

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: P333393-840

Luminaire Tested: **S125DIW-S610D1340U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333393-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S610D1340U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7224.5 lumens
Efficiency: N/A
Efficacy: 134.3 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

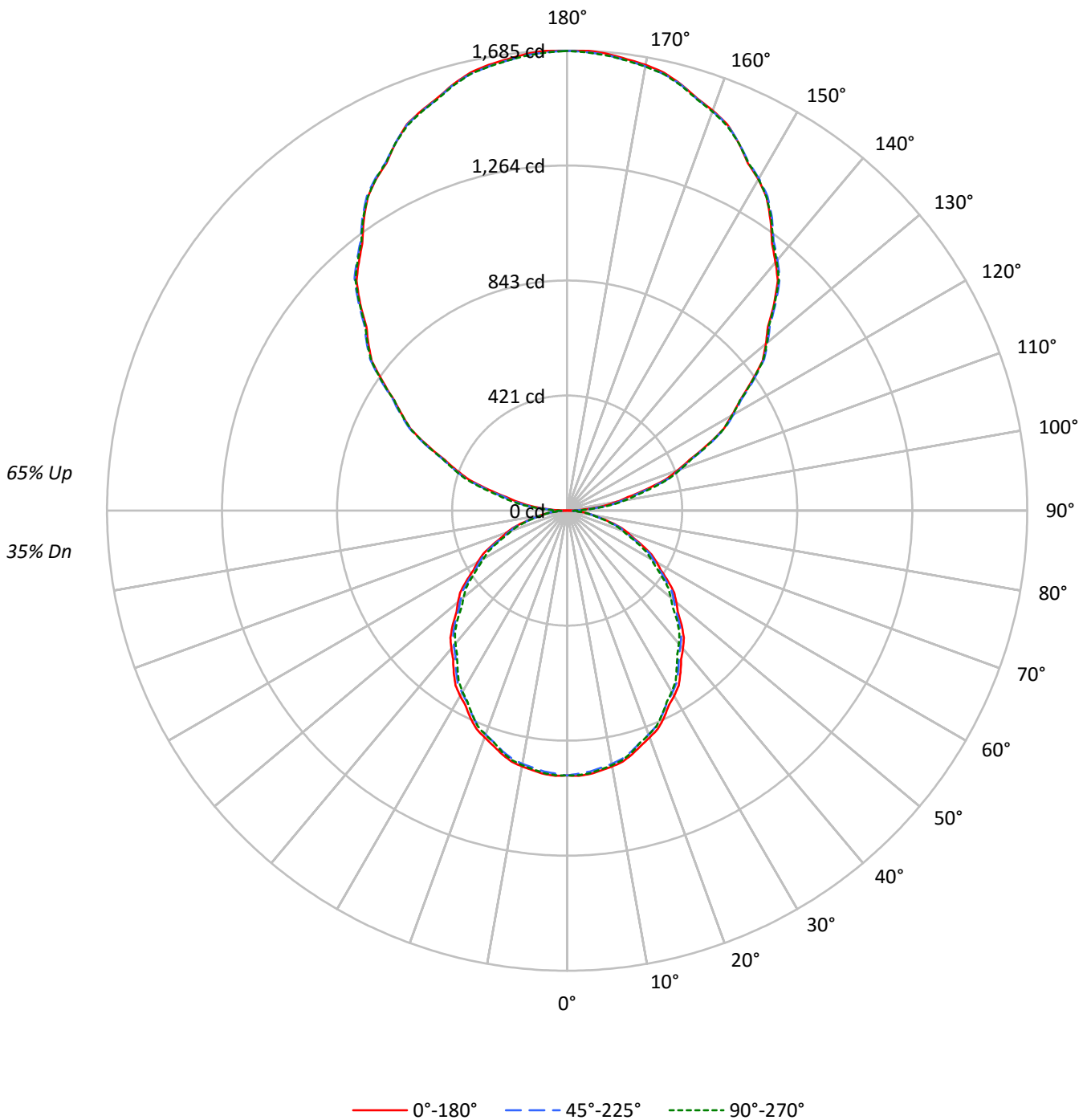
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42
1	94	90	86	83	85	82	78	75	66	63	61	51	49	48	37	36	36
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30
3	78	69	62	56	70	63	57	52	51	46	43	39	36	34	29	27	25
4	72	61	53	47	64	55	49	44	45	40	36	35	32	29	26	24	22
5	66	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17
7	56	44	36	31	50	40	33	28	33	27	24	26	22	19	19	17	15
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	18	15	13
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6264	6264	6264
5°	6278	6218	6257
10°	6239	6174	6209
15°	6171	6100	6125
20°	6075	5996	6006
25°	5971	5872	5867
30°	5842	5739	5711
35°	5705	5595	5517
40°	5563	5440	5363
45°	5411	5298	5193
50°	5243	5127	4972
55°	5080	4933	4796
60°	4886	4738	4570
65°	4655	4504	4351
70°	4434	4232	4086
75°	4040	3905	3773
80°	3593	3537	3451
85°	3127	3179	3016



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.4	1.3
10°-20°	258.3	3.6
20°-30°	381.4	5.3
30°-40°	445.0	6.2
40°-50°	447.0	6.2
50°-60°	392.4	5.4
60°-70°	292.4	4.0
70°-80°	167.2	2.3
80°-90°	52.3	0.7
90°-100°	112.7	1.6
100°-110°	332.9	4.6
110°-120°	563.9	7.8
120°-130°	742.1	10.3
130°-140°	831.6	11.5
140°-150°	815.0	11.3
150°-160°	684.5	9.5
160°-170°	455.0	6.3
170°-180°	159.2	2.2
0°-30°	731.2	10.1
0°-40°	1176.2	16.3
0°-60°	2015.6	27.9
0°-90°	2527.4	35.0
90°-120°	1009.6	14.0
90°-150°	3398.3	47.0
90°-180°	4697.0	65.0
0°-180°	7224.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	968	966	959	966	965	92
15°	923	920	912	916	916	260
25°	838	834	824	825	823	385
35°	724	720	710	706	700	452
45°	592	589	580	571	569	456
55°	451	448	438	431	426	403
65°	305	303	295	288	285	302
75°	162	160	156	154	151	173
85°	42	43	43	42	41	47
90°	1	12	21	27	31	7
95°	85	88	101	110	113	91
105°	299	305	313	321	325	319
115°	565	570	572	571	570	558
125°	824	831	833	831	829	738
135°	1072	1079	1081	1080	1076	826
145°	1298	1303	1307	1307	1303	811
155°	1486	1486	1487	1491	1486	684
165°	1615	1613	1614	1618	1611	455
