

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

Luminaire Tested: **S124DIP-S575D1035U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

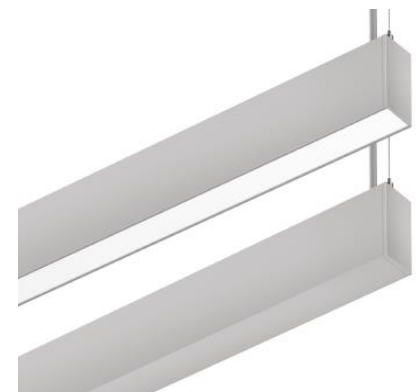
Test Information

Test Method: LM-79-08
Report Number: P332566
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-S575D1035U835-4F0-1E-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: 5953.3 lumens
Efficiency: N/A
Efficacy: 133.8 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

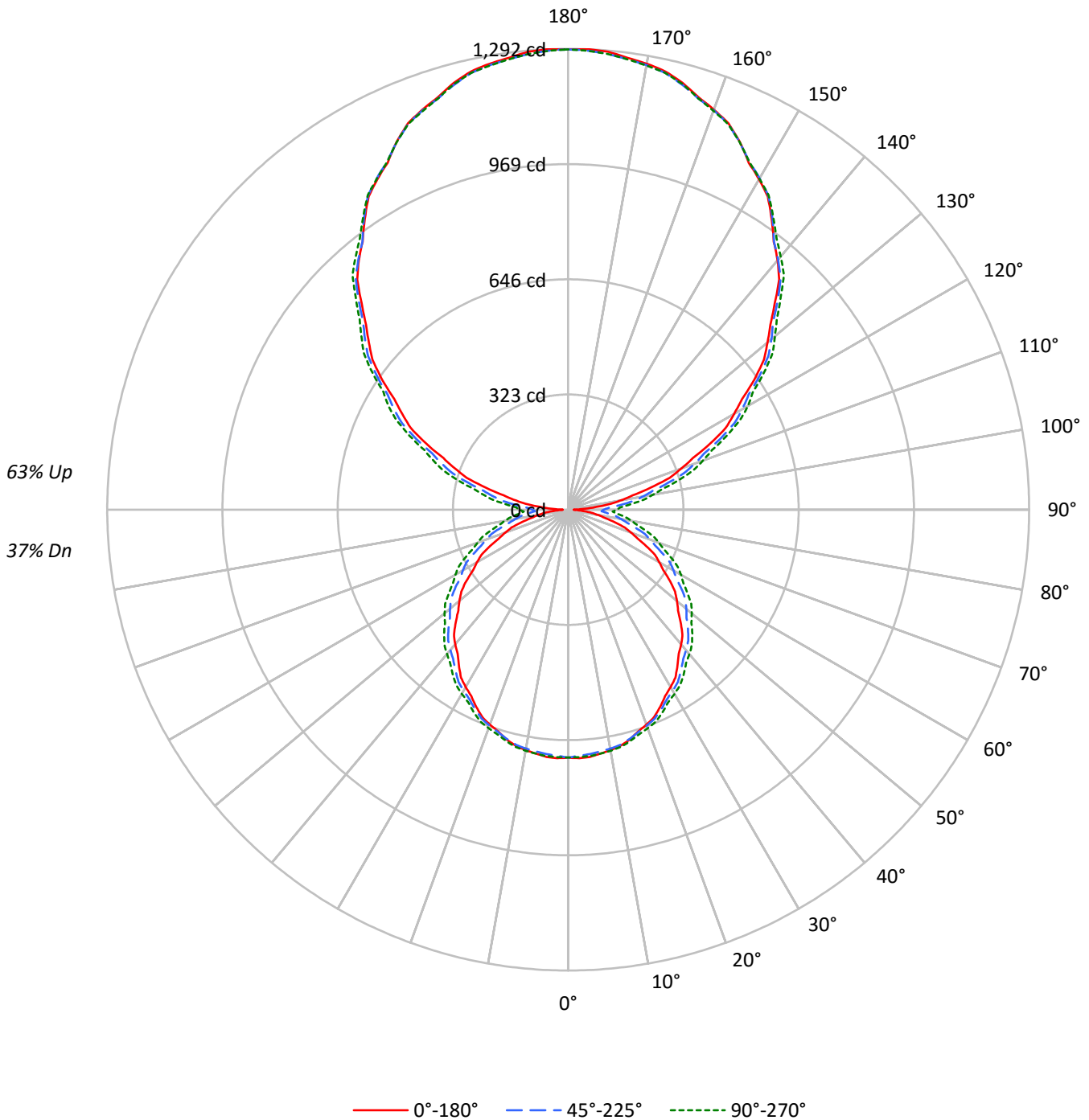
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332566

