

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: P333548-935

Luminaire Tested: **S125RDIP-S610D1205U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333548-935  
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-S610D1205U935-4F0-1E-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: 5636.6 lumens  
Efficiency: N/A  
Efficacy: 114.1 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

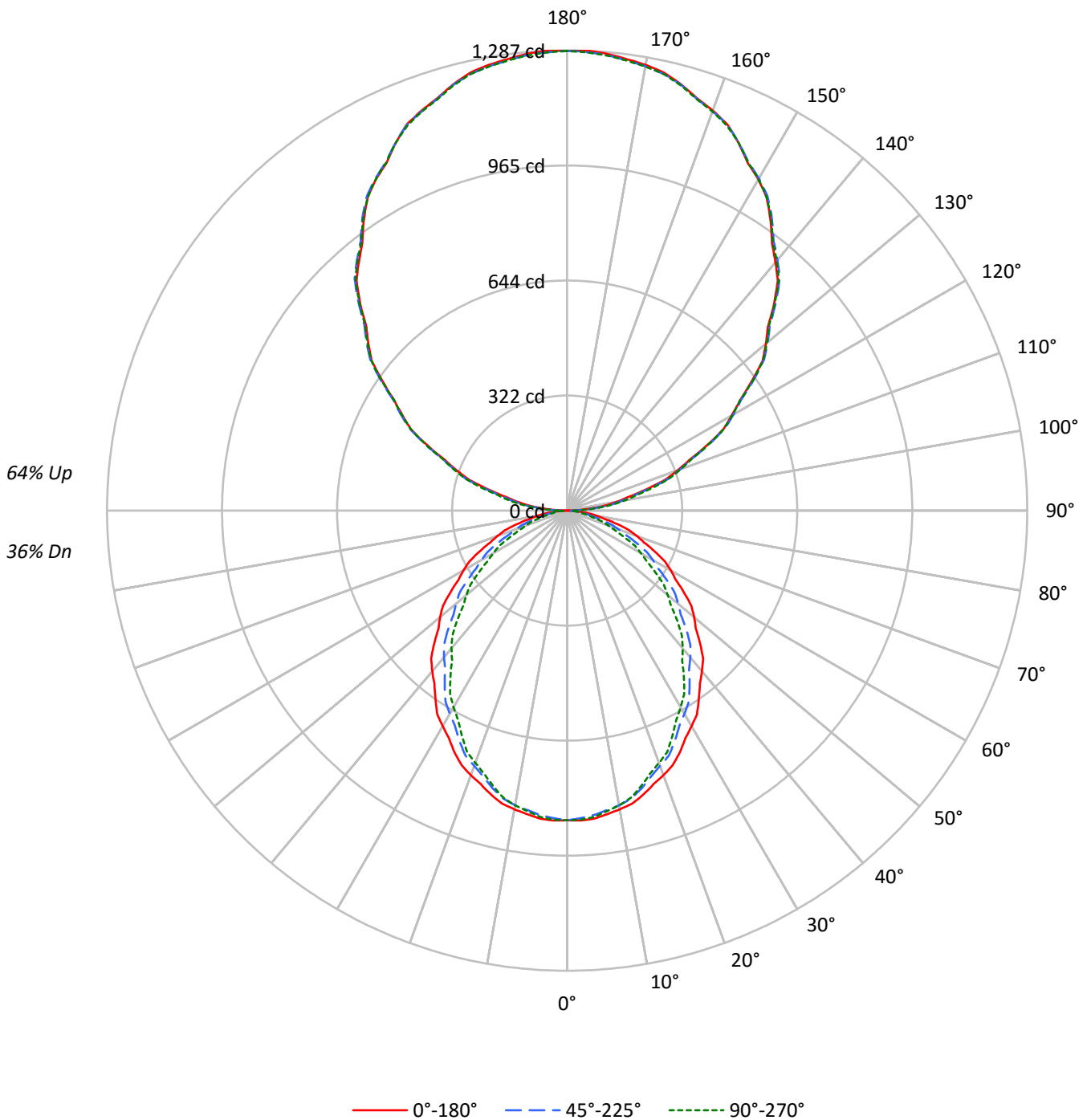
Input Watts (W): 49.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**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°	5594	5594	5594
5°	5607	5543	5577
10°	5564	5491	5491
15°	5498	5380	5336
20°	5413	5225	5161
25°	5315	5072	4960
30°	5190	4894	4737
35°	5065	4709	4487
40°	4947	4517	4242
45°	4804	4302	3974
50°	4660	4068	3693
55°	4494	3845	3396
60°	4326	3574	3077
65°	4129	3260	2709
70°	3903	2866	2334
75°	3593	2415	1941
80°	3165	1901	1629
85°	2668	1549	1452



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.4	1.4
10°-20°	227.6	4.0
20°-30°	330.1	5.9
30°-40°	376.2	6.7
40°-50°	366.7	6.5
50°-60°	308.6	5.5
60°-70°	216.4	3.8
70°-80°	111.2	2.0
80°-90°	30.9	0.5
90°-100°	86.1	1.5
100°-110°	254.3	4.5
110°-120°	430.7	7.6
120°-130°	566.8	10.1
130°-140°	635.1	11.3
140°-150°	622.5	11.0
150°-160°	522.8	9.3
160°-170°	347.5	6.2
170°-180°	121.6	2.2
0°-30°	639.1	11.3
0°-40°	1015.3	18.0
0°-60°	1690.5	30.0
0°-90°	2049.0	36.4
90°-120°	771.1	13.7
90°-150°	2595.6	46.0
90°-180°	3588.0	63.7
0°-180°	5636.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	865	862	855	861	860	82
15°	822	818	805	804	798	232
25°	746	735	712	703	696	343
35°	642	626	597	579	569	402
45°	526	506	471	446	435	406
55°	399	377	342	313	302	357
65°	270	247	213	188	177	268
75°	144	124	97	83	78	152
85°	36	25	21	20	20	40
90°	1	9	16	21	24	5
95°	65	67	77	84	86	69
105°	228	233	239	245	248	244
115°	431	435	437	436	435	426
125°	629	635	636	634	633	563
135°	818	824	825	825	821	631
145°	992	995	998	998	996	620
155°	1135	1135	1136	1139	1135	522
165°	1234	1232	1233	1236	1231	348
175°	1283	1279	1279	1284	1278	122
180°	1286	1286	1286	1286	1286	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	867.7	867.4	867.0	866.7	866.3	865.6	864.4	863.2	862.0	860.9	862.0
5°	864.8	864.3	863.7	863.1	862.5	861.4	859.8	858.2	856.6	855.0	856.4
