

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: P333050-935

Luminaire Tested: **S124RDIW-S575D1340U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333050-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124RDIW-S575D1340U935-4F0-1E-UDD-F1
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6031.6 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Semi-Indirect

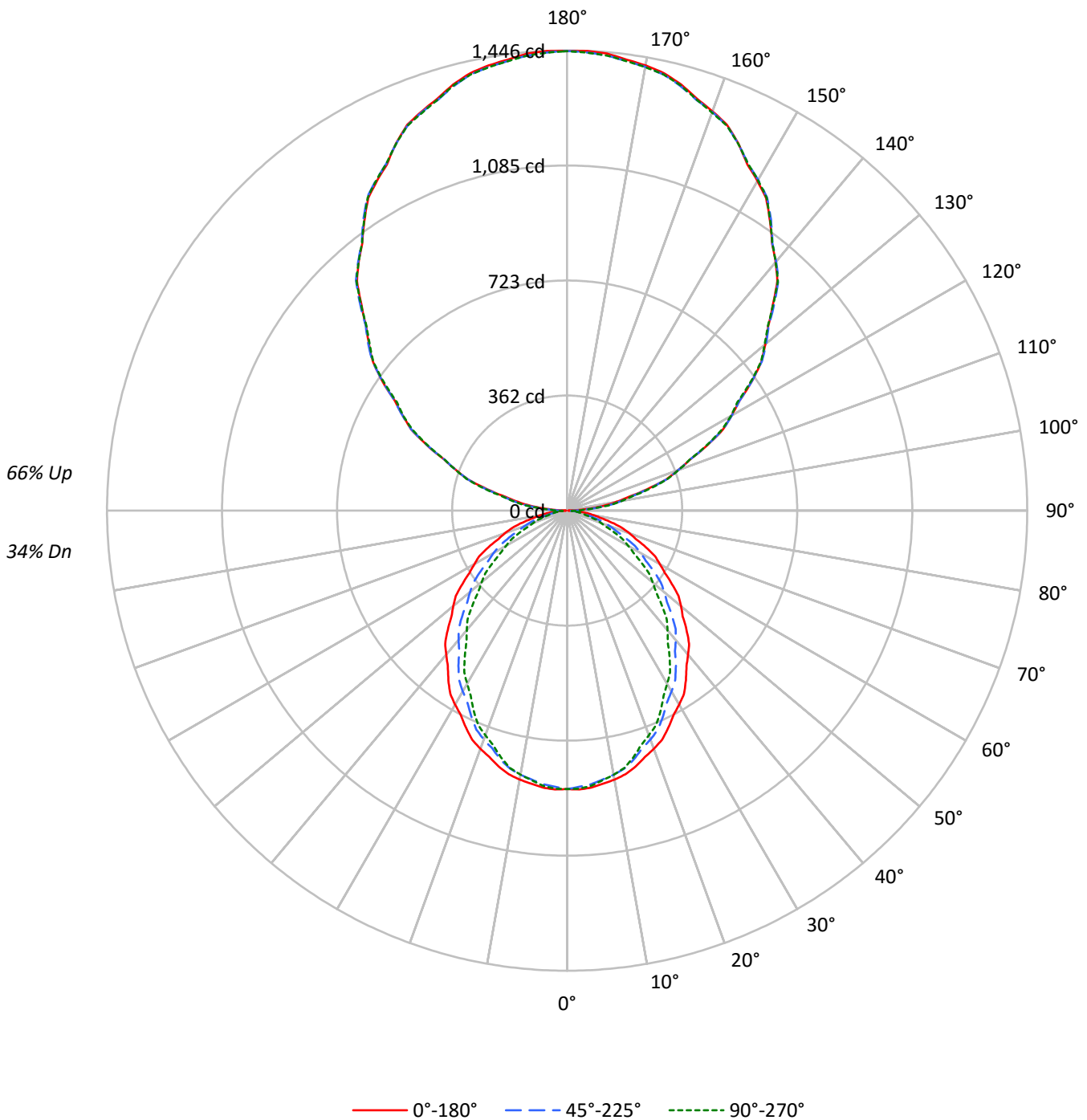
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333050-935

