

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: P333390-830

Luminaire Tested: **S125DIW-S610D1340U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333390-830
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: S125DIW-S610D1340U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7321.3 lumens
Efficiency: N/A
Efficacy: 136.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

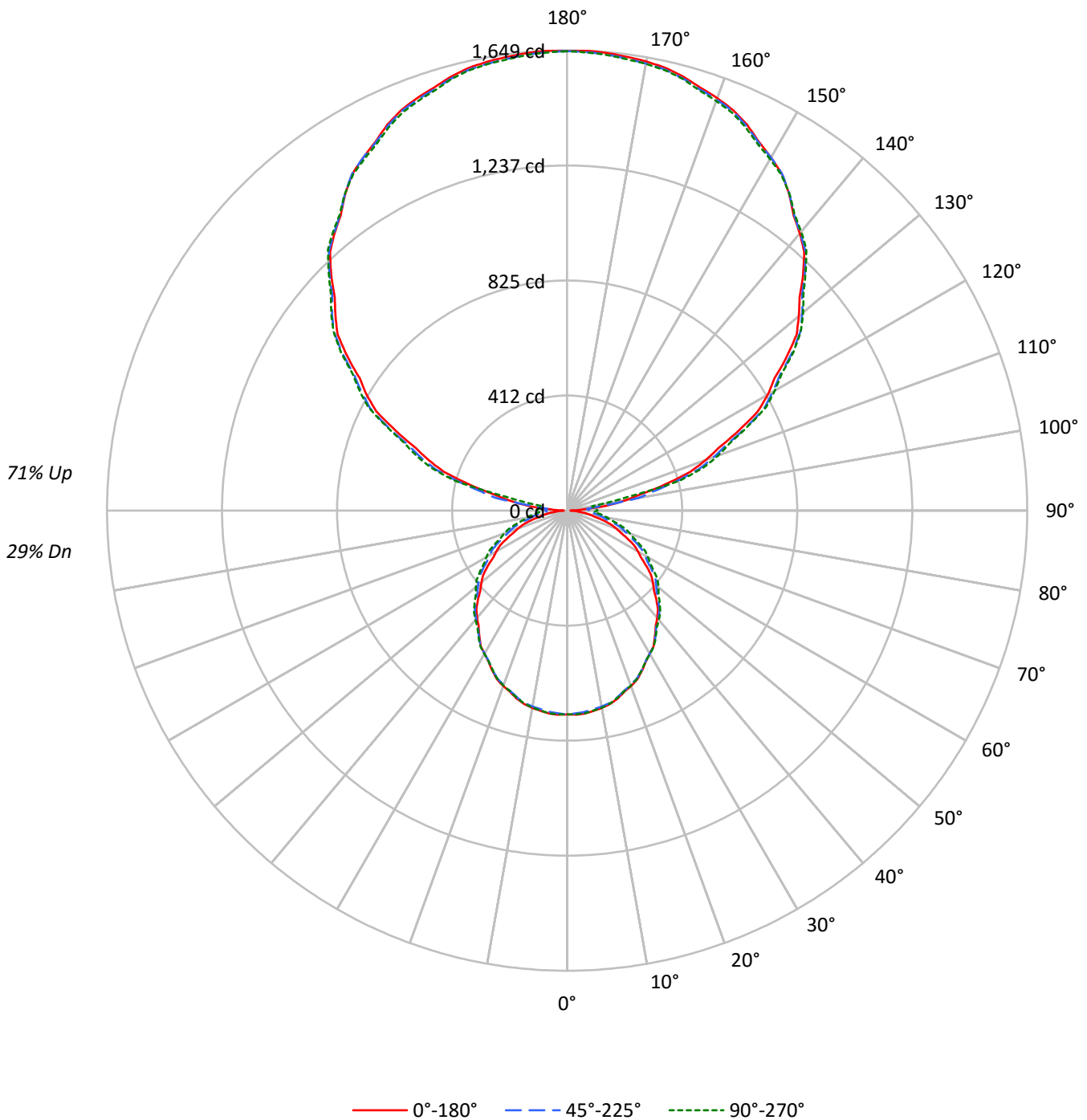
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	24
2	84	77	71	66	75	69	64	59	54	51	47	40	38	36	28	26	25	19
3	77	67	60	54	68	60	54	49	48	43	40	36	33	30	24	23	21	16
4	70	59	52	46	62	53	47	42	42	37	34	32	28	26	22	20	18	14
5	64	53	45	39	57	47	41	35	37	32	29	28	25	22	20	17	16	12
6	59	47	39	33	52	42	36	31	34	29	25	25	22	19	18	15	14	10
7	54	42	35	29	48	38	31	27	30	25	22	23	19	17	16	14	12	9
8	50	38	31	26	45	35	28	23	28	23	19	21	17	15	15	12	11	8
9	47	35	27	23	42	31	25	21	25	20	17	19	16	13	14	11	10	7
10	43	32	25	20	39	29	23	18	23	18	15	18	14	12	13	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4718	4718	4718
5°	4727	4630	4645
10°	4693	4548	4541
15°	4638	4449	4409
20°	4562	4326	4276
25°	4473	4195	4112
30°	4364	4051	3964
35°	4263	3919	3829
40°	4160	3779	3691
45°	4043	3661	3570
50°	3932	3531	3463
55°	3798	3408	3337
60°	3652	3269	3208
65°	3499	3124	3063
70°	3326	2924	2915
75°	3052	2732	2732
80°	2694	2501	2532
85°	2358	2344	2469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	0.9
10°-20°	196.1	2.7
20°-30°	291.6	4.0
30°-40°	345.4	4.7
40°-50°	357.1	4.9
50°-60°	329.0	4.5
60°-70°	265.9	3.6
70°-80°	178.1	2.4
80°-90°	95.8	1.3
90°-100°	111.6	1.5
100°-110°	406.9	5.6
110°-120°	694.3	9.5
120°-130°	872.7	11.9
130°-140°	929.4	12.7
140°-150°	867.7	11.9
150°-160°	700.9	9.6
160°-170°	453.3	6.2
170°-180°	156.3	2.1
0°-30°	556.7	7.6
0°-40°	902.2	12.3
0°-60°	1588.2	21.7
0°-90°	2128.1	29.1
90°-120°	1212.9	16.6
90°-150°	3882.7	53.0
90°-180°	5193.0	70.9
0°-180°	7321.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	730	729	724	729	729	69
15°	698	698	693	697	695	196