7.5°	856.4	855.7	855.2	854.6	854.1	852.9	850.9	849.0	847.1	845.2	846.2
10°	848.4	848.0	847.6	847.1	846.7	845.5	843.4	841.5	839.4	837.3	837.8
12.5°	839.6	839.0	838.4	837.9	837.3	835.7	833.0	830.3	827.5	824.8	825.1
15°	822.3	821.4	820.5	819.7	818.8	816.8	813.8	810.7	807.7	804.6	804.5
17.5°	802.8	801.5	800.1	798.8	797.5	794.9	791.0	787.2	783.3	779.5	778.8
20°	787.6	786.2	784.7	783.3	781.8	778.8	774.1	769.5	764.8	760.2	759.4
22.5°	770.9	769.4	768.0	766.5	765.1	761.9	757.0	752.2	747.3	742.4	741.0
25°	745.8	743.6	741.4	739.3	737.0	733.2	727.9	722.5	717.1	711.7	709.9
27.5°	717.0	714.4	711.7	709.0	706.4	702.2	696.5	690.7	684.9	679.2	676.5
30°	696.0	693.3	690.5	687.8	685.0	680.5	674.4	668.4	662.3	656.2	652.8
32.5°	675.6	672.4	669.2	666.0	662.7	658.0	651.8	645.6	639.3	633.1	629.4
35°	642.4	638.9	635.4	632.0	628.4	623.5	616.9	610.4	603.8	597.3	593.1
37.5°	609.8	605.5	601.3	597.1	592.9	587.4	580.6	573.9	567.1	560.3	555.3
40°	586.8	582.5	578.1	573.7	569.4	563.7	556.7	549.7	542.8	535.8	530.3
42.5°	562.7	558.3	553.8	549.3	544.8	539.0	531.8	524.5	517.4	510.1	504.8
45°	526.0	521.8	517.5	513.3	509.1	503.0	495.0	487.0	479.0	471.0	465.2
47.5°	487.9	483.5	479.0	474.6	470.1	463.8	455.8	447.7	439.7	431.6	425.7
50°	463.8	459.0	454.2	449.4	444.6	438.1	429.8	421.5	413.2	404.9	398.8
52.5°	437.6	432.7	427.8	422.9	418.0	411.6	403.8	396.0	388.1	380.3	373.8
55°	399.1	394.4	389.8	385.1	380.5	374.0	365.9	357.7	349.7	341.5	334.9
57.5°	360.1	355.1	350.1	345.2	340.2	333.7	325.9	318.1	310.2	302.4	295.9
60°	334.9	329.8	324.8	319.7	314.6	308.2	300.2	292.4	284.6	276.7	270.4
62.5°	308.2	303.4	298.5	293.7	288.9	282.4	274.5	266.5	258.6	250.6	244.6
65°	270.2	265.3	260.3	255.4	250.4	244.1	236.3	228.7	220.9	213.3	207.4
67.5°	232.4	227.4	222.5	217.6	212.6	206.5	199.1	191.7	184.3	176.8	171.6
70°	206.7	201.8	196.8	191.9	186.9	180.8	173.6	166.3	159.0	151.8	147.2
72.5°	181.6	176.8	171.9	167.1	162.3	156.4	149.6	142.8	136.0	129.2	125.1
75°	144.0	139.6	135.2	130.9	126.5	121.2	115.1	109.0	102.9	96.8	93.6
77.5°	106.5	103.0	99.5	96.0	92.6	88.3	83.4	78.6	73.7	68.8	66.6
80°	85.1	81.5	78.1	74.6	71.1	67.3	63.2	59.2	55.1	51.1	49.7
82.5°	64.1	61.0	57.9	54.7	51.6	48.6	45.8	43.0	40.2	37.5	36.9
85°	36.0	33.3	30.7	28.2	25.5	23.8	23.1	22.4	21.7	20.9	20.8
87.5°	12.2	11.8	11.3	10.8	10.4	10.2	10.5	10.7	10.8	11.0	11.3
