

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: P332577-930

Luminaire Tested: **S124DIP-S575D1205U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332577-930
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-S575D1205U930-4F0-1E-UDD-F
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5953.4 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Semi-Indirect

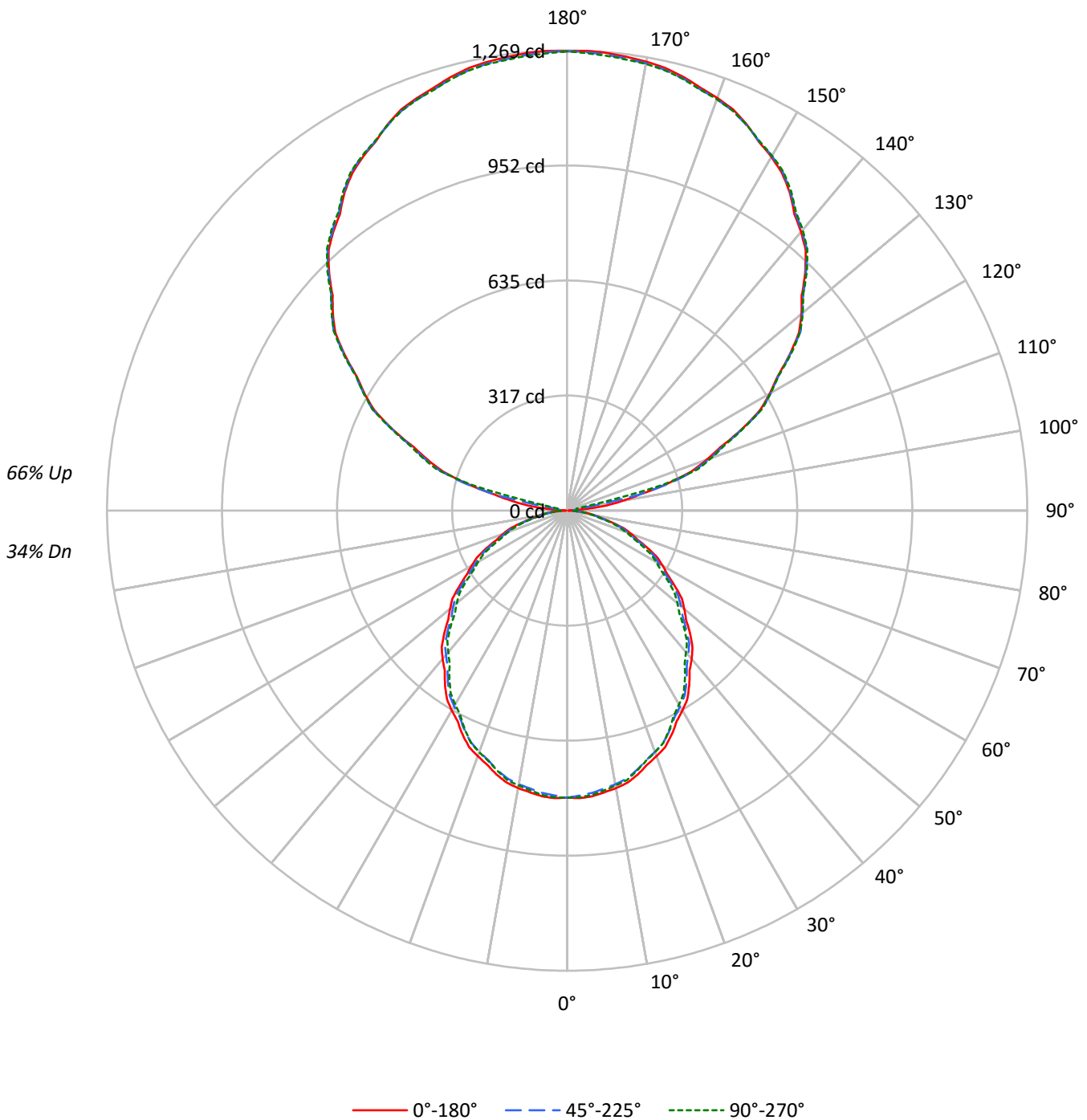
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332577-930

