

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: P333674-935

Luminaire Tested: **S125RDIW-S610D1340U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333674-935
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: S125RDIW-S610D1340U935-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6667.4 lumens
Efficiency: N/A
Efficacy: 123.9 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

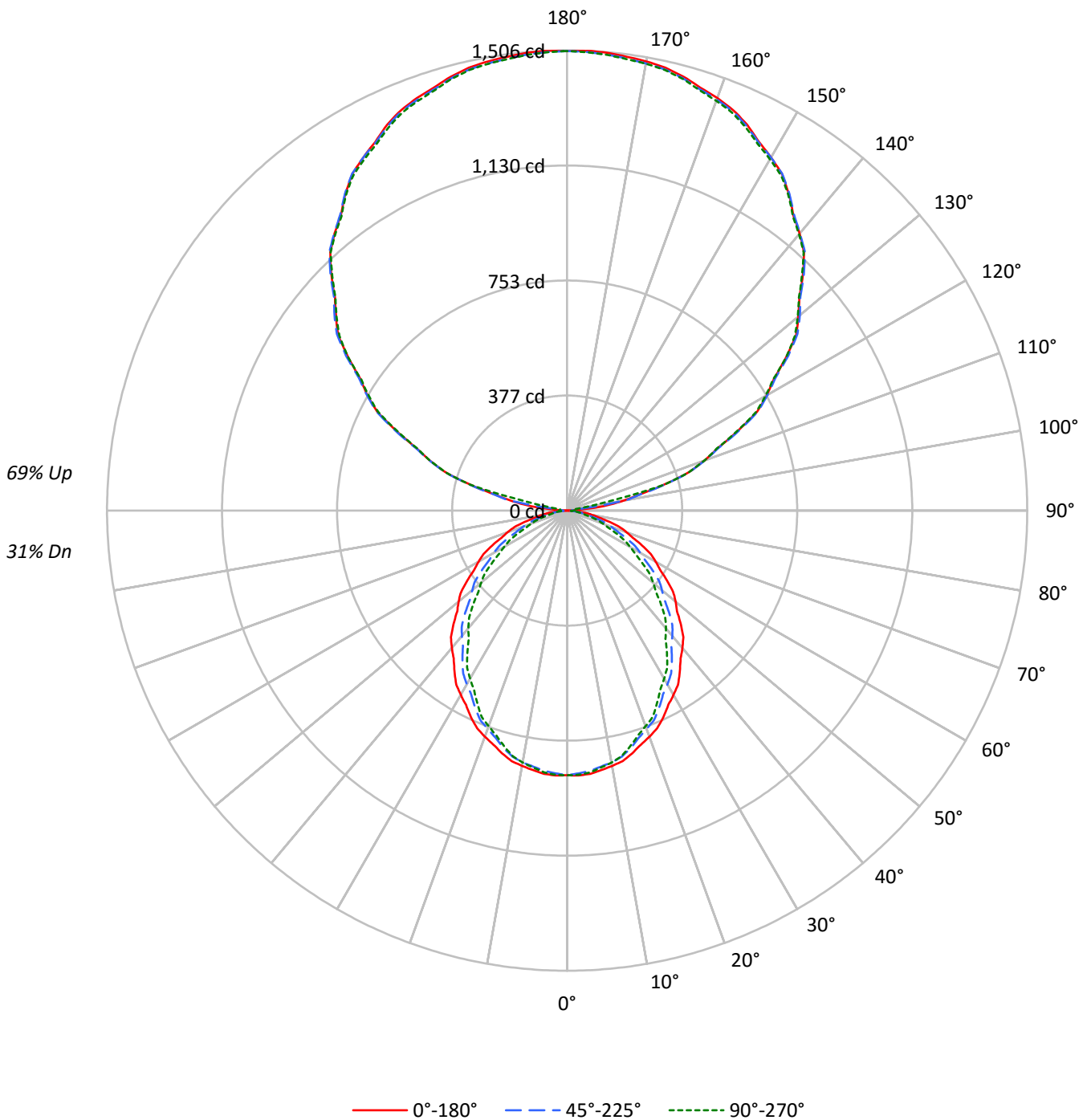
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	92	92	92	73	73	73	55	55	55	38	38	38	31
1	94	89	86	82	84	81	77	75	64	62	60	48	47	46	34	33	33	26
2	85	78	72	67	76	70	66	61	56	53	50	43	40	38	30	29	28	22
3	78	69	62	56	70	62	56	51	49	45	42	38	35	33	27	25	24	19
4	71	61	53	48	64	55	48	43	44	39	36	34	30	28	24	22	20	16
5	65	54	46	41	58	49	42	37	39	34	31	30	27	24	22	20	18	14
6	60	48	41	35	54	44	37	32	35	30	27	27	24	21	20	17	16	13
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	40	32	27	46	36	29	25	29	24	21	23	19	17	16	14	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	15	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

