

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: P333190-927

Luminaire Tested: **S125DIP-S610D1035U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333190-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S610D1035U927-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 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: 5180.4 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

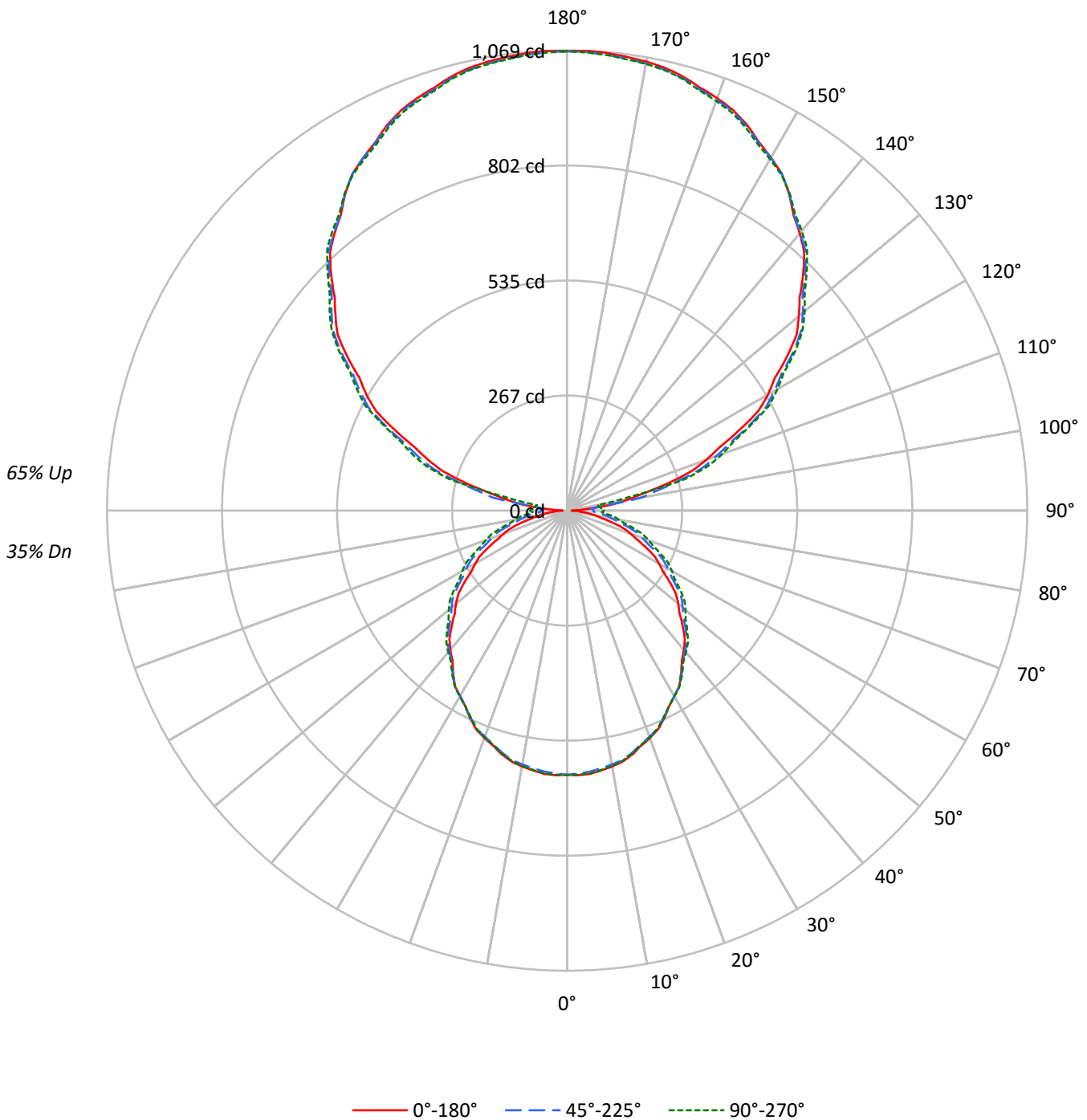
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333190-927

CATALOG NUMBER: S125DIP-S610D1035U927-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P333190-927