25°	634	636	632	634	631	292
35°	549	553	551	554	554	343
45°	452	460	463	468	469	349
55°	347	359	370	378	381	310
65°	239	256	273	283	286	237
75°	132	151	173	187	191	140
85°	39	63	88	103	110	42
90°	13	45	78	100	110	11
95°	79	92	72	93	99	96
105°	365	382	403	417	421	387
115°	678	690	709	716	714	672
125°	961	969	983	989	990	858
135°	1196	1203	1205	1212	1208	922
145°	1386	1387	1388	1392	1388	866
155°	1525	1519	1521	1523	1514	703
165°	1610	1603	1604	1610	1601	455
175°	1646	1639	1640	1649	1639	157
180°	1646	1646	1646	1646	1646	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	732.2	731.9	731.7	731.4	731.1	730.6	729.7	728.8	727.9	727.0	727.9
5°	730.5	730.1	729.8	729.5	729.2	728.5	727.4	726.2	725.1	724.0	725.3
7.5°	724.0	723.9	723.8	723.6	723.5	722.8	721.7	720.6	719.4	718.3	719.3
10°	718.3	718.3	718.3	718.3	718.3	717.7	716.3	715.1	713.8	712.6	713.7
12.5°	710.3	710.4	710.5	710.7	710.8	710.3	709.3	708.3	707.3	706.2	707.1
15°	697.5	697.7	697.9	698.0	698.1	697.7	696.5	695.4	694.4	693.2	694.2
17.5°	680.9	681.2	681.6	681.8	682.2	681.7	680.7	679.6	678.4	677.3	678.1
20°	668.8	669.2	669.5	669.9	670.1	669.8	668.6	667.5	666.4	665.2	665.7
22.5°	655.2	655.7	656.3	656.9	657.4	657.0	655.8	654.6	653.4	652.1	652.7
25°	633.8	634.2	634.7	635.2	635.7	635.5	634.5	633.6	632.5	631.6	632.3
27.5°	610.0	610.7	611.4	612.1	612.8	612.7	611.5	610.5	609.4	608.3	608.7
30°	592.2	593.2	594.2	595.1	596.1	596.1	595.1	594.2	593.2	592.2	592.6
32.5°	576.2	577.0	577.9	578.7	579.5	579.6	578.9	578.2	577.5	576.7	577.1
35°	548.6	549.7	550.8	551.9	553.0	553.4	552.9	552.3	551.9	551.4	551.9
37.5°	520.9	522.0	522.9	524.0	525.0	525.4	525.3	525.1	524.9	524.8	525.4
40°	502.0	503.3	504.5	505.9	507.1	507.7	507.5	507.4	507.2	507.0	507.7
42.5°	481.4	483.1	484.7	486.4	488.0	489.0	489.4	489.7	490.0	490.4	491.2
45°	451.9	453.6	455.3	457.1	458.9	460.1	461.0	461.8	462.5	463.4	464.5
47.5°	421.7	423.3	424.9	426.5	428.2	429.6	431.0	432.3	433.8	435.1	436.8
50°	401.1	402.7	404.5	406.3	408.0	409.8	411.5	413.3	415.0	416.8	418.6
