

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

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332565
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-S575D1035U835-4F0-1E-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

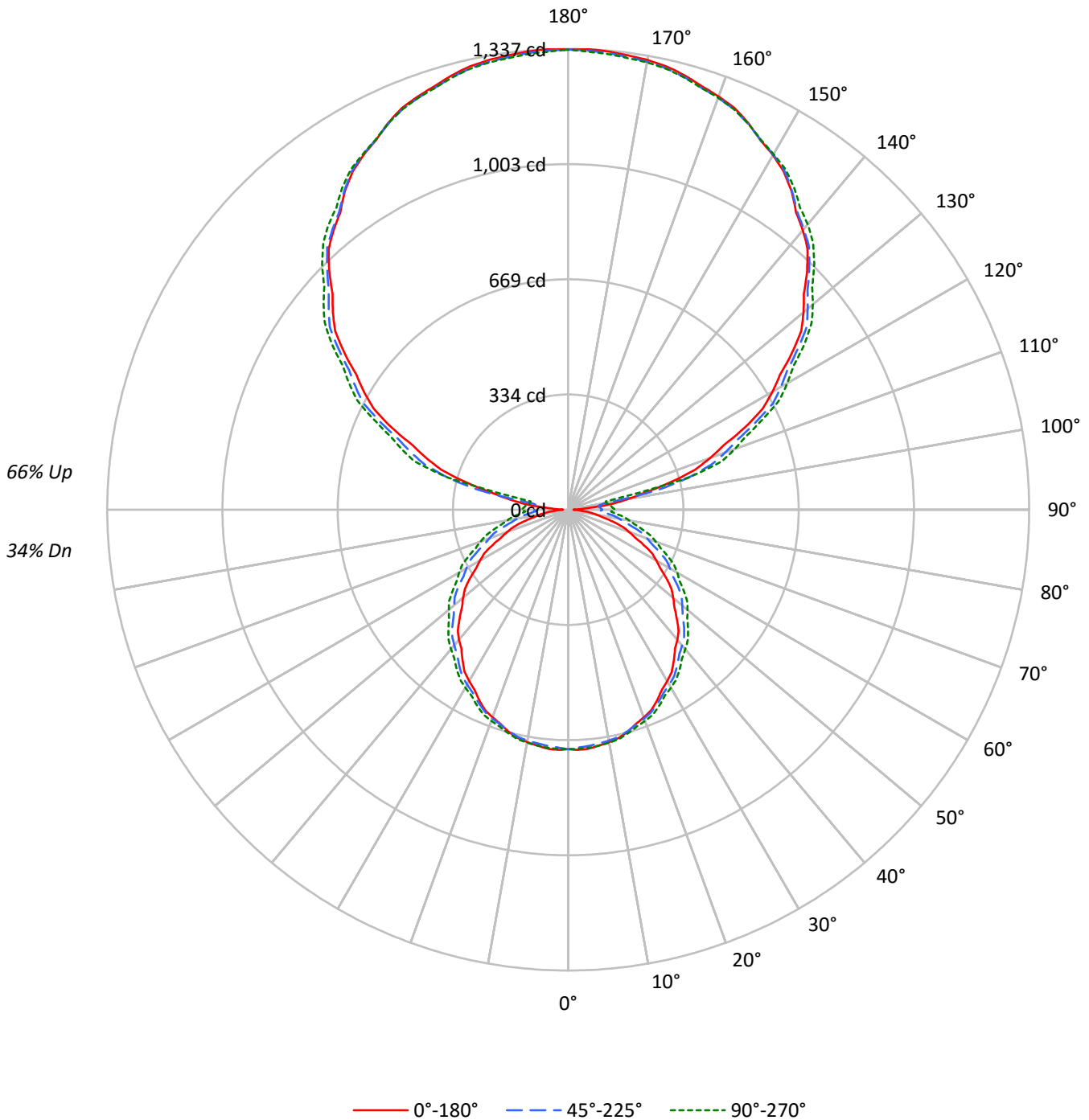
Lumens per Lamp: N/A
Luminaire Lumens: 6501.2 lumens
Efficiency: N/A
Efficacy: 146.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

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: P332565
CATALOG NUMBER: S124DIP-S575D1035U835-4F0-1E-UDD-D

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°	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: P332565

