

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: P333548-927

Luminaire Tested: **S125RDIP-S610D1205U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333548-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S610D1205U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5186.1 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

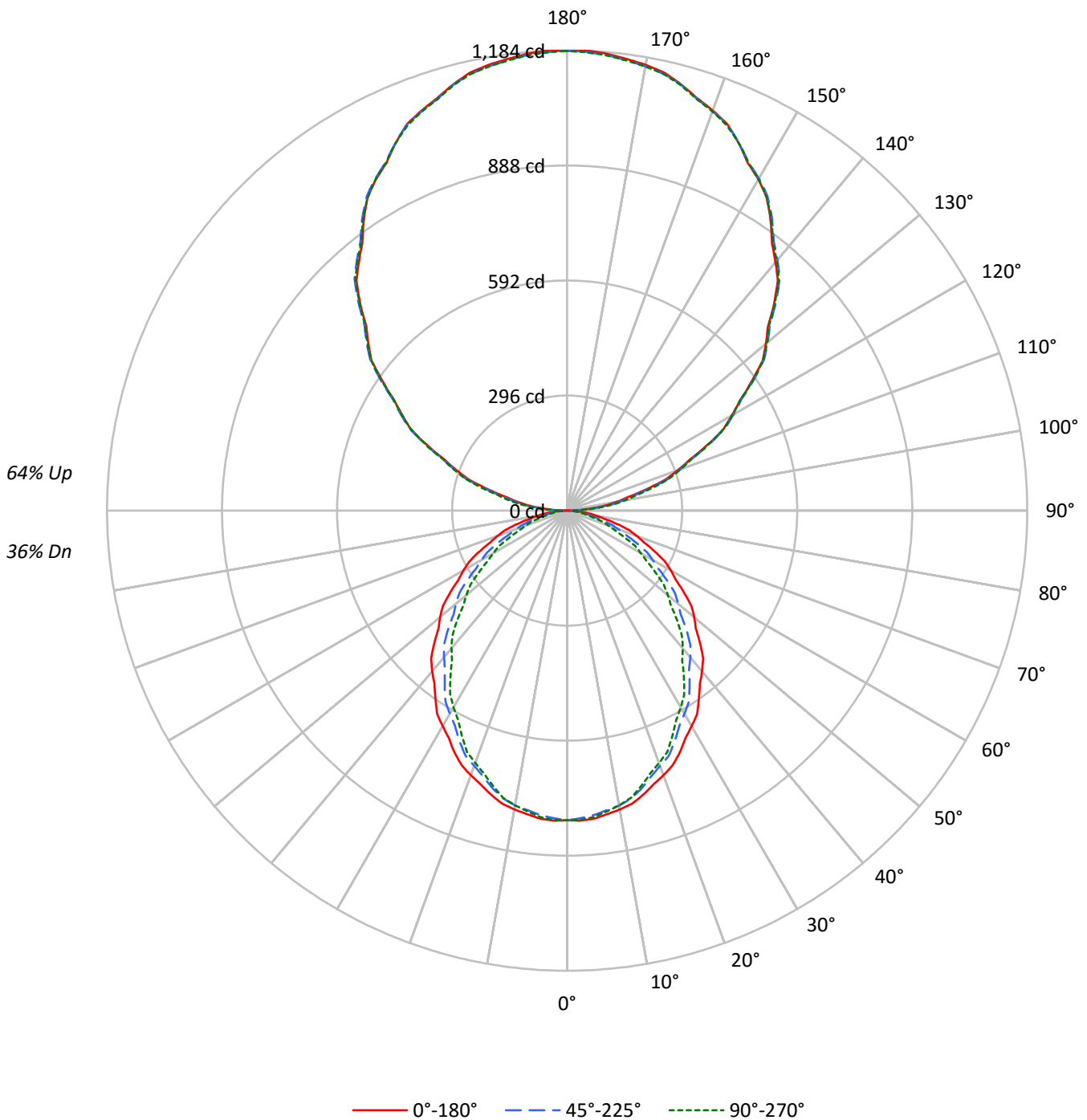
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333548-927