52.5°	379.3	381.4	383.5	385.7	387.8	389.9	392.1	394.2	396.3	398.4	400.3
55°	347.3	349.9	352.4	355.0	357.5	360.1	362.6	365.1	367.7	370.2	372.0
57.5°	314.7	317.7	320.7	323.9	326.9	329.9	332.8	335.7	338.7	341.6	343.6
60°	292.9	296.1	299.3	302.5	305.7	308.8	312.0	315.2	318.4	321.5	324.0
62.5°	271.7	274.8	278.1	281.3	284.5	287.8	291.2	294.6	298.0	301.5	304.2
65°	239.2	242.9	246.5	250.2	253.8	257.6	261.4	265.2	269.0	272.9	275.2
67.5°	208.6	212.1	215.6	219.1	222.6	226.4	230.3	234.1	238.0	242.0	244.8
70°	186.2	189.8	193.5	197.2	200.9	204.7	208.9	213.0	217.2	221.3	224.3
72.5°	164.4	168.2	172.0	175.8	179.6	183.7	188.2	192.7	197.3	201.8	205.1
75°	131.8	135.9	140.1	144.2	148.4	153.0	158.1	163.2	168.2	173.3	176.4
77.5°	100.4	105.2	110.0	114.7	119.5	124.3	129.2	134.1	139.0	143.9	147.4
80°	81.0	85.7	90.5	95.3	100.0	105.1	110.6	115.9	121.3	126.8	130.3
82.5°	63.2	68.1	73.2	78.2	83.3	88.6	94.1	99.6	105.2	110.7	114.0
85°	39.4	44.7	49.9	55.1	60.4	65.8	71.4	76.9	82.5	88.1	91.6
87.5°	22.6	28.1	33.6	39.2	44.7	50.3	56.2	61.9	67.8	73.5	77.5
90°	12.7	20.0	27.2	34.5	41.8	49.0	56.4	63.6	71.0	78.2	83.2
92.5°	29.1	32.3	35.5	38.6	41.8	47.0	54.3	61.5	68.7	76.0	80.9
95°	78.9	82.2	85.5	88.9	92.2	91.4	86.5	81.6	76.7	71.8	76.6
97.5°	153.6	158.8	164.0	169.3	174.5	169.5	154.3	139.1	123.9	108.8	104.4
100°	211.7	215.8	220.0	224.1	228.3	233.5	239.7	245.8	252.0	258.2	221.1
102.5°	270.7	274.8	278.9	283.0	287.1	292.0	297.7	303.2	308.9	314.4	310.0
105°	365.2	368.8	372.5	376.2	379.8	384.0	388.7	393.5	398.3	403.0	406.2
107.5°	463.4	465.6	467.8	470.0	472.1	475.8	480.9	486.0	491.2	496.2	499.5
110°	527.4	529.2	531.1	533.0	535.0	538.4	543.4	548.4	553.4	558.5	560.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	587.9	590.0	592.2	594.4	596.5	600.0	604.6	609.3	614.0	618.6	620.5
115°	678.0	680.4	682.9	685.3	687.8	691.3	695.7	700.0	704.5	708.9	710.7
117.5°	771.2	771.8	772.5	773.3	773.9	776.7	781.7	786.6	791.5	796.4	797.8
120°	829.7	830.0	830.2	830.4	830.6	832.9	837.4	841.9	846.3	850.8	853.0
