

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: P333392-830

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333392-830
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-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7414.3 lumens
Efficiency: N/A
Efficacy: 137.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

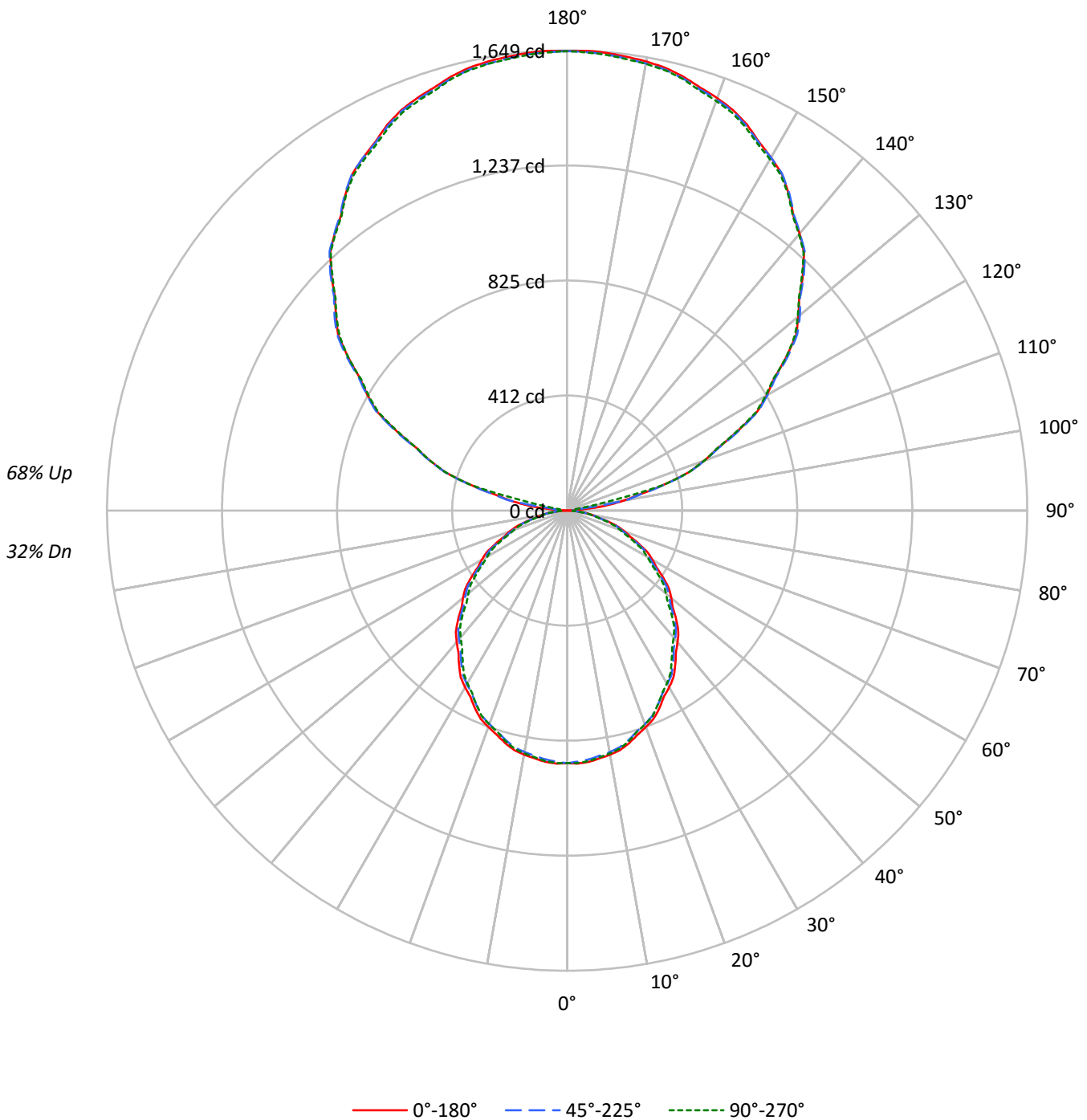
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333392-830

