

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: P332566-940

Luminaire Tested: **S124DIP-S575D1035U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332566-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S575D1035U940-4F0-1E-UDD-D1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5308.6 lumens
Efficiency: N/A
Efficacy: 119.3 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

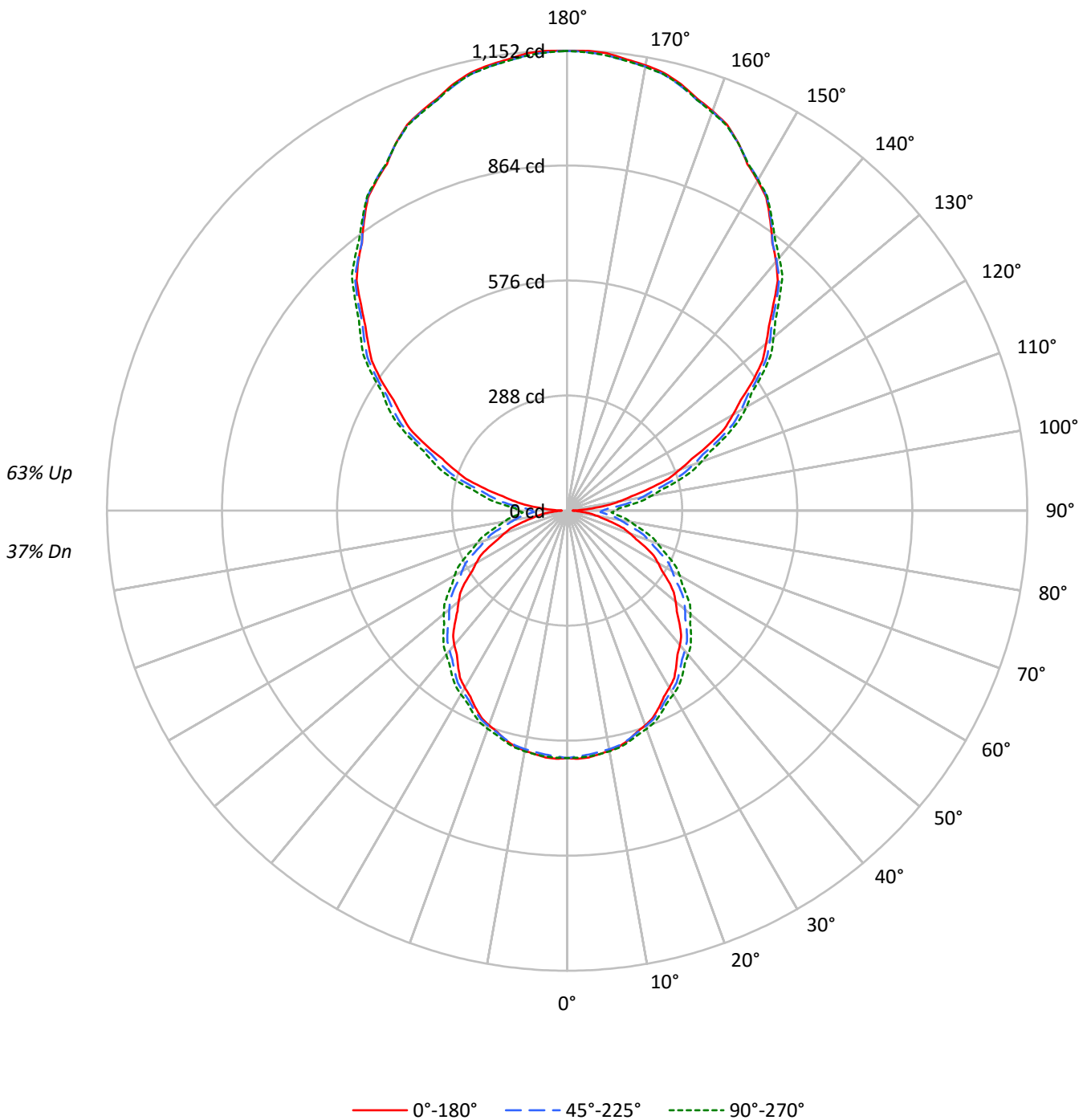
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332566-940

CATALOG NUMBER: S124DIP-S575D1035U940-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P332566-940

CATALOG NUMBER: S124DIP-S575D1035U940-4F0-1E-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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37
1	94	90	85	82	85	81	78	74	65	63	61	51	49	48	38	37	36	29
2	85	78	71	66	77	70	65	60	57	53	50	44	42	39	33	31	29	24
3	78	68	61	55	70	62	55	50	50	45	41	39	36	33	29	27	25	20
4	71	60	52	46	64	54	47	42	44	39	35	34	31	28	25	23	21	17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15
6	60	48	39	34	54	43	36	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11
8	51	39	31	26	46	35	28	24	29	24	20	23	19	16	17	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	16	13	11	9
10	44	32	25	20	40	29	23	19	24	19	16	19	16	13	15	12	10	8