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	1.0
10°-20°	188.5	2.9
20°-30°	285.1	4.4
30°-40°	344.9	5.3
40°-50°	364.7	5.6
50°-60°	343.2	5.3
60°-70°	284.7	4.4
70°-80°	200.0	3.1
80°-90°	116.9	1.8
90°-100°	112.8	1.7
100°-110°	340.8	5.2
110°-120°	590.1	9.1
120°-130°	725.6	11.2
130°-140°	764.4	11.8
140°-150°	708.8	10.9
150°-160°	570.3	8.8
160°-170°	367.8	5.7
170°-180°	126.8	1.9
0°-30°	539.4	8.3
0°-40°	884.4	13.6
0°-60°	1592.2	24.5
0°-90°	2193.9	33.7
90°-120°	1043.7	16.1
90°-150°	3242.5	49.9
90°-180°	4307.0	66.2
0°-180°	6501.2	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	11
95°	65	59	90	116	125	79
105°	308	330	363	388	362	322
115°	566	576	600	618	624	557
125°	792	796	812	830	836	707
135°	980	979	988	1002	1009	755
145°	1129	1131	1131	1137	1142	705
155°	1237	1238	1235	1238	1236	570
165°	1305	1300	1300	1307	1299	369
175°	1335	1329	1330	1338	1327	127
180°	1335	1335	1335	1335	1335	



TEST NUMBER: P332565

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

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°	24.4	30.8	37.1	43.5	49.8	57.6	66.8	76.0	85.3	94.5	100.7
95°	65.0	63.2	61.3	59.5	57.7	60.4	67.7	75.0	82.3	89.7	95.7
97.5°	125.8	135.4	145.0	154.6	164.2	160.2	142.4	124.7	107.0	89.2	93.9
100°	172.3	180.8	189.3	197.7	206.2	198.5	174.7	150.8	126.9	103.1	104.0
102.5°	225.0	231.9	238.7	245.6	252.5	257.2	259.8	262.4	265.0	267.7	231.5
105°	307.5	312.3	317.1	321.9	326.6	332.8	340.3	347.8	355.3	362.8	369.1
107.5°	385.4	388.9	392.4	395.9	399.4	404.9	412.5	420.1	427.6	435.2	440.4
110°	437.5	440.6	443.7	446.7	449.8	455.1	462.4	469.8	477.2	484.6	489.0



TEST NUMBER: P332565

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	488.0	491.3	494.7	498.0	501.3	506.2	512.6	519.0	525.4	531.8	535.5
115°	565.7	567.9	570.1	572.4	574.6	578.4	583.7	589.0	594.3	599.6	603.8
117.5°	636.4	638.2	640.1	641.9	643.7	647.4	653.1	658.7	664.4	670.0	673.5
120°	683.7	685.1	686.5	687.9	689.3	692.4	697.2	702.0	706.8	711.6	715.5
122.5°	728.4	729.1	729.7	730.3	731.0	733.8	738.9	743.9	749.0	754.0	757.7
125°	791.7	792.5	793.2	793.9	794.6	796.9	800.8	804.7	808.5	812.4	816.4
127.5°	852.3	852.3	852.4	852.4	852.5	854.7	859.0	863.4	867.7	872.0	875.0
130°	890.8	890.8	890.9	890.9	891.0	892.7	896.2	899.6	903.0	906.5	909.8
132.5°	926.7	927.0	927.2	927.4	927.6	929.3	932.3	935.4	938.4	941.5	944.7
135°	979.9	979.6	979.4	979.2	979.0	979.9	982.0	984.1	986.2	988.3	991.5
137.5°	1027.6	1027.5	1027.4	1027.3	1027.2	1028.0	1029.5	1031.1	1032.7	1034.2	1037.2
140°	1058.7	1059.0	1059.3	1059.5	1059.8	1060.3	1060.9	1061.5	1062.1	1062.7	1065.6
142.5°	1086.1	1086.8	1087.6	1088.3	1089.1	1089.6	1089.7	1089.9	1090.1	1090.2	1092.7
145°	1128.8	1129.3	1129.8	1130.3	1130.8	1131.0	1131.0	1131.0	1131.0	1131.0	1132.3
147.5°	1163.0	1164.0	1165.1	1166.2	1167.2	1167.7	1167.4	1167.2	1167.0	1166.8	1167.1
150°	1187.7	1188.4	1189.1	1189.9	1190.6	1190.8	1190.6	1190.4	1190.2	1189.9	1189.9
152.5°	1207.9	1208.5	1209.2	1209.9	1210.6	1210.7	1210.3	1209.9	1209.5	1209.1	1209.5
155°	1236.9	1237.1	1237.3	1237.5	1237.7	1237.5	1236.9	1236.2	1235.5	1234.9	1235.7
157.5°	1261.4	1261.3	1261.1	1261.0	1260.9	1260.4	1259.7	1258.9	1258.2	1257.4	1258.6
160°	1275.8	1275.1	1274.5	1273.8	1273.1	1272.7	1272.5	1272.2	1272.0	1271.8	1273.1
162.5°	1288.6	1287.7	1286.9	1286.0	1285.2	1284.7	1284.4	1284.2	1284.0	1283.8	1285.1
165°	1304.7	1303.6	1302.5	1301.4	1300.3	1299.7	1299.7	1299.7	1299.7	1299.7	1301.5
167.5°	1317.5	1316.4	1315.2	1314.1	1312.9	1312.3	1312.1	1312.0	1311.9	1311.7	1313.7
170°	1324.7	1323.4	1322.0	1320.7	1319.4	1318.8	1319.0	1319.3	1319.5	1319.7	1321.5
172.5°	1329.5	1328.2	1326.8	1325.5	1324.2	1323.6	1323.8	1324.1	1324.3	1324.5	1326.3
175°	1334.7	1333.4	1332.0	1330.7	1329.4	1328.8	1329.0	1329.3	1329.5	1329.7	1331.7
177.5°	1337.1	1335.8	1334.6	1333.4	1332.1	1331.7	1332.0	1332.4	1332.7	1333.1	1334.5
180°	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7