CATALOG NUMBER: S124RDIW-S575D1340U935-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333050-935

CATALOG NUMBER: S124RDIW-S575D1340U935-4F0-1E-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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	94	90	86	83	85	81	78	75	65	63	61	50	49	48	37	36	35	29
2	86	79	73	68	77	71	66	62	57	54	51	44	42	40	32	31	30	24
3	78	69	62	57	71	63	57	52	51	46	43	39	36	34	29	27	25	21
4	72	61	54	48	65	56	49	44	45	40	37	35	32	29	26	24	22	18
5	66	55	47	41	59	50	43	38	40	35	32	31	28	25	23	21	19	16
6	61	49	41	36	55	45	38	33	36	31	27	28	25	22	21	19	17	14
7	56	44	37	31	50	40	34	29	33	28	24	26	22	20	19	17	15	12
8	52	40	33	27	47	37	30	25	30	25	21	24	20	17	18	15	14	11
9	48	36	29	24	44	33	27	23	27	23	19	22	18	16	16	14	12	10
10	45	33	26	22	41	31	24	20	25	20	17	20	17	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7064	7064	7064
5°	7080	6994	7037
10°	7035	6909	6909
15°	6955	6764	6714
20°	6844	6574	6453
25°	6702	6350	6188
30°	6564	6114	5858
35°	6412	5870	5527
40°	6227	5592	5168
45°	6058	5316	4804
50°	5865	4999	4417
55°	5658	4669	3997
60°	5430	4306	3570
65°	5223	3851	3148
70°	4919	3354	2672
75°	4535	2779	2174
80°	3956	2115	1994
85°	3353	1927	1806



TEST NUMBER: P333050-935

CATALOG NUMBER: S124RDIW-S575D1340U935-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.2	1.4
10°-20°	229.2	3.8
20°-30°	331.0	5.5
30°-40°	375.2	6.2
40°-50°	362.3	6.0
50°-60°	301.3	5.0
60°-70°	208.0	3.4
70°-80°	105.4	1.7
80°-90°	31.4	0.5
90°-100°	95.2	1.6
100°-110°	282.1	4.7
110°-120°	478.8	7.9
120°-130°	631.3	10.5
130°-140°	709.0	11.8
140°-150°	696.7	11.6
150°-160°	586.0	9.7
160°-170°	389.9	6.5
170°-180°	136.5	2.3
0°-30°	642.4	10.7
0°-40°	1017.6	16.9
0°-60°	1681.1	27.9
0°-90°	2025.9	33.6
90°-120°	856.1	14.2
90°-150°	2893.2	48.0
90°-180°	4006.0	66.4
0°-180°	6031.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	875	875	875	875	875	
5°	874	871	863	869	868	83
15°	832	825	809	808	803	234
25°	752	740	713	702	695	347
35°	651	628	596	573	561	406
45°	531	505	466	434	421	409
55°	402	374	332	298	284	359
65°	273	244	202	174	165	270
75°	145	120	89	74	70	154
85°	36	23	21	20	20	41
90°	3	15	24	31	34	6
95°	67	77	85	88	88	75
105°	260	261	266	269	272	276
115°	487	487	485	484	482	480
125°	709	709	708	706	703	632
135°	914	921	921	919	916	707
145°	1111	1115	1117	1115	1112	695
155°	1273	1273	1272	1276	1272	585
165°	1386	1382	1380	1386	1382	390
175°	1442	1436	1435	1442	1435	137
180°	1444	1444	1444	1444	1444	