CATALOG NUMBER: S125DIP-S610D1035U927-4F0-1E-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	50	30	10	0	
RCR																						
0	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42	35				
1	94	89	85	82	84	81	77	74	65	62	60	50	48	47	36	35	34	28				
2	85	78	72	66	77	70	65	61	56	53	49	43	41	39	32	30	28	23				
3	78	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19				
4	71	60	52	46	64	54	48	42	44	39	35	34	30	28	25	22	21	16				
5	65	53	45	39	58	48	41	36	39	34	30	30	27	24	22	20	18	14				
6	60	48	40	34	54	43	36	31	35	30	26	27	24	21	20	18	16	12				
7	55	43	35	30	49	39	32	27	32	26	23	25	21	18	18	16	14	11				
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	17	14	12	10				
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	15	13	11	9				
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10	8				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3965	3965	3965
5°	3973	3892	3904
10°	3945	3822	3817
15°	3898	3740	3705
20°	3834	3636	3593
25°	3759	3526	3457
30°	3667	3405	3332
35°	3583	3293	3217
40°	3496	3176	3103
45°	3398	3076	3001
50°	3305	2967	2910
55°	3192	2865	2804
60°	3069	2747	2697
65°	2942	2625	2574
70°	2795	2458	2451
75°	2563	2297	2296
80°	2262	2101	2129
85°	1981	1972	2077



TEST NUMBER: P333190-927

CATALOG NUMBER: S125DIP-S610D1035U927-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.1
10°-20°	164.8	3.2
20°-30°	245.1	4.7
30°-40°	290.3	5.6
40°-50°	300.2	5.8
50°-60°	276.5	5.3
60°-70°	223.5	4.3
70°-80°	149.7	2.9
80°-90°	79.8	1.5
90°-100°	82.3	1.6
100°-110°	271.1	5.2
110°-120°	454.9	8.8
120°-130°	568.5	11.0
130°-140°	603.6	11.7
140°-150°	562.6	10.9
150°-160°	454.3	8.8
160°-170°	293.8	5.7
170°-180°	101.3	2.0
0°-30°	467.9	9.0
0°-40°	758.2	14.6
0°-60°	1334.9	25.8
0°-90°	1787.9	34.5
90°-120°	808.4	15.6
90°-150°	2543.1	49.1
90°-180°	3392.0	65.5
0°-180°	5180.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	614	613	608	613	613	58
15°	586	587	583	586	584	165
25°	533	534	531	533	530	245
35°	461	465	463	465	465	288
45°	380	386	389	393	394	293
55°	292	302	311	318	320	261
65°	201	215	229	238	241	199
75°	111	127	146	157	161	117
85°	33	53	74	87	92	35
90°	10	36	62	79	86	8
95°	53	65	57	73	78	64
105°	238	251	269	280	284	252
115°	440	449	465	472	471	436
125°	623	629	640	646	647	556
135°	776	780	782	788	787	598
145°	898	899	899	903	901	561
155°	989	984	986	987	982	455
165°	1043	1039	1039	1043	1038	295
175°	1067	1063	1063	1069	1062	102
180°	1067	1067	1067	1067	1067	