CATALOG NUMBER: S124DIP-S575D1205U930-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P332577-930

CATALOG NUMBER: S124DIP-S575D1205U930-4F0-1E-UDD-F

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	103	103	103	103	93	93	93	93	75	75	75	57	57	57	42	42	42	34				
1	94	90	86	83	85	81	78	75	65	63	61	50	49	48	37	36	35	29				
2	86	79	73	67	77	71	66	62	57	54	50	44	42	40	32	31	29	24				
3	78	69	62	56	70	62	56	51	50	46	42	39	36	34	29	27	25	20				
4	71	61	53	47	64	55	49	44	45	40	36	35	31	29	26	23	22	17				
5	65	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19	15				
6	60	48	41	35	54	44	37	32	36	31	27	28	24	22	21	18	16	13				
7	56	44	36	30	50	40	33	28	32	27	24	25	22	19	19	17	15	12				
8	52	40	32	27	46	36	29	25	29	24	21	23	20	17	17	15	13	11				
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12	10				
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	11	9				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6391	6391	6391
5°	6412	6334	6380
10°	6370	6283	6314
15°	6294	6193	6209
20°	6192	6082	6088
25°	6075	5956	5940
30°	5931	5808	5754
35°	5784	5653	5577
40°	5630	5476	5376
45°	5469	5302	5200
50°	5291	5148	4987
55°	5098	4947	4787
60°	4907	4721	4579
65°	4690	4508	4327
70°	4447	4223	4057
75°	4077	3877	3780
80°	3626	3477	3394
85°	3168	3057	3001



TEST NUMBER: P332577-930

CATALOG NUMBER: S124DIP-S575D1205U930-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.6	1.3
10°-20°	210.1	3.5
20°-30°	309.2	5.2
30°-40°	359.5	6.0
40°-50°	359.5	6.0
50°-60°	314.5	5.3
60°-70°	233.5	3.9
70°-80°	132.7	2.2
80°-90°	41.9	0.7
90°-100°	43.3	0.7
100°-110°	276.2	4.6
110°-120°	528.4	8.9
120°-130°	670.8	11.3
130°-140°	717.7	12.1
140°-150°	671.1	11.3
150°-160°	541.2	9.1
160°-170°	349.1	5.9
170°-180°	120.3	2.0
0°-30°	593.9	10.0
0°-40°	953.4	16.0
0°-60°	1627.3	27.3
0°-90°	2035.5	34.2
90°-120°	847.9	14.2
90°-150°	2907.4	48.8
90°-180°	3918.0	65.8
0°-180°	5953.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	792	792	792	792	792	
5°	791	788	782	788	787	75
15°	753	750	741	744	743	212
25°	682	677	669	669	667	314
35°	587	582	574	569	566	367
45°	479	474	464	458	456	369
55°	362	360	352	344	340	324
65°	246	242	236	230	226	243
75°	131	128	124	122	121	139
85°	34	34	33	33	32	38
90°	3	13	21	26	28	4
95°	52	22	21	26	28	67
105°	285	291	296	302	270	298
115°	532	535	534	536	536	524
125°	748	752	750	753	754	668
135°	928	928	931	933	935	715
145°	1070	1073	1073	1074	1076	669
155°	1174	1174	1172	1175	1173	541
165°	1238	1234	1234	1240	1232	350
175°	1267	1261	1262	1269	1259	121
180°	1267	1267	1267	1267	1267	