TEST NUMBER: P333050-935

CATALOG NUMBER: S124RDIW-S575D1340U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	875.0	875.0	875.0	875.0	875.0	875.0	875.0	875.0	875.0	875.0	875.0
2.5°	877.2	876.7	876.2	875.7	875.3	874.3	873.1	871.8	870.4	869.1	870.4
5°	873.7	873.1	872.5	871.8	871.3	870.1	868.3	866.5	864.7	863.0	864.4
7.5°	865.7	865.1	864.5	863.9	863.2	861.8	859.5	857.1	854.8	852.5	853.4
10°	858.2	857.6	856.8	856.0	855.3	853.6	850.9	848.2	845.5	842.8	843.4
12.5°	848.6	847.7	846.9	846.0	845.2	843.2	840.0	836.8	833.7	830.5	830.9
15°	832.2	830.8	829.5	828.1	826.7	824.2	820.5	816.8	813.0	809.3	809.1
17.5°	812.2	810.2	808.3	806.3	804.4	801.2	796.8	792.3	787.8	783.3	782.6
20°	796.6	794.7	792.7	790.8	788.8	785.4	780.3	775.2	770.2	765.2	764.0
22.5°	779.5	777.3	775.2	772.9	770.8	767.0	761.6	756.1	750.7	745.3	743.5
25°	752.4	749.8	747.0	744.3	741.7	737.3	731.2	725.0	718.9	712.9	710.3
27.5°	724.0	720.7	717.3	713.9	710.5	705.6	699.0	692.6	686.0	679.5	676.4
30°	704.1	700.4	696.7	693.0	689.3	683.9	676.9	669.9	662.9	655.9	652.2
32.5°	683.3	679.1	674.9	670.6	666.5	660.7	653.5	646.3	639.0	631.8	627.5
35°	650.6	645.8	641.0	636.3	631.5	625.4	617.9	610.5	603.0	595.6	590.6
37.5°	615.6	610.7	605.8	600.9	595.9	589.4	581.1	572.8	564.6	556.4	550.7
40°	590.9	586.0	581.1	576.2	571.3	564.6	556.1	547.6	539.2	530.6	524.3
42.5°	567.3	562.2	557.1	551.9	546.7	539.8	530.9	522.0	513.2	504.4	498.0
45°	530.6	525.1	519.6	514.1	508.6	501.4	492.4	483.5	474.6	465.6	458.3
47.5°	492.8	487.1	481.3	475.6	469.9	462.4	453.1	443.9	434.6	425.3	417.8
50°	467.0	461.2	455.4	449.5	443.8	436.1	426.5	417.1	407.5	398.0	390.5
52.5°	440.7	435.1	429.4	423.7	417.9	410.3	400.5	390.7	380.9	371.2	363.6
55°	402.0	396.1	390.1	384.1	378.2	370.3	360.7	351.0	341.3	331.7	323.9
57.5°	363.7	357.5	351.3	345.1	338.9	331.1	321.5	311.9	302.5	292.9	285.1
60°	336.3	330.4	324.4	318.5	312.5	304.8	295.2	285.7	276.2	266.7	258.9
62.5°	311.7	305.5	299.3	293.1	286.9	279.0	269.1	259.4	249.6	239.9	232.7
65°	273.4	267.0	260.5	254.2	247.7	239.8	230.2	220.8	211.2	201.6	195.3
67.5°	233.6	227.4	221.3	215.2	209.1	201.6	192.7	183.8	175.0	166.2	160.7
70°	208.4	202.1	195.9	189.6	183.4	176.0	167.5	159.0	150.5	142.1	137.2
72.5°	181.6	175.9	170.2	164.6	158.9	152.1	144.1	136.1	128.0	120.0	115.9
75°	145.4	139.9	134.4	128.9	123.4	117.1	110.1	103.1	96.1	89.1	85.7
77.5°	108.7	104.0	99.4	94.6	90.0	84.8	79.1	73.5	67.8	62.2	60.2
80°	85.1	80.8	76.5	72.2	67.8	63.5	59.0	54.5	50.0	45.5	45.1
82.5°	64.7	60.8	56.8	52.9	48.9	45.6	43.0	40.5	38.0	35.4	35.0
85°	36.2	33.2	30.2	27.2	24.3	22.6	22.1	21.7	21.2	20.8	20.5
87.5°	13.0	12.6	12.2	11.8	11.4	11.3	11.6	11.9	12.1	12.4	12.6
90°	3.4	6.1	8.8	11.5	14.3	16.6	18.6	20.6	22.6	24.5	26.1
92.5°	23.9	27.0	30.1	33.2	36.4	38.7	40.0	41.4	42.8	44.3	45.1
95°	67.0	69.2	71.5	73.7	75.9	77.9	79.6	81.4	83.1	84.9	85.6
97.5°	117.0	118.8	120.6	122.3	124.2	126.1	128.1	130.2	132.2	134.2	135.1
100°	156.4	157.3	158.3	159.3	160.3	161.9	164.1	166.3	168.6	170.8	171.3
102.5°	197.4	197.9	198.2	198.6	199.0	200.2	202.2	204.3	206.3	208.4	209.1
105°	260.2	260.5	260.7	260.9	261.1	261.7	262.8	263.8	264.8	265.8	266.5
107.5°	326.1	326.3	326.7	326.9	327.3	327.4	327.6	327.8	328.0	328.0	328.7
110°	370.7	371.2	371.7	372.2	372.7	372.8	372.6	372.3	372.1	371.9	371.3