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	1.2
10°-20°	227.6	3.4
20°-30°	330.1	5.0
30°-40°	376.2	5.6
40°-50°	366.7	5.5
50°-60°	308.6	4.6
60°-70°	216.4	3.2
70°-80°	111.2	1.7
80°-90°	31.2	0.5
90°-100°	54.6	0.8
100°-110°	336.8	5.1
110°-120°	610.9	9.2
120°-130°	783.9	11.8
130°-140°	843.2	12.6
140°-150°	791.5	11.9
150°-160°	640.2	9.6
160°-170°	414.1	6.2
170°-180°	142.8	2.1
0°-30°	639.1	9.6
0°-40°	1015.3	15.2
0°-60°	1690.5	25.4
0°-90°	2049.3	30.7
90°-120°	1002.3	15.0
90°-150°	3420.9	51.3
90°-180°	4618.0	69.3
0°-180°	6667.4	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	10	18	23	27	4
95°	64	58	18	23	23	81
105°	328	332	332	332	331	347
115°	615	621	622	617	611	610
125°	875	882	883	878	875	781
135°	1091	1098	1096	1093	1087	841
145°	1265	1267	1268	1268	1262	791
155°	1393	1387	1389	1392	1384	642
165°	1470	1464	1465	1471	1463	415
175°	1504	1498	1498	1506	1497	143
180°	1504	1504	1504	1504	1504	



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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	11.9	11.5	11.0	10.6	10.5	10.8	10.9	11.2	11.5	11.6
90°	1.1	3.1	5.1	7.1	9.0	10.9	12.7	14.4	16.1	17.8	19.1
92.5°	17.1	15.8	14.4	13.0	11.6	11.7	13.3	14.7	16.3	17.8	19.1
95°	63.5	62.8	62.1	61.3	60.5	55.4	46.1	36.7	27.2	17.8	19.1
97.5°	132.7	134.0	135.3	136.6	138.0	129.3	110.7	92.1	73.4	54.8	47.9
100°	186.1	186.9	187.6	188.4	189.2	190.0	191.0	192.0	193.0	194.0	157.0
102.5°	240.6	241.5	242.5	243.4	244.4	245.1	245.7	246.3	246.8	247.5	240.5
105°	327.8	328.7	329.8	330.7	331.7	332.2	332.2	332.2	332.2	332.2	332.2
107.5°	418.3	418.3	418.3	418.3	418.3	418.5	419.0	419.5	420.0	420.5	420.5
110°	477.2	477.2	477.2	477.2	477.2	477.3	477.9	478.4	478.9	479.3	478.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	532.4	533.0	533.6	534.2	534.8	535.3	535.5	535.8	536.1	536.4	535.5
115°	615.4	616.6	617.9	619.1	620.4	621.0	621.3	621.6	621.8	622.1	621.0
117.5°	701.2	701.1	701.1	701.0	701.0	701.5	702.4	703.4	704.3	705.2	704.0
120°	754.7	754.5	754.2	754.0	753.7	754.0	754.7	755.4	756.2	756.9	756.5
122.5°	801.9	802.9	803.8	804.8	805.7	806.4	806.8	807.1	807.4	807.8	807.3
125°	875.1	876.8	878.6	880.3	882.0	882.9	882.9	882.9	882.9	882.9	881.9
127.5°	944.9	946.2	947.4	948.6	949.9	950.4	950.2	950.1	949.9	949.8	949.3
130°	987.7	988.9	990.2	991.4	992.6	993.4	993.7	993.9	994.1	994.4	993.7
132.5°	1030.5	1031.9	1033.4	1034.8	1036.2	1036.7	1036.1	1035.6	1035.1	1034.5	1034.4
135°	1091.4	1092.9	1094.3	1095.8	1097.3	1097.8	1097.3	1096.8	1096.3	1095.8	1095.4
137.5°	1147.4	1148.6	1149.9	1151.2	1152.4	1152.9	1152.4	1152.0	1151.6	1151.2	1151.2
140°	1183.9	1184.4	1184.9	1185.3	1185.9	1186.0	1185.8	1185.5	1185.3	1185.0	1185.5
142.5°	1216.9	1217.2	1217.5	1217.8	1218.1	1218.4	1218.7	1219.1	1219.4	1219.8	1219.9
145°	1265.2	1265.8	1266.3	1266.8	1267.2	1267.5	1267.5	1267.5	1267.5	1267.5	1267.7
147.5°	1307.6	1307.5	1307.4	1307.3	1307.3	1307.3	1307.6	1307.9	1308.2	1308.5	1308.8
150°	1334.4	1333.9	1333.4	1332.9	1332.4	1332.4	1332.9	1333.4	1333.9	1334.4	1334.9
152.5°	1360.2	1359.2	1358.1	1357.0	1355.9	1355.6	1356.1	1356.6	1357.1	1357.5	1358.1
155°	1393.4	1392.0	1390.5	1389.1	1387.5	1387.1	1387.5	1388.0	1388.5	1389.1	1389.7
157.5°	1419.1	1418.2	1417.3	1416.4	1415.6	1415.1	1415.1	1415.2	1415.3	1415.3	1416.1
160°	1436.9	1435.5	1434.0	1432.4	1431.0	1430.4	1430.6	1430.9	1431.2	1431.4	1432.4
162.5°	1451.2	1449.8	1448.2	1446.7	1445.3	1444.7	1444.9	1445.2	1445.4	1445.6	1447.0
165°	1470.4	1468.9	1467.4	1465.9	1464.5	1463.8	1464.0	1464.3	1464.6	1464.8	1466.3
167.5°	1484.6	1483.2	1481.6	1480.1	1478.5	1477.9	1478.1	1478.3	1478.6	1478.9	1480.7
170°	1492.7	1491.0	1489.2	1487.5	1485.7	1485.0	1485.2	1485.5	1485.7	1486.0	1488.0
172.5°	1498.1	1496.3	1494.6	1492.8	1491.1	1490.5	1490.9	1491.3	1491.8	1492.2	1494.0
175°	1503.8	1502.4	1500.9	1499.3	1497.9	1497.3	1497.5	1497.8	1498.1	1498.2	1500.2
177.5°	1506.5	1505.3	1504.2	1503.0	1501.8	1501.2	1501.5	1501.7	1501.8	1502.0	1503.5
180°	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8



