

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: P334633

Luminaire Tested: **S123IP-S1025U927-4F0-1E-UDD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334633
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123IP-S1025U927-4F0-1E-UDD-4
Description: DEFINE 3 INDIRECT LED LUMINAIRE, BATWING OPTIC
PENDANT MOUNT, 1025 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

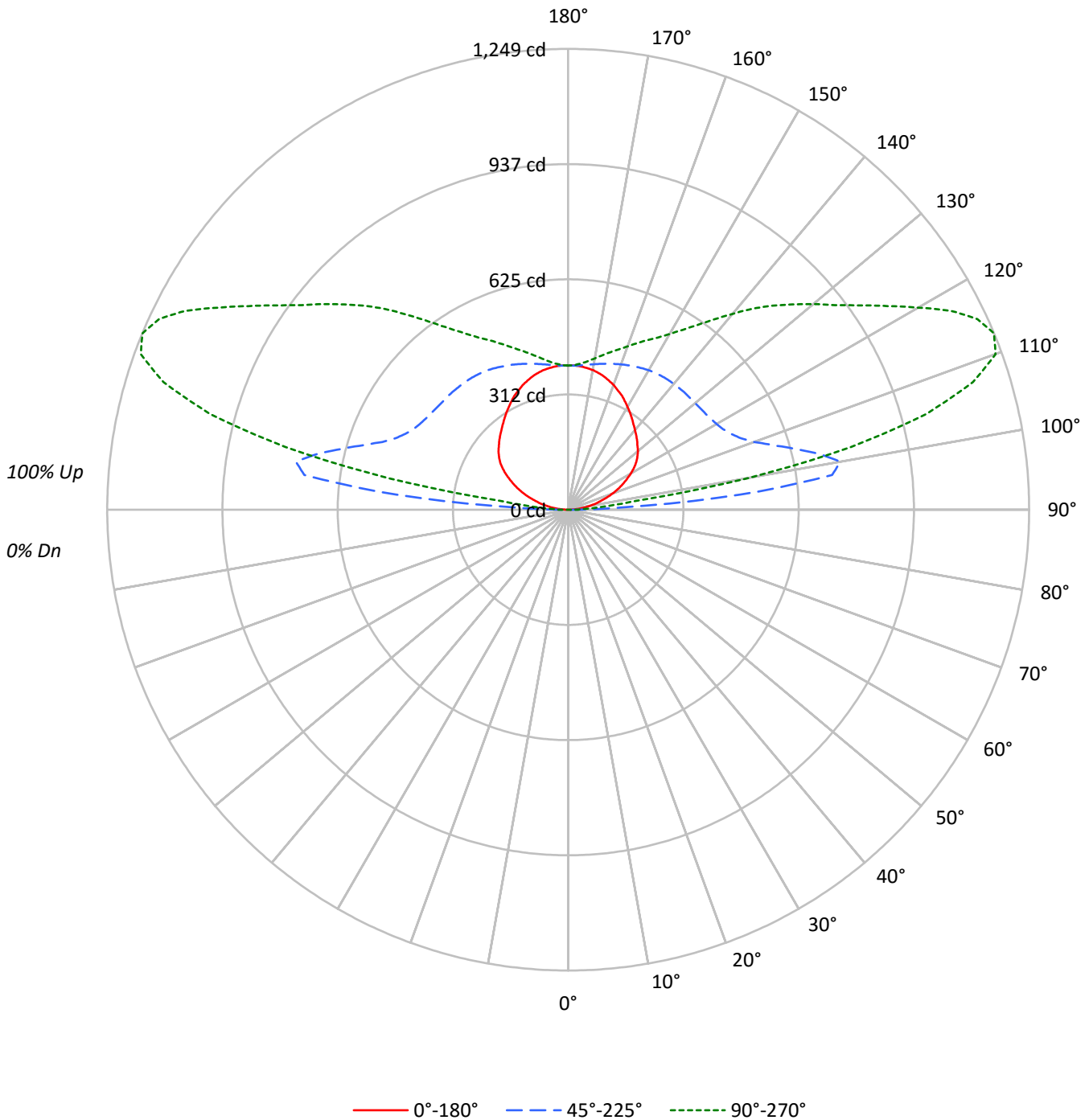
Lumens per Lamp: N/A
Luminaire Lumens: 2940.5 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Indirect

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: P334633
CATALOG NUMBER: S123IP-S1025U927-4F0-1E-UDD-4

Luminous Intensity Polar Plot





TEST NUMBER: P334633

CATALOG NUMBER: S123IP-S1025U927-4F0-1E-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: P334633