122.5°	880.9	882.2	883.4	884.7	886.0	888.5	892.4	896.4	900.2	904.2	906.3
125°	960.8	962.6	964.3	966.1	967.8	970.3	973.5	976.7	979.8	983.0	984.5
127.5°	1036.5	1037.7	1038.9	1040.1	1041.3	1043.1	1045.6	1048.0	1050.5	1052.9	1054.7
130°	1083.4	1084.6	1085.8	1086.9	1088.2	1090.1	1092.5	1095.0	1097.5	1100.0	1101.5
132.5°	1129.6	1131.2	1132.7	1134.3	1135.9	1137.2	1138.3	1139.4	1140.6	1141.6	1143.7
135°	1196.2	1197.6	1199.1	1200.5	1202.0	1203.1	1203.6	1204.2	1204.8	1205.3	1206.8
137.5°	1257.3	1258.6	1259.8	1261.1	1262.4	1263.1	1263.1	1263.2	1263.2	1263.3	1265.3
140°	1296.8	1297.3	1297.8	1298.4	1298.9	1299.1	1299.0	1298.9	1298.8	1298.6	1301.0
142.5°	1332.8	1333.0	1333.2	1333.4	1333.6	1334.0	1334.4	1334.7	1335.2	1335.6	1337.2
145°	1385.8	1386.2	1386.6	1387.0	1387.3	1387.5	1387.5	1387.5	1387.5	1387.5	1388.6
147.5°	1431.4	1431.3	1431.3	1431.2	1431.1	1431.2	1431.4	1431.8	1432.1	1432.5	1433.0
150°	1460.8	1460.2	1459.7	1459.2	1458.6	1458.6	1459.2	1459.7	1460.2	1460.8	1461.3
152.5°	1489.0	1487.9	1486.7	1485.5	1484.3	1483.9	1484.5	1485.1	1485.6	1486.1	1486.7
155°	1525.4	1523.8	1522.2	1520.6	1518.9	1518.4	1518.9	1519.5	1520.0	1520.6	1521.4
157.5°	1553.5	1552.6	1551.5	1550.6	1549.6	1549.2	1549.2	1549.3	1549.4	1549.4	1550.2
160°	1573.0	1571.4	1569.8	1568.1	1566.5	1565.8	1566.1	1566.4	1566.7	1567.0	1568.0
162.5°	1588.7	1587.1	1585.4	1583.8	1582.2	1581.5	1581.8	1582.1	1582.2	1582.5	1584.0
165°	1609.7	1608.0	1606.4	1604.8	1603.2	1602.4	1602.7	1603.0	1603.3	1603.5	1605.1
167.5°	1625.2	1623.6	1621.9	1620.2	1618.5	1617.9	1618.1	1618.3	1618.6	1618.9	1620.9
170°	1634.1	1632.2	1630.2	1628.3	1626.5	1625.6	1625.9	1626.2	1626.5	1626.7	1628.9
172.5°	1639.9	1638.0	1636.2	1634.2	1632.3	1631.6	1632.1	1632.6	1633.0	1633.5	1635.5
175°	1646.2	1644.6	1643.0	1641.3	1639.7	1639.1	1639.4	1639.6	1639.9	1640.1	1642.3
177.5°	1649.2	1647.8	1646.6	1645.3	1644.0	1643.4	1643.7	1643.9	1644.1	1644.3	1645.9
180°	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	728.8	729.7	730.6	730.9	730.8	730.8	730.6	730.5
5°	726.5	727.8	729.1	729.6	729.5	729.3	729.2	729.1