TEST NUMBER: P333050-935

CATALOG NUMBER: S124RDIW-S575D1340U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	417.2	417.2	417.3	417.5	417.6	417.4	417.0	416.5	416.0	415.6	415.5
115°	486.8	486.8	486.8	486.8	486.8	486.6	486.1	485.6	485.1	484.6	484.4
117.5°	552.5	552.7	552.9	553.1	553.3	553.2	552.8	552.5	552.2	551.8	551.0
120°	596.2	597.3	598.2	599.3	600.2	600.4	599.6	598.9	598.1	597.4	596.2
122.5°	641.8	642.2	642.7	643.0	643.4	643.4	643.1	642.7	642.4	642.0	641.2
125°	709.0	709.0	709.0	709.0	709.0	708.9	708.7	708.4	708.2	707.9	707.4
127.5°	770.0	770.8	771.5	772.2	773.0	773.2	772.7	772.4	772.0	771.5	771.1
130°	812.9	813.6	814.4	815.1	815.9	816.2	816.2	816.2	816.2	816.2	815.7
132.5°	856.7	857.2	857.7	858.3	858.8	859.0	858.8	858.6	858.4	858.2	857.7
135°	914.5	916.0	917.5	918.9	920.5	921.2	921.2	921.2	921.2	921.2	920.8
137.5°	977.5	978.2	978.9	979.6	980.2	980.9	981.2	981.6	982.0	982.4	981.7
140°	1019.5	1019.9	1020.5	1021.0	1021.5	1021.7	1021.7	1021.7	1021.7	1021.7	1021.5
142.5°	1057.9	1058.3	1058.9	1059.4	1059.9	1060.0	1059.8	1059.6	1059.5	1059.2	1059.2
145°	1111.0	1112.1	1113.0	1114.0	1115.0	1115.6	1115.9	1116.1	1116.4	1116.6	1116.4
147.5°	1163.7	1164.9	1166.1	1167.3	1168.5	1169.0	1168.8	1168.6	1168.4	1168.2	1168.0
150°	1195.9	1196.9	1197.9	1198.9	1199.9	1200.3	1200.3	1200.3	1200.3	1200.3	1200.3
152.5°	1226.2	1226.8	1227.4	1228.0	1228.6	1229.1	1229.2	1229.4	1229.7	1229.9	1230.5
155°	1272.9	1272.9	1272.9	1272.9	1272.9	1272.8	1272.6	1272.3	1272.0	1271.9	1272.8
157.5°	1312.3	1311.8	1311.4	1310.9	1310.4	1310.2	1310.2	1310.1	1310.1	1310.0	1310.8
160°	1335.5	1335.2	1335.0	1334.7	1334.5	1334.2	1333.9	1333.8	1333.5	1333.3	1333.9
162.5°	1356.9	1356.2	1355.6	1355.0	1354.4	1353.9	1353.7	1353.4	1353.1	1352.9	1354.3
165°	1385.7	1385.0	1384.2	1383.5	1382.8	1382.2	1381.6	1381.1	1380.6	1380.1	1381.6
167.5°	1407.8	1406.8	1405.8	1404.7	1403.7	1403.2	1403.3	1403.3	1403.3	1403.3	1404.9
170°	1420.3	1419.1	1417.9	1416.6	1415.4	1414.9	1415.1	1415.4	1415.7	1415.8	1417.4
172.5°	1429.3	1428.2	1427.2	1426.2	1425.1	1424.6	1424.7	1424.7	1424.8	1424.8	1426.5
175°	1441.6	1440.3	1439.1	1437.9	1436.6	1435.8	1435.6	1435.4	1435.1	1434.9	1436.6
177.5°	1445.5	1444.6	1443.6	1442.6	1441.6	1441.1	1441.1	1441.1	1441.1	1441.1	1442.5
180°	1443.8	1443.8	1443.8	1443.8	1443.8	1443.8	1443.8	1443.8	1443.8	1443.8	1443.8