175°	1679	1674	1674	1681	1673	160
180°	1683	1683	1683	1683	1683	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9
2.5°	972.3	971.9	971.5	971.1	970.7	969.8	968.5	967.0	965.7	964.3	965.7
5°	968.4	968.0	967.7	967.2	966.9	965.9	964.2	962.5	960.8	959.1	960.7
7.5°	959.4	959.1	958.8	958.4	958.1	956.9	955.0	953.2	951.3	949.5	950.9
10°	951.4	951.1	950.8	950.4	950.1	949.0	947.1	945.2	943.3	941.5	942.8
12.5°	941.6	941.0	940.4	939.8	939.2	938.0	936.2	934.5	932.7	931.0	932.1
15°	923.0	922.5	922.0	921.5	921.0	919.8	918.0	916.0	914.1	912.3	913.1
17.5°	901.7	901.0	900.2	899.5	898.7	897.4	895.4	893.4	891.5	889.6	890.6
20°	883.9	883.5	883.2	882.9	882.5	881.3	879.1	876.9	874.6	872.4	873.6
22.5°	866.1	865.5	864.8	864.2	863.6	862.3	860.2	858.2	856.1	853.9	854.7
25°	837.9	837.0	836.2	835.4	834.5	832.9	830.7	828.5	826.3	824.0	824.5
27.5°	804.9	804.4	803.9	803.3	802.8	801.4	799.1	796.9	794.6	792.3	792.3
30°	783.4	782.8	782.3	781.8	781.3	779.8	777.3	774.7	772.1	769.6	769.2
32.5°	760.0	759.3	758.5	757.7	756.9	755.4	753.2	750.8	748.5	746.3	745.7
35°	723.6	722.9	722.2	721.5	720.8	719.3	716.9	714.5	712.2	709.7	708.9
37.5°	685.6	684.8	684.0	683.1	682.3	680.6	678.4	676.2	673.9	671.7	670.4
40°	659.8	659.0	658.1	657.3	656.4	654.8	652.5	650.1	647.6	645.3	643.8
42.5°	632.3	631.6	630.8	630.1	629.3	627.8	625.4	623.1	620.7	618.2	616.9
45°	592.4	591.7	591.0	590.3	589.7	588.2	586.2	584.2	582.1	580.1	578.0
47.5°	549.4	549.4	549.5	549.5	549.5	548.3	545.8	543.4	541.0	538.5	536.4
50°	521.8	521.2	520.7	520.2	519.7	518.5	516.3	514.3	512.3	510.3	508.1
52.5°	493.5	493.1	492.8	492.4	492.0	490.7	488.6	486.4	484.2	482.0	480.1
55°	451.2	450.6	450.1	449.6	449.1	447.7	445.2	442.9	440.5	438.1	436.6
57.5°	406.5	406.3	406.0	405.7	405.5	404.2	402.2	400.2	398.2	396.3	394.3
60°	378.3	377.6	376.9	376.2	375.6	374.3	372.4	370.5	368.6	366.8	365.1
62.5°	348.8	348.3	347.7	347.2	346.6	345.6	344.0	342.3	340.7	339.1	337.3
65°	304.6	304.3	304.0	303.6	303.3	302.2	300.2	298.4	296.5	294.7	293.1
67.5°	261.8	261.1	260.3	259.6	258.9	257.9	256.5	255.1	253.7	252.3	251.0
70°	234.8	234.0	233.1	232.3	231.4	230.1	228.6	227.1	225.6	224.1	223.0
72.5°	205.3	204.7	204.2	203.6	203.0	202.2	201.3	200.3	199.2	198.2	197.1
75°	161.9	161.6	161.2	160.9	160.6	160.0	159.1	158.2	157.3	156.5	156.0
77.5°	121.9	121.7	121.6	121.4	121.3	121.0	120.5	120.1	119.6	119.1	118.8
80°	96.6	96.6	96.6	96.6	96.6	96.5	96.1	95.8	95.5	95.1	94.9