CATALOG NUMBER: S124DIP-S575D1035U835-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P332566

CATALOG NUMBER: S124DIP-S575D1035U835-4F0-1E-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	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°	5610	5610	5610
5°	5628	5483	5498
10°	5593	5393	5388
15°	5543	5289	5260
20°	5467	5175	5135
25°	5382	5046	4997
30°	5290	4919	4856
35°	5185	4787	4732
40°	5102	4663	4603
45°	4978	4549	4492
50°	4873	4416	4375
55°	4765	4291	4237
60°	4596	4132	4112
65°	4410	3962	3958
70°	4186	3768	3778
75°	3872	3553	3616
80°	3526	3347	3457
85°	3082	3163	3364



TEST NUMBER: P332566

CATALOG NUMBER: S124DIP-S575D1035U835-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	1.1
10°-20°	188.5	3.2
20°-30°	285.1	4.8
30°-40°	344.9	5.8
40°-50°	364.7	6.1
50°-60°	343.2	5.8
60°-70°	284.7	4.8
70°-80°	200.0	3.4
80°-90°	116.9	2.0
90°-100°	152.3	2.6
100°-110°	301.9	5.1
110°-120°	461.3	7.7
120°-130°	583.2	9.8
130°-140°	641.9	10.8
140°-150°	624.5	10.5
150°-160°	523.8	8.8
160°-170°	348.5	5.9
170°-180°	122.0	2.1
0°-30°	539.4	9.1
0°-40°	884.4	14.9
0°-60°	1592.2	26.7
0°-90°	2193.8	36.9
90°-120°	915.5	15.4
90°-150°	2765.0	46.4
90°-180°	3759.0	63.1
0°-180°	5953.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	696	693	688	694	693	66
15°	667	668	665	672	672	188
25°	610	615	617	625	626	281
35°	534	543	551	561	564	334
45°	445	460	475	487	492	344
55°	349	365	388	403	408	311
65°	241	266	293	311	318	239
75°	134	163	195	216	224	142
85°	41	74	109	131	140	44
90°	15	58	99	126	136	12
95°	70	105	144	167	175	75
105°	240	257	289	311	321	255
115°	440	448	470	485	490	434
125°	637	637	655	667	670	568
135°	819	825	830	840	843	634
145°	994	997	998	1002	1002	622
155°	1138	1138	1137	1140	1137	523
165°	1239	1236	1234	1239	1236	349
175°	1289	1284	1283	1289	1283	122
180°	1291	1291	1291	1291	1291	