7.5°	720.5	721.6	722.7	723.2	723.0	722.9	722.7	722.6
10°	714.8	715.9	717.0	717.5	717.4	717.2	717.0	716.8
12.5°	707.9	708.8	709.7	709.9	709.5	709.1	708.7	708.2
15°	695.1	696.1	697.0	697.2	696.5	695.9	695.3	694.7
17.5°	678.8	679.5	680.2	680.4	680.0	679.7	679.3	678.9
20°	666.3	666.8	667.2	667.4	667.4	667.4	667.4	667.4
22.5°	653.3	653.9	654.5	654.6	654.2	653.8	653.5	653.1
25°	632.9	633.6	634.1	634.1	633.3	632.5	631.7	630.9
27.5°	609.2	609.6	610.1	610.1	609.8	609.5	609.3	609.0
30°	592.9	593.2	593.5	593.6	593.4	593.2	593.1	593.0
32.5°	577.4	577.7	578.1	578.2	578.0	577.8	577.7	577.5
35°	552.3	552.9	553.4	553.6	553.6	553.6	553.6	553.6
37.5°	526.0	526.7	527.4	527.6	527.5	527.4	527.4	527.4
40°	508.3	509.0	509.5	510.0	510.4	510.7	511.0	511.3
42.5°	491.9	492.7	493.4	493.9	494.0	494.0	494.1	494.2
45°	465.5	466.7	467.8	468.4	468.6	468.7	468.9	469.1
47.5°	438.4	440.0	441.6	442.6	443.0	443.3	443.7	444.0
50°	420.3	422.1	423.8	424.9	425.4	425.8	426.3	426.8
52.5°	402.2	404.1	406.0	407.1	407.5	407.7	408.1	408.5
55°	373.7	375.5	377.2	378.4	379.1	379.8	380.3	381.0
57.5°	345.6	347.6	349.6	350.8	351.4	351.9	352.3	352.8
60°	326.3	328.7	331.1	332.5	333.0	333.5	333.9	334.4
62.5°	306.8	309.4	312.1	313.7	314.2	314.9	315.5	316.1
65°	277.6	280.0	282.4	283.9	284.6	285.2	285.8	286.4
67.5°	247.7	250.6	253.4	255.3	256.2	257.0	257.9	258.6
70°	227.3	230.4	233.4	235.4	236.3	237.2	238.3	239.2
72.5°	208.4	211.6	214.9	216.9	217.6	218.3	219.0	219.7
75°	179.6	182.9	186.1	188.0	188.8	189.6	190.4	191.2
77.5°	150.9	154.5	158.0	160.0	160.6	161.3	161.9	162.6
80°	133.7	137.2	140.7	142.8	143.5	144.1	144.8	145.3
82.5°	117.4	120.8	124.2	126.5	127.6	128.8	129.9	131.0
85°	95.1	98.6	102.1	104.4	105.8	107.0	108.3	109.5
87.5°	81.3	85.3	89.3	91.8	93.1	94.4	95.7	97.0
90°	88.3	93.3	98.3	101.8	103.7	105.7	107.5	109.5
92.5°	85.8	90.6	95.5	98.7	100.2	101.7	103.2	104.7
95°	81.5	86.3	91.2	94.3	95.3	96.4	97.6	98.7
97.5°	100.1	95.9	91.5	89.9	91.0	92.1	93.1	94.3
100°	184.1	146.9	109.9	91.3	91.1	91.0	91.0	90.8
