

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: P333674-927

Luminaire Tested: **S125RDIW-S610D1340U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333674-927
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-S610D1340U927-4F0-1E-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: 6134.4 lumens
Efficiency: N/A
Efficacy: 114.0 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

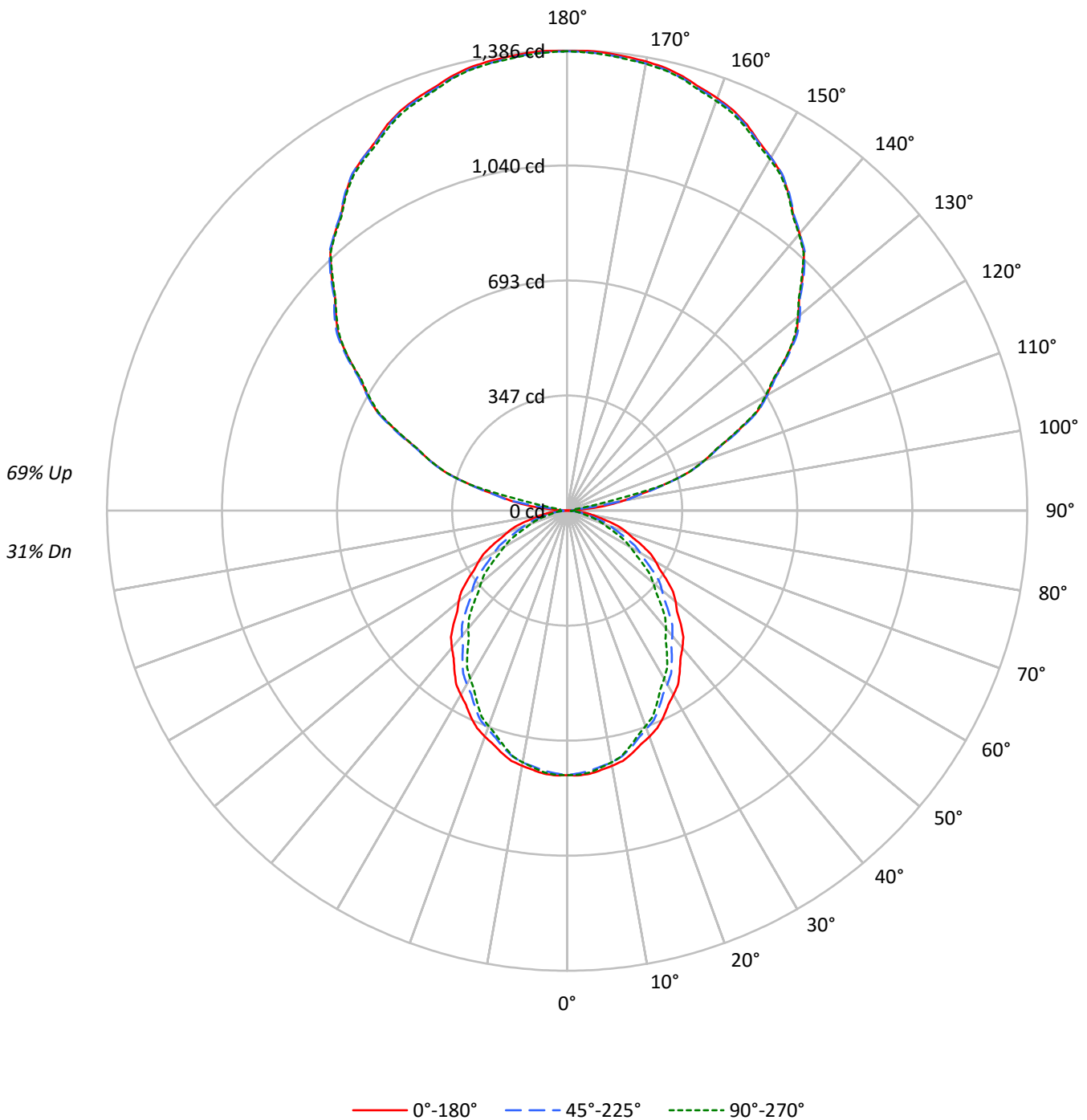
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	1.2
10°-20°	209.4	3.4
20°-30°	303.7	5.0
30°-40°	346.1	5.6
40°-50°	337.4	5.5
50°-60°	284.0	4.6
60°-70°	199.1	3.2
70°-80°	102.3	1.7
80°-90°	28.7	0.5
90°-100°	50.3	0.8
100°-110°	309.9	5.1
110°-120°	562.0	9.2
120°-130°	721.3	11.8
130°-140°	775.8	12.6
140°-150°	728.2	11.9
150°-160°	589.1	9.6
160°-170°	381.0	6.2
170°-180°	131.4	2.1
0°-30°	588.0	9.6
0°-40°	934.1	15.2
0°-60°	1555.4	25.4
0°-90°	1885.5	30.7
90°-120°	922.2	15.0
90°-150°	3147.5	51.3
90°-180°	4249.0	69.3
0°-180°	6134.4	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	9	16	21	25	4
95°	58	53	16	21	22	75
105°	302	305	306	306	305	320
115°	566	571	572	568	562	561
125°	805	812	812	808	805	719
135°	1004	1010	1008	1006	1000	774
145°	1164	1166	1166	1167	1161	728
155°	1282	1276	1278	1280	1273	590
165°	1353	1347	1348	1353	1346	382
175°	1384	1378	1378	1386	1377	132
180°	1384	1384	1384	1384	1384	



