

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: P333547-935

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333547-935
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: S125RDIP-S610D1205U935-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6194.2 lumens
Efficiency: N/A
Efficacy: 125.4 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

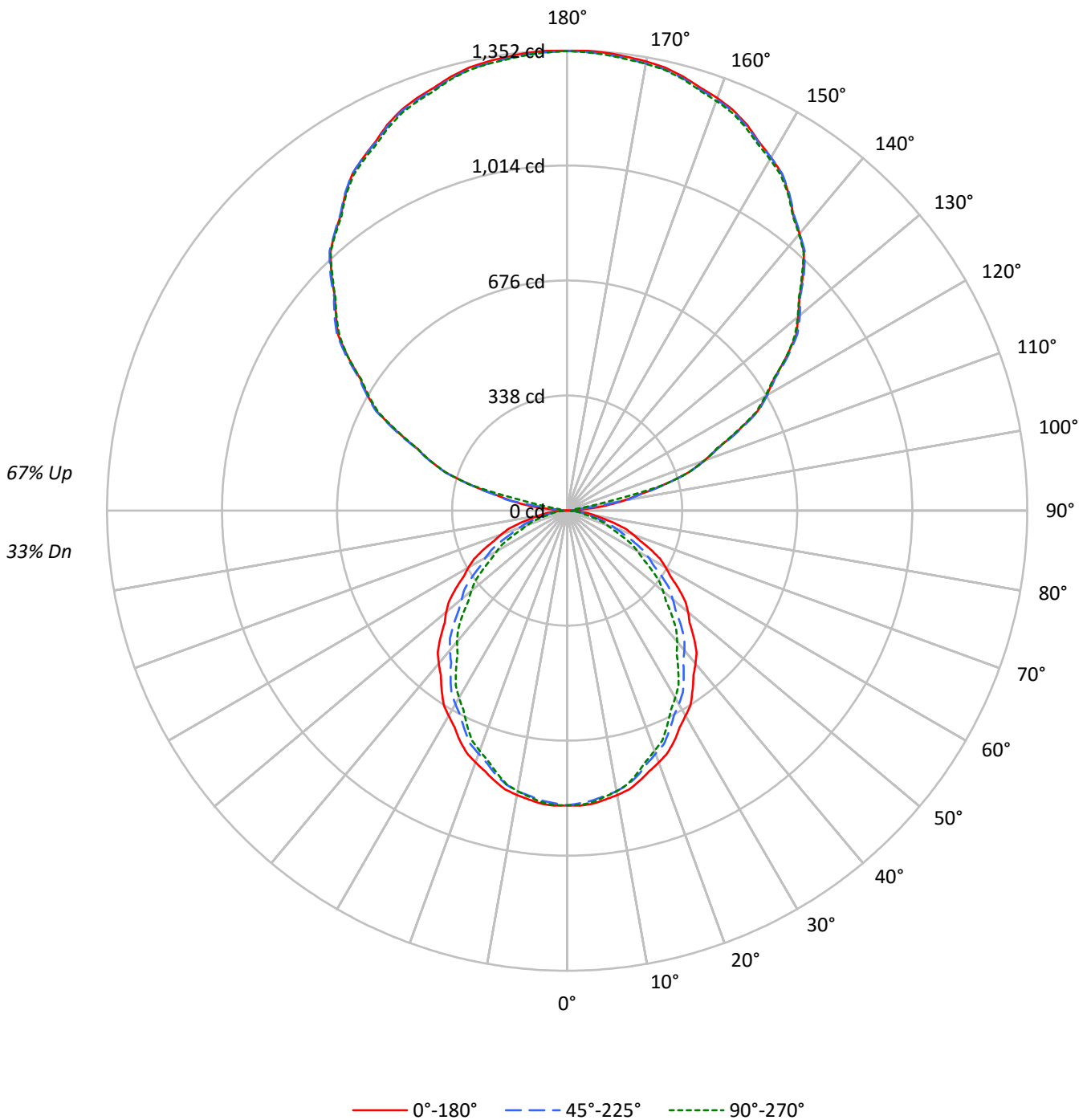
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333547-935

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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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	36	35	35	28
2	86	79	73	68	77	71	66	62	57	54	51	44	42	40	32	30	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	27	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	31	29	25	23	22	18
5	66	55	47	41	59	49	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	18	17	13
7	56	44	36	31	50	40	33	29	33	28	24	26	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	13	11	9

