

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: P334453

Luminaire Tested: **S122IP-S925U840-4F0-1E-UDD-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334453  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122IP-S925U840-4F0-1E-UDD-4  
Description: DEFINE 2 INDIRECT LED LUMINAIRE, BATWING OPTIC  
PENDANT MOUNT, 925 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

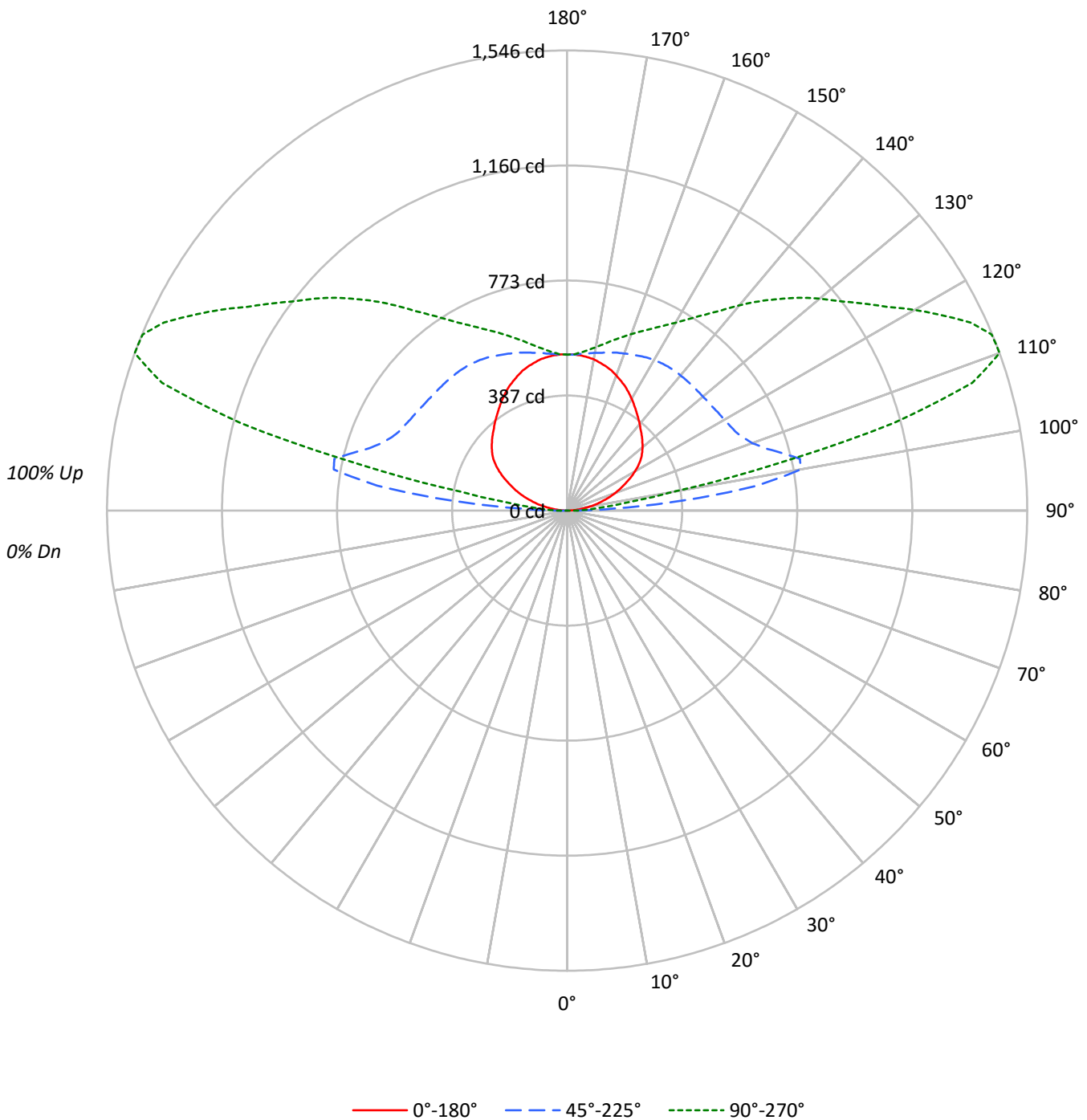
Lumens per Lamp: N/A  
Luminaire Lumens: 3653.2 lumens  
Efficiency: N/A  
Efficacy: 104.1 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 35.1  
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: P334453  
CATALOG NUMBER: S122IP-S925U840-4F0-1E-UDD-4

### Luminous Intensity Polar Plot





TEST NUMBER: P334453

CATALOG NUMBER: S122IP-S925U840-4F0-1E-UDD-4

**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	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8	0
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7	0
3	72	63	56	51	61	54	49	44	37	34	31	21	20	18	7	6	6	0
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4	0
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	3	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	0	0	0
5°	0	0	0
10°	0	0	0
15°	0	0	0
20°	0	0	0
25°	0	0	0
30°	0	0	0
35°	0	0	0
40°	0	0	0
45°	0	0	0
50°	0	0	0
55°	0	0	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P334453