82.5°	74.6	74.3	74.0	73.7	73.5	73.3	73.2	73.2	73.1	73.0	72.7
85°	42.2	42.4	42.5	42.7	42.9	42.9	42.9	42.9	42.9	42.9	42.8
87.5°	16.9	17.3	17.8	18.3	18.7	19.1	19.3	19.6	19.9	20.2	20.4
90°	1.3	3.6	6.0	8.3	10.6	12.8	14.8	16.9	18.9	21.0	22.4
92.5°	31.7	33.3	34.9	36.6	38.2	40.3	42.8	45.3	47.8	50.3	52.2
95°	85.1	85.7	86.3	86.8	87.5	89.3	92.1	95.0	98.0	100.9	102.9
97.5°	141.5	141.7	142.0	142.2	142.4	144.5	148.6	152.6	156.6	160.6	162.5
100°	183.4	183.4	183.4	183.4	183.4	185.3	189.0	192.9	196.6	200.5	203.1
102.5°	228.4	229.6	230.8	232.0	233.1	234.7	236.6	238.5	240.4	242.4	245.2
105°	298.7	300.1	301.5	303.1	304.5	306.1	307.8	309.6	311.3	313.1	314.9
107.5°	376.2	377.7	379.1	380.6	382.0	383.4	384.8	386.1	387.5	388.8	389.7
110°	429.7	431.1	432.6	434.0	435.5	436.7	437.6	438.4	439.3	440.1	441.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	484.1	484.9	485.6	486.5	487.2	488.2	489.2	490.3	491.4	492.5	492.9
115°	564.6	565.7	566.9	568.0	569.3	570.2	570.7	571.3	571.9	572.5	572.2
117.5°	645.3	645.8	646.3	646.8	647.4	647.9	648.4	648.9	649.4	650.1	650.3
120°	695.6	697.0	698.5	699.9	701.5	702.3	702.6	702.9	703.2	703.5	703.5
122.5°	750.1	750.6	751.1	751.6	752.1	752.9	753.6	754.4	755.1	755.9	755.6
125°	823.9	825.7	827.5	829.2	830.9	831.9	832.2	832.5	832.8	833.1	832.5
127.5°	902.5	903.5	904.5	905.5	906.6	907.2	907.6	907.9	908.3	908.6	908.3
130°	949.7	951.2	952.6	954.1	955.5	956.5	957.2	957.8	958.3	958.9	958.6
132.5°	996.8	999.3	1001.7	1004.0	1006.4	1007.5	1007.4	1007.3	1007.2	1007.1	1006.8
135°	1071.6	1073.3	1075.0	1076.8	1078.5	1079.5	1079.8	1080.2	1080.5	1080.8	1080.8
137.5°	1141.8	1143.5	1145.2	1146.8	1148.5	1149.6	1150.3	1150.9	1151.7	1152.3	1152.6
140°	1186.8	1188.3	1189.7	1191.2	1192.7	1193.8	1194.7	1195.6	1196.4	1197.3	1197.9
142.5°	1231.9	1233.1	1234.4	1235.6	1236.8	1237.9	1239.0	1240.1	1241.2	1242.3	1242.7
145°	1298.2	1299.3	1300.5	1301.6	1302.8	1303.8	1304.7	1305.6	1306.5	1307.4	1307.4
147.5°	1359.5	1360.1	1360.8	1361.4	1362.0	1362.7	1363.4	1364.1	1364.8	1365.5	1366.2
150°	1400.4	1400.1	1399.8	1399.5	1399.2	1399.6	1400.8	1402.0	1403.1	1404.3	1404.3
152.5°	1433.9	1434.3	1434.7	1435.1	1435.5	1435.9	1436.4	1436.8	1437.3	1437.8	1438.6
155°	1485.5	1485.5	1485.5	1485.5	1485.5	1485.6	1485.9	1486.2	1486.5	1486.8	1487.9
157.5°	1531.6	1531.0	1530.3	1529.6	1529.0	1528.8	1529.1	1529.4	1529.7	1530.0	1531.2
160°	1558.8	1558.0	1557.1	1556.2	1555.4	1555.1	1555.4	1555.7	1555.9	1556.2	1557.4