90°	1.0	2.8	4.6	6.4	8.1	9.8	11.4	12.9	14.5	16.0	17.1
92.5°	24.2	25.5	26.7	28.0	29.2	30.7	32.7	34.6	36.5	38.4	39.9
95°	65.0	65.4	66.0	66.4	66.8	68.1	70.3	72.6	74.8	77.1	78.6
97.5°	108.1	108.2	108.4	108.6	108.7	110.4	113.5	116.5	119.6	122.7	124.2
100°	140.1	140.1	140.1	140.1	140.1	141.5	144.4	147.3	150.2	153.1	155.1
102.5°	174.5	175.4	176.2	177.2	178.1	179.3	180.7	182.2	183.7	185.1	187.3
105°	228.1	229.2	230.3	231.4	232.6	233.8	235.1	236.4	237.8	239.1	240.5
107.5°	287.3	288.4	289.6	290.7	291.8	292.8	293.9	294.9	295.9	297.0	297.6
110°	328.2	329.2	330.4	331.5	332.6	333.5	334.2	334.8	335.5	336.1	336.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	369.8	370.4	370.9	371.5	372.1	372.8	373.7	374.5	375.3	376.2	376.5
115°	431.2	432.1	433.0	433.9	434.8	435.4	435.9	436.4	436.8	437.2	437.0
117.5°	492.8	493.3	493.7	494.0	494.5	494.8	495.2	495.7	496.0	496.5	496.6
120°	531.2	532.4	533.5	534.6	535.7	536.4	536.6	536.8	537.1	537.3	537.3
122.5°	572.9	573.3	573.7	574.1	574.5	575.0	575.6	576.2	576.7	577.3	577.1
125°	629.3	630.7	632.0	633.4	634.6	635.4	635.7	635.8	636.1	636.4	635.8
127.5°	689.4	690.1	690.9	691.6	692.4	692.9	693.2	693.4	693.7	694.0	693.7
130°	725.4	726.5	727.6	728.8	729.8	730.6	731.1	731.5	731.9	732.4	732.2
132.5°	761.4	763.2	765.1	766.9	768.7	769.6	769.5	769.4	769.3	769.2	769.0
135°	818.5	819.8	821.1	822.4	823.8	824.6	824.8	825.0	825.2	825.4	825.4
137.5°	872.0	873.3	874.6	875.9	877.2	878.1	878.6	879.1	879.6	880.0	880.3
140°	906.5	907.6	908.7	909.8	910.9	911.8	912.5	913.2	913.8	914.5	914.9
142.5°	940.9	941.8	942.8	943.7	944.6	945.6	946.3	947.2	948.0	948.9	949.2
145°	991.5	992.4	993.3	994.2	995.1	995.8	996.5	997.2	997.8	998.5	998.5
147.5°	1038.4	1038.8	1039.3	1039.8	1040.3	1040.8	1041.4	1041.9	1042.4	1042.9	1043.4
150°	1069.5	1069.4	1069.1	1068.9	1068.7	1069.0	1069.9	1070.7	1071.7	1072.5	1072.5
152.5°	1095.2	1095.5	1095.8	1096.1	1096.4	1096.7	1097.1	1097.4	1097.9	1098.2	1098.7
155°	1134.6	1134.6	1134.6	1134.6	1134.6	1134.7	1135.0	1135.1	1135.4	1135.6	1136.5
157.5°	1169.8	1169.3	1168.8	1168.4	1167.9	1167.7	1167.9	1168.2	1168.4	1168.6	1169.5
160°	1190.6	1190.0	1189.3	1188.6	1187.9	1187.7	1187.9	1188.2	1188.4	1188.6	1189.5
162.5°	1209.0	1208.6	1208.1	1207.6	1207.0	1206.9	1206.9	1206.9	1206.9	1207.0	1208.1