CATALOG NUMBER: S122IP-S925U840-4F0-1E-UDD-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	3.4	0.1
90°-100°	204.3	5.6
100°-110°	719.5	19.7
110°-120°	755.6	20.7
120°-130°	621.7	17.0
130°-140°	499.4	13.7
140°-150°	377.2	10.3
150°-160°	265.2	7.3
160°-170°	156.1	4.3
170°-180°	50.8	1.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	3.4	0.1
90°-120°	1679.4	46.0
90°-150°	3177.7	87.0
90°-180°	3650.0	99.9
0°-180°	3653.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	0	0	0	0	0	
5°	0	0	0	0	0	0
15°	0	0	0	0	0	0
25°	0	0	0	0	0	0
35°	0	0	0	0	0	0
45°	0	0	0	0	0	0
55°	0	0	0	0	0	0
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	1	14	34	33	33	2
95°	35	87	395	149	115	36
105°	123	185	747	1335	1136	131
115°	217	274	625	1290	1495	215
125°	302	358	601	1045	1212	269
135°	355	423	594	878	1005	274
145°	405	466	591	733	802	254
155°	461	497	574	649	674	212
165°	502	517	549	583	592	142
175°	523	524	528	535	533	50
180°	524	524	524	524	524	



TEST NUMBER: P334453

CATALOG NUMBER: S122IP-S925U840-4F0-1E-UDD-4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	1.0	4.0	8.1	10.1	12.1	15.1	20.2	27.2	33.3	34.3	33.3
92.5°	15.1	21.2	29.2	34.3	42.3	53.4	80.6	118.9	153.2	155.2	130.0
95°	35.3	39.3	49.4	58.5	74.6	98.8	145.1	232.8	349.7	395.1	345.7
97.5°	52.4	58.5	69.5	82.6	100.8	128.0	187.5	309.4	497.9	644.0	649.1
100°	77.6	80.6	89.7	105.8	126.0	154.2	207.6	330.6	548.3	796.2	941.4
102.5°	100.8	102.8	111.9	128.0	149.2	177.4	225.8	331.6	529.1	801.3	1050.2
105°	123.0	127.0	134.0	149.2	171.3	199.6	246.9	336.6	502.9	746.8	1014.9
107.5°	147.1	150.2	157.2	171.3	193.5	221.7	268.1	347.7	488.8	696.4	940.3
110°	171.3	175.4	181.4	194.5	215.7	244.9	289.3	361.8	484.8	662.2	870.8



TEST NUMBER: P334453

CATALOG NUMBER: S122IP-S925U840-4F0-1E-UDD-4

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	193.5	197.5	204.6	216.7	236.9	267.1	309.4	376.9	485.8	640.0	822.4
115°	216.7	221.7	227.8	239.9	260.0	287.2	330.6	392.1	489.8	624.9	784.1
117.5°	240.9	244.9	251.0	262.0	281.2	309.4	349.7	408.2	495.9	616.8	757.9
120°	263.1	267.1	273.1	282.2	302.4	330.6	369.9	424.3	501.9	609.8	737.8
122.5°	284.2	287.2	293.3	303.4	323.5	352.8	389.0	438.4	509.0	605.7	720.6
125°	302.4	305.4	311.4	323.5	343.7	371.9	408.2	453.5	516.0	600.7	704.5
127.5°	317.5	321.5	329.6	342.7	361.8	391.1	426.3	467.7	523.1	597.7	689.4
130°	330.6	334.6	344.7	358.8	379.0	407.2	442.5	480.8	531.1	595.7	674.3
132.5°	342.7	347.7	358.8	373.9	395.1	423.3	456.6	493.9	539.2	594.6	662.2
135°	354.8	358.8	370.9	386.0	409.2	437.4	469.7	504.9	545.3	593.6	651.1
137.5°	365.9	370.9	383.0	399.1	422.3	448.5	480.8	514.0	551.3	593.6	643.0
140°	379.0	383.0	395.1	411.2	433.4	459.6	489.8	521.1	555.3	592.6	636.0
142.5°	392.1	395.1	406.2	422.3	443.5	467.7	496.9	527.1	558.4	592.6	628.9
145°	405.2	409.2	419.3	434.4	454.6	476.7	503.9	532.2	560.4	590.6	622.9
147.5°	419.3	422.3	432.4	446.5	463.6	483.8	510.0	535.2	561.4	587.6	616.8
150°	433.4	436.4	444.5	457.6	472.7	490.8	514.0	537.2	560.4	584.6	608.8
152.5°	447.5	448.5	456.6	467.7	481.8	497.9	518.0	538.2	558.4	579.5	601.7
155°	460.6	461.6	467.7	478.7	489.8	504.9	522.1	539.2	556.3	573.5	592.6
157.5°	471.7	472.7	477.7	487.8	496.9	510.0	525.1	539.2	552.3	567.4	584.6
160°	482.8	483.8	487.8	495.9	503.9	515.0	527.1	539.2	549.3	561.4	575.5
162.5°	493.9	492.9	496.9	502.9	510.0	518.0	528.1	538.2	546.3	556.3	567.4
165°	501.9	500.9	502.9	509.0	514.0	520.1	529.1	536.2	542.2	549.3	558.4
167.5°	509.0	508.0	510.0	514.0	518.0	522.1	529.1	535.2	538.2	543.2	549.3
170°	516.0	514.0	515.0	518.0	520.1	523.1	528.1	533.2	535.2	538.2	542.2
172.5°	520.1	519.1	518.0	521.1	522.1	524.1	527.1	530.1	531.1	532.2	535.2
175°	523.1	522.1	521.1	523.1	523.1	524.1	526.1	528.1	527.1	528.1	529.1
177.5°	525.1	523.1	522.1	524.1	524.1	524.1	525.1	527.1	525.1	524.1	525.1
180°	524.1	524.1	524.1	524.1	524.1	524.1	524.1	524.1	524.1	524.1	524.1