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

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5846	5846	5846
5°	5859	5803	5841
10°	5823	5762	5795
15°	5760	5693	5717
20°	5670	5597	5606
25°	5573	5481	5476
30°	5452	5357	5330
35°	5324	5222	5149
40°	5193	5078	5005
45°	5050	4945	4847
50°	4893	4786	4641
55°	4741	4604	4476
60°	4561	4421	4265
65°	4345	4202	4060
70°	4137	3950	3814
75°	3770	3646	3521
80°	3355	3303	3221
85°	2920	2971	2816



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.3	1.2
10°-20°	241.1	3.3
20°-30°	356.0	4.8
30°-40°	415.4	5.6
40°-50°	417.2	5.6
50°-60°	366.2	4.9
60°-70°	272.9	3.7
70°-80°	156.0	2.1
80°-90°	48.8	0.7
90°-100°	59.8	0.8
100°-110°	368.7	5.0
110°-120°	668.7	9.0
120°-130°	858.2	11.6
130°-140°	923.1	12.4
140°-150°	866.4	11.7
150°-160°	700.9	9.5
160°-170°	453.3	6.1
170°-180°	156.3	2.1
0°-30°	682.4	9.2
0°-40°	1097.8	14.8
0°-60°	1881.2	25.4
0°-90°	2358.9	31.8
90°-120°	1097.2	14.8
90°-150°	3744.9	50.5
90°-180°	5055.0	68.2
0°-180°	7414.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	904	902	895	901	901	86
15°	862	859	852	855	855	243
25°	782	778	769	770	768	360
35°	675	672	662	659	653	422
45°	553	550	541	533	531	426
55°	421	418	409	403	398	376
65°	284	282	275	269	266	282
75°	151	150	146	144	141	161
85°	39	40	40	39	38	44
90°	1	11	20	26	29	5
95°	70	64	20	25	26	89
105°	359	363	364	364	362	380
115°	674	680	681	676	669	668
125°	958	966	966	962	958	855
135°	1195	1202	1200	1197	1190	921
145°	1385	1387	1388	1388	1382	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	