TEST NUMBER: P333050-935

CATALOG NUMBER: S124RDIW-S575D1340U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	875.0	875.0	875.0	875.0	875.0	875.0	875.0	875.0
2.5°	871.8	873.1	874.3	874.9	874.9	874.7	874.6	874.5
5°	865.9	867.5	868.9	869.5	869.2	868.9	868.6	868.3
7.5°	854.4	855.3	856.4	856.5	856.1	855.6	855.1	854.6
10°	844.0	844.6	845.2	845.2	844.6	844.0	843.4	842.8
12.5°	831.2	831.6	832.0	831.7	830.9	830.1	829.2	828.4
15°	808.7	808.5	808.1	807.5	806.4	805.4	804.3	803.3
17.5°	781.7	780.8	780.0	778.8	777.2	775.7	774.0	772.5
20°	762.8	761.6	760.3	758.8	756.9	754.9	753.0	751.1
22.5°	741.8	739.9	738.1	736.5	734.9	733.3	731.8	730.1
25°	707.8	705.2	702.7	700.8	699.2	697.8	696.3	694.7
27.5°	673.2	670.1	667.0	664.3	662.2	660.0	658.0	655.8
30°	648.5	644.7	641.0	638.0	635.6	633.2	630.9	628.4
32.5°	623.2	618.9	614.5	611.2	609.0	606.7	604.4	602.2
35°	585.5	580.4	575.4	571.5	568.9	566.1	563.4	560.8
37.5°	545.0	539.4	533.7	529.6	526.8	524.2	521.5	518.8
40°	518.1	511.9	505.6	501.2	498.4	495.8	493.1	490.4
42.5°	491.6	485.3	478.9	474.3	471.5	468.7	465.9	463.1
45°	451.1	443.8	436.4	431.4	428.8	426.1	423.4	420.8
47.5°	410.2	402.6	395.0	389.8	386.8	383.9	381.0	378.0
50°	383.1	375.7	368.2	363.1	360.2	357.4	354.6	351.7
52.5°	356.0	348.4	341.0	335.7	332.7	329.8	326.8	323.9
55°	316.2	308.4	300.7	295.4	292.6	289.7	286.9	284.0
57.5°	277.2	269.3	261.5	256.5	254.3	252.2	250.0	247.9
60°	251.2	243.4	235.7	230.7	228.3	225.8	223.5	221.1
62.5°	225.6	218.4	211.3	206.7	204.8	202.9	201.0	199.1
65°	188.9	182.4	176.1	171.9	170.2	168.4	166.6	164.8
67.5°	155.2	149.6	144.1	140.4	138.4	136.5	134.5	132.5
70°	132.2	127.3	122.3	119.2	117.7	116.2	114.7	113.2
72.5°	111.7	107.5	103.2	100.5	99.1	97.7	96.3	95.0
75°	82.2	78.9	75.4	73.3	72.3	71.5	70.6	69.7
77.5°	58.2	56.2	54.2	53.0	52.8	52.5	52.3	52.0
80°	44.7	44.3	43.7	43.5	43.3	43.1	43.0	42.9
82.5°	34.7	34.4	34.1	33.8	33.7	33.5	33.4	33.2
85°	20.1	19.9	19.5	19.5	19.5	19.5	19.5	19.5
87.5°	12.7	12.9	13.2	13.3	13.5	13.8	13.9	14.2
90°	27.6	29.0	30.5	31.5	32.0	32.5	33.0	33.5
92.5°	46.0	46.9	47.8	48.4	48.6	49.0	49.2	49.6
95°	86.4	87.1	87.8	88.3	88.3	88.3	88.3	88.3
97.5°	136.0	136.9	137.8	138.3	138.3	138.3	138.3	138.3
100°	171.9	172.4	172.8	173.1	173.1	173.1	173.1	173.1
102.5°	209.7	210.4	211.1	211.5	211.8	212.0	212.2	212.4
105°	267.3	268.0	268.7	269.5	270.2	271.0	271.7	272.4
107.5°	329.4	330.1	330.9	331.1	331.1	331.1	331.1	331.0
110°	370.8	370.3	369.9	370.0	370.7	371.4	372.2	373.0