TEST NUMBER: P333190-927

CATALOG NUMBER: S125DIP-S610D1035U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	615.4	615.1	615.0	614.7	614.5	614.0	613.3	612.5	611.8	611.0	611.8
5°	613.9	613.6	613.4	613.1	612.8	612.3	611.3	610.4	609.4	608.5	609.6
7.5°	608.5	608.4	608.3	608.2	608.1	607.5	606.6	605.6	604.7	603.7	604.6
10°	603.7	603.7	603.7	603.7	603.7	603.2	602.1	601.0	599.9	598.9	599.8
12.5°	597.0	597.1	597.1	597.3	597.4	597.0	596.1	595.3	594.5	593.6	594.3
15°	586.2	586.4	586.5	586.6	586.8	586.4	585.4	584.5	583.6	582.7	583.4
17.5°	572.3	572.5	572.8	573.1	573.4	573.0	572.1	571.2	570.2	569.3	569.9
20°	562.1	562.4	562.7	563.0	563.2	562.9	562.0	561.0	560.1	559.1	559.5
22.5°	550.6	551.1	551.6	552.1	552.5	552.2	551.2	550.2	549.1	548.1	548.6
25°	532.7	533.1	533.5	533.9	534.2	534.1	533.3	532.5	531.6	530.8	531.4
27.5°	512.7	513.3	513.9	514.4	515.1	514.9	514.0	513.1	512.1	511.3	511.6
30°	497.7	498.6	499.4	500.2	501.0	501.0	500.2	499.4	498.6	497.7	498.0
32.5°	484.3	485.0	485.7	486.4	487.0	487.1	486.6	485.9	485.4	484.7	485.1
35°	461.1	462.0	463.0	463.8	464.8	465.1	464.7	464.2	463.8	463.4	463.8
37.5°	437.8	438.7	439.5	440.4	441.2	441.6	441.5	441.3	441.2	441.1	441.6
40°	421.9	423.0	424.1	425.2	426.2	426.7	426.5	426.4	426.3	426.1	426.7
42.5°	404.6	406.0	407.3	408.8	410.2	411.0	411.3	411.6	411.9	412.2	412.8
45°	379.8	381.3	382.7	384.2	385.7	386.7	387.5	388.1	388.7	389.4	390.4
47.5°	354.4	355.8	357.1	358.5	359.9	361.1	362.3	363.4	364.6	365.7	367.1
50°	337.1	338.5	340.0	341.5	342.9	344.4	345.9	347.4	348.8	350.3	351.8
52.5°	318.8	320.5	322.3	324.2	325.9	327.7	329.5	331.3	333.1	334.9	336.4
55°	291.9	294.1	296.2	298.3	300.5	302.6	304.8	306.9	309.0	311.2	312.7
57.5°	264.5	267.0	269.6	272.2	274.7	277.3	279.7	282.2	284.6	287.1	288.8
60°	246.2	248.8	251.5	254.2	256.9	259.5	262.2	264.9	267.6	270.2	272.3
62.5°	228.4	231.0	233.7	236.4	239.1	241.9	244.7	247.6	250.5	253.4	255.6
65°	201.1	204.1	207.2	210.2	213.3	216.5	219.7	222.9	226.1	229.3	231.3
67.5°	175.3	178.2	181.2	184.2	187.1	190.3	193.5	196.8	200.0	203.4	205.7
70°	156.5	159.5	162.6	165.7	168.8	172.1	175.5	179.0	182.5	186.0	188.5
72.5°	138.2	141.4	144.6	147.7	150.9	154.4	158.2	162.0	165.8	169.6	172.4
75°	110.7	114.2	117.7	121.2	124.7	128.6	132.8	137.1	141.4	145.7	148.3
77.5°	84.4	88.4	92.4	96.4	100.4	104.5	108.6	112.7	116.8	121.0	123.9
80°	68.0	72.0	76.0	80.1	84.1	88.3	92.9	97.4	102.0	106.5	109.5
82.5°	53.1	57.3	61.6	65.8	70.0	74.5	79.1	83.7	88.4	93.1	95.9
85°	33.1	37.5	41.9	46.3	50.8	55.3	60.0	64.6	69.3	74.1	77.0
87.5°	18.9	23.5	28.0	32.6	37.2	41.8	46.7	51.4	56.2	61.0	64.3
90°	10.5	16.1	21.8	27.5	33.2	38.9	44.7	50.5	56.2	62.0	66.0
92.5°	20.8	23.8	26.8	29.8	32.7	37.1	42.9	48.6	54.3	60.0	63.9
95°	52.9	55.8	58.8	61.8	64.7	65.1	63.0	60.8	58.7	56.6	60.4
97.5°	101.2	105.3	109.4	113.4	117.6	115.2	106.3	97.5	88.6	79.9	77.7
100°	138.7	142.0	145.4	148.7	152.0	156.2	161.2	166.2	171.2	176.2	152.7
102.5°	176.8	180.1	183.4	186.6	189.9	193.8	198.4	203.0	207.6	212.2	209.9
105°	238.0	240.8	243.7	246.5	249.3	252.8	256.7	260.8	264.8	268.8	271.5
107.5°	301.5	303.2	305.1	306.9	308.7	311.7	315.9	320.2	324.4	328.6	331.3
110°	342.8	344.4	345.9	347.5	349.2	352.0	356.1	360.2	364.3	368.4	370.4