165°	1233.6	1233.2	1232.8	1232.3	1231.8	1231.7	1232.0	1232.2	1232.4	1232.6	1233.6
167.5°	1254.5	1253.5	1252.7	1251.8	1250.9	1250.4	1250.4	1250.4	1250.4	1250.4	1251.8
170°	1265.7	1264.8	1263.9	1263.0	1262.1	1261.6	1261.6	1261.6	1261.6	1261.6	1263.0
172.5°	1273.7	1272.8	1271.9	1271.0	1270.1	1269.6	1269.6	1269.6	1269.6	1269.6	1271.0
175°	1282.6	1281.8	1280.9	1280.0	1279.1	1278.7	1278.7	1278.7	1278.7	1278.7	1280.0
177.5°	1287.3	1286.6	1285.8	1285.1	1284.4	1284.0	1283.8	1283.7	1283.4	1283.2	1284.4
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	863.2	864.4	865.6	866.1	866.0	865.8	865.7	865.6
5°	857.9	859.4	860.8	861.4	861.1	860.8	860.6	860.2
7.5°	847.2	848.3	849.3	849.6	849.3	848.9	848.7	848.3
10°	838.2	838.6	839.1	839.1	838.6	838.2	837.8	837.3
12.5°	825.4	825.8	826.0	825.9	825.2	824.6	823.9	823.2
15°	804.3	804.2	804.1	803.3	802.0	800.7	799.4	798.1
17.5°	778.1	777.3	776.6	775.7	774.6	773.5	772.5	771.4
20°	758.7	757.9	757.2	756.2	754.9	753.6	752.3	751.0
22.5°	739.5	738.0	736.7	735.4	734.3	733.2	732.2	731.1
25°	708.0	706.1	704.2	702.4	700.9	699.2	697.7	696.0
27.5°	673.9	671.2	668.6	666.5	665.0	663.4	661.9	660.3
30°	649.5	646.1	642.7	640.4	639.1	637.8	636.5	635.2
32.5°	625.7	622.1	618.4	615.7	614.0	612.3	610.7	609.1
35°	588.8	584.6	580.4	577.3	575.2	573.2	571.2	569.1
37.5°	550.3	545.2	540.1	536.6	534.6	532.7	530.7	528.7
40°	524.7	519.2	513.7	510.1	508.3	506.5	504.8	503.1
42.5°	499.6	494.2	489.0	485.0	482.5	479.9	477.3	474.8
45°	459.3	453.6	447.7	443.8	441.6	439.4	437.2	435.1
47.5°	419.7	413.6	407.7	403.5	401.1	398.6	396.2	393.8
50°	392.7	386.6	380.5	376.3	374.2	372.0	369.8	367.6
52.5°	367.2	360.6	354.0	349.7	347.5	345.3	343.1	341.0
55°	328.4	321.8	315.3	310.9	308.6	306.3	303.9	301.6
57.5°	289.6	283.2	276.8	272.5	270.4	268.4	266.4	264.3
60°	263.9	257.5	251.2	246.8	244.7	242.5	240.3	238.2
62.5°	238.7	232.7	226.8	222.7	220.6	218.4	216.2	214.0
65°	201.6	195.8	190.0	186.0	183.8	181.7	179.4	177.3
67.5°	166.3	160.9	155.6	152.1	150.3	148.6	146.8	145.1
70°	142.8	138.3	133.7	130.6	128.9	127.2	125.4	123.6
72.5°	121.0	116.8	112.6	109.9	108.8	107.6	106.5	105.3
75°	90.4	87.2	84.0	81.9	80.9	79.9	78.9	77.8
77.5°	64.3	62.1	59.8	58.4	57.6	56.8	56.1	55.4
80°	48.4	47.1	45.8	45.0	44.7	44.4	44.1	43.8
82.5°	36.2	35.6	35.0	34.6	34.4	34.3	34.1	33.9
85°	20.7	20.5	20.3	20.2	20.1	19.9	19.8	19.6