TEST NUMBER: P333392-830

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2
2.5°	907.5	907.1	906.7	906.3	906.0	905.1	903.9	902.6	901.4	900.0	901.4
5°	903.8	903.4	903.1	902.8	902.5	901.5	899.9	898.3	896.7	895.1	896.6
7.5°	895.4	895.1	894.8	894.5	894.2	893.2	891.4	889.7	887.9	886.2	887.5
10°	888.0	887.7	887.4	887.0	886.7	885.7	883.9	882.2	880.4	878.7	880.0
12.5°	878.8	878.3	877.7	877.1	876.6	875.4	873.8	872.2	870.5	868.9	870.0
15°	861.5	861.0	860.5	860.1	859.6	858.5	856.8	855.0	853.2	851.5	852.2
17.5°	841.6	840.9	840.2	839.5	838.8	837.5	835.8	833.9	832.1	830.3	831.2
20°	825.0	824.6	824.3	824.1	823.7	822.6	820.5	818.4	816.3	814.3	815.4
22.5°	808.3	807.8	807.2	806.6	806.1	804.8	802.9	801.0	799.0	797.0	797.8
25°	782.0	781.2	780.4	779.7	778.8	777.4	775.3	773.3	771.2	769.1	769.5
27.5°	751.2	750.7	750.3	749.8	749.3	748.0	745.8	743.8	741.6	739.5	739.5
30°	731.1	730.7	730.2	729.7	729.2	727.8	725.5	723.0	720.7	718.3	717.9
32.5°	709.4	708.7	707.9	707.2	706.4	705.0	702.9	700.8	698.6	696.5	696.0
35°	675.3	674.7	674.0	673.4	672.8	671.4	669.1	666.8	664.7	662.4	661.7
37.5°	639.9	639.1	638.4	637.5	636.8	635.3	633.2	631.1	629.0	626.9	625.8
40°	615.9	615.1	614.3	613.5	612.7	611.1	609.0	606.7	604.5	602.3	600.9
42.5°	590.1	589.5	588.7	588.1	587.4	586.0	583.7	581.5	579.3	577.0	575.8
45°	552.9	552.2	551.6	550.9	550.4	549.0	547.1	545.3	543.3	541.4	539.5
47.5°	512.7	512.7	512.8	512.8	512.8	511.7	509.4	507.2	504.9	502.6	500.7
50°	487.0	486.4	486.0	485.5	485.0	483.9	481.9	480.0	478.2	476.3	474.2
52.5°	460.6	460.2	460.0	459.6	459.2	458.0	456.0	453.9	451.9	449.9	448.1
55°	421.1	420.6	420.1	419.6	419.1	417.8	415.6	413.4	411.1	408.9	407.5
57.5°	379.4	379.2	378.9	378.6	378.4	377.3	375.4	373.5	371.6	369.9	368.0
60°	353.1	352.4	351.8	351.1	350.5	349.3	347.6	345.8	344.0	342.3	340.7
62.5°	325.6	325.1	324.5	324.0	323.5	322.5	321.0	319.5	318.0	316.5	314.8
65°	284.3	284.0	283.7	283.3	283.0	282.0	280.2	278.5	276.7	275.0	273.5
67.5°	244.3	243.6	243.0	242.3	241.7	240.7	239.4	238.1	236.8	235.4	234.2
70°	219.1	218.4	217.5	216.8	215.9	214.8	213.4	212.0	210.6	209.2	208.1
72.5°	191.6	191.1	190.6	190.0	189.5	188.7	187.8	186.9	186.0	185.0	184.0
75°	151.1	150.8	150.4	150.1	149.9	149.3	148.5	147.7	146.8	146.1	145.6
77.5°	113.8	113.6	113.5	113.3	113.2	112.9	112.4	112.1	111.6	111.1	110.8
80°	90.2	90.2	90.2	90.2	90.2	90.1	89.7	89.4	89.2	88.8	88.6
82.5°	69.7	69.4	69.1	68.8	68.6	68.4	68.3	68.3	68.2	68.1	67.9
85°	39.4	39.6	39.7	39.9	40.1	40.1	40.1	40.1	40.1	40.1	40.0
87.5°	15.7	16.1	16.6	17.1	17.4	17.8	18.0	18.3	18.6	18.8	19.0
90°	1.2	3.4	5.6	7.7	9.9	12.0	13.9	15.7	17.6	19.5	20.9
92.5°	18.8	17.2	15.7	14.2	12.7	12.8	14.5	16.1	17.8	19.5	20.9
95°	69.6	68.7	68.0	67.1	66.3	60.7	50.4	40.2	29.8	19.5	20.9
97.5°	145.2	146.7	148.2	149.6	151.1	141.6	121.2	100.9	80.4	60.0	52.4
100°	203.8	204.6	205.4	206.2	207.1	208.0	209.1	210.2	211.2	212.4	171.9
102.5°	263.3	264.4	265.4	266.5	267.5	268.3	269.0	269.7	270.2	270.9	263.3
105°	358.8	359.9	361.0	362.0	363.2	363.6	363.6	363.6	363.6	363.6	363.6
107.5°	457.9	457.9	457.9	457.9	457.9	458.2	458.7	459.2	459.8	460.3	460.3
110°	522.4	522.4	522.4	522.4	522.4	522.5	523.1	523.7	524.2	524.7	524.0