CATALOG NUMBER: S125RDIP-S610D1205U927-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333548-927

CATALOG NUMBER: S125RDIP-S610D1205U927-4F0-1E-UDD-F1

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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	36
1	95	91	87	84	86	82	79	76	67	64	62	52	51	49	39	38	37	31
2	86	79	73	68	78	72	67	63	58	55	52	46	44	41	34	33	31	26
3	79	70	63	57	71	64	57	53	52	47	44	41	38	35	30	29	27	22
4	72	62	54	48	65	56	50	45	46	41	37	36	33	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17
6	61	49	41	36	55	45	38	33	37	32	28	29	26	23	22	20	18	15
7	56	44	37	31	51	41	34	29	33	28	25	27	23	20	20	18	16	13
8	52	40	33	28	47	37	30	26	31	25	22	24	21	18	19	16	14	12
9	49	37	29	25	44	34	27	23	28	23	20	22	19	16	17	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5147	5147	5147
5°	5159	5100	5131
10°	5119	5052	5052
15°	5059	4950	4910
20°	4981	4807	4748
25°	4890	4666	4563
30°	4776	4502	4359
35°	4660	4332	4128
40°	4552	4156	3903
45°	4420	3958	3656
50°	4287	3744	3399
55°	4135	3538	3125
60°	3981	3289	2830
65°	3799	2998	2492
70°	3592	2638	2149
75°	3306	2221	1787
80°	2912	1748	1499
85°	2453	1430	1341



TEST NUMBER: P333548-927

CATALOG NUMBER: S125RDIP-S610D1205U927-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	1.4
10°-20°	209.4	4.0
20°-30°	303.7	5.9
30°-40°	346.1	6.7
40°-50°	337.4	6.5
50°-60°	284.0	5.5
60°-70°	199.1	3.8
70°-80°	102.3	2.0
80°-90°	28.4	0.5
90°-100°	79.2	1.5
100°-110°	234.0	4.5
110°-120°	396.3	7.6
120°-130°	521.5	10.1
130°-140°	584.4	11.3
140°-150°	572.7	11.0
150°-160°	481.1	9.3
160°-170°	319.8	6.2
170°-180°	111.9	2.2
0°-30°	588.0	11.3
0°-40°	934.1	18.0
0°-60°	1555.4	30.0
0°-90°	1885.2	36.4
90°-120°	709.5	13.7
90°-150°	2388.1	46.0
90°-180°	3301.0	63.7
0°-180°	5186.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	796	793	787	792	792	75
15°	757	752	740	739	734	213
25°	686	676	655	647	640	316
35°	591	576	550	533	524	370
45°	484	466	433	410	400	373
55°	367	347	314	288	278	328
65°	249	228	196	173	163	246
75°	132	114	89	76	72	140
85°	33	23	19	19	18	37
90°	1	8	15	19	22	5
95°	60	62	71	77	79	64
105°	210	215	220	225	228	224
115°	397	400	402	401	400	392
125°	579	584	586	584	583	518
135°	753	758	760	759	756	580
145°	912	916	919	919	916	570
155°	1044	1044	1045	1048	1044	481
165°	1135	1133	1134	1137	1132	320
175°	1180	1177	1176	1181	1176	112
180°	1183	1183	1183	1183	1183	