102.5°	305.6	301.1	296.7	285.8	268.2	250.8	233.3	215.8
105°	409.4	412.6	415.8	417.8	418.7	419.5	420.3	421.1
107.5°	502.7	505.9	509.1	510.8	511.0	511.1	511.3	511.4
110°	562.8	565.1	567.2	569.0	570.4	571.8	573.2	574.6



TEST NUMBER: P333390-830

CATALOG NUMBER: S125DIW-S610D1340U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	622.4	624.2	626.0	627.4	628.1	628.9	629.5	630.3
115°	712.5	714.3	716.0	716.5	715.9	715.2	714.5	713.9
117.5°	799.1	800.4	801.6	802.5	802.9	803.2	803.6	804.0
120°	855.2	857.3	859.5	860.4	860.0	859.5	859.1	858.8
122.5°	908.2	910.3	912.3	913.0	912.4	911.8	911.2	910.6
125°	985.9	987.4	988.8	989.6	989.6	989.5	989.5	989.5
127.5°	1056.4	1058.2	1060.0	1060.3	1059.2	1058.1	1057.1	1055.9
130°	1102.9	1104.3	1105.7	1106.1	1105.5	1104.9	1104.4	1103.8
132.5°	1145.8	1147.8	1149.9	1150.6	1149.9	1149.2	1148.6	1147.8
135°	1208.4	1209.9	1211.4	1211.8	1211.0	1210.1	1209.3	1208.4
137.5°	1267.2	1269.2	1271.2	1271.9	1271.1	1270.3	1269.5	1268.8
140°	1303.3	1305.5	1307.9	1308.5	1307.5	1306.6	1305.5	1304.6
142.5°	1338.8	1340.4	1342.0	1342.3	1341.3	1340.3	1339.4	1338.3
145°	1389.7	1390.7	1391.9	1391.9	1390.8	1389.9	1388.8	1387.9
147.5°	1433.6	1434.2	1434.7	1434.3	1432.6	1430.9	1429.3	1427.6
150°	1461.9	1462.4	1462.9	1462.2	1460.2	1458.2	1456.1	1454.2
152.5°	1487.2	1487.8	1488.3	1487.6	1485.7	1483.8	1481.9	1480.0
155°	1522.2	1523.0	1523.8	1523.1	1521.0	1518.8	1516.6	1514.5
157.5°	1551.1	1552.0	1552.8	1552.2	1550.0	1547.8	1545.7	1543.5
160°	1569.1	1570.2	1571.3	1570.7	1568.6	1566.4	1564.2	1562.1
162.5°	1585.5	1587.1	1588.7	1588.2	1585.8	1583.4	1581.0	1578.7
165°	1606.8	1608.4	1610.1	1609.8	1607.6	1605.4	1603.3	1601.1
167.5°	1622.9	1624.8	1626.7	1626.5	1624.0	1621.6	1619.2	1616.7
170°	1631.1	1633.2	1635.4	1635.3	1632.9	1630.4	1628.0	1625.5
172.5°	1637.5	1639.5	1641.3	1641.2	1638.7	1636.3	1633.8	1631.4
175°	1644.5	1646.6	1648.8	1648.7	1646.2	1643.8	1641.3	1638.9
177.5°	1647.4	1648.9	1650.4	1650.3	1648.5	1646.8	1645.0	1643.3
180°	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2

(END OF REPORT)