TEST NUMBER: P333392-830

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	582.9	583.5	584.2	584.8	585.4	586.0	586.3	586.5	586.9	587.2	586.2
115°	673.6	675.0	676.4	677.7	679.1	679.9	680.1	680.4	680.7	681.0	679.9
117.5°	767.6	767.5	767.5	767.4	767.4	767.9	768.9	770.0	771.0	772.0	770.6
120°	826.1	826.0	825.7	825.4	825.1	825.4	826.1	827.0	827.8	828.6	828.1
122.5°	877.9	878.9	880.0	881.0	882.0	882.8	883.2	883.5	883.9	884.3	883.7
125°	958.0	959.9	961.8	963.7	965.5	966.5	966.5	966.5	966.5	966.5	965.4
127.5°	1034.3	1035.8	1037.1	1038.4	1039.8	1040.4	1040.2	1040.1	1039.9	1039.7	1039.2
130°	1081.2	1082.6	1083.9	1085.3	1086.7	1087.5	1087.8	1088.0	1088.3	1088.5	1087.8
132.5°	1128.1	1129.6	1131.2	1132.8	1134.3	1134.9	1134.3	1133.7	1133.1	1132.5	1132.4
135°	1194.8	1196.4	1198.0	1199.6	1201.3	1201.7	1201.3	1200.7	1200.1	1199.6	1199.1
137.5°	1256.0	1257.4	1258.8	1260.2	1261.6	1262.1	1261.6	1261.1	1260.7	1260.2	1260.3
140°	1296.0	1296.6	1297.1	1297.6	1298.2	1298.4	1298.1	1297.8	1297.5	1297.2	1297.8
142.5°	1332.1	1332.5	1332.8	1333.1	1333.4	1333.8	1334.2	1334.5	1334.9	1335.3	1335.4
145°	1385.1	1385.6	1386.2	1386.8	1387.2	1387.5	1387.5	1387.5	1387.5	1387.5	1387.8
147.5°	1431.4	1431.3	1431.3	1431.2	1431.1	1431.2	1431.4	1431.8	1432.1	1432.5	1432.8
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