TEST NUMBER: P332566

CATALOG NUMBER: S124DIP-S575D1035U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9
2.5°	697.4	697.0	696.6	696.1	695.7	695.0	693.9	692.8	691.6	690.5	691.5
5°	695.7	695.2	694.6	694.1	693.6	692.7	691.5	690.3	689.1	687.9	689.3
7.5°	689.8	689.4	689.1	688.8	688.5	687.9	686.9	685.9	684.8	683.8	685.4
10°	684.8	684.6	684.4	684.3	684.1	683.6	682.7	681.8	681.0	680.1	681.7
12.5°	677.9	677.9	677.9	677.8	677.8	677.5	676.9	676.3	675.7	675.1	676.5
15°	666.9	667.1	667.2	667.4	667.6	667.4	666.9	666.4	665.8	665.3	666.9
17.5°	651.8	652.3	652.8	653.3	653.9	654.1	654.0	653.9	653.8	653.7	655.2
20°	641.2	641.7	642.2	642.8	643.3	643.6	643.8	644.0	644.1	644.3	646.0
22.5°	629.4	630.0	630.7	631.3	632.0	632.5	632.8	633.1	633.4	633.7	635.5
25°	610.1	611.1	612.2	613.2	614.2	615.0	615.5	616.0	616.6	617.1	619.0
27.5°	588.6	590.1	591.6	593.2	594.7	595.8	596.6	597.4	598.2	599.0	600.8
30°	574.3	575.7	577.0	578.4	579.8	581.1	582.3	583.5	584.7	586.0	587.9
32.5°	558.7	560.4	562.0	563.7	565.4	566.9	568.2	569.6	570.9	572.3	574.4
35°	533.8	535.9	538.0	540.0	542.1	544.0	545.7	547.5	549.2	550.9	553.4
37.5°	508.8	511.1	513.5	515.9	518.3	520.6	522.7	524.9	527.0	529.1	531.6
40°	492.6	494.8	497.1	499.3	501.6	503.9	506.3	508.7	511.2	513.6	516.2
42.5°	473.9	476.4	478.9	481.5	484.0	486.7	489.5	492.3	495.2	498.0	500.9
45°	445.1	448.4	451.7	455.0	458.2	461.5	464.8	468.1	471.4	474.7	477.6
47.5°	417.6	420.9	424.3	427.7	431.1	434.7	438.5	442.3	446.1	449.9	453.0
50°	397.6	401.4	405.2	409.1	412.9	416.7	420.5	424.3	428.1	431.9	435.3
52.5°	377.7	381.5	385.3	389.1	392.9	397.0	401.4	405.7	410.1	414.4	417.9
55°	348.6	352.2	355.9	359.5	363.1	367.5	372.7	377.9	383.1	388.3	391.8
57.5°	316.1	320.6	325.1	329.6	334.1	338.9	344.0	349.2	354.4	359.5	363.6
60°	294.9	299.4	303.9	308.4	312.9	318.0	323.7	329.4	335.1	340.8	344.8
62.5°	274.4	279.3	284.2	289.1	294.0	299.3	305.0	310.7	316.5	322.2	326.1
65°	241.2	246.8	252.3	257.8	263.4	269.1	274.9	280.8	286.7	292.6	296.9
67.5°	209.3	215.2	221.1	227.0	232.8	238.9	245.2	251.5	257.8	264.1	268.5
70°	187.5	193.4	199.3	205.2	211.1	217.3	223.8	230.4	237.0	243.6	248.2
72.5°	166.4	172.4	178.4	184.4	190.4	196.9	203.9	210.9	217.9	224.9	229.4
75°	133.8	140.2	146.6	153.0	159.4	166.3	173.5	180.8	188.1	195.3	200.2
77.5°	103.5	110.3	117.1	123.8	130.6	137.8	145.4	153.0	160.6	168.2	173.1
80°	84.8	91.7	98.7	105.6	112.5	119.7	127.4	135.0	142.6	150.2	155.4
82.5°	66.1	73.3	80.5	87.7	94.9	102.3	109.9	117.5	125.1	132.8	138.1
85°	41.2	48.5	55.8	63.0	70.3	77.8	85.6	93.4	101.2	108.9	114.1
87.5°	23.6	31.2	38.7	46.3	53.8	61.5	69.5	77.4	85.3	93.3	98.5
90°	15.4	24.8	34.2	43.5	52.9	62.2	71.4	80.6	89.8	99.0	105.3
92.5°	33.2	42.2	51.2	60.2	69.3	78.1	86.8	95.5	104.2	112.8	118.5
95°	70.0	77.7	85.4	93.1	100.8	109.0	117.6	126.3	134.9	143.6	148.9
97.5°	113.8	120.3	126.8	133.3	139.8	147.5	156.3	165.2	174.0	182.9	188.2
100°	148.3	153.7	159.1	164.4	169.8	176.9	185.6	194.4	203.1	211.9	217.0
102.5°	185.0	189.3	193.6	197.9	202.2	208.6	217.0	225.4	233.9	242.3	247.4
105°	239.6	243.2	246.9	250.6	254.3	259.8	267.1	274.3	281.6	288.9	293.9
107.5°	298.3	301.4	304.5	307.6	310.7	315.4	321.5	327.7	333.9	340.1	345.0
110°	337.6	340.5	343.3	346.2	349.1	353.4	359.2	365.1	370.9	376.7	380.3