TEST NUMBER: P333190-927

CATALOG NUMBER: S125DIP-S610D1035U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	382.0	383.7	385.4	387.1	388.8	391.6	395.5	399.3	403.1	406.9	408.8
115°	440.2	442.0	443.9	445.7	447.5	450.2	453.8	457.6	461.2	464.9	466.5
117.5°	500.5	501.1	501.7	502.2	502.9	505.1	509.1	513.0	517.0	520.9	522.3
120°	538.5	538.7	538.9	539.2	539.4	541.3	544.9	548.5	552.2	555.7	557.6
122.5°	571.6	572.4	573.2	574.1	575.0	577.0	580.2	583.4	586.7	589.9	591.7
125°	623.3	624.4	625.5	626.6	627.7	629.6	632.2	634.9	637.6	640.3	641.7
127.5°	672.2	673.0	673.8	674.5	675.2	676.6	678.7	680.8	682.9	685.0	686.6
130°	702.6	703.4	704.1	704.8	705.6	706.9	709.0	711.1	713.1	715.2	716.5
132.5°	732.5	733.5	734.5	735.5	736.5	737.5	738.6	739.6	740.7	741.7	743.5
135°	775.5	776.5	777.4	778.3	779.3	780.0	780.6	781.2	781.7	782.4	783.7
137.5°	815.2	815.9	816.7	817.5	818.4	818.9	819.0	819.1	819.3	819.4	821.0
140°	840.6	841.0	841.3	841.7	842.0	842.2	842.1	842.1	842.0	842.0	843.8
142.5°	864.0	864.1	864.2	864.4	864.4	864.6	864.9	865.1	865.5	865.7	867.0
145°	898.3	898.6	898.8	899.0	899.2	899.4	899.4	899.4	899.4	899.4	900.2
147.5°	927.8	927.7	927.6	927.6	927.5	927.6	927.8	928.0	928.2	928.4	928.8
150°	946.8	946.4	946.1	945.7	945.4	945.4	945.7	946.1	946.4	946.8	947.1
152.5°	965.1	964.4	963.6	962.8	962.0	961.9	962.2	962.5	962.9	963.2	963.6
155°	988.7	987.7	986.6	985.6	984.5	984.1	984.5	984.8	985.2	985.6	986.1
157.5°	1006.9	1006.2	1005.7	1005.0	1004.4	1004.1	1004.1	1004.2	1004.2	1004.2	1004.8
160°	1019.5	1018.5	1017.5	1016.4	1015.3	1014.9	1015.1	1015.3	1015.4	1015.6	1016.3
162.5°	1029.7	1028.6	1027.5	1026.5	1025.5	1025.0	1025.2	1025.4	1025.6	1025.7	1026.7
165°	1043.3	1042.2	1041.2	1040.1	1039.1	1038.6	1038.8	1038.9	1039.2	1039.3	1040.4
167.5°	1053.4	1052.3	1051.2	1050.1	1049.1	1048.6	1048.8	1048.9	1049.1	1049.3	1050.6
170°	1059.1	1057.9	1056.6	1055.4	1054.2	1053.7	1053.8	1054.0	1054.2	1054.4	1055.7
172.5°	1062.9	1061.7	1060.4	1059.2	1058.0	1057.6	1057.8	1058.1	1058.4	1058.8	1060.0
175°	1067.0	1066.0	1064.9	1063.8	1062.8	1062.4	1062.6	1062.7	1062.9	1063.0	1064.5
177.5°	1068.9	1068.1	1067.2	1066.4	1065.6	1065.2	1065.3	1065.5	1065.6	1065.7	1066.8
180°	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0



TEST NUMBER: P333190-927

CATALOG NUMBER: S125DIP-S610D1035U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	612.5	613.3	614.0	614.3	614.3	614.2	614.0	613.9
5°	610.6	611.7	612.8	613.2	613.1	613.0	612.8	612.8
7.5°	605.5	606.5	607.4	607.8	607.7	607.6	607.4	607.3
10°	600.8	601.7	602.6	603.0	602.9	602.8	602.6	602.5
12.5°	595.0	595.7	596.5	596.7	596.3	596.0	595.6	595.2
15°	584.2	585.0	585.8	586.0	585.4	584.9	584.4	583.8
17.5°	570.5	571.1	571.7	571.9	571.6	571.2	570.9	570.6
20°	560.0	560.4	560.8	560.9	560.9	560.9	560.9	560.9
22.5°	549.1	549.6	550.1	550.2	549.9	549.5	549.2	548.9
25°	532.0	532.5	533.0	533.0	532.3	531.6	530.9	530.3
27.5°	512.0	512.4	512.8	512.8	512.5	512.3	512.1	511.8
30°	498.3	498.6	498.8	498.9	498.8	498.6	498.5	498.4
32.5°	485.3	485.5	485.8	485.9	485.8	485.6	485.5	485.4
35°	464.2	464.7	465.1	465.2	465.2	465.2	465.2	465.2
37.5°	442.1	442.7	443.2	443.5	443.4	443.3	443.3	443.2
40°	427.2	427.8	428.3	428.6	429.0	429.2	429.5	429.8
42.5°	413.4	414.1	414.7	415.1	415.2	415.2	415.3	415.3
45°	391.3	392.2	393.2	393.7	393.9	394.0	394.1	394.3
47.5°	368.4	369.8	371.1	372.0	372.3	372.6	372.9	373.2
50°	353.2	354.7	356.2	357.1	357.5	357.9	358.3	358.7
52.5°	338.0	339.6	341.2	342.1	342.5	342.7	343.0	343.3
55°	314.1	315.6	317.0	318.1	318.6	319.2	319.6	320.2
57.5°	290.5	292.2	293.8	294.9	295.3	295.7	296.1	296.5
60°	274.3	276.2	278.3	279.5	279.9	280.3	280.7	281.1
62.5°	257.9	260.1	262.3	263.6	264.1	264.7	265.1	265.7
65°	233.3	235.4	237.3	238.6	239.2	239.7	240.2	240.7
67.5°	208.2	210.6	213.0	214.6	215.3	216.0	216.7	217.4
70°	191.1	193.6	196.1	197.8	198.6	199.4	200.3	201.1
72.5°	175.2	177.8	180.6	182.3	182.9	183.5	184.1	184.7
75°	151.0	153.7	156.4	158.0	158.7	159.4	160.0	160.7
77.5°	126.8	129.8	132.8	134.5	135.0	135.5	136.1	136.7
80°	112.4	115.3	118.3	120.0	120.6	121.1	121.7	122.2
82.5°	98.7	101.6	104.4	106.3	107.3	108.2	109.2	110.1
85°	79.9	82.9	85.8	87.8	88.9	89.9	91.0	92.1
87.5°	67.6	70.8	74.1	76.2	77.2	78.3	79.3	80.3
90°	69.9	73.9	77.8	80.6	82.0	83.5	84.9	86.4
92.5°	67.8	71.6	75.5	78.0	79.1	80.3	81.5	82.7
95°	64.2	68.0	71.9	74.2	75.2	76.1	77.1	78.0
97.5°	75.6	73.4	71.2	70.7	71.5	72.5	73.4	74.3
100°	129.4	106.0	82.6	71.0	71.1	71.2	71.3	71.4
102.5°	207.7	205.4	203.2	196.5	185.3	174.2	163.0	151.9
105°	274.2	276.9	279.5	281.2	282.0	282.7	283.5	284.2
107.5°	333.9	336.6	339.3	340.8	341.1	341.4	341.7	342.0
110°	372.4	374.5	376.4	378.0	379.1	380.2	381.4	382.5