CATALOG NUMBER: S123IP-S1025U927-4F0-1E-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°	2.2	0.1
90°-100°	212.0	7.2
100°-110°	620.6	21.1
110°-120°	606.0	20.6
120°-130°	482.6	16.4
130°-140°	380.8	13.0
140°-150°	284.1	9.7
150°-160°	198.1	6.7
160°-170°	116.4	4.0
170°-180°	37.8	1.3
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.2	0.1
90°-120°	1438.6	48.9
90°-150°	2586.1	87.9
90°-180°	2938.0	99.9
0°-180°	2940.5	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°	2	10	20	22	23	2
95°	27	87	469	137	92	28
105°	92	136	636	1112	1006	97
115°	162	202	486	1066	1223	160
125°	225	266	454	822	965	200
135°	264	315	448	677	782	204
145°	301	345	442	556	611	189
155°	342	369	428	486	507	158
165°	374	385	410	434	442	105
175°	390	390	393	398	398	37
180°	391	391	391	391	391	



TEST NUMBER: P334633

CATALOG NUMBER: S123IP-S1025U927-4F0-1E-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°	1.6	3.2	4.7	7.1	8.7	10.3	12.7	15.0	17.4	19.8	19.0
92.5°	11.9	17.4	25.3	32.4	40.3	54.6	79.9	121.8	162.9	147.1	109.9
95°	26.9	29.3	38.0	51.4	72.0	102.8	170.0	287.8	417.5	468.9	380.3
97.5°	42.7	43.5	50.6	62.5	83.0	117.0	183.5	320.2	538.5	721.2	745.7
100°	58.5	59.3	64.8	75.9	94.9	125.7	181.1	298.1	506.1	748.8	904.6
102.5°	75.1	76.7	81.4	91.7	108.3	136.0	184.2	279.1	458.6	697.4	912.5
105°	91.7	94.1	98.8	108.3	123.4	147.9	190.6	272.0	421.5	635.8	862.7
107.5°	109.1	111.5	116.2	125.7	140.0	162.9	200.8	270.4	394.6	581.2	791.5
110°	128.1	130.5	134.4	143.1	156.6	178.7	214.3	274.4	380.3	536.1	725.1



TEST NUMBER: P334633

CATALOG NUMBER: S123IP-S1025U927-4F0-1E-UDD-4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	145.5	147.9	151.8	160.5	174.0	195.3	227.7	282.3	372.4	506.1	667.4
115°	162.1	165.3	170.0	177.9	191.4	212.7	242.8	291.0	371.6	486.3	623.1
117.5°	178.7	182.7	186.6	193.7	208.8	228.5	258.6	302.1	372.4	472.9	593.8
120°	196.1	198.5	202.4	210.3	225.4	245.1	273.6	314.7	375.6	464.2	571.7
122.5°	211.1	213.5	217.5	226.2	240.4	261.7	289.4	326.6	381.1	458.6	553.5
125°	225.4	226.9	231.7	240.4	255.4	276.8	304.4	339.2	386.7	453.9	538.5
127.5°	236.4	238.8	244.3	253.0	269.6	291.0	317.9	349.5	393.0	451.5	524.3
130°	246.7	249.1	256.2	265.7	282.3	303.6	329.7	359.8	399.3	449.1	513.2
132.5°	254.6	257.8	265.7	277.5	294.2	314.7	340.0	369.3	404.1	448.3	502.9
135°	264.1	267.3	276.0	287.8	304.4	325.8	350.3	377.2	408.8	447.6	494.2
137.5°	272.8	276.0	284.7	297.3	313.9	333.7	357.4	383.5	412.0	446.0	486.3
140°	281.5	285.5	293.4	306.0	321.8	341.6	364.5	388.3	415.1	445.2	479.2
142.5°	291.0	294.2	302.9	313.9	329.7	347.9	370.1	393.0	417.5	443.6	472.9
145°	301.3	303.6	310.8	322.6	336.1	354.3	374.8	396.2	418.3	442.0	467.3
147.5°	311.6	313.1	320.2	330.5	344.0	359.8	378.8	398.5	418.3	439.7	461.8
150°	321.8	322.6	328.9	339.2	350.3	364.5	382.7	399.3	418.3	436.5	456.3
152.5°	332.1	332.1	338.4	347.1	356.6	370.1	385.1	400.9	415.9	432.5	449.9
155°	342.4	342.4	347.1	355.0	363.7	374.8	388.3	400.9	414.3	427.8	443.6
157.5°	350.3	351.1	355.0	362.2	370.1	378.8	389.8	401.7	412.0	423.8	436.5
160°	359.8	359.8	362.9	369.3	374.8	382.7	392.2	401.7	410.4	419.1	429.4
162.5°	366.9	366.9	369.3	374.0	378.8	385.1	393.0	400.9	407.2	414.3	422.3
165°	374.0	373.2	374.8	378.8	381.9	387.5	393.8	399.3	404.1	409.6	415.9
167.5°	379.6	378.8	379.6	382.7	385.1	389.0	393.8	398.5	400.9	404.9	409.6
170°	384.3	382.7	383.5	385.9	387.5	389.0	393.0	396.2	397.7	400.1	404.1
172.5°	387.5	386.7	386.7	388.3	389.0	389.8	393.0	395.4	395.4	396.2	398.5
175°	389.8	389.0	388.3	389.8	389.8	390.6	392.2	393.8	393.0	393.0	394.6
177.5°	391.4	390.6	389.8	390.6	390.6	390.6	391.4	393.0	391.4	390.6	391.4
180°	390.6	390.6	390.6	390.6	390.6	390.6	390.6	390.6	390.6	390.6	390.6