87.5°	11.5	11.7	12.0	12.1	12.1	12.1	12.1	12.1
90°	18.3	19.4	20.5	21.4	22.0	22.6	23.3	24.0
92.5°	41.3	42.8	44.3	45.3	45.7	46.2	46.8	47.2
95°	80.2	81.7	83.3	84.3	84.7	85.2	85.6	86.0
97.5°	125.6	127.1	128.5	129.4	129.7	129.9	130.2	130.4
100°	157.0	159.1	161.1	162.3	162.7	163.2	163.7	164.1
102.5°	189.4	191.7	193.8	195.2	195.9	196.5	197.1	197.7
105°	241.8	243.1	244.4	245.5	246.2	246.8	247.5	248.1
107.5°	298.3	298.9	299.6	300.0	299.9	299.9	299.8	299.7
110°	337.5	338.2	338.8	339.1	338.8	338.6	338.4	338.2





TEST NUMBER: P333548-935

CATALOG NUMBER: S125RDIP-S610D1205U935-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	376.9	377.1	377.5	377.4	377.0	376.6	376.2	375.8
115°	436.8	436.5	436.4	436.1	435.9	435.7	435.4	435.2
117.5°	496.8	497.0	497.1	496.8	495.9	495.1	494.1	493.3
120°	537.3	537.3	537.3	536.8	536.0	535.0	534.2	533.3
122.5°	577.0	576.8	576.6	576.2	575.4	574.7	574.0	573.3
125°	635.4	635.0	634.6	634.2	634.0	633.8	633.5	633.4
127.5°	693.5	693.3	693.1	692.8	692.3	691.8	691.4	691.0
130°	731.9	731.7	731.5	731.2	730.7	730.3	729.8	729.4
132.5°	768.8	768.5	768.3	767.9	767.2	766.6	766.0	765.4
135°	825.4	825.4	825.4	825.0	824.1	823.2	822.3	821.4
137.5°	880.6	880.9	881.1	880.7	879.6	878.5	877.4	876.2
140°	915.3	915.8	916.3	915.9	914.8	913.7	912.6	911.5
142.5°	949.4	949.7	949.9	949.5	948.4	947.4	946.2	945.1
145°	998.5	998.5	998.5	998.2	997.6	996.9	996.2	995.5
147.5°	1044.0	1044.6	1045.1	1044.6	1043.1	1041.6	1040.1	1038.5
150°	1072.5	1072.5	1072.5	1072.4	1071.9	1071.4	1071.0	1070.6
152.5°	1099.2	1099.8	1100.3	1100.2	1099.4	1098.5	1097.8	1097.0
155°	1137.4	1138.2	1139.2	1139.0	1137.9	1136.8	1135.7	1134.6
157.5°	1170.4	1171.3	1172.2	1171.9	1170.4	1169.0	1167.5	1166.1
160°	1190.4	1191.3	1192.1	1192.1	1190.9	1189.8	1188.7	1187.7
162.5°	1209.2	1210.2	1211.3	1211.2	1209.9	1208.6	1207.3	1206.0
165°	1234.4	1235.3	1236.2	1236.0	1234.7	1233.3	1232.0	1230.6
167.5°	1253.1	1254.5	1255.8	1255.8	1254.4	1253.0	1251.6	1250.3
170°	1264.3	1265.7	1267.0	1266.9	1265.3	1263.8	1262.2	1260.7
172.5°	1272.3	1273.7	1275.0	1275.0	1273.6	1272.2	1270.8	1269.5
175°	1281.3	1282.6	1284.0	1283.9	1282.4	1280.8	1279.2	1277.6
177.5°	1285.4	1286.5	1287.5	1287.5	1286.2	1285.0	1283.8	1282.5
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6

(END OF REPORT)