TEST NUMBER: P332566

CATALOG NUMBER: S124DIP-S575D1035U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	378.5	380.7	383.0	385.2	387.4	391.2	396.6	402.0	407.4	412.7	416.5
115°	439.9	441.4	443.0	444.5	446.1	449.4	454.5	459.6	464.7	469.8	473.3
117.5°	498.4	499.5	500.6	501.7	502.8	505.8	510.7	515.5	520.3	525.2	528.0
120°	536.9	538.3	539.7	541.1	542.5	545.4	549.7	554.1	558.4	562.8	565.1
122.5°	577.6	578.1	578.5	579.0	579.5	581.9	586.3	590.8	595.2	599.6	602.3
125°	636.9	636.8	636.6	636.4	636.2	638.2	642.3	646.4	650.5	654.6	657.4
127.5°	691.3	691.8	692.3	692.7	693.2	695.0	697.9	700.9	703.9	706.8	709.5
130°	729.0	729.5	730.0	730.5	730.9	732.6	735.3	738.1	740.9	743.6	746.3
132.5°	768.1	768.4	768.7	769.0	769.4	770.5	772.6	774.6	776.6	778.7	781.2
135°	819.0	820.4	821.7	823.0	824.4	825.6	826.8	828.0	829.3	830.5	832.8
137.5°	875.3	875.8	876.2	876.7	877.1	877.8	878.8	879.7	880.6	881.6	883.5
140°	912.9	913.1	913.4	913.7	913.9	914.2	914.3	914.5	914.7	914.9	916.9
142.5°	946.6	947.0	947.4	947.8	948.2	948.3	948.0	947.7	947.4	947.1	949.1
145°	993.9	994.6	995.4	996.1	996.8	997.2	997.5	997.7	997.9	998.1	999.0
147.5°	1041.0	1041.9	1042.8	1043.7	1044.6	1045.0	1044.8	1044.6	1044.4	1044.3	1044.2
150°	1069.8	1070.5	1071.2	1071.9	1072.6	1073.0	1073.0	1073.0	1073.0	1073.0	1073.0
152.5°	1096.3	1096.8	1097.3	1097.8	1098.3	1098.6	1098.8	1099.0	1099.2	1099.3	1099.9
155°	1137.9	1137.9	1137.9	1137.9	1137.9	1137.8	1137.5	1137.3	1137.1	1136.9	1137.8
157.5°	1173.0	1172.6	1172.2	1171.8	1171.4	1171.2	1171.1	1171.1	1171.1	1171.0	1171.7
160°	1193.8	1193.5	1193.3	1193.1	1192.9	1192.7	1192.4	1192.2	1192.0	1191.8	1192.4
162.5°	1212.9	1212.4	1211.8	1211.2	1210.6	1210.2	1210.0	1209.8	1209.6	1209.3	1210.5
165°	1238.7	1238.0	1237.4	1236.7	1236.0	1235.5	1235.0	1234.6	1234.1	1233.7	1235.0
167.5°	1258.5	1257.5	1256.6	1255.7	1254.7	1254.3	1254.3	1254.4	1254.4	1254.5	1255.8
170°	1269.6	1268.5	1267.4	1266.3	1265.2	1264.7	1265.0	1265.2	1265.4	1265.6	1267.0
172.5°	1277.6	1276.7	1275.8	1274.8	1273.9	1273.4	1273.5	1273.5	1273.6	1273.6	1275.1
175°	1288.6	1287.5	1286.4	1285.3	1284.2	1283.5	1283.3	1283.0	1282.8	1282.6	1284.2
177.5°	1292.2	1291.3	1290.4	1289.5	1288.6	1288.2	1288.2	1288.2	1288.2	1288.2	1289.4
180°	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6



