

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: P332574-930

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332574-930
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-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5852.9 lumens
Efficiency: N/A
Efficacy: 118.5 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

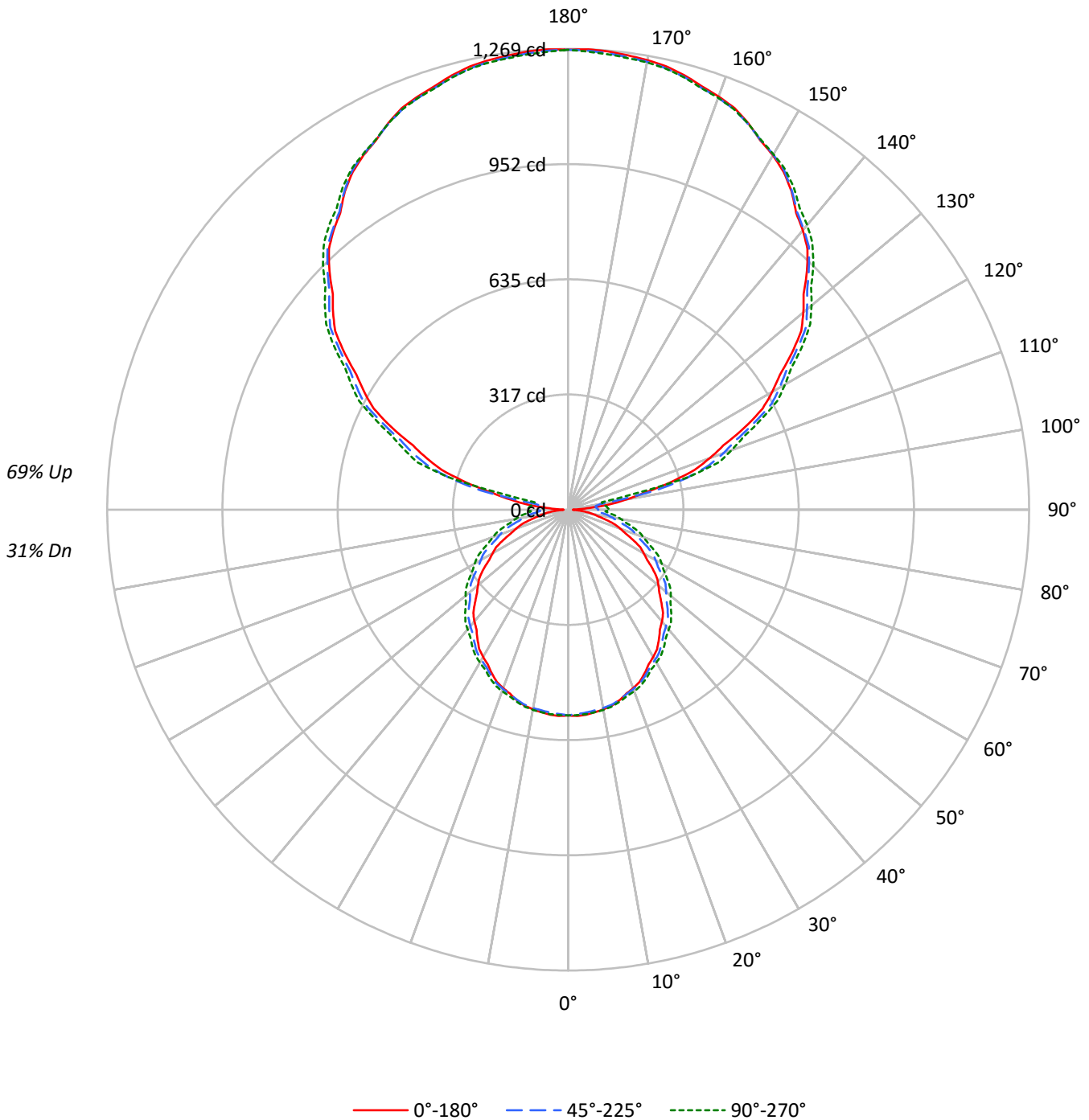
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332574-930