TEST NUMBER: P332577-930

CATALOG NUMBER: S124DIP-S575D1205U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	791.7	791.7	791.7	791.7	791.7	791.7	791.7	791.7	791.7	791.7	791.7
2.5°	793.8	793.4	793.1	792.8	792.5	791.7	790.4	789.2	787.9	786.7	787.8
5°	791.2	790.6	790.0	789.5	788.9	787.8	786.3	784.7	783.2	781.6	783.2
7.5°	783.7	783.2	782.7	782.1	781.5	780.4	778.7	777.0	775.2	773.5	774.8
10°	777.1	776.7	776.1	775.5	774.9	773.7	771.9	770.1	768.3	766.4	767.5
12.5°	768.6	768.0	767.4	766.9	766.3	765.1	763.1	761.2	759.2	757.2	758.5
15°	753.1	752.5	752.0	751.4	750.8	749.5	747.4	745.3	743.1	741.0	741.8
17.5°	734.4	733.7	733.0	732.3	731.6	730.3	728.2	726.3	724.2	722.3	722.8
20°	720.7	720.0	719.3	718.6	717.9	716.5	714.4	712.2	710.1	708.0	708.4
22.5°	706.0	705.1	704.2	703.2	702.3	700.7	698.6	696.5	694.4	692.3	693.1
25°	682.0	681.0	680.0	679.1	678.1	676.6	674.6	672.6	670.7	668.7	668.9
27.5°	654.6	653.6	652.6	651.6	650.5	649.1	647.3	645.5	643.6	641.8	641.5
30°	636.3	635.2	634.1	632.9	631.9	630.3	628.5	626.6	624.8	623.1	622.5
32.5°	617.0	616.0	615.0	614.0	613.0	611.5	609.6	607.6	605.7	603.7	603.1
35°	586.9	585.9	584.9	583.9	582.9	581.4	579.4	577.5	575.5	573.6	572.5
37.5°	555.0	554.1	553.2	552.3	551.4	549.9	547.8	545.7	543.6	541.4	540.4
40°	534.2	533.0	531.9	530.8	529.7	528.1	525.9	523.8	521.7	519.6	518.2
42.5°	511.8	511.2	510.5	509.8	509.2	507.6	505.3	503.0	500.6	498.3	496.7
45°	479.0	478.0	477.0	476.1	475.1	473.4	471.2	468.9	466.7	464.4	462.8
47.5°	444.6	443.9	443.3	442.5	441.9	440.5	438.5	436.3	434.2	432.2	430.4
50°	421.3	420.7	420.1	419.6	419.0	417.8	415.8	413.8	411.8	409.9	407.9
52.5°	398.4	397.8	397.1	396.4	395.7	394.4	392.2	390.2	388.1	386.0	384.3
55°	362.2	361.8	361.4	361.0	360.6	359.4	357.4	355.4	353.4	351.5	349.8
57.5°	327.8	327.3	326.8	326.3	325.8	324.7	322.7	320.7	318.8	316.8	315.2
60°	303.9	303.2	302.5	301.7	301.1	299.8	298.0	296.1	294.3	292.4	291.2
62.5°	280.5	280.0	279.3	278.8	278.2	276.9	275.0	273.0	271.1	269.1	268.0
65°	245.5	244.8	244.1	243.4	242.7	241.7	240.3	238.8	237.4	236.0	234.6
67.5°	210.3	209.6	209.0	208.3	207.7	206.7	205.3	204.0	202.6	201.2	199.9
70°	188.4	187.4	186.5	185.5	184.5	183.4	182.3	181.2	180.0	178.9	177.8
72.5°	165.1	164.1	163.1	162.1	161.1	160.2	159.3	158.4	157.5	156.5	155.6
75°	130.7	130.0	129.3	128.6	127.8	127.2	126.5	125.7	125.1	124.3	123.8
77.5°	97.8	97.5	97.2	96.9	96.6	96.1	95.5	94.9	94.2	93.7	93.4
80°	78.0	77.6	77.2	76.8	76.3	76.0	75.7	75.4	75.2	74.8	74.6
82.5°	58.8	58.5	58.4	58.1	58.0	57.8	57.8	57.7	57.6	57.6	57.4
85°	34.2	34.2	34.2	34.2	34.2	34.1	33.8	33.6	33.3	33.0	33.0
87.5°	13.8	14.1	14.4	14.8	15.2	15.5	15.7	15.9	16.1	16.4	16.6
90°	2.9	5.1	7.5	9.8	12.1	14.1	15.8	17.4	19.2	20.9	22.1
92.5°	11.9	12.1	12.2	12.3	12.5	13.4	15.0	16.7	18.4	20.1	21.4
95°	52.1	44.9	37.7	30.7	23.5	20.0	20.2	20.4	20.6	20.9	22.1
97.5°	110.6	115.1	119.6	124.0	128.5	119.0	95.5	72.0	48.5	25.0	25.1
100°	155.4	159.1	163.0	166.7	170.6	157.9	128.8	99.8	70.8	41.7	38.1
102.5°	205.4	208.1	210.9	213.7	216.5	216.0	212.2	208.4	204.6	200.8	162.2
105°	285.1	286.4	287.6	288.9	290.2	291.4	292.4	293.4	294.5	295.5	297.5
107.5°	359.2	359.9	360.5	361.1	361.7	362.8	364.2	365.7	367.0	368.5	369.4
110°	409.3	409.9	410.5	411.2	411.8	412.7	414.0	415.2	416.5	417.8	418.2



