27.5	33.1	38.8	44.4	51.4	59.6	67.8	76.1	84.3	89.8
95°	58.0	56.4	54.7	53.1	51.5	53.9	60.4	66.9	73.4	80.0	85.3
97.5°	112.2	120.7	129.3	137.9	146.4	142.9	127.0	111.2	95.4	79.5	83.7
100°	153.6	161.2	168.8	176.3	183.9	177.0	155.8	134.5	113.2	91.9	92.7
102.5°	200.6	206.8	212.9	219.0	225.2	229.3	231.7	234.0	236.3	238.7	206.4
105°	274.2	278.5	282.8	287.0	291.2	296.8	303.4	310.1	316.8	323.5	329.1
107.5°	343.7	346.8	349.9	353.0	356.1	361.1	367.8	374.6	381.3	388.1	392.7
110°	390.1	392.9	395.7	398.3	401.1	405.8	412.3	418.9	425.5	432.1	436.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	435.2	438.1	441.1	444.1	447.0	451.4	457.1	462.8	468.5	474.2	477.5
115°	504.4	506.4	508.4	510.4	512.4	515.8	520.5	525.2	529.9	534.7	538.4
117.5°	567.5	569.1	570.8	572.4	574.0	577.3	582.4	587.4	592.5	597.4	600.6
120°	609.7	610.9	612.2	613.4	614.7	617.4	621.7	626.0	630.3	634.5	638.0
122.5°	649.5	650.1	650.7	651.2	651.8	654.3	658.9	663.3	667.9	672.3	675.6
125°	706.0	706.7	707.3	707.9	708.6	710.6	714.1	717.6	720.9	724.4	728.0
127.5°	760.0	760.0	760.1	760.1	760.2	762.1	766.0	769.9	773.7	777.6	780.2
130°	794.3	794.3	794.4	794.4	794.5	796.0	799.2	802.2	805.2	808.3	811.3
132.5°	826.3	826.6	826.8	827.0	827.2	828.7	831.3	834.1	836.8	839.5	842.4
135°	873.8	873.5	873.3	873.2	873.0	873.8	875.7	877.5	879.4	881.3	884.1
137.5°	916.3	916.2	916.1	916.1	916.0	916.7	918.0	919.4	920.9	922.2	924.9
140°	944.1	944.3	944.6	944.8	945.0	945.5	946.0	946.6	947.1	947.6	950.2
142.5°	968.5	969.1	969.8	970.4	971.2	971.6	971.7	971.9	972.1	972.1	974.4
145°	1006.6	1007.0	1007.5	1007.9	1008.3	1008.5	1008.5	1008.5	1008.5	1008.5	1009.7
147.5°	1037.1	1038.0	1038.9	1039.9	1040.8	1041.3	1041.0	1040.8	1040.6	1040.4	1040.7
150°	1059.1	1059.7	1060.3	1061.0	1061.7	1061.8	1061.7	1061.5	1061.3	1061.0	1061.0
152.5°	1077.1	1077.6	1078.3	1078.9	1079.5	1079.6	1079.2	1078.9	1078.5	1078.2	1078.5
155°	1103.0	1103.1	1103.3	1103.5	1103.7	1103.5	1103.0	1102.3	1101.7	1101.2	1101.9
157.5°	1124.8	1124.7	1124.5	1124.4	1124.4	1123.9	1123.3	1122.6	1122.0	1121.2	1122.3
160°	1137.6	1137.0	1136.5	1135.9	1135.2	1134.9	1134.7	1134.4	1134.3	1134.1	1135.2
162.5°	1149.1	1148.3	1147.5	1146.7	1146.0	1145.6	1145.3	1145.1	1145.0	1144.8	1145.9
165°	1163.4	1162.4	1161.5	1160.5	1159.5	1159.0	1159.0	1159.0	1159.0	1159.0	1160.6
167.5°	1174.8	1173.8	1172.8	1171.8	1170.7	1170.2	1170.0	1169.9	1169.8	1169.7	1171.4
170°	1181.2	1180.1	1178.8	1177.7	1176.5	1176.0	1176.2	1176.4	1176.6	1176.8	1178.4
172.5°	1185.5	1184.4	1183.1	1182.0	1180.8	1180.3	1180.4	1180.7	1180.9	1181.1	1182.7
175°	1190.2	1189.0	1187.8	1186.6	1185.4	1184.9	1185.1	1185.4	1185.5	1185.7	1187.5
177.5°	1192.3	1191.1	1190.1	1189.0	1187.8	1187.5	1187.8	1188.1	1188.4	1188.7	1190.0
180°	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6
2.5°	617.5	618.3	619.2	619.6	619.5	619.3	619.2	619.1
5°	615.9	617.1	618.3	618.8	618.8	618.6	618.4	618.2
7.5°	612.6	613.9	615.4	616.0	615.8	615.6	615.5	615.4
10°	609.2	610.6	612.0	612.6	612.5	612.3	612.2	612.0
12.5°	604.6	605.8	607.1	607.7	607.7	607.6	607.6	607.6
15°	596.0	597.4	598.8	599.4	599.3	599.1	599.0	598.8
17.5°	585.7	587.1	588.5	589.2	589.1	589.0	588.8	588.7
20°	577.7	579.2	580.7	581.5	581.5	581.5	581.5	581.5
22.5°	568.2	569.7	571.2	572.2	572.4	572.7	572.9	573.2
25°	553.7	555.4	557.1	557.9	558.1	558.3	558.4	558.6
27.5°	537.3	538.9	540.5	541.4	541.5	541.7	541.9	542.1
30°	525.9	527.6	529.3	530.3	530.6	530.9	531.2	531.5
32.5°	514.2	516.1	518.1	519.2	519.5	519.8	520.1	520.4
35°	495.6	497.8	499.9	501.2	501.7	502.1	502.6	503.1
37.5°	476.3	478.4	480.6	482.0	482.4	483.0	483.4	483.9
40°	462.6	464.9	467.3	468.7	469.3	469.9	470.6	471.2
42.5°	449.2	451.7	454.3	455.8	456.4	456.8	457.4	457.8
45°	428.6	431.1	433.7	435.4	436.2	437.0	437.7	438.5
47.5°	406.6	409.4	412.1	413.8	414.8	415.7	416.7	417.6
50°	391.3	394.4	397.4	399.5	400.4	401.3	402.3	403.1
52.5°	375.8	378.8	381.9	383.9	384.9	385.8	386.6	387.6
55°	352.4	355.5	358.6	360.6	361.5	362.5	363.4	364.3
57.5°	327.9	331.6	335.3	337.5	338.4	339.2	340.1	341.0
60°	311.0	314.6	318.1	320.5	321.7	323.0	324.2	325.5
62.5°	294.4	297.9	301.5	303.8	305.1	306.3	307.6	308.8
65°	268.6	272.5	276.3	278.8	280.1	281.3	282.6	283.8
67.5°	243.3	247.3	251.2	253.7	254.9	256.1	257.3	258.5
70°	225.5	229.7	233.8	236.5	237.6	238.6	239.7	240.8
72.5°	208.6	212.7	216.7	219.3	220.5	221.7	222.9	224.1
75°	182.8	187.1	191.5	194.3	195.6	197.1	198.5	199.8
77.5°	158.8	163.2	167.6	170.5	171.9	173.4	174.9	176.4
80°	143.2	147.8	152.4	155.3	156.6	157.8	159.1	160.3
82.5°	127.9	132.6	137.4	140.4	141.8	143.1	144.5	145.9
85°	106.4	111.0	115.7	118.8	120.3	121.8	123.3	124.9
87.5°	92.6	97.3	102.0	105.0	106.5	107.9	109.4	110.8
90°	99.6	105.2	110.9	114.6	116.2	117.8	119.5	121.1
92.5°	95.3	100.9	106.4	109.8	111.1	112.4	113.8	115.0
95°	90.7	96.0	101.4	104.9	106.4	108.0	109.6	111.2
97.5°	87.9	92.0	96.2	99.1	100.6	102.1	103.6	105.1
100°	93.5	94.3	95.1	96.1	97.5	98.7	100.0	101.2
102.5°	174.2	142.0	109.7	94.3	95.5	96.7	97.9	99.2
105°	334.8	340.5	346.1	346.0	340.1	334.2	328.2	322.4
107.5°	397.3	402.1	406.7	410.0	411.8	413.7	415.5	417.4
110°	440.0	444.0	447.9	450.8	452.6	454.4	456.3	458.1