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



TEST NUMBER: P333547-935

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	1.3
10°-20°	227.6	3.7
20°-30°	330.1	5.3
30°-40°	376.2	6.1
40°-50°	366.7	5.9
50°-60°	308.6	5.0
60°-70°	216.4	3.5
70°-80°	111.2	1.8
80°-90°	30.9	0.5
90°-100°	49.1	0.8
100°-110°	302.3	4.9
110°-120°	548.3	8.9
120°-130°	703.7	11.4
130°-140°	756.9	12.2
140°-150°	710.4	11.5
150°-160°	574.7	9.3
160°-170°	371.7	6.0
170°-180°	128.2	2.1
0°-30°	639.1	10.3
0°-40°	1015.3	16.4
0°-60°	1690.5	27.3
0°-90°	2049.0	33.1
90°-120°	899.7	14.5
90°-150°	3070.7	49.6
90°-180°	4145.0	66.9
0°-180°	6194.2	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	4
95°	57	52	16	21	21	73
105°	294	298	298	298	297	312
115°	552	557	558	554	548	547
125°	786	792	792	789	786	701
135°	980	985	984	981	976	755
145°	1136	1138	1138	1138	1133	710
155°	1251	1245	1247	1249	1242	576
165°	1320	1314	1315	1320	1313	373
175°	1350	1344	1345	1352	1344	128
180°	1350	1350	1350	1350	1350	



TEST NUMBER: P333547-935

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

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°	15.4	14.2	12.9	11.7	10.4	10.5	11.9	13.3	14.6	16.0	17.1
95°	57.0	56.4	55.7	55.0	54.3	49.9	41.3	32.9	24.5	16.0	17.1
97.5°	119.1	120.3	121.5	122.7	123.9	116.1	99.4	82.7	66.0	49.2	43.0
100°	167.1	167.8	168.4	169.1	169.8	170.6	171.4	172.4	173.2	174.1	140.9
102.5°	215.9	216.8	217.7	218.4	219.3	220.0	220.5	221.1	221.6	222.1	215.9
105°	294.2	295.1	295.9	296.9	297.7	298.2	298.2	298.2	298.2	298.2	298.2
107.5°	375.5	375.5	375.5	375.5	375.5	375.7	376.1	376.5	377.0	377.5	377.5
110°	428.3	428.3	428.3	428.3	428.3	428.5	429.0	429.4	429.8	430.2	429.6



TEST NUMBER: P333547-935

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	477.9	478.5	479.0	479.5	480.0	480.4	480.7	481.0	481.2	481.5	480.7
115°	552.3	553.5	554.6	555.7	556.8	557.5	557.7	557.9	558.1	558.4	557.5
117.5°	629.4	629.4	629.3	629.3	629.2	629.6	630.5	631.3	632.1	633.0	631.9
120°	677.4	677.2	677.0	676.7	676.6	676.7	677.4	678.1	678.7	679.4	679.0
122.5°	719.9	720.7	721.5	722.4	723.2	723.8	724.1	724.4	724.8	725.0	724.6
125°	785.5	787.0	788.6	790.1	791.7	792.5	792.5	792.5	792.5	792.5	791.6
127.5°	848.2	849.3	850.3	851.4	852.6	853.1	852.9	852.8	852.6	852.6	852.0
130°	886.6	887.7	888.8	889.9	891.0	891.7	891.9	892.2	892.3	892.6	891.9
132.5°	925.0	926.3	927.6	928.8	930.1	930.6	930.1	929.5	929.1	928.6	928.5
135°	979.6	980.9	982.3	983.6	985.0	985.4	985.0	984.6	984.0	983.6	983.2
137.5°	1029.8	1031.0	1032.2	1033.3	1034.5	1034.8	1034.5	1034.1	1033.6	1033.3	1033.4
140°	1062.6	1063.2	1063.6	1064.0	1064.5	1064.5	1064.4	1064.1	1063.9	1063.7	1064.1
142.5°	1092.3	1092.5	1092.9	1093.1	1093.4	1093.6	1094.0	1094.2	1094.6	1094.9	1095.0
145°	1135.7	1136.2	1136.6	1137.0	1137.5	1137.7	1137.7	1137.7	1137.7	1137.7	1138.0
147.5°	1173.7	1173.6	1173.5	1173.5	1173.4	1173.5	1173.7	1174.0	1174.3	1174.6	1174.8
150°	1197.7	1197.3	1196.9	1196.4	1196.0	1196.0	1196.4	1196.9	1197.3	1197.7	1198.2
152.5°	1221.0	1220.0	1219.0	1218.1	1217.0	1216.8	1217.3	1217.7	1218.1	1218.6	1219.0
155°	1250.8	1249.5	1248.1	1246.8	1245.4	1245.0	1245.4	1245.9	1246.4	1246.8	1247.5
157.5°	1273.8	1273.0	1272.2	1271.4	1270.6	1270.2	1270.3	1270.3	1270.4	1270.4	1271.1
160°	1289.9	1288.5	1287.2	1285.8	1284.5	1283.9	1284.2	1284.4	1284.6	1284.8	1285.7
162.5°	1302.6	1301.3	1299.9	1298.6	1297.3	1296.8	1296.9	1297.2	1297.4	1297.6	1298.9
165°	1319.8	1318.5	1317.2	1315.9	1314.5	1314.0	1314.1	1314.4	1314.6	1314.8	1316.2
167.5°	1332.7	1331.3	1329.9	1328.5	1327.1	1326.5	1326.8	1327.0	1327.2	1327.5	1329.0
170°	1339.9	1338.3	1336.7	1335.2	1333.6	1333.0	1333.2	1333.4	1333.6	1333.9	1335.7
172.5°	1344.6	1343.1	1341.5	1340.0	1338.4	1337.8	1338.3	1338.7	1339.0	1339.5	1341.1
175°	1349.9	1348.5	1347.2	1345.8	1344.5	1343.9	1344.2	1344.5	1344.6	1344.9	1346.6
177.5°	1352.3	1351.2	1350.1	1349.1	1348.0	1347.6	1347.7	1347.9	1348.1	1348.2	1349.5
180°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9