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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	10.5	10.1	9.7	9.7	9.9	10.1	10.3	10.5	10.7
90°	1.0	2.9	4.7	6.5	8.3	10.1	11.6	13.2	14.8	16.4	17.6
92.5°	15.8	14.5	13.2	12.0	10.7	10.8	12.2	13.5	15.0	16.4	17.6
95°	58.5	57.8	57.1	56.4	55.7	51.0	42.4	33.7	25.0	16.4	17.6
97.5°	122.1	123.3	124.5	125.7	127.0	119.0	101.9	84.8	67.6	50.5	44.0
100°	171.3	172.0	172.6	173.3	174.0	174.8	175.7	176.7	177.5	178.5	144.5
102.5°	221.3	222.2	223.1	223.9	224.8	225.5	226.1	226.6	227.1	227.7	221.3
105°	301.6	302.5	303.4	304.3	305.2	305.6	305.6	305.6	305.6	305.6	305.6
107.5°	384.8	384.8	384.8	384.8	384.8	385.1	385.6	386.0	386.4	386.9	386.9
110°	439.0	439.0	439.0	439.0	439.0	439.2	439.7	440.1	440.6	441.0	440.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	489.9	490.4	491.0	491.5	492.0	492.5	492.7	493.0	493.3	493.5	492.7
115°	566.2	567.3	568.5	569.6	570.8	571.4	571.6	571.9	572.1	572.4	571.4
117.5°	645.2	645.1	645.1	645.0	645.0	645.4	646.3	647.1	648.0	648.9	647.7
120°	694.3	694.2	694.0	693.7	693.5	693.7	694.3	695.1	695.8	696.4	696.0
122.5°	737.8	738.7	739.6	740.5	741.3	742.0	742.3	742.6	742.9	743.2	742.8
125°	805.2	806.8	808.3	809.9	811.5	812.3	812.3	812.3	812.3	812.3	811.4
127.5°	869.3	870.5	871.6	872.7	873.9	874.4	874.3	874.2	874.0	873.9	873.4
130°	908.7	909.9	911.0	912.2	913.3	914.0	914.3	914.4	914.7	914.9	914.3
132.5°	948.2	949.4	950.8	952.1	953.4	953.9	953.3	952.8	952.4	951.8	951.7
135°	1004.2	1005.5	1006.9	1008.2	1009.6	1010.0	1009.6	1009.2	1008.7	1008.2	1007.8
137.5°	1055.7	1056.8	1058.0	1059.1	1060.3	1060.7	1060.3	1059.9	1059.5	1059.1	1059.2
140°	1089.3	1089.7	1090.2	1090.6	1091.1	1091.2	1091.0	1090.8	1090.5	1090.3	1090.8
142.5°	1119.6	1119.9	1120.1	1120.5	1120.7	1121.0	1121.3	1121.7	1122.0	1122.3	1122.4
145°	1164.1	1164.6	1165.1	1165.5	1165.9	1166.2	1166.2	1166.2	1166.2	1166.2	1166.4
147.5°	1203.1	1203.0	1202.9	1202.8	1202.8	1202.8	1203.1	1203.4	1203.6	1204.0	1204.2
150°	1227.7	1227.2	1226.9	1226.4	1225.9	1225.9	1226.4	1226.9	1227.2	1227.7	1228.2
152.5°	1251.5	1250.5	1249.5	1248.6	1247.5	1247.2	1247.7	1248.2	1248.6	1249.0	1249.5
155°	1282.1	1280.7	1279.4	1278.0	1276.6	1276.2	1276.6	1277.1	1277.6	1278.0	1278.7
157.5°	1305.7	1304.9	1304.0	1303.2	1302.4	1302.0	1302.0	1302.1	1302.2	1302.2	1302.9
160°	1322.1	1320.7	1319.4	1318.0	1316.6	1316.1	1316.3	1316.5	1316.8	1317.0	1317.9
162.5°	1335.2	1333.9	1332.5	1331.1	1329.8	1329.2	1329.4	1329.7	1329.8	1330.1	1331.3
165°	1352.9	1351.5	1350.1	1348.8	1347.4	1346.8	1347.0	1347.3	1347.5	1347.7	1349.1
167.5°	1366.0	1364.6	1363.2	1361.8	1360.3	1359.8	1359.9	1360.2	1360.4	1360.7	1362.3
170°	1373.4	1371.8	1370.2	1368.6	1367.0	1366.3	1366.5	1366.8	1367.0	1367.2	1369.0
172.5°	1378.3	1376.7	1375.1	1373.5	1371.9	1371.3	1371.7	1372.1	1372.5	1372.9	1374.6
175°	1383.6	1382.3	1380.9	1379.5	1378.2	1377.6	1377.8	1378.1	1378.3	1378.5	1380.3
177.5°	1386.1	1385.0	1383.9	1382.8	1381.7	1381.2	1381.5	1381.6	1381.8	1382.0	1383.3
180°	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6