TEST NUMBER: P333548-927

CATALOG NUMBER: S125RDIP-S610D1205U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	798.4	798.0	797.7	797.4	797.1	796.4	795.3	794.2	793.1	792.1	793.1
5°	795.7	795.2	794.6	794.1	793.5	792.6	791.1	789.6	788.1	786.6	788.0
7.5°	787.9	787.3	786.9	786.3	785.8	784.7	782.9	781.2	779.4	777.6	778.6
10°	780.6	780.2	779.8	779.4	779.0	777.9	776.0	774.2	772.3	770.4	770.8
12.5°	772.5	772.0	771.4	771.0	770.4	768.9	766.4	763.9	761.4	758.8	759.1
15°	756.6	755.7	754.9	754.2	753.4	751.5	748.8	745.9	743.1	740.3	740.2
17.5°	738.6	737.4	736.2	735.0	733.7	731.3	727.8	724.3	720.7	717.2	716.5
20°	724.7	723.3	722.0	720.6	719.3	716.5	712.3	708.0	703.7	699.4	698.7
22.5°	709.2	707.9	706.6	705.3	703.9	701.0	696.5	692.1	687.5	683.0	681.8
25°	686.2	684.1	682.1	680.2	678.1	674.6	669.7	664.7	659.8	654.8	653.2
27.5°	659.7	657.3	654.8	652.4	649.9	646.1	640.8	635.5	630.2	624.9	622.4
30°	640.4	637.9	635.3	632.8	630.3	626.1	620.5	615.0	609.3	603.7	600.6
32.5°	621.6	618.7	615.7	612.8	609.7	605.4	599.7	594.0	588.2	582.5	579.1
35°	591.0	587.9	584.6	581.5	578.2	573.6	567.6	561.6	555.6	549.5	545.7
37.5°	561.1	557.1	553.3	549.4	545.5	540.4	534.2	528.0	521.8	515.6	511.0
40°	539.9	535.9	531.9	527.8	523.9	518.6	512.2	505.8	499.4	493.0	487.9
42.5°	517.8	513.7	509.5	505.4	501.3	495.9	489.3	482.6	476.0	469.4	464.5
45°	483.9	480.1	476.2	472.3	468.4	462.8	455.4	448.1	440.7	433.3	428.0
47.5°	448.9	444.8	440.7	436.7	432.5	426.7	419.4	411.9	404.6	397.1	391.7
50°	426.7	422.3	417.9	413.5	409.1	403.1	395.5	387.9	380.2	372.6	366.9
52.5°	402.7	398.2	393.6	389.1	384.6	378.7	371.5	364.3	357.1	349.9	343.9
55°	367.2	362.9	358.6	354.3	350.1	344.1	336.7	329.2	321.7	314.2	308.2
57.5°	331.3	326.7	322.1	317.6	313.0	307.0	299.8	292.6	285.4	278.2	272.3
60°	308.2	303.5	298.8	294.1	289.5	283.5	276.2	269.0	261.8	254.6	248.7
62.5°	283.6	279.2	274.6	270.2	265.8	259.8	252.5	245.2	237.9	230.5	225.1
65°	248.6	244.1	239.5	235.0	230.4	224.6	217.5	210.4	203.3	196.2	190.8
67.5°	213.8	209.2	204.7	200.2	195.6	190.0	183.2	176.3	169.5	162.7	157.9
70°	190.2	185.7	181.1	176.6	172.0	166.4	159.7	153.0	146.3	139.7	135.5
72.5°	167.1	162.6	158.2	153.8	149.3	143.9	137.7	131.4	125.2	118.9	115.1
75°	132.5	128.4	124.4	120.4	116.4	111.5	105.9	100.3	94.7	89.0	86.1
77.5°	98.0	94.7	91.6	88.3	85.2	81.3	76.8	72.3	67.8	63.3	61.2
80°	78.3	75.0	71.9	68.6	65.4	61.9	58.1	54.4	50.7	47.0	45.7
82.5°	59.0	56.1	53.2	50.3	47.5	44.7	42.1	39.5	37.0	34.5	33.9
85°	33.1	30.7	28.3	25.9	23.4	21.9	21.2	20.6	20.0	19.3	19.1
87.5°	11.2	10.9	10.4	10.0	9.6	9.4	9.7	9.8	10.0	10.1	10.4
90°	1.0	2.5	4.2	5.9	7.4	9.0	10.5	11.9	13.3	14.7	15.8
92.5°	22.3	23.4	24.6	25.7	26.9	28.3	30.1	31.8	33.6	35.3	36.7
95°	59.8	60.2	60.7	61.1	61.5	62.7	64.7	66.8	68.8	70.9	72.3
97.5°	99.4	99.6	99.7	99.9	100.1	101.6	104.4	107.2	110.0	112.9	114.2
100°	128.9	128.9	128.9	128.9	128.9	130.2	132.8	135.5	138.2	140.9	142.7
102.5°	160.6	161.4	162.2	163.0	163.8	164.9	166.3	167.6	169.0	170.3	172.3
105°	209.8	210.9	211.9	212.9	214.0	215.1	216.3	217.5	218.8	220.0	221.3
107.5°	264.4	265.4	266.4	267.4	268.5	269.4	270.4	271.3	272.3	273.2	273.9
110°	302.0	302.9	304.0	305.0	306.0	306.8	307.4	308.1	308.7	309.3	309.9