TEST NUMBER: P334453

CATALOG NUMBER: S122IP-S925U840-4F0-1E-UDD-4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	32.3	30.2	32.3	33.3	33.3	33.3	33.3	33.3
92.5°	101.8	86.7	75.6	67.5	66.5	62.5	63.5	61.5
95°	264.1	202.6	160.3	138.1	125.0	116.9	113.9	114.9
97.5°	540.2	431.4	329.6	269.1	229.8	209.6	198.6	192.5
100°	920.2	795.2	657.1	535.2	451.5	408.2	379.0	360.8
102.5°	1169.1	1165.1	1073.4	942.4	849.6	768.0	729.7	703.5
105°	1224.6	1338.5	1351.6	1318.3	1255.8	1193.3	1150.0	1135.9
107.5°	1165.1	1334.4	1433.2	1473.5	1472.5	1463.4	1450.3	1427.1
110°	1083.5	1263.9	1392.9	1475.5	1518.9	1538.0	1547.1	1546.1





TEST NUMBER: P334453

CATALOG NUMBER: S122IP-S925U840-4F0-1E-UDD-4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1008.9	1180.2	1320.3	1418.1	1482.6	1517.9	1537.0	1544.1
115°	950.4	1105.6	1237.7	1341.5	1413.0	1459.4	1485.6	1494.7
117.5°	902.0	1041.1	1164.1	1262.9	1336.4	1385.8	1413.0	1420.1
120°	867.8	992.8	1099.6	1191.3	1261.9	1309.2	1338.5	1348.5
122.5°	840.6	952.4	1052.2	1132.8	1194.3	1240.7	1265.9	1274.0
125°	814.4	918.2	1006.9	1082.5	1140.9	1179.2	1204.4	1212.5
127.5°	788.2	883.9	968.6	1039.1	1090.5	1126.8	1149.0	1155.0
130°	763.0	849.6	929.3	995.8	1045.2	1079.4	1099.6	1107.7
132.5°	738.8	817.4	888.9	950.4	998.8	1033.1	1051.2	1058.3
135°	716.6	783.1	849.6	906.1	949.4	982.7	1000.8	1004.8
137.5°	698.5	755.9	810.3	860.7	902.0	931.3	947.4	953.4
140°	681.3	729.7	776.1	820.4	852.7	878.9	894.0	900.0
142.5°	667.2	706.5	744.8	780.1	810.3	833.5	846.6	846.6
145°	654.1	687.4	718.6	747.8	772.0	789.2	799.2	802.3
147.5°	644.0	671.2	696.4	718.6	739.8	753.9	760.9	763.0
150°	632.9	655.1	676.3	694.4	709.5	721.6	727.7	728.7
152.5°	621.9	642.0	659.1	674.3	685.4	695.4	699.5	699.5
155°	611.8	627.9	643.0	654.1	665.2	672.3	676.3	674.3
157.5°	599.7	613.8	626.9	636.0	644.0	650.1	652.1	652.1
160°	588.6	599.7	610.8	617.8	624.9	629.9	630.9	630.9
162.5°	577.5	586.6	595.7	600.7	607.7	610.8	611.8	610.8
165°	566.4	573.5	580.5	584.6	588.6	592.6	592.6	591.6
167.5°	555.3	561.4	566.4	570.5	572.5	574.5	574.5	573.5
170°	547.3	550.3	554.3	556.3	557.4	560.4	559.4	557.4
172.5°	538.2	540.2	543.2	544.3	545.3	546.3	545.3	544.3
175°	532.2	533.2	534.2	535.2	535.2	536.2	535.2	533.2
177.5°	527.1	527.1	528.1	528.1	528.1	528.1	527.1	525.1
180°	524.1	524.1	524.1	524.1	524.1	524.1	524.1	524.1

(END OF REPORT)