TEST NUMBER: P333190-927

CATALOG NUMBER: S125DIP-S610D1035U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	410.5	412.3	414.1	415.3	416.0	416.7	417.3	418.0
115°	468.3	469.9	471.7	472.4	472.1	471.9	471.6	471.3
117.5°	523.6	525.1	526.4	527.3	527.8	528.2	528.6	529.1
120°	559.6	561.5	563.4	564.4	564.3	564.2	564.1	564.0
122.5°	593.5	595.3	597.1	597.9	597.7	597.5	597.3	597.1
125°	643.2	644.6	646.0	646.8	647.0	647.1	647.2	647.4
127.5°	688.2	689.8	691.3	691.9	691.3	690.9	690.3	689.8
130°	717.9	719.2	720.6	721.1	720.9	720.7	720.5	720.3
132.5°	745.3	747.0	748.8	749.5	749.2	748.8	748.5	748.2
135°	785.1	786.5	787.9	788.4	788.0	787.6	787.2	786.9
137.5°	822.7	824.3	826.0	826.6	826.2	825.9	825.5	825.1
140°	845.7	847.5	849.3	849.9	849.5	848.9	848.3	847.9
142.5°	868.4	869.7	871.0	871.4	870.9	870.4	869.9	869.3
145°	901.0	901.9	902.7	902.9	902.4	901.8	901.3	900.8
147.5°	929.3	929.7	930.1	929.9	928.8	927.8	926.8	925.7
150°	947.5	947.8	948.2	947.8	946.5	945.2	943.9	942.6
152.5°	963.9	964.3	964.6	964.2	963.0	961.7	960.5	959.3
155°	986.6	987.1	987.7	987.2	985.8	984.4	983.0	981.6
157.5°	1005.4	1005.9	1006.5	1006.1	1004.6	1003.2	1001.8	1000.4
160°	1017.0	1017.7	1018.4	1018.0	1016.7	1015.3	1013.8	1012.4
162.5°	1027.7	1028.6	1029.7	1029.4	1027.9	1026.3	1024.8	1023.2
165°	1041.4	1042.5	1043.5	1043.4	1042.0	1040.5	1039.2	1037.8
167.5°	1051.9	1053.1	1054.4	1054.2	1052.7	1051.1	1049.5	1047.9
170°	1057.2	1058.6	1060.0	1059.9	1058.3	1056.8	1055.2	1053.6
172.5°	1061.3	1062.6	1063.8	1063.7	1062.1	1060.5	1058.9	1057.4
175°	1065.9	1067.3	1068.7	1068.6	1067.0	1065.4	1063.8	1062.2
177.5°	1067.7	1068.7	1069.7	1069.6	1068.5	1067.4	1066.3	1065.1
180°	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0

(END OF REPORT)