TEST NUMBER: P332565

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

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	134.0	135.8
92.5°	106.9	113.1	119.3	123.1	124.6	126.1	127.6	129.0
95°	101.7	107.7	113.7	117.6	119.3	121.1	122.9	124.7
97.5°	98.6	103.2	107.9	111.1	112.8	114.5	116.2	117.9
100°	104.9	105.8	106.7	107.8	109.3	110.7	112.1	113.5
102.5°	195.4	159.2	123.0	105.7	107.1	108.4	109.8	111.2
105°	375.5	381.8	388.1	388.0	381.4	374.8	368.1	361.5
107.5°	445.6	450.9	456.1	459.8	461.8	463.9	466.0	468.1
110°	493.4	497.9	502.3	505.5	507.6	509.6	511.7	513.7



TEST NUMBER: P332565

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	539.3	543.0	546.8	549.8	552.0	554.2	556.5	558.7
115°	608.1	612.3	616.6	619.3	620.5	621.7	623.0	624.2
117.5°	677.0	680.5	684.0	686.4	687.7	689.0	690.3	691.6
120°	719.4	723.3	727.2	729.6	730.6	731.5	732.5	733.4
122.5°	761.5	765.2	768.9	771.2	772.0	772.8	773.6	774.4
125°	820.3	824.3	828.2	830.8	832.1	833.3	834.6	835.9
127.5°	878.0	881.0	884.0	885.9	886.9	887.9	888.9	889.9
130°	913.1	916.5	919.8	922.0	923.0	924.1	925.1	926.1
132.5°	947.9	951.1	954.3	956.3	957.2	958.0	958.9	959.8
135°	994.7	997.9	1001.1	1003.5	1005.0	1006.5	1007.9	1009.4
137.5°	1040.3	1043.3	1046.3	1048.2	1048.9	1049.6	1050.4	1051.1
140°	1068.5	1071.5	1074.4	1076.4	1077.5	1078.5	1079.6	1080.7
142.5°	1095.1	1097.6	1100.1	1101.7	1102.4	1103.2	1104.0	1104.8
145°	1133.6	1134.8	1136.1	1137.3	1138.4	1139.5	1140.7	1141.8
147.5°	1167.4	1167.7	1168.0	1168.6	1169.4	1170.1	1170.9	1171.7
150°	1189.9	1189.9	1189.9	1190.0	1190.3	1190.5	1190.7	1190.9
152.5°	1209.8	1210.2	1210.5	1210.6	1210.5	1210.4	1210.2	1210.1
155°	1236.6	1237.5	1238.4	1238.5	1237.9	1237.2	1236.5	1235.9
157.5°	1259.7	1260.9	1262.0	1262.0	1260.9	1259.7	1258.6	1257.4
160°	1274.5	1275.8	1277.1	1277.1	1275.8	1274.5	1273.1	1271.8
162.5°	1286.4	1287.8	1289.1	1289.0	1287.5	1286.0	1284.5	1283.0
165°	1303.3	1305.1	1306.8	1306.7	1304.7	1302.7	1300.7	1298.7
167.5°	1315.6	1317.6	1319.5	1319.4	1317.2	1315.0	1312.7	1310.5
170°	1323.3	1325.0	1326.8	1326.6	1324.4	1322.2	1319.9	1317.7
172.5°	1328.1	1329.8	1331.6	1331.3	1328.9	1326.5	1324.1	1321.7
175°	1333.7	1335.7	1337.7	1337.3	1334.7	1332.0	1329.4	1326.7
177.5°	1335.9	1337.3	1338.8	1338.4	1336.3	1334.2	1332.0	1329.9
180°	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7

(END OF REPORT)