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



TEST NUMBER: P332566-940

CATALOG NUMBER: S124DIP-S575D1035U940-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	1.1
10°-20°	168.1	3.2
20°-30°	254.2	4.8
30°-40°	307.6	5.8
40°-50°	325.2	6.1
50°-60°	306.0	5.8
60°-70°	253.9	4.8
70°-80°	178.3	3.4
80°-90°	104.3	2.0
90°-100°	135.8	2.6
100°-110°	269.2	5.1
110°-120°	411.4	7.7
120°-130°	520.0	9.8
130°-140°	572.4	10.8
140°-150°	556.8	10.5
150°-160°	467.1	8.8
160°-170°	310.8	5.9
170°-180°	108.8	2.1
0°-30°	481.0	9.1
0°-40°	788.6	14.9
0°-60°	1419.8	26.7
0°-90°	1956.3	36.9
90°-120°	816.3	15.4
90°-150°	2465.6	46.4
90°-180°	3352.0	63.1
0°-180°	5308.6	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	11
95°	62	94	128	149	156	67
105°	214	229	258	277	286	227
115°	392	399	419	433	437	387
125°	568	568	584	595	598	506
135°	730	736	741	749	751	565
145°	886	889	890	893	893	555
155°	1015	1015	1014	1017	1014	467
165°	1105	1102	1100	1105	1102	311
175°	1149	1145	1144	1149	1144	109
180°	1151	1151	1151	1151	1151	



TEST NUMBER: P332566-940

CATALOG NUMBER: S124DIP-S575D1035U940-4F0-1E-UDD-D1

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°	29.6	37.6	45.7	53.7	61.8	69.6	77.4	85.2	92.9	100.6	105.7
95°	62.4	69.3	76.2	83.0	89.9	97.2	104.9	112.6	120.3	128.0	132.8
97.5°	101.5	107.3	113.1	118.9	124.7	131.5	139.4	147.3	155.2	163.1	167.8
100°	132.2	137.1	141.9	146.6	151.4	157.7	165.5	173.3	181.1	189.0	193.5
102.5°	165.0	168.8	172.6	176.5	180.3	186.0	193.5	201.0	208.6	216.1	220.6
105°	213.7	216.9	220.2	223.5	226.8	231.7	238.2	244.6	251.1	257.6	262.1
107.5°	266.0	268.8	271.5	274.3	277.1	281.2	286.7	292.2	297.7	303.3	307.6
110°	301.0	303.6	306.1	308.7	311.3	315.1	320.3	325.6	330.7	335.9	339.1



TEST NUMBER: P332566-940

CATALOG NUMBER: S124DIP-S575D1035U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	337.5	339.5	341.5	343.5	345.4	348.8	353.7	358.5	363.3	368.0	371.4
115°	392.3	393.6	395.0	396.4	397.8	400.7	405.3	409.8	414.4	418.9	422.0
117.5°	444.4	445.4	446.4	447.4	448.4	451.0	455.4	459.7	464.0	468.3	470.8
120°	478.8	480.0	481.3	482.5	483.8	486.3	490.2	494.1	497.9	501.9	503.9
122.5°	515.1	515.5	515.9	516.3	516.7	518.9	522.8	526.8	530.7	534.7	537.1
125°	567.9	567.8	567.7	567.5	567.3	569.1	572.7	576.4	580.1	583.7	586.2
127.5°	616.4	616.9	617.3	617.7	618.1	619.7	622.3	625.0	627.7	630.3	632.7
130°	650.1	650.5	650.9	651.4	651.8	653.3	655.7	658.2	660.7	663.1	665.5
132.5°	684.9	685.2	685.5	685.7	686.1	687.1	688.9	690.7	692.5	694.4	696.6
135°	730.3	731.6	732.7	733.9	735.1	736.2	737.3	738.3	739.5	740.6	742.6
137.5°	780.5	781.0	781.3	781.8	782.1	782.7	783.6	784.4	785.2	786.1	787.8
140°	814.0	814.2	814.5	814.8	814.9	815.2	815.3	815.5	815.6	815.8	817.6
142.5°	844.1	844.5	844.8	845.2	845.5	845.6	845.3	845.1	844.8	844.5	846.3
145°	886.3	886.9	887.6	888.2	888.9	889.2	889.5	889.7	889.8	890.0	890.8
147.5°	928.3	929.1	929.9	930.7	931.5	931.8	931.7	931.5	931.3	931.2	931.1
150°	954.0	954.6	955.2	955.8	956.4	956.8	956.8	956.8	956.8	956.8	956.8
152.5°	977.6	978.0	978.5	978.9	979.4	979.6	979.8	980.0	980.2	980.3	980.8
155°	1014.7	1014.7	1014.7	1014.7	1014.7	1014.6	1014.3	1014.1	1014.0	1013.8	1014.6
157.5°	1046.0	1045.6	1045.3	1044.9	1044.6	1044.4	1044.3	1044.3	1044.3	1044.2	1044.8
160°	1064.5	1064.3	1064.1	1063.9	1063.7	1063.5	1063.3	1063.1	1062.9	1062.7	1063.3
162.5°	1081.6	1081.1	1080.6	1080.0	1079.5	1079.1	1079.0	1078.8	1078.6	1078.3	1079.4
165°	1104.6	1103.9	1103.4	1102.8	1102.2	1101.7	1101.3	1100.9	1100.5	1100.1	1101.3
167.5°	1122.2	1121.3	1120.5	1119.7	1118.8	1118.5	1118.5	1118.6	1118.6	1118.7	1119.8
170°	1132.1	1131.1	1130.2	1129.2	1128.2	1127.7	1128.0	1128.2	1128.4	1128.5	1129.8
172.5°	1139.2	1138.4	1137.6	1136.8	1136.0	1135.5	1135.6	1135.6	1135.7	1135.7	1137.0
175°	1149.1	1148.1	1147.1	1146.1	1145.1	1144.5	1144.3	1144.1	1143.9	1143.7	1145.1
177.5°	1152.3	1151.5	1150.7	1149.9	1149.1	1148.7	1148.7	1148.7	1148.7	1148.7	1149.8
180°	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8