162.5°	1583.0	1582.4	1581.7	1581.0	1580.4	1580.1	1580.1	1580.2	1580.2	1580.3	1581.8
165°	1615.2	1614.6	1614.0	1613.5	1612.9	1612.8	1613.0	1613.3	1613.6	1613.9	1615.1
167.5°	1642.4	1641.2	1640.1	1638.9	1637.8	1637.2	1637.2	1637.2	1637.2	1637.2	1638.9
170°	1657.1	1656.0	1654.8	1653.7	1652.4	1651.8	1651.8	1651.8	1651.8	1651.8	1653.7
172.5°	1667.6	1666.4	1665.3	1664.1	1662.9	1662.3	1662.3	1662.3	1662.3	1662.3	1664.1
175°	1679.4	1678.2	1677.1	1675.9	1674.8	1674.2	1674.2	1674.2	1674.2	1674.2	1675.9
177.5°	1685.4	1684.5	1683.5	1682.6	1681.6	1681.1	1680.8	1680.6	1680.4	1680.1	1681.5
180°	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9
2.5°	967.0	968.5	969.8	970.4	970.3	970.1	970.0	969.9
5°	962.2	963.7	965.2	965.9	965.7	965.6	965.4	965.2
7.5°	952.4	953.9	955.4	956.1	955.9	955.7	955.6	955.4
10°	944.2	945.5	947.0	947.6	947.4	947.2	947.0	946.8
12.5°	933.2	934.3	935.3	935.9	935.8	935.8	935.8	935.7
15°	914.0	914.8	915.7	916.1	916.1	916.1	916.1	916.1
17.5°	891.7	892.7	893.8	893.9	893.0	892.2	891.4	890.5
20°	874.7	876.0	877.2	877.4	876.5	875.7	874.7	873.9
22.5°	855.6	856.4	857.2	857.3	856.7	856.1	855.5	855.0
25°	824.8	825.1	825.5	825.4	824.9	824.4	823.8	823.3
27.5°	792.4	792.5	792.5	792.3	791.8	791.3	790.8	790.3
30°	768.9	768.6	768.2	767.8	767.3	766.8	766.3	765.8
32.5°	745.1	744.4	743.8	743.1	742.1	741.2	740.2	739.3
35°	708.0	707.2	706.3	705.2	703.9	702.5	701.1	699.7
37.5°	669.1	667.9	666.6	665.6	664.8	664.1	663.3	662.5
40°	642.2	640.7	639.1	638.1	637.6	637.1	636.6	636.1
42.5°	615.5	614.1	612.7	611.6	610.8	610.1	609.3	608.4
45°	575.9	573.9	571.9	570.6	570.1	569.6	569.1	568.6
47.5°	534.3	532.2	530.2	528.6	527.4	526.1	524.9	523.7
50°	505.8	503.6	501.4	499.7	498.5	497.3	496.0	494.9
52.5°	478.1	476.2	474.2	472.6	471.3	469.9	468.6	467.3
55°	435.0	433.5	432.0	430.6	429.4	428.2	427.1	425.9
57.5°	392.2	390.3	388.3	387.0	386.4	385.7	385.1	384.5
60°	363.3	361.6	359.9	358.5	357.3	356.1	354.9	353.8
62.5°	335.5	333.7	331.7	330.4	329.5	328.5	327.6	326.7
65°	291.5	290.0	288.5	287.4	286.7	286.0	285.4	284.7
67.5°	249.7	248.4	247.1	246.2	245.8	245.4	245.0	244.6
70°	222.0	221.0	219.9	219.1	218.4	217.7	217.0	216.4
72.5°	195.9	194.8	193.6	192.7	192.0	191.4	190.7	190.0
75°	155.5	155.0	154.5	153.9	153.2	152.5	151.9	151.2
77.5°	118.5	118.2	117.9	117.4	116.9	116.5	116.0	115.5
80°	94.8	94.6	94.4	94.2	93.8	93.5	93.2	92.8
82.5°	72.4	72.1	71.8	71.6	71.6	71.5	71.4	71.4