TEST NUMBER: P333050-935

CATALOG NUMBER: S124RDIW-S575D1340U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	415.4	415.3	415.2	415.3	415.3	415.5	415.7	415.9
115°	484.1	483.9	483.6	483.4	483.1	482.8	482.6	482.4
117.5°	550.2	549.3	548.5	547.8	547.3	546.8	546.3	545.8
120°	595.0	593.7	592.5	592.0	592.5	593.1	593.6	594.0
122.5°	640.3	639.6	638.7	637.8	636.9	636.0	635.2	634.2
125°	707.0	706.5	705.9	705.4	705.0	704.5	704.0	703.4
127.5°	770.6	770.1	769.6	769.1	768.8	768.4	767.9	767.6
130°	815.3	814.8	814.2	813.6	812.5	811.5	810.5	809.5
132.5°	857.2	856.8	856.3	855.8	855.4	855.0	854.6	854.2
135°	920.2	919.7	919.2	918.6	917.8	917.1	916.4	915.6
137.5°	981.1	980.5	979.8	979.6	979.7	979.9	980.0	980.2
140°	1021.2	1021.0	1020.7	1020.5	1020.2	1019.9	1019.7	1019.5
142.5°	1059.1	1059.1	1059.0	1058.9	1058.9	1058.9	1058.9	1058.8
145°	1116.1	1115.9	1115.6	1115.2	1114.4	1113.6	1112.9	1112.2
147.5°	1167.8	1167.6	1167.4	1167.2	1166.9	1166.7	1166.5	1166.2
150°	1200.3	1200.3	1200.3	1200.2	1200.0	1199.7	1199.5	1199.3
152.5°	1231.1	1231.7	1232.3	1232.2	1231.6	1230.9	1230.3	1229.6
155°	1273.8	1274.8	1275.8	1275.8	1274.8	1273.8	1272.8	1271.9
157.5°	1311.5	1312.3	1313.0	1312.9	1312.1	1311.2	1310.4	1309.6
160°	1334.7	1335.5	1336.2	1335.9	1334.7	1333.5	1332.2	1331.0
162.5°	1355.6	1356.9	1358.2	1358.3	1357.0	1355.8	1354.6	1353.3
165°	1383.1	1384.6	1386.1	1386.4	1385.3	1384.3	1383.4	1382.3
167.5°	1406.4	1407.8	1409.3	1409.3	1407.7	1406.2	1404.7	1403.2
170°	1418.8	1420.3	1421.9	1421.7	1420.0	1418.2	1416.5	1414.8
172.5°	1428.1	1429.9	1431.6	1431.5	1429.8	1428.1	1426.3	1424.6
175°	1438.3	1440.0	1441.8	1441.8	1440.0	1438.3	1436.6	1434.9
177.5°	1443.9	1445.3	1446.7	1446.6	1445.0	1443.4	1441.8	1440.2
180°	1443.8	1443.8	1443.8	1443.8	1443.8	1443.8	1443.8	1443.8

(END OF REPORT)