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

Luminous Intensity Polar Plot





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

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	92	92	92	92	73	73	73	55	55	55	38	38	38	31
1	93	88	84	81	83	79	76	73	63	60	58	47	46	44	33	32	31	24
2	84	77	71	65	75	69	64	59	54	51	47	41	38	36	28	27	26	20
3	77	67	60	54	68	60	54	49	48	43	40	36	33	30	25	23	21	17
4	70	59	51	45	62	53	47	41	42	37	33	32	28	26	22	20	18	14
5	64	52	44	39	57	47	40	35	38	32	29	28	25	22	20	18	16	12
6	59	47	39	33	52	42	35	30	34	29	25	26	22	19	18	16	14	11
7	54	42	34	29	48	38	31	26	30	25	22	23	20	17	16	14	12	9
8	50	38	30	25	45	34	28	23	28	23	19	21	17	15	15	13	11	8
9	47	35	27	22	42	31	25	20	25	20	17	19	16	13	14	11	10	7
10	43	32	25	20	39	29	22	18	23	18	15	18	14	12	13	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4574	4574	4574
5°	4588	4470	4482
10°	4560	4397	4393
15°	4519	4312	4289
20°	4458	4219	4187
25°	4388	4114	4074
30°	4313	4011	3959
35°	4227	3903	3858
40°	4160	3802	3753
45°	4059	3708	3663
50°	3973	3600	3567
55°	3884	3499	3454
60°	3746	3369	3353
65°	3597	3231	3227
70°	3414	3072	3080
75°	3157	2896	2948
80°	2873	2730	2819
85°	2514	2579	2742



TEST NUMBER: P332574-930

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	0.9
10°-20°	153.7	2.6
20°-30°	232.4	4.0
30°-40°	281.2	4.8
40°-50°	297.3	5.1
50°-60°	279.8	4.8
60°-70°	232.1	4.0
70°-80°	163.1	2.8
80°-90°	95.8	1.6
90°-100°	98.1	1.7
100°-110°	316.7	5.4
110°-120°	555.6	9.5
120°-130°	686.1	11.7
130°-140°	724.3	12.4
140°-150°	672.4	11.5
150°-160°	541.2	9.2
160°-170°	349.1	6.0
170°-180°	120.3	2.1
0°-30°	439.8	7.5
0°-40°	721.0	12.3
0°-60°	1298.1	22.2
0°-90°	1789.2	30.6
90°-120°	970.4	16.6
90°-150°	3053.2	52.2
90°-180°	4064.0	69.4
0°-180°	5852.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	567	567	567	567	567	
5°	567	565	561	566	565	54
15°	544	544	542	548	548	153
25°	497	501	503	510	511	229
35°	435	443	449	458	460	272
45°	363	375	387	397	401	280
55°	284	298	317	329	333	253
65°	197	217	239	254	260	195
75°	109	133	159	176	183	116
85°	34	60	89	107	114	36
90°	13	49	84	107	115	9
95°	60	51	76	98	106	73
105°	291	310	338	359	333	305
115°	536	545	564	579	584	528
125°	751	755	768	782	788	670
135°	930	929	937	949	955	716
145°	1071	1073	1073	1078	1083	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: P332574-930