TEST NUMBER: P332577-930

CATALOG NUMBER: S124DIP-S575D1205U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	457.8	458.9	460.0	461.1	462.3	463.2	463.7	464.3	465.0	465.5	465.5
115°	532.4	533.0	533.7	534.3	534.9	535.2	534.9	534.8	534.5	534.3	534.8
117.5°	599.7	600.5	601.4	602.2	603.0	603.6	604.1	604.6	605.1	605.5	605.4
120°	645.1	646.0	646.9	647.7	648.5	648.8	648.7	648.4	648.2	648.0	648.4
122.5°	687.5	688.1	688.6	689.1	689.6	690.0	690.3	690.6	690.9	691.2	691.5
125°	748.4	749.3	750.1	750.9	751.8	752.0	751.5	751.1	750.7	750.3	750.9
127.5°	806.0	806.2	806.4	806.7	806.8	807.4	808.4	809.3	810.3	811.3	811.1
130°	843.1	843.3	843.6	843.8	844.0	844.4	845.1	845.6	846.3	846.9	847.1
132.5°	877.3	877.6	878.0	878.4	878.7	879.4	880.1	880.9	881.7	882.6	882.7
135°	928.4	928.2	928.0	927.7	927.6	927.9	928.7	929.5	930.4	931.2	931.6
137.5°	973.7	973.8	973.9	974.0	974.0	974.5	975.4	976.4	977.3	978.2	978.7
140°	1003.2	1003.6	1004.0	1004.5	1004.9	1005.3	1005.8	1006.2	1006.6	1007.1	1007.6
142.5°	1029.7	1030.5	1031.3	1032.0	1032.8	1033.3	1033.6	1033.8	1034.0	1034.3	1034.8
145°	1070.5	1071.1	1071.8	1072.4	1073.0	1073.3	1073.3	1073.3	1073.3	1073.3	1073.6
147.5°	1102.9	1104.1	1105.2	1106.4	1107.6	1108.1	1107.9	1107.7	1107.4	1107.3	1107.4
150°	1126.4	1127.2	1128.0	1128.9	1129.8	1130.1	1129.8	1129.7	1129.4	1129.2	1129.2
152.5°	1146.1	1146.8	1147.5	1148.1	1148.8	1148.9	1148.6	1148.2	1147.8	1147.5	1147.8
155°	1173.8	1173.9	1174.2	1174.4	1174.6	1174.4	1173.8	1173.1	1172.5	1171.8	1172.7
157.5°	1197.0	1196.9	1196.8	1196.7	1196.5	1196.1	1195.4	1194.7	1194.0	1193.3	1194.3
160°	1210.7	1210.1	1209.4	1208.8	1208.2	1207.8	1207.5	1207.3	1207.1	1206.9	1208.2
162.5°	1222.8	1222.1	1221.2	1220.4	1219.6	1219.1	1218.9	1218.7	1218.5	1218.3	1219.5
165°	1238.2	1237.1	1236.1	1235.0	1234.0	1233.5	1233.5	1233.5	1233.5	1233.5	1235.1
167.5°	1250.3	1249.2	1248.1	1247.0	1245.9	1245.3	1245.2	1245.0	1245.0	1244.8	1246.7
170°	1257.1	1255.9	1254.6	1253.4	1252.1	1251.6	1251.7	1252.0	1252.1	1252.4	1254.1
172.5°	1261.7	1260.4	1259.1	1257.8	1256.6	1256.1	1256.3	1256.5	1256.7	1256.9	1258.6
175°	1266.6	1265.3	1264.0	1262.8	1261.5	1261.0	1261.2	1261.4	1261.7	1261.8	1263.7
177.5°	1268.9	1267.7	1266.5	1265.3	1264.1	1263.7	1264.0	1264.4	1264.8	1265.1	1266.4
180°	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6