TEST NUMBER: P333547-935

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

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°	18.3	19.4	20.5	21.2	21.4	21.8	22.1	22.4
95°	18.3	19.4	20.5	21.0	21.0	21.0	21.0	21.0
97.5°	36.7	30.4	24.1	21.0	21.0	21.0	21.0	21.0
100°	107.9	74.7	41.6	24.5	23.7	22.8	21.9	21.0
102.5°	209.6	203.4	197.1	186.4	171.3	156.1	141.0	125.9
105°	298.2	298.2	298.2	298.1	297.8	297.6	297.4	297.2
107.5°	377.5	377.5	377.6	377.3	376.6	376.0	375.3	374.6
110°	429.0	428.3	427.6	427.4	427.6	427.8	428.1	428.3



TEST NUMBER: P333547-935

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	479.8	479.0	478.1	477.5	477.3	476.9	476.6	476.3
115°	556.6	555.7	554.8	553.7	552.3	551.0	549.7	548.4
117.5°	630.7	629.6	628.4	627.5	626.9	626.4	625.8	625.2
120°	678.6	678.1	677.7	676.9	675.8	674.7	673.6	672.4
122.5°	724.2	723.8	723.3	722.4	721.1	719.8	718.6	717.3
125°	790.7	789.8	788.9	788.2	787.5	786.9	786.2	785.5
127.5°	851.5	851.1	850.6	849.5	847.9	846.2	844.6	842.9
130°	891.2	890.5	889.9	889.0	887.9	886.8	885.7	884.6
132.5°	928.3	928.2	928.1	927.5	926.3	925.2	924.1	923.0
135°	982.7	982.3	981.9	980.9	979.6	978.3	977.0	975.6
137.5°	1033.5	1033.5	1033.6	1033.1	1031.9	1030.8	1029.6	1028.5
140°	1064.5	1065.0	1065.5	1065.0	1063.7	1062.4	1061.0	1059.7
142.5°	1095.1	1095.2	1095.3	1094.7	1093.3	1092.0	1090.6	1089.3
145°	1138.2	1138.4	1138.6	1138.1	1136.7	1135.4	1134.0	1132.7
147.5°	1175.1	1175.4	1175.6	1174.9	1173.4	1171.7	1170.2	1168.5
150°	1198.7	1199.1	1199.5	1198.9	1197.1	1195.3	1193.5	1191.8
152.5°	1219.4	1220.0	1220.4	1219.8	1218.1	1216.6	1215.0	1213.4
155°	1248.1	1248.8	1249.5	1248.9	1247.2	1245.4	1243.5	1241.8
157.5°	1271.9	1272.6	1273.2	1272.7	1270.9	1269.2	1267.4	1265.6
160°	1286.6	1287.5	1288.4	1288.0	1286.2	1284.4	1282.6	1280.8
162.5°	1300.1	1301.4	1302.6	1302.3	1300.3	1298.3	1296.4	1294.4
165°	1317.5	1318.9	1320.2	1319.9	1318.2	1316.4	1314.6	1312.9
167.5°	1330.7	1332.2	1333.9	1333.7	1331.6	1329.6	1327.7	1325.7
170°	1337.4	1339.2	1341.0	1340.8	1338.9	1336.9	1334.9	1332.8
172.5°	1342.6	1344.3	1345.8	1345.7	1343.7	1341.7	1339.6	1337.6
175°	1348.4	1350.2	1351.9	1351.9	1349.9	1347.9	1345.8	1343.8
177.5°	1350.7	1352.0	1353.2	1353.1	1351.8	1350.3	1348.8	1347.5
180°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9

(END OF REPORT)