TEST NUMBER: P333548-927

CATALOG NUMBER: S125RDIP-S610D1205U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	340.2	340.8	341.3	341.8	342.4	343.0	343.8	344.6	345.3	346.1	346.4
115°	396.7	397.6	398.4	399.2	400.1	400.6	401.1	401.5	401.9	402.3	402.1
117.5°	453.4	453.8	454.2	454.6	455.0	455.3	455.7	456.1	456.4	456.8	456.9
120°	488.8	489.8	490.8	491.9	492.9	493.5	493.7	493.9	494.2	494.3	494.3
122.5°	527.1	527.5	527.8	528.2	528.5	529.0	529.6	530.1	530.6	531.2	531.0
125°	579.0	580.3	581.5	582.7	583.9	584.6	584.9	585.0	585.3	585.5	585.0
127.5°	634.3	634.9	635.6	636.4	637.1	637.5	637.8	638.0	638.3	638.5	638.3
130°	667.4	668.4	669.5	670.5	671.5	672.2	672.6	673.0	673.4	673.8	673.7
132.5°	700.5	702.2	703.9	705.6	707.3	708.1	708.0	707.9	707.8	707.7	707.5
135°	753.0	754.2	755.5	756.7	758.0	758.7	758.8	759.1	759.2	759.5	759.5
137.5°	802.3	803.5	804.7	805.9	807.1	807.9	808.3	808.8	809.3	809.7	809.9
140°	834.0	835.0	836.1	837.1	838.1	838.9	839.6	840.2	840.7	841.4	841.8
142.5°	865.7	866.6	867.4	868.2	869.1	870.0	870.7	871.5	872.3	873.1	873.3
145°	912.3	913.1	913.9	914.7	915.5	916.2	916.9	917.5	918.1	918.7	918.7
147.5°	955.4	955.8	956.2	956.7	957.1	957.6	958.1	958.6	959.1	959.6	960.0
150°	984.0	983.9	983.7	983.5	983.3	983.6	984.4	985.2	986.0	986.8	986.8
152.5°	1007.7	1007.9	1008.2	1008.5	1008.8	1009.1	1009.4	1009.7	1010.1	1010.4	1010.9
155°	1043.9	1043.9	1043.9	1043.9	1043.9	1044.0	1044.3	1044.4	1044.7	1044.8	1045.7
157.5°	1076.3	1075.9	1075.4	1075.0	1074.5	1074.4	1074.6	1074.8	1075.0	1075.2	1076.0
160°	1095.4	1094.9	1094.2	1093.6	1093.0	1092.8	1093.0	1093.2	1093.4	1093.6	1094.4
162.5°	1112.4	1112.0	1111.5	1111.0	1110.6	1110.4	1110.4	1110.5	1110.5	1110.6	1111.5
165°	1135.0	1134.6	1134.2	1133.9	1133.4	1133.3	1133.5	1133.7	1133.9	1134.1	1135.0
167.5°	1154.2	1153.3	1152.5	1151.8	1150.9	1150.5	1150.5	1150.5	1150.5	1150.5	1151.8
170°	1164.5	1163.7	1162.8	1162.1	1161.3	1160.8	1160.8	1160.8	1160.8	1160.8	1162.1
172.5°	1171.9	1171.1	1170.2	1169.4	1168.6	1168.2	1168.2	1168.2	1168.2	1168.2	1169.4
175°	1180.1	1179.3	1178.5	1177.7	1176.9	1176.5	1176.5	1176.5	1176.5	1176.5	1177.7
177.5°	1184.4	1183.8	1183.0	1182.4	1181.8	1181.4	1181.2	1181.1	1180.8	1180.7	1181.7
180°	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9