TEST NUMBER: P334633

CATALOG NUMBER: S123IP-S1025U927-4F0-1E-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°	19.8	20.6	21.3	22.9	22.1	22.9	23.7	22.9
92.5°	78.3	60.9	53.0	47.4	45.9	42.7	43.5	41.9
95°	284.7	192.9	151.0	122.6	107.5	100.4	94.9	91.7
97.5°	653.9	493.4	389.0	298.9	245.9	215.9	196.9	188.2
100°	932.3	868.2	775.7	663.4	583.6	525.8	495.0	495.8
102.5°	1024.8	1038.2	994.0	933.1	875.3	832.6	808.1	785.2
105°	1028.0	1107.0	1122.1	1101.5	1065.1	1035.1	1009.8	1005.8
107.5°	980.5	1104.7	1166.3	1187.7	1182.9	1168.7	1158.4	1149.7
110°	906.2	1051.7	1151.3	1206.7	1228.8	1235.1	1233.6	1232.0



TEST NUMBER: P334633

CATALOG NUMBER: S123IP-S1025U927-4F0-1E-UDD-4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	832.6	982.1	1096.8	1171.9	1216.9	1239.9	1247.8	1248.6
115°	769.4	907.0	1023.2	1109.4	1168.7	1203.5	1219.3	1223.3
117.5°	720.4	842.1	948.9	1038.2	1099.9	1138.7	1162.4	1167.9
120°	683.2	789.9	884.8	964.7	1027.2	1071.5	1090.4	1095.2
122.5°	653.9	748.0	834.2	907.0	960.7	999.5	1020.8	1027.2
125°	628.6	714.8	790.7	854.0	904.6	939.4	959.2	964.7
127.5°	605.7	684.0	753.6	812.1	858.0	888.0	906.2	910.9
130°	584.4	655.5	719.6	773.3	815.3	843.7	860.3	866.7
132.5°	564.6	628.6	687.2	737.8	776.5	805.0	819.2	823.2
135°	547.2	603.3	654.7	699.8	738.6	762.3	776.5	782.0
137.5°	530.6	578.0	623.9	664.2	697.4	721.9	733.8	738.6
140°	516.4	556.7	594.6	628.6	658.7	680.8	693.5	692.7
142.5°	502.9	536.1	567.8	596.2	620.7	639.7	650.8	650.0
145°	492.6	518.7	544.0	567.0	586.7	603.3	609.7	611.2
147.5°	483.9	505.3	526.6	543.2	559.1	570.9	577.2	578.0
150°	474.4	492.6	509.2	524.3	536.1	544.8	549.6	549.6
152.5°	465.7	480.8	495.0	506.9	515.6	523.5	525.8	525.8
155°	457.0	469.7	481.6	491.0	498.2	504.5	506.1	506.9
157.5°	447.6	458.6	468.1	476.0	482.4	487.1	488.7	488.7
160°	439.7	448.3	456.3	461.8	467.3	472.1	472.1	471.3
162.5°	430.2	437.3	444.4	449.1	452.3	456.3	456.3	455.5
165°	422.3	427.0	432.5	436.5	439.7	442.8	442.0	442.0
167.5°	415.1	419.1	422.3	425.4	427.0	429.4	428.6	428.6
170°	408.0	410.4	413.6	415.1	415.9	417.5	416.7	416.7
172.5°	401.7	403.3	405.6	406.4	406.4	408.0	406.4	405.6
175°	396.2	397.0	398.5	398.5	398.5	399.3	398.5	397.7
177.5°	392.2	393.0	393.8	393.8	393.0	393.8	392.2	392.2
180°	390.6	390.6	390.6	390.6	390.6	390.6	390.6	390.6

(END OF REPORT)