TEST NUMBER: P332566

CATALOG NUMBER: S124DIP-S575D1035U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9
2.5°	692.5	693.4	694.4	694.8	694.7	694.5	694.4	694.3
5°	690.7	692.0	693.4	694.0	693.9	693.7	693.5	693.3
7.5°	687.0	688.5	690.1	690.8	690.6	690.4	690.2	690.1
10°	683.2	684.8	686.3	687.0	686.9	686.7	686.5	686.3
12.5°	678.0	679.4	680.8	681.5	681.5	681.4	681.4	681.4
15°	668.4	670.0	671.5	672.2	672.1	671.9	671.7	671.5
17.5°	656.8	658.4	660.0	660.7	660.6	660.5	660.3	660.2
20°	647.8	649.5	651.2	652.1	652.1	652.1	652.1	652.1
22.5°	637.2	638.9	640.6	641.7	641.9	642.2	642.5	642.8
25°	620.9	622.8	624.7	625.7	625.9	626.1	626.2	626.4
27.5°	602.6	604.3	606.1	607.1	607.3	607.5	607.7	607.9
30°	589.8	591.7	593.6	594.7	595.0	595.4	595.7	596.1
32.5°	576.6	578.8	581.0	582.2	582.6	582.9	583.3	583.6
35°	555.8	558.2	560.6	562.1	562.6	563.1	563.6	564.2
37.5°	534.1	536.5	539.0	540.5	541.0	541.6	542.1	542.7
40°	518.8	521.4	524.0	525.6	526.3	527.0	527.7	528.4
42.5°	503.8	506.6	509.5	511.2	511.8	512.3	512.9	513.4
45°	480.6	483.5	486.4	488.3	489.2	490.1	490.9	491.8
47.5°	456.0	459.1	462.1	464.1	465.2	466.2	467.3	468.3
50°	438.8	442.3	445.7	448.0	449.0	450.0	451.1	452.1
52.5°	421.4	424.8	428.3	430.5	431.6	432.6	433.6	434.7
55°	395.2	398.7	402.1	404.4	405.4	406.5	407.5	408.5
57.5°	367.7	371.9	376.0	378.5	379.5	380.4	381.4	382.4
60°	348.8	352.8	356.7	359.4	360.8	362.2	363.6	365.0
62.5°	330.1	334.1	338.1	340.7	342.1	343.5	344.9	346.3
65°	301.2	305.6	309.9	312.7	314.1	315.5	316.9	318.3
67.5°	272.9	277.3	281.7	284.5	285.9	287.2	288.6	289.9
70°	252.9	257.6	262.2	265.2	266.4	267.6	268.8	270.0
72.5°	233.9	238.5	243.0	245.9	247.3	248.6	250.0	251.3
75°	205.0	209.8	214.7	217.9	219.4	221.0	222.6	224.1
77.5°	178.1	183.0	187.9	191.2	192.8	194.5	196.1	197.8
80°	160.6	165.7	170.9	174.2	175.6	177.0	178.4	179.8
82.5°	143.4	148.7	154.1	157.5	159.0	160.5	162.0	163.6
85°	119.3	124.5	129.7	133.2	134.9	136.6	138.3	140.1
87.5°	103.8	109.1	114.4	117.8	119.4	121.0	122.7	124.3
90°	111.7	118.0	124.4	128.5	130.3	132.1	133.9	135.8
92.5°	124.2	129.9	135.5	139.2	140.8	142.5	144.1	145.8
95°	154.2	159.6	164.9	168.3	169.9	171.5	173.0	174.6
97.5°	193.5	198.8	204.2	207.6	209.1	210.6	212.0	213.5
100°	222.1	227.2	232.3	235.5	236.7	237.9	239.1	240.3
102.5°	252.6	257.7	262.9	266.2	267.8	269.3	270.8	272.3
105°	298.9	303.9	308.9	312.4	314.4	316.5	318.5	320.6
107.5°	349.8	354.7	359.6	362.6	363.8	365.0	366.2	367.4
110°	383.8	387.3	390.9	393.7	395.7	397.8	399.8	401.9