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	566.6	566.6	566.6	566.6	566.6	566.6	566.6	566.6	566.6	566.6	566.6
2.5°	568.6	568.3	567.9	567.5	567.2	566.6	565.7	564.8	563.9	563.0	563.8
5°	567.2	566.8	566.3	565.9	565.5	564.8	563.8	562.8	561.8	560.8	562.0
7.5°	562.4	562.1	561.8	561.6	561.3	560.8	560.0	559.2	558.3	557.5	558.8
10°	558.3	558.2	558.0	557.9	557.7	557.3	556.6	555.9	555.2	554.5	555.8
12.5°	552.7	552.7	552.7	552.6	552.6	552.4	551.9	551.4	550.9	550.4	551.5
15°	543.7	543.9	544.0	544.1	544.3	544.1	543.7	543.3	542.8	542.4	543.7
17.5°	531.4	531.8	532.2	532.6	533.1	533.3	533.2	533.1	533.0	533.0	534.2
20°	522.8	523.2	523.6	524.1	524.5	524.7	524.9	525.1	525.1	525.3	526.7
22.5°	513.1	513.6	514.2	514.7	515.3	515.7	515.9	516.2	516.4	516.7	518.1
25°	497.4	498.2	499.1	499.9	500.8	501.4	501.8	502.2	502.7	503.1	504.7
27.5°	479.9	481.1	482.3	483.6	484.9	485.8	486.4	487.1	487.7	488.4	489.8
30°	468.2	469.4	470.4	471.6	472.7	473.8	474.7	475.7	476.7	477.8	479.3
32.5°	455.5	456.9	458.2	459.6	461.0	462.2	463.3	464.4	465.5	466.6	468.3
35°	435.2	436.9	438.6	440.3	442.0	443.5	444.9	446.4	447.8	449.1	451.2
37.5°	414.8	416.7	418.7	420.6	422.6	424.4	426.2	428.0	429.7	431.4	433.4
40°	401.6	403.4	405.3	407.1	409.0	410.8	412.8	414.7	416.8	418.7	420.9
42.5°	386.4	388.4	390.4	392.6	394.6	396.8	399.1	401.4	403.7	406.0	408.4
45°	362.9	365.6	368.3	371.0	373.6	376.3	379.0	381.6	384.3	387.0	389.4
47.5°	340.5	343.2	345.9	348.7	351.5	354.4	357.5	360.6	363.7	366.8	369.3
50°	324.2	327.3	330.4	333.5	336.6	339.7	342.8	345.9	349.0	352.1	354.9
52.5°	307.9	311.0	314.1	317.2	320.3	323.7	327.3	330.8	334.4	337.9	340.7
55°	284.2	287.1	290.2	293.1	296.0	299.6	303.9	308.1	312.3	316.6	319.4
57.5°	257.7	261.4	265.1	268.7	272.4	276.3	280.5	284.7	288.9	293.1	296.4
60°	240.4	244.1	247.8	251.4	255.1	259.3	263.9	268.6	273.2	277.9	281.1
62.5°	223.7	227.7	231.7	235.7	239.7	244.0	248.7	253.3	258.0	262.7	265.9
65°	196.7	201.2	205.7	210.2	214.7	219.4	224.1	228.9	233.7	238.6	242.1
67.5°	170.6	175.5	180.3	185.1	189.8	194.8	199.9	205.0	210.2	215.3	218.9
70°	152.9	157.7	162.5	167.3	172.1	177.2	182.5	187.8	193.2	198.6	202.4
72.5°	135.7	140.6	145.4	150.3	155.2	160.5	166.2	171.9	177.7	183.4	187.0
75°	109.1	114.3	119.5	124.7	130.0	135.6	141.5	147.4	153.4	159.2	163.2
77.5°	84.4	89.9	95.5	100.9	106.5	112.3	118.5	124.7	130.9	137.1	141.1
80°	69.1	74.8	80.5	86.1	91.7	97.6	103.9	110.1	116.3	122.5	126.7
82.5°	53.9	59.8	65.6	71.5	77.4	83.4	89.6	95.8	102.0	108.3	112.6
85°	33.6	39.5	45.5	51.4	57.3	63.4	69.8	76.1	82.5	88.8	93.0
87.5°	19.3	25.6	31.8	38.0	44.2	50.5	57.1	63.6	70.1	76.6	81.0
90°	13.0	21.0	28.9	36.9	44.8	52.7	60.4	68.2	75.9	83.6	89.0
92.5°	21.6	26.7	32.0	37.2	42.4	48.8	56.6	64.3	72.1	79.8	85.1
95°	60.3	57.9	55.4	52.8	50.3	52.1	58.0	64.1	70.0	76.1	81.1
97.5°	118.1	126.6	135.1	143.6	152.0	147.3	129.6	111.8	94.0	76.3	80.1
100°	162.3	169.8	177.2	184.7	192.2	184.1	160.5	137.0	113.5	89.9	90.1
102.5°	212.4	218.3	224.4	230.3	236.4	240.1	241.7	243.3	244.9	246.5	211.6
105°	290.9	295.0	299.1	303.1	307.2	312.3	318.6	324.9	331.2	337.5	342.8
107.5°	364.8	367.8	370.7	373.7	376.6	381.2	387.6	394.0	400.3	406.7	411.1
110°	414.3	416.9	419.6	422.2	424.8	429.2	435.4	441.6	447.8	454.0	457.6