TEST NUMBER: P332577-930

CATALOG NUMBER: S124DIP-S575D1205U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	791.7	791.7	791.7	791.7	791.7	791.7	791.7	791.7
2.5°	789.0	790.1	791.2	791.7	791.6	791.5	791.4	791.2
5°	784.7	786.3	787.8	788.5	788.1	787.9	787.6	787.3
7.5°	776.0	777.2	778.4	779.0	778.9	778.7	778.5	778.3
10°	768.7	769.8	770.9	771.4	771.0	770.8	770.5	770.2
12.5°	759.8	761.0	762.2	762.6	762.2	761.8	761.5	761.1
15°	742.7	743.6	744.4	744.6	744.2	743.8	743.3	742.9
17.5°	723.3	723.8	724.4	724.5	724.2	723.9	723.7	723.4
20°	708.9	709.3	709.7	709.8	709.5	709.2	709.0	708.7
22.5°	693.8	694.6	695.4	695.5	695.0	694.5	694.0	693.4
25°	669.0	669.1	669.3	669.0	668.5	667.9	667.3	666.8
27.5°	641.2	640.7	640.4	639.9	639.2	638.5	637.8	637.1
30°	621.9	621.3	620.8	620.1	619.4	618.7	618.0	617.3
32.5°	602.3	601.7	601.0	600.3	599.7	598.9	598.2	597.5
35°	571.5	570.5	569.6	568.8	568.0	567.3	566.6	565.9
37.5°	539.3	538.2	537.1	536.1	535.2	534.3	533.4	532.4
40°	516.8	515.4	514.0	512.9	512.2	511.5	510.8	510.1
42.5°	495.0	493.3	491.7	490.6	490.2	489.8	489.3	488.8
45°	461.3	459.7	458.2	457.2	456.8	456.4	455.9	455.5
47.5°	428.7	426.9	425.2	423.8	422.7	421.6	420.5	419.5
50°	405.9	403.9	401.9	400.6	399.7	398.8	398.0	397.1
52.5°	382.5	380.7	379.0	377.6	376.5	375.4	374.4	373.3
55°	348.1	346.4	344.7	343.4	342.6	341.8	340.9	340.1
57.5°	313.6	312.0	310.4	309.2	308.3	307.5	306.7	305.9
60°	289.9	288.7	287.4	286.4	285.7	285.0	284.3	283.6
62.5°	266.8	265.6	264.5	263.6	262.9	262.2	261.5	260.7
65°	233.2	231.8	230.4	229.3	228.6	227.9	227.2	226.5
67.5°	198.5	197.2	195.8	195.0	194.9	194.7	194.4	194.3
70°	176.7	175.5	174.4	173.7	173.2	172.8	172.4	171.9
72.5°	154.7	153.8	153.0	152.3	151.9	151.5	151.1	150.6
75°	123.2	122.6	122.1	121.7	121.6	121.5	121.3	121.2
77.5°	93.3	93.1	92.9	92.7	92.3	92.0	91.6	91.2
80°	74.3	74.0	73.7	73.5	73.4	73.2	73.1	73.0
82.5°	57.2	57.1	56.9	56.7	56.7	56.5	56.3	56.2
85°	33.0	33.0	33.0	32.9	32.8	32.6	32.5	32.4
87.5°	16.9	17.1	17.4	17.5	17.6	17.7	17.8	17.9
90°	23.4	24.6	25.9	26.7	27.1	27.6	28.0	28.5
92.5°	22.6	23.9	25.1	25.8	25.9	26.0	26.1	26.2
95°	23.4	24.6	25.9	26.7	26.8	27.1	27.2	27.5
97.5°	25.3	25.4	25.5	25.7	25.9	26.1	26.3	26.5
100°	34.5	31.0	27.4	25.7	25.9	26.1	26.3	26.5
102.5°	123.6	85.0	46.4	27.1	27.1	27.2	27.2	27.3
105°	299.4	301.3	303.1	300.3	292.7	285.1	277.6	270.0
107.5°	370.4	371.3	372.2	373.1	373.9	374.7	375.4	376.3
110°	418.7	419.1	419.5	420.0	420.6	421.3	421.9	422.5