TEST NUMBER: P333392-830

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2
2.5°	902.6	903.9	905.1	905.7	905.6	905.4	905.3	905.2
5°	898.1	899.5	900.9	901.5	901.4	901.3	901.1	900.9
7.5°	888.9	890.3	891.7	892.4	892.2	892.0	891.9	891.7
10°	881.3	882.5	883.8	884.4	884.2	884.0	883.8	883.7
12.5°	871.0	872.0	873.0	873.5	873.5	873.5	873.5	873.4
15°	853.1	853.8	854.7	855.1	855.1	855.1	855.1	855.1
17.5°	832.3	833.2	834.2	834.3	833.5	832.7	832.0	831.1
20°	816.4	817.6	818.7	818.9	818.0	817.3	816.4	815.7
22.5°	798.5	799.3	800.0	800.1	799.6	799.0	798.4	798.0
25°	769.8	770.1	770.4	770.3	769.9	769.4	768.9	768.5
27.5°	739.6	739.7	739.7	739.5	739.0	738.6	738.1	737.6
30°	717.7	717.4	717.0	716.6	716.1	715.7	715.2	714.7
32.5°	695.4	694.7	694.2	693.5	692.7	691.8	690.9	690.0
35°	660.8	660.1	659.2	658.2	657.0	655.6	654.4	653.1
37.5°	624.5	623.4	622.2	621.2	620.5	619.8	619.1	618.3
40°	599.4	597.9	596.5	595.6	595.1	594.7	594.2	593.7
42.5°	574.5	573.2	571.8	570.8	570.0	569.4	568.6	567.9
45°	537.5	535.6	533.8	532.5	532.1	531.6	531.1	530.7
47.5°	498.7	496.7	494.8	493.3	492.2	491.1	489.9	488.8
50°	472.1	470.0	468.0	466.4	465.2	464.1	463.0	461.9
52.5°	446.2	444.4	442.6	441.1	439.9	438.6	437.3	436.1
55°	406.0	404.6	403.2	401.9	400.8	399.6	398.6	397.5
57.5°	366.1	364.3	362.4	361.2	360.6	360.0	359.4	358.8
60°	339.1	337.5	335.9	334.6	333.5	332.3	331.2	330.2
62.5°	313.1	311.4	309.6	308.4	307.6	306.6	305.8	304.9
65°	272.1	270.7	269.3	268.2	267.6	266.9	266.4	265.7
67.5°	233.1	231.9	230.6	229.8	229.4	229.0	228.7	228.3
70°	207.2	206.2	205.3	204.5	203.9	203.2	202.6	202.0
72.5°	182.9	181.8	180.7	179.8	179.2	178.6	178.0	177.3
75°	145.2	144.7	144.2	143.6	143.0	142.3	141.8	141.1
77.5°	110.6	110.3	110.0	109.6	109.1	108.8	108.3	107.8
80°	88.5	88.3	88.1	87.9	87.6	87.3	87.0	86.6
82.5°	67.6	67.3	67.0	66.8	66.8	66.7	66.6	66.6
85°	39.8	39.6	39.5	39.2	38.9	38.5	38.3	38.0
87.5°	19.3	19.6	19.9	20.0	19.9	19.8	19.7	19.6
90°	22.2	23.6	25.0	26.0	26.9	27.6	28.5	29.3
92.5°	22.2	23.6	25.0	25.8	26.2	26.6	27.0	27.3
95°	22.2	23.6	25.0	25.6	25.6	25.6	25.6	25.6
97.5°	44.8	37.1	29.4	25.6	25.6	25.6	25.6	25.6
100°	131.5	91.1	50.7	30.0	28.8	27.8	26.7	25.6
102.5°	255.6	248.0	240.3	227.2	208.9	190.4	171.9	153.5
105°	363.6	363.6	363.6	363.5	363.3	363.0	362.7	362.4
107.5°	460.4	460.5	460.5	460.1	459.3	458.5	457.7	456.9
110°	523.1	522.4	521.5	521.2	521.5	521.8	522.1	522.4



TEST NUMBER: P333392-830

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	585.1	584.2	583.2	582.4	582.0	581.6	581.3	580.9
115°	678.8	677.7	676.7	675.2	673.6	672.0	670.3	668.7
117.5°	769.2	767.8	766.4	765.3	764.6	763.9	763.2	762.5
120°	827.6	827.0	826.4	825.5	824.2	822.7	821.4	820.1
122.5°	883.2	882.6	882.1	881.0	879.5	877.9	876.3	874.8
125°	964.3	963.3	962.1	961.2	960.5	959.6	958.8	958.0
127.5°	1038.6	1037.9	1037.4	1036.0	1034.1	1032.1	1030.0	1028.0
130°	1086.9	1086.1	1085.3	1084.2	1082.9	1081.5	1080.2	1078.8
132.5°	1132.2	1132.0	1131.8	1131.1	1129.7	1128.4	1127.0	1125.7
135°	1198.5	1198.0	1197.4	1196.4	1194.8	1193.1	1191.5	1189.9
137.5°	1260.4	1260.5	1260.6	1259.9	1258.5	1257.1	1255.7	1254.2
140°	1298.4	1298.8	1299.4	1298.8	1297.2	1295.6	1294.0	1292.3
142.5°	1335.5	1335.7	1335.8	1335.0	1333.3	1331.7	1330.1	1328.5
145°	1388.1	1388.4	1388.6	1388.0	1386.3	1384.7	1383.1	1381.5
147.5°	1433.1	1433.4	1433.8	1432.9	1431.0	1429.0	1427.1	1425.1
150°	1461.9	1462.4	1462.9	1462.1	1459.9	1457.7	1455.6	1453.4
152.5°	1487.2	1487.8	1488.3	1487.6	1485.6	1483.8	1481.8	1479.8
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)