TEST NUMBER: P332574-930

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	462.4	465.2	468.1	471.0	473.9	477.9	483.2	488.5	493.8	499.1	502.2
115°	536.2	538.1	540.0	541.9	543.8	546.9	551.2	555.5	559.8	564.1	567.6
117.5°	603.3	605.0	606.6	608.1	609.8	612.9	617.6	622.2	626.9	631.5	634.4
120°	648.3	649.5	650.9	652.1	653.4	655.9	659.8	663.7	667.6	671.5	674.7
122.5°	690.7	691.4	691.9	692.5	693.1	695.5	699.6	703.8	707.9	712.1	715.2
125°	751.0	751.6	752.4	753.0	753.7	755.6	758.7	761.8	764.9	768.1	771.4
127.5°	808.4	808.5	808.5	808.6	808.7	810.6	814.2	817.9	821.6	825.2	827.7
130°	845.1	845.1	845.1	845.2	845.3	846.8	849.7	852.6	855.5	858.3	861.1
132.5°	879.1	879.4	879.6	879.9	880.1	881.5	884.1	886.7	889.3	891.9	894.5
135°	929.7	929.4	929.3	929.0	928.8	929.6	931.5	933.3	935.1	936.9	939.6
137.5°	974.9	974.9	974.9	974.8	974.7	975.4	976.8	978.2	979.6	981.0	983.5
140°	1004.5	1004.8	1005.1	1005.3	1005.6	1006.1	1006.6	1007.1	1007.7	1008.3	1010.7
142.5°	1030.5	1031.3	1032.0	1032.7	1033.5	1033.9	1034.0	1034.2	1034.4	1034.5	1036.7
145°	1071.1	1071.6	1072.1	1072.6	1073.1	1073.3	1073.3	1073.3	1073.3	1073.3	1074.4
147.5°	1103.5	1104.6	1105.6	1106.6	1107.7	1108.1	1107.9	1107.7	1107.4	1107.3	1107.5
150°	1127.0	1127.7	1128.5	1129.1	1129.8	1130.1	1129.8	1129.7	1129.4	1129.2	1129.2
152.5°	1146.2	1146.9	1147.5	1148.2	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: P332574-930