TEST NUMBER: P332566

CATALOG NUMBER: S124DIP-S575D1035U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	420.2	424.0	427.7	430.4	431.9	433.4	434.9	436.4
115°	476.9	480.5	484.1	486.4	487.4	488.4	489.3	490.3
117.5°	530.9	533.7	536.6	538.4	539.4	540.3	541.3	542.2
120°	567.5	569.8	572.2	574.3	576.1	577.9	579.8	581.6
122.5°	605.0	607.7	610.4	612.0	612.4	612.9	613.3	613.8
125°	660.3	663.1	666.0	667.7	668.3	668.9	669.5	670.1
127.5°	712.2	714.8	717.5	719.3	720.1	720.9	721.7	722.5
130°	749.0	751.7	754.3	755.7	755.9	756.0	756.2	756.3
132.5°	783.7	786.3	788.8	790.4	791.1	791.8	792.5	793.1
135°	835.1	837.4	839.8	841.1	841.5	841.9	842.2	842.6
137.5°	885.5	887.4	889.4	890.8	891.8	892.8	893.8	894.8
140°	918.9	920.9	923.0	924.3	924.9	925.6	926.2	926.9
142.5°	951.0	952.9	954.9	956.2	956.8	957.5	958.2	958.9
145°	999.8	1000.6	1001.4	1001.8	1001.8	1001.9	1001.9	1001.9
147.5°	1044.2	1044.1	1044.1	1044.2	1044.6	1044.9	1045.2	1045.6
150°	1073.0	1073.0	1073.0	1072.9	1072.7	1072.4	1072.2	1072.0
152.5°	1100.4	1100.9	1101.5	1101.5	1100.9	1100.3	1099.7	1099.1
155°	1138.7	1139.5	1140.4	1140.4	1139.5	1138.7	1137.8	1136.9
157.5°	1172.3	1173.0	1173.7	1173.6	1172.9	1172.1	1171.4	1170.6
160°	1193.1	1193.8	1194.4	1194.2	1193.1	1192.0	1190.9	1189.8
162.5°	1211.7	1212.9	1214.1	1214.2	1213.1	1212.0	1210.9	1209.7
165°	1236.4	1237.7	1239.0	1239.2	1238.4	1237.5	1236.6	1235.7
167.5°	1257.1	1258.5	1259.8	1259.8	1258.4	1257.0	1255.6	1254.3
170°	1268.3	1269.6	1271.0	1270.8	1269.3	1267.7	1266.2	1264.6
172.5°	1276.6	1278.1	1279.7	1279.6	1278.1	1276.5	1275.0	1273.4
175°	1285.7	1287.3	1288.8	1288.8	1287.3	1285.7	1284.2	1282.6
177.5°	1290.7	1291.9	1293.2	1293.1	1291.7	1290.2	1288.8	1287.4
180°	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6

(END OF REPORT)