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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°	11.9	12.1	12.4	12.6	12.6	12.6	12.7	12.7
90°	20.3	21.5	22.8	23.8	24.5	25.2	26.0	26.8
92.5°	20.3	21.5	22.8	23.6	23.9	24.3	24.6	25.0
95°	20.3	21.5	22.8	23.4	23.4	23.4	23.4	23.4
97.5°	40.9	33.9	26.9	23.4	23.4	23.4	23.4	23.4
100°	120.1	83.3	46.3	27.4	26.3	25.4	24.4	23.4
102.5°	233.5	226.5	219.6	207.6	190.8	173.9	157.0	140.3
105°	332.2	332.2	332.2	332.1	331.8	331.6	331.3	331.1
107.5°	420.6	420.7	420.7	420.3	419.6	418.9	418.1	417.4
110°	477.9	477.2	476.4	476.1	476.4	476.6	476.9	477.2



TEST NUMBER: P333674-935

CATALOG NUMBER: S125RDIW-S610D1340U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	534.5	533.6	532.7	532.0	531.7	531.3	531.0	530.6
115°	620.1	619.1	618.1	616.8	615.4	613.9	612.3	610.9
117.5°	702.7	701.4	700.1	699.0	698.4	697.8	697.2	696.5
120°	756.0	755.4	754.9	754.1	752.9	751.6	750.4	749.2
122.5°	806.8	806.2	805.8	804.8	803.4	801.9	800.5	799.1
125°	880.9	879.9	878.9	878.0	877.4	876.6	875.8	875.1
127.5°	948.7	948.1	947.6	946.4	944.6	942.8	940.9	939.1
130°	992.9	992.1	991.4	990.4	989.2	987.9	986.7	985.5
132.5°	1034.2	1034.1	1033.9	1033.2	1032.0	1030.8	1029.5	1028.3
135°	1094.8	1094.3	1093.8	1092.9	1091.4	1089.9	1088.4	1086.9
137.5°	1151.3	1151.4	1151.5	1150.9	1149.6	1148.3	1147.0	1145.7
140°	1186.0	1186.5	1187.0	1186.5	1185.0	1183.5	1182.1	1180.5
142.5°	1220.0	1220.1	1220.2	1219.5	1218.0	1216.5	1215.0	1213.6
145°	1268.0	1268.3	1268.5	1267.9	1266.4	1264.9	1263.4	1262.0
147.5°	1309.2	1309.4	1309.8	1309.0	1307.2	1305.4	1303.6	1301.8
150°	1335.4	1335.8	1336.4	1335.6	1333.6	1331.6	1329.6	1327.7
152.5°	1358.6	1359.1	1359.5	1358.9	1357.1	1355.4	1353.6	1351.8
155°	1390.5	1391.2	1392.0	1391.4	1389.4	1387.4	1385.4	1383.5
157.5°	1416.9	1417.7	1418.5	1417.9	1415.9	1413.9	1412.0	1410.0
160°	1433.4	1434.3	1435.4	1434.9	1432.9	1430.9	1428.9	1426.9
162.5°	1448.4	1449.8	1451.2	1450.8	1448.6	1446.4	1444.2	1442.1
165°	1467.7	1469.3	1470.8	1470.5	1468.5	1466.5	1464.6	1462.6
167.5°	1482.5	1484.2	1486.0	1485.7	1483.5	1481.4	1479.1	1476.9
170°	1490.0	1491.9	1493.9	1493.8	1491.6	1489.4	1487.1	1484.9
172.5°	1495.8	1497.6	1499.3	1499.2	1496.9	1494.7	1492.5	1490.2
175°	1502.2	1504.2	1506.1	1506.1	1503.8	1501.6	1499.3	1497.1
177.5°	1504.9	1506.2	1507.6	1507.5	1505.9	1504.3	1502.7	1501.2
180°	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8

(END OF REPORT)