TEST NUMBER: P332565-940

CATALOG NUMBER: SA4XXDIP-C575D1035U940-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	480.9	484.2	487.6	490.3	492.2	494.2	496.2	498.2
115°	542.2	546.0	549.8	552.2	553.3	554.4	555.5	556.6
117.5°	603.7	606.8	609.9	612.1	613.2	614.4	615.5	616.7
120°	641.5	645.0	648.5	650.6	651.5	652.3	653.2	654.0
122.5°	679.0	682.3	685.6	687.7	688.4	689.1	689.8	690.5
125°	731.5	735.0	738.5	740.8	742.0	743.1	744.2	745.4
127.5°	782.9	785.6	788.3	790.0	790.9	791.8	792.6	793.5
130°	814.2	817.3	820.2	822.2	823.0	824.0	824.9	825.8
132.5°	845.3	848.1	851.0	852.7	853.5	854.3	855.1	855.9
135°	887.0	889.8	892.7	894.8	896.2	897.5	898.8	900.1
137.5°	927.6	930.3	933.0	934.7	935.3	935.9	936.7	937.3
140°	952.8	955.5	958.1	959.8	960.8	961.7	962.7	963.7
142.5°	976.5	978.7	981.0	982.4	983.0	983.7	984.4	985.2
145°	1010.8	1011.9	1013.1	1014.1	1015.1	1016.1	1017.2	1018.2
147.5°	1041.0	1041.3	1041.5	1042.1	1042.8	1043.4	1044.1	1044.8
150°	1061.0	1061.0	1061.0	1061.1	1061.4	1061.6	1061.8	1061.9
152.5°	1078.8	1079.1	1079.4	1079.5	1079.4	1079.3	1079.1	1079.1
155°	1102.7	1103.5	1104.3	1104.4	1103.8	1103.2	1102.6	1102.1
157.5°	1123.3	1124.4	1125.3	1125.3	1124.4	1123.3	1122.3	1121.2
160°	1136.5	1137.6	1138.8	1138.8	1137.6	1136.5	1135.2	1134.1
162.5°	1147.1	1148.3	1149.5	1149.4	1148.1	1146.7	1145.4	1144.1
165°	1162.2	1163.8	1165.3	1165.2	1163.4	1161.6	1159.8	1158.1
167.5°	1173.1	1174.9	1176.6	1176.5	1174.6	1172.6	1170.5	1168.6
170°	1180.0	1181.5	1183.1	1182.9	1181.0	1179.0	1177.0	1175.0
172.5°	1184.3	1185.8	1187.4	1187.1	1185.0	1182.9	1180.7	1178.6
175°	1189.3	1191.1	1192.8	1192.5	1190.2	1187.8	1185.4	1183.0
177.5°	1191.2	1192.5	1193.8	1193.5	1191.6	1189.7	1187.8	1185.9
180°	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2

(END OF REPORT)