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	566.6	566.6	566.6	566.6	566.6	566.6	566.6	566.6
2.5°	564.6	565.3	566.1	566.5	566.4	566.2	566.1	566.1
5°	563.1	564.2	565.3	565.8	565.7	565.6	565.4	565.2
7.5°	560.1	561.3	562.6	563.2	563.0	562.9	562.7	562.6
10°	557.0	558.3	559.5	560.1	560.0	559.9	559.7	559.5
12.5°	552.8	553.9	555.1	555.6	555.6	555.5	555.5	555.5
15°	544.9	546.3	547.5	548.0	548.0	547.8	547.6	547.5
17.5°	535.5	536.8	538.1	538.7	538.6	538.5	538.3	538.3
20°	528.2	529.5	530.9	531.7	531.7	531.7	531.7	531.7
22.5°	519.5	520.9	522.3	523.2	523.3	523.6	523.8	524.1
25°	506.2	507.8	509.3	510.1	510.3	510.5	510.5	510.7
27.5°	491.3	492.7	494.2	495.0	495.1	495.3	495.5	495.6
30°	480.9	482.4	484.0	484.9	485.1	485.4	485.7	486.0
32.5°	470.1	471.9	473.7	474.7	475.0	475.2	475.6	475.8
35°	453.1	455.1	457.1	458.3	458.7	459.1	459.5	460.0
37.5°	435.5	437.4	439.4	440.7	441.1	441.6	442.0	442.5
40°	423.0	425.1	427.2	428.5	429.1	429.7	430.2	430.8
42.5°	410.7	413.0	415.4	416.8	417.3	417.7	418.2	418.6
45°	391.8	394.2	396.6	398.1	398.8	399.6	400.2	401.0
47.5°	371.8	374.3	376.7	378.4	379.3	380.1	381.0	381.8
50°	357.8	360.6	363.4	365.3	366.1	366.9	367.8	368.6
52.5°	343.6	346.3	349.2	351.0	351.9	352.7	353.5	354.4
55°	322.2	325.1	327.8	329.7	330.5	331.4	332.2	333.0
57.5°	299.8	303.2	306.6	308.6	309.4	310.1	311.0	311.8
60°	284.4	287.6	290.8	293.0	294.2	295.3	296.4	297.6
62.5°	269.1	272.4	275.7	277.8	278.9	280.1	281.2	282.3
65°	245.6	249.2	252.7	254.9	256.1	257.2	258.4	259.5
67.5°	222.5	226.1	229.7	232.0	233.1	234.2	235.3	236.4
70°	206.2	210.0	213.8	216.2	217.2	218.2	219.2	220.1
72.5°	190.7	194.4	198.1	200.5	201.6	202.7	203.8	204.9
75°	167.1	171.0	175.0	177.7	178.9	180.2	181.5	182.7
77.5°	145.2	149.2	153.2	155.9	157.2	158.6	159.9	161.3
80°	130.9	135.1	139.3	142.0	143.2	144.3	145.4	146.6
82.5°	116.9	121.2	125.6	128.4	129.6	130.9	132.1	133.4
85°	97.3	101.5	105.7	108.6	110.0	111.4	112.8	114.2
87.5°	85.3	89.7	94.0	96.9	98.2	99.5	100.8	102.2
90°	94.3	99.7	105.1	108.5	110.1	111.6	113.2	114.7
92.5°	90.3	95.6	100.8	104.0	105.3	106.5	107.7	108.8
95°	86.2	91.2	96.3	99.6	101.1	102.6	104.0	105.5
97.5°	83.9	87.7	91.6	94.2	95.6	97.0	98.4	99.9
100°	90.3	90.6	90.8	91.6	92.7	93.9	95.1	96.3
102.5°	176.7	141.8	106.9	89.9	91.1	92.2	93.4	94.5
105°	348.3	353.7	359.1	358.6	352.1	345.7	339.2	332.8
107.5°	415.5	419.9	424.3	427.4	429.2	431.0	432.8	434.6
110°	461.3	465.0	468.6	471.3	473.0	474.8	476.6	478.3



TEST NUMBER: P332574-930

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	505.2	508.3	511.4	513.8	515.8	517.6	519.6	521.5
115°	571.2	574.7	578.2	580.5	581.5	582.4	583.4	584.4
117.5°	637.2	640.1	642.9	644.9	646.0	646.9	648.0	649.1
120°	677.9	681.2	684.4	686.4	687.1	687.8	688.5	689.3
122.5°	718.3	721.3	724.4	726.3	726.8	727.4	728.0	728.6
125°	774.7	778.0	781.3	783.5	784.6	785.6	786.7	787.7
127.5°	830.1	832.5	834.9	836.5	837.3	838.0	838.9	839.7
130°	863.8	866.6	869.4	871.1	872.0	872.9	873.7	874.5
132.5°	897.2	899.8	902.5	904.2	904.8	905.5	906.1	906.9
135°	942.3	945.0	947.6	949.7	950.9	952.2	953.4	954.7
137.5°	986.0	988.6	991.1	992.6	993.2	993.8	994.4	995.0
140°	1013.3	1015.7	1018.1	1019.9	1020.8	1021.7	1022.5	1023.5
142.5°	1038.7	1040.7	1042.8	1044.2	1044.8	1045.5	1046.1	1046.8
145°	1075.5	1076.5	1077.6	1078.6	1079.5	1080.5	1081.6	1082.6
147.5°	1107.8	1108.1	1108.4	1108.8	1109.5	1110.2	1110.8	1111.5
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)