TEST NUMBER: P332566-940

CATALOG NUMBER: S124DIP-S575D1035U940-4F0-1E-UDD-D1

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	119.4	121.1
92.5°	110.8	115.8	120.8	124.1	125.6	127.1	128.5	130.0
95°	137.5	142.3	147.0	150.1	151.5	152.9	154.3	155.7
97.5°	172.5	177.3	182.1	185.1	186.5	187.8	189.0	190.4
100°	198.0	202.6	207.1	210.0	211.1	212.1	213.2	214.3
102.5°	225.2	229.8	234.4	237.4	238.8	240.1	241.5	242.8
105°	266.5	271.0	275.4	278.6	280.4	282.2	284.0	285.9
107.5°	311.9	316.3	320.7	323.3	324.4	325.5	326.5	327.6
110°	342.2	345.4	348.6	351.1	352.8	354.7	356.5	358.4



TEST NUMBER: P332566-940

CATALOG NUMBER: S124DIP-S575D1035U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	374.7	378.1	381.4	383.8	385.1	386.5	387.8	389.1
115°	425.3	428.5	431.7	433.7	434.6	435.5	436.3	437.2
117.5°	473.4	475.9	478.5	480.1	481.0	481.8	482.7	483.5
120°	506.0	508.1	510.2	512.1	513.7	515.3	517.0	518.6
122.5°	539.5	541.9	544.3	545.7	546.1	546.5	546.9	547.3
125°	588.8	591.3	593.9	595.4	595.9	596.5	597.0	597.5
127.5°	635.1	637.4	639.8	641.4	642.1	642.8	643.5	644.3
130°	667.9	670.3	672.6	673.9	674.0	674.1	674.3	674.4
132.5°	698.8	701.2	703.4	704.8	705.4	706.1	706.7	707.2
135°	744.7	746.7	748.9	750.0	750.4	750.7	751.0	751.4
137.5°	789.6	791.3	793.1	794.3	795.2	796.1	797.0	797.9
140°	819.4	821.2	823.0	824.2	824.7	825.4	825.9	826.5
142.5°	848.0	849.7	851.5	852.7	853.2	853.8	854.4	855.1
145°	891.5	892.2	893.0	893.3	893.3	893.4	893.4	893.4
147.5°	931.1	931.0	931.0	931.1	931.5	931.7	932.0	932.4
150°	956.8	956.8	956.8	956.7	956.5	956.3	956.1	955.9
152.5°	981.2	981.7	982.2	982.2	981.7	981.1	980.6	980.1
155°	1015.4	1016.1	1016.9	1016.9	1016.1	1015.4	1014.6	1013.8
157.5°	1045.4	1046.0	1046.6	1046.5	1045.9	1045.2	1044.6	1043.8
160°	1063.9	1064.5	1065.1	1064.9	1063.9	1062.9	1061.9	1061.0
162.5°	1080.5	1081.6	1082.6	1082.7	1081.7	1080.8	1079.8	1078.7
165°	1102.5	1103.7	1104.8	1105.0	1104.3	1103.5	1102.7	1101.9
167.5°	1121.0	1122.2	1123.4	1123.4	1122.1	1120.9	1119.6	1118.5
170°	1131.0	1132.1	1133.4	1133.2	1131.8	1130.4	1129.1	1127.7
172.5°	1138.4	1139.7	1141.1	1141.0	1139.7	1138.3	1136.9	1135.5
175°	1146.5	1147.9	1149.2	1149.2	1147.9	1146.5	1145.1	1143.7
177.5°	1150.9	1152.0	1153.2	1153.1	1151.8	1150.5	1149.2	1148.0
180°	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8

(END OF REPORT)