TEST NUMBER: P333548-927

CATALOG NUMBER: S125RDIP-S610D1205U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	794.2	795.3	796.4	796.9	796.8	796.6	796.5	796.5
5°	789.3	790.7	792.0	792.6	792.3	792.0	791.8	791.5
7.5°	779.5	780.5	781.4	781.7	781.4	781.1	780.9	780.5
10°	771.2	771.6	772.1	772.1	771.6	771.2	770.8	770.4
12.5°	759.5	759.8	760.0	759.9	759.2	758.7	758.0	757.4
15°	740.1	739.9	739.8	739.1	737.9	736.7	735.5	734.3
17.5°	715.9	715.2	714.5	713.7	712.7	711.7	710.7	709.7
20°	698.1	697.4	696.7	695.8	694.6	693.4	692.2	690.9
22.5°	680.4	679.1	677.8	676.6	675.7	674.6	673.7	672.6
25°	651.4	649.7	647.9	646.3	644.8	643.3	641.9	640.4
27.5°	620.0	617.6	615.1	613.2	611.8	610.4	609.0	607.5
30°	597.5	594.5	591.4	589.2	588.0	586.8	585.7	584.5
32.5°	575.7	572.4	568.9	566.5	564.9	563.4	561.9	560.4
35°	541.8	537.9	534.0	531.2	529.3	527.4	525.5	523.6
37.5°	506.3	501.6	496.9	493.7	491.9	490.1	488.3	486.5
40°	482.8	477.7	472.6	469.3	467.7	466.0	464.5	462.9
42.5°	459.6	454.7	449.9	446.2	443.9	441.6	439.2	436.9
45°	422.6	417.3	411.9	408.3	406.3	404.3	402.3	400.3
47.5°	386.1	380.6	375.1	371.2	369.0	366.8	364.6	362.3
50°	361.3	355.7	350.1	346.3	344.3	342.3	340.2	338.3
52.5°	337.9	331.8	325.7	321.7	319.7	317.7	315.7	313.7
55°	302.1	296.1	290.1	286.1	283.9	281.8	279.6	277.5
57.5°	266.4	260.5	254.7	250.7	248.8	246.9	245.1	243.2
60°	242.8	236.9	231.1	227.1	225.1	223.1	221.1	219.1
62.5°	219.6	214.1	208.7	204.9	203.0	201.0	198.9	196.9
65°	185.5	180.1	174.8	171.1	169.1	167.2	165.1	163.1
67.5°	153.0	148.1	143.1	139.9	138.3	136.7	135.1	133.5
70°	131.3	127.2	123.0	120.2	118.6	117.0	115.3	113.8
72.5°	111.3	107.4	103.6	101.2	100.1	99.0	98.0	96.9
75°	83.2	80.2	77.3	75.3	74.5	73.5	72.6	71.6
77.5°	59.2	57.1	55.1	53.7	53.0	52.3	51.7	50.9
80°	44.5	43.3	42.1	41.4	41.1	40.9	40.6	40.3
82.5°	33.3	32.7	32.2	31.8	31.7	31.5	31.4	31.2
85°	19.0	18.9	18.7	18.6	18.5	18.3	18.2	18.1
87.5°	10.6	10.8	11.0	11.1	11.1	11.1	11.2	11.2
90°	16.8	17.8	18.9	19.6	20.3	20.8	21.5	22.1
92.5°	38.0	39.4	40.7	41.7	42.1	42.5	43.0	43.4
95°	73.8	75.2	76.6	77.6	78.0	78.3	78.7	79.1
97.5°	115.6	116.9	118.3	119.1	119.3	119.5	119.8	120.0
100°	144.5	146.4	148.2	149.3	149.7	150.1	150.6	151.0
102.5°	174.3	176.3	178.3	179.6	180.2	180.8	181.3	181.9
105°	222.4	223.7	224.9	225.9	226.5	227.0	227.7	228.3
107.5°	274.4	275.0	275.7	276.0	275.9	275.9	275.8	275.8
110°	310.5	311.2	311.7	312.0	311.7	311.6	311.3	311.2