85°	42.6	42.4	42.3	42.0	41.7	41.3	41.0	40.7
87.5°	20.7	21.0	21.3	21.4	21.3	21.2	21.1	21.0
90°	23.8	25.3	26.8	28.0	28.8	29.7	30.6	31.4
92.5°	54.1	56.0	58.0	59.3	59.9	60.6	61.2	61.8
95°	104.9	106.9	109.1	110.3	110.9	111.5	112.1	112.7
97.5°	164.4	166.3	168.2	169.5	169.8	170.2	170.5	170.9
100°	205.7	208.2	210.9	212.5	213.1	213.7	214.3	214.8
102.5°	248.0	250.9	253.8	255.6	256.4	257.2	258.0	258.8
105°	316.6	318.3	320.0	321.3	322.2	323.2	324.0	324.9
107.5°	390.5	391.4	392.3	392.7	392.6	392.5	392.5	392.4
110°	441.9	442.7	443.6	443.9	443.6	443.3	443.0	442.7



TEST NUMBER: P333393-840

CATALOG NUMBER: S125DIW-S610D1340U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	493.3	493.7	494.1	494.1	493.6	493.1	492.5	492.0
115°	571.9	571.6	571.3	571.0	570.7	570.4	570.2	569.9
117.5°	650.5	650.7	651.0	650.5	649.3	648.1	647.0	645.8
120°	703.5	703.5	703.5	702.9	701.7	700.5	699.3	698.2
122.5°	755.4	755.2	754.9	754.4	753.4	752.5	751.5	750.6
125°	831.9	831.4	830.8	830.4	830.1	829.8	829.5	829.2
127.5°	908.0	907.7	907.5	907.0	906.5	905.8	905.2	904.6
130°	958.3	958.1	957.8	957.3	956.7	956.1	955.5	954.9
132.5°	1006.5	1006.2	1005.9	1005.4	1004.6	1003.7	1002.9	1002.1
135°	1080.8	1080.8	1080.8	1080.2	1078.9	1077.8	1076.6	1075.5
137.5°	1153.0	1153.3	1153.7	1153.1	1151.7	1150.1	1148.7	1147.3
140°	1198.5	1199.0	1199.6	1199.2	1197.7	1196.3	1194.9	1193.4
142.5°	1243.0	1243.4	1243.7	1243.2	1241.7	1240.3	1238.8	1237.4
145°	1307.4	1307.4	1307.4	1306.9	1306.1	1305.1	1304.2	1303.4
147.5°	1366.9	1367.6	1368.3	1367.7	1365.6	1363.7	1361.7	1359.8
150°	1404.3	1404.3	1404.3	1404.0	1403.4	1402.8	1402.2	1401.7
152.5°	1439.2	1439.9	1440.6	1440.5	1439.4	1438.4	1437.2	1436.2
155°	1489.1	1490.3	1491.5	1491.3	1489.9	1488.4	1486.9	1485.5
157.5°	1532.4	1533.5	1534.7	1534.3	1532.4	1530.5	1528.5	1526.6
160°	1558.5	1559.7	1560.8	1560.7	1559.3	1557.8	1556.4	1554.9
162.5°	1583.2	1584.5	1585.9	1585.8	1584.1	1582.4	1580.7	1579.0
165°	1616.2	1617.4	1618.5	1618.2	1616.5	1614.8	1613.0	1611.2
167.5°	1640.7	1642.4	1644.2	1644.2	1642.3	1640.5	1638.7	1636.9
170°	1655.4	1657.1	1658.8	1658.7	1656.7	1654.7	1652.5	1650.5
172.5°	1665.9	1667.6	1669.3	1669.3	1667.5	1665.7	1663.9	1662.0
175°	1677.6	1679.4	1681.1	1680.9	1678.9	1676.9	1674.9	1672.8
177.5°	1682.9	1684.4	1685.8	1685.7	1683.9	1682.3	1680.7	1679.1
180°	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3

(END OF REPORT)