TEST NUMBER: P332577-930

CATALOG NUMBER: S124DIP-S575D1205U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	465.4	465.3	465.2	465.5	466.4	467.2	468.0	468.7
115°	535.2	535.6	536.0	536.2	536.2	536.2	536.2	536.2
117.5°	605.4	605.3	605.2	605.1	605.0	605.0	604.9	604.8
120°	648.8	649.2	649.6	649.6	649.2	648.8	648.4	648.0
122.5°	691.7	691.9	692.2	692.1	691.7	691.3	690.8	690.4
125°	751.5	752.2	752.8	753.3	753.4	753.7	753.9	754.1
127.5°	811.1	810.9	810.8	810.7	810.5	810.3	810.2	810.0
130°	847.3	847.6	847.7	847.8	847.8	847.8	847.8	847.8
132.5°	883.0	883.2	883.4	883.4	883.2	883.1	882.9	882.7
135°	932.1	932.5	932.9	933.4	933.8	934.2	934.6	935.0
137.5°	979.2	979.6	980.1	980.2	980.2	980.0	979.8	979.7
140°	1008.3	1008.9	1009.6	1010.0	1010.2	1010.4	1010.6	1010.8
142.5°	1035.3	1035.7	1036.2	1036.4	1036.5	1036.5	1036.6	1036.6
145°	1073.7	1074.0	1074.2	1074.5	1074.9	1075.3	1075.8	1076.2
147.5°	1107.6	1107.7	1107.9	1108.1	1108.3	1108.6	1108.7	1109.0
150°	1129.2	1129.2	1129.2	1129.4	1129.5	1129.8	1130.0	1130.2
152.5°	1148.1	1148.4	1148.8	1148.8	1148.8	1148.6	1148.5	1148.3
155°	1173.5	1174.4	1175.3	1175.3	1174.7	1174.0	1173.5	1172.8
157.5°	1195.5	1196.5	1197.7	1197.7	1196.5	1195.5	1194.3	1193.3
160°	1209.4	1210.7	1211.9	1211.9	1210.7	1209.4	1208.2	1206.9
162.5°	1220.8	1222.1	1223.4	1223.3	1221.8	1220.4	1219.0	1217.5
165°	1236.8	1238.5	1240.2	1240.1	1238.2	1236.2	1234.4	1232.5
167.5°	1248.5	1250.3	1252.2	1252.1	1250.0	1247.9	1245.8	1243.7
170°	1255.7	1257.4	1259.1	1258.9	1256.8	1254.7	1252.6	1250.5
172.5°	1260.3	1262.0	1263.6	1263.4	1261.1	1258.8	1256.5	1254.3
175°	1265.7	1267.5	1269.4	1269.1	1266.6	1264.0	1261.5	1259.0
177.5°	1267.8	1269.1	1270.5	1270.2	1268.1	1266.1	1264.0	1262.1
180°	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6

(END OF REPORT)