TEST NUMBER: P333548-927

CATALOG NUMBER: S125RDIP-S610D1205U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	346.7	347.0	347.3	347.2	346.9	346.5	346.1	345.8
115°	401.9	401.6	401.5	401.2	401.1	400.8	400.6	400.4
117.5°	457.1	457.2	457.4	457.1	456.3	455.5	454.6	453.8
120°	494.3	494.3	494.3	493.9	493.1	492.3	491.5	490.7
122.5°	530.8	530.7	530.5	530.1	529.4	528.8	528.1	527.5
125°	584.6	584.2	583.8	583.5	583.4	583.1	582.9	582.7
127.5°	638.1	637.9	637.7	637.4	637.0	636.5	636.1	635.7
130°	673.4	673.2	673.0	672.7	672.3	671.9	671.5	671.1
132.5°	707.3	707.1	706.9	706.5	705.9	705.4	704.8	704.3
135°	759.5	759.5	759.5	759.1	758.2	757.4	756.6	755.7
137.5°	810.2	810.5	810.7	810.3	809.3	808.3	807.2	806.2
140°	842.2	842.6	843.0	842.7	841.7	840.7	839.6	838.6
142.5°	873.5	873.8	874.0	873.6	872.6	871.6	870.6	869.6
145°	918.7	918.7	918.7	918.4	917.8	917.2	916.6	915.9
147.5°	960.6	961.1	961.6	961.1	959.7	958.3	957.0	955.5
150°	986.8	986.8	986.8	986.7	986.2	985.8	985.4	985.0
152.5°	1011.4	1011.9	1012.3	1012.3	1011.5	1010.7	1010.0	1009.3
155°	1046.5	1047.3	1048.1	1048.0	1046.9	1045.9	1045.0	1043.9
157.5°	1076.8	1077.7	1078.5	1078.2	1076.9	1075.5	1074.2	1072.9
160°	1095.3	1096.1	1096.9	1096.8	1095.7	1094.7	1093.7	1092.7
162.5°	1112.5	1113.5	1114.5	1114.4	1113.2	1112.0	1110.8	1109.6
165°	1135.8	1136.5	1137.4	1137.2	1136.0	1134.7	1133.5	1132.3
167.5°	1152.9	1154.2	1155.4	1155.4	1154.1	1152.9	1151.6	1150.3
170°	1163.2	1164.5	1165.7	1165.6	1164.2	1162.8	1161.3	1159.9
172.5°	1170.6	1171.9	1173.1	1173.1	1171.8	1170.5	1169.3	1168.0
175°	1178.9	1180.1	1181.4	1181.3	1179.9	1178.5	1176.9	1175.5
177.5°	1182.6	1183.7	1184.6	1184.6	1183.4	1182.3	1181.1	1180.0
180°	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9

(END OF REPORT)