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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°	10.9	11.2	11.4	11.6	11.6	11.6	11.6	11.6
90°	18.7	19.8	21.0	21.9	22.6	23.2	23.9	24.6
92.5°	18.7	19.8	21.0	21.7	22.0	22.3	22.7	23.0
95°	18.7	19.8	21.0	21.5	21.5	21.5	21.5	21.5
97.5°	37.6	31.2	24.7	21.5	21.5	21.5	21.5	21.5
100°	110.5	76.6	42.6	25.2	24.2	23.4	22.4	21.5
102.5°	214.8	208.4	202.0	191.0	175.5	160.0	144.5	129.0
105°	305.6	305.6	305.6	305.5	305.3	305.1	304.8	304.6
107.5°	387.0	387.1	387.1	386.7	386.0	385.4	384.7	384.0
110°	439.7	439.0	438.3	438.1	438.3	438.6	438.8	439.0



TEST NUMBER: P333674-927

CATALOG NUMBER: S125RDIW-S610D1340U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	491.8	491.0	490.1	489.5	489.2	488.9	488.5	488.2
115°	570.5	569.6	568.7	567.5	566.2	564.8	563.4	562.1
117.5°	646.5	645.3	644.1	643.2	642.6	642.1	641.4	640.9
120°	695.5	695.1	694.6	693.8	692.7	691.5	690.4	689.3
122.5°	742.3	741.8	741.4	740.5	739.2	737.8	736.5	735.2
125°	810.5	809.6	808.7	807.9	807.2	806.5	805.8	805.2
127.5°	872.9	872.4	871.9	870.8	869.1	867.4	865.7	864.0
130°	913.5	912.8	912.2	911.2	910.1	908.9	907.8	906.7
132.5°	951.6	951.4	951.3	950.6	949.5	948.4	947.2	946.1
135°	1007.3	1006.9	1006.4	1005.5	1004.2	1002.7	1001.4	1000.1
137.5°	1059.3	1059.4	1059.5	1058.9	1057.7	1056.5	1055.3	1054.2
140°	1091.2	1091.6	1092.1	1091.6	1090.3	1088.9	1087.6	1086.2
142.5°	1122.4	1122.6	1122.7	1122.0	1120.6	1119.3	1117.9	1116.6
145°	1166.6	1166.9	1167.1	1166.6	1165.1	1163.8	1162.4	1161.1
147.5°	1204.5	1204.8	1205.1	1204.4	1202.7	1201.0	1199.4	1197.8
150°	1228.7	1229.1	1229.5	1228.8	1227.0	1225.2	1223.4	1221.5
152.5°	1250.0	1250.5	1250.9	1250.3	1248.6	1247.1	1245.4	1243.7
155°	1279.4	1280.0	1280.7	1280.2	1278.3	1276.5	1274.7	1272.9
157.5°	1303.7	1304.4	1305.1	1304.6	1302.7	1300.9	1299.1	1297.3
160°	1318.8	1319.7	1320.6	1320.2	1318.3	1316.5	1314.7	1312.9
162.5°	1332.6	1334.0	1335.2	1334.8	1332.8	1330.8	1328.8	1326.8
165°	1350.4	1351.9	1353.2	1353.0	1351.1	1349.3	1347.5	1345.7
167.5°	1364.0	1365.6	1367.2	1367.0	1364.9	1362.9	1360.9	1358.8
170°	1370.9	1372.7	1374.5	1374.4	1372.4	1370.3	1368.3	1366.2
172.5°	1376.3	1377.9	1379.5	1379.3	1377.3	1375.2	1373.2	1371.1
175°	1382.1	1383.9	1385.8	1385.7	1383.6	1381.6	1379.5	1377.4
177.5°	1384.6	1385.8	1387.1	1387.0	1385.5	1384.1	1382.6	1381.2
180°	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6

(END OF REPORT)